University of Michigan

Report on Federal Awards in Accordance with the Uniform Guidance For the Year Ended June 30, 2018 EIN 38-6006309

University of Michigan Contents

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Report of Independent Auditors

To the Regents of the University of Michigan

We have audited the accompanying consolidated financial statements of the University of Michigan and its subsidiaries (the "University"), which comprise the consolidated statement of net position as of June 30, 2018 and 2017, and the related consolidated statements of revenues, expenses and changes in net position and of cash flows for the years then ended.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the University's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used



and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the University of Michigan and its subsidiaries as of June 30, 2018 and 2017, and the changes in their financial position and their cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1 to the consolidated financial statements, the University changed the manner in which it accounts for irrevocable split-interest agreements in which the University is a beneficiary in 2018 and the manner in which it accounts for postemployment benefits other than pensions in 2017. Our opinion is not modified with respect to this matter.

Other Matter

Required Supplementary Information

The accompanying management's discussion and analysis on pages 4 through 29 and the accompanying supplemental information on pages 78 through 80 are required by accounting principles generally accepted in the United States of America to supplement the basic consolidated financial statements. Such information, although not a part of the basic consolidated financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic consolidated financial statements, and other knowledge we obtained during our audits of the basic consolidated financial statements. We do not express an opinion or provide any assurance on the information



because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements as a whole. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards and is not a required part of the consolidated financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the consolidated financial statements. The information has been subjected to the auditing procedures applied in the audit of the consolidated financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the consolidated financial statements or to the consolidated financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated, in all material respects, in relation to the consolidated financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 18, 2018 on our consideration of the University of Michigan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the University of Michigan's internal control over financial reporting and compliance.

Pricewaterkouse Coopers LLP

October 18, 2018

Management's Discussion and Analysis (Unaudited)

Introduction

The following discussion and analysis provides an overview of the financial position of the University of Michigan (the "University") at June 30, 2018 and 2017 and its activities for the three fiscal years ended June 30, 2018. This discussion has been prepared by management and should be read in conjunction with the financial statements and the notes thereto, which follow this section.

The University is a comprehensive public institution of higher learning with over 63,000 students and approximately 8,200 faculty members on three campuses in southeast Michigan. The University offers a diverse range of degree programs from baccalaureate to post-doctoral levels through 19 schools and colleges, and contributes to the state and nation through related research and public service programs. The University also has a nationally renowned health system which includes the University of Michigan Hospitals, the University's Medical School, Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives) and UM Health (a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations). The University's health system currently includes four hospitals as well as numerous health centers and outpatient clinics.

The University consistently ranks among the nation's top universities by various measures of quality, both in general academic terms, and in terms of strength of offerings in specific academic disciplines and professional subjects. Research is central to the University's mission and a key aspect of its strong reputation among educational institutions. The University is widely recognized for the breadth and excellence of its research enterprise as well as for the exceptional level of cooperation across disciplines, which allows faculty and students to address the full complexity of real-world challenges. The University's health system also has a tradition of excellence in teaching, advancement of medical science and patient care, consistently ranking among the best health care systems in the nation.

On December 15, 2016, the University completed an affiliation with Metropolitan Health Corporation ("Metro Health"), a community health care provider in west Michigan, pursuant to which UM Health became the sole corporate member of Metro Health. In addition to its hospital, Metro Health has neighborhood outpatient clinics and offices throughout west Michigan to serve the greater Grand Rapids area. In accordance with Governmental Accounting Standards Board ("GASB") Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, this combination is included in the financial statements as if it occurred at the beginning of the earliest period presented.

Management's Discussion and Analysis (Unaudited)--Continued

Financial Highlights

The University's financial position remains strong, with total assets and deferred outflows of \$22.1 billion and total liabilities and deferred inflows of \$7.8 billion at June 30, 2018, compared to total assets and deferred outflows of \$20.9 billion and total liabilities and deferred inflows of \$7.5 billion at June 30, 2017. Net position, which represents the residual interest in the University's total assets and deferred outflows after total liabilities and deferred inflows are deducted, totaled \$14.3 billion and \$13.4 billion at June 30, 2018 and 2017, respectively. Changes in net position represent the University's results of operations and are summarized for the years ended June 30 as follows:

	2018	2017	
	(in millions)		
Operating revenues and educational appropriations	\$ 7,879	\$ 7,480	
Private gifts for operating activities	197	159	
Operating and net interest expenses	(8,625)	(7,976)	
	(549)	(337)	
Net investment income	1,261	1,401	
Endowment, capital gifts and grants, and other	208	198	
Increase in net position	\$ 920	\$ 1,262	

During 2018, net position was restated at July 1, 2016 to reflect the adoption of GASB Statement No. 81, *Irrevocable Split-Interest Agreements* ("GASB 81"), resulting in a decrease of \$52 million as compared to amounts previously reported.

During 2017, net position was restated at July 1, 2016 for the affiliation with Metro Health and the adoption of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions ("GASB 75"), resulting in a net decrease of \$850 million.

For purposes of management's discussion and analysis, comparative data for the statement of net position has been provided by combining Metro Health with the University and reflecting the adoption of GASB 75 and GASB 81 at June 30, 2016.

Management's Discussion and Analysis (Unaudited)--Continued

The results of operations reflect the University's emphasis on maintaining its national standards academically, in research and in health care within a competitive recruitment environment for faculty and health care professionals and a period of continued pressure on federal funding for research. At the same time, the University is addressing constrained state appropriations and rising health care, regulatory and facility costs with aggressive cost cutting and productivity gains to help preserve access to affordable higher education for Michigan families. In 2018, the results of operations also reflect period costs associated with capacity expansion for the University's health system. To achieve aggressive and sustainable long-term goals for cost cutting and productivity gains, the University is also strategically utilizing resources to support enterprise-wide information technology projects and other initiatives.

The University's long-term investment strategy combined with its endowment spending policy serves to insulate operations from expected volatility in the capital markets and provides for a stable and predictable level of spending distributions from the endowment. Endowment spending rate distributions to University units totaled \$339 million and \$318 million in 2018 and 2017, respectively. The success of the University's long-term investment strategy is evidenced by strong returns over sustained periods of time and the ability to limit losses in the face of challenging markets.

The University invests its financial assets in pools with distinct risk and liquidity characteristics based on its needs, with most of its financial assets invested in two such pools. The University's working capital is primarily invested in relatively short duration, liquid assets, through its Daily and Monthly Portfolios, while the endowment is primarily invested, along with the noncurrent portion of the insurance and benefit reserves, in an equity oriented long-term strategy through its Long Term Portfolio.

Using the Financial Statements

The University's financial report includes three financial statements: the Statement of Net Position; the Statement of Revenues, Expenses and Changes in Net Position; and the Statement of Cash Flows. These financial statements are prepared in accordance with GASB principles, which establish standards for external financial reporting for public colleges and universities.

Management's Discussion and Analysis (Unaudited)--Continued

Statement of Net Position

The statement of net position presents the financial position of the University at the end of the fiscal year and includes all assets, deferred outflows, liabilities and deferred inflows of the University. The difference between total assets and deferred outflows as compared to total liabilities and deferred inflows – net position – is one indicator of the current financial condition of the University, while the change in net position is an indication of whether the overall financial condition has improved or worsened during the year. The University's assets, deferred outflows, liabilities, deferred inflows and net position at June 30 are summarized as follows:

	2018	2017 (in millions)	2016
Current assets Noncurrent assets:	\$ 2,743	\$ 2,696	\$ 2,545
Endowment, life income and other investments Capital assets, net	12,305 6,121	11,323 6,045	10,109 5,948
Other Total assets	510 21,679	439 20,503	346 18,948
Deferred outflows	384	349	30
Total assets and deferred outflows Current liabilities	22,063	20,852	18,978
Noncurrent liabilities Total liabilities	1,775 5,814 7,589	1,802 5,606 7,408	1,881 4,946 6,827
Deferred inflows	193	83	52
Net position	\$ 14,281	\$ 13,361	\$ 12,099

The University continues to maintain and protect its strong financial foundation. This financial health, as reflected in the University's net position, results from the prudent utilization of financial resources including careful cost controls, preservation of endowment funds, conservative utilization of debt and adherence to a long-range capital plan for the maintenance and replacement of the physical plant.

Current assets consist primarily of cash and cash equivalents, operating and capital investments and accounts receivable and totaled \$2.7 billion at June 30, 2018 and 2017. Cash, cash equivalents and investments for operating activities totaled \$1.3 billion at June 30, 2018, which represents approximately two months of total expenses excluding depreciation.

Management's Discussion and Analysis (Unaudited)--Continued

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, debt and derivative activity, and Metro Health's defined benefit pension plan. Deferred outflows totaled \$384 million and \$349 million at June 30, 2018 and 2017, respectively.

Current liabilities consist primarily of accounts payable, accrued compensation, unearned revenue, commercial paper, the current portion of bonds payable and net long-term bonds payable subject to remarketing. Current liabilities totaled \$1.8 billion at June 30, 2018 and 2017.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with the University's postemployment benefits obligations, Metro Health's defined benefit pension plan and irrevocable split-interest agreements. Deferred inflows totaled \$193 million and \$83 million at June 30, 2018 and 2017, respectively.

Endowment, Life Income and Other Investments

The composition of the University's endowment, life income and other investments at June 30 is summarized as follows:

	2018	2017 (in millions)	2016
Endowment investments Life income investments Noncurrent portion of insurance and benefits	\$ 11,902	\$ 10,936	\$ 9,743
	144	132	111
obligations investments Other	208	205	192
	51	50	63
	\$ 12,305	\$ 11,323	\$ 10,109

The University's endowment funds consist of both permanent endowments and funds functioning as endowment. Permanent endowments are those funds received from donors with the stipulation that the principal remain intact and be invested in perpetuity to produce income that is to be expended for the purposes specified by the donors. Funds functioning as endowment consist of amounts (restricted gifts or unrestricted funds) that have been allocated by the University for long-term investment purposes, but are not limited by donor stipulations requiring the University to preserve principal in perpetuity. Programs supported by endowment funds include scholarships, fellowships, professorships, research efforts and other important programs and activities.

Management's Discussion and Analysis (Unaudited)--Continued

The University uses its endowment funds to support operations in a way that strikes a balance between generating a predictable stream of annual support for current needs and preserving the purchasing power of the endowment funds for future periods. The major portion of the endowment is maintained in the University Endowment Fund, a unitized pool which represents a collection of approximately 11,200 separate (individual) funds, the majority of which are restricted for specific purposes. The University Endowment Fund is invested in the University's Long Term Portfolio, a single diversified investment pool.

The endowment spending rule provides for distributions from the University Endowment Fund to the entities that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of University Endowment Fund shares. This spending rule is one element of an ongoing financial management strategy that has allowed the University to effectively weather challenging economic environments while avoiding measures such as faculty hiring freezes, furloughs, program cuts or halting construction.

To protect endowment principal in the event of a prolonged market downturn, distributions are limited to 5.3 percent of the current fair value of fund shares. Capital gains or income generated above the endowment spending rate are reinvested so that in lean times funds will be available for distribution. In addition, departments may also use withdrawals from funds functioning as endowment to support capital expenditures and operations.

Endowment spending rate distributions totaled \$346 million and \$325 million and withdrawals from funds functioning as endowment totaled \$33 million and \$7 million in 2018 and 2017, respectively. Total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 4.4 percent and 4.2 percent of the current year average fair value of the University Endowment Fund for 2018 and 2017, respectively. Over the past ten years, total spending rate distributions combined with withdrawals from funds functioning as endowment averaged 5.0 percent.

The University participates in certain split-interest agreements and currently holds life income funds for beneficiaries of the pooled income fund, charitable remainder trusts and the gift annuity program. These funds generally pay lifetime income to beneficiaries, after which the principal is made available to the University in accordance with donor intentions. During 2018, the University adopted GASB 81, which establishes recognition and measurement guidance for situations in which a government is a beneficiary of a split-interest agreement. Adoption of this statement resulted in an increase in deferred inflows and a decrease in restricted expendable net position of \$52 million, as reflected in the comparative balances presented at June 30, 2016.

Management's Discussion and Analysis (Unaudited)--Continued

Capital and Debt Activities

One of the critical factors in continuing the quality of the University's academic, research and clinical programs is the development and renewal of capital assets. The University continues to implement its long-range plan to maintain and modernize its existing infrastructure and strategically invest in new construction.

Capital asset additions totaled \$650 million in 2018, as compared to \$636 million in 2017. Capital asset additions primarily represent renovation and new construction of academic, research, clinical and athletic facilities, as well as significant investments in equipment, including information technology. Current year capital asset additions were primarily funded with net position and gifts designated for capital purposes of \$482 million, as well as debt proceeds of \$163 million and state capital appropriations of \$5 million.

Projects completed in 2018 include significant new construction and renovation of academic and research buildings for natural sciences and international studies, as well as new facilities for ambulatory care, clinical pathology, and athletics.

The Biological Science Building was constructed to provide teaching, research and museum facilities for the biological sciences and exhibit museums. Bringing these programs together creates exciting opportunities for interdisciplinary teaching, research and collaboration, and offers a richer experience for museum visitors. The new building houses 300,000 square feet of classrooms, research laboratories, associated support functions, offices and vivarium services, as well as the anthropology, natural history, paleontology and zoology museums formerly housed at the Alexander G. Ruthven Museums Building. The structure also includes a connection to the adjacent Life Sciences Institute Building to increase the utilization of its loading dock and vivarium functions.

An extensive renovation of Weiser Hall, formerly the Dennison Building which was originally constructed in 1963, was completed. Renovation of 106,000 square feet, vacated by the relocation of the Department of Astronomy to West Hall and the repurposing of classrooms, created space that facilitates faculty collaboration and enhances opportunities for graduate and undergraduate students. This project enabled relocation of the International Institute and its associated centers for international studies from the School of Social Work Building to Weiser Hall, along with other College of Literature, Science, and the Arts centers, institutes and units that have a primary focus on international engagement.

Construction of a new West Ann Arbor Health Center improves patient access to ambulatory care services. The new center, which includes 75,000 square feet, houses 27 adult and pediatric primary and specialty care services and replaces a prior center of 6,000 square feet that was previously located in leased space.

Management's Discussion and Analysis (Unaudited)--Continued

Many of the Health System's clinical pathology laboratories relocated into newly refurbished space at the University's North Campus Research Complex, freeing up space in University hospitals and other patient care locations. Previously, pathology laboratories were dispersed throughout various buildings on the University's medical campus and leased space. This project included the renovation of 186,000 square feet to enhance the clinical laboratory functions necessary to meet the growing demand for advanced clinical and anatomic pathology testing, improve operational efficiency and reduce the expense of maintaining laboratories in multiple locations. The new laboratories have also been designed to provide flexibility to meet future education, research and technology requirements.

The Athletics South Competition and Performance Project added 280,000 square feet of space for men's and women's track and field, cross country, lacrosse, soccer and women's rowing. This facility includes an indoor and outdoor track competition venue, a lacrosse stadium and an indoor rowing tank. The complex also includes a performance and team center with specialized spaces for each team and shared resources for all teams, with strength and conditioning, athletic medicine, meeting space and locker rooms. This new center enables consolidation of various team facilities formerly dispersed across the athletic campus. The facilities are also available to student-athletes who already practice and compete in that area, as well as students who participate in the University's recreational sports programs.

Construction in progress, which totaled \$301 million and \$476 million at June 30, 2018 and 2017, respectively, includes important projects for patient care, instruction, research and student life.

The University is nearing completion of the Brighton Center for Specialty Care, which is designed to meet growing ambulatory care demands. This new facility, with 300,000 square feet, will house more than 40 specialty services for pediatric and adult health care, including a comprehensive musculoskeletal center, sleep lab, ambulatory diagnostic and treatment center, medical procedure unit, radiation oncology, infusion, pharmacy, radiology, operating rooms and lab services. This new building is located near the existing Brighton Health Center, which will continue to be utilized. This project is scheduled to be completed in fall 2018.

Construction has commenced on a new research and teaching facility for the College of Engineering's Robotics program. This state-of-the-art facility will include 140,000 square feet to house research and testing laboratories, associated support functions, offices and classroom space. The building will also accommodate space for its corporate partner, Ford Motor Company, which will establish collaborative research activities within the facility. The open plan design of the building will allow for greater collaboration, increased flexibility and better space utilization. The facility will include labs for robot walking, flight testing, rehabilitation robotics and electronics and software development. This project is scheduled to be completed in winter 2020.

Management's Discussion and Analysis (Unaudited)--Continued

Renovation and expansion of the Engineering Lab Building on the University's Dearborn campus is underway. The renovated building, which was originally constructed in 1959, will include teaching labs designed to facilitate entrepreneurial problem solving, encourage multidisciplinary cooperation in the context of 21st-century engineering instruction, and provide students with new collaboration and project spaces. The new facility is also designed to allow for research partnerships with industry as well as expanded K-12 and community outreach efforts, with a focus on women and minorities. When finished, the new facility will include 123,000 square feet of space to be used for classrooms, research and teaching laboratories, faculty offices and student support spaces. Regional boiler and electrical distribution equipment replacement are also included in this project, which is scheduled to be completed in spring 2020.

The Michigan Union, which originally opened in 1919 with building additions in the 1930s and 1950s, is undergoing an extensive renovation. This project will improve accessibility throughout the building, create state-of-the-art student organization and student involvement space, improve space for counseling and student support services, and enhance meeting, lounge and study spaces. Deferred maintenance will also be addressed, including life safety, electrical, mechanical, and plumbing system improvements, replacement of the roof, windows and elevators, and upgrades to interior finish and restrooms. This project is scheduled to be completed in fall 2019.

Construction is also underway on a new William Monroe Trotter Multicultural Center dedicated to celebrating and fostering the University's diversity in a way that is inclusive and more visible. Located on central campus, the new center will accommodate lounge, kitchen and conference room spaces from the current center, and add a multipurpose room with capacity for 300 people for conferences and events, as well as an active-learning, classroom-style configuration that will accommodate 100 students. This project is scheduled to be completed in winter 2019.

Management's Discussion and Analysis (Unaudited)--Continued

The University is aware of its financial stewardship responsibility and works diligently to manage its financial resources effectively, including the prudent use of debt to finance capital projects. A strong debt rating is an important indicator of the University's success in this area. In 2018, S&P Global affirmed its highest credit rating (AAA) for bonds backed by a broad revenue pledge based on the University's robust enrollment and demand, exceptional student quality, retention and graduation rates, strong reputation of the University's health care system, excellent balance sheet, exceptional research presence and manageable debt burden. Moody's also affirmed its highest credit rating (Aaa) based on the University's ability to translate its international brand into solid revenue growth, strong philanthropic support and substantial financial reserves.

Long-term debt activity for the years ended June 30 is summarized as follows:

		20	18	
	Beginning Balance	Additions	Reductions	Ending Balance
		(111 1111	llions)	
Commercial paper Bonds	\$ 161 2,155	\$ 6 157	\$ 9 76	\$ 158 2,236
Other	2	Φ 1.62	2	- -
	\$ 2,318	\$ 163	\$ 87	\$ 2,394
	2017			
	Beginning Balance	Additions (in mi	Reductions llions)	Ending Balance
		(
Commercial paper	\$ 160	\$ 23	\$ 22	\$ 161
Bonds	2,025	550	420	2,155
Other	4		2	2
	\$ 2,189	\$ 573	\$ 444	\$ 2,318

The University utilizes commercial paper, backed by a general revenue pledge, to provide interim financing for its capital improvement program. Outstanding commercial paper is converted to long-term debt financing as appropriate, within the normal course of business. Outstanding bonds are also supported by the University's general revenue pledge.

Management's Discussion and Analysis (Unaudited)--Continued

During 2018, the University issued \$138 million of fixed rate, tax-exempt, general revenue bonds with a net original issue premium of \$19 million. Total bond proceeds of \$157 million, were utilized for capital projects and debt issuance costs.

During 2017, the University issued \$465 million of fixed rate, tax-exempt, general revenue bonds with a net original issue premium of \$85 million. Total bond proceeds of \$550 million, together with amounts held by trustees under bond indenture of \$12 million, were utilized to convert \$12 million of commercial paper to long-term debt, refund existing bonds of \$238 million, establish an escrow to advance refund existing bonds of \$112 million and provide \$200 million for capital projects and debt issuance costs.

The composition of the University's debt at June 30 is summarized as follows:

	2018	2017 (in millions)	2016
Variable rate:			
Commercial paper	\$ 158	\$ 161	\$ 160
Bonds	580	602	676
Fixed rate bonds	1,656	1,553	1,349
Other		2	4
	\$ 2,394	\$ 2,318	\$ 2,189

A significant portion of the University's variable rate bonds are subject to remarketing and, in accordance with GASB Interpretation No. 1, such debt is classified as current unless supported by liquidity arrangements such as lines of credit or standby bond purchase agreements, which could refinance the debt on a long-term basis. In the event that variable rate bonds are put back to the University by the debt holder, management believes that the University's strong credit rating will ensure that the bonds will be remarketed within a reasonable period of time. In addition, the University utilizes remarketing agents to achieve a wide distribution of its variable rate bonds.

While fixed rate bonds typically have a higher effective rate of interest at the date of issuance as compared to variable rate bonds, they reduce the volatility of required debt service payments and do not require liquidity support, such as lines of credit, standby bond purchase agreements or internal liquidity.

Effective interest rates averaged 2.9 percent in 2018 and 2.7 percent in 2017, including the federal subsidies for interest on taxable Build America Bonds. Interest expense net of federal subsidies received for interest on taxable Build America Bonds and interest capitalized during construction totaled \$66 million in 2018 and 2017.

Management's Discussion and Analysis (Unaudited)--Continued

Obligations for Postemployment Benefits

During 2017, the University adopted GASB 75, which establishes new actuarial methods and discount rate standards for the measurement and recognition of the cost of postemployment benefits during the periods when employees render their services, superseding the requirements of GASB Statement No. 45. Adoption of this statement resulted in an increase in the reported liability for postemployment benefits obligations and a decrease in unrestricted net position of \$930 million, as reflected in the comparative balances presented at June 30, 2016.

Using current actuarial assumptions, and presuming a continuation of the current level of benefits, the University's obligations for postemployment benefits totaled \$3.3 billion at June 30, 2018, as compared to \$3.2 billion and \$2.8 billion at June 30, 2017 and 2016, respectively. The increase in the reported liability at June 30, 2018 was driven primarily by the recognition of additional service cost and interest expense, offset somewhat by an increase in the discount rate used in developing the valuation. The increase in the reported liability at June 30, 2017, was driven primarily by a decline in the discount rate. Since a portion of retiree medical services will be provided by the University's health system, this liability is net of the related margin and fixed costs of providing those services which totaled \$611 million, \$674 million and \$616 million at June 30, 2018, 2017 and 2016, respectively.

By implementing a series of health benefit initiatives over the past several years, the University has favorably impacted its total liability for postemployment benefits by \$1.4 billion at June 30, 2018. These initiatives have included cost sharing changes, elimination of Medicare Part B reimbursements for certain retirees and the adjustment of retirement eligibility criteria.

Management's Discussion and Analysis (Unaudited)--Continued

Net Position

Net position represents the residual interest in the University's assets and deferred outflows after liabilities and deferred inflows are deducted. The composition of the University's net position at June 30 is summarized as follows:

_	2018	2017 (in millions)	2016
Net investment in capital assets Restricted:	\$ 3,722	\$ 3,735	\$ 3,715
Nonexpendable: Permanent endowment corpus	2,146	1,967	1,816
Expendable:	,	,	,
Net appreciation of permanent endowments	2,068	1,829	1,519
Funds functioning as endowment	2,308	2,126	1,942
Restricted for operations and other	632	633	617
Unrestricted	3,405	3,071	2,490
_	\$ 14,281	\$ 13,361	\$ 12,099

Net investment in capital assets represents the University's capital assets net of accumulated depreciation, outstanding principal balances of debt and capital lease liabilities, unexpended bond proceeds and deferred outflows associated with the acquisition, construction or improvement of those assets.

Restricted nonexpendable net position represents the historical value (corpus) of gifts to the University's permanent endowment funds. Restricted expendable net position is subject to externally imposed stipulations governing their use and includes net appreciation of permanent endowments, funds functioning as endowment and net position restricted for operations, facilities and student loan programs. Restricted expendable net position increased 9 percent, or \$420 million, to \$5.0 billion at June 30, 2018, as compared to an increase of 13 percent, or \$510 million, to \$4.6 billion at June 30, 2017. The increase experienced during both 2018 and 2017 was driven primarily by investment income and new gift activity.

Although unrestricted net position is not subject to externally imposed stipulations, substantially all of the University's unrestricted net position has been designated for various academic programs, research initiatives and capital projects. Unrestricted net position at June 30, 2018 totaled \$3.4 billion and included funds functioning as endowment of \$5.2 billion offset by unfunded obligations for postemployment benefits of \$3.1 billion. Unrestricted net position at June 30, 2017 totaled \$3.1 billion and included funds functioning as endowment of \$4.9 billion offset by unfunded obligations for postemployment benefits of \$2.9 billion. Unrestricted net position also includes other net resources which totaled \$1.3 billion and \$1.1 billion at June 30, 2018 and 2017, respectively.

Management's Discussion and Analysis (Unaudited)--Continued

Statement of Revenues, Expenses and Changes in Net Position

The statement of revenues, expenses and changes in net position presents the University's results of operations. In accordance with GASB reporting principles, revenues and expenses are classified as either operating or nonoperating. The University's revenues, expenses and changes in net position for the years ended June 30 are summarized as follows:

	2018	2017	2016
		(in millions)	
Operating revenues:			
Net student tuition and fees	\$ 1,310.9	\$ 1,240.6	\$ 1,161.7
Sponsored programs	1,229.4	1,180.2	1,107.1
Patient care revenues, net	4,438.7	4,200.1	3,587.3
Other	487.9	458.8	421.9
	7,466.9	7,079.7	6,278.0
Operating expenses	8,559.4	7,910.0	7,152.8
Operating loss	(1,092.5)	(830.3)	(874.8)
Nonoperating and other revenues (expenses):			
State educational appropriations	363.1	356.0	345.8
Federal Pell grants	49.2	43.8	43.3
Private gifts for operating activities	196.6	159.1	167.2
Net investment income (loss)	1,261.4	1,400.6	(129.7)
Interest expense, net	(72.9)	(73.1)	(55.6)
Federal subsidies for interest on Build America Bonds	7.4	7.5	7.6
State capital appropriations	5.0	18.0	47.6
Endowment and capital gifts and grants	209.2	187.0	163.0
Other	(6.1)	(6.9)	(9.0)
Nonoperating and other revenues, net	2,012.9	2,092.0	580.2
Increase (decrease) in net position	920.4	1,261.7	(294.6)
Net position, beginning of year	13,360.6	13,001.2	13,295.8
Affiliation with Metro Health and adoption of GASB 75 and GASB 81		(902.3)	
Net position, beginning of year, as restated	13,360.6	12,098.9	13,295.8
Net position, end of year	\$ 14,281.0	\$ 13,360.6	\$ 13,001.2

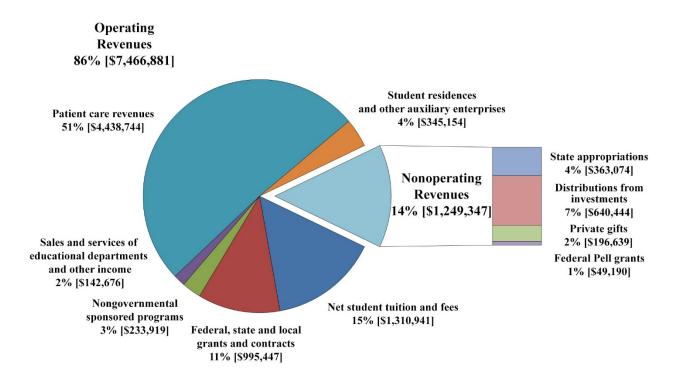
The impact of the Metro Health affiliation and the adoption of GASB 75 and GASB 81 has been reflected as of the beginning of the earliest period presented in the financial statements, or July 1, 2016. Therefore, the statement of revenues, expenses and changes in net position presented above for the year ended June 30, 2016 does not reflect these items. During 2016, Metro Health reported total operating revenues of \$374 million and total operating expenses of \$357 million.

Management's Discussion and Analysis (Unaudited)--Continued

One of the University's greatest strengths is the diverse streams of revenue that supplement its student tuition and fees, including private support from individuals, foundations and corporations, along with government and other sponsored programs, state appropriations and investment income. The University continues to aggressively seek funding from all possible sources consistent with its mission in order to supplement student tuition and prudently manage the financial resources realized from these efforts to fund its operating activities, which include instruction, patient care and research.

The following is a graphic illustration of revenues by source, both operating and nonoperating, which are used to fund the University's operating activities for the year ended June 30, 2018 (amounts are presented in thousands of dollars). Certain recurring sources of the University's revenues are considered nonoperating, as defined by GASB, such as state appropriations, distributions from investments, private gifts and federal Pell grants.

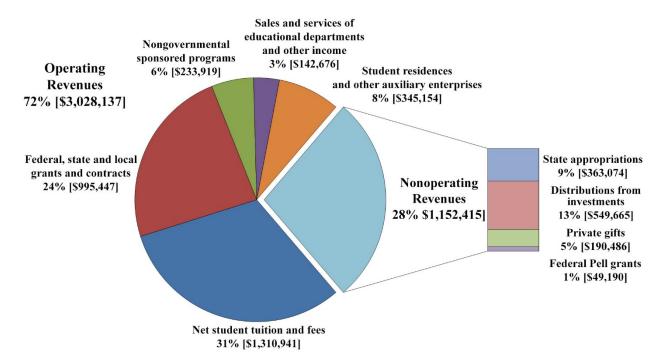
2018 Revenues for Operating Activities



Management's Discussion and Analysis (Unaudited)--Continued

The University measures its performance both for the University as a whole and for the University without its health system and other clinical activities. The exclusion of these activities allows a clearer view of the operations of the schools and colleges, as well as central administration. The following is a graphic illustration of University revenues by source, both operating and nonoperating, which are used to fund operating activities other than the health system and other clinical activities, for the year ended June 30, 2018 (amounts are presented in thousands of dollars).

2018 Revenues for Operating Activities Excluding Revenues from the Health System and Other Clinical Activities



Tuition and state appropriations are the primary sources of funding for the University's academic programs. There is a relationship between the growth or reduction in state support and the University's ability to restrain tuition fee increases. Together, net student tuition and fees and state appropriations increased 5 percent, or \$77 million, to \$1.7 billion in 2018.

Management's Discussion and Analysis (Unaudited)--Continued

The University's long-term plan includes an ongoing commitment to cost containment and reallocating resources to the highest priorities to provide support for innovative new initiatives to maintain academic excellence and help students keep pace with the evolving needs of society. In 2018, the University's state educational appropriations increased 2 percent, or \$7 million, to \$363 million.

For the years ended June 30, net student tuition and fees revenue consisted of the following components:

Student tuition and fees Less scholarship allowances

2018	2017
(in millions)	
\$ 1,726.0	\$ 1,616.6
415.1	376.0
\$ 1,310.9	\$ 1,240.6

In 2018, net student tuition and fees revenue increased 6 percent, or \$70 million, to \$1.3 billion, which reflects an increase of 7 percent, or \$109 million, in gross student tuition and fees revenue offset by an increase of 10 percent, or \$39 million, in scholarship allowances. Tuition rate increases in 2018 were 2.9 percent for resident undergraduate students, 4.5 percent for nonresident undergraduate students and 4.1 percent for most graduate students on the Ann Arbor campus, with a 3.7 and 4.1 percent tuition rate increase for most resident undergraduate students on the Dearborn and Flint campuses, respectively. During 2018, the University experienced moderate growth in the number of students, as well as a shift in mix from resident to nonresident students.

Tuition rate increases in 2017 were 3.9 percent for resident undergraduate students, 4.4 percent for nonresident undergraduate students and 3.9 percent for most graduate students on the Ann Arbor campus, with a 4.1 percent tuition rate increase for most undergraduate students on both the Dearborn and Flint campuses.

The University's tuition rate increases have consistently been among the lowest in the state, even in years of significant reductions in state appropriations, which reflects a commitment to affordable higher education for Michigan families. In addition, the University has increased scholarship and fellowship expenses and related allowances to benefit students in financial need.

While tuition and state appropriations fund a large percentage of University costs, private support is also essential to the University's academic distinction. Private gifts for other than capital and endowment purposes totaled \$197 million in 2018, as compared to \$159 million in 2017.

Management's Discussion and Analysis (Unaudited)--Continued

The University receives revenues for sponsored programs from various government agencies and private sources, which normally provide for both direct and indirect costs to perform these sponsored activities, with a significant portion related to federal research. Revenues for sponsored programs increased 4 percent, or \$49 million, to \$1.2 billion in 2018 driven primarily by an increase in federally sponsored activity.

Patient care revenues are principally generated within the University's hospitals and ambulatory care facilities. Patient care revenues increased 6 percent, or \$239 million, to \$4.4 billion in 2018 and reflect growth in patient volume, as well as an increase in revenue per patient case.

For the years ended June 30, patient care revenues by source is summarized as follows:

	2018	2017	
	(in millions)		
University of Michigan Hospitals	\$ 3,404.9	\$ 3,206.5	
University of Michigan Medical Group	485.1	488.2	
UM Health	433.9	376.4	
Michigan Health Corporation	17.9	18.4	
Other	96.9	110.6	
	\$ 4,438.7	\$ 4,200.1	

The largest component of patient care revenues is generated by the University of Michigan Hospitals ("UMH"), a national leader in advanced patient care and comprehensive education of physicians and medical scientists. UMH, which serves as the principal teaching facility for the University's Medical School, operates three hospitals with 1,043 licensed beds for acute care and psychiatric needs, as well as numerous ambulatory care centers, outpatient clinics and various other health care programs across the state. Substantially all physician services to UMH patients are provided by the University of Michigan Medical Group, which is comprised of the university's Medical School faculty. UMH also provides educational and clinical opportunities to students of the University's Schools of Nursing, Dentistry, Pharmacy, Social Work and Public Health.

UM Health is a growing component of patient care activity and its revenues currently represent Metro Health, a community health care provider in west Michigan, which operates a hospital with 208 licensed beds for acute care, as well as neighborhood outpatient clinics and a growing network of specialty services. The University's affiliation with Metro Health positions UM Health to expand research capabilities, primary care, specialty services, and the use of complex medical technologies.

Management's Discussion and Analysis (Unaudited)--Continued

Michigan Health Corporation generates revenue through its various joint venture and managed care initiatives, which provide services to patients including dialysis and other health services.

Other patient care revenues include amounts received from governmental and commercial payers associated with initiatives designed to improve accessibility and quality of care for patients, services provided by physicians working at facilities outside of the University and ambulatory care services provided by University Health Service, the School of Dentistry and the School of Nursing.

Contractual arrangements with governmental payers (Medicare and Medicaid) and private insurers impact patient care revenues. In 2018, the University realized payment rate increases from the majority of private insurers and governmental payers as compared to 2017. The distribution of net patient care service revenue by primary payer source for the two years ended June 30 is summarized as follows:

	2018	2017
Medicare	26%	26%
Medicaid	12%	11%
Blue Cross	38%	34%
Other	24%	29%

Net investment income totaled \$1.3 billion in 2018 as compared to \$1.4 billion in 2017. The investment environment in 2018 continued its positive momentum from 2017. The US public equity markets were very strong in the first half of the year and climbed to all-time highs in January 2018. While these markets lost momentum in February, they spent the remainder of the fiscal year climbing back to near all-time highs. The alternative asset class performance was particularly strong in 2018, returning 17 percent. Leaders in this asset class included private equity and venture capital, which both returned 20 percent. Public equity performance while returning 6 percent this year, was down from last year when it returned 25 percent. In 2017, returns were strong in all asset classes including equity securities, as well as the alternative asset class where private equity and natural resources had the highest returns at 17 percent.

Management's Discussion and Analysis (Unaudited)--Continued

State capital appropriations are also helping the University improve its academic buildings. Recent capital outlays have supported renovations of the George Granger Brown Memorial Laboratories on the Ann Arbor campus, the Science Building and Computer Information Science Building on the Dearborn campus and the William R. Murchie Science Building on the Flint campus. Revenue is recognized as qualified capital expenditures are incurred and totaled \$5 million and \$18 million in 2018 and 2017, respectively.

Gifts and grants for endowment and capital purposes continue to be a significant part of sustaining the University's excellence. Private gifts for permanent endowment purposes totaled \$169 million in 2018, as compared to \$143 million in 2017. Capital gifts and grants totaled \$40 million in 2018, as compared to \$44 million in 2017. In recent years, major gifts have been received in support of the University's wide-ranging capital initiatives which include the health system, Ross School of Business, College of Engineering and Intercollegiate Athletics.

In addition to revenue diversification, the University continues to make cost containment an ongoing priority. This is necessary as the University faces significant financial pressures, particularly in the areas of compensation and benefits, which represent 63 percent of total expenses, as well as in the areas of energy, technology and ongoing maintenance of facilities and infrastructure.

The University's expenses for the years ended June 30 are summarized as follows (amounts in millions):

	2018		2017	
Operating:				
Compensation and benefits	\$ 5,431.4	63%	\$ 5,064.4	63%
Supplies and services	2,402.6	27	2,164.0	27
Depreciation	568.7	7	537.7	7
Scholarships and fellowships	156.7	2	143.9	2
	8,559.4	99	7,910.0	99
Nonoperating:				
Interest, net	65.5	1	65.6	1
	\$ 8,624.9	100%	\$ 7,975.6	100%

The University is committed to recruiting and retaining outstanding faculty and staff and the compensation package is one way to successfully compete with peer institutions and nonacademic employers. Compensation and benefits increased 7 percent, or \$367 million, to \$5.4 billion in 2018. Of the 2018 increase, compensation increased 6 percent, or \$244 million, to \$4.1 billion, driven primarily by increases in staffing levels resulting from patient activity and

Management's Discussion and Analysis (Unaudited)--Continued

capacity expansion within the University's health system, and employee benefits increased 10 percent, or \$123 million, to \$1.3 billion, resulting from an increase in prescription drug costs as well as activity associated with the University's postemployment benefits obligations.

The University faces external and industry realities that put significant pressure on its ability to reduce compensation costs while remaining competitive. To help address this risk, the University continues to review components of its existing benefits program to find opportunities for potential savings without compromising the ability to offer competitive benefits to all faculty and staff.

Health care benefits are one of the most significant employee benefits. Over the past several years, the University has implemented initiatives to better control its rate of cost increase, encourage employees to choose the lowest cost health care plan that meets their needs and share a larger portion of health care cost increases with employees. These initiatives reflect the reality of the national landscape, while remaining true to the commitment we make to our employees for a robust benefits package. Careful stewardship of our health benefit plans, including the use of wellness initiatives, helps maintain our competitive position while preserving funding for the University's core mission.

During 2013, the University began to implement changes to eligibility requirements and the University contribution to retiree health benefits that were announced in 2011. These changes were recommended by a committee that evaluated ways to maintain competitive retiree health benefits while helping address the acceleration of future costs, and are being phased in over eight years in order to assist current employees with the transition. These adjustments will keep the University's retiree benefits competitive with peer institutions while producing an estimated \$9 million reduction in annual cash outlay by 2020 and an estimated \$165 million reduction in annual cash outlay by 2040.

Compared to most employers, the University is in a unique position to utilize internal experts to advise and guide its health care and drug plans. For example, the Pharmacy Benefits Advisory Committee, which consists of internal experts including health system physicians, School of Pharmacy faculty and on-staff pharmacists, monitors the safety and effectiveness of covered medications and guides appropriate prescribing, dispensing and cost effective use of prescription drugs. In addition, the University utilizes its nationally recognized health policy experts to guide future health plan strategies.

Supplies and services expenses increased 11 percent, or \$239 million, to \$2.4 billion in 2018 and reflects the growth in patient care related expenses including higher costs of prescription drugs and infusion treatments, as well as costs associated with significant capital projects.

Management's Discussion and Analysis (Unaudited)--Continued

Depreciation expense increased 6 percent, or \$31 million, to \$569 million in 2018 and reflects the completion of current year capital projects, the impact of a full year of depreciation for the capital projects completed during the prior year, and a \$25 million impairment charge associated with certain components of Metro Health's hospital facilities. Capital assets placed in service during 2018 include the Biological Science Building, Weiser Hall renovation, West Ann Arbor Health Center, Clinical Pathology renovation and relocation, and Athletics South Competition and Performance Project.

In addition to their natural (object) classification, it is also informative to review operating expenses by function. The University's expenses by functional classification for the years ended June 30 are summarized as follows (amounts in millions):

	2018		2017	
Operating:				
Instruction	\$ 1,153.2	13%	\$ 1,099.8	14%
Research	823.6	10	803.5	10
Public service	211.5	2	187.8	2
Institutional and academic support	681.0	8	646.7	8
Auxiliary enterprises:				
Patient care	4,349.2	50	3,976.1	50
Other	264.6	3	198.1	2
Operations and maintenance of plant	350.9	4	316.4	4
Depreciation	568.7	7	537.7	7
Scholarships and fellowships	156.7	2	143.9	2
-	8,559.4	99	7,910.0	99
Nonoperating:	·			
Interest, net	65.5	1	65.6	1
	\$ 8,624.9	100%	\$ 7,975.6	100%

Instruction expenses increased 5 percent, or \$53 million, in 2018 and reflect the level of growth in the related revenue sources offset by cost containment efforts.

Research expenses increased 3 percent, or \$20 million, in 2018 driven by the strength of the University's research enterprise, in spite of continued pressure on federal funding and intense competition for research dollars. To measure its total volume of research expenditures, the University considers research expenses included in the above table, as well as research related facilities and administrative expenses, research initiative and start-up expenses and research equipment purchases. These amounts totaled \$1.55 billion and \$1.48 billion in 2018 and 2017, respectively.

Management's Discussion and Analysis (Unaudited)--Continued

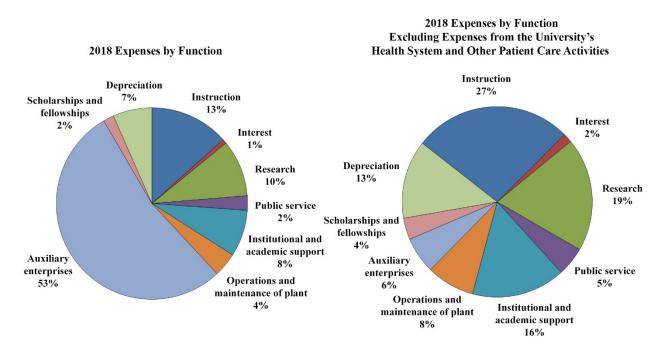
Patient care expenses increased 9 percent, or \$373 million, in 2018 and reflect the impact of additional patient activity and capacity expansion. Increased compensation expense related to patient care includes both growth in staff levels and wage increases. Increased medical supplies expense results from higher patient activity levels, particularly in operating rooms and infusion treatments, new information technology initiatives and the rising cost of pharmaceuticals.

Scholarships and fellowships provided to students totaled \$596 million in 2018, as compared to \$543 million in 2017, an increase of 10 percent. Tuition, housing and fees revenues are reported net of aid applied to students' accounts, while amounts paid directly to students are reported as scholarship and fellowship expenses. Scholarships and fellowships for the years ended June 30 are summarized as follows:

Paid directly to students Applied to tuition and fees Applied to University Housing

2017		
(in millions)		
\$ 143.9		
376.0		
22.7		
\$ 542.6		

The following graphic illustrations present total expenses by function, with and without the University's health system and other patient care activities:



Management's Discussion and Analysis (Unaudited)--Continued

Statement of Cash Flows

The statement of cash flows provides additional information about the University's financial results by reporting the major sources and uses of cash. The University's cash flows for the years ended June 30 are summarized as follows:

	2018	2017 (in millions)	2016
Cash received from operations	\$ 7,505.7	\$ 7,103.6	\$ 6,330.7
Cash expended for operations	(7,916.8)	(7,277.3)	(6,496.5)
Net cash used in operating activities	(411.1)	(173.7)	(165.8)
Net cash provided by noncapital financing activities	732.7	715.5	679.0
Net cash used in capital and related financing activities	(592.6)	(497.9)	(449.3)
Net cash provided by (used in) investing activities	299.3	(278.4)	116.4
Net increase (decrease) in cash and cash equivalents	28.3	(234.5)	180.3
Cash and cash equivalents, beginning of year	105.1	285.8	105.5
Affiliation with Metro Health		53.8	
Cash and cash equivalents, beginning of year, as restated	105.1	339.6	105.5
Cash and cash equivalents, end of year	\$ 133.4	\$ 105.1	\$ 285.8

The impact of the Metro Health affiliation is reflected as of the beginning of the earliest period presented in the financial statements, or July 1, 2016. Therefore, the statement of cash flows presented above for the year ended June 30, 2016 does not reflect the impact of this affiliation.

Cash received from operations primarily consists of student tuition, sponsored program grants and contracts, and patient care revenues. Significant sources of cash provided by noncapital financing activities, as defined by GASB, include state appropriations, federal Pell grants and private gifts used to fund operating activities.

Economic Factors That May Affect the Future

The University maintains the highest credit ratings of S&P Global (AAA) and Moody's (Aaa). Achieving and maintaining the highest credit ratings provides the University with significant flexibility in securing capital funds on the most competitive terms. This flexibility, along with ongoing efforts toward revenue diversification and cost containment, will enable the University to provide the necessary resources to support a consistent level of excellence in service to students, patients, the research community, the state and the nation.

Management's Discussion and Analysis (Unaudited)--Continued

A crucial element to the University's future continues to be a strong relationship with the state of Michigan. Historically, there has been a connection between the growth, or reduction, of state support and the University's ability to control tuition increases. Over the past several years, the University has successfully addressed the realities of the state's challenging economy and, pursuant to a long-range plan, continues to work relentlessly to cut and mitigate operational costs in order to remain affordable and preserve access, while protecting the academic enterprise.

The University's budget for 2019 anticipates a 2.0 percent increase in state educational appropriations, a 2.9 percent tuition rate increase for Ann Arbor campus resident undergraduates and a 16.3 percent increase in centrally awarded financial aid. Nonresident undergraduate tuition rates will increase 3.9 percent, while most graduate and professional rates will increase 3.3 percent. Resident undergraduate tuition rates on the Dearborn and Flint campuses will increase 3.7 percent and 4.3 percent, respectively.

While tuition and state appropriations fund a large percentage of academic costs, private support is also essential to the University's academic distinction. In November 2013, the University launched the public phase of a major fundraising campaign with the announcement of an ambitious goal of \$4 billion. The campaign, titled "Victors for Michigan", is focused on raising funds for three priority areas of student support, engaged learning and bold ideas, in order to better prepare tomorrow's leaders and address the complex problems facing the world. The campaign is expected to continue through December 2018.

The University continues to execute its long-range plan to maintain, modernize and expand its complement of older facilities while adding key new facilities for instruction, research, patient care, athletics and residential life. This strategy addresses the University's growth and the continuing effects of technology on teaching, research and clinical activities. Authorized costs to complete construction and other projects totaled \$971 million at June 30, 2018. Funding for these projects is anticipated to include \$799 million from internal sources, gifts, grants and future borrowings, \$89 million from the State Building Authority and \$83 million from the utilization of unexpended bond proceeds.

The University's health system continues its strategy to expand access to patients, locally and on a statewide basis. In addition to strategic capital and technological investments, the University's health system is also focusing on clinical affiliation arrangements and population management programs designed to expand community access and improve patient, family and provider experiences across the continuum of care. The affiliation arrangements are also expected to enhance clinical research, physician recruitment and support services.

Management's Discussion and Analysis (Unaudited)--Continued

While the University's health system is well positioned to maintain a strong financial position in the near term, ongoing constraints on revenue are expected due to fiscal pressures from employers and federal and state governments. Lawmakers continue to discuss Medicare and Medicaid changes which may target graduate medical education-related payments and could result in a significant impact on teaching hospitals. In addition, private insurance and managed care contracts historically provide for annual increases in reimbursement rates that met or exceeded the rate of inflation; however, there can be no assurance that such trends will continue. Management believes that much of the payment pressure can be offset by growth in patient volume and continued efforts to contain certain costs.

The University will continue to employ its long-term investment strategy to maximize total returns, at an appropriate level of risk, while utilizing a spending rate policy to preserve endowment capital and insulate the University's operations from temporary market volatility.

As a labor-intensive organization, the University faces competitive pressures related to attracting and retaining faculty and staff. Moreover, consistent with the national landscape, the University also faces rising costs of health benefits for its employees and retirees. The University has successfully taken and will continue to take proactive steps to respond to these challenges while protecting the quality of the overall benefits package.

A portion of the University's labor force is unionized, with negotiated labor agreements defining terms and conditions of employment. Changes in relations with unions and represented employees, including the negotiation of new agreements, could have a material effect on the University.

While it is not possible to predict the ultimate results, management believes that the University's financial position will remain strong.

Consolidated Statement of Net Position

	June 30,	
	2018	2017
_	(in the	ousands)
Assets and Deferred Outflows		
Current Assets:		
Cash and cash equivalents	\$ 133,365	\$ 105,127
Investments for operating activities	1,117,063	1,265,208
Investments for capital activities	533,855	378,931
Investments for student loan activities	57,135	58,836
Accounts receivable, net	666,811	639,384
Current portion of notes and pledges receivable, net	79,765	76,148
Current portion of prepaid expenses and other assets	125,159	127,799
Cash collateral held by agent	29,727	44,130
Total Current Assets	2,742,880	2,695,563
Noncurrent Assets:		
Unexpended bond proceeds	82,797	98,455
Endowment, life income and other investments	12,305,228	11,322,610
Notes and pledges receivable, net	336,870	312,478
Prepaid expenses and other assets	90,618	28,740
Capital assets, net	6,120,997	6,045,442
Total Noncurrent Assets	18,936,510	17,807,725
Total Assets	21,679,390	20,503,288
Deferred Outflows	383,589	348,691
Total Assets and Deferred Outflows	\$ 22,062,979	\$ 20,851,979
Liabilities, Deferred Inflows and Net Position		
Current Liabilities:		
	\$ 290,563	\$ 328,672
Accounts payable Accrued compensation and other		442,749
Unearned revenue	451,458	283,551
Current portion of insurance and benefits reserves	306,803 98,159	97,799
Current portion of obligations for postemployment benefits	· · · · · · · · · · · · · · · · · · ·	77,374
Commercial paper and current portion of bonds payable	87,638	237,243
Long-term bonds payable subject to remarketing, net	237,371	
	195,552	202,718 44,130
Collateral held for securities lending Deposits of affiliates and others	29,727 77,422	87,811
Total Current Liabilities		
Noncurrent Liabilities:	1,774,693	1,802,047
Accrued compensation	40.692	42 004
Insurance and benefits reserves	40,682	43,904
Obligations for defined benefit pension plan, net	137,003	116,236
Obligations for postemployment benefits	(3,823)	3,436
	3,216,102	3,120,953
Obligations under life income agreements	74,180 81,510	65,897 88,401
Government loan advances		
Bonds payable Deposits of affiliates and other	1,961,085	1,877,554 289,213
Total Noncurrent Liabilities	307,210 5 813 040	5,605,594
Total Liabilities	5,813,949	7,407,641
-	7,588,642	
Deferred Inflows	193,292	83,683
Net Position:		
Net investment in capital assets	3,722,086	3,735,130
Restricted:	•	
Nonexpendable	2,146,358	1,966,541
Expendable	5,007,324	4,587,581
Unrestricted	3,405,277	3,071,403
Total Net Position	14,281,045	13,360,655
Total Liabilities, Deferred Inflows and Net Position	\$ 22,062,979	\$ 20,851,979

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statement of Revenues, Expenses and Changes in Net Position

	Year Ended June 30,	
	2018	2017
Operating Revenues	(in tho	usands)
Student tuition and fees	\$ 1,726,033	\$ 1,616,575
Less scholarship allowances	415,092	375,991
Net student tuition and fees	1,310,941	1,240,584
Federal grants and contracts	982,143	942,287
State and local grants and contracts	13,304	11,405
Nongovernmental sponsored programs	233,919	226,556
Sales and services of educational departments	140,139	135,212
Auxiliary enterprises:		
Patient care revenues (net of provision for bad debts of \$101,109 in 2018	4 420 5 44	4 200 001
and \$95,214 in 2017)	4,438,744	4,200,081
Student residence fees (net of scholarship allowances of \$23,814 in 2018 and \$22,678 in 2017)	117 966	112,478
Other revenues	117,866 227,288	208,628
Student loan interest income and fees	2,537	2,448
Total Operating Revenues	7,466,881	7,079,679
	7,100,001	,,,,,,,,,
Operating Expenses		
Compensation and benefits	5,431,392	5,064,422
Supplies and services	2,402,592	2,164,018
Depreciation	568,707	537,670
Scholarships and fellowships	156,738	143,932
Total Operating Expenses _	8,559,429	7,910,042
Operating loss	(1,092,548)	(830,363)
Nonoperating Revenues (Expenses)	242.054	255.002
State educational appropriations	363,074	355,992
Federal Pell grants Private gifts for other than capital and endowment purposes	49,190 196,639	43,819 159,148
Net investment income	1,261,443	1,400,671
Interest expense, net	(72,905)	(73,150)
Federal subsidies for interest on Build America Bonds	7,451	7,506
Total Nonoperating Revenues, Net	1,804,892	1,893,986
, , _	, ,	, ,
Income before other revenues (expenses)	712,344	1,063,623
Other Revenues (Expenses)		
State capital appropriations	4,978	17,965
Capital gifts and grants	39,835	43,828
Private gifts for permanent endowment purposes	169,337	143,174
Other	(6,104)	(6,855)
Total Other Revenues, Net	208,046	198,112
Increase in net position	920,390	1,261,735
Net Position, Beginning of Year	13,360,655	13,001,255
Affiliation with Metro Health and Adoption of GASB 75 and GASB 81	,,	(902,335)
Net Position, Beginning of Year, as Restated	13,360,655	12,098,920
Net Position, End of Year	\$ 14,281,045	\$ 13,360,655

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statement of Cash Flows

	Year Ende	d June 30,
	2018	2017
	(in tho	usands)
Cash Flows From Operating Activities		* 1 0 10 00 -
Student tuition and fees	\$ 1,314,268	\$ 1,242,227
Federal, state and local grants and contracts	973,815	945,781
Nongovernmental sponsored programs	250,617	240,657
Sales and services of educational departments and other	394,892	338,496
Patient care revenues	4,431,064	4,200,681
Student residence fees	118,192	112,623
Payments to employees	(4,108,246)	(3,881,649)
Payments for benefits	(1,157,316)	(1,060,665)
Payments to suppliers	(2,478,042)	(2,171,333)
Payments for scholarships and fellowships	(156,738)	(143,932)
Student loans issued	(16,453)	(19,675)
Student loans collected	20,328	20,730
Student loan interest and fees collected	2,537	2,448
Net Cash Used in Operating Activities	(411,082)	(173,611)
Cash Flows From Noncapital Financing Activities		
State educational appropriations	361,787	354,143
Federal Pell grants	49,190	43,819
Private gifts and other receipts	317,215	299,984
Student direct lending receipts	298,011	297,406
Student direct lending disbursements	(301,194)	(291,964)
Amounts received for annuity and life income funds	16,878	21,243
Amounts paid to annuitants and life beneficiaries and related expenses	(9,186)	(9,142)
Net Cash Provided by Noncapital Financing Activities	732,701	715,489
Cash Flows From Capital and Related Financing Activities	4.070	40.676
State capital appropriations	4,968	40,676
Private gifts and other receipts Proceeds from issuance of capital debt	47,655	45,674 572,420
	163,328	573,439
Principal payments on capital debt	(75,918)	(428,828)
Interest payments on capital debt Federal subsidies for Build America Bonds interest	(82,096)	(88,383)
	7,413	7,462
Payments for bond refunding and related costs	(526)	(1,447)
Purchases of capital assets	(658,839) 1,329	(648,245)
Proceeds from sales of capital assets Net Cash Used in Capital and Related Financing Activities	(592,686)	1,692 (497,960)
Net Cash Osed in Capital and Related Financing Activities	(392,000)	(497,900)
Cash Flows From Investing Activities		
Interest and dividends on investments, net	51,985	48,375
Proceeds from sales and maturities of investments	5,477,448	5,389,209
Purchases of investments	(5,119,195)	(5,718,627)
Net decrease (increase) in unexpended capital debt proceeds	15,658	(98,455)
Net (increase) decrease in cash equivalents from noncurrent investments	(126,745)	60,398
Net increase in deposits of affiliates and other	154	40,714
Net Cash Provided by (Used in) Investing Activities	299,305	(278,386)
Net increase (decrease) in cash and cash equivalents	28,238	(234,468)
	105 125	205.020
Cash and Cash Equivalents, Beginning of Year	105,127	285,838
Affiliation with Metro Health	40-11-	53,757
Cash and Cash Equivalents, Beginning of Year, as Restated	105,127	339,595
Cash and Cash Equivalents, End of Year	\$ 133,365	\$ 105,127

The accompanying notes are an integral part of the consolidated financial statements.

Consolidated Statement of Cash Flows--Continued

	Year Ended June 30,		
	2018	2017	
	(in thousands)		
Reconciliation of operating loss to net cash used in operating activities:			
Operating loss	\$ (1,092,548)	\$ (830,363)	
Adjustments to reconcile operating loss to net cash used in operating activities			
Depreciation expense	568,707	537,670	
Changes in assets and liabilities:			
Accounts receivable, net	(21,468)	(11,427)	
Prepaid expenses and other assets	(65,680)	(10,662)	
Accounts payable	(32,228)	(4,103)	
Accrued compensation and other	6,106	21,952	
Unearned revenue	23,502	15,716	
Insurance and benefits reserves	21,127	10,832	
Obligations for defined benefit pension plan, net	(7,259)	(25,742)	
Obligations for postemployment benefits	105,413	427,401	
Deposits of affiliates and other	20,345		
Changes in deferred outflows	(43,176)	(322,166)	
Changes in deferred inflows	106,077	17,281	
Net cash used in operating activities	\$ (411,082)	\$ (173,611)	

Notes to Consolidated Financial Statements

June 30, 2018 and 2017

Note 1--Organization and Summary of Significant Accounting Policies

Organization and Basis of Presentation: The University of Michigan (the "University") is a state-supported institution with an enrollment of over 63,000 students on its three campuses. The financial statements include the individual schools, colleges and departments, the University of Michigan Hospitals, Michigan Health Corporation (a wholly-owned corporation created for joint venture and managed care initiatives), UM Health (a wholly-owned corporation created to hold and develop the University's statewide network of hospitals, hospital joint ventures and other hospital affiliations) and Veritas Insurance Corporation (a wholly-owned captive insurance company). While the University is a political subdivision of the state of Michigan, it is not a component unit of the State in accordance with Governmental Accounting Standards Board ("GASB") Statement No. 14, *The Financial Reporting Entity*. The University is classified as a state instrumentality under Internal Revenue Code Section 115 and a charitable organization under Internal Revenue Code Section 501(c)(3), and is therefore exempt from federal income taxes. Certain activities of the University may be subject to taxation as unrelated business income under Internal Revenue Code Sections 511 to 514.

The University reports as a special purpose government entity engaged primarily in business type activities, as defined by GASB, on the accrual basis. Business type activities are those that are financed in whole or in part by fees charged to external parties for goods or services.

The financial statements of all controlled organizations are included in the University's financial statements; affiliated organizations that are not controlled by, and not dependent on the University, such as booster and alumni organizations, are not included.

On December 15, 2016, the University completed an affiliation with Metropolitan Health Corporation ("Metro Health"), a community health care provider in west Michigan, pursuant to which UM Health became the sole corporate member of Metro Health. In accordance with GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, this affiliation is included in the financial statements as if it occurred at the beginning of the earliest period presented, resulting in an increase in net position of \$80,261,000 at July 1, 2016.

During 2018, the University adopted GASB Statement No. 81, *Irrevocable Split-Interest Agreements* ("GASB 81"). This statement establishes recognition and measurement guidance for situations in which a government is a beneficiary of a split-interest agreement. The adoption of GASB 81 has been reflected as of the beginning of the earliest period presented in the financial statements, resulting in an increase in deferred inflows and a decrease in restricted expendable net position of \$52,252,000 at July 1, 2016.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

During 2017, the University adopted GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions ("GASB 75"). This statement supersedes GASB Statement No. 45 and establishes new requirements for calculating and reporting the University's postemployment benefits. The adoption of GASB 75 has been reflected as of the beginning of the earliest period presented in the financial statements, resulting in an increase in obligations for postemployment benefits and a decrease in unrestricted net position of \$930,343,000 at July 1, 2016.

Net position is categorized as:

Net investment in capital assets: Capital assets, net of accumulated depreciation, outstanding
principal balances of debt and capital lease liabilities, unexpended bond proceeds and
deferred outflows associated with the acquisition, construction or improvement of those
assets.

Restricted:

<u>Nonexpendable</u> – Net position subject to externally imposed stipulations that it be maintained permanently. Such net position includes the corpus portion (historical value) of gifts to the University's permanent endowment funds and certain investment earnings stipulated by the donor to be reinvested permanently.

<u>Expendable</u> – Net position subject to externally imposed stipulations that can be fulfilled by actions of the University pursuant to those stipulations or that expire by the passage of time. Such net position includes net appreciation of the University's permanent endowment funds that have not been stipulated by the donor to be reinvested permanently.

• Unrestricted: Net position not subject to externally imposed stipulations. Unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. Substantially all unrestricted net position is designated for various academic programs, research initiatives and capital projects.

<u>Summary of Significant Accounting Policies</u>: For purposes of the statement of cash flows, the University considers all highly liquid investments purchased with a maturity of three months or less, to be cash equivalents. Cash equivalents representing assets of the University's endowment, life income and other investments are included in noncurrent investments as these funds are not used for operating purposes.

Investments are reported in four categories in the statement of net position. Investments reported as endowment, life income and other investments are those funds invested in portfolios that are considered by management to be of a long duration. Investments for student loan and capital activities are those funds that are intended to be used for these specific activities. All other investments are reported as investments for operating activities.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

GASB defines fair value and establishes a framework for measuring fair value that includes a three tiered hierarchy of valuation inputs, placing a priority on those which are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the reporting entity and unobservable inputs reflect the University's own assumptions about how market participants would value an asset or liability based on the best information available. To the extent that valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. The three levels of inputs, of which the first two are considered observable and the last unobservable, are as follows:

- Level 1 Quoted prices for identical assets or liabilities in active markets that can be accessed at the measurement date
- Level 2 Other significant observable inputs, either direct or indirect, such as quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable; or market corroborated inputs
- Level 3 Unobservable inputs

GASB allows for the use of net asset value ("NAV") as a practical expedient to determine the fair value of nonmarketable investments if the NAV is calculated in a manner consistent with the Financial Accounting Standards Board's measurement principles for investment companies. Investments that use NAV in determining fair value are disclosed separately from the valuation hierarchy as presented in Note 2.

Investments in marketable securities are carried at fair value, as established by the major securities markets. Purchases and sales of investments are accounted for on the trade date basis. Investment income is recorded on the accrual basis. Realized and unrealized gains and losses are reported in investment income.

Investments in nonmarketable limited partnerships are carried at fair value, which is generally established using the NAV provided by the management of the investment partnerships at June 30, 2018 and 2017. The University may also adjust the fair value of these investments based on market conditions, specific redemption terms and restrictions, risk considerations and other factors. As these investments are not readily marketable, the estimated value is subject to uncertainty, and therefore, may differ from the value that would have been used had a ready market for the investments existed.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

Investments denominated in foreign currencies are translated into U.S. dollar equivalents using year end spot foreign currency exchange rates. Purchases and sales of investments denominated in foreign currencies and related income are translated at spot exchange rates on the transaction dates.

Derivative instruments such as financial futures, forward foreign exchange contracts and interest rate swaps held in investment portfolios, are recorded on the contract date and are carried at fair value using listed price quotations or amounts that approximate fair value. To facilitate trading in financial futures, the University is required to post cash or securities to satisfy margin requirements of the exchange where such futures contracts are listed. The University monitors the required amount of cash and securities on deposit for financial futures transactions and withdraws or deposits cash or securities as necessary.

Accounts receivable are recorded net of an allowance for uncollectible accounts receivable. The allowance is based on management's judgment of potential uncollectible amounts, which includes such factors as historical experience and type of receivable.

The University receives pledges and bequests of financial support from corporations, foundations and individuals. Revenue is recognized when a pledge representing an unconditional promise to give is received and all eligibility requirements, including time requirements, have been met. In the absence of such a promise, revenue is recognized when the gift is received. Permanent endowment pledges do not meet eligibility requirements, as defined by GASB, and are not recorded as assets until the related gift is received.

Unconditional promises to give that are expected to be collected in future years are recorded at the present value of the estimated future cash flows. The discounts on these amounts are computed using risk-free interest rates applicable to the years in which the promises are made, commensurate with expected future payments. An allowance for uncollectible pledges receivable is provided based on management's judgment of potential uncollectible amounts and includes such factors as prior collection history, type of gift and nature of fundraising.

Capital assets are recorded at cost or, if donated, at acquisition value at the date of donation. Depreciation of capital assets is provided on a straight-line method over the estimated useful lives of the respective assets, which generally range from three to fifty years. The University does not capitalize works of art or historical treasures that are held for exhibition, education, research or public service. These collections are neither disposed of for financial gain nor encumbered in any way. Accordingly, such collections are not recognized or capitalized for financial statement purposes.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

Deferred outflows represent the consumption of net assets attributable to a future period and are primarily associated with the University's obligations for postemployment benefits, debt and derivative activity, and Metro Health's defined benefit pension plan.

Unearned revenue consists primarily of cash received from grant and contract sponsors which has not yet been earned under the terms of the agreement. Unearned revenue also includes amounts received in advance of an event, such as student tuition and advance ticket sales related to future fiscal years.

Deposits of affiliates and others represents cash and invested funds held by the University as a result of agency relationships with various groups. Noncurrent deposits of affiliates represents the portion of endowment and similar funds held by the University on behalf of others.

The University holds life income funds for beneficiaries of the pooled income fund, charitable remainder trusts and the gift annuity program. These funds generally pay lifetime income to beneficiaries, after which the principal is made available to the University in accordance with donor intentions. All life income fund assets, including those held in trust, are recorded at fair value. The present value of estimated future payments due to life income beneficiaries is recorded as a liability.

Deferred inflows represent the acquisition of net assets attributable to a future period and are associated with the University's postemployment benefits obligations, Metro Health's defined benefit pension plan and irrevocable split-interest agreements.

For donor restricted endowments, the Uniform Prudent Management of Institutional Funds Act, as adopted in Michigan, permits the Board of Regents to appropriate amounts for endowment spending rule distributions as is considered prudent. The University's policy is to retain net realized and unrealized appreciation with the endowment after spending rule distributions. Net appreciation of permanent endowment funds, which totaled \$2,067,392,000 and \$1,828,744,000 at June 30, 2018 and 2017, respectively, is recorded in restricted expendable net position. The University's endowment spending rule is further discussed in Note 2.

Student tuition and residence fees are presented net of scholarships and fellowships applied to student accounts, while stipends and other payments made directly to students are presented as scholarship and fellowship expenses.

Notes to Consolidated Financial Statements--Continued

Note 1--Organization and Summary of Significant Accounting Policies--Continued

Patient care revenues are reported net of contractual allowances and bad debt expenses. Contractual allowances are estimated based on agreements with third-party payers that provide payments for patient care services at amounts different from established rates. These allowances are subject to the laws and regulations governing the federal and state programs and post-payment audits, and adjusted in future periods as final settlements are determined. Patient care services are primarily provided through the University's health system, which includes the University of Michigan Hospitals, Metro Health, the University of Michigan Medical Group and Michigan Health Corporation. Patient care services are also provided through University Health Service, which provides health care services to students, faculty and staff, and Dental Faculty Associates, which provides dental care services performed by faculty dentists.

Patient care services are provided to patients who meet certain criteria under the University's charity care policies without charge or at amounts less than its established rates. Accordingly, charity care is not reported as revenue in the accompanying statement of revenues, expenses and changes in net position. Charges forgone for charity care services totaled \$57,999,000 and \$52,986,000 in 2018 and 2017, respectively.

Other auxiliary enterprise revenues primarily represent revenues generated by intercollegiate athletics, parking, student unions and student publications.

The University's policy for defining operating activities as reported on the statement of revenues, expenses and changes in net position are those that generally result from exchange transactions such as payments received for providing services and payments made for services or goods received. Nearly all of the University's expenses are from exchange transactions.

Certain significant revenue streams relied upon for operations result from nonexchange transactions and are recorded as nonoperating revenues including state appropriations, federal Pell grants, gifts and investment income.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates. The most significant areas that require management estimates relate to self-insurance and benefits obligations.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments

<u>Summary</u>: The University maintains centralized management for substantially all of its cash and investments.

Working capital of individual University units is primarily invested in the University Investment Pool ("UIP"). Together with the University's short-term insurance and other benefits reserves, the UIP is invested in the Daily and Monthly Portfolios, which are principally invested in investment-grade money market securities, U.S. government and other fixed income securities and absolute return strategies.

The University collectively invests substantially all of the assets of its endowment funds along with a portion of its insurance and benefits reserves, charitable remainder trusts and gift annuity program in the Long Term Portfolio. The longer investment horizon of the Long Term Portfolio allows for an equity-oriented strategy to achieve higher expected returns over time, and permits the use of less liquid alternative investments, providing for equity diversification beyond the stock markets. The Long Term Portfolio includes investments in domestic and non-U.S. stocks and bonds, commingled funds and limited partnerships consisting of venture capital, private equity, real estate, natural resources and absolute return strategies.

The University also separately invests certain endowments and charitable remainder trusts, unexpended bond proceeds and other funds with investment restrictions outside of the Daily, Monthly and Long Term Portfolios.

<u>Authorizations</u>: The University's investment policies are governed and authorized by University Bylaws and the Board of Regents. The approved asset allocation policy for the Long Term Portfolio sets general targets for both equities and fixed income securities. Since diversification is a fundamental risk management strategy, the Long Term Portfolio is broadly diversified within these general categories.

The endowment spending rule provides for distributions from the University Endowment Fund to the entities that benefit from the endowment fund. The annual distribution rate is 4.5 percent of the one-quarter lagged seven year moving average fair value of fund shares. To protect endowment principal in the event of a prolonged market downturn, distributions are limited to 5.3 percent of the current fair value of fund shares. Distributions are also made from the UIP to University entities based on the 90-day U.S. Treasury Bill rate. The University's costs to administer and grow the University Endowment Fund and UIP are funded by investment returns.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

Cash and Cash Equivalents and Unexpended Bond Proceeds: Cash and cash equivalents, which totaled \$133,365,000 and \$105,127,000 at June 30, 2018 and 2017, respectively, represent short-term money market investments in mutual funds, overnight collective funds managed by the University's custodian or short-term highly liquid investments registered as securities and held by the University or its agents in the University's name. Of its cash and cash equivalents, the University had actual cash balances in its bank accounts in excess of Federal Deposit Insurance Corporation limits in the amount of \$42,720,000 and \$61,583,000 at June 30, 2018 and 2017, respectively. The University does not require its deposits to be collateralized or insured.

Unexpended bond proceeds, which totaled \$82,797,000 and \$98,455,000 at June 30, 2018 and 2017, respectively, represent short-term money market investments in mutual funds. These amounts are used solely for the reimbursement of qualifying expenditures for construction projects associated with certain outstanding general revenue bonds issued by the University.

Cash and cash equivalents and unexpended bond proceeds include certain securities that are subject to the leveling requirements defined by GASB. Level 1 securities, which primarily consist of money market funds and U.S. government securities, totaled \$132,042,000 and \$105,300,000 at June 30 2018 and 2017, respectively. Level 2 securities, which primarily consist of U.S. agencies, totaled \$34,100,000 and \$59,900,000 at June 30, 2018 and 2017, respectively.

<u>Investments</u>: At June 30, 2018 and 2017, the University's investments, which are held by the University or its agents in the University's name, are summarized as follows:

	2010	2017	
	(in thousands)		
Cash equivalents, noncurrent	\$ 229,067	\$ 102,550	
Equity securities	1,238,818	1,364,719	
Fixed income securities	1,826,821	2,181,020	
Commingled funds	3,101,671	3,255,747	
Nonmarketable alternative investments	7,608,059	6,112,495	
Other investments	8,845	9,054	
	\$ 14,013,281	\$ 13,025,585	

2010

2017

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

At June 30, 2018 and 2017, the fair value of the University's investments based on the inputs used to value them is summarized as follows:

			2018		
-	Level 1	Level 2	Level 3 (in thousands)	NAV	Total Fair Value
Cash equivalents, noncurrent	\$ 229,067	<u>-</u>	-	-	\$ 229,067
Equity securities: Domestic Foreign	401,755 801,506		\$ 34,971 586		436,726 802,092
- -	1,203,261	-	35,557	-	1,238,818
Fixed income securities: U.S. Treasury U.S. government agency Corporate and other	752,529 752,529	\$ 116,085 955,166 1,071,251	3,041 3,041		752,529 116,085 958,207 1,826,821
Commingled funds:	732,329	1,0/1,231	3,041		
Absolute return Domestic equities Global equities U.S. fixed income Other	17,089 9,495 9,453 4,011			\$ 2,006,037 263,389 758,608 33,589	2,006,037 280,478 768,103 43,042 4,011
-	40,048	-	-	3,061,623	3,101,671
Nonmarketable alternative investments: Venture capital Absolute return				1,771,258 1,636,355	1,771,258 1,636,355
Private equity Real estate			343,688 9,225	1,504,786 1,104,080	1,848,474 1,113,305
Natural resources	-		224,151 577,064	1,014,516 7,030,995	1,238,667 7,608,059
Other investments	(2,131) \$ 2,222,774	966 \$ 1,072,217	10,010 \$ 625,672	\$ 10,092,618	8,845 \$ 14,013,281

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

			2017		
- -	Level 1	Level 2	Level 3 (in thousands)	NAV	Total Fair Value
Cash equivalents, noncurrent	\$ 102,550	-	-		\$ 102,550
Equity securities:					
Domestic	446,823		\$ 28,358		475,181
Foreign	888,965		573		889,538
<u>-</u>	1,335,788	-	28,931	_	1,364,719
Fixed income securities:	-,000,00		20,521		2,2 0 1,7 22
U.S. Treasury	1,020,420				1,020,420
U.S. government agency	,, .	\$ 301,634			301,634
Corporate and other		854,885	4,081		858,966
•	1,020,420	1,156,519	4,081	-	2,181,020
Commingled funds:					, , , , , , , , , , , , , , , , , , ,
Absolute return				\$ 2,036,001	2,036,001
Domestic equities	17,206			274,829	292,035
Global equities	8,896			862,070	870,966
U.S. fixed income	10,938			41,332	52,270
Other	4,475				4,475
-	41,515	-	-	3,214,232	3,255,747
Nonmarketable alternative investments:					
Venture capital				1,430,158	1,430,158
Absolute return				1,299,022	1,299,022
Private equity			207,078	1,271,632	1,478,710
Real estate			8,033	968,849	976,882
Natural resources			176,294	751,429	927,723
	-	-	391,405	5,721,090	6,112,495
Other investments	1,302	(4,036)	11,788	-	9,054
=	\$ 2,501,575	\$ 1,152,483	\$ 436,205	\$ 8,935,322	\$ 13,025,585

Investments categorized as Level 1 are valued using prices quoted in active markets for those securities. Equity securities categorized as Level 3 represent investments in start-up or venture companies. Fixed income securities categorized as Level 2 represent investments valued using a matrix pricing technique, which values debt securities based on their relationship to a benchmark and the relative spread to that benchmark. Fixed income securities categorized as Level 3 represent debt investments with select venture funded University faculty start-ups. Nonmarketable alternative investments categorized as Level 3 primarily represent direct investments which are valued using models that rely on inputs which are unobservable in the market.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The University's investment strategy incorporates certain financial instruments that involve, to varying degrees, elements of market risk and credit risk in excess of amounts recorded in the financial statements. Market risk is the potential for changes in the value of financial instruments due to market changes, including interest and foreign exchange rate movements and fluctuations embodied in forwards, futures and commodity or security prices. Market risk is directly impacted by the volatility and liquidity of the markets in which the underlying assets are traded. Credit risk is the possibility that a loss may occur due to the failure of a counterparty to perform according to the terms of the contract. The University's risk of loss in the event of a counterparty default is typically limited to the amounts recognized in the statement of net position and is not represented by the contract or notional amounts of the instruments.

Fixed income securities have inherent financial risks, including credit risk and interest rate risk. Credit risk for fixed income securities is the risk that the issuer will not fulfill its obligations. Nationally recognized statistical rating organizations ("NSROs"), such as S&P Global and Moody's, assign credit ratings to security issues and issuers that indicate a measure of potential credit risk to investors. Fixed income securities considered investment grade are those rated at least BBB by S&P Global and Baa by Moody's. To manage credit risk, the University specifies minimum average and minimum absolute quality NSRO ratings for securities held pursuant to its management agreements.

The University minimizes concentration of credit risk, the risk of a large loss attributed to the magnitude of the investment in a single issuer of fixed income securities, by diversifying its fixed income issues and issuers and holding U.S. Treasury securities which are considered to have minimal credit risk. The University also manages this risk at the account level by limiting each fixed income manager's holding of any non-U.S. government issuer to 5 percent of the value of the investment account.

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of fixed income securities. Effective duration, a commonly used measure of interest rate risk, incorporates a security's yield, coupon, final maturity, call features and other imbedded options into one number expressed in years that indicates how price-sensitive a security or portfolio of securities is to changes in interest rates. The effective duration of a security or portfolio indicates the approximate percentage change in fair value expected for a one percent change in interest rates. The longer the duration, the more sensitive the security or portfolio is to changes in interest rates. The weighted average effective duration of the University's fixed income securities was 4.2 years at June 30, 2018 compared to 5.0 years at June 30, 2017. The University manages the effective duration of its fixed income securities at the account level, where fixed income managers generally may not deviate from the duration of their respective benchmarks by more than 25 percent. The Monthly Portfolio held positions in bond futures at June 30, 2018 and 2017, which are used to adjust the duration of cash equivalents and the fixed income portion of the portfolios.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The composition of fixed income securities at June 30, 2018 and 2017, along with credit quality and effective duration measures, is summarized as follows:

			2018			
			Non-			
	U.S.	Investment	Investment			
	Government	Grade	Grade	Not Rated	Total	Duration
			(in thousands)			(in years)
II C T	Ф 5 2 7 662				Φ 527.662	0.7
U.S. Treasury	\$ 527,662				\$ 527,662	8.7
U.S. Treasury inflation						
protected	224,867				224,867	2.2
U.S. government agency	116,085				116,085	0.4
Mortgage backed		\$ 82,258	\$ 2,930	\$ 22,634	107,822	0.6
Asset backed		68,336		2,210	70,546	0.7
Corporate and other		753,876	16,841	9,122	779,839	3.2
·	\$ 868,614	\$ 904,470	\$ 19,771	\$ 33,966	\$ 1,826,821	4.2

			2017			
			Non-			_
	U.S.	Investment	Investment			
	Government	Grade	Grade	Not Rated	Total	Duration
			(in thousands)			(in years)
U.S. Treasury	\$ 791,194				\$ 791,194	6.2
U.S. Treasury inflation						
protected	229,226				229,226	2.7
U.S. government agency	301,634				301,634	0.5
Mortgage backed		\$ 64,229	\$ 7,143	\$ 5,159	76,531	1.0
Asset backed		71,441	650	126	72,217	0.7
Corporate and other		695,333	6,975	7,910	710,218	7.2
	\$ 1,322,054	\$ 831,003	\$ 14,768	\$ 13,195	\$ 2,181,020	5.0

Of the University's fixed income securities, 97 percent and 99 percent were rated investment grade or better at June 30, 2018 and 2017, respectively, and 59 percent and 69 percent of these securities consisted of either U.S. treasury and government agencies or non-U.S. government securities rated AAA/Aaa at June 30, 2018 and 2017, respectively.

Commingled (pooled) funds include Securities and Exchange Commission regulated mutual funds and externally managed funds, limited partnerships and corporate structures which are generally unrated and unregulated. Certain commingled funds may use derivatives, short positions and leverage as part of their investment strategy. These investments are structured to limit the University's risk exposure to the amount of invested capital.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

Nonmarketable alternative investments consist of limited partnerships and similar vehicles involving an advance commitment of capital called by the general partner as needed and distributions of capital and return on invested capital as underlying strategies are concluded during the life of the partnership. There is not an active secondary market for these alternative investments, which are generally unrated and unregulated, and the liquidity of these investments is dependent on actions taken by the general partner. The University's limited partnerships are diversified in terms of manager selection, industry and geographic focus. At June 30, 2018 and 2017, no individual partnership investment represented 5 percent or more of total investments.

Absolute return strategies in the commingled funds and nonmarketable alternative investments classifications include long/short stock programs, merger arbitrage, intra-capital structure arbitrage and distressed debt investments. The goal of absolute return strategies is to provide, in aggregate, a return that is consistently positive and uncorrelated with the overall market.

The University's investments in commingled funds and nonmarketable alternative investments are contractual agreements that may limit the ability to initiate redemptions due to notice periods, lock-ups and gates. Additional information about current redemption terms and outstanding commitments at June 30, 2018 is summarized as follows (amounts in thousands):

	Fair Value	Remaining Life	Outstanding Commitments	Redemption Terms	Redemption Notice
Commingled funds	\$ 3,101,671	N/A		Daily, monthly, quarterly, and annually, with varying notice periods	Lock-up provisions range from none to 3 years
Nonmarketable alternative investments	\$ 7,608,059	1-12 years	\$ 5,711,078	Ineligible for redemption	N/A

Commingled funds have liquidity (redemption) provisions, which enable the University to make full or partial withdrawals with notice, subject to restrictions on the timing and amount. Of the University's commingled funds at June 30, 2018 and 2017, approximately 79 percent and 78 percent are redeemable within one year, with 63 percent and 61 percent redeemable within 90 days under normal market conditions. The remaining amounts are redeemable beyond one year, with redemption of certain funds dependent on disposition of the underlying assets. The University's committed but unpaid obligation to nonmarketable alternative investments is further discussed in Note 14.

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The University participates in non-U.S. developed and emerging markets through commingled funds invested in non-U.S./global equities and absolute return strategies. Although substantially all of these funds are reported in U.S. dollars, price changes of the underlying securities in local markets as well as changes to the value of local currencies relative to the U.S. dollar are embedded in investment returns. In addition, a portion of the University's equity securities and nonmarketable alternative investments are denominated in foreign currencies, which must be settled in local (non-U.S.) currencies.

Foreign exchange risk is the risk that investments denominated in foreign currencies may lose value due to adverse fluctuations in the value of the U.S. dollar relative to foreign currencies. Forward foreign currency contracts are typically used to manage the risks related to fluctuations in currency exchange rates between the time of purchase or sale and the actual settlement of foreign securities. Various investment managers acting for the University use forward foreign exchange contracts in risk-based transactions to carry out their portfolio strategies and are subject to agreements that provide minimum diversification and maximum exposure limits by country and currency.

The value of the University's non-U.S. dollar holdings, net of the value of the outstanding forward foreign exchange contracts, totaled \$1,766,714,000 or 13 percent of total investments at June 30, 2018, and \$1,694,128,000 or 13 percent of total investments at June 30, 2017, and are summarized as follows:

	2018	2017
	(in tho	usands)
Euro	\$ 983,971	\$ 954,456
British pound sterling	252,537	230,211
Japanese yen	233,049	230,547
Canadian dollar	79,368	69,764
Swedish krona	78,464	52,440
Norwegian krone	49,760	32,954
Other	89,565	123,756
	\$ 1,766,714	\$ 1,694,128

Notes to Consolidated Financial Statements--Continued

Note 2--Cash and Investments--Continued

The Long Term Portfolio and the Monthly Portfolio participate in a short-term, fully collateralized, securities lending program administered by the University's master custodian. Together, the Portfolios had \$79,224,000 and \$90,638,000 in securities loans outstanding at June 30, 2018 and 2017, respectively. At loan inception, an approved borrower must deliver collateral of cash, securities or letters of credit to the University's lending agent equal to 102 percent of fair value for domestic securities and 105 percent for foreign securities. Collateral positions are monitored daily to ensure that borrowed securities are never less than 100 percent collateralized. At June 30, 2018, collateral of \$82,085,000 (104 percent of securities on loan) includes invested cash of \$29,727,000 and U.S. government securities of \$52,358,000, while at June 30, 2017, collateral of \$95,679,000 (106 percent of securities on loan) includes invested cash of \$44,130,000 and U.S. government securities of \$51,549,000.

Cash collateral held by the University's lending agent, along with the offsetting liability to return the collateral at loan termination, are recorded in the statement of net position. Neither the University nor its securities lending agent has the ability to pledge or sell securities received as collateral unless a borrower defaults. Securities loans may be terminated upon notice by either the University or the borrower.

Note 3--Accounts Receivable

The composition of accounts receivable at June 30, 2018 and 2017 is summarized as follows:

	2018	2017
	(in thousands)	
Patient care	\$ 628,189	\$ 633,727
Sponsored programs	164,264	143,958
State appropriations, educational and capital	67,230	65,933
Student accounts	27,457	29,544
Other	32,219	33,602
	919,359	906,764
Less allowance for uncollectible accounts receivable:		
Patient care	243,732	258,847
All other	8,816	8,533
	\$ 666,811	\$ 639,384

Notes to Consolidated Financial Statements--Continued

Note 4--Notes and Pledges Receivable

The composition of notes and pledges receivable at June 30, 2018 and 2017 is summarized as follows:

	2018	2017
	(in thou	ısands)
Notes:		
Federal student loan programs	\$ 85,918	\$ 88,911
University student loan funds	16,664	17,563
Other	1,390	1,120
	103,972	107,594
Less allowance for uncollectible notes	3,134	3,100
Total notes receivable, net	100,838	104,494
Gift pledges:		
Capital	165,342	177,043
<u> </u>	*	,
Operations	164,920	121,047
Less:	330,262	298,090
	9,523	10,064
Allowance for uncollectible pledges	*	,
Unamortized discount to present value	4,942	3,894
Total pledges receivable, net	315,797	284,132
Total notes and pledges receivable, net	416,635	388,626
Less current portion	79,765	76,148
	\$ 336,870	\$ 312,478

The principal repayment and interest rate terms of federal and university loans vary considerably. The allowance for uncollectible notes only applies to University funded notes and the University portion of federal student loans, as the University is not obligated to fund the federal portion of uncollected student loans. Federal loan programs are funded principally with federal advances to the University under the Perkins and various health professions loan programs.

Notes to Consolidated Financial Statements--Continued

Note 4--Notes and Pledges Receivable--Continued

Payments on pledges receivable at June 30, 2018 are expected to be received in the following years ended June 30 (in thousands):

2019	\$ 63,596
2020	53,412
2021	50,792
2022	36,255
2023	28,327
2024 and after	97,880
	\$ 330,262

As discussed in Note 1, permanent endowment pledges do not meet eligibility requirements, as defined by GASB, until the related gift is received. Accordingly, permanent endowment pledges totaling \$168,926,000 and \$185,551,000 at June 30, 2018 and 2017, respectively, are not recognized as assets in the accompanying financial statements. In addition, bequest intentions and other conditional promises are not recognized as assets until the specified conditions are met due to uncertainties with regard to their realizability and valuation.

Notes to Consolidated Financial Statements--Continued

Note 5--Capital Assets

Capital assets activity for the years ended June 30, 2018 and 2017 is summarized as follows:

	2018			
	Beginning			Ending
	Balance	Additions	Retirements	Balance
		(in th	nousands)	Т
Land	\$ 126,617	\$ 2,952	\$ 193	\$ 129,376
Land improvements	137,981	7,275	1,518	143,738
Infrastructure	258,449	4,149	391	262,207
Buildings	8,618,377	620,725	60,227	9,178,875
Construction in progress	476,124	(174,690)		301,434
Equipment	2,050,848	163,428	115,906	2,098,370
Library materials	620,200	26,176		646,376
	12,288,596	650,015	178,235	12,760,376
Less accumulated depreciation	6,243,154	568,707	172,482	6,639,379
•	\$ 6,045,442	\$ 81,308	\$ 5,753	\$ 6,120,997

	2017				
	Beginning			Ending	
	Balance	Additions	Retirements	Balance	
		(in th	ousands)	Г	
Land	\$ 124,207	\$ 2,410		\$ 126,617	
Land improvements	125,953	12,152	\$ 124	137,981	
Infrastructure	255,921	2,528		258,449	
Buildings	8,206,614	430,132	18,369	8,618,377	
Construction in progress	456,391	19,733		476,124	
Property held for future use	24,502	(24,502)		-	
Equipment	2,068,851	167,252	185,255	2,050,848	
Library materials	593,768	26,432		620,200	
	11,856,207	636,137	203,748	12,288,596	
Less accumulated depreciation	5,907,820	537,670	202,336	6,243,154	
_	\$ 5,948,387	\$ 98,467	\$ 1,412	\$ 6,045,442	

The decrease in construction in progress of \$174,690,000 in 2018 represents the amount of capital expenditures for new projects of \$527,908,000 net of assets placed in service of \$702,598,000. The increase in construction in progress of \$19,733,000 in 2017 represents the amount of capital expenditures for new projects of \$563,683,000 net of assets placed in service of \$543,950,000.

During 2018, the University recognized \$24,698,000 of additional depreciation expense in connection with the impairment of certain components of Metro Health's hospital facilities.

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt

Long-term debt at June 30, 2018 and 2017 is summarized as follows:

	2018	2017
	(in thou	ısands)
Commercial paper:		
Tax-exempt, variable rate (1.44%)*	\$ 155,595	\$ 157,160
Taxable, variable rate (2.00%)*	2,865	3,885
General revenue bonds:		
Series 2018A, 4.00% to 5.00% through 2048	137,510	
unamortized premium	19,055	
Series 2017A, 4.00% to 5.00% through 2047	456,265	464,750
unamortized premium	78,186	84,172
Series 2015, 4.00% to 5.00% through 2046	302,415	304,615
unamortized premium	47,640	50,686
Series 2014A, 4.25% to 5.00% through 2044	76,060	77,825
Series 2014B, 2.071% to 3.516% through 2024	5,730	6,625
unamortized premium	6,503	6,963
Series 2013A, 2.50% to 5.00% through 2029	44,975	46,385
unamortized premium	1,649	1,885
Series 2012A, variable rate (1.40%)* through 2036	50,000	50,000
Series 2012B, variable rate (1.45%)* through 2042	65,000	65,000
Series 2012D-1, variable rate (1.40%)* through 2025 with partial swap		
to fixed through 2025	60,220	63,635
Series 2012D-2, variable rate (1.45%)* through 2030 with partial swap		
to fixed through 2026	62,725	66,990
Series 2012E**, variable rate (1.78%)* through 2033	95,020	95,500
Series 2010A, taxable-Build America Bonds, 4.926% to 5.593% through 2040	163,110	163,110
Series 2010C, 3.75% to 5.00% through 2027	50,485	61,570
unamortized premium	3,647	4,434
Series 2010D, taxable-Build America Bonds, 3.356% to 5.333% through 2041	165,790	173,560
Series 2009A, 3.00% to 5.00% through 2019	4,165	12,555
unamortized premium	2,769	2,991
Series 2009B, variable rate (1.50%)* through 2039	118,710	118,710
Series 2009D, taxable-Build America Bonds, 5.155% to 6.172% through 2030	89,815	89,815
Series 2008A, variable rate (1.50%)* through 2038	57,085	57,085
Series 2008B, variable rate (1.46%)* through 2028 with swap to fixed		
through 2026	70,845	77,185
Series 2005A, 5.00% through 2018		1,065
unamortized premium		17
Series 2002, variable rate through 2018 with swap to fixed		
through 2018		7,595
Other	174	1,747
	2,394,008	2,317,515
Less:		, ,
Commercial paper and current portion of bonds payable	237,371	237,243
Long-term bonds payable subject to remarketing, net	195,552	202,718
	\$ 1,961,085	\$ 1,877,554
* Departure visibile rate at June 20, 2019		

^{*} Denotes variable rate at June 30, 2018 ** Denotes variable rate bonds not subject to remarketing

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt--Continued

Certain variable rate bonds have remarketing features which allow bondholders to put debt back to the University. Accordingly, variable rate bonds payable is classified as current unless supported by liquidity agreements, such as lines of credit or standby bond purchase agreements, which can refinance the debt on a long-term basis. The classification of the University's variable rate bonds payable at June 30, 2018 and 2017 is summarized as follows:

	2017 ousands)
\$ 484,585	\$ 506,200
13,770	21,615
275,263	150,000
	131,867
\$ 195,552	\$ 202,718
	\$ 484,585 13,770 275,263

The University's available lines of credit were entirely unused at June 30, 2018.

In connection with certain issues of variable rate debt, the University has entered into various floating-to-fixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. The fair value, significant terms and other information about the University's interest rate swaps is discussed in Note 7.

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt--Continued

Long-term debt activity for the years ended June 30, 2018 and 2017 is summarized as follows:

	2018			
	Beginning Balance	Additions	Reductions	Ending Balance
		(in tho	usands)	_
Commercial paper Bonds Other	\$ 161,045 2,154,723 1,747	\$ 6,600 156,728	\$ 9,185 76,077 1,573	\$ 158,460 2,235,374 174
C 12202	\$ 2,317,515	\$ 163,328	\$ 86,835	\$ 2,394,008
	2017			
	Beginning Balance	Additions (in tho	Reductions usands)	Ending Balance
Commercial paper Bonds Other	\$ 159,970 2,025,251 4,175	\$ 23,420 550,019	\$ 22,345 420,547	\$ 161,045 2,154,723
Ouici	\$ 2,189,396	\$ 573,439	2,428 \$ 445,320	1,747 \$ 2,317,515

The University maintains a combination of variable and fixed rate debt supported by general revenues, with effective interest rates that averaged 2.9 percent and 2.7 percent in 2018 and 2017, respectively, including federal subsidies for interest on taxable Build America Bonds.

The University utilizes commercial paper to provide interim financing for its capital improvement program. The Board of Regents has authorized the issuance of up to \$300,000,000 in commercial paper backed by a general revenue pledge. Outstanding commercial paper debt is converted to long-term debt financing, as appropriate, within the normal course of business.

During 2018, the University issued \$137,510,000 of fixed rate General Revenue Bonds Series 2018A with a net original issue premium of \$19,218,000. Total bond proceeds of \$156,728,000 were utilized to provide \$156,200,000 for capital projects and \$528,000 for debt issuance costs.

During 2017, the University issued \$464,750,000 of fixed rate General Revenue Bonds Series 2017A with a net original issue premium of \$85,269,000. Total bond proceeds of \$550,019,000 together with amounts held by trustees under bond indenture of \$12,019,000 were utilized to convert \$12,285,000 of commercial paper to long-term debt, refund \$237,540,000 of existing bonds, and establish an escrow of \$111,752,000 to advance refund existing bonds, as well as provide \$199,014,000 for capital projects and \$1,447,000 for debt issuance costs.

Notes to Consolidated Financial Statements--Continued

Note 6--Long-term Debt--Continued

Deferred outflows associated with the University's refunding activity totaled \$14,095,000 and \$17,011,000 at June 30, 2018 and 2017, respectively, which will be amortized into interest expense over the remaining life of the refunded bonds.

Debt obligations are generally callable by the University and mature at various dates through fiscal 2048. Principal maturities, including interest on debt obligations, based on scheduled bond maturities for the next five years and in subsequent five-year periods are as follows:

	Principal	Interest* (in thousands)	Total
2019 2020 2021 2022 2023 2024-2028 2029-2033 2034-2038 2039-2043	\$ 225,808 69,086 72,805 76,070 77,130 449,120 427,650 470,480 265,895	\$ 80,820 78,849 76,620 74,406 71,629 310,255 216,722 133,927 54,252	\$ 306,628 147,935 149,425 150,476 148,759 759,375 644,372 604,407 320,147
2044-2048	100,515	12,848	113,363
Total payments	2,234,559	\$ 1,110,328	\$ 3,344,887
Plus unamortized premiums	159,449		
	\$ 2,394,008		

^{*} Interest on variable rate debt is estimated based on rates in effect at June 30, 2018; amounts do not reflect federal subsidies to be received for Build America Bonds interest.

If all variable rate bonds were put back to the University and existing unsecured lines of credit were not extended upon their current expiration dates, the total principal payments due in 2019 would increase to \$421,360,000, total principal payments due in 2020 would increase to \$234,195,000, total principal payments due in 2021 would increase to \$87,278,000, total principal payments due in 2022 would increase to \$89,899,000 and total principal payments due in 2023 would increase to \$80,454,000. Accordingly, principal payments due in subsequent years would be reduced to \$358,048,000 in 2024 through 2028; \$349,630,000 in 2029 through 2033; \$302,195,000 in 2034 through 2038; and \$210,985,000 in 2039 through 2043. Principal payments due in 2044 through 2048 would remain the same. There would not be a material impact on annual interest payments due to the low variable rate of interest on these bonds.

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments

Derivatives held by the University are recorded at fair value in the statement of net position. For hedging derivative instruments that are effective in significantly reducing an identified financial risk, the corresponding change in fair value is deferred and included in the statement of net position. For all other derivative instruments, changes in fair value are reported as net investment income (loss).

Derivative instruments held by the University at June 30, 2018 and 2017 are summarized as follows:

	2018		2017	
	Notional		Notional	
	Amount	Fair Value	Amount	Fair Value
		(in tho	usands)	
Investment derivative instruments:				
Investment portfolios:				
Futures	\$ 183,096	\$ (2,131)	\$ 242,854	\$ (6,371)
Foreign currency forwards:				
Chinese yuan	332,924	10,829	332,080	(8,633)
Swedish krona	209,549	8,221	82,727	(2,019)
South African rand	58,800	(7,463)	71,852	3,453
Australian dollar	207,419	(7,647)	9,559	1,528
Turkish lire	59,214	(8,269)	66,218	1,358
Brazil real	123,133	(11,745)	81,588	(1,170)
All other currencies	1,573,663	20,467	1,124,200	(3,454)
	2,564,702	4,393	1,768,224	(8,937)
Other	2,939,567	(790)	2,089,063	12,723
	\$ 5,687,365	\$ 1,472	\$ 4,100,141	\$ (2,585)
Floating-to-fixed interest rate swap on debt	\$ -	\$ -	\$ 7,595	\$ (186)
Effective cash flow hedges:				
Floating-to-fixed interest rate swaps on debt	\$ 152,655	\$ (12,212)	\$ 166,660	\$ (19,312)

The University utilizes bond futures in its investment portfolios to adjust the duration of cash equivalents and fixed income securities, while foreign currency forward contracts are utilized to settle securities and transactions denominated in foreign currencies and manage foreign exchange risk. Other derivative instruments in the University's investment portfolios consist primarily of interest rate swaps, credit default swaps and total return swaps used to carry out investment and portfolio strategies.

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments--Continued

In connection with certain issues of variable rate debt, the University has entered into various floating-to-fixed interest rate swaps to convert all or a portion of the associated variable rate debt to synthetic fixed rates to protect against the potential of rising interest rates. The fair value generally represents the estimated amount that the University would pay to terminate the swap agreements at the statement of net position date, taking into account current interest rates and creditworthiness of the underlying counterparty. The valuation inputs used to determine the fair value of these instruments are considered Level 2, as they rely on observable inputs other than quoted market prices. The notional amount represents the underlying reference of the instrument and does not represent the amount of the University's settlement obligations.

At June 30, 2018 and 2017, the fair value of floating-to-fixed interest rate swaps associated with the University's variable rate debt is (\$12,212,000) and (\$19,498,000), respectively, and is included in the statement of net position as a component of deposits of affiliates and other. The deferred outflows for the fair value of swaps deemed effective cash flow hedges totaled \$731,000 and \$5,181,000 at June 30, 2018 and 2017, respectively.

The change in fair value of derivative instruments, which includes realized gains and losses on positions closed, for the years ended June 30, 2018 and 2017 is summarized as follows:

	2018 (in tho	2017 usands)
Investment derivative instruments: Investment portfolios: Futures Foreign currency forwards Other	\$ 8,592 (58,308) 1,098	\$ 27,627 57,408 (21,006)
Floating-to-fixed interest rate swap on debt	\$ (48,618) \$ 186	\$ 64,029 \$ 462
Effective cash flow hedges: Floating-to-fixed interest rate swaps on debt	\$ 7,100	\$ 10,626

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments--Continued

The University's interest rate swaps, along with their associated variable rate debt and significant terms, are summarized below.

The floating-to-fixed interest rate swap associated with the Series 2008B General Revenue Bonds has a notional amount of \$54,130,000 and \$60,470,000 at June 30, 2018 and 2017, respectively, and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 3.105 percent and receives variable rate payments from the swap counterparty based on 68 percent of One-Month USD LIBOR, until the swap terminates in April 2026. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2018 and 2017 and has a fair value of (\$3,076,000) and (\$5,448,000), respectively.

The floating-to-fixed interest rate swap associated with the Series 2012 D-2 General Revenue Bonds has a notional amount of \$38,430,000 and \$42,685,000 at June 30, 2018 and 2017, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 3.229 percent and receives variable rate payments from the swap counterparty based on 68 percent of the One-Month USD LIBOR, until the swap terminates in December 2025. The University has the option to terminate the swap upon five business days written notice and payment of the fair market compensation for the value of the swap. This swap is considered an effective hedge at June 30, 2018 and 2017 and has a fair value of (\$2,010,000) and (\$3,564,000), respectively.

The first floating-to-fixed interest rate swap associated with the Series 2012 D-1 General Revenue Bonds has a notional amount of \$44,670,000 at June 30, 2018 and 2017, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based on a fixed rate of 4.705 percent and receives variable rate payments from the swap counterparty based on the floating Securities Industry and Financial Markets Association ("SIFMA") Municipal Index through the final maturity dates of the underlying bonds in December 2024. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2018 and 2017 and has a fair value of (\$6,234,000) and (\$8,663,000), respectively.

The second floating-to-fixed interest rate swap associated with the Series 2012 D-1 General Revenue Bonds has a notional amount of \$15,425,000 and \$18,835,000 at June 30, 2018 and 2017, respectively, covering a portion of the principal outstanding and the notional amount decreases as principal on the underlying bonds is repaid. The University makes payments based

Notes to Consolidated Financial Statements--Continued

Note 7--Derivative Instruments--Continued

on a fixed rate of 4.685 percent and receives variable rate payments based on the floating SIFMA Municipal Index through the final maturity dates of a portion of the underlying bonds in December 2021. The counterparty has the option of terminating the swaps if for any 180-day period the average variable rate is more than 7.0 percent. This swap is considered an effective hedge at June 30, 2018 and 2017 and has a fair value of (\$892,000) and (\$1,637,000), respectively.

Using rates in effect at June 30, 2018, the projected cash flows for the floating-to-fixed interest rate swaps deemed effective cash flow hedges, along with the debt service requirements of the associated variable rate debt, are summarized as follows:

	Variable R	ate Bonds	Bonds Swap Payments,	
	Principal	Interest	Net	Payments
		(in the	ousands)	
2019	\$ 13,770	\$ 2,700	\$ 3,385	\$ 19,855
2020	14,365	2,501	3,094	19,960
2021	15,000	2,284	2,776	20,060
2022	15,645	2,067	2,457	20,169
2023	26,150	1,758	1,890	29,798
2024-2028	98,440	3,874	1,649	103,963
2029-2030	10,420	95		10,515
	\$ 193,790	\$ 15,279	\$ 15,251	\$ 224,320

By using derivative financial instruments to hedge exposures to changes in interest rates, the University is exposed to termination risk and basis risk. There is termination risk with floating-to-fixed interest rate swaps because the University or swap counterparty may terminate a swap if the other party fails to perform under the terms of the contract or its credit rating falls below investment grade. Termination risk is the risk that the associated variable rate debt no longer carries a synthetic fixed rate and if at the time of termination a swap has a negative fair value, the University is liable to the counterparty for payment equal to the swap's fair value. The University is also exposed to basis risk as a portion of the variable payments paid to the University by the counterparties are based on a percentage of LIBOR. Basis risk is the risk that changes in the relationship between SIFMA and LIBOR may impact the synthetic fixed rate of the variable rate debt. At June 30, 2018 and 2017, the University is not exposed to credit risk as the swaps have negative fair values.

The University is subject to collateral requirements with its counterparties on certain derivative instrument positions. To meet trading margin requirements for bond futures, the University had cash and U.S. government securities with a fair value of \$15,306,000 and \$21,099,000 at June 30, 2018 and 2017, respectively, on deposit with its futures broker as collateral.

Notes to Consolidated Financial Statements--Continued

Note 8--Self-Insurance

The University is self-insured for medical malpractice, workers' compensation, directors' and officers' liability, property damage, auto liability and general liability through Veritas Insurance Corporation. The University is also self-insured for various employee benefits through internally maintained funds.

Claims and expenses are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Those losses include an estimate of claims that have been incurred but not reported and the future costs of handling claims. These liabilities are generally based on actuarial valuations and are reported at present value, discounted at a rate of 5 percent.

Changes in the total reported liability for insurance and benefits obligations for the years ended June 30, 2018 and 2017 are summarized as follows:

2018

2017

	-010	= 017
	(in thousands)	
Balance, beginning of year	\$ 214,035	\$ 203,203
Claims incurred and changes in estimates	694,199	628,681
Claim payments	(673,072)	(617,849)
Balance, end of year	235,162	214,035
Less current portion	98,159	97,799
	\$ 137,003	\$ 116,236

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan

Metro Health has a noncontributory, single employer defined benefit pension plan, which covered substantially all employees prior to being frozen as of December 31, 2007. The plan generally provides benefits based on each employee's years of service and final average earnings, as defined, and does not provide any automatic or ad-hoc cost of living adjustments. The Metro Health Board of Directors has the authority to establish and amend benefit provisions of the plan.

The annual pension expense and net pension liability is actuarially determined using the entry age normal level percentage of pay method. Metro Health has elected to measure the net pension liability one year prior to the fiscal year end reporting date, and amounts measured as of June 30, 2017 and 2016 were determined based on an actuarial valuation as of October 1, 2016 and 2015, respectively. There are no significant changes known which would impact the total pension liability between the measurement date and the reporting date, other than typical plan experience.

For purposes of the June 30, 2017 and 2016 measurement dates, the number of plan participants consisted of the following:

	2017	2016
Active participants	612	685
Vested terminated participants	947	928
Retirees, beneficiaries and disabled participants	366	323
	1,925	1,936

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

Changes in the reported net pension liability for the years ended June 30, 2018 and 2017 are summarized as follows:

		2018	
	Total Pension	Plan Fiduciary	Net Pension
	Liability	Net Position	Liability
		(in thousands)	
Balance, beginning of year	\$ 73,968	\$ 70,532	\$ 3,436
Interest cost	5,013	Ψ 70,552	5,013
Changes in assumptions	(822)		(822)
Differences between expected and actual			
plan experience	(767)		(767)
Benefit payments	(4,712)	(4,712)	-
Contributions from the employer		2,171	(2,171)
Net investment income:			
Expected investment earnings		4,848	(4,848)
Difference between expected and actual earnings		3,664	(3,664)
Balance, end of year	\$ 72,680	\$ 76,503	\$ (3,823)

	2017		
	Total Pension	Plan Fiduciary	Net Pension
	Liability	Net Position	Liability
		(in thousands)	
	Φ 06 44 4	Ф. СТ. 22. С	A. 20.15 0
Balance, beginning of year	\$ 96,414	\$ 67,236	\$ 29,178
Interest cost	4,482		4,482
Changes in assumptions	(24,906)		(24,906)
Differences between expected and actual			
plan experience	2,067		2,067
Benefit payments	(4,089)	(4,089)	-
Contributions from the employer		2,903	(2,903)
Net investment income:			
Expected investment earnings		3,166	(3,166)
Difference between expected and actual earnings		1,316	(1,316)
Balance, end of year	\$ 73,968	\$ 70,532	\$ 3,436

The plan fiduciary net position as a percentage of the total pension liability was 105 percent and 95 percent at June 30, 2018 and 2017, respectively.

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

Significant actuarial assumptions used at the June 30, 2017 and 2016 measurement dates are as follows:

	2017	2016
Discount rate	7.00%	7.00%
Inflation	2.00%	2.75%
Investment rate of return	7.00%	7.00%
Mortality table	RP-2014 Employee and Healthy	RP-2014 Employee and Healthy
•	Annuitant, Scale MP-2016	Annuitant, Scale MP-2015

Discount rates are based on the expected rate of return on pension plan investments. The projection of cash flows used to determine the single discount rate for each fiscal year end assumed that employer contributions will be made based on the minimum contribution projection under provisions of ERISA and the Pension Protection Act of 2006 (including MAP-21) for future years. Based on the stated assumptions, the pension plan's fiduciary net position and future contributions were sufficient to finance the future benefit payments of the current plan members for all projection years. As a result, the long-term expected rate of return on pension plan investments was applied to all periods of the projected benefit payments to determine the total pension liability.

The long-term expected rate of return on pension plan investments of 7.00 percent at June 30, 2017 and 2016, was determined using the expected future rates of return for the target asset allocation of the portfolio. The target allocation and best estimate geometric rates of return by asset class are summarized as follows:

	2017		2016	
	Portfolio	Long-Term	Portfolio	Long-Term
	Allocation	Expected Return	Allocation	Expected Return
U.S. large cap	25.0%	6.8%	25.0%	7.3%
U.S. mid cap	10.5%	7.6%	10.5%	7.5%
U.S. small cap	6.5%	8.3%	6.5%	7.8%
International developed	14.0%	5.6%	14.0%	6.8%
Emerging market	9.0%	5.6%	9.0%	12.6%
STRIPs	7.0%	4.5%	7.0%	2.1%
Corporate 10+ year	28.0%	4.8%	28.0%	5.1%

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

A one-percentage point change in the discount rate would impact the net pension liability at June 30, 2018 and 2017 as follows:

	2018		2017	
	1% Decrease	1% Increase	1% Decrease	1% Increase
		(in thou	isands)	
Net pension liability	\$ 4,928	\$ (11,075)	\$ 9,056	\$ (7,470)

The components of pension expense (income) for the years ended June 30, 2018 and 2017 are summarized as follows:

	2018	2017
	(in thousands)	
Interest cost Expected investment earnings	\$ 5,013 (4,848)	\$ 4,482 (3,166)
Amortization of deferred outflows and deferred inflows	(9,582) \$ (9,417)	(8,221) \$ (6,905)

Deferred outflows and deferred inflows related to the net pension liability at June 30, 2018 and 2017 are summarized as follows:

	2018		2017	
	Deferred	Deferred	Deferred	Deferred
	Outflows	Inflows	Outflows	Inflows
		(in tho	usands)	
Changes in assumptions Difference between expected and actual	¢ (26	\$ 8,047	¢ 1 247	\$ 16,228
plan experience	\$ 626	464	\$ 1,347	
Difference between expected and actual investment earnings		3,720		1,053
	626	12,231	1,347	17,281
Contributions made after measurement				
date	1,047		2,171	
	\$ 1,673	\$ 12,231	\$ 3,518	\$ 17,281

Notes to Consolidated Financial Statements--Continued

Note 9--Pension Plan--Continued

Deferred outflows and deferred inflows related to changes in assumptions and differences between expected and actual experience will be recognized into expense in the following years ended June 30 based upon the average future work life expectancy of plan participants (in thousands):

2019	\$ 8,547
2020	1,329
2021	996
2022	733
	\$ 11,605

The reported fair value of the plan's investments based on the inputs used to value them at June 30, 2018 and 2017 is summarized as follows:

Equity securities
Fixed income securities
Nonmarketable
alternative investments

2018				
			Total Fair	
Level 1	Level 2	NAV	Value	
	(in tho	usands)		
\$ 54,057	\$ 21,297		\$ 54,057 21,297	
		\$ 1,149	1,149	
\$ 54,057	\$ 21,297	\$ 1,149	\$ 76,503	

			Total Fair
Level 1	Level 2	NAV	Value
	(in tho	usands)	
\$ 49,494			\$ 49,494
· -, -	\$ 19,555		19,555
		\$ 1,483	1,483
\$ 49,494	\$ 19,555	\$ 1,483	\$ 70,532

2017

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits

The University provides retiree health and welfare benefits, primarily medical, prescription drug, dental and life insurance coverage, to eligible retirees and their eligible dependents. Substantially all full-time regular University employees may become eligible for these benefits if they reach retirement age while working for the University. For employees retiring on or after January 1, 1987, contributions toward health and welfare benefits are shared between the University and the retiree and can vary based on date of hire, date of retirement, age and coverage elections.

The University also provides income replacement benefits, retirement savings contributions and health and life insurance benefits to substantially all regular University employees that are enrolled in a University sponsored long-term disability plan and qualify, based on disability status while working for the University, to receive basic or expanded long-term disability benefits. Contributions toward the expanded long-term disability plan are shared between the University and employees and vary based on years of service, annual base salary and coverage elections. Contributions toward the basic long-term disability plan are paid entirely by the University.

These postemployment benefits are provided through single-employer plans administered by the University. The Executive Vice Presidents of the University have the authority to establish and amend benefit provisions of the plans.

Actuarial projections of benefits expense are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided and announced future changes at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point.

The University's reported liability for postemployment benefits obligations is calculated using the entry age normal level percent of pay method. The University has elected to measure the total postemployment liability one year prior to the fiscal year end reporting date, and amounts measured as of June 30, 2017 and 2016 were determined based on an actuarial valuation as of January 1, 2017 and 2016, respectively. There are no significant changes known which would impact the total postemployment liability between the measurement date and the reporting date, other than typical plan experience.

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

For purposes of the June 30, 2017 and 2016 measurement dates, the number of plan participants consisted of the following:

	2017		2016	
	Retiree Health and Welfare	Long-term Disability	Retiree Health and Welfare	Long-term Disability
Active employees Retirees receiving benefits Surviving spouses Participants receiving	40,757 9,694 862	35,020	39,510 9,099 872	34,496
disability benefits		619		610
	51,313	35,639	49,481	35,106

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

Changes in the reported total liability for postemployment benefits obligations for the years ended June 30, 2018 and 2017 are summarized as follows:

	2018		
	Retiree Health	Long-term	_
	and Welfare	Disability	Total
		(in thousands)	
Balance, beginning of year	\$ 2,930,656	\$ 267,671	\$ 3,198,327
Service cost	115,686	28,101	143,787
Interest cost	86,129	8,024	94,153
Changes in assumptions	(124,729)	16,855	(107,874)
Differences between expected and actual	(121,72)	10,022	(107,071)
plan experience	43,472	9,249	52,721
Benefit payments	(48,910)	(28,464)	(77,374)
Balance, end of year	3,002,304	301,436	3,303,740
Less current portion	53,974	33,664	87,638
_	\$ 2,948,330	\$ 267,772	\$ 3,216,102
		2017	
	Retiree Health	Long-term	
	and Welfare	Disability	Total
		(in thousands)	
Balance, beginning of year	\$ 2,532,952	\$ 237,974	\$ 2,770,926
Service cost	97,193	24,880	122,073
Interest cost	99,036	9,525	108,561
Changes in assumptions	244,109	10,932	255,041
Differences between expected and actual			
plan experience	5,259	8,769	14,028
Benefit payments	(47,893)	(24,409)	(72,302)
Balance, end of year	2,930,656	267,671	3,198,327
Less current portion	48,910	28,464	77,374
	\$ 2,881,746	\$ 239,207	\$ 3,120,953

Since a portion of retiree medical services will be provided by the University's health system, the liability for postemployment benefits obligations is net of the related margin and fixed costs of providing those services which totaled \$611,361,000 and \$674,252,000 at June 30, 2018 and 2017, respectively.

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

The University's liability for postemployment benefits obligations at June 30, 2018 is not reduced by the anticipated Medicare Retiree Drug Subsidy for future periods. This subsidy would reduce the total postemployment benefits liability by approximately \$382,000,000.

The University does not maintain a separate legal trust to house assets used to fund postemployment benefits, has no obligation to make contributions in advance of when insurance premiums or claims are due for payment and currently pays for postemployment benefits on a pay-as-you-go basis. The University's reported postemployment benefits obligations at June 30, 2018 and 2017 as a percentage of covered payroll of \$3,792,553,000 and \$3,568,918,000 was 87 percent and 90 percent, respectively.

Significant actuarial assumptions used at the June 30, 2017 and 2016 measurement dates are as follows:

	2017	2016
Discount rate*	3.58%	2.85%
Inflation rate	2.00%	2.75%
Immediate/ultimate administrative trend rate	0.0%/3.0%	0.0%/3.0%
Immediate/ultimate medical trend rate	7.0%/4.5%	7.0%/4.5%
Immediate/ultimate Rx trend rate	9.5%/4.5%	10.0%/4.5%
Increase in compensation rate	4.00%	4.00%
Mortality table**	RP-2014 White Collar Head Count Table, Scale MP-2016	RP-2014 White Collar Head Count Table, Scale MP-2015
Average future work life expectancy (years):	•	,
Retiree health and welfare	9.17	9.54
Long-term disability	11.43	11.90

^{*} Bond Buyer 20-year General Obligation Municipal Bond Index as of the last publication of the measurement period

^{**} Based on the University's study of mortality experience from 2010-2014

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

A one-percentage point change in the discount rate and assumed health care cost trend rates would impact the total liability for postemployment benefits obligations at June 30, 2018 and 2017 as follows:

	2018 1% Decrease 1% Increase	2017		
	1% Decrease	1% Increase	1% Decrease	1% Increase
	(in thousands)			
Discount rate:				
Retiree health and welfare	\$ 677,895	\$ (520,431)	\$ 672,064	\$ (516,547)
Long-term disability	\$ 11,211	\$ (11,260)	\$ 9,360	\$ (8,600)
Health care trend rates:				
Retiree health and welfare	\$ (563,305)	\$ 768,219	\$ (570,224)	\$ 776,594
Long-term disability	\$ (11,907)	\$ 12,196	\$ (9,402)	\$ 9,661

The components of postemployment benefits expense for the years ended June 30, 2018 and 2017 are summarized as follows:

		2018			
	Retiree Health and Welfare	Long-term Disability (in thousands)	Total		
Service cost Interest cost Amortization of deferred outflows	\$ 115,686 86,129	\$ 28,101 8,024	\$ 143,787 94,153		
and deferred inflows	17,278	3,940	21,218		
	\$ 219,093	\$ 40,065	\$ 259,158		
	2017				
	Retiree Health and Welfare	Long-term Disability (in thousands)	Total		
Service cost	\$ 97,193	\$ 24,880	\$ 122,073		
Interest cost	99,036	9,525	108,561		
Amortization of deferred outflows	26,139	1,656	27,795		
	\$ 222,368	\$ 36,061	\$ 258,429		

Notes to Consolidated Financial Statements--Continued

Note 10--Postemployment Benefits--Continued

Deferred outflows and deferred inflows related to postemployment benefits obligations at June 30, 2018 and 2017 are summarized as follows:

	20	2018		
	Deferred	Deferred	Deferred	
	Outflows	Inflows	Outflows	
		(in thousands)		
Changes in assumptions Difference between expected and	\$ 217,407	\$ 111,127	\$ 228,534	
actual plan experience	58,623		12,740	
	276,030	111,127	241,274	
Benefit payments made after				
measurement date	87,638		77,374	
	\$ 363,668	\$ 111,127	\$ 318,648	

Deferred outflows and deferred inflows related to changes in assumptions and the difference between expected and actual plan experience will be recognized into expense in the following years ended June 30 based upon the average future work life expectancy of plan participants (in thousands):

2019	\$ 21,218
2020	21,218
2021	21,218
2022	21,218
2023	21,218
2024 and beyond	58,813
	\$ 164,903

Note 11--Retirement Plan

The University has a defined contribution retirement plan for all qualified employees through the Teachers Insurance and Annuity Association - College Retirement Equities Fund ("TIAA-CREF") and Fidelity Management Trust Company ("FMTC") mutual funds. All regular and supplemental instructional and primary staff are eligible to participate in the plan based upon age and service requirements. Participants maintain individual contracts with TIAA-CREF, or accounts with FMTC, and are fully vested.

Notes to Consolidated Financial Statements--Continued

Note 11--Retirement Plan--Continued

For payroll covered under the plan, eligible employees generally contribute 5 percent of their pay and the University generally contributes 10 percent of employees' pay to the plan, while certain employees generally contribute 4.5 percent of their pay, with the University contributing 9 percent of those employees' pay to the plan. The University contribution commences after an employee has completed one year of employment. Participants may elect to contribute additional amounts to the plans within specified limits that are not matched by University contributions. Contributions and covered payroll under the plan (excluding participants' additional contributions) for the years ended June 30, 2018 and 2017 are summarized as follows:

	2018	2017
	(in tho	usands)
University contributions	\$ 286,376	\$ 271,669
Employee contributions	\$ 150,488	\$ 142,539
Payroll covered under plan	\$ 3,792,553	\$ 3,568,918
Total payroll	\$ 3,947,501	\$ 3,727,646

Notes to Consolidated Financial Statements--Continued

Note 12--Net Position

The composition of net position at June 30, 2018 and 2017 is summarized as follows:

	2018	2017
_	(in thou	usands)
Net investment in capital assets Restricted:	\$ 3,722,086	\$ 3,735,130
Nonexpendable: Permanent endowment corpus Expendable:	2,146,358	1,966,541
Net appreciation of permanent endowments	2,067,392	1,828,744
Funds functioning as endowment	2,308,185	2,126,286
Restricted for operations and other	631,747	632,551
Unrestricted	3,405,277	3,071,403
_	\$ 14,281,045	\$ 13,360,655

Unrestricted net position, as defined by GASB, is not subject to externally imposed stipulations; however, it is subject to internal restrictions. For example, unrestricted net position may be designated for specific purposes by action of management or the Board of Regents. At June 30, 2018 and 2017, substantially all of the unrestricted net position has been designated for various academic programs, research initiatives and capital projects.

Note 13--Federal Direct Lending Program

The University distributed \$301,194,000 and \$291,964,000 during the years ended June 30, 2018 and 2017, respectively, for student loans through the U.S. Department of Education ("DoED") federal direct lending program. These distributions and related funding sources are not included as expenses and revenues in the accompanying financial statements. The statement of net position includes a receivable of \$3,183,000 and \$2,429,000 at June 30, 2018 and 2017, respectively, for DoED funding received subsequent to distribution.

Notes to Consolidated Financial Statements--Continued

Note 14--Commitments and Contingencies

Authorized expenditures for construction and other projects unexpended at June 30, 2018 were \$970,655,000. Of these expenditures, the University expects that \$798,608,000 will be funded by internal sources, gifts, grants and future borrowings, \$89,250,000 by the State Building Authority and the remaining \$82,797,000 will be funded using unexpended bond proceeds.

Under the terms of various limited partnership agreements approved by the Board of Regents or by University officers, the University is obligated to make periodic payments for advance commitments to venture capital, private equity, real estate, natural resources and absolute return strategies. As of June 30, 2018, the University had committed, but not paid, a total of \$5,711,078,000 in funding for these alternative investments. Based on historical capital calls and discussions with those managing the limited partnerships, outstanding commitments for such investments are anticipated to be paid in the following years ended June 30 (in thousands):

2019	\$ 1,999,817
2020	1,270,335
2021	950,868
2022	542,402
2023	370,162
2024 and beyond	577,494
	\$ 5,711,078

These commitments are generally able to be called prior to an agreed commitment expiration date and therefore may occur earlier or later than estimated.

The University has entered into capital and operating leases for certain space and equipment, which expire at various dates through 2039. Outstanding commitments for these leases are expected to be paid in the following years ended June 30:

	Capital	Operating
	(in thousands)	
2019	\$ 11,290	\$ 46,301
2020	10,705	43,218
2021	10,139	37,197
2022	10,211	33,252
2023	10,327	27,938
2024-2028	45,280	85,369
2029-2033	47,628	2,618
2034-2038	25,505	26
2039	3,312	
	174,397	\$ 275,919
nting interest	80,139	
se payments	\$ 94,258	

Less amount representing interest Present value of minimum lease payments

Notes to Consolidated Financial Statements--Continued

Note 14--Commitments and Contingencies--Continued

Operating lease expenses totaled \$49,058,000 and \$50,409,000 in 2018 and 2017, respectively.

Substantial amounts are received and expended by the University under federal and state programs and are subject to audit by cognizant governmental agencies. This funding relates to research, student aid, patient care and other programs. The University believes that any liabilities arising from such audits will not have a material effect on its financial position.

The University is a party to various pending legal actions and other claims in the normal course of business, and is of the opinion that the outcome of these proceedings will not have a material adverse effect on its financial position.

Notes to Consolidated Financial Statements--Continued

Note 15--Operating Expenses by Function

Operating expenses by functional classification for the years ended June 30, 2018 and 2017 are summarized as follows:

			2018		
	Compensation	Supplies		Scholarships	
	and	and		and	
	Benefits	Services	Depreciation	Fellowships	Total
		ı	(in thousands)		
In stantation	¢ 1 000 200	¢ 152.922			¢ 1 152 221
Instruction	\$ 1,000,388	\$ 152,833			\$ 1,153,221
Research	555,853	267,734			823,587
Public service	129,675	81,769			211,444
Academic support	255,641	61,604			317,245
Student services	89,762	27,516			117,278
Institutional support	185,801	60,702			246,503
Operations and maintenance of					
plant	53,337	297,558			350,895
Auxiliary enterprises	3,160,935	1,452,876			4,613,811
Depreciation			\$ 568,707		568,707
Scholarships and fellowships				\$ 156,738	156,738
	\$ 5,431,392	\$ 2,402,592	\$ 568,707	\$ 156,738	\$ 8,559,429

			2017		
	Compensation	Supplies		Scholarships	
	and	and		and	
	Benefits	Services	Depreciation	Fellowships	Total
	-	T	(in thousands)		
Instruction	\$ 939,548	\$ 160,206			\$ 1,099,754
Research	538,613	264,980			803,593
Public service	120,755	67,010			187,765
Academic support	237,819	60,278			298,097
Student services	87,885	24,075			111,960
Institutional support	181,106	55,556			236,662
Operations and maintenance of					
plant	40,575	275,789			316,364
Auxiliary enterprises	2,918,121	1,256,124			4,174,245
Depreciation			\$ 537,670		537,670
Scholarships and fellowships				\$ 143,932	143,932
	\$ 5,064,422	\$ 2,164,018	\$ 537,670	\$ 143,932	\$ 7,910,042

Notes to Consolidated Financial Statements--Continued

Note 16--UM Health

Condensed financial information for UM Health, a blended component unit, before the elimination of certain intra-University transactions, as of and for the years ended June 30, 2018 and 2017 is as follows:

	2018	2017
Condensed Statement of Net Position	(in thou	sands)
Assets:		
Current assets	\$ 121,110	\$ 142,403
Noncurrent assets	242,561	258,190
Total assets	363,671	400,593
Deferred outflows	5,094	7,851
Total assets and deferred outflows	\$ 368,765	\$ 408,444
Total assets and deferred outflows	\$ 308,703	\$ 400,444
Liabilities:		
Current liabilities	\$ 60,717	\$ 56,449
Noncurrent liabilities	214,465	229,256
Total liabilities	275,182	285,705
·	,	,
Deferred inflows	15,042	20,258
N-titi		
Net position: Net investment in capital assets	(2.526)	19 601
Restricted:	(2,536)	18,691
Nonexpendable	3,247	177
Expendable	13,310	11,569
Unrestricted	64,520	72,044
Total net position	78,541	102,481
Total liabilities, deferred inflows and net position	\$ 368,765	\$ 408,444
rotal nationates, deterred innows and net position	Ψ 300,703	ψ 100,111
Condensed Statement of Revenues, Expenses and Changes in Net Position		
Operating revenues	\$ 434,611	\$ 377,202
Operating expenses other than depreciation expense	401,607	367,561
Depreciation expense	46,268	20,952
Operating loss	(13,264)	(11,311)
Nonoperating expenses, net	(7,408)	(9,512)
Other expenses, net	(3,268)	(1,974)
Net expenses before transfers	(23,940)	(22,797)
Transfers from other University units		45,000
(Decrease) increase in net position	(23,940)	22,203
Net position, beginning of year	102,481	80,278
Net position, end of year	\$ 78,541	\$ 102,481
Control Character of Control		
Condensed Statement of Cash Flows	¢ 10.500	¢ 16016
Net cash provided by operating activities	\$ 10,509	\$ 16,916
Net cash (used in) provided by noncapital financing activities Net cash used in capital and related financing activities	(1,187) (32,866)	38,113 (63,550)
Net cash provided by (used in) investing activities	148	(529)
Net decrease in cash and cash equivalents	(23,396)	
Cash and cash equivalents, beginning of year	(23,396) 44,723	(9,050) 53,773
Cash and cash equivalents, beginning of year Cash and cash equivalents, end of year	\$ 21,327	\$ 44,723
Cash and cash equivalents, end of year	\$ 21,321	\$ 44,723

Required Supplementary Information (Unaudited)

Pension Plan

Changes in the net pension liability for the years ended June 30, 2018 and 2017 are summarized as follows:

	2018			
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position (in thousands)	Liability	
Balance, beginning of year	\$ 73,968	\$ 70,532	\$ 3,436	
Interest cost	5,013		5,013	
Changes in assumptions	(822)		(822)	
Differences between expected and actual	, ,		, ,	
plan experience	(767)		(767)	
Benefit payments	(4,712)	(4,712)		
Contributions from the employer	,	2,171	(2,171)	
Net investment income:				
Expected investment earnings		4,848	(4,848)	
Difference between expected and actual earnings		3,664	(3,664)	
Balance, end of year	\$ 72,680	\$ 76,503	\$ (3,823)	

	2017			
	Total Pension	Plan Fiduciary	Net Pension	
	Liability	Net Position	Liability	
		(in thousands)		
			_	
Balance, beginning of year	\$ 96,414	\$ 67,236	\$ 29,178	
Interest cost	4,482		4,482	
Changes in assumptions	(24,906)		(24,906)	
Differences between expected and actual				
plan experience	2,067		2,067	
Benefit payments	(4,089)	(4,089)	-	
Contributions from the employer		2,903	(2,903)	
Net investment income:				
Expected investment earnings		3,166	(3,166)	
Difference between expected and actual earnings		1,316	(1,316)	
Balance, end of year	\$ 73,968	\$ 70,532	\$ 3,436	

The plan fiduciary net position as a percentage of the total pension liability was 105 percent and 95 percent at June 30, 2018 and 2017, respectively.

Required Supplementary Information (Unaudited)--Continued

Pension Plan--Continued

Employer contributions in relation to actuarially determined contributions for the years ended June 30, 2018 and 2017 are as follows:

	2018	2017
	(in tho	usands)
Employer contributions*	\$ 1,047	\$ 2,171
Actuarially determined contributions	1,622	1,754
(Deficient) Excess contributions	\$ (575)	\$ 417

^{*} Reflects no employer contributions after April 30 of the respective fiscal year

Significant methods and assumptions used to calculate the actuarially determined contributions for the years ended June 30 are as follows:

Actuarially determined contributions	The plan is subject to funding requirements under the provisions of ERISA and the Pension Protection Act of 2006 (including MAP-21, HATFA and BBA). The actuarially determined contributions represent the IRC Section 430 minimum required contributions.
Contributions in relation to actuarially determined contributions	Under IRC Section 430, the due date to pay minimum required contributions for the plan year is generally 8 $\frac{1}{2}$ months after the end of the plan year. For the plan years ended September 30, contributions are due by June 15 of the following year.
Actuarial cost method	Unit Credit method
Asset valuation method	24-month smoothed value of assets
Interest rate	 2018: First segment rate: 4.16%; Second segment rate: 5.72%; Third segment rate: 6.48%; Effective rate: 5.93% 2017: First segment rate: 4.43%; Second segment rate: 5.91%; Third segment rate: 6.65%; Effective rate: 6.13%
Mortality	Prescribed by the Secretary of Treasury and described in Treasury regulation 1.430(h)(3)-1. Based on the RP-2000 gender distinct table that reflects projected mortality improvements 15 years into the future from the valuation date for non annuitants and 7 years into the future for annuitants.

Required Supplementary Information (Unaudited)--Continued

Postemployment Benefits

The historical reconciliation of the total reported liability for postemployment benefits obligations for the years ended June 30, 2018 and 2017 is summarized as follows (amounts in thousands):

	2018	2017
Service cost Interest cost Changes in assumptions Differences between expected and actual plan experience Benefit payments Net change	\$ 143,787 94,153 (107,874) 52,721 (77,374) \$ 105,413	\$ 122,073 108,561 255,041 14,028 (72,302) \$ 427,401
Total liability, beginning of year Total liability, end of year Covered employee payroll Total liability as a percentage of covered employee payroll	\$ 3,198,327 \$ 3,303,740 \$ 3,792,553 87%	\$ 2,770,926 \$ 3,198,327 \$ 3,568,918 90%

Discount rates used in determining the total reported liability for postemployment benefits obligations at June 30 are as follows:

2018	3.58%
2017	2.85%
2016	3.80%

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Throu
STUDENT FINANCIAL ASSISTANCE CLUSTER							
Education, Department of	Direct			84.007	Federal Supplemental Educational Opportunity Grant	\$ 1,815,807	
Education, Department of	Direct			84.033	Federal Work-Study Program Federal Perkins Loan Program Federal Capital Contributions -	\$ 4,603,497	\$
Education, Department of	Direct			84.038	Balance Outstanding at Beginning of Year Federal Perkins Loan Program Federal Capital Contributions -	\$ 68,721,232	\$
Education, Department of	Direct			84.038	New Loans Federal Perkins Loan Program Federal Capital Contributions -	9,176,392	
Education, Department of	Direct			84.038	Administrative Cost Allowance	634,017	
Education, Department of	Direct			84.063	Federal Pell Grant Program	\$ 78,531,641 \$ 49,247,453	
Education, Department of	Direct			84.268	William D. Ford Federal Direct Loan Program	\$ 301,193,977	
Education, Department of	Direct			84.379	Teacher Education Assistance for College and Higher Education Grants (TEACH Grants)	\$ 54,031	\$
			Total Education, Department of			\$ 435,446,406	\$
Health and Human Services, Department of	Direct			93.264	Nurse Faculty Loan Program (NFLP) - Balance Outstanding at Beginning of Year	\$ 3,669,877	¢
Health and Human Services, Department of	Direct			93.264	Nurse Faculty Loan Program (NFLP) - New Loans	5,009,877	
Trouter and Training Services, Department of	Birect			75.201	. , ,	\$ 4,374,690	
					Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students - Balance		
Health and Human Services, Department of	Direct			93.342	Outstanding at Beginning of Year Health Professions Student Loans, Including Primary Care	\$ 10,381,284	\$
Health and Human Services, Department of	Direct			93.342	Loans/Loans for Disadvantaged Students - New Loans	1,794,995	
					Number Chalant I and Delana Outstanding at Designing of	\$ 12,176,279	\$
Health and Human Services, Department of	Direct			93.364	Nursing Student Loans - Balance Outstanding at Beginning of Year	\$ 1,713,201	\$
Health and Human Services, Department of	Direct			93.364	Nursing Student Loans - New Loans	438,764	
					Scholarships for Health Professions Students from	\$ 2,151,965	\$
Health and Human Services, Department of	Direct			93.925	Disadvantaged Backgrounds - Balance Outstanding at Beginning of Year	\$ 4,425,479	• •
, 1					Scholarships for Health Professions Students from		
Health and Human Services, Department of	Direct			93.925	Disadvantaged Backgrounds - New Loans	\$ 566,322 \$ 4,991,801	
			Total Health and Human Services, Dep	artment of		\$ 23,694,735	
			Total student financial assistance clu	ster		\$ 459,141,141	S
HIGHWAY PLANNING AND CONSTRUCTION CLU	CTED					. , ,	
Transportation, Department of		Michigan, State of, Transportation, Department of	2014-0006/Job 122203	20.205	Highway Planning and Construction	\$ 149,277	\$
Transportation, Department of		South Dakota, State of	311322	20.205	Highway Planning and Construction	2,383	
Transportation, Department of	Pass-Through	University of Minnesota	A004322001	20.205	Highway Planning and Construction	(501)	<i>'</i>
			Total highway planning and construc	etion cluster		\$ 151,159	\$
HIGHWAY SAFETY CLUSTER	D TI 1	Military Control District	TD 17.05	20.600	Grand Control of Control	Ф 42.242	Ф
Transportation, Department of Transportation, Department of		Michigan, State of, Other Projects Michigan, State of, State Police	TR-17-05 PS-18-10	20.600 20.616	State and Community Highway Safety National Priority Safety Programs	\$ 43,243 \$ 85,564	
Transportation, Department of		Michigan, State of, State Police	TR-17-01	20.616	National Priority Safety Programs	238,603	
Transportation, Department of		Michigan, State of, State Police	TR-18-01	20.616	National Priority Safety Programs	453,537	
Transportation, Department of Transportation, Department of		Michigan, State of, State Police Michigan, State of, State Police	TR-18-07 TR-18-11	20.616 20.616	National Priority Safety Programs National Priority Safety Programs	29,524 60,429	
Transportation, Department of	1 ass-1 in ough	Wienigan, State of, State Fonce	1K-10-11	20.010	National Friority Salety Frograms	\$ 867,657	
			Total highway safety cluster			\$ 910,900	\$
TRIO CLUSTER							
Education, Department of	Direct		P047M170268	84.047	TRIO Upward Bound	\$ 175,451	\$
			Total trio cluster			\$ 175,451	\$
AGING CLUSTER							
Health and Human Services, Department of	Pass-Through	Washtenaw, County of	CR 45755	93.045	Special Programs for the Aging, Title III, Part C, Nutrition Services	\$ 8,566	\$
	S						
, I			Total aging cluster			\$ 8,566	\$
CCDF CLUSTER	Pacc_Through	Columbia University	1 (GG008358 06)	03 575	Child Care and Development Block Grant	\$ 425 207	ς
CCDF CLUSTER Health and Human Services, Department of Health and Human Services, Department of		Columbia University Columbia University	1 (GG008358-06) 1(GG008358-05)	93.575 93.575	Child Care and Development Block Grant Child Care and Development Block Grant	\$ 435,207 222,526	
CCDF CLUSTER Health and Human Services, Department of			,				
CCDF CLUSTER Health and Human Services, Department of			1(GG008358-05)			222,526	

Cluster Title/Federal Grantor/Program	Type Page Through	Pass-Through Grantor Michigan State of Health and Human Services Department of	Award Identifier 20162210	CFDA Number	CFDA Program Title Medical Assistance Program	Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	E20170679-00	93.778 93.778	Medical Assistance Program Medical Assistance Program	(358) 16,747	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20170681-003	93.778	Medical Assistance Program	41,459	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171067-002	93.778	Medical Assistance Program	74,517	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171073-001	93.778	Medical Assistance Program	61,094	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171182-00	93.778	Medical Assistance Program	36,952	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171303-001	93.778	Medical Assistance Program	506,975	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171319-00	93.778	Medical Assistance Program	205,204	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171465-00	93.778	Medical Assistance Program	27,652	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171469-00	93.778	Medical Assistance Program	17,782	=
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171470-00	93.778	Medical Assistance Program	308,817	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171475-00	93.778	Medical Assistance Program	229,548	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172061-00	93.778	Medical Assistance Program	77,988	9,793
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172064-00	93.778	Medical Assistance Program	32,871	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172067-00	93.778	Medical Assistance Program	74,287	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172068-00	93.778	Medical Assistance Program	63,743	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172070-00	93.778	Medical Assistance Program	39,814	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172449-00	93.778	Medical Assistance Program	340,439	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172450-00	93.778	Medical Assistance Program	35,344	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172517-00	93.778	Medical Assistance Program	310	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172518-00	93.778	Medical Assistance Program	(14,375)	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172628-00 E20172790-00	93.778	Medical Assistance Program	35,100 77,845	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E2017/2790-00 E20180330-001	93.778	Medical Assistance Program	98,107	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	E20180330-001 E20180331-00	93.778 93.778	Medical Assistance Program Medical Assistance Program	107,435	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180531-00 E20180522-001	93.778	Medical Assistance Program Medical Assistance Program	460,276	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180522-001 E20180567-002	93.778	Medical Assistance Program	333,788	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180649-00	93.778	Medical Assistance Program	1,224,103	13,411
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180660-00	93.778	Medical Assistance Program	125,246	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180661-001	93.778	Medical Assistance Program	101,807	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180662-001	93.778	Medical Assistance Program	196,803	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180663-00	93.778	Medical Assistance Program	37,140	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180664-001	93.778	Medical Assistance Program	83,119	10,863
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180666-00	93.778	Medical Assistance Program	12,008	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180671-00	93.778	Medical Assistance Program	104,884	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180672-001	93.778	Medical Assistance Program	482,560	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181633-00	93.778	Medical Assistance Program	63,548	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181638-001	93.778	Medical Assistance Program	173,936	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181714-00	93.778	Medical Assistance Program	431,187	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182637-002	93.778	Medical Assistance Program	90,737	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182712-00	93.778	Medical Assistance Program	211,610	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182761-00	93.778	Medical Assistance Program	335,782	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182762-00	93.778	Medical Assistance Program	75,220	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182763-00	93.778	Medical Assistance Program	59,076	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182767-00	93.778	Medical Assistance Program	46,906	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182778-00	93.778	Medical Assistance Program	65,440	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182779-002	93.778	Medical Assistance Program	16,558	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182780-00	93.778	Medical Assistance Program	8,758	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182781-00	93.778	Medical Assistance Program	90,619	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182782-001	93.778	Medical Assistance Program	30,772 48,477	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182783-001	93.778	Medical Assistance Program		-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	E20182815-001 E20182831-00	93.778 93.778	Medical Assistance Program Medical Assistance Program	54,026 23,290	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182876-00	93.778	Medical Assistance Program	8,105	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182870-00 E20182884-00	93.778	Medical Assistance Program	34,238	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182971-00	93.778	Medical Assistance Program	34,019	_
Treatur and Transan Services, Department of	Tuss Tillough	Michigan, State of, Treatar and Transan Services, Department of		73.110	redical Assistance Program		
			Total medicaid cluster			\$ 7,560,856	\$ 34,067
RESEARCH AND DEVELOPMENT CLUSTER	ъ.		2017 20100 07000	40.5		ф —·	Ф
Agriculture, Department of	Direct		2016-32100-06099	10.202	Cooperative Forestry Research	\$ 71,377	\$ -
Agriculture, Department of	Direct		NI17MSCFRXXXG068	10.202	Cooperative Forestry Research	270,200	-
						\$ 341,577	\$ -
Agriculture, Department of	Direct		2016-70003-24838	10.217	Higher Education - Institution Challenge Grants Program	\$ 57,058	\$ -
A '-14- D	D 771 1	II ' ' (NI 1 - 1 - I' - I	27 7224 0170 002	10.050	Agricultural and Rural Economic Research, Cooperative	φ 2.27	¢.
Agriculture, Department of	Pass-Through	University of Nebraska-Lincoln	26-6224-0160-002 58-5000-2-0065	10.250	Agreements and Collaborations	\$ 2,271	
Agriculture, Department of	Direct		58-5000-3-0065	10.253	Consumer Data and Nutrition Research	\$ 2,159	-
Agriculture, Department of	Direct	University of Ventueles	59-5000-5-0008	10.253	Consumer Data and Nutrition Research	53,239	-
Agriculture, Department of	Pass-Through	University of Kentucky	3200000900-17-237	10.253	Consumer Data and Nutrition Research	\$ 20,181 \$ 75,579	\$ -
Agriculture, Department of	Direct		2012-68004-20028	10.310	Agriculture and Food Research Initiative (AFRI)	\$ 627,912	
Agriculture, Department of	Direct		2015-67013-22953	10.310	Agriculture and Food Research Initiative (AFRI)	95,402	2,446
Agriculture, Department of	Direct		2015-67015-27094	10.310	Agriculture and Food Research Initiative (AFRI)	96,223	67,794
Agriculture, Department of	Direct		2016-67011-24725	10.310	Agriculture and Food Research Initiative (AFRI)	(2,863)	-
<i>O</i> , 1			2016-67030-24892	10.310	Agriculture and Food Research Initiative (AFRI)	58,082	_
Agriculture, Department of	Direct				· · · · · · · · · · · · · · · · · · ·		
	Direct Direct		2017-67019-26292 2018-UM-01	10.310	Agriculture and Food Research Initiative (AFRI) Agriculture and Food Research Initiative (AFRI)	151,897 12,111	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Agriculture, Department of	Pass-Through	Michigan State University	RC104749B	10.310	Agriculture and Food Research Initiative (AFRI)	243,548	-
griculture, Department of	Pass-Through	Temple University	242673-Umich	10.310	Agriculture and Food Research Initiative (AFRI)	(77)	_
griculture, Department of	Pass-Through	University of Buffalo	R996610	10.310	Agriculture and Food Research Initiative (AFRI)	61,995	_
riculture, Department of	Pass-Through	University of Wisconsin	460K795	10.310	Agriculture and Food Research Initiative (AFRI)	59,694	_
are minute, 2 open minute of	Twee Time ugit	cinitating of Albertain	.0012///0	10.510	1.18.1.0.1.0.0.0.1.0.0.0.1.0.0.0.0.0.0.0	\$ 1,403,924	
riculture, Department of	Direct		13-CR-11242306-077	10.652	Forestry Research	\$ 3,963	
riculture, Department of	Direct		2014-JV-11261975-073	10.652	Forestry Research	34,227	- -
realitates, Department of	Birect		20110111201773 073	10.032	1 of edity freedom	\$ 38,190	\$ -
riculture, Department of	Pass-Through	University of Florida, The	UFDSP00011036/Prime 00119996	10.675	Urban and Community Forestry Program	\$ 9,446	\$ -
riculture, Department of	Direct	Oniversity of Frontai, The	16-CR-11242306-071	10.RD	Orban and Community Polestry Program	\$ 40,574	*
riculture, Department of	Direct		17-CR-11242306-028	10.RD		4,871	υ - -
reduce, Department of	Direct		1/-CR-112 1 2300-020	10.KD		\$ 45,445	<u>-</u>
			Total Agriculture, Department of			\$ 1,973,490	
			Total Agriculture, Department of			\$ 1,973,490	\$ 250,63
namena Department of	Direct		NA14OAR0110139	11.011	Ocean Exploration	\$ 16,243	¢.
nmerce, Department of	Direct		NA14OAR0110139 NA14OAR0110149	11.011	1	13,752	D -
nmerce, Department of					Ocean Exploration	The state of the s	-
nmerce, Department of	Direct		NA14OAR0110265	11.011	Ocean Exploration	(87,813)	-
D	D 751 1		NA 1 (2) (2) (2) (2) (2)	11.010	1, , 10, 01, ', 0, , (1000)	\$ (57,818) \$	
merce, Department of	Pass-Through	Great Lakes Observing System (GLOS)	NA16NOS0120025	11.012	Integrated Ocean Observing System (IOOS)	\$ (244) \$	-
nmerce, Department of	Pass-Through	University of Maryland, The	CA 12-07 07-5-25684	11.012	Integrated Ocean Observing System (IOOS)	(1,525)	-
nmerce, Department of	Pass-Through	University of Maryland, The	SA7525796B	11.012	Integrated Ocean Observing System (IOOS)	189,922	-
						\$ 188,153	
nmerce, Department of	Direct		ED17HDQ0200083	11.020	Cluster Grants	\$ 103,249 \$	
merce, Department of	Direct		ED16CHI3030032	11.303	Economic Development Technical Assistance	\$ 79,476 \$	
nmerce, Department of	Direct		ED16HDQ3130040	11.313	Trade Adjustment Assistance for Firms	\$ 923,718 \$	\$ -
mmerce, Department of	Direct		ED17HDQ3130045	11.313	Trade Adjustment Assistance for Firms	164	<u>-</u>
						\$ 923,882	
nmerce, Department of	Direct		NA14OAR4170070	11.417	Sea Grant Support	\$ 1,584,575	\$ 84,035.
nmerce, Department of	Direct		NA15OAR4170206	11.417	Sea Grant Support	37,384	-
nmerce, Department of	Direct		NA15OAR4170212	11.417	Sea Grant Support	5,051	-
mmerce, Department of	Direct		NA18OAR4170010	11.417	Sea Grant Support	34,629	-
nmerce, Department of	Direct		NA18OAR4170033	11.417	Sea Grant Support	36,078	-
nmerce, Department of	Direct		NA18OAR4170102	11.417	Sea Grant Support	10,572	_
nmerce, Department of	Pass-Through	Ohio Sea Grant	60045748	11.417	Sea Grant Support	(4,449)	_
mmerce, Department of	Pass-Through	Ohio Sea Grant	60063781	11.417	Sea Grant Support	5,150	_
and the second s	Twee Time ugii	5 M6 5 W 5 W 5 W 5 W 5 W 5 W 5 W 5 W 5 W 5	00000701	111117	State State Support	\$ 1,708,990	\$ 84,03
mmerce, Department of	Direct		NA14NOS4190145	11.419	Coastal Zone Management Administration Awards	\$ 4,171,566	\$ 3,200,080.0
mmerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	16-Climate-003	11.419	Coastal Zone Management Administration Awards	71,251	29,06
mmerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	17-Resiliency Strategy-002	11.419	Coastal Zone Management Administration Awards Coastal Zone Management Administration Awards	112,417	27,00
mmerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	18-Clean Marinas-002	11.419	Coastal Zone Management Administration Awards Coastal Zone Management Administration Awards	11,797	-
mmerce, Department of						57,188	-
ninerce, Department of	Pass-Through	Michigan, State of, Environmental Quality, Department of	18-Resiliency Strategy-002	11.419	Coastal Zone Management Administration Awards	\$ 4,424,219	\$ 3,229,14
Dtt -f	D:4		NA 120 A D 42 1000 C	11 421	Climate and Atmandania Dancard		
nmerce, Department of	Direct		NA13OAR4310096	11.431	Climate and Atmospheric Research	\$ 105,530 \$	-
nmerce, Department of	Direct		NA14OAR4310269	11.431	Climate and Atmospheric Research	16,102	-
nmerce, Department of	Direct		NA15OAR4310067	11.431	Climate and Atmospheric Research	32,078	54.054
nmerce, Department of	Direct		NA15OAR4310148	11.431	Climate and Atmospheric Research	457,541	54,854.0
					N. d. 10 d. 14 d. 1 d. 1 d. 1 d. 1 d. 1 d. 1 d.	\$ 611,251 5	\$ 54,85
					National Oceanic and Atmospheric Administration (NOAA)		
nmerce, Department of	Direct		NA12OAR4320071	11.432	Cooperative Institutes	\$ 2,204,982	\$ 269,044.0
					National Oceanic and Atmospheric Administration (NOAA)		
nmerce, Department of	Direct		NA17OAR4320152	11.432	Cooperative Institutes	1,455,275	277,073.0
						\$ 3,660,257	\$ 546,11
nmerce, Department of	Direct		NA16OAR4590240	11.459	Weather and Air Quality Research	\$ 36,042 \$	\$ -
					Center for Sponsored Coastal Ocean Research Coastal Ocean		· · · · · · · · · · · · · · · · · · ·
merce, Department of	Direct		NA16NOS4780209	11.478	Program	\$ 179,258 \$	\$ -
merce, Department of	Direct		60NANB17D191	11.609	Measurement and Engineering Research and Standards	\$ 113,224 \$	\$
merce, Department of	Direct		70NANB15H022	11.609	Measurement and Engineering Research and Standards	41,462	-
nmerce, Department of	Direct		70NANB15H305	11.609	Measurement and Engineering Research and Standards	(1,394)	-
nmerce, Department of	Direct		70NANB16H132	11.609	Measurement and Engineering Research and Standards	112,797	_
nmerce, Department of	Direct		70NANB16H205	11.609	Measurement and Engineering Research and Standards	85,546	_
nmerce, Department of	Direct		70NANB16H291	11.609	Measurement and Engineering Research and Standards	18,064	_
nmerce, Department of	Direct		70NANB16H307	11.609	Measurement and Engineering Research and Standards	103,589	-
nmerce, Department of	Direct		70NANB17H163	11.609	Measurement and Engineering Research and Standards	258,409	_
imerce, Department of	Direct		70NANB17H176	11.609	Measurement and Engineering Research and Standards	89,810	=
merce, Department of	Direct		70NANB17H170	11.609	Measurement and Engineering Research and Standards	164,753	_
imerce, Department of	Direct		70NANB17H291	11.609	Measurement and Engineering Research and Standards	38,551	
microc, Department of	Direct		/UNAIND1/Π271	11.009	wicasurement and engineering research and Standards	\$ 1,024,811	<u>-</u>
imerce Department of	Direct		70NANB16H267	11.620	Science, Technology, Business and/or Education Outreach	\$ 1,024,811 3	
merce, Department of					C		φ -
merce, Department of	Direct		70NANB17H126	11.620	Science, Technology, Business and/or Education Outreach	38	-
merce, Department of	Direct		70NANB17H310	11.620	Science, Technology, Business and/or Education Outreach	154,367	-
nmerce, Department of	Direct		70NANB18H135	11.620	Science, Technology, Business and/or Education Outreach	14,119	
						\$ 208,460 \$	\$ -
nmerce, Department of	Direct		IPA Michael Elliott	11.RD		\$ 43,697 \$	\$ -
merce, Department of	Direct		RA-133W-14-CN-0134	11.RD		44,691	-
•	Direct		RA133W17CN0166	11.RD		140,436	-
merce, Department of	2						
mmerce, Department of mmerce, Department of	Pass-Through	Consortium for Ocean Leadership	18-05	11.RD		8,787	-
		Consortium for Ocean Leadership University of Maryland, The	18-05 Z777101	11.RD 11.RD		8,787 (24,353)	-

Cluster Title/Federal Grantor/Program	Type Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
		Total Commerce, Department of			\$ 13,303,488	\$ 3,914,14
Defense, Department of	Pass-Through BAE Systems	316095	12.114	Collaborative Research and Development	\$ 1,153,106	
Defense, Department of	Direct	FA8750-17-2-0125	12.300	Basic and Applied Scientific Research	\$ 471,307	\$ -
Defense, Department of	Direct	FA8750-18-2-0011	12.300	Basic and Applied Scientific Research	92,321	-
Defense, Department of	Direct	FA8750-18-2-0019	12.300	Basic and Applied Scientific Research	74,207	-
Defense, Department of	Direct	FA9550-18-1-0044	12.300	Basic and Applied Scientific Research	48,368	-
Defense, Department of	Direct Direct	N00014-12-1-0013 N00014-13-1-0071	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	(11) (106,547)	-
Defense, Department of Defense, Department of	Direct	N00014-13-1-0071 N00014-13-1-0217	12.300	Basic and Applied Scientific Research	239,315	-
Defense, Department of Defense, Department of	Direct	N00014-13-1-0217 N00014-13-1-0525	12.300	Basic and Applied Scientific Research	(409)	-
Defense, Department of	Direct	N00014-13-1-0528	12.300	Basic and Applied Scientific Research	7,256	8,70
Defense, Department of	Direct	N00014-14-1-0417	12.300	Basic and Applied Scientific Research	(3,134)	
Defense, Department of	Direct	N00014-14-1-0596	12.300	Basic and Applied Scientific Research	170,003	-
Defense, Department of	Direct	N00014-14-1-0680	12.300	Basic and Applied Scientific Research	28,876	-
Defense, Department of	Direct	N00014-14-1-0712	12.300	Basic and Applied Scientific Research	231,717	-
efense, Department of	Direct	N00014-15-1-2058	12.300	Basic and Applied Scientific Research	157,114	-
efense, Department of	Direct	N00014-15-1-2141	12.300	Basic and Applied Scientific Research	297,834	-
Defense, Department of	Direct	N00014-15-1-2156	12.300	Basic and Applied Scientific Research	(58)	-
Defense, Department of	Direct	N00014-15-1-2163	12.300	Basic and Applied Scientific Research	261,962	-
Defense, Department of	Direct	N00014-15-1-2224	12.300	Basic and Applied Scientific Research	544,604	-
Defense, Department of	Direct	N00014-15-1-2382	12.300	Basic and Applied Scientific Research	169,638	-
befense, Department of	Direct	N00014-15-1-2390	12.300	Basic and Applied Scientific Research	127,855	-
efense, Department of	Direct	N00014-15-1-2668	12.300	Basic and Applied Scientific Research	10,745	-
efense, Department of	Direct	N00014-15-1-2725	12.300	Basic and Applied Scientific Research	165,283	-
efense, Department of	Direct	N00014-15-1-2752	12.300	Basic and Applied Scientific Research	163,104	67,8
efense, Department of	Direct	N00014-16-1-2032	12.300	Basic and Applied Scientific Research	71,039	-
efense, Department of	Direct	N00014-16-1-2102 N00014-16-1-2239	12.300	Basic and Applied Scientific Research	190,058	152.5
efense, Department of	Direct Direct	N00014-16-1-2239 N00014-16-1-2297	12.300 12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	209,678 70,589	153,5
efense, Department of efense, Department of	Direct	N00014-16-1-2353	12.300	Basic and Applied Scientific Research	159,326	-
efense, Department of	Direct	N00014-16-1-2433	12.300	Basic and Applied Scientific Research	88,226	-
efense, Department of	Direct	N00014-16-1-2433	12.300	Basic and Applied Scientific Research	223,742	_
efense, Department of	Direct	N00014-16-1-2614	12.300	Basic and Applied Scientific Research	172,598	_
efense, Department of	Direct	N00014-16-1-2672	12.300	Basic and Applied Scientific Research	413,394	_
efense, Department of	Direct	N00014-16-1-2728	12.300	Basic and Applied Scientific Research	241,322	_
efense, Department of	Direct	N00014-16-1-2738	12.300	Basic and Applied Scientific Research	149,736	-
efense, Department of	Direct	N00014-16-1-2910	12.300	Basic and Applied Scientific Research	108,359	-
efense, Department of	Direct	N00014-16-1-2928	12.300	Basic and Applied Scientific Research	107,711	-
efense, Department of	Direct	N00014-16-1-2969	12.300	Basic and Applied Scientific Research	193,638	-
efense, Department of	Direct	N00014-16-1-2971	12.300	Basic and Applied Scientific Research	456,734	-
efense, Department of	Direct	N00014-16-1-2972	12.300	Basic and Applied Scientific Research	115,133	-
efense, Department of	Direct	N00014-16-1-2975	12.300	Basic and Applied Scientific Research	66,450	-
efense, Department of	Direct	N00014-16-1-2978	12.300	Basic and Applied Scientific Research	157,510	-
efense, Department of	Direct	N00014-16-1-3108	12.300	Basic and Applied Scientific Research	162,734	-
efense, Department of	Direct	N00014-16-1-3115	12.300	Basic and Applied Scientific Research	186,052	-
fense, Department of	Direct	N00014-16-1-3135	12.300	Basic and Applied Scientific Research	200,977	-
efense, Department of	Direct	N00014-16-1-3204	12.300	Basic and Applied Scientific Research	87,808	-
efense, Department of	Direct	N00014-17-1-2050	12.300	Basic and Applied Scientific Research	194,300	-
efense, Department of	Direct	N00014-17-1-2057	12.300	Basic and Applied Scientific Research	73,788	40,4
efense, Department of	Direct	N00014-17-1-2211	12.300	Basic and Applied Scientific Research	109,860	-
efense, Department of	Direct Direct	N00014-17-1-2277 N00014-17-1-2296	12.300 12.300	Basic and Applied Scientific Research	310,124 107,842	-
fense, Department of fense, Department of	Direct Direct	N00014-17-1-2290 N00014-17-1-2303	12.300	Basic and Applied Scientific Research Basic and Applied Scientific Research	399,948	-
fense, Department of	Direct	N00014-17-1-2303 N00014-17-1-2357	12.300	Basic and Applied Scientific Research	117,009	_
fense, Department of	Direct	N00014-17-1-2357	12.300	Basic and Applied Scientific Research	194,966	150,0
fense, Department of	Direct	N00014-17-1-2304 N00014-17-1-2491	12.300	Basic and Applied Scientific Research	87,557	130,0
fense, Department of	Direct	N00014-17-1-2491 N00014-17-1-2747	12.300	Basic and Applied Scientific Research	71,910	9,6
fense, Department of	Direct	N00014-17-1-2747	12.300	Basic and Applied Scientific Research	4,975	
fense, Department of	Direct	N00014-17-1-2958	12.300	Basic and Applied Scientific Research	82,294	-
fense, Department of	Direct	N00014-17-1-2966	12.300	Basic and Applied Scientific Research	138,448	-
Pense, Department of	Direct	N00014-17-1-2982	12.300	Basic and Applied Scientific Research	87,864	-
ense, Department of	Direct	N00014-17-1-2992	12.300	Basic and Applied Scientific Research	325,162	10,9
Pense, Department of	Direct	N00014-17-1-2998	12.300	Basic and Applied Scientific Research	99,070	-
fense, Department of	Direct	N00014-18-1-2010	12.300	Basic and Applied Scientific Research	156,420	-
fense, Department of	Direct	N00014-18-1-2015	12.300	Basic and Applied Scientific Research	48,503	-
fense, Department of	Direct	N00014-18-1-2020	12.300	Basic and Applied Scientific Research	18,721	-
fense, Department of	Direct	N00014-18-1-2141	12.300	Basic and Applied Scientific Research	36,758	-
fense, Department of	Direct	N00014-18-1-2333	12.300	Basic and Applied Scientific Research	7,897	-
fense, Department of	Direct	N00014-18-1-2337	12.300	Basic and Applied Scientific Research	12,106	-
efense, Department of	Direct	N00014-18-1-2477	12.300	Basic and Applied Scientific Research	51,087	-
fense, Department of	Direct	N00014-18-1-2531	12.300	Basic and Applied Scientific Research	8,959	
fense, Department of	Direct	N00173-14-1-G904	12.300	Basic and Applied Scientific Research	104,892	
fense, Department of	Direct	N00173-14-1-G907	12.300	Basic and Applied Scientific Research	6,926	
Sense, Department of	Direct	N00173-16-1-G022	12.300	Basic and Applied Scientific Research	26,403	-
fense, Department of	Direct	N00173-18-1-G006	12.300	Basic and Applied Scientific Research	11,337	-
efense, Department of	Pass-Through American Lightweight Materials Manufacturing Innovation Institute	0002C-10	12.300	Basic and Applied Scientific Research	152,114	-
befense, Department of	Pass-Through American Lightweight Materials Manufacturing Innovation Institute	0003 LCA	12.300	Basic and Applied Scientific Research	269,866	_

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0003C-6	12.300	Basic and Applied Scientific Research	74,786	-
efense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0003D-5	12.300	Basic and Applied Scientific Research	33,120	-
fense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0004A-4	12.300	Basic and Applied Scientific Research	258,430	_
Pense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0007A-4	12.300	Basic and Applied Scientific Research	373,103	_
ense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	Sub-award 0002-LIFT Core ICME	12.300	Basic and Applied Scientific Research	463,997	_
ense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	Subaward 0003B-3	12.300	Basic and Applied Scientific Research	174,675	_
nse, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	Subaward 0005A-5	12.300	Basic and Applied Scientific Research	301,837	_
ense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	Sub-Award Agreement 0001	12.300	Basic and Applied Scientific Research	404,731	_
-	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute American Lightweight Materials Manufacturing Innovation Institute	Subaward Agreement 0001 Subaward Agreement 0002B-9	12.300	Basic and Applied Scientific Research	90,515	-
ense, Department of	_		e e e e e e e e e e e e e e e e e e e		**	-	-
nse, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	Subaward Agreement 0003A-5	12.300	Basic and Applied Scientific Research	46,255	-
ense, Department of	Pass-Through	Boston University	4500002613	12.300	Basic and Applied Scientific Research	50,644	-
ense, Department of	Pass-Through	Brown University	00001041	12.300	Basic and Applied Scientific Research	383,983	=
ense, Department of	Pass-Through	Iowa State University	4212021A	12.300	Basic and Applied Scientific Research	42,595	-
Pense, Department of	Pass-Through	Northwestern University	SP0026757-PROJ0007034	12.300	Basic and Applied Scientific Research	75,224	-
ense, Department of	Pass-Through	Princeton University	SUB0000103	12.300	Basic and Applied Scientific Research	28,068	-
ense, Department of	Pass-Through	Stanford University	60622292-114018	12.300	Basic and Applied Scientific Research	323,786	-
ense, Department of	Pass-Through	University of California - Los Angeles	0160 G VA521	12.300	Basic and Applied Scientific Research	149,290	
ense, Department of	Pass-Through	University of Minnesota	A006141805	12.300	Basic and Applied Scientific Research	148,697	-
ense, Department of	Pass-Through	University of Southern Mississippi	USM-GR05312-001	12.300	Basic and Applied Scientific Research	89,301	-
ense, Department of	Pass-Through	University of St. Andrews	14338-SBE2-XOBO29	12.300	Basic and Applied Scientific Research	7,417	
ense, Department of	Pass-Through	University of Virginia	GG13332.156539	12.300	Basic and Applied Scientific Research	179,895	
						\$ 14,001,619	\$ 441,1
ense, Department of	Direct		HDTRA1-11-1-0019	12.351	Scientific Research - Combating Weapons of Mass Destruction		
<u> -</u>	Direct		HDTRA1-11-1-0019 HDTRA1-11-1-0050				Ψ .
ense, Department of				12.351	Scientific Research - Combating Weapons of Mass Destruction	(25,328)	
ense, Department of	Direct		HDTRA1-12-1-0038	12.351	Scientific Research - Combating Weapons of Mass Destruction	251,200	
ense, Department of	Direct		HDTRA1-12-1-0039	12.351	Scientific Research - Combating Weapons of Mass Destruction	9,639	
ense, Department of	Direct		HDTRA1-13-1-0013	12.351	Scientific Research - Combating Weapons of Mass Destruction	259,665	170,5
ense, Department of	Direct		HDTRA1-15-1-0001	12.351	Scientific Research - Combating Weapons of Mass Destruction	88,338	
Pense, Department of	Direct		HDTRA1-15-1-0045	12.351	Scientific Research - Combating Weapons of Mass Destruction	778,662	508,1
ense, Department of	Direct		HDTRA1-15-1-0067	12.351	Scientific Research - Combating Weapons of Mass Destruction	332,702	96,0
Pense, Department of	Direct		HDTRA1-16-1-0004	12.351	Scientific Research - Combating Weapons of Mass Destruction	345,847	70,0
_		Donardon in Chata II.					•
ense, Department of	Pass-Through	Pennsylvania State University	5455-UM-DTRA-0037	12.351	Scientific Research - Combating Weapons of Mass Destruction _	(41)	Φ 77.4.5
			TY 0.4.1. TO 1.4. 0.4.1.	4	-	\$ 2,038,242	
ense, Department of	Direct		W911NF-11-1-0251	12.360	Research on Chemical and Biological Defense	\$ 27,183	
ense, Department of	Direct		W81XWH-11-1-0714	12.420	Titalian j Titalian Tessan si min 20 versprinsis	\$ 865	\$ -
ense, Department of	Direct		W81XWH-12-1-0080	12.420	Military Medical Research and Development	99,722	-
ense, Department of	Direct		W81XWH-12-1-0597	12.420	Military Medical Research and Development	30,895	
fense, Department of	Direct		W81XWH-12-2-0057	12.420	Military Medical Research and Development	514,930	-
ense, Department of	Direct		W81XWH-13-1-0134	12.420	Military Medical Research and Development	229,317	
Pense, Department of	Direct		W81XWH-13-1-0210	12.420	Military Medical Research and Development	(116)	
ense, Department of	Direct		W81XWH-13-1-0333	12.420	Military Medical Research and Development	259,298	
ense, Department of	Direct		W81XWH-13-1-0334	12.420	Military Medical Research and Development	200,201	
Sense, Department of	Direct		W81XWH-13-1-0377	12.420	Military Medical Research and Development	196,117	
Pense, Department of	Direct		W81XWH-14-1-0005	12.420	Military Medical Research and Development	1,410,330	348,
ense, Department of	Direct		W81XWH-14-1-0172	12.420	Military Medical Research and Development	(19,262)	540,
· ·			W81XWH-14-1-0172	12.420	· · · · · · · · · · · · · · · · · · ·		
nse, Department of	Direct				Military Medical Research and Development	200,508	
ense, Department of	Direct		W81XWH-14-1-0292	12.420	Military Medical Research and Development	94,252	20
ense, Department of	Direct		W81XWH-14-1-0362	12.420	Military Medical Research and Development	506,640	20,
nse, Department of	Direct		W81XWH-14-1-0466	12.420	Military Medical Research and Development	141,629	25
nse, Department of	Direct		W81XWH-14-1-0555	12.420	Military Medical Research and Development	35,144	
nse, Department of	Direct		W81XWH-14-2-0126	12.420	Military Medical Research and Development	15,147	
ense, Department of	Direct		W81XWH-15-1-0019	12.420	Military Medical Research and Development	58,106	
nse, Department of	Direct		W81XWH-15-1-0020	12.420	Military Medical Research and Development	42,220	
ense, Department of	Direct		W81XWH-15-1-0062	12.420	Military Medical Research and Development	86,278	
nse, Department of	Direct		'W81XWH-15-1-0083	12.420	Military Medical Research and Development	177,109	
se, Department of	Direct		W81XWH-15-1-0194	12.420	Military Medical Research and Development	258,632	
se, Department of	Direct		W81XWH-15-1-0222	12.420	Military Medical Research and Development	154,681	39
se, Department of	Direct		W81XWH-15-1-0237	12.420	Military Medical Research and Development	53,546	
nse, Department of	Direct		W81XWH-15-1-0413	12.420	Military Medical Research and Development	108,979	
nse, Department of	Direct		W81XWH-15-1-0503	12.420	Military Medical Research and Development	118,703	
•	Direct		W81XWH-15-1-0548	12.420	Military Medical Research and Development	136,011	
nse, Department of nse, Department of			W81XWH-15-1-0548 W81XWH-15-1-0637	12.420			
	Direct				Military Medical Research and Development	234,844	
se, Department of	Direct		W81XWH-15-1-0703	12.420	Military Medical Research and Development	195,060	
se, Department of	Direct		W81XWH-15-2-0021	12.420	Military Medical Research and Development	481,714	
se, Department of	Direct		W81XWH-16-1-0195	12.420	Military Medical Research and Development	90,474	
ase, Department of	Direct		W81XWH-16-1-0314	12.420	Military Medical Research and Development	131,591	
se, Department of	Direct		W81XWH-16-1-0369	12.420	Military Medical Research and Development	193,579	
se, Department of	Direct		W81XWH-16-1-0426	12.420	Military Medical Research and Development	270,689	
se, Department of	Direct		W81XWH-16-1-0551	12.420	Military Medical Research and Development	135,795	,
se, Department of	Direct		W81XWH-16-1-0571	12.420	Military Medical Research and Development	210,167	
se, Department of	Direct		W81XWH-16-1-0574	12.420	Military Medical Research and Development	136,202	
use, Department of	Direct		W81XWH-16-1-0648	12.420	Military Medical Research and Development	95,787	
nse, Department of	Direct		W81XWH-16-1-0684	12.420	Military Medical Research and Development	258,473	
use, Department of	Direct		W81XWH-16-1-0054	12.420	Military Medical Research and Development	642,368	
ISC DEDALIDED OF			W81XWH-16-1-0/52 W81XWH-16-2-0051	12.420	Military Medical Research and Development Military Medical Research and Development	642,368 165,968	129
. 1	D:		M/X I X M/ H 16 / 1013 I	17470	IVITUARY IVIEGICAL Research and Llevelonment	165 Y6X	129
nse, Department of	Direct				•		12)
ense, Department of ense, Department of ense, Department of ense, Department of	Direct Direct Direct		W81XWH-17-1-0130 W81XWH-17-1-0134	12.420 12.420	Military Medical Research and Development Military Medical Research and Development	48,109 48,544	12)

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Direct		W81XWH-17-1-0155	12.420	Military Medical Research and Development	86,141	-
Defense, Department of	Direct		W81XWH-17-1-0171	12.420	Military Medical Research and Development	373,424	-
Defense, Department of	Direct		W81-XWH-17-1-0224	12.420	Military Medical Research and Development	185,611	22.06
Defense, Department of Defense, Department of	Direct Direct		W81XWH-17-1-0367 W81XWH-17-1-0494	12.420 12.420	Military Medical Research and Development Military Medical Research and Development	112,038 116,126	33,960
Defense, Department of Defense, Department of	Direct		W81XWH-17-1-0496	12.420	Military Medical Research and Development	169,868	- -
Defense, Department of	Direct		W81XWH-17-1-0497	12.420	Military Medical Research and Development	50,801	_
Defense, Department of	Direct		W81XWH-17-1-0575	12.420	Military Medical Research and Development	50,458	-
Defense, Department of	Direct		W81XWH-17-1-0641	12.420	Military Medical Research and Development	207,177	-
Defense, Department of	Direct		W81XWH-17-1-0655	12.420	Military Medical Research and Development	17,929	-
Defense, Department of	Direct		W81XWH-17-1-0701	12.420	Military Medical Research and Development	367,986	-
Defense, Department of	Direct		W81XWH-17-2-0012	12.420	Military Medical Research and Development	510,187	-
Defense, Department of	Direct		W81XWH-18-1-0005	12.420	Military Medical Research and Development	221,180	-
Defense, Department of	Direct	Casa Wastam Basama Univarity	W81XWH-18-1-0033	12.420	Military Medical Research and Development	282,573 175,266	-
Defense, Department of Defense, Department of	Pass-Through Pass-Through	Case Western Reserve University Memorial Sloan-Kettering Cancer Center (MSKCC)	RES509313 BD520591	12.420 12.420	Military Medical Research and Development Military Medical Research and Development	175,266 176,741	-
Defense, Department of Defense, Department of	Pass-Through	Memorial Sloan-Kettering Cancer Center (MSKCC)	W81XWH1520018	12.420	Military Medical Research and Development	151,400	_
Defense, Department of	Pass-Through	New York University	17-A0-00-1000082-01	12.420	Military Medical Research and Development	25,030	-
Defense, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	Subaward No. 1683	12.420	Military Medical Research and Development	1,810	-
Defense, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI1808-1818	12.420	Military Medical Research and Development	6,016	-
Defense, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI1872-03, Ref # 095447	12.420	Military Medical Research and Development	26,790	-
Defense, Department of	Pass-Through	Oregon Health and Science University	1011056_UMICH	12.420	Military Medical Research and Development	9,891	-
Defense, Department of	Pass-Through	Sloan-Kettering Cancer Institute	Research Award	12.420	Military Medical Research and Development	(2,187)	-
Defense, Department of	Pass-Through	University of Alabama	000507860-002	12.420	Military Medical Research and Development	165,319	-
Defense, Department of	Pass-Through	University of Delaware	47471	12.420	Military Medical Research and Development	37,090	-
Defense, Department of	Pass-Through	University of Delaware	Subaward No 39406	12.420	Military Medical Research and Development	8,946	-
Defense, Department of	Pass-Through	University of Minnesota	A003728703	12.420	Military Medical Research and Development	13,802	-
Defense, Department of	Pass-Through	University of Southern California University of Texas Health Science Center at San Antonio	70250537 159425 / 155536	12.420 12.420	Military Medical Research and Development	94,350	-
Defense, Department of Defense, Department of	Pass-Through Pass-Through	University of Utah	10040357-00	12.420	Military Medical Research and Development Military Medical Research and Development	93,918 39,305	-
Defense, Department of	Pass-Through	Veterans Education & Research Assoc of MI (VERAM)	V-SUBUM-11-10	12.420	Military Medical Research and Development	229,072	-
Defense, Department of	Pass-Through	Veterans Education & Research Assoc of MI (VERAM)	V-SUBUM-1602	12.420	Military Medical Research and Development	22,401	_
Defense, Department of	Pass-Through	Veterans Education & Research Assoc of MI (VERAM)	V-VUBUM-1601	12.420	Military Medical Research and Development	166,677	-
Defense, Department of	Pass-Through	Wayne State University	WSU 16046	12.420	Military Medical Research and Development	58,710	-
Defense, Department of	Pass-Through	William Beaumont Hospital	WBH 15001_UM-PO#100-3793974	12.420	Military Medical Research and Development	4,228	-
						\$ 12,705,320	\$ 603,50
Defense, Department of	Direct		FA9550-17-1-0454	12.431	Basic Scientific Research	\$ 209,155	
Defense, Department of	Direct		W911NF-10-1-0518	12.431	Basic Scientific Research	(37,984)	9,453
Defense, Department of	Direct		W911NF-12-1-0214	12.431	Basic Scientific Research	109,017	-
Defense, Department of	Direct		W911NF-13-1-0222	12.431	Basic Scientific Research	75,877	-
Defense, Department of	Direct		W911NF-13-1-0314	12.431	Basic Scientific Research Basic Scientific Research	19,075	1 072 024
Defense, Department of Defense, Department of	Direct Direct		W911NF-13-1-0387 W911NF-14-1-0573	12.431 12.431	Basic Scientific Research	1,262,260 181,419	1,073,030
Defense, Department of	Direct		W911NF-14-1-0375	12.431	Basic Scientific Research	5,494	-
Defense, Department of	Direct		W911NF-15-1-0114	12.431	Basic Scientific Research	169,523	_
Defense, Department of	Direct		W911NF-15-1-0158	12.431	Basic Scientific Research	117,671	-
Defense, Department of	Direct		W911NF-15-1-0185	12.431	Basic Scientific Research	37,476	-
Defense, Department of	Direct		W911NF-15-1-0241	12.431	Basic Scientific Research	139,855	-
Defense, Department of	Direct		W911NF-15-1-0354	12.431	Basic Scientific Research	74,372	-
Defense, Department of	Direct		W911NF-15-1-0511	12.431	Basic Scientific Research	66,470	-
Defense, Department of	Direct		W911NF-15-1-0554	12.431	Basic Scientific Research	102,839	-
Defense, Department of	Direct		W911NF-15-1-0625	12.431	Basic Scientific Research	219,541	26,000
Defense, Department of	Direct		W911NF-16-1-0044	12.431	Basic Scientific Research	129,257	-
Defense, Department of Defense, Department of	Direct Direct		W911NF-16-1-0147 W911NF-16-1-0195	12.431 12.431	Basic Scientific Research Basic Scientific Research	148,812 21,806	-
Defense, Department of Defense, Department of	Direct		W911NF-16-1-0193	12.431	Basic Scientific Research	21,665	-
Defense, Department of Defense, Department of	Direct		W911NF-10-1-0229 W911NF-16-1-0340	12.431	Basic Scientific Research	125,534	37,924
Defense, Department of	Direct		W911NF-16-1-0450	12.431	Basic Scientific Research	(548)	51,72-
Defense, Department of	Direct		W911NF-16-1-0582	12.431	Basic Scientific Research	(68)	-
Defense, Department of	Direct		W911NF-17-1-0102	12.431	Basic Scientific Research	28,994	-
Defense, Department of	Direct		W911NF-17-1-0109	12.431	Basic Scientific Research	80,882	-
Defense, Department of	Direct		W911NF-17-1-0235	12.431	Basic Scientific Research	151,471	-
Defense, Department of	Direct		W911NF-17-1-0243	12.431	Basic Scientific Research	82,792	-
Defense, Department of	Direct		W911NF-17-1-0266	12.431	Basic Scientific Research	349,681	-
Defense, Department of	Direct		W911NF-17-1-0292	12.431	Basic Scientific Research	6,497	-
Defense, Department of	Direct		W911NF-17-1-0312	12.431	Basic Scientific Research	989,196	427,403
Defense, Department of	Direct Direct		W911NF-17-1-0388 W911NF-17-1-0526	12.431 12.431	Basic Scientific Research Basic Scientific Research	53,329 53,184	-
Defense, Department of Defense, Department of	Direct		W911NF-17-1-0526 W911NF-17-1-0567	12.431	Basic Scientific Research	7,914	-
Defense, Department of	Direct		W911NF-17-1-0307 W911NF-18-1-0004	12.431	Basic Scientific Research	156,368	- -
Defense, Department of Defense, Department of	Direct		W911NF-18-1-0004 W911NF-18-1-0061	12.431	Basic Scientific Research	11,893	-
Defense, Department of	Direct		W911NF-18-1-0119	12.431	Basic Scientific Research	39,035	-
Defense, Department of	Pass-Through	Arizona State University	13-949	12.431	Basic Scientific Research	24,457	-
Defense, Department of	Pass-Through	George Mason University	E2030471	12.431	Basic Scientific Research	410,609	-
Defense, Department of	Pass-Through	Georgia Institute of Technology	Subcontract No. RH541-G6	12.431	Basic Scientific Research	44,298	-
Defense, Department of	Pass-Through	Rutgers University	4815-435145-10220	12.431	Basic Scientific Research	14,963	-
•	•						
Defense, Department of Defense, Department of	Pass-Through Pass-Through	Stanford University University of California - Santa Barbara	61074263-119754 KK1811	12.431 12.431	Basic Scientific Research Basic Scientific Research	128,381 62,869	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Pass-Through	University of Maryland, The	26236-Z8401001	12.431	Basic Scientific Research	67,293	
Defense, Department of	Pass-Through	University of Missouri	C00045065-6	12.431	Basic Scientific Research	111,974	_
•	_						_
Defense, Department of	Pass-Through	University of Southern California	PO 10567853	12.431	Basic Scientific Research	45,664	-
Defense, Department of	Pass-Through	University of Wisconsin	623K070	12.431	Basic Scientific Research	279,870	-
Defense, Department of	Pass-Through	William Marsh Rice University	R17831	12.431	Basic Scientific Research	8,901	- 1.572.010
					DOD, NDEP, DOTC-STEM Education Outreach	\$ 6,599,033	\$ 1,573,810
Defense, Department of	Direct		FA9453-17-2-0010	12.560	Implementation	\$ 162,122 5	\$ -
					Community Economic Adjustment Assistance for Reductions in		
Defense, Department of	Direct		ST1409-14-01	12.611	Defense Industry Employment	\$ 9,679	\$ 6,080.00
Defense Denotes of	Diment		CT1400 16 02	12 (11	Community Economic Adjustment Assistance for Reductions in		2 267 102
Defense, Department of	Direct		ST1409-16-03	12.611	Defense Industry Employment Community Economic Adjustment Assistance for Reductions in	5,024,725	2,267,103
Defense, Department of	Pass-Through	Michigan, State of, Economic Development Corporation	CASE-220868	12.611	Defense Industry Employment	73,804	-
	S					\$ 5,108,208	\$ 2,273,183
					Basic, Applied, and Advanced Research in Science and		
Defense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0004C-5	12.630	Engineering	\$ 183,242 \$	\$ -
	D TI 1	A CONTRACTOR CONTRACTOR	0004D 0	12 (20	Basic, Applied, and Advanced Research in Science and	172.022	
Defense, Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0004D-8	12.630	Engineering Basic, Applied, and Advanced Research in Science and	173,923	-
Defence Department of	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0004F-4	12.630	Engineering	23,849	
Defense, Department of	rass-Hilough	American Lightweight Materials Manufacturing innovation institute	00041-4	12.030	Basic, Applied, and Advanced Research in Science and	23,849	-
Defense, Department of	Pass-Through	University of North Texas	GF2665-1	12.630	Engineering	(8,103)	_
Detense, Department of	1 ass-1 in ough	Oniversity of North Texas	G1 2005-1	12.030	Englicering	\$ 372,911	<u> </u>
Defense, Department of	Pass-Through	Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc (HJF)	2879	12.750	Uniformed Services University Medical Research Projects	\$ 3,153,396	
_	•				· · · · · · · · · · · · · · · · · · ·		-
Defense, Department of	Pass-Through	Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc (HJF)	Subaward #3156 PO#856388	12.750	Uniformed Services University Medical Research Projects	\$ 3,308,949 S	<u> </u>
	D'		EA9650 17 2 2209	12.000	A' E DC D 1C' D		
Defense, Department of	Direct		FA8650-17-2-2208	12.800	Air Force Defense Research Sciences Program	\$ 329,025 \$	\$ 83,035.00
Defense, Department of	Direct		FA8650-18-1-5411	12.800	Air Force Defense Research Sciences Program	74,521	-
Defense, Department of	Direct		FA8750-12-2-0314	12.800	Air Force Defense Research Sciences Program	24,775	-
Defense, Department of	Direct		FA9451-16-1-0050	12.800	Air Force Defense Research Sciences Program	20,851	-
Defense, Department of	Direct		FA9453-16-1-0069	12.800	Air Force Defense Research Sciences Program	46,986	-
Defense, Department of	Direct		FA9550-12-1-0435	12.800	Air Force Defense Research Sciences Program	232,756	128,104
Defense, Department of	Direct		FA9550-13-1-0025	12.800	Air Force Defense Research Sciences Program	10,721	-
Defense, Department of	Direct		FA9550-14-1-0010	12.800	Air Force Defense Research Sciences Program	(59,459)	_
Defense, Department of	Direct		FA9550-14-1-0040	12.800	Air Force Defense Research Sciences Program	1,498,803	461,137
<u>.</u>			FA9550-14-1-0156		· · · · · · · · · · · · · · · · · · ·		701,137
Defense, Department of	Direct			12.800	Air Force Defense Research Sciences Program	65,048	-
Defense, Department of	Direct		FA9550-14-1-0245	12.800	Air Force Defense Research Sciences Program	46,523	-
Defense, Department of	Direct		FA9550-14-1-0246	12.800	Air Force Defense Research Sciences Program	326,513	-
Defense, Department of	Direct		FA9550-14-1-0249	12.800	Air Force Defense Research Sciences Program	165,752	83,077
Defense, Department of	Direct		FA9550-14-1-0309	12.800	Air Force Defense Research Sciences Program	210,171	74,054
Defense, Department of	Direct		FA9550-14-1-0380	12.800	Air Force Defense Research Sciences Program	101,151	-
Defense, Department of	Direct		FA9550-14-1-0396	12.800	Air Force Defense Research Sciences Program	70,475	-
Defense, Department of	Direct		FA9550-15-1-0039	12.800	Air Force Defense Research Sciences Program	201,065	-
Defense, Department of	Direct		FA9550-15-1-0097	12.800	Air Force Defense Research Sciences Program	403,098	-
Defense, Department of	Direct		FA9550-15-1-0101	12.800	Air Force Defense Research Sciences Program	120,812	-
Defense, Department of	Direct		FA9550-15-1-0118	12.800	Air Force Defense Research Sciences Program	112,500	_
Defense, Department of	Direct		FA9550-15-1-0157	12.800	Air Force Defense Research Sciences Program	189,701	_
Defense, Department of	Direct		FA9550-15-1-0210	12.800	Air Force Defense Research Sciences Program	273,717	_
-	Direct		FA9550-15-1-0240	12.800	Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	142,834	_
Defense, Department of					· · · · · · · · · · · · · · · · · · ·		-
Defense, Department of	Direct		FA9550-15-1-0307	12.800	Air Force Defense Research Sciences Program	(312)	-
Defense, Department of	Direct		FA9550-15-1-0329	12.800	Air Force Defense Research Sciences Program	164,977	=
Defense, Department of	Direct		FA9550-15-1-0366	12.800	Air Force Defense Research Sciences Program	94,719	-
Defense, Department of	Direct		FA9550-15-1-0378	12.800	Air Force Defense Research Sciences Program	131,608	67,741
Defense, Department of	Direct		FA9550-16-1-0028	12.800	Air Force Defense Research Sciences Program	165,802	-
Defense, Department of	Direct		FA9550-16-1-0071	12.800	Air Force Defense Research Sciences Program	245,750	-
Defense, Department of	Direct		FA9550-16-1-0087	12.800	Air Force Defense Research Sciences Program	741,795	330,180
Defense, Department of	Direct		FA9550-16-1-0265	12.800	Air Force Defense Research Sciences Program	172,033	-
Defense, Department of	Direct		FA9550-16-1-0272	12.800	Air Force Defense Research Sciences Program	177,917	-
Defense, Department of	Direct		FA9550-16-1-0275	12.800	Air Force Defense Research Sciences Program	45,183	-
Defense, Department of	Direct		FA9550-16-1-0291	12.800	Air Force Defense Research Sciences Program	427,518	330,290
Defense, Department of	Direct		FA9550-16-1-0309	12.800	Air Force Defense Research Sciences Program	205,775	-
Defense, Department of	Direct		FA9550-16-1-0312	12.800	Air Force Defense Research Sciences Program	223,080	_
Defense, Department of	Direct		FA9550-16-1-0312	12.800	Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	144,353	_
Defense, Department of	Direct		FA9550-16-1-0363	12.800	Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	81,088	
Defense, Department of Defense, Department of			FA9550-17-1-0365 FA9550-17-1-0035	12.800	Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	246,145	-
-	Direct				e e e e e e e e e e e e e e e e e e e		-
Defense, Department of	Direct		FA9550-17-1-0172	12.800	Air Force Defense Research Sciences Program	67,181	-
Defense, Department of	Direct		FA9550-17-1-0195	12.800	Air Force Defense Research Sciences Program	589,017	265,734
Defense, Department of	Direct		FA9550-17-1-0208	12.800	Air Force Defense Research Sciences Program	141,654	-
Defense, Department of	Direct		FA9550-17-1-0284	12.800	Air Force Defense Research Sciences Program	19,624	-
Defense, Department of	Direct		FA9550-17-1-0408	12.800	Air Force Defense Research Sciences Program	227,821	-
Defense, Department of	Direct		FA9550-17-1-0457	12.800	Air Force Defense Research Sciences Program	49,619	-
Defense, Department of	Direct		FA9550-18-1-0028	12.800	Air Force Defense Research Sciences Program	131,720	-
Defense, Department of	Direct		FA9550-18-1-0091	12.800	Air Force Defense Research Sciences Program	66,748	-
Defense, Department of	Direct		FA9550-18-1-0124	12.800	Air Force Defense Research Sciences Program	26,610	-
· 1			FA9550-18-1-0131	12.800	Air Force Defense Research Sciences Program	33,380	_
Defense, Department of	Direct						
Defense, Department of Defense, Department of	Direct Direct		FA9550-18-1-0153	12.800	Air Force Defense Research Sciences Program	37,653	=

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Defense, Department of	Direct		FA9550-18-1-0168	12.800	Air Force Defense Research Sciences Program	11,481	
befense, Department of	Direct		FA9550-18-1-0180	12.800	Air Force Defense Research Sciences Program	2,690	
refense, Department of	Pass-Through	Carnegie-Mellon University	1150119-294717	12.800	Air Force Defense Research Sciences Program	29,367	
Defense, Department of	Pass-Through	Columbia University	1(GG010953-01)	12.800	Air Force Defense Research Sciences Program	26,644	
Defense, Department of	Pass-Through	Lehigh University	543255-78001	12.800	Air Force Defense Research Sciences Program	72,962	
Defense, Department of	Pass-Through	Massachusetts Institute of Technology	5710003831	12.800	Air Force Defense Research Sciences Program	163,989	
Defense, Department of	Pass-Through	Michigan State University	RC108022UM	12.800	Air Force Defense Research Sciences Program	48,494	
Defense, Department of Defense, Department of	Pass-Through	National Additive Manufacturing Innovation Institute (NAMII) Ohio State University, The	Sub-Recipient Agreement 60041047	12.800 12.800	Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	(1,735 117,251	
Defense, Department of Defense, Department of	Pass-Through Pass-Through	University of California-San Diego	54422375	12.800	Air Force Defense Research Sciences Program Air Force Defense Research Sciences Program	(49,180	
Defense, Department of	Pass-Through	University of Colorado Boulder	1553899	12.800	Air Force Defense Research Sciences Program	272,517	
Defense, Department of	Pass-Through	University of Colorado Boulder University of Illinois-Urbana-Champaign	065435-13890	12.800	Air Force Defense Research Sciences Program	146,654	
Defense, Department of	Pass-Through	University of Illinois-Orbana-Champaign University of Illinois-Urbana-Champaign	084272-16074	12.800	Air Force Defense Research Sciences Program	176,738	
refense, Department of	Pass-Through	University of Illinois-Urbana-Champaign	2015-00008-01	12.800	Air Force Defense Research Sciences Program	2,665	
Defense, Department of	Pass-Through	University of Maryland, The	58333-Z8143003	12.800	Air Force Defense Research Sciences Program	16,420	
efense, Department of	Pass-Through	University of Maryland, The	Q2412001	12.800	Air Force Defense Research Sciences Program	86,272	
efense, Department of	Pass-Through	University of Texas San Antonio	1000002216	12.800	Air Force Defense Research Sciences Program	3,587	7 -
						\$ 10,395,203	
efense, Department of	Direct		H98230-16-1-0023	12.901	Mathematical Sciences Grants	\$ 9,813	
efense, Department of	Direct		H98230-17-1-0308	12.901	Mathematical Sciences Grants	19,853	
efense, Department of	Direct		H98230-18-1-0045	12.901	Mathematical Sciences Grants	13,020	
	D' '		D144 D00007	12.010	D 1 17 1 1 D 1	\$ 42,686	
efense, Department of	Direct		D14AP00086	12.910	Research and Technology Development	\$ 155,909	
efense, Department of	Direct Direct		D16AP00004 FA9453-16-1-0084	12.910	Research and Technology Development	70,628	
efense, Department of	Direct Direct		HR0011-13-2-0015	12.910	Research and Technology Development	(1,80 0 587,97 0	
efense, Department of efense, Department of	Direct Direct		HR0011-13-2-0015 HR0011-17-2-0018	12.910 12.910	Research and Technology Development Research and Technology Development	587,976 670,159	
defense, Department of defense, Department of defense, Department of defense d	Direct		HR0011-17-2-0018 HR00111720067	12.910	Research and Technology Development Research and Technology Development	412,488	
efense, Department of	Direct		N66001-14-1-4014	12.910	Research and Technology Development	408,744	
Defense, Department of	Direct		N66001-14-1-4045	12.910	Research and Technology Development	101,382	
Defense, Department of	Direct		N66001-14-1-4046	12.910	Research and Technology Development	249,713	
Defense, Department of	Direct		N66001-15-1-4050	12.910	Research and Technology Development	128,824	
efense, Department of	Direct		N66001-16-1-4006	12.910	Research and Technology Development	295,001	
Defense, Department of	Direct		N66001-16-1-4029	12.910	Research and Technology Development	1,002,622	
refense, Department of	Direct		W31P4Q-12-1-0002	12.910	Research and Technology Development	(32	
efense, Department of	Direct		W56HZV-14-2-0001	12.910	Research and Technology Development	4,060,026	
efense, Department of	Direct		W911NF-16-1-0383	12.910	Research and Technology Development	198,744	4 -
Defense, Department of	Direct		W911NF-17-1-0060	12.910	Research and Technology Development	298,471	1 75,398
Defense, Department of	Pass-Through	Cornell University	68272-10162	12.910	Research and Technology Development	65,681	i -
Defense, Department of	Pass-Through	Duke University	3130628	12.910	Research and Technology Development	20,590	
Defense, Department of	Pass-Through	Duke University	3130713	12.910	Research and Technology Development	167,354	
efense, Department of	Direct		FA8650-16-C-5235	12.RD		\$ 8,892,474 \$ 9,940	
efense, Department of	Direct		FA8650-17-C-9105	12.RD		1,225,051	
pefense, Department of	Direct		FA8650-17-C-9106	12.RD		488,770	
efense, Department of	Direct		HDTRA-1-15-C-0049	12.RD		1,373,024	
efense, Department of	Direct		HDTRA1-17-C-0001	12.RD		232,591	
efense, Department of	Direct		HDTRA117C0046	12.RD		221,756	
Defense, Department of	Direct		HQ0147-16-C-6004	12.RD		216,525	
efense, Department of	Direct		HQ0727-17-2-4100	12.RD		38,310	
efense, Department of	Direct		HR0011-15-C-0142	12.RD		675,090	
efense, Department of	Direct		HR001118C0019	12.RD		132,205	
efense, Department of	Direct		N00174-16-C-0021	12.RD		105,986	5 -
efense, Department of	Direct		N00174-16-C-0027	12.RD		177,670	0 -
befense, Department of	Direct		Visiting Faculty Program	12.RD		138,225	
efense, Department of	Direct		W56HZV-14-C-0275	12.RD		(6,185	
efense, Department of	Direct		W56HZV-17-P-L507	12.RD		13,125	
befense, Department of	Direct		W81XWH-17-C-0246	12.RD		160,060	
efense, Department of	Direct		W81XWH1810078	12.RD		134,830	
efense, Department of	Direct		W911QY-15-C-0053	12.RD		793,421	
efense, Department of	Direct		W912HQ18C0019	12.RD		3,831	
efense, Department of	Pass-Through	Advanced Computational Technology, LLC	14-ACT-001-U-Michigan	12.RD		26,784	
	Pass-Through	American Lightweight Materials Manufacturing Innovation Institute	0007B-8	12.RD		64,074	
defense, Department of	Pass-Through	BARRON ASSOCIATES, INC	503-SC01	12.RD		52,421	
efense, Department of	•	Battelle Memorial Institute	496032 9221-0001	12.RD		554	
efense, Department of efense, Department of	Pass-Through	Daniel H. Wagner Aggazietas, La-	97.7.1-0001	12.RD		115,271	
efense, Department of efense, Department of efense, Department of	Pass-Through Pass-Through	Daniel H. Wagner Associates, Inc.				11,895	
refense, Department of refense referse refer	Pass-Through Pass-Through Pass-Through	DCS Corporation	APX02-0003	12.RD		· · · · · · · · · · · · · · · · · · ·	
efense, Department of	Pass-Through Pass-Through Pass-Through Pass-Through	DCS Corporation Dow Chemical Company	APX02-0003 613-3.1	12.RD		150,907	
efense, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc	APX02-0003 613-3.1 Roundtable Research Agreement	12.RD 12.RD		150,907 31,868	-
efense, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc General Dynamics Information Technology	APX02-0003 613-3.1 Roundtable Research Agreement DVBIC-SC-14-0013/#07ESM912302	12.RD 12.RD 12.RD		150,907 31,868 162,985	8 - 5 60,42'
efense, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc General Dynamics Information Technology General Electric Company	APX02-0003 613-3.1 Roundtable Research Agreement DVBIC-SC-14-0013/#07ESM912302 401018063	12.RD 12.RD 12.RD 12.RD		150,907 31,868 162,985 661	8 - 5 60,42' 1 -
efense, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc General Dynamics Information Technology General Electric Company Georgia Institute of Technology	APX02-0003 613-3.1 Roundtable Research Agreement DVBIC-SC-14-0013/#07ESM912302 401018063 RC217-G5	12.RD 12.RD 12.RD 12.RD 12.RD		150,907 31,868 162,983 661 3,592	8 - 5 60,42' 1 - 2 -
efense, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc General Dynamics Information Technology General Electric Company Georgia Institute of Technology HygraTek LLC	APX02-0003 613-3.1 Roundtable Research Agreement DVBIC-SC-14-0013/#07ESM912302 401018063 RC217-G5 award letter dated 10/8/16	12.RD 12.RD 12.RD 12.RD 12.RD 12.RD		150,907 31,868 162,985 661 3,592 59,447	8 - 5 60,42° 1 - 2 - 7 -
efense, Department of	Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc General Dynamics Information Technology General Electric Company Georgia Institute of Technology HygraTek LLC HygraTek LLC	APX02-0003 613-3.1 Roundtable Research Agreement DVBIC-SC-14-0013/#07ESM912302 401018063 RC217-G5 award letter dated 10/8/16 Roundtable Research Agreement	12.RD 12.RD 12.RD 12.RD 12.RD 12.RD 12.RD		150,907 31,868 162,985 661 3,592 59,447 (1,505	8 - 5 60,42° 1 - 2 - 7 - 5) -
refense, Department of	Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc General Dynamics Information Technology General Electric Company Georgia Institute of Technology HygraTek LLC HygraTek LLC Indiana University	APX02-0003 613-3.1 Roundtable Research Agreement DVBIC-SC-14-0013/#07ESM912302 401018063 RC217-G5 award letter dated 10/8/16 Roundtable Research Agreement IN-4386932-UM	12.RD 12.RD 12.RD 12.RD 12.RD 12.RD 12.RD 12.RD		150,907 31,868 162,985 661 3,592 59,447 (1,505 1,192,968	8 - 60,427 1 - 2 - 7 - 5) - 8
refense, Department of	Pass-Through	DCS Corporation Dow Chemical Company ePack, Inc General Dynamics Information Technology General Electric Company Georgia Institute of Technology HygraTek LLC HygraTek LLC	APX02-0003 613-3.1 Roundtable Research Agreement DVBIC-SC-14-0013/#07ESM912302 401018063 RC217-G5 award letter dated 10/8/16 Roundtable Research Agreement	12.RD 12.RD 12.RD 12.RD 12.RD 12.RD 12.RD		150,907 31,868 162,985 661 3,592 59,447 (1,505	8 - 5 60,427 1 - 2 - 7 - 5) - 8 -

The Part Par	Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	r CFDA Program Title	Federal Expenditures	Pass-Through
March Marc	Defense, Department of	Pass-Through	Innovative Bio Therapies (IBT)					-
Second S	Defense, Department of	Pass-Through	Innovative Bio Therapies (IBT)	SSP9825	12.RD		9,041	-
Section Sec	Defense, Department of	Pass-Through	Innovision LLC	Research Agreement	12.RD		30,000	-
Section Sect		_	iReprogram, LLC				44,896	-
Second S		•						167.064
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Manipul	Defense, Department of	Pass-Through	Metacomp Technologies, Inc.	Roundtable Research Agreement	12.RD		52,985	-
See	Defense, Department of	Pass-Through	Michigan Engineering Services	P.O. 1021.1	12.RD		4,918	-
See	Defense, Department of	Pass-Through	Michigan Tech Research Institute (MTRI)	1702001Z1	12.RD		3,684	-
March Defended Park James Security		•	· · · · · · · · · · · · · · · · · · ·					3,335,143
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Section Sect	Defense, Department of	Pass-Through	Pacific Northwest National Laboratories				2,256	-
Section Sect	Defense, Department of	Pass-Through	Palo Alto Research Center (PARC)	313498	12.RD		143,257	-
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Semina Department Sam Book Sam Technology, Exc. Since	Defense, Department of	Pass-Through	Rydberg Technologies LLC	Research Agreement dtd 10/1/17	12.RD		31,755	-
Semina Department Sam Book Sam Technology, Exc. Since	Defense, Department of	Pass-Through	Shirley Ryan AbilityLab	Subaward No. 6345	12.RD		146,054	_
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Second Park Internation of Park Internation	Defense, Department of	Pass-Through	Universal Technology Corporation	16-7900-0008-15-C6	12.RD		4,998	=
Second Park Internation of Park Internation	Defense, Department of	Pass-Through	Universal Technology Corporation	17-7900-0008-32-C6	12.RD		9,475	-
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State Pass Through Pass Pas	Defense, Department of	Pass-Through	Wake Forest University	WFUHS 330607	12.RD		(407)	-
Separation of Pass - Through Pass	Defense, Department of	Pass-Through	Westat	6367-S01/W81XWH-15-C-0128	12.RD		146,437	-
Past Tuongh	•	Pass-Through	Women and Infants Hospital	Subcontract 9607	12.RD		7.514	_
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Pass	referse, Department of	russ rinough	Wright State Chiversity		12.10		\$ 17,493,131	\$ 3,845,903
Total Housing and Urban Development, Department of the circin, Department of the Direct				Total Defense, Department of			\$ 82,300,187	\$ 12,785,202
Past	Housing and Urban Development, Department of	Pass-Through	Johns Hopkins University			General Research and Technology Activity		
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PIACO0898 Task PIACO1036 15.944 Natural Resource Stewardship S 1,464,590 S 13,60				G16AC00418				_
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Pass-Through Michigan State University Pass-Through Pass-Through Michigan State University Pass-Through Pass-Through Michigan State University Pass-Through Pass-Through Pass-Through Michigan State University Pass-Through Pass-Through Pass-Through Michigan State University Pass-Through Pass-Through Pass-Through Michigan State University Pass-Through Pass	•					•		Ψ -
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stice, Department of Direct 2013-MU-R-6018 16.523 Juvenile Accountability Block Grants \$ 226,130 \$ - \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	nterior, Department of the	Direct			15.RD			\$ - \$ 13,608
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stice, Department of Direct 2016-WL-AX-0029 16.524 Legal Assistance for Victims S 225,457 \$ 38,61 stice, Department of Direct 2012-DN-BX-K045 16.544 Youth Gang Prevention National Institute of Justice Research, Evaluation, and Stice, Department of Direct 2017-CK-BX-0002 16.560 Development Project Grants National Institute of Justice Research, Evaluation, and Pass-Through Michigan State University RC105817 UM 16.560 Development Project Grants National Institute of Justice Research, Evaluation, and Pass-Through Michigan State University RC105837 UM 16.560 Development Project Grants National Institute of Justice Research, Evaluation, and Nat		-	Salvation Army			<u> </u>		
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National Institute of Justice Research, Evaluation, and Stice, Department of Direct 2017-CK-BX-0002 16.500 Development Project Grants \$88,444 \$-50000 Stice, Department of Pass-Through Michigan State University 177,496 -5000 National Institute of Justice Research, Evaluation, and Stice, Department of Pass-Through Michigan State University 177,496 Stice, Department of Pass-Through Michigan State University 177,496 National Institute of Justice Research, Evaluation, and Stice, Department of Pass-Through Michigan State University 16.500 Development Project Grants National Institute of Justice Research, Evaluation, and National Institute of J	ustice, Department of	Direct		2012-DN-BX-K045	16.544	Youth Gang Prevention	\$ 5,285	\$ 135
Stice, Department of Direct 2017-CK-BX-0002 16.560 Development Project Grants Stice, Department of Pass-Through Michigan State University RC105817 UM 16.560 Development Project Grants National Institute of Justice Research, Evaluation, and National Institute of Justice Research, Evaluation, and Stice, Department of Pass-Through Michigan State University RC105837 UM 16.560 Development Project Grants National Institute of Justice Research, Evaluation, and Stice, Department of Development Project Grants National Institute of Justice Research, Evaluation, and Section Pass-Through Michigan State University RC105837 UM Section Institute of Justice Research, Evaluation, and Section Pass-Through Secti	•							
stice, Department of Pass-Through Michigan State University Pass-Through Michigan State University Pass-Through Pass-Throu	ustice, Department of	Direct		2017-CK-BX-0002	16.560	Development Project Grants	\$ 88,444	\$ -
National Institute of Justice Research, Evaluation, and Stice, Department of Pass-Through Michigan State University RC105837 UM 16.560 Development Project Grants National Institute of Justice Research, Evaluation, and National Institute of Justice Research, Evaluation, and	ustice, Department of	Pass-Through	Michigan State University	RC105817 UM	16.560		77.496	-
National Institute of Justice Research, Evaluation, and		1 and 1 in Ough	,			National Institute of Justice Research, Evaluation, and		
	Justice, Department of	Pass-Through	Michigan State University	RC105837 UM	16.560		86,557	-
11/0/TO / OIX/100/L	fustice, Department of	Pass-Through	University of Rochester	417054G / GR510632	16.560	National Institute of Justice Research, Evaluation, and Development Project Grants	1,965	-

	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures		ss-Through
ustice, Department of	Direct		2011-MU-MU-K075	16.734	Special Data Collections and Statistical Studies		62 \$ 41 \$	<u>-</u>
ustice, Department of	Direct		2016-FA-BX-0002	16.746	Capital Case Litigation Initiative		28 \$	_
ustice, Department of	Pass-Through	Kettering University	5301095AA	16.817	Byrne Criminal Justice Innovation Program	\$ 27,1	17 \$	-
ustice, Department of	Pass-Through	Kettering University	5301095FLT	16.817	Byrne Criminal Justice Innovation Program	(2,1		-
	D .		0011 DI D (5/5	1600			17 \$	-
ustice, Department of	Direct Direct		2011 BJ R 6565 2013 IJR 1168	16.RD 16.RD		\$ 290,0 350,0	48 \$	-
ustice, Department of ustice, Department of	Direct		DJO-BJS-17-RO-0253	16.RD 16.RD		1,580,4		-
ustice, Department of	Pass-Through	City of Battle Creek	FY 16 (BCJI)	16.RD		129,8		_
, 1	8					\$ 2,350,3		-
			Total Justice, Department of			\$ 3,158,6	29 \$	38,748
abor, Department of	Pass-Through	UnidosUS	Counsultant Agreement	17.270	Reentry Employment Opportunities	\$ 22,2	56 \$	-
abor, Department of	Direct		EO-30276-17-60-5-26	17.791	Department of Labor Chief Evaluation Office		22 \$	-
			Total Labor, Department of			\$ 101,8	78 \$	-
State, Department of	Pass-Through	Partners of the Americas Foundation	CBG-2016-R2-09	19.009	Academic Exchange Programs - Undergraduate Programs International Programs to Support Democracy, Human Rights		24 \$	
State, Department of	Direct		S-LMAQM-15-GR-1129	19.345	and Labor	\$ 1,116,9	48 \$	550,555
State, Department of	Direct		S-LMAQM-15-GR-1039	19.415	Professional and Cultural Exchange Programs - Citizen Exchanges	\$	51 \$	_
State, Department of	Pass-Through	Alion Science and Technology	SUBI 138240 TO 001	19.413 19.RD	Exchanges		31 \$	
State, Department of	Pass-Through	United States-India Educational Foundation(USIEF)	USIEF/OSI/2012/03-A02	19.RD		(2,7		_
	S						14 \$	-
			Total State, Department of			\$ 1,134,9	37 \$	550,555
Transportation, Department of	Direct		14-G-011	20.108	Aviation Research Grants	\$ 199,8	52 \$	-
Transportation, Department of	Direct		16-G-010	20.108	Aviation Research Grants	33,4		-
Transportation, Department of	Pass-Through	University of California - Davis	201302812-01	20.108	Aviation Research Grants	4,6		-
T	D:		DTF11/1151100005	20.200	Hilman I I Dayl A	\$ 237,9		1 107 572 00
Transportation, Department of Transportation, Department of	Direct Pass-Through	National Academy of Sciences	DTFH6115H00005 HR 20-110	20.200 20.200	Highway Research and Development Program Highway Research and Development Program	\$ 2,393,0 112,7		1,197,572.00
Transportation, Department of	1 ass-1 iii ougii	National Academy of Sciences	1110 20-110	20.200	riigiiway Researcii and Developinent Program	\$ 2,505,8		1,197,572
					Metropolitan Transportation Planning and State and Non-			
Transportation, Department of	Pass-Through	Michigan, State of, Transportation, Department of	2016-0068	20.505	Metropolitan Planning and Research	\$ 60,2	89 \$	-
Transportation, Department of	Pass-Through	Michigan, State of, Transportation, Department of	2016-0068 Auth Z4	20.505	Metropolitan Transportation Planning and State and Non- Metropolitan Planning and Research	104,1	00	
Transportation, Department of	1 ass-1 iii ougii	Michigan, State of, Transportation, Department of	2010-0000 Auui 24	20.303	Metropolitan Transportation Planning and State and Non-	104,1	<i>)</i>	-
Transportation, Department of	Pass-Through	Michigan, State of, Transportation, Department of	2016-0068 Authorization & Revi	20.505	Metropolitan Planning and Research	123,5		
					N. d. Arrita and G. G. C. Alaberta de Carattera de	\$ 288,0	81 \$	-
Turning at the Demonstration of	D Th	National Cafety Council	Incometical Count Assessment	20.614	National Highway Traffic Safety Administration (NHTSA)	¢ 111.2	10 ¢	
Fransportation, Department of Fransportation, Department of	Pass-Through Direct	National Safety Council	Innovation Grant Agreement 69A3551747105	20.614 20.701	Discretionary Safety Grants and Cooperative Agreements University Transportation Centers Program	\$ 1,410,9	10 \$	539,939.00
Transportation, Department of	Direct		DTRT13-G-UTC54	20.701	University Transportation Centers Program	591,1		319,538.00
						\$ 2,002,1		859,477
Transportation, Department of	Pass-Through	University of Maryland, The	07525729 PO3884	20.819	Ballast Water Treatment Technologies	\$ 33,4	64 \$	-
Transportation, Department of	Direct		OASRTRS-14-H-MICH	20.931	Transportation Planning, Research and Education		69 \$	-
Transportation, Department of	Direct		DTFH6116C00006	20.RD			97 \$	31,001.00
Transportation, Department of	Direct Direct		DTNH22-13-C-00333 DTNH22-14-00329	20.RD 20.RD		(97,1 725,7		(97,169)
Γransportation, Department of Γransportation, Department of	Direct		DTNH22-14-00329 DTNH2215C00032	20.RD 20.RD		664,6		660,663
Transportation, Department of	Direct		DTNH2215D00017	20.RD		234,5		-
Fransportation, Department of	Direct		DTRT5716C10014	20.RD		104,0		-
Transportation, Department of	Pass-Through	Crash Avoidance Metrics Partnership (CAMP)	CAMP0000144	20.RD			77)	-
Transportation, Department of	Pass-Through	Crash Avoidance Metrics Partnership (CAMP)	PO# CAMP0000166	20.RD		261,5		-
Transportation, Department of	Pass-Through	Delphi Automotive Systems	DTRS57-02-C-10049	20.RD		3,9		-
Transportation, Department of	Pass-Through	Delphi Automotive Systems	EKS98622 (Delphi)	20.RD			05 50	-
Fransportation, Department of Fransportation, Department of	Pass-Through Pass-Through	Emory University Michigan, State of, Transportation, Department of	T937114 2016-0068 Z2	20.RD 20.RD		6,1 108,3		-
Fransportation, Department of	Pass-Through	Michigan, State of, Transportation, Department of	2018-0072	20.RD		59,0		
Fransportation, Department of	Pass-Through	National Academy of Sciences	HR 10-93, Activity 163512-1030	20.RD		1,6		-
Transportation, Department of	Pass-Through	National Academy of Sciences	HR 17-67 / SUB0000574	20.RD		(1,2	85)	-
Transportation, Department of	Pass-Through	Nichols Consulting Engineers	092460-Examination of Areas of	20.RD		45,0		-
Fransportation, Department of	Pass-Through	Soar Technology, Inc.	SC-17-007	20.RD		31,8		-
Fransportation, Department of	Pass-Through Pass-Through	The Mackinac Technology Company Transtec Group, Inc.	Roundtable Research Agmt dtd 9 ISU Subcontract 436-17-01A	20.RD 20.RD		48,8 1,7		-
±	Pass-Through	Virginia Polytechnic Institute and State University	451205-19337	20.RD 20.RD			53 51)	(251)
Transportation, Department of	Pass-Through	Virginia Polytechnic Institute and State University Virginia Polytechnic Institute and State University	451263-19337	20.RD		140,4		19,816
Fransportation, Department of Fransportation, Department of		Virginia Polytechnic Institute and State University	451335-19337	20.RD		16,9	35	3,312.00
Fransportation, Department of Fransportation, Department of Fransportation, Department of	Pass-Through	Virginia Polytechnic institute and State University				A	0.5	
Fransportation, Department of Fransportation, Department of Fransportation, Department of		virginia Polytechnic institute and State University				\$ 2,517,5 \$ 7,699.9		617,372 2,674,421
Transportation, Department of Transportation, Department of Transportation, Department of Transportation, Department of	Pass-Through	virginia Polytechnic institute and State University	Total Transportation, Department of			\$ 7,699,9	87 \$	617,372 2,674,421
Cransportation, Department of	Pass-Through Direct	virginia Polytechnic institute and State University	Total Transportation, Department of 17-LITC0178-03-00	21.008	Low Income Taxpayer Clinics	\$ 7,699,9 \$ 52,1	87 \$ 16 \$	
Cransportation, Department of	Pass-Through	virginia Polytechnic institute and State University	Total Transportation, Department of 17-LITC0178-03-00 18-LITC0343-01-00	21.008 21.008	Low Income Taxpayer Clinics Low Income Taxpayer Clinics	\$ 7,699,9 \$ 52,1 46,6	87 \$ 16 \$ 34	2,674,421
Fransportation, Department of Fransportation, Department of Fransportation, Department of	Pass-Through Direct	virginia Polytechnic institute and State University	Total Transportation, Department of 17-LITC0178-03-00		* *	\$ 7,699,9 \$ 52,1 46,6	87 \$ 16 \$	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
			Total Library of Congress			\$ 262,841 \$	<u> </u>
Vational Aeronautics and Space Administration	Direct		80NSSC17K0015	43.001 Science		\$ 188,740 \$	\$ 26,989.0
National Aeronautics and Space Administration	Direct		80NSSC17K0013	43.001 Science		10,417	20,989.0
National Aeronautics and Space Administration	Direct		80NSSC17K0212	43.001 Science		27,775	_
Vational Aeronautics and Space Administration	Direct		80NSSC17K0323	43.001 Science		35,855	-
Vational Aeronautics and Space Administration	Direct		80NSSC17K0380	43.001 Science		35,320	-
ational Aeronautics and Space Administration	Direct		80NSSC17K0381	43.001 Science		43,207	-
National Aeronautics and Space Administration	Direct		80NSSC17K0382	43.001 Science		32,826	-
Jational Aeronautics and Space Administration	Direct		80NSSC17K0453	43.001 Science		36,443	-
National Aeronautics and Space Administration	Direct		80NSSC17K0464	43.001 Science		42,742	-
National Aeronautics and Space Administration	Direct		80NSSC17K0493	43.001 Science		36,943	-
National Aeronautics and Space Administration	Direct		80NSSC17K0604 80NSSC17K0628	43.001 Science 43.001 Science		37,764 5,080	-
Vational Aeronautics and Space Administration Vational Aeronautics and Space Administration	Direct Direct		80NSSC17K0628 80NSSC17K0629	43.001 Science 43.001 Science		15,040	-
Vational Aeronautics and Space Administration	Direct		80NSSC17K0629 80NSSC17K0630	43.001 Science		3,365	-
fational Aeronautics and Space Administration	Direct		80NSSC17K0681	43.001 Science		38,447	_
ational Aeronautics and Space Administration	Direct		80NSSC17K0686	43.001 Science		60,609	_
ational Aeronautics and Space Administration	Direct		80NSSC17K0728	43.001 Science		14,951	_
ational Aeronautics and Space Administration	Direct		80NSSC18K0275	43.001 Science		7,709	-
ational Aeronautics and Space Administration	Direct		80NSSC18K0376	43.001 Science		313	-
ational Aeronautics and Space Administration	Direct		80NSSC18K0647	43.001 Science		712	-
ational Aeronautics and Space Administration	Direct		80NSSC18K0653	43.001 Science		3,046	-
Tational Aeronautics and Space Administration	Direct		NNX11AJ19G	43.001 Science		37,583	-
ational Aeronautics and Space Administration	Direct		NNX12AG44G	43.001 Science		20,284	-
fational Aeronautics and Space Administration	Direct		NNX12AR53G	43.001 Science		79,197	-
National Aeronautics and Space Administration	Direct		NNX13AG22G	43.001 Science		13,540	-
National Aeronautics and Space Administration	Direct		NNX13AI66G	43.001 Science		56	-
National Aeronautics and Space Administration	Direct		NNX13AL04G	43.001 Science		117,111	-
National Aeronautics and Space Administration	Direct		NNX13AP36G	43.001 Science		63,505	-
National Aeronautics and Space Administration	Direct		NNX13AQ33G	43.001 Science		21,238	15,99
ational Aeronautics and Space Administration	Direct		NNX14AB39G	43.001 Science		12,846	-
ational Aeronautics and Space Administration	Direct Direct		NNX14AC82G	43.001 Science 43.001 Science		49,166 27,942	-
ational Aeronautics and Space Administration ational Aeronautics and Space Administration	Direct Direct		NNX14AE75G NNX14AF31G	43.001 Science 43.001 Science		83,046	-
ational Aeronautics and Space Administration	Direct		NNX14AF34G	43.001 Science		66,839	-
ational Aeronautics and Space Administration	Direct		NNX14AF90G	43.001 Science		13,861	-
ational Aeronautics and Space Administration	Direct		NNX14AG68G	43.001 Science		24,435	_
ational Aeronautics and Space Administration	Direct		NNX14AG84G	43.001 Science		44,722	_
ational Aeronautics and Space Administration	Direct		NNX14AH19G	43.001 Science		(1,069)	_
ational Aeronautics and Space Administration	Direct		NNX14AI40G	43.001 Science		(22,104)	-
ational Aeronautics and Space Administration	Direct		NNX14AI87G	43.001 Science		104,180	-
ational Aeronautics and Space Administration	Direct		NNX14AJ50G	43.001 Science		87,944	-
ational Aeronautics and Space Administration	Direct		NNX14AP44G	43.001 Science		156,496	-
ational Aeronautics and Space Administration	Direct		NNX14AR78G	43.001 Science		89,384	-
ational Aeronautics and Space Administration	Direct		NNX15AB36G	43.001 Science		96,398	-
ational Aeronautics and Space Administration	Direct		NNX15AB73G	43.001 Science		89,529	-
ational Aeronautics and Space Administration	Direct		NNX15AC25G	43.001 Science		100,307	-
ational Aeronautics and Space Administration	Direct		NNX15AD40G	43.001 Science		275,695	-
ational Aeronautics and Space Administration	Direct		NNX15AE34G	43.001 Science		195,710	-
ational Aeronautics and Space Administration	Direct		NNX15AE77G	43.001 Science		60,972	-
ational Aeronautics and Space Administration	Direct		NNX15AF33G	43.001 Science		40,433	-
ational Aeronautics and Space Administration	Direct		NNX15AG39G	43.001 Science		2,504	-
ational Aeronautics and Space Administration	Direct		NNX15AH13G	43.001 Science		174,196	56,7
ational Aeronautics and Space Administration	Direct		NNX15AH28G	43.001 Science		68,125	-
ational Aeronautics and Space Administration	Direct Direct		NNX15AH30G NNX15AH37G	43.001 Science 43.001 Science		152,932 130,653	-
ational Aeronautics and Space Administration ational Aeronautics and Space Administration	Direct		NNX15AH3/G NNX15AI39G	43.001 Science		106,120	-
ational Aeronautics and Space Administration	Direct		NNX15AI39G NNX15AI42G	43.001 Science		119,172	_
ational Aeronautics and Space Administration	Direct		NNX15AJ68G	43.001 Science		96,831	_
ational Aeronautics and Space Administration	Direct		NNX15AJ81G	43.001 Science		104,420	_
ational Aeronautics and Space Administration	Direct		NNX15AK79G	43.001 Science		157,082	_
tional Aeronautics and Space Administration	Direct		NNX15AK88G	43.001 Science		84,029	1,0
tional Aeronautics and Space Administration	Direct		NNX15AL01G	43.001 Science		90,628	, - -
tional Aeronautics and Space Administration	Direct		NNX15AL78G	43.001 Science		36,350	_
tional Aeronautics and Space Administration	Direct		NNX15AL99G	43.001 Science		35,166	-
tional Aeronautics and Space Administration	Direct		NNX15AM53G	43.001 Science		121,231	-
tional Aeronautics and Space Administration	Direct		NNX15AM93G	43.001 Science		131,860	10,2
tional Aeronautics and Space Administration	Direct		NNX15AQ16G	43.001 Science		42,723	-
tional Aeronautics and Space Administration	Direct		NNX15AR36G	43.001 Science		1,837	-
ational Aeronautics and Space Administration	Direct		NNX15AR39G	43.001 Science		20,930	
tional Aeronautics and Space Administration	Direct		NNX15AT87G	43.001 Science		54,017	-
ational Aeronautics and Space Administration	Direct		NNX15AU15G	43.001 Science		204,107	-
ational Aeronautics and Space Administration	Direct		NNX15AV08G	43.001 Science		28,695	-
ational Aeronautics and Space Administration	Direct		NNX15AV12G	43.001 Science		27,064	-
ational Aeronautics and Space Administration	Direct		NNX15AV24G	43.001 Science		11,617	-
ational Aeronautics and Space Administration	Direct		NNX15AW08G	43.001 Science		41,684	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		CFDA Program Title	Federal Expenditures	Pass-Through
National Aeronautics and Space Administration	Direct		NNX16AB46G	43.001	Science		91,825	13,887
National Aeronautics and Space Administration	Direct		NNX16AB47G	43.001	Science		81,876	-
National Aeronautics and Space Administration	Direct		NNX16AB48G	43.001	Science		99,031	5,038
National Aeronautics and Space Administration	Direct		NNX16AC01G	43.001	Science		122,215	=
National Aeronautics and Space Administration	Direct		NNX16AC66A NNX16AC74G	43.001	Science		1,025,867	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct		NNX16AC/4G NNX16AD43G	43.001 43.001	Science Science		37,657 89,354	-
National Aeronautics and Space Administration	Direct		NNX16AD43G NNX16AD72A	43.001	Science		(495)	-
National Aeronautics and Space Administration	Direct		NNX16AE38G	43.001	Science		49,338	- -
National Aeronautics and Space Administration	Direct		NNX16AF23G	43.001	Science		173,892	_
National Aeronautics and Space Administration	Direct		NNX16AH01G	43.001	Science		41,250	-
National Aeronautics and Space Administration	Direct		NNX16AH19G	43.001	Science		51,894	-
National Aeronautics and Space Administration	Direct		NNX16AH48G	43.001	Science		(66)	-
National Aeronautics and Space Administration	Direct		NNX16AH79G	43.001	Science		80,146	-
National Aeronautics and Space Administration	Direct		NNX16AI19G	43.001	Science		68,545	-
National Aeronautics and Space Administration	Direct		NNX16AI41G	43.001	Science		125,121	-
National Aeronautics and Space Administration	Direct		NNX16AI58G	43.001	Science		40,441	-
National Aeronautics and Space Administration	Direct		NNX16AJ54G	43.001	Science		163,604	44,667
National Aeronautics and Space Administration	Direct		NNX16AJ67G	43.001	Science		175,684	12,290
National Aeronautics and Space Administration	Direct		NNX16AL12G	43.001	Science		227,462	10,608
National Aeronautics and Space Administration	Direct		NNX16AM23G	43.001	Science		74,105	-
National Aeronautics and Space Administration	Direct		NNX16AM99G	43.001	Science		166,872	-
National Aeronautics and Space Administration	Direct		NNX16AN86G	43.001	Science		6,730	-
National Aeronautics and Space Administration	Direct		NNX16AO23H	43.001	Science		(10,184)	-
National Aeronautics and Space Administration	Direct		NNX16AP03H	43.001	Science		44,459	-
National Agrangities and Space Administration	Direct		NNX16AP04H NNX16AP32G	43.001 43.001	Science Science		39,082 33,549	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Direct		NNX16AP32G NNX16AQ04G	43.001	Science		116,460	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct		NNX16AU4G NNX16AT39G	43.001	Science		9,351	- -
National Aeronautics and Space Administration	Direct		NNX17AB38G	43.001	Science		109,825	- -
National Aeronautics and Space Administration	Direct		NNX17AB87G	43.001	Science		94,859	_
National Aeronautics and Space Administration	Direct		NNX17AC08G	43.001	Science		21,194	_
National Aeronautics and Space Administration	Direct		NNX17AC36G	43.001	Science		5,500	_
National Aeronautics and Space Administration	Direct		NNX17AC82G	43.001	Science		22,643	_
National Aeronautics and Space Administration	Direct		NNX17AD37G	43.001	Science		31,591	31,591
National Aeronautics and Space Administration	Direct		NNX17AD57G	43.001	Science		44,855	-
National Aeronautics and Space Administration	Direct		NNX17AD58G	43.001	Science		17,572	-
National Aeronautics and Space Administration	Direct		NNX17AD60G	43.001	Science		5,189	-
National Aeronautics and Space Administration	Direct		NNX17AD66G	43.001	Science		188,566	-
National Aeronautics and Space Administration	Direct		NNX17AE31G	43.001	Science		33,717	-
National Aeronautics and Space Administration	Direct		NNX17AE57G	43.001	Science		1,150	-
National Aeronautics and Space Administration	Direct		NNX17AE63G	43.001	Science		7,476	-
National Aeronautics and Space Administration	Direct		NNX17AF21G	43.001	Science		147,217	=
National Aeronautics and Space Administration	Direct		NNX17AG25G	43.001	Science		215,603	8,338
National Aeronautics and Space Administration	Direct		NNX17AH55G	43.001	Science		115,653	2,232
National Aeronautics and Space Administration	Direct		NNX17AH97G	43.001	Science		180,019	-
National Aeronautics and Space Administration	Direct		NNX17AI48G	43.001	Science		91,012	-
National Aeronautics and Space Administration	Direct		NNX17AI90G	43.001	Science		106,730	- 77.004
National Agrangities and Space Administration	Direct		NNX17AK19G NNX17AL23G	43.001	Science		286,122 107,728	77,094
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct Pass-Through	Bay Area Environmental Research Institute	Subcontract	43.001 43.001	Science Science		86,658	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Bay Area Environmental Research Institute	Subcontract	43.001	Science		55,390	-
National Aeronautics and Space Administration	Pass-Through	California Institute of Technology	44A-1093998	43.001	Science		103,948	-
National Aeronautics and Space Administration	Pass-Through	California Institute of Technology	S380136	43.001	Science		19,164	_
National Aeronautics and Space Administration	Pass-Through	George Mason University	E2034731	43.001	Science		57,470	_
National Aeronautics and Space Administration	Pass-Through	Georgia Technology Research Corporation	RF402-G1	43.001	Science		14,527	_
National Aeronautics and Space Administration	Pass-Through	Michigan State University	RC104664UM	43.001	Science		5,155	_
National Aeronautics and Space Administration	Pass-Through	Michigan Technological University	1609082Z2	43.001	Science		44,514	=
National Aeronautics and Space Administration	Pass-Through	National Institute of Aerospace	X13-7142-UM	43.001	Science		18,668	=
National Aeronautics and Space Administration	Pass-Through	Ohio State University, The	60042702	43.001	Science		17,320	-
National Aeronautics and Space Administration	Pass-Through	Ohio State University, The	60062085	43.001	Science		88,852	-
National Aeronautics and Space Administration	Pass-Through	Predictive Science Inc.	Research Agrmt dtd 12/1/17	43.001	Science		13,133	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	AR8-19017X	43.001	Science		6,368	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	DD4-15073X	43.001	Science		6,351	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G05-16032A	43.001	Science		(15)	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G05-16034X	43.001	Science		3,175	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G05-16063X	43.001	Science		9,332	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G06-17031A	43.001	Science		3,365	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G06-17104X	43.001	Science		33	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	G07-18038X	43.001	Science		6,368	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO3-14069X	43.001	Science		(763)	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO4-15030X	43.001	Science		41,196	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO4-15080X GO6-17082X	43.001	Science		2,667	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution Smithsonian Institution	GO6-17082X GO6-17085X	43.001	Science		4,108	-
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution Smithsonian Institution	GO6-17085X GO7-18031A	43.001	Science		24,055	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Smithsonian Institution Smithsonian Institution	GO7-18031A GO7-18087X	43.001 43.001	Science Science		3,365 21,844	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO7-18087X GO7-18119X	43.001	Science		4,003	-
	1 455- HHOU2H	OHIMBOHIMI HISHMUOH	UU/=10117/\	4.7.001	DOTOTICE		4,003	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	GO8-19107B	43.001	Science Science	13,463	1 ass-1 iii ougii
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	SP8-19003X	43.001	Science	36,981	_
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	SV6-86010	43.001	Science	90,516	_
National Aeronautics and Space Administration	Pass-Through	Smithsonian Institution	TM8-19007X	43.001	Science	3,780	_
National Aeronautics and Space Administration	Pass-Through	Space Science Institute	Subaward no. 000799	43.001	Science	15,600	_
National Aeronautics and Space Administration	Pass-Through	SRI International	119-000260	43.001	Science	95,293	_
National Aeronautics and Space Administration	Pass-Through	University of California - Berkeley	00008925/POBB00628939	43.001	Science	98,580	_
National Aeronautics and Space Administration	Pass-Through	University of California - Davis	201403446-01	43.001	Science	3,888	_
National Aeronautics and Space Administration	Pass-Through	University of California - Los Angeles	2090 G SA 194	43.001	Science	12,310	_
National Aeronautics and Space Administration	Pass-Through	University of California - Los Angeles	2090 G 3A 194 2090 G TA481	43.001	Science	35,401	-
National Aeronautics and Space Administration	Pass-Through	University of Colorado	1554008	43.001	Science	23,857	- -
National Aeronautics and Space Administration	Pass-Through	University of Colorado Boulder	1554367	43.001	Science	7,887	
1	_						-
National Aeronautics and Space Administration	Pass-Through	University of Colorado Boulder	1555980	43.001	Science	20,644	-
National Aeronautics and Space Administration	Pass-Through	University of Maryland, The	Z6054002	43.001	Science	94,499	-
National Aeronautics and Space Administration	Pass-Through	University of Maryland-Baltimore County (UMBC)	0000014591	43.001	Science	64,652	-
National Aeronautics and Space Administration	Pass-Through	University of Montana	PG15-26860-01	43.001	Science	9,383	-
National Aeronautics and Space Administration	Pass-Through	University of New Hampshire	14-084	43.001	Science	54,537	-
National Aeronautics and Space Administration	Pass-Through	University of New Hampshire	16-011	43.001	Science	58,567	-
National Aeronautics and Space Administration	Pass-Through	University of New Hampshire	17-013	43.001	Science	40,944	=
National Aeronautics and Space Administration	Pass-Through	University of New Hampshire	Subaward # 18-013	43.001	Science	50,051	-
National Aeronautics and Space Administration	Pass-Through	West Virginia University	16-159-UM	43.001	Science	9,875	-
National Aeronautics and Space Administration	Pass-Through	William Marsh Rice University	R53461	43.001	Science	13,528	-
National Aeronautics and Space Administration	Pass-Through	Woods Hole Oceanographic Institute	A101330, WHOI Project 23143700	43.001	Science	136,542	-
National Aeronautics and Space Administration	Pass-Through	Woods Hole Research Center	Subcontract Agreement No. WHRC	43.001	Science	13,093	=
	-					\$ 11,518,272	\$ 316,850
National Aeronautics and Space Administration	Direct		NNM13AA11G	43.002	Aeronautics	\$ (290)	\$ -
National Aeronautics and Space Administration	Direct		NNX11AO78A	43.002	Aeronautics	53,436	12,074
National Aeronautics and Space Administration	Direct		NNX15AN97A	43.002	Aeronautics	128,795	122,891
National Aeronautics and Space Administration	Direct		NNX15AN98A	43.002	Aeronautics	35,802	11,905
National Aeronautics and Space Administration	Direct		NNX16AH81A	43.002	Aeronautics	376,146	-
National Aeronautics and Space Administration	Direct		NNX16AP90A	43.002	Aeronautics	122,623	98,522
National Aeronautics and Space Administration	Pass-Through	National Space Biomedical Research Institute	NCC 9-58-46	43.002	Aeronautics	(61)	-
National Aeronautics and Space Administration	Pass-Through	National Space Biomedical Research Institute	NCC9-58-46	43.002	Aeronautics	(1,373)	_
vational Actonautics and Space Administration	1 ass-1 in ough	ivational space Dioniculeal Research institute	11007-30-40	43.002	Actonautics	\$ 715,078	
National Aeronautics and Space Administration	Direct		NNX16A074G	43.003	Exploration	\$ 99,918	<u> </u>
•	Direct				•		5 -
National Aeronautics and Space Administration		Hairmaite of Calana da Davidan	NNX16AO73G	43.003	Exploration	21,150	-
National Aeronautics and Space Administration	Pass-Through	University of Colorado Boulder	1555631	43.003	Exploration	18,899	<u>-</u>
T 2 14 2 10 41 11 2	D: .		NN 174 5 4 1940 4	42.007		\$ 139,967	
National Aeronautics and Space Administration	Direct		NNX15AW42A	43.007	Space Operations	\$ 35,092	\$ -
National Aeronautics and Space Administration	Pass-Through	University of Vermont	29247 SUB 51783	43.007	Space Operations	31,961	-
						\$ 67,053	
National Aeronautics and Space Administration	Direct		NNX13AL51H	43.008	Education	\$ 7,678	\$ -
National Aeronautics and Space Administration	Direct		NNX15AJ20H	43.008	Education	288,717	-
National Aeronautics and Space Administration	Direct		NNX16AI92A	43.008	Education	126,443	-
National Aeronautics and Space Administration	Direct		NNX16AT21H	43.008	Education	53,901	-
National Aeronautics and Space Administration	Pass-Through	University of Alabama, Huntsville	2015-059	43.008	Education	53,631	=
						\$ 530,370	\$ -
National Aeronautics and Space Administration	Direct		NNX14AL65H	43.009	Cross Agency Support	\$ 68,855	\$ -
National Aeronautics and Space Administration	Direct		NNX14AL67H	43.009	Cross Agency Support	36,466	-
National Aeronautics and Space Administration	Direct		NNX17AD24G	43.009	Cross Agency Support	1,226,635	343,718.00
1						\$ 1,331,956	
National Aeronautics and Space Administration	Direct		80NSSC17K0152	43.012	Space Technology	\$ 73,748	
National Aeronautics and Space Administration	Direct		80NSSC17K0156	43.012	Space Technology	45,828	Ψ _
National Aeronautics and Space Administration	Direct		80NSSC17K0157	43.012	Space Technology	49,847	_
National Aeronautics and Space Administration	Direct		NNX15AP46H	43.012	Space Technology Space Technology	73,279	-
National Aeronautics and Space Administration	Direct		NNX15AQ37H	43.012	Space Technology Space Technology	67,059	_
National Aeronautics and Space Administration National Aeronautics and Space Administration	Direct		NNX15AQ37H NNX15AQ43H	43.012	Space Technology Space Technology	60,155	-
*					1		-
National Aeronautics and Space Administration	Direct		NNX16AM55H	43.012	Space Technology	62,354	-
National Aeronautics and Space Administration	Direct		NNX16AM61H	43.012	Space Technology	64,567	-
National Aeronautics and Space Administration	Direct		NNX16AM62H	43.012	Space Technology	69,975	-
National Aeronautics and Space Administration	Direct		NNX16AM92H	43.012	Space Technology	72,337	-
National Aeronautics and Space Administration	Direct		NNX16AR65G	43.012	Space Technology	131,606	-
National Aeronautics and Space Administration	Direct		NNX16AT35A	43.012	Space Technology	80,993	-
National Aeronautics and Space Administration	Direct		NNX16AT43G	43.012	Space Technology	101,106	-
						\$ 952,854	
	Direct		80GSFC18C0009	43.RD		\$ 21,999	\$ -
<u> -</u>	Direct		Janet Kozyra IPA-NNH17IA42P	43.RD		201,009	-
National Aeronautics and Space Administration			NNG12CR34C	43.RD		238,516	-
Vational Aeronautics and Space Administration Vational Aeronautics and Space Administration	Direct		37774440000	43.RD		8,705,364	83,733
Vational Aeronautics and Space Administration Vational Aeronautics and Space Administration			NNL13AQ00C				
Tational Aeronautics and Space Administration Tational Aeronautics and Space Administration Tational Aeronautics and Space Administration	Direct		NNL13AQ00C NNX16AH47G	43.RD		60,468	-
Vational Aeronautics and Space Administration	Direct Direct	Aurora Flight Sciences		43.RD 43.RD			
Vational Aeronautics and Space Administration	Direct Direct Direct Pass-Through	Aurora Flight Sciences California Institute of Technology	NNX16AH47G	43.RD		(20,237)	
fational Aeronautics and Space Administration	Direct Direct Direct Pass-Through Pass-Through	California Institute of Technology	NNX16AH47G AFS14-2380 44A-1098583	43.RD 43.RD		(20,237) 109,700	
ational Aeronautics and Space Administration ational Aeronautics and Space Administration	Direct Direct Direct Pass-Through Pass-Through Pass-Through	California Institute of Technology Catholic University of America	NNX16AH47G AFS14-2380 44A-1098583 361346 Sub 2	43.RD 43.RD 43.RD		(20,237) 109,700 14,008	
ational Aeronautics and Space Administration ational Aeronautics and Space Administration	Direct Direct Direct Pass-Through Pass-Through Pass-Through Pass-Through	California Institute of Technology Catholic University of America Catholic University of America	NNX16AH47G AFS14-2380 44A-1098583 361346 Sub 2 361361 Sub 2	43.RD 43.RD 43.RD 43.RD		(20,237) 109,700 14,008 316,912	
National Aeronautics and Space Administration	Direct Direct Direct Pass-Through Pass-Through Pass-Through Pass-Through	California Institute of Technology Catholic University of America Catholic University of America Catholic University of America	NNX16AH47G AFS14-2380 44A-1098583 361346 Sub 2 361361 Sub 2 361361 Sub 3	43.RD 43.RD 43.RD 43.RD 43.RD		(20,237) 109,700 14,008 316,912 30,469	
National Aeronautics and Space Administration	Direct Direct Direct Pass-Through Pass-Through Pass-Through Pass-Through	California Institute of Technology Catholic University of America Catholic University of America	NNX16AH47G AFS14-2380 44A-1098583 361346 Sub 2 361361 Sub 2	43.RD 43.RD 43.RD 43.RD		(20,237) 109,700 14,008 316,912	

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1409449	43.RD		564,838	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1416972	43.RD		85,965	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1416974 1449038	43.RD		22,907 163,108	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Jet Propulsion Laboratory Jet Propulsion Laboratory	1449038 1486489	43.RD 43.RD		162,198 48,033	- -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1514747	43.RD		42,894	- -
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1515850	43.RD		17,966	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1521148	43.RD		(228)	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1532308	43.RD		106,867	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1534436	43.RD		73,898	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1546643	43.RD		2,459	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Jet Propulsion Laboratory Jet Propulsion Laboratory	1564409 1574620	43.RD 43.RD		110,368 194,390	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1579208	43.RD		329,507	- -
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1593522	43.RD		56,288	-
National Aeronautics and Space Administration	Pass-Through	Jet Propulsion Laboratory	1595301	43.RD		16,930	-
National Aeronautics and Space Administration	Pass-Through	Johns Hopkins University	117613	43.RD		4,753	-
National Aeronautics and Space Administration	Pass-Through	Johns Hopkins University	141617	43.RD		124,940	-
National Aeronautics and Space Administration	Pass-Through	Johns Hopkins University	143448	43.RD		304,808	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Johns Hopkins University Michigan Engineering Services	130622/CLIN 1 1025	43.RD 43.RD		(430) 7,493	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Smithsonian Institution	SV4-84016	43.RD 43.RD		180,564	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	699056KC	43.RD		255,047	<u>-</u>
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	A99201MO	43.RD		398,641	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	E99061MO	43.RD		142,572	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	H99061MO	43.RD		236,406	-
National Aeronautics and Space Administration	Pass-Through	Southwest Research Institute	K99067CT	43.RD		13,133	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-AR-13879.001-A	43.RD		4,364	-
National Agranautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-AR-13881.001-A HST-AR-13884.001-A	43.RD 43.RD		7,431	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-AR-13890.001-A	43.RD 43.RD		3,072 5,750	- -
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScI)	HST-AR-14279.001-A	43.RD		7,238	- -
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-AR-15047.001-A	43.RD		8,675	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-AR-15051.001-A	43.RD		4,373	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-12904.01-A	43.RD		(590)	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13284.001-A	43.RD		32,772	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13293.001-A	43.RD		4,433	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-GO-13337.001-A HST-GO-13363.001-A	43.RD 43.RD		534 40,269	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScI)	HST-GO-13437.002-A	43.RD		943	- -
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13454.007-A	43.RD		13,011	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13492.006-A	43.RD		4,480	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13639.003-A	43.RD		4,001	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13642.004-A	43.RD		6,351	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13696.002-A	43.RD		5,810	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13702.001-A HST-GO-13758.005-A	43.RD 43.RD		34,908	-
National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-GO-13827.001-A	43.RD		(1,745) 3,789	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScI)	HST-GO-13841.006-A	43.RD		5,759	- -
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13874.004-A	43.RD		9,328	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-13939.003-A	43.RD		12,365	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14046.007-A	43.RD		1,060	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14080.002-A	43.RD		22,035	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScI)	HST-GO-14096.005-A	43.RD		33,169	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-GO-14151.002-A HST-GO-14170.004-A	43.RD 43.RD		11,764 9,439	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScI)	HST-GO-14170.004-A HST-GO-14187.001-A	43.RD 43.RD		10,266	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14194.008-A	43.RD		1,333	_
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14197.004-A	43.RD		868	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14229.001-A	43.RD		14,545	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14230.002-A	43.RD		3,727	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14231.001-A	43.RD		7,527	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl) Space Telescope Institute (STScl)	HST-GO-14232.001-A HST-GO-14356.004-A	43.RD 43.RD		48,486 6,079	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScI) Space Telescope Institute (STScI)	HST-GO-14622.003-A	43.RD 43.RD		3,741	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScI)	HST-GO-14729.001-A	43.RD		18,503	- -
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14765.001-A	43.RD		3,391	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-14896.004-A	43.RD		7,047	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15230.002-A	43.RD		8,671	-
National Aeronautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-GO-15307.004-A	43.RD		2,426	-
National Agropautics and Space Administration	Pass-Through	Space Telescope Institute (STScl)	HST-HF2-51401.001-A	43.RD		91,786	-
National Aeronautics and Space Administration National Aeronautics and Space Administration	Pass-Through Pass-Through	Space Telescope Institute (STScl) Systems Technology, Inc.	STScI-49724 Roundtable Research Agreement	43.RD 43.RD		38,298 (9,933)	-
National Aeronautics and Space Administration	Pass-Through	University of Arizona	344641	43.RD		94,346	- -
National Aeronautics and Space Administration	Pass-Through	University of California - Los Angeles	2090-S-VA274	43.RD		40,805	-
National Aeronautics and Space Administration	Pass-Through	University of Colorado	1546525	43.RD		61,009	-
National Aeronautics and Space Administration	Pass-Through	University of Colorado	1546525/PO 1000106275	43.RD		219,945	-
National Aeronautics and Space Administration	Pass-Through	University of Washington	16-PAF02071	43.RD		10,100	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditure		ass-Through
			Total National Aeronautics and Space Admin	inistration		\$ 14,952,7 \$ 30,208,3		83,733 989,693
National Endowment for the Arts	Direct		16-4200-7024	45.024	Promotion of the Arts Grants to Organizations and Individuals	\$ 1,5	527 \$	_
National Endowment for the Arts	Direct		16-4400-7094	45.024	Promotion of the Arts Grants to Organizations and Individuals	(3,0		_
ational Endowment for the Arts	Direct		17-4100-7142	45.024	Promotion of the Arts Grants to Organizations and Individuals		39	-
ational Endowment for the Arts	Direct		17-4400-7112	45.024	Promotion of the Arts Grants to Organizations and Individuals	17,		-
					C		33 \$	-
tional Endowment for the Arts	Pass-Through	Michigan, State of, Council for Arts and Cultural Affairs	17PS3685ED	45.025	Promotion of the Arts Partnership Agreements	\$ 16,3	25 \$	-
			Total National Endowment for the Arts			\$ 41,8	358 \$	-
tional Endowment for the Humanities	Direct		CH-51140-14	45.130	Promotion of the Humanities Challenge Grants		013) \$	-
tional Endowment for the Humanities	Direct		ZH-252894	45.130	Promotion of the Humanities Challenge Grants	\$ 11.9	984 971 \$	
	D: .		DO 252004 15	45.140	Promotion of the Humanities Division of Preservation and			
ional Endowment for the Humanities	Direct		PG-252806-17	45.149	Access Promotion of the Humanities Division of Preservation and	\$ 6,2	170 \$	_
cional Endowment for the Humanities	Direct		PW-234665-16	45.149	Access Promotion of the Humanities Division of Preservation and	15,0	97	9,740
ional Endowment for the Humanities	Direct		PW-234705-16	45.149	Access	75,9	938	-
ional Endowment for the Humanities	Direct		PW-234763-16	45.149	Promotion of the Humanities Division of Preservation and	56,4	165	
That Endowment for the Flumanities	Direct		PW-234/03-10	43.149	Access		970 \$	9,740
onal Endowment for the Humanities	Direct		FA-232828	45.160	Promotion of the Humanities Fellowships and Stipends		718) \$	-
onal Endowment for the Humanities	Direct		FA-232894-16	45.160	Promotion of the Humanities Fellowships and Stipends	(44,3		-
onal Endowment for the Humanities	Direct		FA-251067-17	45.160	Promotion of the Humanities Fellowships and Stipends	38,9	71	-
onal Endowment for the Humanities	Direct		FA-251469-17	45.160	Promotion of the Humanities Fellowships and Stipends	112,		-
onal Endowment for the Humanities	Direct		FZ-256488-17	45.160	Promotion of the Humanities Fellowships and Stipends	47,2		
1E 1 46 4 H- 2	D' - 4		DO 240704 17	45 171	D C Cd II. C D 1		250 \$	-
onal Endowment for the Humanities	Direct		RQ-249784-16	45.161	Promotion of the Humanities Research		17 \$	-
onal Endowment for the Humanities onal Endowment for the Humanities	Direct Pass-Through	American Musicological Society	RZ-249792-16 Award Letter Dated 11/12/14	45.161 45.161	Promotion of the Humanities Research Promotion of the Humanities Research	47,2 21,0		-
		•)43 \$	-
onal Endowment for the Humanities	Direct		EH-250823-16	45.163	Promotion of the Humanities Professional Development		90 \$	
onal Endowment for the Humanities	Direct	A	HZ-259485-18	45.169	Promotion of the Humanities Office of Digital Humanities		15 \$	-
onal Endowment for the Humanities	Pass-Through	American Musicological Society	Grant Agreement Total National Endowment for the Humanition	45.RD			40 \$ 79 \$	9,740
tute of Museum and Library Services	Direct		MA-30-16-0527-16	45.301	Museums for America	\$ 62.5	337 \$	_
tute of Museum and Library Services	Direct		LG-06-14-0122-14	45.312	National Leadership Grants		108 \$	7,157.00
ute of Museum and Library Services	Direct		LG-96-18-0040-18	45.312	National Leadership Grants		348	
ute of Museum and Library Services	Pass-Through	Arizona State University	17-092	45.312	National Leadership Grants	45,9		_
tute of Museum and Library Services	Pass-Through	Chicago Zoological Society	Indep Contractor Agrmt	45.312	National Leadership Grants	95,3		_
tute of Museum and Library Services	Pass-Through	Oregon State University	X0159A-E	45.312	National Leadership Grants		152	-
tute of Museum and Library Services	Pass-Through	Purdue University	4112-64403	45.312	National Leadership Grants		541	7.15
ute of Museum and Library Services	Direct		RE-00-15-0113-15	45.313	Laura Bush 21st Century Librarian Program		552 \$ 221 \$	7,15
tute of Museum and Library Services	Direct		RE-01-15-0086-15	45.313	Laura Bush 21st Century Librarian Program	125,0		_
ute of Museum and Library Services	Direct		RE-05-15-0021-15	45.313	Laura Bush 21st Century Librarian Program	191,8		-
tute of Museum and Library Services	Direct		RE-95-17-0104-17	45.313	Laura Bush 21st Century Librarian Program	53,5		
ute of Museum and Library Services	Pass-Through	Chicago Zoological Society	Agreement	45.RD			277 \$ 228 \$	<u>-</u>
,	8		Total Institute of Museum and Library Service				594 \$	7,15
nal Science Foundation	Direct		1240264	47.041	Engineering Grants	\$ 192,2	241 \$	5,037.0
onal Science Foundation	Direct		1454188	47.041	Engineering Grants	147,9		-
onal Science Foundation	Direct		1462060	47.041	Engineering Grants	56,2		10,26
onal Science Foundation	Direct		1462084	47.041	Engineering Grants	39,3		-
onal Science Foundation	Direct		1462267	47.041	Engineering Grants	51,0		-
nal Science Foundation	Direct		1462292	47.041	Engineering Grants	56,2		-
onal Science Foundation	Direct		1462363	47.041	Engineering Grants	30,0		-
nal Science Foundation	Direct		1462910	47.041	Engineering Grants	91,0		-
onal Science Foundation onal Science Foundation	Direct Direct		1463474 1500095	47.041 47.041	Engineering Grants Engineering Grants	3, ² 21, ⁸		-
onal Science Foundation	Direct		1500093	47.041	Engineering Grants	82,7		-
onal Science Foundation	Direct		1500377	47.041	Engineering Grants	206,2		_
onal Science Foundation	Direct		1507192	47.041	Engineering Grants	65,5		-
onal Science Foundation	Direct		1507928	47.041	Engineering Grants	55,3		47,25
onal Science Foundation	Direct		1508943	47.041	Engineering Grants	94,4		-
onal Science Foundation	Direct		1509354	47.041	Engineering Grants	77,5	574	-
onal Science Foundation	Direct		1509691	47.041	Engineering Grants	177,0		-
onal Science Foundation	Direct		1510788	47.041	Engineering Grants	15,9		-
onal Science Foundation	Direct		1511720	47.041	Engineering Grants	46,		-
onal Science Foundation	Direct		1511834	47.041 47.041	Engineering Grants	·)94 .52	-
			1.5000007	47 041	Engineering Grants	55	57	
onal Science Foundation	Direct		1523287		e e	55,1		1 = 10
tional Science Foundation tional Science Foundation tional Science Foundation	Direct Direct Direct		1523287 1531533 1533557	47.041 47.041 47.041	Engineering Grants Engineering Grants	85,0 165,0	070	15,495

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
National Science Foundation	Direct		1536087	47.041	Engineering Grants	91,804	-
National Science Foundation National Science Foundation	Direct		1536188 1536444	47.041	Engineering Grants	159,668 91,802	-
National Science Foundation National Science Foundation	Direct Direct		1536603	47.041 47.041	Engineering Grants Engineering Grants	18,992	- -
National Science Foundation	Direct		1536834	47.041	Engineering Grants	129,238	_
National Science Foundation	Direct		1536924	47.041	Engineering Grants	75,604	-
National Science Foundation	Direct		1537222	47.041	Engineering Grants	101,235	-
National Science Foundation	Direct		1537360	47.041	Engineering Grants	189,572	-
National Science Foundation	Direct		1537440	47.041	Engineering Grants	62,067	-
National Science Foundation National Science Foundation	Direct Direct		1537582 1537711	47.041 47.041	Engineering Grants Engineering Grants	174,079 168,588	-
National Science Foundation	Direct		1538/11	47.041	Engineering Grants	7,115	- -
National Science Foundation	Direct		1542020	47.041	Engineering Grants	25,346	25,346
National Science Foundation	Direct		1547073	47.041	Engineering Grants	71,927	-
National Science Foundation	Direct		1547091	47.041	Engineering Grants	138,550	-
National Science Foundation	Direct		1547987	47.041	Engineering Grants	4,630	-
National Science Foundation National Science Foundation	Direct Direct		1548201 1549670	47.041 47.041	Engineering Grants	69,707 107,747	-
National Science Foundation National Science Foundation	Direct		1552534	47.041 47.041	Engineering Grants Engineering Grants	1,819,051	- -
National Science Foundation	Direct		1552545	47.041	Engineering Grants	43,788	_
National Science Foundation	Direct		1552580	47.041	Engineering Grants	173,356	-
National Science Foundation	Direct		1553831	47.041	Engineering Grants	191,179	-
National Science Foundation	Direct		1553860	47.041	Engineering Grants	142,415	-
National Science Foundation	Direct		1553873	47.041	Engineering Grants	3,545	-
National Science Foundation National Science Foundation	Direct Direct		1554349 1555983	47.041 47.041	Engineering Grants Engineering Grants	84,078 11,760	-
National Science Foundation National Science Foundation	Direct		1559706	47.041 47.041	Engineering Grants Engineering Grants	4,982	-
National Science Foundation	Direct		1561791	47.041	Engineering Grants	61,619	_
National Science Foundation	Direct		1561794	47.041	Engineering Grants	154,129	-
National Science Foundation	Direct		1562209	47.041	Engineering Grants	108,635	-
National Science Foundation	Direct		1562254	47.041	Engineering Grants	165,537	-
National Science Foundation	Direct		1562297	47.041	Engineering Grants	94,335	-
National Science Foundation National Science Foundation	Direct Direct		1562388 1562612	47.041 47.041	Engineering Grants	74,487 121,505	-
National Science Foundation National Science Foundation	Direct		1565355	47.041 47.041	Engineering Grants Engineering Grants	98,405	- -
National Science Foundation	Direct		1565863	47.041	Engineering Grants	97,231	_
National Science Foundation	Direct		1602183	47.041	Engineering Grants	162,474	-
National Science Foundation	Direct		1604069	47.041	Engineering Grants	107,768	-
National Science Foundation	Direct		1604903	47.041	Engineering Grants	39,140	-
National Science Foundation	Direct		1605202	47.041	Engineering Grants	108,290	-
National Science Foundation National Science Foundation	Direct Direct		1606577 1607250	47.041 47.041	Engineering Grants Engineering Grants	(9,892) 143,007	16,180
National Science Foundation	Direct		1608338	47.041	Engineering Grants Engineering Grants	164,453	10,180
National Science Foundation	Direct		1608361	47.041	Engineering Grants	93,748	_
National Science Foundation	Direct		1620313	47.041	Engineering Grants	(22,253)	-
National Science Foundation	Direct		1621135	47.041	Engineering Grants	9,402	-
National Science Foundation	Direct		1622890	47.041	Engineering Grants	(1,073)	-
National Science Foundation	Direct		1623572	47.041	Engineering Grants	12,556	-
National Science Foundation National Science Foundation	Direct Direct		1632974 1634505	47.041 47.041	Engineering Grants Engineering Grants	(522) 84,159	-
National Science Foundation	Direct		1634545	47.041	Engineering Grants Engineering Grants	117,653	- -
National Science Foundation	Direct		1634676	47.041	Engineering Grants	57,823	-
National Science Foundation	Direct		1634680	47.041	Engineering Grants	79,541	-
National Science Foundation	Direct		1634694	47.041	Engineering Grants	156,305	-
National Science Foundation	Direct		1634824	47.041	Engineering Grants	83,799	-
National Science Foundation	Direct		1636132	47.041	Engineering Grants	63,562	-
National Science Foundation National Science Foundation	Direct Direct		1636876 1638199	47.041 47.041	Engineering Grants Engineering Grants	57,615 113,539	-
National Science Foundation	Direct		1639244	47.041	Engineering Grants	760,113	259,854
National Science Foundation	Direct		1640417	47.041	Engineering Grants	72,335	-
National Science Foundation	Direct		1640633	47.041	Engineering Grants	156,539	-
National Science Foundation	Direct		1643280	47.041	Engineering Grants	871,732	337,577
National Science Foundation	Direct		1643479	47.041	Engineering Grants	(1,408)	-
National Science Foundation	Direct		1645229 1645870	47.041	Engineering Grants	126,306	-
National Science Foundation National Science Foundation	Direct Direct		1645870 1648870	47.041 47.041	Engineering Grants Engineering Grants	(192) 66,360	-
National Science Foundation	Direct		1649879	47.041	Engineering Grants Engineering Grants	(10,980)	-
National Science Foundation	Direct		1650488	47.041	Engineering Grants	5,231	-
National Science Foundation	Direct		1653339	47.041	Engineering Grants	1,537	-
National Science Foundation	Direct		1661568	47.041	Engineering Grants	68,346	-
National Science Foundation	Direct		1662774	47.041	Engineering Grants	40,774	-
National Science Foundation	Direct		1663288	47.041	Engineering Grants	14,602	-
National Science Foundation National Science Foundation	Direct		1700848 1701057	47.041 47.041	Engineering Grants	90,038	-
National Science Foundation National Science Foundation	Direct Direct		1701057	47.041 47.041	Engineering Grants Engineering Grants	106,287 52,048	-
National Science Foundation	Direct		1701343	47.041	Engineering Grants Engineering Grants	10,604	-
National Science Foundation	Direct		1703435	47.041	Engineering Grants	51,240	-
National Science Foundation	Direct		1703543	47.041	Engineering Grants	63,018	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	8	Federal Expenditures	Pass-Through
National Science Foundation	Direct		1705273	47.041	Engineering Grants	36,602	-
National Science Foundation	Direct		1707232	47.041	Engineering Grants	12,036	-
National Science Foundation National Science Foundation	Direct Direct		1708700 1708706	47.041 47.041	Engineering Grants	317,226 86,890	-
National Science Foundation	Direct		1709094	47.041	Engineering Grants Engineering Grants	95,788	-
National Science Foundation	Direct		1709207	47.041	Engineering Grants Engineering Grants	80,243	- -
National Science Foundation	Direct		1713736	47.041	Engineering Grants	117	-
National Science Foundation	Direct		1719868	47.041	Engineering Grants	49,999	-
National Science Foundation	Direct		1724168	47.041	Engineering Grants	88,537	-
National Science Foundation	Direct		1726524	47.041	Engineering Grants	6,575	-
National Science Foundation	Direct		1727371	47.041	Engineering Grants	11,239	-
National Science Foundation	Direct		1727618	47.041	Engineering Grants	36,765	=
National Science Foundation National Science Foundation	Direct Direct		1727918 1730549	47.041 47.041	Engineering Grants Engineering Grants	134,902 9,848	-
National Science Foundation National Science Foundation	Direct		1733665	47.041	Engineering Grants Engineering Grants	39,458	_
National Science Foundation	Direct		1738207	47.041	Engineering Grants	11,200	_ _
National Science Foundation	Direct		1740497	47.041	Engineering Grants	9,510	_
National Science Foundation	Direct		1740865	47.041	Engineering Grants	53,766	-
National Science Foundation	Direct		1741618	47.041	Engineering Grants	218,714	112,240
National Science Foundation	Direct		1745710	47.041	Engineering Grants	22,617	-
National Science Foundation	Direct		1745742	47.041	Engineering Grants	11,455	-
National Science Foundation	Direct		1745866	47.041	Engineering Grants	24,951	-
National Science Foundation	Direct		1748414	47.041	Engineering Grants	61,099	-
National Science Foundation	Direct		1751093 1751426	47.041 47.041	Engineering Grants	14,341	-
National Science Foundation National Science Foundation	Direct Direct		1751426 1751590	47.041 47.041	Engineering Grants Engineering Grants	24,039 990	-
National Science Foundation	Direct		1751390	47.041	Engineering Grants Engineering Grants	10,480	-
National Science Foundation	Direct		1760247	47.041	Engineering Grants	93,515	-
National Science Foundation	Direct		1813963	47.041	Engineering Grants	31,624	-
National Science Foundation	Direct		1824635	47.041	Engineering Grants	19,816	-
National Science Foundation	Direct		1826621	47.041	Engineering Grants	4,049	-
National Science Foundation	Direct		CBET 1067450	47.041	Engineering Grants	(901)	-
National Science Foundation	Direct		CBET 1253157	47.041	Engineering Grants	25,215	-
National Science Foundation	Direct		CBET 1332252	47.041	Engineering Grants	(26)	-
National Science Foundation	Direct		CBET 1332807	47.041	Engineering Grants	58,474	-
National Science Foundation National Science Foundation	Direct		CBET 1335878 CBET 1336375	47.041 47.041	Engineering Grants	21,198	-
National Science Foundation	Direct Direct		CBET 1336387	47.041	Engineering Grants Engineering Grants	(219) (1,483)	
National Science Foundation	Direct		CBET 1336636	47.041	Engineering Grants	(322)	
National Science Foundation	Direct		CBET 1336719	47.041	Engineering Grants	66,738	_
National Science Foundation	Direct		CBET 1349921	47.041	Engineering Grants	55,989	-
National Science Foundation	Direct		CBET 1351188	47.041	Engineering Grants	52,988	-
National Science Foundation	Direct		CBET 1351482	47.041	Engineering Grants	36,082	-
National Science Foundation	Direct		CBET 1402845	47.041	Engineering Grants	130,136	-
National Science Foundation	Direct		CBET 1403777	47.041	Engineering Grants	(4,412)	-
National Science Foundation	Direct		CBET 1435269	47.041	Engineering Grants	78,251	-
National Science Foundation National Science Foundation	Direct		CBET 1436056 CBET 1437601	47.041 47.041	Engineering Grants	54,721 126,587	-
National Science Foundation	Direct Direct		CBET 1437601 CBET 1438560	47.041	Engineering Grants Engineering Grants	62,444	-
National Science Foundation	Direct		CBET-1402707	47.041	Engineering Grants	62,523	- -
National Science Foundation	Direct		CBET-1403339	47.041	Engineering Grants	122,477	_
National Science Foundation	Direct		CBET-1553028	47.041	Engineering Grants	95,070	-
National Science Foundation	Direct		CBET-1604087	47.041	Engineering Grants	18,310	-
National Science Foundation	Direct		CBET-1653080	47.041	Engineering Grants	68,452	-
National Science Foundation	Direct		CBET-1653611	47.041	Engineering Grants	190,742	-
National Science Foundation	Direct		CBET-1817353	47.041	Engineering Grants	3,086	-
National Science Foundation	Direct		CMMI 1232683	47.041	Engineering Grants	(2,581)	-
National Science Foundation National Science Foundation	Direct Direct		CMMI 1233108 CMMI 1253440	47.041 47.041	Engineering Grants Engineering Grants	62,200 129,227	-
National Science Foundation National Science Foundation	Direct		CMMI 1300010	47.041	Engineering Grants Engineering Grants	135,909	-
National Science Foundation	Direct		CMMI 1300010 CMMI 1300319	47.041	Engineering Grants	(12,614)	- -
National Science Foundation	Direct		CMMI 1327316	47.041	Engineering Grants	182,722	-
National Science Foundation	Direct		CMMI 1333260	47.041	Engineering Grants	(476)	-
National Science Foundation	Direct		CMMI 1334204	47.041	Engineering Grants	(7,457)	-
National Science Foundation	Direct		CMMI 1334272	47.041	Engineering Grants	779	-
National Science Foundation	Direct		CMMI 1334340	47.041	Engineering Grants	7,809	-
National Science Foundation	Direct		CMMI 1334394	47.041	Engineering Grants	(2,387)	-
National Science Foundation	Direct		CMMI 1344908	47.041	Engineering Grants	41,605	-
National Science Foundation National Science Foundation	Direct Direct		CMMI 1344372 CMMI 1350202	47.041 47.041	Engineering Grants	40,185 71,121	-
National Science Foundation National Science Foundation	Direct Direct		CMMI 1350202 CMMI 1351403	47.041 47.041	Engineering Grants Engineering Grants	/1,121 68,281	-
National Science Foundation	Direct		CMMI 1351403 CMMI 1351412	47.041	Engineering Grants Engineering Grants	177,922	- -
National Science Foundation	Direct		CMMI 1351412 CMMI 1362003	47.041	Engineering Grants	37,557	-
National Science Foundation	Direct		CMMI 1362503 CMMI 1362513	47.041	Engineering Grants	45,362	-
National Science Foundation	Direct		CMMI 1362547	47.041	Engineering Grants	121,267	-
National Science Foundation	Direct		CMMI 1362754	47.041	Engineering Grants	32,317	-
National Science Foundation	Direct		CMMI 1362975	47.041	Engineering Grants	89,277	-
National Science Foundation	Direct		CMMI 1404747	47.041	Engineering Grants	92,494	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation	Direct		CMMI 1433066	47.041	Engineering Grants	119,575	-
National Science Foundation	Direct		CMMI 1434693	47.041	Engineering Grants	47,798	-
National Science Foundation	Direct		CMMI 1435188	47.041	Engineering Grants	104,150	-
National Science Foundation National Science Foundation	Direct		CMMI 1435222 CMMI 1436631	47.041	Engineering Grants	1,746	-
National Science Foundation National Science Foundation	Direct Direct		CMMI 1436631 CMMI 1634709	47.041 47.041	Engineering Grants Engineering Grants	96,194 146,376	-
Vational Science Foundation	Direct		CMMI 1634709 CMMI 1638197	47.041	Engineering Grants Engineering Grants	68,436	-
Vational Science Foundation	Direct		CMMI 1638197 CMMI 1647517	47.041	Engineering Grants	15,253	1,411
National Science Foundation	Direct		CMMI1265164	47.041	Engineering Grants	(6,580)	-
Vational Science Foundation	Direct		CMMI-1266063	47.041	Engineering Grants	(1,854)	_
National Science Foundation	Direct		CMMI-1350605	47.041	Engineering Grants	15,774	_
National Science Foundation	Direct		CMMI-1351456	47.041	Engineering Grants	53,842	_
National Science Foundation	Direct		CMMI-1351469	47.041	Engineering Grants	57,192	-
National Science Foundation	Direct		CMMI-1453346	47.041	Engineering Grants	47,891	-
National Science Foundation	Direct		CMMI-1523453	47.041	Engineering Grants	(3,278)	-
National Science Foundation	Direct		CNS 1253172	47.041	Engineering Grants	143,022	-
Vational Science Foundation	Direct		ECCS 1055308	47.041	Engineering Grants	(3)	-
National Science Foundation	Direct		ECCS 1227879	47.041	Engineering Grants	50,186	-
National Science Foundation	Direct		ECCS 1254468	47.041	Engineering Grants	3,515	-
National Science Foundation	Direct		ECCS 1303499	47.041	Engineering Grants	(34,707)	2,913
National Science Foundation	Direct		ECCS 1307754	47.041	Engineering Grants	(1,214)	-
National Science Foundation	Direct		ECCS 1343720	47.041	Engineering Grants	114,990	-
National Science Foundation	Direct		ECCS 1404814	47.041	Engineering Grants	87,267	-
National Science Foundation	Direct		ECCS 1405870	47.041	Engineering Grants	(8,281)	-
National Science Foundation	Direct		ECCS 1407580	47.041	Engineering Grants	53,760	-
National Science Foundation	Direct		ECCS 1407967	47.041	Engineering Grants	11,259	-
National Science Foundation	Direct		ECCS 1428069	47.041	Engineering Grants	15,782	-
National Science Foundation National Science Foundation	Direct		ECCS 1446521 ECCS 1607796	47.041	Engineering Grants	115,874 84,060	-
National Science Foundation National Science Foundation	Direct		ECCS 1607/96 ECCS-1452916	47.041 47.041	Engineering Grants	103,861	-
National Science Foundation	Direct Direct		ECCS-1432910 ECCS-1610362	47.041 47.041	Engineering Grants	125,873	-
National Science Foundation National Science Foundation	Direct		ECCS-1610302 ECCS-1644731	47.041	Engineering Grants Engineering Grants	54,497	-
Vational Science Foundation	Direct		EEC 1159345	47.041	Engineering Grants Engineering Grants	(6,331)	-
Vational Science Foundation	Direct		EEC 1264551	47.041	Engineering Grants	35,007	_
Vational Science Foundation	Direct		EEC-1204331 EEC-1329217	47.041	Engineering Grants Engineering Grants	92	_
National Science Foundation	Direct		EECCS 1407977	47.041	Engineering Grants	181,799	25,000
National Science Foundation	Direct		EFRI 1332342	47.041	Engineering Grants	229,403	-
National Science Foundation	Direct		IIP 1134676	47.041	Engineering Grants	881	_
National Science Foundation	Pass-Through	Boston University	4500002489/4500002490	47.041	Engineering Grants	229,667	_
National Science Foundation	Pass-Through	Care Progress LLC	Roundtable Research Agreeement	47.041	Engineering Grants	40,261	-
National Science Foundation	Pass-Through	FlexDex, Inc.	FlexDex-Ps	47.041	Engineering Grants	(1,317)	_
National Science Foundation	Pass-Through	Florida State University	R01736	47.041	Engineering Grants	2,177	-
National Science Foundation	Pass-Through	Iowa State University	420-72-34/I9 69672 23	47.041	Engineering Grants	148,102	-
National Science Foundation	Pass-Through	Iowa State University	4207275B	47.041	Engineering Grants	71,312	-
National Science Foundation	Pass-Through	Kettering University	531098A/PO#P0036341	47.041	Engineering Grants	18,153	-
National Science Foundation	Pass-Through	North Carolina State University	2012-1067-04	47.041	Engineering Grants	148,299	-
National Science Foundation	Pass-Through	North Carolina State University	2015-0995-01	47.041	Engineering Grants	73,137	-
National Science Foundation	Pass-Through	North Carolina State University	2018-0906-01	47.041	Engineering Grants	60,465	-
National Science Foundation	Pass-Through	Ohio State University, The	60061807	47.041	Engineering Grants	86,564	-
National Science Foundation	Pass-Through	Oklahoma State University	1-565747-MICH	47.041	Engineering Grants	49,247	-
National Science Foundation	Pass-Through	PhasiQ, Inc.	Roundtable Research Agreement	47.041	Engineering Grants	(624)	-
National Science Foundation	Pass-Through	Stanford University	60447212-111120-B	47.041	Engineering Grants	6,036	-
National Science Foundation	Pass-Through	Texas A & M University	C8321	47.041	Engineering Grants	55,982	-
National Science Foundation	Pass-Through	University of California - Santa Barbara	KK1822	47.041	Engineering Grants	84,210	-
National Science Foundation	Pass-Through	University of Colorado	1549958 PO#1000175809	47.041	Engineering Grants	46,734	-
National Science Foundation National Science Foundation	Pass-Through	University of Florida, The	UFDSP00011776 A0005262101	47.041	Engineering Grants	8,071	-
National Science Foundation National Science Foundation	Pass-Through	University of Minnesota University of Southern California	88868935	47.041 47.041	Engineering Grants	248,594 39,177	-
Vational Science Foundation	Pass-Through	University of Southern California	91665631	47.041	Engineering Grants Engineering Grants	147,589	15,044
National Science Foundation	Pass-Through Pass-Through	University of Washington	UWSC9408	47.041 47.041	Engineering Grants Engineering Grants	21,830	13,044
National Science Foundation	Pass-Through	Vanderbilt University	UNIV59840	47.041	Engineering Grants Engineering Grants	14,744	-
Vational Science Foundation	Pass-Through	Venturewell	Agreement for Services	47.041	Engineering Grants Engineering Grants	8,000	
National Science i dundation	1 ass-1 iii ougii	venturewen	Agreement for Services	77.071	Engineering Grants	\$ 19,369,483	\$ 909,722
National Science Foundation	Direct		1452392	47.049	Mathematical and Physical Sciences	\$ 92,591	
Vational Science Foundation	Direct		1452636	47.049	Mathematical and Physical Sciences	174,433	-
National Science Foundation	Direct		1453893	47.049	Mathematical and Physical Sciences	142,817	-
National Science Foundation	Direct		1453894	47.049	Mathematical and Physical Sciences	92,771	-
National Science Foundation	Direct		1454010	47.049	Mathematical and Physical Sciences	89,885	-
National Science Foundation	Direct		1460331	47.049	Mathematical and Physical Sciences	92,378	-
National Science Foundation	Direct		1460990	47.049	Mathematical and Physical Sciences	91,161	-
National Science Foundation	Direct		1462368	47.049	Mathematical and Physical Sciences	88,928	-
National Science Foundation	Direct		1464477	47.049	Mathematical and Physical Sciences	138,153	-
Vational Science Foundation	Direct		1464514	47.049	Mathematical and Physical Sciences	88,608	-
National Science Foundation	Direct		1464584	47.049	Mathematical and Physical Sciences	110,931	-
Vational Science Foundation	Direct		1464693	47.049	Mathematical and Physical Sciences	88,201	-
tational science i canadion				47.049			
	Direct		1464696	47.049	Mathematical and Physical Sciences	50,831	-
National Science Foundation National Science Foundation	Direct Direct		1500142	47.049 47.049	Mathematical and Physical Sciences	87,744	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation	Direct		1501625	47.049	Mathematical and Physical Sciences	65,179	-
ational Science Foundation	Direct		1505385	47.049	Mathematical and Physical Sciences	51,630	-
ational Science Foundation	Direct		1505458	47.049	Mathematical and Physical Sciences	325,729	-
lational Science Foundation	Direct		1505635	47.049	Mathematical and Physical Sciences	114,275	-
ational Science Foundation	Direct		1505932	47.049	Mathematical and Physical Sciences	322,111	-
ational Science Foundation	Direct		1506021	47.049	Mathematical and Physical Sciences	222,680	-
ational Science Foundation	Direct		1506055	47.049	Mathematical and Physical Sciences	49,018	-
ational Science Foundation	Direct		1506093	47.049	Mathematical and Physical Sciences	113,063	-
ational Science Foundation	Direct		1506117	47.049	Mathematical and Physical Sciences	84,680	15,00
ational Science Foundation	Direct		1506273	47.049	Mathematical and Physical Sciences	277,480	-
ational Science Foundation	Direct		1506540	47.049	Mathematical and Physical Sciences	264,928	-
ational Science Foundation	Direct		1507033	47.049	Mathematical and Physical Sciences	233,686	135,88
ational Science Foundation	Direct		1508485	47.049	Mathematical and Physical Sciences	87,121	-
ational Science Foundation	Direct		1508492	47.049	Mathematical and Physical Sciences	143,702	32,46
ational Science Foundation	Direct		1510429	47.049	Mathematical and Physical Sciences	49,017	-
tional Science Foundation	Direct		1513040	47.049	Mathematical and Physical Sciences	67,797	-
ational Science Foundation	Direct		1513054	47.049	Mathematical and Physical Sciences	105,270	-
tional Science Foundation	Direct		1513379	47.049	Mathematical and Physical Sciences	165,772	-
tional Science Foundation	Direct		1513595	47.049	Mathematical and Physical Sciences	51,400	-
tional Science Foundation	Direct		1514670	47.049	Mathematical and Physical Sciences	82,698	-
tional Science Foundation	Direct		1514835	47.049	Mathematical and Physical Sciences	131,280	-
ational Science Foundation	Direct		1514838	47.049	Mathematical and Physical Sciences	122,449	-
ational Science Foundation	Direct		1515001	47.049	Mathematical and Physical Sciences	75,755	-
ational Science Foundation	Direct		1515161	47.049	Mathematical and Physical Sciences	150,788	-
ational Science Foundation	Direct		1516075	47.049	Mathematical and Physical Sciences	105,310	-
ational Science Foundation	Direct		1519117	47.049	Mathematical and Physical Sciences	123,510	-
ational Science Foundation	Direct		1521158	47.049	Mathematical and Physical Sciences	46,438	-
ational Science Foundation	Direct		1521551	47.049	Mathematical and Physical Sciences	112,142	-
ational Science Foundation	Direct		1534221	47.049	Mathematical and Physical Sciences	99,997	-
ational Science Foundation	Direct		1535628	47.049	Mathematical and Physical Sciences	149,902	-
ntional Science Foundation	Direct		1539709	47.049	Mathematical and Physical Sciences	66,795	-
tional Science Foundation	Direct		1551994	47.049	Mathematical and Physical Sciences	104,574	-
tional Science Foundation	Direct		1564457	47.049	Mathematical and Physical Sciences	52,398	-
tional Science Foundation	Direct		1565795	47.049	Mathematical and Physical Sciences	154,925	-
tional Science Foundation	Direct		1565837	47.049	Mathematical and Physical Sciences	232,871	-
ational Science Foundation	Direct		1566460	47.049	Mathematical and Physical Sciences	22,893	-
ational Science Foundation	Direct		1600138	47.049	Mathematical and Physical Sciences	42,334	=
ational Science Foundation	Direct		1600223	47.049	Mathematical and Physical Sciences	99,071	-
ational Science Foundation	Direct		1606348	47.049	Mathematical and Physical Sciences	63,644	-
tional Science Foundation	Direct		1606553	47.049	Mathematical and Physical Sciences	99,978	-
tional Science Foundation	Direct		1607260	47.049	Mathematical and Physical Sciences	115,860	-
tional Science Foundation	Direct		1607570	47.049	Mathematical and Physical Sciences	86,626	-
tional Science Foundation	Direct		1607779	47.049	Mathematical and Physical Sciences	108,849	=
tional Science Foundation	Direct		1608331	47.049	Mathematical and Physical Sciences	190,179	-
tional Science Foundation	Direct		1609051	47.049	Mathematical and Physical Sciences	105,983	-
tional Science Foundation	Direct		1609840	47.049	Mathematical and Physical Sciences	132,457	-
tional Science Foundation	Direct		1610344	47.049	Mathematical and Physical Sciences	78,460	-
tional Science Foundation	Direct		1610742	47.049	Mathematical and Physical Sciences	172,344	-
tional Science Foundation	Direct		1613536	47.049	Mathematical and Physical Sciences	66,036	-
tional Science Foundation	Direct		1622768	47.049	Mathematical and Physical Sciences	113,894	-
tional Science Foundation	Direct		1641065	47.049	Mathematical and Physical Sciences	37,471	-
tional Science Foundation	Direct		1643145	47.049	Mathematical and Physical Sciences	3,458	-
tional Science Foundation	Direct		1649873	47.049	Mathematical and Physical Sciences	336,180	-
tional Science Foundation	Direct		1653433	47.049	Mathematical and Physical Sciences	89,194	-
tional Science Foundation	Direct		1654149	47.049	Mathematical and Physical Sciences	65,683	-
ional Science Foundation	Direct		1659393	47.049	Mathematical and Physical Sciences	209,505	-
ional Science Foundation	Direct		1664531	47.049	Mathematical and Physical Sciences	65,541	-
tional Science Foundation	Direct		1701622	47.049	Mathematical and Physical Sciences	110,491	-
tional Science Foundation	Direct		1705418	47.049	Mathematical and Physical Sciences	84,865	-
tional Science Foundation	Direct		1707260	47.049	Mathematical and Physical Sciences	9,525	-
tional Science Foundation	Direct		1707377	47.049	Mathematical and Physical Sciences	152,492	9,99
tional Science Foundation	Direct		1707620	47.049	Mathematical and Physical Sciences	60,681	-
tional Science Foundation	Direct		1707640	47.049	Mathematical and Physical Sciences	157,985	-
tional Science Foundation	Direct		1708043	47.049	Mathematical and Physical Sciences	124,463	-
tional Science Foundation	Direct		1708062	47.049	Mathematical and Physical Sciences	171,214	-
tional Science Foundation	Direct		1709163	47.049	Mathematical and Physical Sciences	1,030	-
tional Science Foundation	Direct		1710848	47.049	Mathematical and Physical Sciences	99,912	-
tional Science Foundation	Direct		1712933	47.049	Mathematical and Physical Sciences	44,734	-
tional Science Foundation	Direct		1715140	47.049	Mathematical and Physical Sciences	114,416	-
tional Science Foundation	Direct		1719727	47.049	Mathematical and Physical Sciences	89,780	_
tional Science Foundation	Direct		1725482	47.049	Mathematical and Physical Sciences	233,245	-
tional Science Foundation	Direct		1726457	47.049	Mathematical and Physical Sciences	36,142	-
tional Science Foundation	Direct		1743665	47.049	Mathematical and Physical Sciences	1,735	_
tional Science Foundation	Direct		1744105	47.049	Mathematical and Physical Sciences	74,184	_
	Direct		1757523	47.049	Mathematical and Physical Sciences	48,322	-
tional Science Foundation	211000		1131343	∀/.∪ ₹/	1.1441011441041 4II4 1 Hysical Bolchoos	70,322	=
			1818766	47 049	Mathematical and Physical Sciences	226	_
ntional Science Foundation ntional Science Foundation ntional Science Foundation	Direct Direct		1818766 AST 1210973	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	226 (9,335)	-

National Science Foundation	Direct	AST 1312997 AST 1344133 AST 1412144 AST 1412730 AST1411154 CHE 1124724 CHE 1230236 CHE 1252322 CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120 CHE 1412759	47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049	Mathematical and Physical Sciences	61,555 63,957 130,973 4,471 35,448 14,841 217,702 105,700 52,078 55,698 150,905	- 46,218 - - - - 10,134 - -
National Science Foundation	Direct	AST 1412144 AST 1412730 AST1411154 CHE 1124724 CHE 1230236 CHE 1252322 CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049	Mathematical and Physical Sciences	130,973 4,471 35,448 14,841 217,702 105,700 52,078 55,698 150,905	10,134
National Science Foundation	Direct	AST 1412730 AST1411154 CHE 1124724 CHE 1230236 CHE 1252322 CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049 47.049 47.049 47.049 47.049 47.049	Mathematical and Physical Sciences	4,471 35,448 14,841 217,702 105,700 52,078 55,698 150,905	10,134
National Science Foundation	Direct	AST1411154 CHE 1124724 CHE 1230236 CHE 1252322 CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049 47.049 47.049 47.049 47.049	Mathematical and Physical Sciences	35,448 14,841 217,702 105,700 52,078 55,698 150,905	10,134
National Science Foundation	Direct	CHE 1124724 CHE 1230236 CHE 1252322 CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049 47.049 47.049 47.049	Mathematical and Physical Sciences	14,841 217,702 105,700 52,078 55,698 150,905	10,134 - -
National Science Foundation	Direct	CHE 1230236 CHE 1252322 CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049 47.049 47.049	Mathematical and Physical Sciences	217,702 105,700 52,078 55,698 150,905	10,134
National Science Foundation	Direct	CHE 1252322 CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049 47.049	Mathematical and Physical Sciences	105,700 52,078 55,698 150,905	- -
National Science Foundation	Direct	CHE 1253384 CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences Mathematical and Physical Sciences Mathematical and Physical Sciences	52,078 55,698 150,905	-
National Science Foundation	Direct	CHE 1350060 CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences Mathematical and Physical Sciences	55,698 150,905	
National Science Foundation	Direct Direct Direct Direct Direct Direct Direct Direct Direct	CHE 1350877 CHE 1361542 CHE 1361779 CHE 1362120	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	150,905	_
National Science Foundation	Direct Direct Direct Direct Direct Direct Direct Direct	CHE 1361542 CHE 1361779 CHE 1362120	47.049	Mathematical and Physical Sciences		_
National Science Foundation	Direct Direct Direct Direct Direct Direct	CHE 1361779 CHE 1362120		•	4,012	_
National Science Foundation	Direct Direct Direct Direct Direct	CHE 1362120		Mathematical and Physical Sciences	38,884	_
National Science Foundation	Direct Direct Direct Direct		47.049	Mathematical and Physical Sciences	145,615	_
National Science Foundation National Science Foundation National Science Foundation National Science Foundation	Direct Direct Direct		47.049	Mathematical and Physical Sciences	(4,592)	_
National Science Foundation National Science Foundation National Science Foundation	Direct Direct	CHE 1428479	47.049	Mathematical and Physical Sciences	46,328	_
National Science Foundation National Science Foundation	Direct	CHE 1565782	47.049	Mathematical and Physical Sciences	172,092	_
National Science Foundation		CHE 1565840	47.049	Mathematical and Physical Sciences	197,781	-
National Science Foundation		CHE-1149670	47.049	Mathematical and Physical Sciences	9,051	_
	Direct	CHE-1607949	47.049	Mathematical and Physical Sciences	190,059	_
National Science Foundation	Direct	CHE-1608553	47.049	Mathematical and Physical Sciences	180,213	_
National Science Foundation	Direct	CHE-1654223	47.049	Mathematical and Physical Sciences	143,150	-
National Science Foundation	Direct	CHE-1664961	47.049	Mathematical and Physical Sciences	95,750	-
National Science Foundation	Direct	CHE-1664964	47.049	Mathematical and Physical Sciences	155,797	-
National Science Foundation	Direct	DMR 0906909	47.049	Mathematical and Physical Sciences	(555)	-
National Science Foundation	Direct	DMR 1056456	47.049	Mathematical and Physical Sciences	19,656	-
National Science Foundation	Direct	DMR 1106058	47.049	Mathematical and Physical Sciences	(732)	
National Science Foundation	Direct	DMR 1120923	47.049	Mathematical and Physical Sciences	917,876	66,660
National Science Foundation	Direct	DMR 1254314	47.049	Mathematical and Physical Sciences	147,322	-
National Science Foundation	Direct	DMR 1305749	47.049	Mathematical and Physical Sciences	(3,677)	
National Science Foundation	Direct	DMR 1306815	47.049	Mathematical and Physical Sciences	(854)	-
National Science Foundation	Direct	DMR 1307884	47.049	Mathematical and Physical Sciences	31,544	-
National Science Foundation	Direct	DMR 1352157	47.049	Mathematical and Physical Sciences	100,595	-
National Science Foundation	Direct	DMR 1403335	47.049	Mathematical and Physical Sciences	34,528	-
National Science Foundation	Direct	DMR 1408817	47.049	Mathematical and Physical Sciences	111,189	-
National Science Foundation	Direct	DMR 1409529	47.049	Mathematical and Physical Sciences	66,702	=
National Science Foundation	Direct	DMR 1409620	47.049	Mathematical and Physical Sciences	62,916	
National Science Foundation	Direct	DMR 1410282	47.049	Mathematical and Physical Sciences	113,125	
National Science Foundation National Science Foundation	Direct	DMR 1410461 DMR 1411014	47.049	Mathematical and Physical Sciences	76,778	
National Science Foundation National Science Foundation	Direct Direct	DMR 1411014 DMR 1411064	47.049 47.049	Mathematical and Physical Sciences	(44,146) (12,015)	
National Science Foundation	Direct	DMR-1253347	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	58,228	-
National Science Foundation National Science Foundation	Direct	DMR-1235347 DMR-1435965	47.049 47.049	Mathematical and Physical Sciences	167,953	-
National Science Foundation	Direct	DMR-1433903 DMR-1561008	47.049	Mathematical and Physical Sciences	201,552	-
National Science Foundation	Direct	DMR-1607854	47.049	Mathematical and Physical Sciences	27,252	
National Science Foundation	Direct	DMR-1625671	47.049	Mathematical and Physical Sciences	420,928	_
National Science Foundation	Direct	DMR-1709005	47.049	Mathematical and Physical Sciences	105,653	_
National Science Foundation	Direct	DMS 0943832	47.049	Mathematical and Physical Sciences	1,214	_
National Science Foundation	Direct	DMS 1045119	47.049	Mathematical and Physical Sciences	251,584	_
National Science Foundation	Direct	DMS 1054115	47.049	Mathematical and Physical Sciences	(1,727)	-
National Science Foundation	Direct	DMS 1160720	47.049	Mathematical and Physical Sciences	(48)	
National Science Foundation	Direct	DMS 1162181	47.049	Mathematical and Physical Sciences	(839)	
National Science Foundation	Direct	DMS 1253149	47.049	Mathematical and Physical Sciences	70,250	-
National Science Foundation	Direct	DMS 1265256	47.049	Mathematical and Physical Sciences	(3,655)	-
National Science Foundation	Direct	DMS 1265782	47.049	Mathematical and Physical Sciences	3,133	-
National Science Foundation	Direct	DMS 1266207	47.049	Mathematical and Physical Sciences	(218)	-
National Science Foundation	Direct	DMS 1303082	47.049	Mathematical and Physical Sciences	(4,203)	-
National Science Foundation	Direct	DMS 1306992	47.049	Mathematical and Physical Sciences	1,332	-
National Science Foundation	Direct	DMS 1307164	47.049	Mathematical and Physical Sciences	1,045	-
National Science Foundation	Direct	DMS 1307566	47.049	Mathematical and Physical Sciences	(1,342)	-
National Science Foundation	Direct	DMS 1308919	47.049	Mathematical and Physical Sciences	(403)	-
National Science Foundation	Direct	DMS 1316731	47.049	Mathematical and Physical Sciences	9,401	-
National Science Foundation	Direct	DMS 1317730	47.049	Mathematical and Physical Sciences	(1,302)	-
National Science Foundation	Direct	DMS 1351362	47.049	Mathematical and Physical Sciences	132,483	-
National Science Foundation	Direct	DMS 1361541	47.049	Mathematical and Physical Sciences	78,133	-
National Science Foundation	Direct	DMS 1401224	47.049	Mathematical and Physical Sciences	1,448	-
National Science Foundation	Direct	DMS 1401227	47.049	Mathematical and Physical Sciences	2,275	-
National Science Foundation	Direct	DMS 1401384	47.049	Mathematical and Physical Sciences	86,733	-
National Science Foundation	Direct	DMS 1405245	47.049	Mathematical and Physical Sciences	46,328	-
National Science Foundation	Direct	DMS 1406066	47.049	Mathematical and Physical Sciences	4,408	-
National Science Foundation	Direct	DMS 1406712	47.049	Mathematical and Physical Sciences	6,731	-
National Science Foundation	Direct	DMS 1407142	47.049	Mathematical and Physical Sciences	4,940	-
National Science Foundation	Direct	DMS 1407207	47.049 47.040	Mathematical and Physical Sciences	38,201 77,422	-
National Science Foundation	Direct	DMS 1407698	47.049	Mathematical and Physical Sciences	77,422	-
National Science Foundation	Direct	DMS 1411824	47.049 47.040	Mathematical and Physical Sciences	26,486	-
National Science Foundation	Direct	DMS 1417053	47.049 47.049	Mathematical and Physical Sciences	64,863	-
National Science Foundation National Science Foundation	Direct Direct	DMS 1418966 DMS 1422335	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	104,485 (3,832)	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation	Direct		DMS 1601229	47.049	Mathematical and Physical Sciences	93,223	-
National Science Foundation	Direct		DMS 1613819	47.049	Mathematical and Physical Sciences	27,596	-
National Science Foundation	Direct		DMS-1361789	47.049	Mathematical and Physical Sciences	(144)	-
National Science Foundation	Direct		DMS-1361791 DMS-1401380	47.049	Mathematical and Physical Sciences	12,476	-
National Science Foundation National Science Foundation	Direct Direct		DMS-1401380 DMS-1412119	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	8,641 (640)	-
National Science Foundation	Direct		DMS-1412119 DMS-1418964	47.049	Mathematical and Physical Sciences	(1,690)	-
National Science Foundation	Direct		DMS-1500750	47.049	Mathematical and Physical Sciences	(8)	- -
National Science Foundation	Direct		DMS-1564362	47.049	Mathematical and Physical Sciences	136,127	_
National Science Foundation	Direct		DMS1600011	47.049	Mathematical and Physical Sciences	121,987	-
National Science Foundation	Direct		DMS-1600494	47.049	Mathematical and Physical Sciences	49,674	-
National Science Foundation	Direct		DMS-1600665	47.049	Mathematical and Physical Sciences	(1,033)	-
National Science Foundation	Direct		DMS-1601844	47.049	Mathematical and Physical Sciences	78,002	-
National Science Foundation	Direct		DMS-1607840	47.049	Mathematical and Physical Sciences	86,785	-
National Science Foundation	Direct		DMS-1612549	47.049	Mathematical and Physical Sciences	6,893	-
National Science Foundation	Direct		DMS-1613170	47.049	Mathematical and Physical Sciences	65,319	-
National Science Foundation	Direct		DMS-1619907	47.049	Mathematical and Physical Sciences	120,688	-
National Science Foundation	Direct		DMS-1646108	47.049	Mathematical and Physical Sciences	412,562	-
National Science Foundation	Direct		DMS-1651294	47.049	Mathematical and Physical Sciences	26,660	-
National Science Foundation	Direct		DMS-1659203	47.049	Mathematical and Physical Sciences	68,310	-
National Science Foundation	Direct		DMS-1664692	47.049	Mathematical and Physical Sciences	90,659	-
National Science Foundation	Direct		DMS-1664722	47.049	Mathematical and Physical Sciences	84,858	-
National Science Foundation	Direct		DMS-1665088	47.049	Mathematical and Physical Sciences	23,000	-
National Science Foundation	Direct		DMS-1701437	47.049	Mathematical and Physical Sciences	53,989	-
National Science Foundation	Direct		DMS-1701576	47.049	Mathematical and Physical Sciences	139,202	-
National Science Foundation National Science Foundation	Direct		DMS-1701577	47.049	Mathematical and Physical Sciences	23,852	-
	Direct		DMS-1702114	47.049	Mathematical and Physical Sciences	24,783	-
National Science Foundation National Science Foundation	Direct		DMS-1707603 DMS-1712717	47.049 47.049	Mathematical and Physical Sciences	31,622	-
National Science Foundation National Science Foundation	Direct Direct		DMS-1/12/17 DMS1712962	47.049 47.049	Mathematical and Physical Sciences Mathematical and Physical Sciences	10,613 97,491	-
National Science Foundation	Direct		DMS-1714094	47.049	Mathematical and Physical Sciences	75,374	-
National Science Foundation	Direct		PHY 1205219	47.049	Mathematical and Physical Sciences	(886)	-
National Science Foundation	Direct		PHY 1205254	47.049	Mathematical and Physical Sciences	32,019	-
National Science Foundation	Direct		PHY 1262543	47.049	Mathematical and Physical Sciences	(53)	_
National Science Foundation	Direct		PHY 1358944	47.049	Mathematical and Physical Sciences	22,262	_
National Science Foundation	Direct		PHY 1360546	47.049	Mathematical and Physical Sciences	77,549	_
National Science Foundation	Direct		PHY 1401242	47.049	Mathematical and Physical Sciences	2,822	_
National Science Foundation	Direct		PHY 1402971	47.049	Mathematical and Physical Sciences	65,218	_
National Science Foundation	Direct		PHY 1413821	47.049	Mathematical and Physical Sciences	24,966	_
National Science Foundation	Direct		PHY 1417059	47.049	Mathematical and Physical Sciences	27,662	-
National Science Foundation	Direct		PHY 1559988	47.049	Mathematical and Physical Sciences	106,299	_
National Science Foundation		American Physical Society	INC-005-2016	47.049	Mathematical and Physical Sciences	477	_
National Science Foundation	Pass-Through B	Ball State University	G1108-UMD	47.049	Mathematical and Physical Sciences	12,648	-
National Science Foundation	Pass-Through C	Columbia University	1 GG012452-02	47.049	Mathematical and Physical Sciences	39,292	-
National Science Foundation	Pass-Through E	Eastern Illinois University	FY2017-01	47.049	Mathematical and Physical Sciences	23,457	-
National Science Foundation	Pass-Through E	Emory University	T439661	47.049	Mathematical and Physical Sciences	9,270	-
National Science Foundation	Pass-Through E	Emory University	T849744	47.049	Mathematical and Physical Sciences	160,956	-
National Science Foundation	_	Georgia State University	SP00011284-01	47.049	Mathematical and Physical Sciences	11,048	-
National Science Foundation	_	National Radio Astronomy Observatory	SOSPA4-004	47.049	Mathematical and Physical Sciences	30,362	-
National Science Foundation	•	Norfolk State University (NSU)	F1040044	47.049	Mathematical and Physical Sciences	23,286	-
National Science Foundation	•	Northwestern University	SP0024290-PROJ0009185/00933AST	47.049	Mathematical and Physical Sciences	115,016	-
National Science Foundation	•	Princeton University	SUB0000031	47.049	Mathematical and Physical Sciences	150,228	-
National Science Foundation	•	tony Brook University	76749/1136652/2/R&D	47.049	Mathematical and Physical Sciences	222,274	-
National Science Foundation	_	tony Brook University	76749/1136652/2/Tier2	47.049	Mathematical and Physical Sciences	673,995	292,813
National Science Foundation	_	Jniversity of Arizona	1655677	47.049	Mathematical and Physical Sciences	22,424	-
National Science Foundation		Jniversity of California - Santa Barbara	KK1516	47.049	Mathematical and Physical Sciences	67,162	-
National Science Foundation National Science Foundation	_	University of Massachusetts	17-009589B	47.049	Mathematical and Physical Sciences	7,008 64,276	-
	_	University of Massachusetts	18-010023 B	47.049	Mathematical and Physical Sciences	64,276	-
National Science Foundation	_	University of Toledo	F-2015-102	47.049	Mathematical and Physical Sciences	27,527	-
National Science Foundation	_	University of Washington	UWSC6733 420K976	47.049	Mathematical and Physical Sciences	218,671	-
National Science Foundation	Pass-Through U	University of Wisconsin	420K970	47.049	Mathematical and Physical Sciences	90,105	° 600 165
National Science Foundation	Direct		1408789	47.050	Geosciences	\$ 20,283,804 \$ 191,582	\$ 609,165 \$ 104,365.00
National Science Foundation	Direct		1415543	47.050	Geosciences	330,731	Ψ 107,303.00
National Science Foundation	Direct		1453543	47.050	Geosciences	123,668	48,040
National Science Foundation	Direct		1451372	47.050	Geosciences	50,140	
National Science Foundation	Direct		1452097	47.050	Geosciences	81,763	_
National Science Foundation	Direct		1459862	47.050	Geosciences	16,208	-
National Science Foundation	Direct		1460170	47.050	Geosciences	49,327	-
National Science Foundation	Direct		1501292	47.050	Geosciences	64,057	-
National Science Foundation	Direct		1502478	47.050	Geosciences	54,027	-
National Science Foundation	Direct		1503917	47.050	Geosciences	105,645	-
National Science Foundation	Direct		1504006	47.050	Geosciences	13,982	-
National Science Foundation	Direct		1524304	47.050	Geosciences	91,388	-
National Science Foundation	Direct		1524394	47.050	Geosciences	109,302	46,322
National Science Foundation	Direct		1524473	47.050	Geosciences	85,577	
	Direct		1526444	47.050	Geosciences	97,371	_
National Science Foundation	Direct		1320111	17.050	Geogetenees	77,371	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	- G	Federal Expenditures	Pass-Thro
onal Science Foundation	Direct		1536242	47.050	Geosciences	66,436	
onal Science Foundation	Direct		1540589	47.050	Geosciences	18,143	
onal Science Foundation	Direct		1540954	47.050	Geosciences	152,005	
onal Science Foundation	Direct		1621686	47.050	Geosciences	69,170	
onal Science Foundation	Direct		1629805	47.050	Geosciences	32,973	
nal Science Foundation nal Science Foundation	Direct		1637066	47.050	Geosciences	78,973	
onal Science Foundation	Direct		1639640 1650682	47.050	Geosciences Geosciences	89,942 70,071	
onal Science Foundation	Direct Direct		1654044	47.050 47.050	Geosciences	70,071 37,855	
onal Science Foundation	Direct Direct		1659248	47.050	Geosciences	46,052	
onal Science Foundation	Direct		1659338	47.050	Geosciences	112,307	
onal Science Foundation	Direct		1663770	47.050	Geosciences	86,362	
nal Science Foundation	Direct		1663800	47.050	Geosciences	65,727	
nal Science Foundation	Direct		1703019	47.050	Geosciences	95,073	
al Science Foundation	Direct		1724744	47.050	Geosciences	6,563	
al Science Foundation	Direct		1724744	47.050	Geosciences	284,798	
al Science Foundation	Direct		1736606	47.050	Geosciences	20,903	
al Science Foundation	Direct		1736629	47.050	Geosciences	91,423	
al Science Foundation	Direct		1738896	47.050	Geosciences	12,267	
Il Science Foundation	Direct		1744367	47.050	Geosciences	13,357	
Il Science Foundation	Direct		1744307	47.050	Geosciences	34,397	
			1829336			-	
l Science Foundation l Science Foundation	Direct			47.050 47.050	Geosciences	18,668	
Science Foundation Science Foundation	Direct Direct		AGS 1242830	47.050 47.050	Geosciences	3,952 8,088	
	Direct Direct		AGS 1242839	47.050	Geosciences	8,088	
Science Foundation	Direct		AGS 1255704	47.050	Geosciences	33,627	
Science Foundation	Direct		AGS 1257519	47.050	Geosciences	(385)	
Science Foundation	Direct		AGS 1262634	47.050	Geosciences	1,230	
Science Foundation	Direct		AGS 1265651	47.050	Geosciences	3,639	
Science Foundation	Direct		AGS 1322543	47.050	Geosciences	132,183	
Science Foundation	Direct		AGS 1342968	47.050	Geosciences	98,983	
Science Foundation	Direct		AGS 1344835	47.050	Geosciences	21,169	
Science Foundation	Direct		AGS 1358268	47.050	Geosciences	57,326	
Science Foundation	Direct		AGS-1602956	47.050	Geosciences	68,694	
Science Foundation	Direct		AGS-1738588	47.050	Geosciences	58,091	
Science Foundation	Direct		EAR 1049822	47.050	Geosciences	4,561	
Science Foundation	Direct		EAR 1151247	47.050	Geosciences	53,769	
Science Foundation	Direct		EAR 1211434	47.050	Geosciences	43,356	
Science Foundation	Direct		EAR 1246700	47.050	Geosciences	9,478	
Science Foundation	Direct		EAR 1249788	47.050	Geosciences	23,729	
Science Foundation	Direct		EAR 1250239	47.050	Geosciences	59,327	
Science Foundation	Direct		EAR 1337440	47.050	Geosciences	36,729	
Science Foundation	Direct		EAR 1338200	47.050	Geosciences	88,864	
Science Foundation	Direct		EAR 1344357	47.050	Geosciences	55,920	
Science Foundation	Direct		EAR 1416695	47.050	Geosciences	14,196	
Science Foundation	Direct		EAR 1422473	47.050	Geosciences	(805)	
Science Foundation	Direct		EAR 1426717	47.050	Geosciences	227	
Science Foundation	Direct		EAR 1550101	47.050	Geosciences	4,045	
Science Foundation	Direct		EAR 1551344	47.050	Geosciences	192,200	
Science Foundation	Direct		EAR 1565511	47.050	Geosciences	77,541	
Science Foundation	Direct		EAR 1640797	47.050	Geosciences	57,675	
Science Foundation	Direct		EAR 1644829	47.050	Geosciences	(392)	
Science Foundation	Direct		EAR 1719496	47.050	Geosciences	13,839	
Science Foundation	Direct		EAR-1338295	47.050	Geosciences	50,864	
Science Foundation	Direct		EAR1725025	47.050	Geosciences	64,857	
Science Foundation	Direct		GEO 1214416	47.050	Geosciences	(4,962)	
Science Foundation	Direct		ICER-1663769	47.050	Geosciences	59,727	
Science Foundation	Direct		OCE 1261443	47.050	Geosciences	30,101	
Science Foundation	Direct		OCE 1304327	47.050	Geosciences	90,162	
Science Foundation	Direct		OCE 1334727	47.050	Geosciences	8,280	
Science Foundation	Direct		OCE 1339783	47.050	Geosciences	22,100	
Science Foundation	Direct		OCE 1351837	47.050	Geosciences	87,329	
Science Foundation	Direct		OCE 1433710	47.050	Geosciences	37,281	
Science Foundation	Direct		OCE-1600012	47.050	Geosciences	448,507	
Science Foundation	Direct		OPP-1724585	47.050	Geosciences	60,049	
Science Foundation	Direct		PLR 1246702	47.050	Geosciences	(1,289)	
Science Foundation	Direct		PLR 1341568	47.050	Geosciences	80,265	
Science Foundation	Direct		PLR 1351745	47.050	Geosciences	34,640	
Science Foundation	Direct		PLR 1417668	47.050	Geosciences	69,167	
Science Foundation	Pass-Through Duke University		14-NSF-1028	47.050	Geosciences	90,691	
Science Foundation	Pass-Through Georgia Institute of Techn	ology	RG098-G2	47.050	Geosciences	185,367	
Science Foundation	Pass-Through Ohio State University, The		60031346	47.050	Geosciences	3,882	
Science Foundation	Pass-Through University of Arizona	-	125163	47.050	Geosciences	372	
Science Foundation	Pass-Through University of California -	Berkelev	00009256	47.050	Geosciences	123,994	
Science Foundation	Pass-Through University of Camorina - University of Camorina - University of Illinois-Urba	•	087882-16531	47.050	Geosciences	4,843	
Science Foundation Science Foundation	Pass-Through University of Inmois-Oroz University of Southern Ca		91265930	47.050 47.050	Geosciences	4,843 9,873	
Defence I Oundation	1 ass-1 mough Oniversity of Southern Ca	monia	91203930	47.030	Geosciences	\$ 5,852,590	\$
Science Foundation	Direct		1452099	47.070	Computer and Information Science and Engineering	\$ 5,852,590	
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Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	8	Federal Expenditures	Pass-Through
National Science Foundation	Direct		1452915	47.070	Computer and Information Science and Engineering	38,139	-
National Science Foundation National Science Foundation	Direct Direct		1453304 1505684	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	21,762	-
National Science Foundation	Direct		1505084	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	(396) 110,961	-
National Science Foundation	Direct		1513596	47.070	Computer and Information Science and Engineering	46,016	-
National Science Foundation	Direct		1513718	47.070	Computer and Information Science and Engineering	196,394	-
National Science Foundation	Direct		1514371	47.070	Computer and Information Science and Engineering	150,002	-
National Science Foundation	Direct		1514383	47.070	Computer and Information Science and Engineering	124,941	-
National Science Foundation National Science Foundation	Direct Direct		1515306 1518888	47.070 47.070	Computer and Information Science and Engineering	3,713 162,238	-
National Science Foundation	Direct		1522904	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	36,165	-
National Science Foundation	Direct		1525006	47.070	Computer and Information Science and Engineering	139,193	_
National Science Foundation	Direct		1525372	47.070	Computer and Information Science and Engineering	73,846	-
National Science Foundation	Direct		1526059	47.070	Computer and Information Science and Engineering	50,803	-
National Science Foundation	Direct		1526455	47.070	Computer and Information Science and Engineering	89,026	-
National Science Foundation	Direct		1526928	47.070	Computer and Information Science and Engineering	183,407	-
National Science Foundation National Science Foundation	Direct Direct		1527301 1531752	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	52,624 (109,436)	-
National Science Foundation	Direct		1535752	47.070	Computer and Information Science and Engineering	98,018	-
National Science Foundation	Direct		1537483	47.070	Computer and Information Science and Engineering	42,670	-
National Science Foundation	Direct		1538827	47.070	Computer and Information Science and Engineering	12,204	-
National Science Foundation	Direct		1539011	47.070	Computer and Information Science and Engineering	233,634	-
National Science Foundation	Direct		1539722	47.070	Computer and Information Science and Engineering	103,845	-
National Science Foundation	Direct		1539991 1541335	47.070 47.070	Computer and Information Science and Engineering	152,031 485,510	165 650
National Science Foundation National Science Foundation	Direct Direct		1541335 1544678	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	485,510 327,103	165,652
National Science Foundation	Direct		1544844	47.070	Computer and Information Science and Engineering	230,139	_
National Science Foundation	Direct		1546036	47.070	Computer and Information Science and Engineering	100,521	-
National Science Foundation	Direct		1550103	47.070	Computer and Information Science and Engineering	45,630	-
National Science Foundation	Direct		1552503	47.070	Computer and Information Science and Engineering	14,819	-
National Science Foundation	Direct		1553146	47.070	Computer and Information Science and Engineering	32,973	-
National Science Foundation National Science Foundation	Direct Direct		1553169 1553485	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	77,607 66,817	-
National Science Foundation	Direct		1563095	47.070	Computer and Information Science and Engineering	187,472	-
National Science Foundation	Direct		1563849	47.070	Computer and Information Science and Engineering	65,419	-
National Science Foundation	Direct		1606362	47.070	Computer and Information Science and Engineering	172,390	-
National Science Foundation	Direct		1607251	47.070	Computer and Information Science and Engineering	39,602	-
National Science Foundation	Direct		1616575	47.070	Computer and Information Science and Engineering	24,054	-
National Science Foundation National Science Foundation	Direct		1617315 1617319	47.070	Computer and Information Science and Engineering	138,628	-
National Science Foundation National Science Foundation	Direct Direct		1617319	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	52,884 81,004	-
National Science Foundation	Direct		1617773	47.070	Computer and Information Science and Engineering	65,578	_
National Science Foundation	Direct		1617820	47.070	Computer and Information Science and Engineering	167,788	-
National Science Foundation	Direct		1617898	47.070	Computer and Information Science and Engineering	128,730	-
National Science Foundation	Direct		1618187	47.070	Computer and Information Science and Engineering	54,058	-
National Science Foundation	Direct		1622831	47.070	Computer and Information Science and Engineering	1,113	-
National Science Foundation National Science Foundation	Direct Direct		1623834 1628987	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	(338) 89,827	-
National Science Foundation	Direct		1628991	47.070	Computer and Information Science and Engineering	22,700	
National Science Foundation	Direct		1629397	47.070	Computer and Information Science and Engineering	237,524	-
National Science Foundation	Direct		1629763	47.070	Computer and Information Science and Engineering	27,505	-
National Science Foundation	Direct		1633157	47.070	Computer and Information Science and Engineering	88,293	-
National Science Foundation	Direct		1636840	47.070	Computer and Information Science and Engineering	71,366	-
National Science Foundation National Science Foundation	Direct Direct		1637232 1637546	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	98,111 41,846	-
National Science Foundation	Direct		1638047	47.070	Computer and Information Science and Engineering	129,103	- -
National Science Foundation	Direct		1638186	47.070	Computer and Information Science and Engineering	480,473	96,692
National Science Foundation	Direct		1640510	47.070	Computer and Information Science and Engineering	2,959	-
National Science Foundation	Direct		1640575	47.070	Computer and Information Science and Engineering	712,609	546,553
National Science Foundation	Direct		1646019	47.070	Computer and Information Science and Engineering	212,985	-
National Science Foundation National Science Foundation	Direct		1646130 1646392	47.070 47.070	Computer and Information Science and Engineering	64,677 95,238	-
National Science Foundation	Direct Direct		1646392	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	129,877	-
National Science Foundation	Direct		1651740	47.070	Computer and Information Science and Engineering	89,153	_
National Science Foundation	Direct		1652294	47.070	Computer and Information Science and Engineering	94,205	-
National Science Foundation	Direct		1656101	47.070	Computer and Information Science and Engineering	70,481	-
National Science Foundation	Direct		1658635	47.070	Computer and Information Science and Engineering	26,272	-
National Science Foundation	Direct		1661422 1665040	47.070	Computer and Information Science and Engineering	25,612	-
National Science Foundation National Science Foundation	Direct Direct		1665049 1665151	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	142,763 38,031	-
National Science Foundation National Science Foundation	Direct		1703931	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	67,365	- -
National Science Foundation	Direct		1717064	47.070	Computer and Information Science and Engineering	45,648	-
National Science Foundation	Direct		1717186	47.070	Computer and Information Science and Engineering	19,102	-
National Science Foundation	Direct		1717299	47.070	Computer and Information Science and Engineering	113,154	-
National Science Foundation	Direct		1717523	47.070	Computer and Information Science and Engineering	138,173	-
	D'			4			
National Science Foundation National Science Foundation	Direct Direct		1717688 1722801	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	82,505 129,615	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation	Direct		1734014	47.070	Computer and Information Science and Engineering	22,252	-
National Science Foundation National Science Foundation	Direct Direct		1734266 1734871	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	133,206 26,941	-
National Science Foundation	Direct		1737432	47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	187,174	61,465
National Science Foundation	Direct		1738103	47.070	Computer and Information Science and Engineering	1,182	-
National Science Foundation	Direct		1738714	47.070	Computer and Information Science and Engineering	63,042	31,920
National Science Foundation	Direct		1739525	47.070	Computer and Information Science and Engineering	53,075	-
National Science Foundation	Direct		1740897	47.070	Computer and Information Science and Engineering	35,191	-
National Science Foundation	Direct		1741022	47.070	Computer and Information Science and Engineering	3,179	-
National Science Foundation National Science Foundation	Direct		1741166 1741190	47.070 47.070	Computer and Information Science and Engineering	1,431 119,638	-
National Science Foundation	Direct Direct		1741190	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	25,004	- -
National Science Foundation	Direct		1741433	47.070	Computer and Information Science and Engineering	24,214	_ _
National Science Foundation	Direct		1743088	47.070	Computer and Information Science and Engineering	48,410	-
National Science Foundation	Direct		1748047	47.070	Computer and Information Science and Engineering	45,188	-
National Science Foundation	Direct		1755841	47.070	Computer and Information Science and Engineering	32,842	-
National Science Foundation	Direct		1755908	47.070	Computer and Information Science and Engineering	240	-
National Science Foundation	Direct		1800771	47.070	Computer and Information Science and Engineering	2,016	-
National Science Foundation	Direct		1822228	47.070	Computer and Information Science and Engineering	64,751	-
National Science Foundation National Science Foundation	Direct Direct		ACI 1440571 CCF 1111061	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	1,850 7,102	-
National Science Foundation	Direct		CCF 11116040	47.070	Computer and Information Science and Engineering	(1,416)	- -
National Science Foundation	Direct		CCF 1138860	47.070	Computer and Information Science and Engineering	36,467	_
National Science Foundation	Direct		CCF 1149773	47.070	Computer and Information Science and Engineering	110,445	-
National Science Foundation	Direct		CCF 1161233	47.070	Computer and Information Science and Engineering	(7,077)	-
National Science Foundation	Direct		CCF 1161505	47.070	Computer and Information Science and Engineering	(4,106)	-
National Science Foundation	Direct		CCF 1318091	47.070	Computer and Information Science and Engineering	(776)	-
National Science Foundation	Direct		CCF 1319592	47.070	Computer and Information Science and Engineering	(18,691)	-
National Science Foundation	Direct		CCF 1421467	47.070	Computer and Information Science and Engineering	3,874	-
National Science Foundation National Science Foundation	Direct Direct		CCF 1422157 CCF 1422284	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	141,152 39,863	-
National Science Foundation	Direct		CCF 1438996	47.070	Computer and Information Science and Engineering	228,737	-
National Science Foundation	Direct		CCF 1442495	47.070	Computer and Information Science and Engineering	9,154	_
National Science Foundation	Direct		CCF 1442777	47.070	Computer and Information Science and Engineering	26,140	-
National Science Foundation	Direct		CCF-1406739	47.070	Computer and Information Science and Engineering	62,947	-
National Science Foundation	Direct		CCF1442773	47.070	Computer and Information Science and Engineering	308,199	-
National Science Foundation	Direct		CCF-1649468	47.070	Computer and Information Science and Engineering	5,322	-
National Science Foundation	Direct		CCF-1750127	47.070	Computer and Information Science and Engineering	29,049	-
National Science Foundation National Science Foundation	Direct		CNS 111541	47.070	Computer and Information Science and Engineering	(19,784)	-
National Science Foundation National Science Foundation	Direct Direct		CNS 1160775 CNS 1317411	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	(7,173) 13,214	-
National Science Foundation	Direct		CNS 1317411 CNS 1318306	47.070	Computer and Information Science and Engineering	259,560	-
National Science Foundation	Direct		CNS 1318722	47.070	Computer and Information Science and Engineering	19,349	_
National Science Foundation	Direct		CNS 1319784	47.070	Computer and Information Science and Engineering	75,711	-
National Science Foundation	Direct		CNS 1329539	47.070	Computer and Information Science and Engineering	123,714	-
National Science Foundation	Direct		CNS 1329702	47.070	Computer and Information Science and Engineering	87,101	-
National Science Foundation	Direct		CNS 1330142	47.070	Computer and Information Science and Engineering	360,155	-
National Science Foundation	Direct		CNS 1409505	47.070	Computer and Information Science and Engineering	106,252	-
National Science Foundation	Direct		CNS 1421122	47.070	Computer and Information Science and Engineering	181,133	-
National Science Foundation National Science Foundation	Direct Direct		CNS 1421441 CNS 1422078	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	119,269 137,758	8,107
National Science Foundation	Direct		CNS 1422076 CNS 1422211	47.070	Computer and Information Science and Engineering	193,110	6,107
National Science Foundation	Direct		CNS 1446117	47.070	Computer and Information Science and Engineering	63,802	_
National Science Foundation	Direct		CNS 1446298	47.070	Computer and Information Science and Engineering	126,188	-
National Science Foundation	Direct		CNS 1455719	47.070	Computer and Information Science and Engineering	14,138	-
National Science Foundation	Direct		CNS 1463102	47.070	Computer and Information Science and Engineering	(770)	-
National Science Foundation	Direct		CNS 1463126	47.070	Computer and Information Science and Engineering	64,640	-
National Science Foundation	Direct		CNS 1624632	47.070	Computer and Information Science and Engineering	3,447	-
National Science Foundation	Direct		CNS-1238962	47.070	Computer and Information Science and Engineering	184,198	-
National Science Foundation National Science Foundation	Direct Direct		CNS-1239037 CNS-1345226	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	260,303 63,051	-
National Science Foundation	Direct		CNS-1343220 CNS-1425485	47.070	Computer and Information Science and Engineering	41,395	-
National Science Foundation	Direct		IIS 1054199	47.070	Computer and Information Science and Engineering	43,288	
National Science Foundation	Direct		IIS 1065027	47.070	Computer and Information Science and Engineering	(6,953)	-
National Science Foundation	Direct		IIS 1149601	47.070	Computer and Information Science and Engineering	4,103	-
National Science Foundation	Direct		IIS 1250880	47.070	Computer and Information Science and Engineering	201,505	-
National Science Foundation	Direct		IIS 1319365	47.070	Computer and Information Science and Engineering	211,241	-
National Science Foundation	Direct		IIS 1319922	47.070	Computer and Information Science and Engineering	141,958	-
National Science Foundation	Direct		IIS 1344257	47.070	Computer and Information Science and Engineering	276,541	144,922
National Science Foundation National Science Foundation	Direct		IIS 1355633 IIS 1421168	47.070 47.070	Computer and Information Science and Engineering	8,379 69,678	-
National Science Foundation National Science Foundation	Direct Direct		IIS 1421168 IIS 1421391	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	168,689	-
National Science Foundation National Science Foundation	Direct		IIS 1421391 IIS 1440360	47.070 47.070	Computer and Information Science and Engineering Computer and Information Science and Engineering	831	- -
National Science Foundation	Direct		IIS 1633370	47.070	Computer and Information Science and Engineering	60,012	- -
National Science Foundation	Direct		IIS-1318143	47.070	Computer and Information Science and Engineering	12,854	-
National Science Foundation	Direct		IIS1320078	47.070	Computer and Information Science and Engineering	9,750	-
National Science Foundation	Direct		IIS-1421438	47.070	Computer and Information Science and Engineering	19,094	-
National Science Foundation	Direct		IIS-1516204	47.070	Computer and Information Science and Engineering	78,117	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation	Direct		IIS-1564079	47.070	Computer and Information Science and Engineering	126,298	
ational Science Foundation	Direct		IIS-1636919	47.070	Computer and Information Science and Engineering	1,824	-
ational Science Foundation	Direct		IIS-1643006	47.070	Computer and Information Science and Engineering	60,558	-
ational Science Foundation	Direct		SES-1760133	47.070	Computer and Information Science and Engineering	41,820	-
ational Science Foundation	Pass-Through	Carnegie-Mellon University	1121941-372179	47.070	Computer and Information Science and Engineering	75,453	-
ational Science Foundation	Pass-Through	Stony Brook University	79217/1142110/2	47.070	Computer and Information Science and Engineering	18,643	-
ational Science Foundation	Pass-Through	University of California-San Diego	77845292	47.070	Computer and Information Science and Engineering	230,405	_
ational Science Foundation	Pass-Through	University of Chicago	FP066185-A	47.070	Computer and Information Science and Engineering	124,376	_
ational Science Foundation	Pass-Through	University of Illinois-Urbana-Champaign	15746	47.070	Computer and Information Science and Engineering	39,578	_
tional Science Foundation	Pass-Through	University of Illinois-Urbana-Champaign	15837	47.070	Computer and Information Science and Engineering	10,460	_
ational Science Foundation	Pass-Through	University of Texas-Arlington	126100536610	47.070	Computer and Information Science and Engineering	54,949	_
ational Science Foundation	Pass-Through	University of Washington	UWSC9862	47.070	Computer and Information Science and Engineering	7,395	
tuonai Science i oundation	1 ass-1 iii ougii	Oniversity of washington	0 W 3C 7602	47.070	Computer and information Science and Engineering	\$ 14,775,686	\$ 1,055,31
tional Science Foundation	Direct		1444400	47.074	Biological Sciences	\$ 405,634	
ional Science Foundation	Direct		1451127	47.074	Biological Sciences	95,750	-
onal Science Foundation	Direct		1452656	47.074	Biological Sciences	146,224	-
ional Science Foundation	Direct		1456115	47.074	Biological Sciences	193,567	_
onal Science Foundation	Direct		1458002	47.074	Biological Sciences	198,202	_
onal Science Foundation	Direct		1458466	47.074	Biological Sciences	53,066	
ional Science Foundation			1501159	47.074	Biological Sciences Biological Sciences	-	-
	Direct				E	(806)	-
ional Science Foundation	Direct		1501301	47.074	Biological Sciences	17,621	-
ional Science Foundation	Direct		1501304	47.074	Biological Sciences	(1,351)	-
ional Science Foundation	Direct		1501462	47.074	Biological Sciences	(1,695)	-
onal Science Foundation	Direct		1502703	47.074	Biological Sciences	20,956	-
onal Science Foundation	Direct		1545199	47.074	Biological Sciences	5,125	-
onal Science Foundation	Direct		1556585	47.074	Biological Sciences	134,310	-
onal Science Foundation	Direct		1557564	47.074	Biological Sciences	32,871	-
onal Science Foundation	Direct		1557831	47.074	Biological Sciences	220,773	158,84
onal Science Foundation	Direct		1557850	47.074	Biological Sciences	220,652	150,07
onal Science Foundation			1560096		•		_
	Direct			47.074	Biological Sciences	133,788	-
ional Science Foundation	Direct		1564756	47.074	Biological Sciences	283,279	-
onal Science Foundation	Direct		1601248	47.074	Biological Sciences	3,682	-
onal Science Foundation	Direct		1601259	47.074	Biological Sciences	1,133	-
onal Science Foundation	Direct		1601260	47.074	Biological Sciences	1,098	-
onal Science Foundation	Direct		1601389	47.074	Biological Sciences	1,471	-
ional Science Foundation	Direct		1601455	47.074	Biological Sciences	14,450	_
ional Science Foundation	Direct		1612917	47.074	Biological Sciences	101,027	-
ional Science Foundation	Direct		1615338	47.074	Biological Sciences	101,541	_
tional Science Foundation	Direct		1615586	47.074	Biological Sciences	238,168	_
tional Science Foundation			1624205	47.074	Biological Sciences	81,964	_
	Direct				•		-
ional Science Foundation	Direct		1651614	47.074	Biological Sciences	132,624	-
ional Science Foundation	Direct		1655720	47.074	Biological Sciences	18,910	-
ional Science Foundation	Direct		1655856	47.074	Biological Sciences	28,556	-
onal Science Foundation	Direct		1701450	47.074	Biological Sciences	19,665	-
onal Science Foundation	Direct		1701459	47.074	Biological Sciences	9,769	-
ional Science Foundation	Direct		1701467	47.074	Biological Sciences	18,347	-
onal Science Foundation	Direct		1701645	47.074	Biological Sciences	9,589	_
onal Science Foundation	Direct		1701713	47.074	Biological Sciences	26,982	_
onal Science Foundation	Direct		1707316	47.074	Biological Sciences	902,101	266,48
ional Science Foundation	Direct		1716403	47.074	Biological Sciences	13,565	200,40
					•		-
onal Science Foundation	Direct		1737680	47.074	Biological Sciences	122,375	-
onal Science Foundation	Direct		1749627	47.074	Biological Sciences	1,408	-
ional Science Foundation	Direct		1754398	47.074	Biological Sciences	512	-
onal Science Foundation	Direct		1755482	47.074	Biological Sciences	37,505	-
onal Science Foundation	Direct		1756202	47.074	Biological Sciences	23,335	-
onal Science Foundation	Direct		DBI 1349276	47.074	Biological Sciences	81,032	-
onal Science Foundation	Direct		DBI-1263079	47.074	Biological Sciences	(2)	-
onal Science Foundation	Direct		DEB 1127250	47.074	Biological Sciences	62,198	-
onal Science Foundation	Direct		DEB 1147336	47.074	Biological Sciences	106,046	-
onal Science Foundation	Direct		DEB 1207915	47.074	Biological Sciences	144,045	
onal Science Foundation	Direct		DEB 1240869	47.074	Biological Sciences	107,360	_
onal Science Foundation			DEB 1252664	47.074	Biological Sciences Biological Sciences		-
	Direct				e	99,175	-
onal Science Foundation	Direct		DEB 1252841	47.074	Biological Sciences	61,850	-
onal Science Foundation	Direct		DEB 1256330	47.074	Biological Sciences	16,007	-
onal Science Foundation	Direct		DEB 1257080	47.074	Biological Sciences	72,388	-
onal Science Foundation	Direct		DEB 1305836	47.074	Biological Sciences	(2,465)	-
onal Science Foundation	Direct		DEB 1345063	47.074	Biological Sciences	5,886	-
onal Science Foundation	Direct		DEB 1353070	47.074	Biological Sciences	48,790	-
onal Science Foundation	Direct		DEB 1353806	47.074	Biological Sciences	104,292	-
onal Science Foundation	Direct		DEB 1353850	47.074	Biological Sciences	29,884	_
onal Science Foundation	Direct		DEB 1353908	47.074	Biological Sciences	72,989	24,99
							24,93
onal Science Foundation	Direct		DEB 1354048	47.074	Biological Sciences	81,619	-
onal Science Foundation	Direct		DEB 1354625	47.074	Biological Sciences	119,922	48,77
onal Science Foundation	Direct		DEB 1441677	47.074	Biological Sciences	138,599	27,20
onal Science Foundation	Direct		DEB 1617364	47.074	Biological Sciences	233,221	75,22
ional Science Foundation	Direct		DEB-1655607	47.074	Biological Sciences	14,203	-
tonai Science Foundation					U		
tional Science Foundation	Direct		DEB-1657527	47.074	Biological Sciences	39,368	_

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
ational Science Foundation	Direct		EF 1303779	47.074	Biological Sciences	(1,372)	-
ational Science Foundation	Direct		EF 1404964	47.074	Biological Sciences	35,409	-
tional Science Foundation	Direct		EF 1405302	47.074	Biological Sciences	55,527	872
ational Science Foundation ational Science Foundation	Direct Direct		EF-1340681 IOS 1255974	47.074 47.074	Biological Sciences Biological Sciences	128,046 80,752	64,784
ational Science Foundation ational Science Foundation	Direct		IOS 1253974 IOS 1353914	47.074 47.074	Biological Sciences Biological Sciences	79,016	-
ational Science Foundation	Direct		IOS 1353914 IOS 1354046	47.074	Biological Sciences	155,484	_
ational Science Foundation	Direct		IOS1353263	47.074	Biological Sciences	138,280	_
ational Science Foundation	Direct		IOS1456518	47.074	Biological Sciences	68,541	_
ational Science Foundation	Direct		MCB 1050948	47.074	Biological Sciences	2,823	_
ational Science Foundation	Direct		MCB 1157800	47.074	Biological Sciences	(2,770)	_
ational Science Foundation	Direct		MCB1411565	47.074	Biological Sciences	5,723	3,49
ational Science Foundation	Direct		MCB-1552439	47.074	Biological Sciences	203,168	=
ational Science Foundation	Direct		MCB-1553031	47.074	Biological Sciences	103,936	-
ational Science Foundation	Direct		MCB-1714539	47.074	Biological Sciences	132,206	-
tional Science Foundation	Pass-Through	Cary Institute of Ecosystem Studies	3298/200201813	47.074	Biological Sciences	12,508	-
tional Science Foundation	Pass-Through	Emmanuel College	10-9053-1	47.074	Biological Sciences	1,051	-
tional Science Foundation	Pass-Through	Emory University	T599131	47.074	Biological Sciences	56,535	-
ational Science Foundation	Pass-Through	Louisiana State University	109071	47.074	Biological Sciences	(1,497)	-
tional Science Foundation	Pass-Through	Marine Biological Laboratory	40985	47.074	Biological Sciences	66,538	=
ational Science Foundation	Pass-Through	Marine Biological Laboratory	52806 DC1026791D4	47.074	Biological Sciences	92,152	-
ational Science Foundation	Pass-Through	Michigan State University	RC103678UM RC106385UM	47.074	Biological Sciences	289	-
tional Science Foundation	Pass-Through	Michigan State University University of Arizona	DBI-1661485	47.074 47.074	Biological Sciences Biological Sciences	212,957 17,919	-
ational Science Foundation	Pass-Through Pass-Through	Woods Hole Oceanographic Institute	A101378	47.074 47.074	Biological Sciences Biological Sciences	17,919	-
monai ocience i uniuatiun	1 ass-1 III Ougii	11 oods 11010 Occanographic institute	A1013/0	47.074	Diological ociclices	\$ 7,347,160	\$ 670,663
ational Science Foundation	Direct		1131500	47.075	Social, Behavioral, and Economic Sciences	\$ 331,509	
ational Science Foundation	Direct		1458926	47.075	Social, Behavioral, and Economic Sciences	356	<u>-</u>
ational Science Foundation	Direct		1459459	47.075	Social, Behavioral, and Economic Sciences	46,728	_
ational Science Foundation	Direct		1459864	47.075	Social, Behavioral, and Economic Sciences	8,374	_
ational Science Foundation	Direct		1459931	47.075	Social, Behavioral, and Economic Sciences	22,215	_
ational Science Foundation	Direct		1461470	47.075	Social, Behavioral, and Economic Sciences	264,623	-
ational Science Foundation	Direct		1517701	47.075	Social, Behavioral, and Economic Sciences	90,123	-
ational Science Foundation	Direct		1519594	47.075	Social, Behavioral, and Economic Sciences	20,751	18,518
ational Science Foundation	Direct		1521882	47.075	Social, Behavioral, and Economic Sciences	50,314	-
ational Science Foundation	Direct		1528262	47.075	Social, Behavioral, and Economic Sciences	(9)	-
ational Science Foundation	Direct		1528445	47.075	Social, Behavioral, and Economic Sciences	395,026	278,428
fational Science Foundation	Direct		1528496	47.075	Social, Behavioral, and Economic Sciences	6,428	-
ational Science Foundation	Direct		1528719	47.075	Social, Behavioral, and Economic Sciences	8,599	-
ational Science Foundation	Direct		1529788	47.075	Social, Behavioral, and Economic Sciences	96,407	14,413
ational Science Foundation	Direct		1530628	47.075	Social, Behavioral, and Economic Sciences	34,861	-
ational Science Foundation	Direct		1539864	47.075	Social, Behavioral, and Economic Sciences	1,253	-
ational Science Foundation	Direct		1540259	47.075	Social, Behavioral, and Economic Sciences	11,407	=
ational Science Foundation	Direct		1541663	47.075	Social, Behavioral, and Economic Sciences	867	-
Jational Science Foundation	Direct		1551513	47.075	Social, Behavioral, and Economic Sciences	2,961 58,225	-
ational Science Foundation ational Science Foundation	Direct		1552429 1555460	47.075 47.075	Social, Behavioral, and Economic Sciences Social, Behavioral, and Economic Sciences	58,225 114,168	-
ational Science Foundation	Direct Direct		1560987	47.075	Social, Behavioral, and Economic Sciences	141,330	-
lational Science Foundation	Direct		1561266	47.075	Social, Behavioral, and Economic Sciences	997	-
lational Science Foundation	Direct		1606818	47.075	Social, Behavioral, and Economic Sciences	95,601	_
Vational Science Foundation	Direct		1613392	47.075	Social, Behavioral, and Economic Sciences	2,831	_
ational Science Foundation	Direct		1613415	47.075	Social, Behavioral, and Economic Sciences	2,430	_
ational Science Foundation	Direct		1625196	47.075	Social, Behavioral, and Economic Sciences	122,301	_
ational Science Foundation	Direct		1625347	47.075	Social, Behavioral, and Economic Sciences	8,578	_
ational Science Foundation	Direct		1625440	47.075	Social, Behavioral, and Economic Sciences	1,548	-
ational Science Foundation	Direct		1627893	47.075	Social, Behavioral, and Economic Sciences	22,523	_
ational Science Foundation	Direct		1628096	47.075	Social, Behavioral, and Economic Sciences	3,862	-
ational Science Foundation	Direct		1628141	47.075	Social, Behavioral, and Economic Sciences	202,942	-
ational Science Foundation	Direct		1628227	47.075	Social, Behavioral, and Economic Sciences	3,712	_
ational Science Foundation	Direct		1628883	47.075	Social, Behavioral, and Economic Sciences	187,885	-
ational Science Foundation	Direct		1631409	47.075	Social, Behavioral, and Economic Sciences	533,691	437,830
ational Science Foundation	Direct		1638553	47.075	Social, Behavioral, and Economic Sciences	37,296	-
ational Science Foundation	Direct		1638642	47.075	Social, Behavioral, and Economic Sciences	186,833	57,900
ational Science Foundation	Direct		1639357	47.075	Social, Behavioral, and Economic Sciences	4,602	-
ational Science Foundation	Direct		1646988	47.075	Social, Behavioral, and Economic Sciences	5,023	-
ational Science Foundation	Direct		1647191	47.075	Social, Behavioral, and Economic Sciences	23,249	-
ational Science Foundation	Direct		1658268	47.075	Social, Behavioral, and Economic Sciences	60,712	-
ational Science Foundation	Direct		1659924	47.075	Social, Behavioral, and Economic Sciences	17,098	-
ational Science Foundation	Direct		1708480	47.075	Social, Behavioral, and Economic Sciences	39,642	-
ational Science Foundation	Direct		1727590	47.075	Social, Behavioral, and Economic Sciences	7,091	-
ational Science Foundation	Direct		1728784	47.075	Social, Behavioral, and Economic Sciences	10,541	-
ational Science Foundation	Direct		1728882	47.075	Social, Behavioral, and Economic Sciences	72,790	-
ational Science Foundation	Direct		1728959	47.075	Social, Behavioral, and Economic Sciences	68,036	-
ational Science Foundation	Direct		1729165	47.075	Social, Behavioral, and Economic Sciences	4,619	-
ational Science Foundation	Direct		1744065	47.075	Social, Behavioral, and Economic Sciences	24,507	-
ational Science Foundation	Direct		1744365	47.075	Social, Behavioral, and Economic Sciences	19,263	-
ational Science Foundation	Direct		1744724	47.075	Social, Behavioral, and Economic Sciences	96,409	7,047
National Science Foundation	Direct		1760238	47.075	Social, Behavioral, and Economic Sciences	52,585	ŕ

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Vational Science Foundation	Direct		1760644	47.075	Social, Behavioral, and Economic Sciences	20,422	-
tional Science Foundation	Direct		1762420	47.075	Social, Behavioral, and Economic Sciences	267	-
tional Science Foundation	Direct		1801902	47.075	Social, Behavioral, and Economic Sciences	689	-
tional Science Foundation	Direct		BCS 1241811	47.075	Social, Behavioral, and Economic Sciences	23,107	-
tional Science Foundation	Direct		BCS 1263150	47.075	Social, Behavioral, and Economic Sciences	25,962	-
ional Science Foundation	Direct		BCS 1264315	47.075	Social, Behavioral, and Economic Sciences	15,972	-
ional Science Foundation	Direct		BCS 1348013	47.075	Social, Behavioral, and Economic Sciences	35,367	-
ional Science Foundation	Direct		BCS 1348150	47.075	Social, Behavioral, and Economic Sciences	50,306	_
ional Science Foundation	Direct		BCS 1348957	47.075	Social, Behavioral, and Economic Sciences	117,133	_
ional Science Foundation	Direct		BCS 1430391	47.075	Social, Behavioral, and Economic Sciences	62,295	_
ional Science Foundation	Direct		BCS 1440017	47.075	Social, Behavioral, and Economic Sciences	479	_
tional Science Foundation	Direct		BCS 1509457	47.075	Social, Behavioral, and Economic Sciences	(550)	_
tional Science Foundation	Direct		BCS1354814	47.075	Social, Behavioral, and Economic Sciences	29,330	_
ional Science Foundation	Direct		BCS1356118	47.075	Social, Behavioral, and Economic Sciences	35,953	94
onal Science Foundation	Direct		BCS-1749430	47.075	Social, Behavioral, and Economic Sciences	77,851)-
onal Science Foundation	Direct		NCSE 1424081	47.075	Social, Behavioral, and Economic Sciences	(698)	-
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onal Science Foundation	Direct		SES 1157698	47.075	Social, Behavioral, and Economic Sciences	3,270,946	-
onal Science Foundation	Direct		SES 1360738	47.075	Social, Behavioral, and Economic Sciences	(1,021)	-
onal Science Foundation	Direct		SES 1420973	47.075	Social, Behavioral, and Economic Sciences	174,595	-
onal Science Foundation	Direct		SES 1444500	47.075	Social, Behavioral, and Economic Sciences	36,442	-
onal Science Foundation	Direct		SES 1444721	47.075	Social, Behavioral, and Economic Sciences	1,132,781	-
ional Science Foundation	Direct		SES 1451100	47.075	Social, Behavioral, and Economic Sciences	(303)	-
ional Science Foundation	Direct		SES 1523355	47.075	Social, Behavioral, and Economic Sciences	167,995	-
onal Science Foundation	Direct		SES 1542345	47.075	Social, Behavioral, and Economic Sciences	10,644	-
onal Science Foundation	Direct		SES 1624386	47.075	Social, Behavioral, and Economic Sciences	3,625	
onal Science Foundation	Direct		SES1324689	47.075	Social, Behavioral, and Economic Sciences	25,058	
nal Science Foundation	Direct		SES1357561	47.075	Social, Behavioral, and Economic Sciences	(2,924)	
nal Science Foundation	Direct		SES-1627464	47.075	Social, Behavioral, and Economic Sciences	30,913	
onal Science Foundation			SES-1636754	47.075	Social, Behavioral, and Economic Sciences	5,152	_
	Direct				,	-	-
onal Science Foundation	Direct		SES-1654645	47.075	Social, Behavioral, and Economic Sciences	107,988	-
onal Science Foundation	Direct		SES-1658336	47.075	Social, Behavioral, and Economic Sciences	107,610	-
onal Science Foundation	Direct		SES-1659328	47.075	Social, Behavioral, and Economic Sciences	75,052	12,4
onal Science Foundation	Direct		SES-1659776	47.075	Social, Behavioral, and Economic Sciences	16,001	-
onal Science Foundation	Direct		SES-1724436	47.075	Social, Behavioral, and Economic Sciences	78,067	39,4
onal Science Foundation	Direct		SES-1727491	47.075	Social, Behavioral, and Economic Sciences	67,272	-
ional Science Foundation	Direct		SES-1728792	47.075	Social, Behavioral, and Economic Sciences	52,454	-
tional Science Foundation	Direct		SES-1729115	47.075	Social, Behavioral, and Economic Sciences	16,502	_
tional Science Foundation	Direct		SES-1733546	47.075	Social, Behavioral, and Economic Sciences	108,086	_
tional Science Foundation	Direct		SMA-1539228	47.075	Social, Behavioral, and Economic Sciences	831,310	_
tional Science Foundation		rnegie-Mellon University	1122455-370028	47.075	Social, Behavioral, and Economic Sciences	68,274	_
ional Science Foundation	•	rnell University	64184 9947	47.075	Social, Behavioral, and Economic Sciences	44,184	
ional Science Foundation	•	rnell University	75097-10854	47.075	Social, Behavioral, and Economic Sciences	1,016	-
	•	·				-	-
onal Science Foundation	•	ecision Research	17-01	47.075	Social, Behavioral, and Economic Sciences	85,269	-
ional Science Foundation	•	cision Research	18-01	47.075	Social, Behavioral, and Economic Sciences	24,717	-
ional Science Foundation	•	liana University	BL-4831222-UM	47.075	Social, Behavioral, and Economic Sciences	7,847	-
onal Science Foundation	_	nns Hopkins University	PO 2003171568	47.075	Social, Behavioral, and Economic Sciences	97,236	-
onal Science Foundation	Pass-Through Mic	chigan State University	RC104160UM	47.075	Social, Behavioral, and Economic Sciences	75,116	-
onal Science Foundation	Pass-Through Nat	tional Endowment for the Humanities	PD-255909-17	47.075	Social, Behavioral, and Economic Sciences	56,562	-
ional Science Foundation	Pass-Through Per	nnsylvania State University	5574-UM-NSF-8209	47.075	Social, Behavioral, and Economic Sciences	136,801	-
ional Science Foundation	_	iversity of Colorado Boulder	1555402	47.075	Social, Behavioral, and Economic Sciences	4,426	-
ional Science Foundation	•	iversity of Virginia	GA11260.156640	47.075	Social, Behavioral, and Economic Sciences	31,084	-
	S	, ,			,	\$ 11,066,375	\$ 866,93
onal Science Foundation	Direct		1458375	47.076	Education and Human Resources	\$ 117,098	
onal Science Foundation	Direct		1502711	47.076	Education and Human Resources	94,111	_
onal Science Foundation	Direct		1502778	47.076	Education and Human Resources	609,867	_
onal Science Foundation	Direct		1504257	47.076	Education and Human Resources	102,361	52,57
							32,3
onal Science Foundation	Direct		1504721 1524067	47.076	Education and Human Resources	21,581	-
onal Science Foundation	Direct		1524967	47.076	Education and Human Resources	194,620	-
nal Science Foundation	Direct		1535370	47.076	Education and Human Resources	319,388	-
nal Science Foundation	Direct		1535389	47.076	Education and Human Resources	458,198	-
onal Science Foundation	Direct		1544337	47.076	Education and Human Resources	46,835	-
nal Science Foundation	Direct		1545851	47.076	Education and Human Resources	18,193	-
onal Science Foundation	Direct		1609204	47.076	Education and Human Resources	89,015	-
nal Science Foundation	Direct		1611687	47.076	Education and Human Resources	80,692	
onal Science Foundation	Direct		1621104	47.076	Education and Human Resources	517,672	-
onal Science Foundation	Direct		1624634	47.076	Education and Human Resources	84,205	<u>-</u>
onal Science Foundation	Direct		1625387	47.076	Education and Human Resources	155,803	_
nal Science Foundation	Direct		1625387	47.076	Education and Human Resources	381,615	•
onal Science Foundation						-	-
	Direct		1711533	47.076	Education and Human Resources	112,781	•
onal Science Foundation	Direct		1725837	47.076	Education and Human Resources	150,877	
nal Science Foundation	Direct		1744407	47.076	Education and Human Resources	9,516	
nal Science Foundation	Direct		1760609	47.076	Education and Human Resources	22,196	
onal Science Foundation	Direct		DGE 1256260	47.076	Education and Human Resources	9,575,975	
nal Science Foundation	Direct		DGE 1419280	47.076	Education and Human Resources	(677)	
onal Science Foundation	Direct		DGE 1439520	47.076	Education and Human Resources	10,448	4
	Direct		DRL 0918425	47.076	Education and Human Resources	174,086	
onal Science Foundation	Direct						
onal Science Foundation onal Science Foundation	Direct		DRL 1008327	47.076	Education and Human Resources	91,373	_

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
National Science Foundation	Direct		DRL 1251862	47.076	Education and Human Resources	222,499	-
ational Science Foundation	Direct		DRL 1420102	47.076	Education and Human Resources	76,205	-
lational Science Foundation	Direct		DRL 1420168	47.076	Education and Human Resources	101,566	19,396
lational Science Foundation	Direct		DRL-1439366	47.076	Education and Human Resources	(2,643)	-
National Science Foundation	Direct		DRL1665117	47.076	Education and Human Resources	98,422	-
National Science Foundation	Direct		DRL1743150	47.076	Education and Human Resources	60,707	21,431
ational Science Foundation	Direct		DUE 0934678	47.076	Education and Human Resources	27,379	-
ational Science Foundation	Direct		DUE 1161121	47.076	Education and Human Resources	383,617	-
National Science Foundation	Direct		DUE 1240409	47.076	Education and Human Resources	(22,932)	_
ational Science Foundation	Direct		DUE 1259395	47.076	Education and Human Resources	(415)	_
Vational Science Foundation	Direct		DUE 1322552	47.076	Education and Human Resources	30,732	-
National Science Foundation	Direct		DUE 1347697	47.076	Education and Human Resources	251,487	_
Vational Science Foundation	Direct		DUE 1347718	47.076	Education and Human Resources	32,353	26,988
Vational Science Foundation	Direct		HRD 1038099	47.076	Education and Human Resources	81,701	20,700
fational Science Foundation	Direct		HRD 1305932	47.076	Education and Human Resources	23,432	_
lational Science Foundation	Direct		HRD 1619681	47.076	Education and Human Resources	915,809	278,155
ational Science Foundation			HRD 1019081 HRD-1348619				270,13.
	Direct	A ' E1 (' 1D 1A ' ('		47.076	Education and Human Resources	88,408	-
ational Science Foundation	Pass-Through	American Educational Research Association	Award Letter	47.076	Education and Human Resources	19,413	-
ational Science Foundation	Pass-Through	American Educational Research Association	Award Letter dtd 03/13/17	47.076	Education and Human Resources	10,500	-
lational Science Foundation	Pass-Through	American Educational Research Association	Award Letter dtd 25Jul2017	47.076	Education and Human Resources	20,000	-
Vational Science Foundation	Pass-Through	Bowling Green State University	10008257-UM.Karabenick	47.076	Education and Human Resources	26,888	-
Vational Science Foundation	Pass-Through	Florida Atlantic University	URJ32	47.076	Education and Human Resources	29,897	-
Vational Science Foundation	Pass-Through	Harvard University	108124-5097661	47.076	Education and Human Resources	(477)	-
lational Science Foundation	Pass-Through	Harvard University	108131-5079307	47.076	Education and Human Resources	45,735	_
Vational Science Foundation	Pass-Through	Harvard University	108144-5097698	47.076	Education and Human Resources	90,633	_
ational Science Foundation	Pass-Through	Iowa State University	4202507A	47.076	Education and Human Resources	40,813	_
lational Science Foundation	Pass-Through	Iowa State University	4202507A 4202541A	47.076	Education and Human Resources	15,527	- -
lational Science Foundation	Pass-Through	Maricopa County Community College District		47.076	Education and Human Resources	252,598	-
	•	1 , ,	Agreement				-
National Science Foundation	Pass-Through	Northwestern University	SP0024546	47.076	Education and Human Resources	5,820	-
National Science Foundation	Pass-Through	Rutgers University	5920	47.076	Education and Human Resources	292,079	-
National Science Foundation	Pass-Through	University of California - Irvine	2015-3266	47.076	Education and Human Resources	67,620	-
National Science Foundation	Pass-Through	University of Maryland, The	Z411102	47.076	Education and Human Resources	289,197	-
National Science Foundation	Pass-Through	University of Massachusetts	B000346830	47.076	Education and Human Resources	29,116	-
						\$ 17,413,147	\$ 600,068
National Science Foundation	Direct		ANT 1149085	47.078	Polar Programs	\$ 133,902	\$ -
National Science Foundation	Direct		ARC 1253154	47.078	Polar Programs	75,152	-
					-	\$ 209,054	\$ -
National Science Foundation	Direct		1459911	47.079	Office of International Science and Engineering	\$ 95,215	\$ -
National Science Foundation	Direct		1515015	47.079	Office of International Science and Engineering	14,287	_
National Science Foundation	Direct		1658650	47.079	Office of International Science and Engineering	7,871	_
National Science Foundation	Pass-Through	Johns Hopkins University	Subaward Agreement	47.079	Office of International Science and Engineering	14,754	_
National Science Foundation	Pass-Through	Virginia Polytechnic Institute and State University	479477-19337	47.079	Office of International Science and Engineering	151,089	_
vational Science I dundation	1 ass-1 in ough	virginia i oryteenine institute and state oniversity	117111-17551	77.077	Office of international Science and Engineering	\$ 283,216	
National Science Foundation	Direct		OCI 0940824	47.080	Office of Cyberinfrastructure	\$ 111,216	
Varional Science Foundation		University of Minnesota	H002341902	47.080	Office of Cyberinfrastructure		\$ 67,777.00
ational Science Foundation	Pass-Inrougn	University of Minnesota	П002341902	47.080	Office of Cyberinirastructure	10,840	- 07.777
	D: .		1545050	47.002	000 01	\$ 122,056	·
lational Science Foundation	Direct		1545858	47.083	Office of Integrative Activities	\$ 1,234,591	
National Science Foundation	Direct		IPA Agreement	47.RD		\$ 282,798	
			Total National Science Foundation			\$ 98,239,960	\$ 5,559,247
Veterans Affairs, Department of	Direct		506-C85005	64.RD		\$ 15,560	\$ -
eterans Affairs, Department of	Direct		506-D85011	64.RD		3,850	-
eterans Affairs, Department of	Direct		D75215	64.RD		55,304	-
eterans Affairs, Department of	Direct		D75216	64.RD		34,261	-
Veterans Affairs, Department of	Direct		D85005	64.RD		37,976	-
eterans Affairs, Department of	Direct		D85007	64.RD		39,148	-
eterans Affairs, Department of	Direct		D85010	64.RD		2,636	-
Veterans Affairs, Department of	Direct		D85021	64.RD		48,278	-
eterans Affairs, Department of	Direct		D85024	64.RD		25,071	_
eterans Affairs, Department of	Direct		D85029	64.RD		19,928	_
eterans Affairs, Department of	Direct		D85025 D85035	64.RD		5,864	_
eterans Affairs, Department of	Direct		D85057	64.RD		1,541	-
						· · · · · · · · · · · · · · · · · · ·	-
Veterans Affairs, Department of	Direct		Flennoy, Khristen	64.RD		5,980	-
Veterans Affairs, Department of	Direct		Gross,Colin	64.RD		14,773	-
eterans Affairs, Department of	Direct		Harrison IPA	64.RD		2,191	-
Veterans Affairs, Department of	Direct		IPA - Baveja, Satinder	64.RD		6,217	-
eterans Affairs, Department of	Direct		IPA - Chen, Jenny	64.RD		9,344	-
eterans Affairs, Department of	Direct		IPA - DeSantis, Angela	64.RD		5,470	-
eterans Affairs, Department of	Direct		IPA - DeVries, Raymond	64.RD		6,870	-
eterans Affairs, Department of	Direct		IPA - Ignacio, Rosalinda	64.RD		87,980	-
eterans Affairs, Department of	Direct		IPA - Klein, Debbie	64.RD		1,677	_
eterans Affairs, Department of	Direct		IPA - Krenz, Chris	64.RD		6,480	-
eterans Affairs, Department of	Direct		IPA - Marcotte, John	64.RD		357	_
eterans Affairs, Department of	Direct		IPA - Martina Nabozny	64.RD		65,940	_
<u> </u>			•				-
eterans Affairs, Department of	Direct		IPA - Niharika Chalpe	64.RD		26,058	-
	Direct		IPA - Niharika Chalpe	64.RD		3,499	-
			TD A D . T	(100			
Veterans Affairs, Department of Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA - Petersen,Laura IPA - Rogers, Mary	64.RD 64.RD		5,402 7,302	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Veterans Affairs, Department of	Direct		IPA - Winter, Suzanne	64.RD		8,177	-
Veterans Affairs, Department of	Direct		IPA - Yosef, Matheos	64.RD		107,422	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Agreement - New, PO# D8503 IPA Agreement Ashley Szpara FY	64.RD 64.RD		26,650 10,046	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		IPA Agleenient_Asiney Szpara_r i IPA Ajlen, Aaron	64.RD		3,656	-
Veterans Affairs, Department of	Direct		IPA Althuis, Katie	64.RD		25,433	-
Veterans Affairs, Department of	Direct		IPA Althuis, Katie	64.RD		42,089	-
Veterans Affairs, Department of	Direct		IPA Amanda Ciofu	64.RD		4,398	-
Veterans Affairs, Department of	Direct		IPA Barick, Audrey	64.RD		38,726	-
Veterans Affairs, Department of	Direct		IPA Barick, Audrey	64.RD		8,845	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Bauer, David IPA Bautista, Genevieve Gretch	64.RD 64.RD		28,702 3,155	- -
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		IPA Beaulieu, Melanie	64.RD		2,051	- -
Veterans Affairs, Department of	Direct		IPA Bhaumik, Arijit	64.RD		4,955	-
Veterans Affairs, Department of	Direct		IPA Calhoun, Oliver	64.RD		11,181	-
Veterans Affairs, Department of	Direct		IPA Carver, Kyle	64.RD		28,189	-
Veterans Affairs, Department of	Direct		IPA Chowdhury, Mahboob	64.RD		10,194	-
Veterans Affairs, Department of	Direct		IPA CHOWDHURY, MAHBOOB	64.RD		34,235	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Clines, Katrina IPA Cohn, Amy	64.RD 64.RD		3,177 7,413	- -
Veterans Affairs, Department of	Direct		IPA De Vries, Raymond	64.RD		29,029	- -
Veterans Affairs, Department of	Direct		IPA De Vries, Raymond	64.RD		3,952	-
Veterans Affairs, Department of	Direct		IPA Eisenberg, Daniel	64.RD		8,242	-
Veterans Affairs, Department of	Direct		IPA Farris, Karen	64.RD		2,675	-
Veterans Affairs, Department of	Direct		IPA Farris, Karen Bell	64.RD		239	-
Veterans Affairs, Department of	Direct		IPA Fries, Brant	64.RD		22,723	-
Veterans Affairs, Department of	Direct		IPA Garlick, James	64.RD		11,035	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Garlick, James IPA Garnett, Emily	64.RD 64.RD		28,608 735	-
Veterans Affairs, Department of	Direct		IPA Gornick, Michelle	64.RD		32,022	- -
Veterans Affairs, Department of	Direct		IPA Gregory, Lynn	64.RD		30,139	-
Veterans Affairs, Department of	Direct		IPA Gregory, Lynn A	64.RD		21,907	-
Veterans Affairs, Department of	Direct		IPA Guo, Chiao	64.RD		14,919	-
Veterans Affairs, Department of	Direct		IPA Ha, Jinkyung	64.RD		5,042	-
Veterans Affairs, Department of	Direct		IPA Ha, Jinkyung	64.RD		5,087	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Harley, Jennifer IPA Henderson, James	64.RD 64.RD		14,325 18,215	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		IPA Hoelscher, Alise	64.RD		38,069	-
Veterans Affairs, Department of	Direct		IPA Ignacio, Rosalinda	64.RD		(14,985)	-
Veterans Affairs, Department of	Direct		IPA Jordan, Jennifer	64.RD		2,564	-
Veterans Affairs, Department of	Direct		IPA Kadri, Reema Sub#810	64.RD		12,449	-
Veterans Affairs, Department of	Direct		IPA Kadri,Reema	64.RD		2,443	-
Veterans Affairs, Department of	Direct		IPA Kadri,Reema Sub Account #8	64.RD		3,399	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Kanicki, Ariane IPA Kelly, Robert	64.RD 64.RD		42,086 (26,578)	-
Veterans Affairs, Department of	Direct		IPA Kim,Hyungjin	64.RD		15,920	- -
Veterans Affairs, Department of	Direct		IPA Kim,Hyungjin Myra	64.RD		38,957	-
Veterans Affairs, Department of	Direct		IPA King, Michael	64.RD		(2,301)	-
Veterans Affairs, Department of	Direct		IPA King, Michael	64.RD		29,386	-
Veterans Affairs, Department of	Direct		IPA Klein, Debra	64.RD		875	-
Veterans Affairs, Department of	Direct		IPA Krans, Amy	64.RD		11,425	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Landis-Lewis, Zachary IPA Lee, Soo Jung	64.RD 64.RD		7,131 8,487	- -
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		IPA Lesnovskaya, Alina	64.RD		714	_ _
Veterans Affairs, Department of	Direct		IPA Ma, Sean	64.RD		55,999	-
Veterans Affairs, Department of	Direct		IPA Manikas, Marianna	64.RD		34,640	-
Veterans Affairs, Department of	Direct		IPA Mann, Jason	64.RD		580	-
Veterans Affairs, Department of	Direct		IPA Martin, Catherine	64.RD		20,453	-
Veterans Affairs, Department of	Direct		IPA Mase, Rebecca	64.RD		9,530	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Mase, Rebecca IPA Mase, Rebecca	64.RD 64.RD		12,789 58,464	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		IPA McCloskey, Lisa	64.RD		35,232	-
Veterans Affairs, Department of	Direct		IPA McCloskey, Lisa	64.RD		39,587	-
Veterans Affairs, Department of	Direct		IPA Metko, Valbona	64.RD		6,937	-
Veterans Affairs, Department of	Direct		IPA Mohammed Kabeto	64.RD		24,717	-
Veterans Affairs, Department of	Direct		IPA Muller, Martjin	64.RD		9,634	-
Veterans Affairs, Department of	Direct		IPA Navok Chand	64.RD		16,928	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Nowak, Cheryl IPA Nowak, Michael	64.RD 64.RD		23,313 603	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct		IPA Nowak, Michael IPA O'Reilly, Dennis	64.RD		(2,226)	- -
Veterans Affairs, Department of	Direct		IPA Patel, Nita	64.RD		45,971	-
Veterans Affairs, Department of	Direct		IPA Pearl, Naw May	64.RD		4,827	-
Veterans Affairs, Department of	Direct		IPA Peterson, Laura	64.RD		3,409	-
Veterans Affairs, Department of	Direct		IPA Quinn, Martha	64.RD		6,680	-
Veterans Affairs, Department of	Direct		IPA Rogers, Mary	64.RD		2,997	-
Veterans Affairs, Department of	Direct		IPA Sarach Cymys	64.RD		9,805	-
Veterans Affairs, Department of Veterans Affairs, Department of	Direct Direct		IPA Sarosh, Cyrus IPA Sarosh, Cyrus	64.RD 64.RD		9,312 13,206	-
veterans Amairs, Department of	Direct		1ra Sarosn, Cyrus	04.KD		13,206	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor Award Identifier	CFDA Numbe	r CFDA Program Title	Federal Expenditures	Pass-Through
Veterans Affairs, Department of	Direct	IPA Shay, Barbara	64.RD		9,270	-
Veterans Affairs, Department of	Direct	IPA Stoll, Shelley	64.RD		(16,463)	-
eterans Affairs, Department of	Direct	IPA Sun, Xiankui	64.RD		12,741	-
eterans Affairs, Department of	Direct	IPA Swalwell, Kathleen	64.RD		32,226	-
terans Affairs, Department of	Direct	IPA Szpara, Ashley	64.RD		2,466	-
erans Affairs, Department of	Direct	IPA Teitz-Tennenbaum, Seagal	64.RD		14,212	-
erans Affairs, Department of	Direct	IPA Teitz-Tennenbaum, Seagal	64.RD		72,742	-
erans Affairs, Department of	Direct	IPA Uju-Eke, Oluchi	64.RD		22,874	-
erans Affairs, Department of	Direct	IPA Villegas-Umana, Emily	64.RD		16,147	-
erans Affairs, Department of	Direct	IPA Wang, Jintao	64.RD		18,060	-
erans Affairs, Department of	Direct	IPA Wang, Shirley	64.RD		16,157	_
erans Affairs, Department of	Direct	IPA Wilke, Carol	64.RD		31,616	_
erans Affairs, Department of	Direct	IPA Winter, Suzanne	64.RD		2,528	_
erans Affairs, Department of	Direct	IPA Wu, Zetang	64.RD		20,598	_
erans Affairs, Department of	Direct	IPA Xu, Jintao	64.RD		49,662	
erans Affairs, Department of	Direct	IPA Yeagley, Emily	64.RD		2,650	
-	Direct		64.RD		1,952	
erans Affairs, Department of		IPA Yongqun He			· · · · · · · · · · · · · · · · · · ·	
erans Affairs, Department of	Direct	IPA Zhang, Huailin	64.RD		3,312	
erans Affairs, Department of	Direct	IPA Zhang, Xiaojie	64.RD		4,639	
erans Affairs, Department of	Direct	IPA Zhao, Lili	64.RD		4,685	
erans Affairs, Department of	Direct	IPA Zikmund-Fisher, Brian	64.RD		2,650	-
erans Affairs, Department of	Direct	IPA, Heist, Kevin	64.RD		23,105	-
erans Affairs, Department of	Direct	IPA, Williams David A	64.RD		551	
erans Affairs, Department of	Direct	IPA: Toma, Mariam	64.RD		43,803	
erans Affairs, Department of	Direct	IPA:Luther, Tahra	64.RD		77,622	
erans Affairs, Department of	Direct	IPA-Hwajung Choi	64.RD		24,920	
erans Affairs, Department of	Direct	IPA-Kadri, Reema	64.RD		(8,457)	
erans Affairs, Department of	Direct	IPA-Kelly,Robert	64.RD		26,578	
erans Affairs, Department of	Direct	IPA-Nowak, Michael	64.RD		3,089	•
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erans Affairs, Department of	Direct	Krent, Chris	64.RD		2,180	-
erans Affairs, Department of	Direct	Moore, Ian	64.RD		7,889	-
erans Affairs, Department of	Direct	Nowak, Michael	64.RD		19,850	
erans Affairs, Department of	Direct	PO 101-C79541	64.RD		16,190	
erans Affairs, Department of	Direct	PO 506-D75203	64.RD		18,388	
erans Affairs, Department of	Direct	PO# 506-D75205	64.RD		24,490	-
erans Affairs, Department of	Direct	PO# D85006	64.RD		43,830	
erans Affairs, Department of	Direct	PO# D85008	64.RD		55,406	-
terans Affairs, Department of	Direct	Semerad, Jay	64.RD		2,651	-
terans Affairs, Department of	Direct	Stoll, Shelley IPA 2017	64.RD		103,145	_
terans Affairs, Department of	Direct	VA IPA - Bhaumik, Arijit	64.RD		17,860	_
erans Affairs, Department of	Direct	VA IPA - Calhoun, Oliver	64.RD		34,211	
erans Affairs, Department of	Direct	VA II A - Camoun, Onver	64.RD		51,034	-
		VA IFA - Fries, Blant VA IPA - Hernandez, Katrina			-	-
erans Affairs, Department of	Direct		64.RD		17,184	-
erans Affairs, Department of	Direct	VA IPA - Ignacio,Rosalinda	64.RD		21,995	,
erans Affairs, Department of	Direct	VA IPA - Jordan,Jennifer	64.RD		4,738	-
erans Affairs, Department of	Direct	VA IPA - Kerry Ryan	64.RD		2,818	-
erans Affairs, Department of	Direct	VA IPA - Klein,Debbie	64.RD		3,071	
erans Affairs, Department of	Direct	VA IPA - Liang, Julie	64.RD		29,075	-
erans Affairs, Department of	Direct	VA IPA - Mann,Jason	64.RD		1,880	-
erans Affairs, Department of	Direct	VA IPA - O'Reilly, Dennis	64.RD		6,544	
rans Affairs, Department of	Direct	VA IPA - Uju-Eke,Oluchi	64.RD		3,510	
erans Affairs, Department of	Direct	VA IPA - Yeagley, Emily	64.RD		14,137	
erans Affairs, Department of	Direct	VA IPA Alvaro Rojas-Pena	64.RD		1,874	_
erans Affairs, Department of	Direct	VA IPA Alvaio Rojas-i ena VA IPA Buis, Lorraine	64.RD		2,098	
erans Affairs, Department of	Direct	VA II A Buis, Lottaine VA IPA Luther, Tahra	64.RD		(4,125)	
erans Affairs, Department of	Direct	VA IFA Luttier, Talita VA IPA Robert Bartlett	64.RD		1,829	
· •					-	
rans Affairs, Department of	Direct	VA IPA Sva Ivva I va	64.RD		22,831	
erans Affairs, Department of	Direct	VA IPA-Soo Jung Lee	64.RD		49,207	
rans Affairs, Department of	Direct	VA250-16-D0138	64.RD		7,265	
rans Affairs, Department of	Direct	VA250-17-C-0083/PO 506-C70207	64.RD		38,721	
rans Affairs, Department of	Direct	VA250-17-C-0107 PO# D70010	64.RD		3,361	
rans Affairs, Department of	Direct	VA251-15-C-0063	64.RD		56,984	
rans Affairs, Department of	Direct	VA251-15-C-0171	64.RD		52,442	
rans Affairs, Department of	Direct	VA251-15-D-0057	64.RD		80,679	
		Total Veterans Affairs, Department of			\$ 3,147,150	\$
				Internships, Training and Workshops for the Office of Air		
ironmental Protection Agency	Direct	83594901	66.037	Radiation	\$ 78,324	
ronmental Protection Agency	Pass-Through Michigan, State of, Environmenta	l Quality, Department of 205J Contract 2014-0100	66.454	Water Quality Management Planning	\$ 2,422	
ronmental Protection Agency	Pass-Through Michigan Technological Universi		66.469	Great Lakes Program	\$ 1,095	
fronmental Protection Agency	Pass-Through Michigan, State of, Environmenta		66.469	Great Lakes Program Great Lakes Program	122,509	7
ronmental Protection Agency	Pass-Through The Stewardship Network	GL-01E01193 GL-00E01461	66.469	Great Lakes Program	5,419	
Tollinonal Floredon Agency	1 ass 1 mough The Stewardship Network	GL-00E01401	UU. 1 U7	Great Lanco i rogram	\$ 129,023	•
inammantal Duata-ti A	Direct	02542701	((500	Colomos To Ashi D14 (CTAD) D 1 D		
ironmental Protection Agency	Direct	83543601	66.509	Science To Achieve Results (STAR) Research Program	\$ 856,206	\$ 51,98
ironmental Protection Agency	Direct	83563701	66.509	Science To Achieve Results (STAR) Research Program	146,840	38,
rironmental Protection Agency	Direct	83564401	66.509	Science To Achieve Results (STAR) Research Program	30,376	
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ironmental Protection Agency ironmental Protection Agency	Direct Pass-Through Northeastern University	RD83517001 5505112-78050	66.509 66.509	Science To Achieve Results (STAR) Research Program Science To Achieve Results (STAR) Research Program	109,520 (496)	103,7

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	<u> </u>		Pass-Through
Environmental Protection Agency	Pass-Through	Water Environment & Reuse Foundation (WE&RF)	STAR_NIR14	66.509	Science To Achieve Results (STAR) Research Program	36,368	4,478
Environmental Protection Agency	Pass-Through	Yale University	C16P12354 (P00385) / 83587101	66.509	Science To Achieve Results (STAR) Research Program	\$ 35,458 \$ 1,214,272 \$	198,300
					P3 Award: National Student Design Competition for	Ψ 1,211,272 Ψ	170,500
Environmental Protection Agency	Direct		83928901	66.516	Sustainability	\$ 1,615 \$	
Environmental Protection Agency	Direct	C 411 F1 - T 4	NE 00E02041	66.951	Environmental Education Grants	\$ 38,878 \$	-
Environmental Protection Agency	Pass-Through	Great Lakes Fishery Trust	2015.1583	66.951	Environmental Education Grants	\$ 40,608 \$ 79,486 \$	
			Total Environmental Protection Agency			\$ 1,505,142 \$	198,300
			ND 0 NO 40 0 000		U.S. Nuclear Regulatory Commission Scholarship and	(0.740)	
Nuclear Regulatory Commission	Direct		NRC-HQ-13-G-38-0007	77.008	Fellowship Program U.S. Nuclear Regulatory Commission Scholarship and	\$ (9,540) \$	-
Nuclear Regulatory Commission	Direct		NRC-HQ-13-G-38-0024	77.008	Fellowship Program	(33,791)	_
			2000 200 200 200 200 200 200 200 200 20	,,,,,,	U.S. Nuclear Regulatory Commission Scholarship and	(-2,12-)	
Nuclear Regulatory Commission	Direct		NRC-HQ-84-14-G0043	77.008	Fellowship Program	122,114	-
No. 1 - Do -14 Control	D'		NDC HO 94 15 C 9929	77.000	U.S. Nuclear Regulatory Commission Scholarship and	44.025	
Nuclear Regulatory Commission	Direct		NRC-HQ-84-15-G-0039	77.008	Fellowship Program U.S. Nuclear Regulatory Commission Scholarship and	44,035	-
Nuclear Regulatory Commission	Direct		NRC-HQ-84-16-G-0010	77.008	Fellowship Program	179,221	-
,			`			\$ 302,039 \$	-
Nuclear Regulatory Commission	Direct		NRC-HQ-60-15-C-0012	77.RD		\$ 254,191 \$	-
Nuclear Regulatory Commission	Pass-Through	Brookhaven Science Associates, LLC	333492	77.RD		6,605	-
Nuclear Regulatory Commission Nuclear Regulatory Commission	Pass-Through Pass-Through	Purdue University Purdue University	4112-64315 4112-81070	77.RD 77.RD		161,230 578,767	-
reduced regulatory commission	1 d33 Till Odgii	Turdue Oniversity	4112 01070	77.10		\$ 1,000,793 \$	-
			Total Nuclear Regulatory Commission			\$ 1,302,832 \$	-
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Energy, Department of Energy, Department of	Direct Direct		DE FG02 05 ER15686 DE SC0008062	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	\$ 92,107 \$ (123)	-
Energy, Department of	Direct		DE-FG02-06ER15783	81.049	Office of Science Financial Assistance Program	166,286	-
Energy, Department of	Direct		DE-FG02-08ER15931	81.049	Office of Science Financial Assistance Program	223,152	-
Energy, Department of	Direct		DE-FG02-08ER15997	81.049	Office of Science Financial Assistance Program	71,648	-
Energy, Department of	Direct		DE-FG02-08ER46525	81.049	Office of Science Financial Assistance Program	314,111	203,665
Energy, Department of	Direct		DE-NA0002956	81.049	Office of Science Financial Assistance Program	773,467	25,580
Energy, Department of	Direct		DE-SC0001939	81.049	Office of Science Financial Assistance Program	1,596,022	1,200,048
Energy, Department of Energy, Department of	Direct Direct		DE-SC0004871 DE-SC0004888	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	121,293 174,718	-
Energy, Department of	Direct		DE-SC0006587	81.049	Office of Science Financial Assistance Program	93,862	_
Energy, Department of	Direct		DE-SC0006628	81.049	Office of Science Financial Assistance Program	122,037	-
Energy, Department of	Direct		DE-SC0007859	81.049	Office of Science Financial Assistance Program	2,700,345	-
Energy, Department of	Direct		DE-SC0008110	81.049	Office of Science Financial Assistance Program	(3,869)	-
Energy, Department of	Direct		DE-SC0008574	81.049	Office of Science Financial Assistance Program	(71,343)	-
Energy, Department of Energy, Department of	Direct Direct		DE-SC0008637 DE-SC0010341	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	2,081,461 107,319	295,683
Energy, Department of	Direct		DE-SC0010341 DE-SC0010342	81.049	Office of Science Financial Assistance Program	98,808	-
Energy, Department of	Direct		DE-SC0010381	81.049	Office of Science Financial Assistance Program	80,090	-
Energy, Department of	Direct		DE-SC0010541	81.049	Office of Science Financial Assistance Program	34,125	-
Energy, Department of	Direct		DE-SC0011078	81.049	Office of Science Financial Assistance Program	22,814	23,859
Energy, Department of	Direct		DE-SC0012327	81.049	Office of Science Financial Assistance Program	306,033	-
Energy, Department of	Direct		DE-SC0012328 DE-SC0012479	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	61,493 141,291	-
Energy, Department of Energy, Department of	Direct Direct		DE-SC0012479 DE-SC0012482	81.049	Office of Science Financial Assistance Program	147,618	-
Energy, Department of	Direct		DE-SC0012484	81.049	Office of Science Financial Assistance Program	174,318	-
Energy, Department of	Direct		DE-SC0012969	81.049	Office of Science Financial Assistance Program	139,561	-
Energy, Department of	Direct		DE-SC0013393	81.049	Office of Science Financial Assistance Program	118,065	-
Energy, Department of	Direct		DE-SC0013520	81.049	Office of Science Financial Assistance Program	62,994	-
Energy, Department of	Direct		DE-SC0013562 DE-SC0013961	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	206,848 24,703	-
Energy, Department of Energy, Department of	Direct Direct		DE-SC0013901 DE-SC0013971	81.049	Office of Science Financial Assistance Program	66,831	-
Energy, Department of	Direct		DE-SC0013991	81.049	Office of Science Financial Assistance Program	79,391	_
Energy, Department of	Direct		DE-SC0014132	81.049	Office of Science Financial Assistance Program	66,113	-
Energy, Department of	Direct		DE-SC0014134	81.049	Office of Science Financial Assistance Program	157,283	-
Energy, Department of	Direct		DE-SC0015394	81.049	Office of Science Financial Assistance Program	57,249	-
Energy, Department of	Direct		DE-SC0015708 DE-SC0015782	81.049 81.049	Office of Science Financial Assistance Program	169,740	-
Energy, Department of Energy, Department of	Direct Direct		DE-SC0015782 DE-SC0015785	81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	187,110 260	-
Energy, Department of	Direct		DE-SC0015765 DE-SC0015799	81.049	Office of Science Financial Assistance Program	115,366	-
Energy, Department of	Direct		DE-SC0016206	81.049	Office of Science Financial Assistance Program	129,220	-
Energy, Department of	Direct		DE-SC0016384	81.049	Office of Science Financial Assistance Program	194,037	-
Energy, Department of	Direct		DE-SC0016489	81.049	Office of Science Financial Assistance Program	155,408	-
Energy, Department of	Direct		DE-SC0016804 DE-SC0016808	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	239,661	64,245
Energy, Department of Energy, Department of	Direct Direct		DE-SC0016808 DE-SC0017380	81.049 81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	299,755 59,503	04,245
Energy, Department of Energy, Department of	Direct		DE-SC0017380 DE-SC0017808	81.049	Office of Science Financial Assistance Program Office of Science Financial Assistance Program	24,118	- -
Energy, Department of	Direct		DE-SC0017816	81.049	Office of Science Financial Assistance Program	145,000	-
Energy, Department of	Direct		DE-SC0017971	81.049	Office of Science Financial Assistance Program	17,685	-
Energy, Department of	Direct		DE-SC0018018	81.049	Office of Science Financial Assistance Program	24,169	

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Line December De	Energy, Department of	Direct		DE-SC0018058	81.049	Office of Science Financial Assistance Program	77,437	-
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Part								\$ 1,813,080
Second Dec	nergy, Department of	Direct		DE-EE0006434	81.086	Conservation Research and Development	\$ 158,220	\$ -
Part	nergy, Department of	Direct		DE-EE0006821	81.086	Conservation Research and Development	126,599	-
Separate	nergy, Department of	Direct		DE-EE0006831	81.086	Conservation Research and Development	7,183	-
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Page	Energy, Department of	Pass-Through	Aerojet Corporation	200065051	81.089	Fossil Energy Research and Development	160,804	-
Pass	Energy, Department of	Pass-Through	University of Texas at Austin	UTA16-000734	81.089	Fossil Energy Research and Development	52,174	-
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Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Training and Technical Energy, Department of Direct Energy, Department of Dire	Energy, Department of	Pass-Through	North Carolina State University	2014-0501-01-F1	81.113	Defense Nuclear Nonproliferation Research		<u> </u>
Direct DE-E0005526 B1.117 Analysis/Assistance Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Training and Technical Direct DE-E0005565 B1.117 Analysis/Assistance Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Training and Technical Direct DE-E0005565 B1.117 Analysis/Assistance Interpretation DE-E000566 B1.117 Analysis/Assistance Interpretation DE-E000566 B1.117 Analysis/Assistance Interpretation DE-NE0000132 B1.117 Analysis/Assistance Interpretation In							\$ 5,448,266	\$ 3,136,432
Energy Efficiency and Renewable Energy Information Dissemination, Outreach, Training and Technical Energy, Department of Direct Energy, Department of DE-NE0000132 Energy, Department of DE-NE0000639 Energy, Department of DE-NE0000639 Energy, Department of DE-NE0000639 Energy, Department of DE-NE0000639 Energy, Department of DE-NE0000663 Energy, Department of DE-NE0000663 Energy, Department of DE-NE0000664 Energy, Department of DE-NE0000665 Energy,	Energy, Department of	Direct		DE-EE0005526	81.117		\$ 17.268	\$ -
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Energy, Department of Direct DE-NE0008503 S1.121 Nuclear Energy Research, Development and Demonstration 202,488								12,/23

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
nergy, Department of	Direct		DE-NE0008519	81.121	Nuclear Energy Research, Development and Demonstration	187,243	-
ergy, Department of	Direct		DE-NE0008520	81.121	Nuclear Energy Research, Development and Demonstration	133,444	_
ergy, Department of	Direct		DE-NE0008632	81.121	Nuclear Energy Research, Development and Demonstration	117,547	_
ergy, Department of	Direct		DE-NE0008697	81.121	Nuclear Energy Research, Development and Demonstration	25,194	4,89
nergy, Department of	Pass-Through	Carnegie-Mellon University	1070222-374895	81.121	Nuclear Energy Research, Development and Demonstration	137,941	-
nergy, Department of	Pass-Through	Georgia Technology Research Corporation	RF764-G6	81.121	Nuclear Energy Research, Development and Demonstration	313,199	_
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ergy, Department of	Pass-Through	North Carolina State University	2016-1536-05	81.121	Nuclear Energy Research, Development and Demonstration	152,821	-
nergy, Department of	Pass-Through	Notre Dame University-Louaize, Lebanon (NDU)	Subaward DE-NE0008272	81.121	Nuclear Energy Research, Development and Demonstration	156,355	-
ergy, Department of	Pass-Through	Ohio State University, The	60046086/PO #RF01482663	81.121	Nuclear Energy Research, Development and Demonstration	162,086	-
ergy, Department of	Pass-Through	Oregon State University	G0156A-A	81.121	Nuclear Energy Research, Development and Demonstration	155,293	-
ergy, Department of	Pass-Through	Oregon State University	G0157A-A	81.121	Nuclear Energy Research, Development and Demonstration	313,889	-
nergy, Department of	Pass-Through	Pennsylvania State University	5434-UM-USDOE-8266	81.121	Nuclear Energy Research, Development and Demonstration	29,840	-
ergy, Department of	Pass-Through	Pennsylvania State University	5724-UM-DOE-8717	81.121	Nuclear Energy Research, Development and Demonstration	66,259	_
ergy, Department of	Pass-Through	Purdue University	4105-77202	81.121	Nuclear Energy Research, Development and Demonstration	162,163	_
ergy, Department of	Pass-Through	Purdue University	4105-85097	81.121	Nuclear Energy Research, Development and Demonstration	159,458	
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ergy, Department of	Pass-Through	Texas A & M University	C7481	81.121	Nuclear Energy Research, Development and Demonstration	26,688	-
ergy, Department of	Pass-Through	University of Massachusetts Lowell	S51900000030483	81.121	Nuclear Energy Research, Development and Demonstration	17,578	-
ergy, Department of	Pass-Through	University of Wisconsin	775K515	81.121	Nuclear Energy Research, Development and Demonstration	79,793	-
ergy, Department of	Pass-Through	Virginia Polytechnic Institute and State University	429353-19337	81.121	Nuclear Energy Research, Development and Demonstration	76,796	-
					-	\$ 4,014,552	\$ 231,89
nergy, Department of	Pass-Through	Stanford University	60545512-107908	81.124	Predictive Science Academic Alliance Program	\$ 113,091	
nergy, Department of	Pass-Through	University of Illinois-Urbana-Champaign	Grant Code AA540; Subaward No.	81.124	Predictive Science Academic Alliance Program	64,190	· -
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eray Department of	Direct		DE-AR0000426	81.135	Advanced Research Projects Account. Engage	\$ 1,7261	
ergy, Department of	Direct				Advanced Research Projects Agency - Energy		
ergy, Department of	Direct		DE-AR0000653	81.135	Advanced Research Projects Agency - Energy	1,020,261	50,05
ergy, Department of	Direct		DE-AR0000659	81.135	Advanced Research Projects Agency - Energy	557,384	_
ergy, Department of	Direct		DE-AR0000715	81.135	Advanced Research Projects Agency - Energy	526,158	210,44
ergy, Department of	Direct		DE-AR0000797	81.135	Advanced Research Projects Agency - Energy	333,733	57,85
nergy, Department of	Pass-Through	Southwest Research Institute	K99085KJ	81.135	Advanced Research Projects Agency - Energy	48,817	-
nergy, Department of	Pass-Through	University of Delaware	46101	81.135	Advanced Research Projects Agency - Energy	154,927	_
ergy, Department of	Pass-Through	University of Maryland, The	56289 - Z7218004	81.135	Advanced Research Projects Agency - Energy	20,393	-
	-					\$ 2,663,599	\$ 318,360
ergy, Department of	Pass-Through	Alliance for Sustainable Energy, LLC	XHD-4-42014-01	81.RD		\$ 41,606	
nergy, Department of	Pass-Through	Argonne National Laboratory	3F-31141	81.RD		626,726	-
ergy, Department of	Pass-Through	Argonne National Laboratory	7F-30052	81.RD		44,706	_
ergy, Department of	Pass-Through	Argonne National Laboratory	7F-30154	81.RD		166,020	
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nergy, Department of	Pass-Through	Argonne National Laboratory	8F-30021	81.RD		47,070	-
ergy, Department of	Pass-Through	Argonne National Laboratory	8F-30062	81.RD		34,877	-
nergy, Department of	Pass-Through	Argonne National Laboratory	Subcontract No 6F-30844	81.RD		78,252	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	00127073	81.RD		(1,987)	(1,29
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184138	81.RD		38,500	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184558	81.RD		1,291	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184559	81.RD		15,108	-
ergy, Department of	Pass-Through	Battelle Energy Alliance, LLC	184561	81.RD		20,240	-
ergy, Department of	Pass-Through	Bechtel Marine Propulsion Corporation	PO 124375	81.RD		2,328	_
ergy, Department of	Pass-Through	Brookhaven Science Associates, LLC	241382	81.RD		(376)	_
ergy, Department of	Pass-Through	Brookhaven Science Associates, LLC	302986	81.RD		393,803	
		Brookhaven Science Associates, LLC	326127	81.RD			_
ergy, Department of	Pass-Through	•				327,972	-
ergy, Department of	Pass-Through	Detroit Diesel Corporation	Research Agreement	81.RD		134,739	-
ergy, Department of	Pass-Through	Ford Motor Company	RQ13-085R05	81.RD		103,962	-
ergy, Department of	Pass-Through	Ford Motor Company	RQ14-337R01	81.RD		146,602	-
ergy, Department of	Pass-Through	GE Global Research	401050083	81.RD		75,021	-
ergy, Department of	Pass-Through	Idaho National Lab	166012	81.RD		11,729	-
ergy, Department of	Pass-Through	Idaho National Lab	190212	81.RD		5,797	-
ergy, Department of	Pass-Through	Johns Hopkins University	2003555195	81.RD		31,323	-
ergy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B608839	81.RD		28,000	-
nergy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B611071	81.RD		(3,763)	_
ergy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B614207	81.RD		2,062,935	_
ergy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B621939	81.RD		(1,335)	
	-	Lawrence Livermore National Security, LLC	B623215	81.RD		47,605	_
ergy, Department of	Pass-Through	· · · · · · · · · · · · · · · · · · ·				-	-
ergy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B625733	81.RD		58,391	-
ergy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B626360	81.RD		62,779	-
ergy, Department of	Pass-Through	Lawrence Livermore National Security, LLC	B627062	81.RD		15,546	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	375553	81.RD		51,470	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	416304	81.RD		180,571	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	487270	81.RD		34,748	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	427118-367023	81.RD		68,022	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	454189 B.A. # 367023	81.RD		36,119	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	BA #367023 Subcontract# 370629	81.RD		524,086	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	BA 154750/#320801	81.RD		36,735	_
=	-	Los Alamos National Security, LLC Los Alamos National Security, LLC	BA# 367023 Subcontract # 45921	81.RD			-
ergy, Department of	Pass-Through					8,363	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	BA: 367023, SC: 389180	81.RD		43,030	-
ergy, Department of	Pass-Through	Los Alamos National Security, LLC	Subcontract No. 423006 Basic A	81.RD		239,673	-
D	Pass-Through	Los Alamos National Security, LLC	Subcontract# 389182, B.A. #367	81.RD		40,049	_
nergy, Department of nergy, Department of	Pass-Through	National Renewable Energy Laboratory	XEU-7-70041-01	81.RD		23,065	

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Energy, Department of	Pass-Through Pass-Through	National Renewable Energy Laboratory National Technology and Engineering Solutions of Sandia LLC (NTESS)	XEU-7-70226-01 1485136	81.RD 81.RD		34,466	-
Energy, Department of Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS) National Technology and Engineering Solutions of Sandia LLC (NTESS)	1511621	81.RD		(141) 64,329	-
Energy, Department of Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1626776	81.RD		150,676	<u>-</u>
Energy, Department of Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1763525	81.RD		13,044	_
Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1820798	81.RD		25,000	_
Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	1853288	81.RD		72,132	_
Energy, Department of	Pass-Through	National Technology and Engineering Solutions of Sandia LLC (NTESS)	Standard P.O. # 1869167	81.RD		19,389	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000135076	81.RD		184,067	=
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000136101	81.RD		222,839	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000136608	81.RD		319,501	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000138067	81.RD		88,000	=
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000144102	81.RD		4,057	=
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000149341	81.RD		56,366	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000152467	81.RD		9,457	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000153508	81.RD		18,000	-
Energy, Department of	Pass-Through	Oak Ridge National Laboratory	4000159555	81.RD		5,347	-
Energy, Department of	Pass-Through	Pacific Northwest National Laboratories	315246	81.RD		27,483	=
Energy, Department of	Pass-Through	Pacific Northwest National Laboratories	340625	81.RD		6,030	-
Energy, Department of	Pass-Through	Pacific Northwest National Laboratories	379141	81.RD		21,526	-
Energy, Department of	Pass-Through	Pacific Northwest National Laboratories	390688	81.RD		38,548	-
Energy, Department of	Pass-Through	Pacific Northwest National Laboratories	PO 387535	81.RD		58,253	-
Energy, Department of	Pass-Through	Pennsylvania State University	4909-UM-VG-4089	81.RD		(138)	-
Energy, Department of	Pass-Through	Princeton University	S014754-H	81.RD		(4,873)	-
Energy, Department of	Pass-Through	Savannah River National Laboratory	0000306392	81.RD		41,488	-
Energy, Department of	Pass-Through	SLAC National Accelerator Laboratory	174133	81.RD		77,884	-
Energy, Department of	Pass-Through	University of California - Irvine	2015-3156	81.RD		13,563	-
Energy, Department of	Pass-Through Pass-Through	University of California - Lawrence Berkeley National Laboratory	7213371 7234031	81.RD 81.RD		16,872 379,413	-
Energy, Department of Energy, Department of	Pass-Through	University of California - Lawrence Berkeley National Laboratory University of California - Lawrence Berkeley National Laboratory	7263193	81.RD		1,821,053	-
Energy, Department of Energy, Department of	Pass-Through	University of California - Lawrence Berkeley National Laboratory	7342299	81.RD		36,379	-
Energy, Department of Energy, Department of	Pass-Through	University of California - Lawrence Berkeley National Laboratory	Subcontract 7264325	81.RD		47,269	- -
Energy, Department of Energy, Department of	Pass-Through	UT-Battelle, LLC	4000140128	81.RD		512,273	_
Energy, Department of Energy, Department of	Pass-Through	UT-Battelle, LLC	4000140129	81.RD		1,208,929	_
Energy, Department of	Tuso Tinough	o i Building Elle	1000110129	onab		\$ 11,652,867	
			Total Energy, Department of			\$ 43,268,627	\ /
					National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship		
Education, Department of	Direct		P015A140090 (NRC)	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	\$ 284,076	\$ -
Education, Department of	Direct		P015A140091 (NRC)	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	306,710	-
Education, Department of	Direct		P015A140093 (NRC)	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	237,165	-
Education, Department of	Direct		P015A140095 (NRC)	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	202,265	-
Education, Department of	Direct		P015A140100	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	328,093	-
Education, Department of	Direct		P015B140090 (FLAS)	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	269,376	-
Education, Department of	Direct		P015B140091 (FLAS)	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	315,890	-
Education, Department of	Direct		P015B140092	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	221,458	-
Education, Department of	Direct		P015B140093 (FLAS)	84.015	Program National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship	394,922	-
Education, Department of	Direct		P015B140095 (FLAS)	84.015	Program Program	225,837	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies	Federal Expenditures	Pass-Through
					Program and Foreign Language and Area Studies Fellowship		
ducation, Department of	Direct		P015B140100	84.015	Program	264,871	_
			22	V 2	8	\$ 3,050,663	\$ -
ducation, Department of	Direct		P022A150008	84.022	Overseas Programs - Doctoral Dissertation Research Abroad	\$ 1,181	\$ -
ducation, Department of	Direct		P022A160004	84.022	Overseas Programs - Doctoral Dissertation Research Abroad	4,481	-
ducation, Department of	Direct		P022A170002	84.022	Overseas Programs - Doctoral Dissertation Research Abroad	107,670	-
•					-	\$ 113,332	\$ -
lucation, Department of	Direct		P200A150164	84.200	Graduate Assistance in Areas of National Need	\$ 412,589	\$ -
ucation, Department of	Direct		P200A150170	84.200	Graduate Assistance in Areas of National Need	339,136	-
						\$ 751,725	
ucation, Department of	Direct		R305A100369	84.305	Education Research, Development and Dissemination	\$ 16,560	•
cation, Department of	Direct		R305A120811	84.305	Education Research, Development and Dissemination	709,465	254,21
cation, Department of	Direct		R305A140059	84.305	Education Research, Development and Dissemination	326,800	234,68
cation, Department of	Direct		R305A140363	84.305	Education Research, Development and Dissemination	279,701	223,20
eation, Department of	Direct		R305A140647	84.305	Education Research, Development and Dissemination	218,727	97,79
cation, Department of	Direct		R305A150163	84.305	Education Research, Development and Dissemination	464,507	295,65
cation, Department of	Direct		R305A170489	84.305	Education Research, Development and Dissemination	158,180	-
cation, Department of	Direct		R305B11000115	84.305	Education Research, Development and Dissemination	4,414	-
cation, Department of	Direct		R305B150012-17	84.305	Education Research, Development and Dissemination	753,573	-
cation, Department of	Direct		R305B170015	84.305	Education Research, Development and Dissemination	11,687	-
ation, Department of	Direct		R305H140028	84.305	Education Research, Development and Dissemination	395,025	232,50
ration, Department of	Pass-Through	MDRC	R305N160018	84.305	Education Research, Development and Dissemination	44,965	-
ation, Department of	Pass-Through	Miami University	G02732	84.305	Education Research, Development and Dissemination	196,309	-
eation, Department of	Pass-Through	New York University	F0255-04	84.305	Education Research, Development and Dissemination	13,997	-
ation, Department of	Pass-Through	Northwestern University	SP0034839-PROJ0009317	84.305	Education Research, Development and Dissemination	8,751	-
eation, Department of	Pass-Through	University of Minnesota	P005236601	84.305	Education Research, Development and Dissemination	41,264	-
-					_	\$ 3,643,925	\$ 1,354,67
cation, Department of	Direct		R324A150023	84.324	Research in Special Education	\$ 366,615	\$ 114,03
					Special Education - Personnel Development to Improve	,	•
eation, Department of	Direct		H325D110003	84.325	Services and Results for Children with Disabilities Special Education - Personnel Development to Improve	\$ 4,033	\$ -
cation, Department of	Direct		H325D160032	84.325	Services and Results for Children with Disabilities	254,186	_
auton, Department of	Birect		110200 100002	01.323	Services and results for Similaren with Disastinates	\$ 258,219	
					Gaining Early Awareness and Readiness for Undergraduate	ψ 250,217	Ψ
eation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	15-00-19B	84.334	Programs	\$ 1,632	\$ -
anon, Beparanen er	Tubb Tinough	intelligan, state of, Department of Tuton and Development	10 00 172	01.551	Gaining Early Awareness and Readiness for Undergraduate	1,032	Ψ
eation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-11	84.334	Programs	130,134	_
ation, Department of	russ rinough	intelligan, state of, Department of Tutont and Development	10 00 11	01.551	Gaining Early Awareness and Readiness for Undergraduate	150,151	
ation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-13	84.334	Programs	27,316	_
ation, Department of	1 uss 1 mough	Themgan, state of, Department of Talent and Development	10 00 13	01.551	Gaining Early Awareness and Readiness for Undergraduate	27,310	
ation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-13	84.334	Programs	10,364	_
ation, Department of	russ rinough	intelligan, state of, Department of Tutont and Development	10 00 13	01.551	Gaining Early Awareness and Readiness for Undergraduate	10,501	
eation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-18	84.334	Programs	7,428	_
, _F	8				Gaining Early Awareness and Readiness for Undergraduate	.,	
ation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-18	84.334	Programs	8,935	_
ation, Department of	1 uss 1 mough	intelligan, state of, Department of Tutont and Development	10 00 10	01.551	Gaining Early Awareness and Readiness for Undergraduate	0,733	
eation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-19	84.334	Programs	51,088	_
ation, Department of	1 ass Tillough	Michigan, State of, Department of Tarent and Leononic Development	10 00 1)	04.334	Gaining Early Awareness and Readiness for Undergraduate	31,000	
ation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-19	84.334	Programs	91,158	_
ation, Department of	1 ass-1111ough	whenigan, state of, Department of Talent and Economic Development	10-00-19	07.337	Gaining Early Awareness and Readiness for Undergraduate	91,136	_
eation, Department of	Pass-Through	Michigan, State of, Strategic Fund	16-00-12	84.334	Programs	(4,834)	
ation, Department of	1 ass-1111 ough	Michigan, State of, Strategie I und	10-00-12	07.337	Gaining Early Awareness and Readiness for Undergraduate	(4,034)	_
ation, Department of	Pass-Through	Michigan, State of, Strategic Fund	16-00-12	84.334	Programs	53,022	_
ation, Department of	1 ass-1111 ough	Michigan, State of, Strategic I that	10-00-12	04.334	Tograms	\$ 376,243	
ration, Department of	Direct		P335A130240	84.335	Child Care Access Means Parents in School	\$ 25,053	
ation, Department of	Pass-Through	Michigan, State of, Department of Talent and Economic Development	16-00-11	84.344	TRIO Dissemination Partnership Grants	\$ 94,344	
tion, Department of	Pass-Through	Tennessee, State of	0000024026 / 33105-04117 / 515	84.372	Statewide Longitudinal Data Systems	\$ 81,499	
ation, Department of	Pass-Through	Flint Community Schools	Award Letter Dated 10/20/16	84.RD	Statewide Longitudinal Data Systems	\$ 4,483	
ation, Department of	Pass-Through	Flint Community Schools	Award Letter Dated 10/20/16 Award Letter Dated 10/20/16	84.RD		3,271	Ψ
tion, Department of	Pass-Through	Flint Community Schools	MOU	84.RD		15,002	=
tion, Department of	Pass-Through	Flint Community Schools	MOU	84.RD		15,002	-
tion, Department of	Pass-Through	Michigan, State of, Education, Department of		84.RD		754,128	-
tion, Department of	Pass-Through	Michigan, State of, Education, Department of	Agreement	04.KD		\$ 791,886	<u>-</u>
			Total Education Department of			\$ 9,553,504	
			Total Education, Department of			\$ 9,333,304	\$ 1,408,70
	D'		5 D05 HD20027 02 00	02.050	This is a limited limited by the	f 150.224	¢.
th and Human Services, Department of	Direct	M'1' - D'C - A - '4'	5 D85 HP30827-02-00	93.059	Training in General, Pediatric, and Public Health Dentistry	\$ 159,334	
h and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Award Letter dtd 23Mar18	93.070	Environmental Public Health and Emergency Response Hospital Preparedness Program (HPP) and Public Health	\$ 2,159	Φ -
	D 771 1	Military Company of the Company of t	F20171101 002	02.074	Emergency Preparedness (PHEP) Aligned Cooperative	ф 10.000	Ф
th and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171181-002	93.074	Agreements Haggital Dynamadnass Dynamam (HDD) and Dynklia Haalth	\$ 10,888	\$ -
					Hospital Preparedness Program (HPP) and Public Health		
					Emergency Preparedness (PHEP) Aligned Cooperative		
h and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182710-00	93.074	Agreements	62,667	-
						\$ 73,555	\$ -
	. — ·		C7		Family Smoking Prevention and Tobacco Control Act		Φ.
th and Human Services, Department of	Pass-Through	Georgetown University	GR410103	93.077	Regulatory Research	\$ 103,225	\$ -

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Hemophilia Foundation of Michigan	15-16-446	93.080	Blood Disorder Program: Prevention, Surveillance, and Research	\$ 13,310 \$,
, 1	8				Blood Disorder Program: Prevention, Surveillance, and		
Health and Human Services, Department of	Pass-Through	Hemophilia Foundation of Michigan	CDC-17-18-446	93.080	Research	9,487	-
					Prevention of Disease, Disability, and Death through	\$ 22,797 \$	
Health and Human Services, Department of	Direct		3 U01IP000974-02S1	93.083	Immunization and Control of Respiratory and Related Diseases	\$ 170,999 \$	73,780.00
-					Prevention of Disease, Disability, and Death through		
Health and Human Services, Department of	Direct		5 U01 IP000965-03	93.083	Immunization and Control of Respiratory and Related Diseases	342,584	-
Health and Human Services, Department of	Direct		5 U01 IP000974-03	93.083	Prevention of Disease, Disability, and Death through Immunization and Control of Respiratory and Related Diseases	522,838	82,887.00
Treatur and Transact Services, Department of	Birect		5 601 H 00057 1 05	75.005	inminument and control of recopitatory and rectained Bibbases	\$ 1,036,421 \$	· · · · · · · · · · · · · · · · · · ·
					Prevention of Disease, Disability, and Death by Infectious		
Health and Human Services, Department of	Pass-Through	Rush University Medical Center	15122902-Sub01	93.084	Diseases Prevention of Disease, Disability, and Death by Infectious	\$ 256,895 \$	-
Health and Human Services, Department of	Pass-Through	Rush University Medical Center	Hayden CPIEII CORE Subaward Ag	93.084	Diseases	72,160	_
2100000 01	Tues Time ugii		, <u>-</u> <u>-</u> <u>-</u>	, , , , ,	-	\$ 329,055 \$	-
Health and Human Services, Department of	Direct		1 R01 FD005393-01A1	93.103	Food and Drug Administration Research	\$ 208,451 \$	-
Health and Human Services, Department of	Direct		4 P50 FD00378-07	93.103	Food and Drug Administration Research	(209)	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 FD005085-03 5 U01 FD005847-02	93.103 93.103	Food and Drug Administration Research Food and Drug Administration Research	440,689 262,454	152,300
Health and Human Services, Department of	Pass-Through	Cincinnati Children's Hospital Medical Center (CCHMC)	PO 3100482392/134248	93.103	Food and Drug Administration Research	15,584	- -
, 1	S	•				\$ 926,969 \$	152,300
W. H	D 751 1			02.104	Comprehensive Community Mental Health Services for	(2.61) · (2.61)	
Health and Human Services, Department of	Pass-Through Direct	American Indian Health and Family Services of SE Michigan, Inc (AIHFS)	Roundtable Research Agreement 1H98MC30374-01-00	93.104	Children with Serious Emotional Disturbances (SED) Maternal and Child Health Federal Consolidated Programs	\$ (361) \$ \$ 254,900 \$	
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 T20 MC07463-10-00	93.110 93.110	Maternal and Child Health Federal Consolidated Programs	812	-
Health and Human Services, Department of	Direct		5 T20 MC07463-10-00 5 T20 MC07463-12-00	93.110	Maternal and Child Health Federal Consolidated Programs	12,741	1,557
Health and Human Services, Department of	Pass-Through	Hemophilia Foundation of Michigan	2017-2018- MCHB Grant Award	93.110	Maternal and Child Health Federal Consolidated Programs	26,564	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20170680-03	93.110	Maternal and Child Health Federal Consolidated Programs	5,503	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20170682-00	93.110	Maternal and Child Health Federal Consolidated Programs	6,556	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182445-00	93.110	Maternal and Child Health Federal Consolidated Programs	18,713	-
Health and Human Services, Department of	Pass-Through	University of California - Los Angeles	1638 G UA197 WSU16147	93.110 93.110	Maternal and Child Health Federal Consolidated Programs Maternal and Child Health Federal Consolidated Programs	7,000	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Wayne State University Wayne State University	WSU16153	93.110	Maternal and Child Health Federal Consolidated Programs	17,550 (246)	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17100	93.110	Maternal and Child Health Federal Consolidated Programs	53,151	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17103	93.110	Maternal and Child Health Federal Consolidated Programs	3,111	-
	D' .		1 Pol Ego20002 01	02.112	T :	\$ 406,355 \$	
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R01 ES028802-01 1 R21 ES026306-02	93.113 93.113	Environmental Health Environmental Health	\$ 182,083 \$ 187,913	-
Health and Human Services, Department of	Direct		1 R21 ES020500-02 1 R21 ES029751-01	93.113	Environmental Health	11,032	- -
Health and Human Services, Department of	Direct		1 R24 ES028502-01	93.113	Environmental Health	123,552	20,471
Health and Human Services, Department of	Direct		4 R01 ES020875-05	93.113	Environmental Health	(736)	-
Health and Human Services, Department of	Direct Direct		4 R01 ES021465-05 5 F31 ES025101-02	93.113 93.113	Environmental Health Environmental Health	529,367	10,189
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 F32 ES025101-02 5 F32 ES026477-02	93.113	Environmental Health	(3,889) 55,592	-
Health and Human Services, Department of	Direct		5 K01 ES026839-03	93.113	Environmental Health	185,689	-
Health and Human Services, Department of	Direct		5 K23 ES027221-02	93.113	Environmental Health	214,187	-
Health and Human Services, Department of	Direct		5 K99 ES026198-02	93.113	Environmental Health	82,260	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 P01 ES022844-05 5 P30 ES017885-07	93.113 93.113	Environmental Health Environmental Health	636,842 1,835,529	44,269
Health and Human Services, Department of	Direct		5 R00 ES024340-05	93.113	Environmental Health	242,256	- -
Health and Human Services, Department of	Direct		5 R01 ES012236-15	93.113	Environmental Health	252,215	-
Health and Human Services, Department of	Direct		5 R01 ES022616-05	93.113	Environmental Health	504,341	111,796
Health and Human Services, Department of	Direct Direct		5 R01 ES024732-04 5 R01 ES026578-03	93.113 93.113	Environmental Health Environmental Health	310,341	19,425
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 ES026964-02	93.113	Environmental Health	499,461 574,992	-
Health and Human Services, Department of	Direct		5 U01 ES026697-03	93.113	Environmental Health	389,014	-
Health and Human Services, Department of	Direct		T32 ES007062	93.113	Environmental Health	442,553	-
Health and Human Services, Department of	Pass-Through	Boston University	4500000637	93.113	Environmental Health	63	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Case Western Reserve University Case Western Reserve University	RES512047 RES512141	93.113 93.113	Environmental Health Environmental Health	116,928 116,421	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University Case Western Reserve University	RES512634	93.113	Environmental Health	82,710	-
Health and Human Services, Department of	Pass-Through	Colorado State University	G-00695	93.113	Environmental Health	1,085	-
Health and Human Services, Department of	Pass-Through	Colorado State University	G-18939-1	93.113	Environmental Health	16,358	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Harvard University Johns Honkins University	112147-5072942 2002425844	93.113 93.113	Environmental Health Environmental Health	129,486 1,084	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University Johns Hopkins University	2002423844 2002950119	93.113	Environmental Health	48,360	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	R01ES025531	93.113	Environmental Health	80,954	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC103336UM	93.113	Environmental Health	66,231	-
Health and Human Services, Department of	Pass-Through	Northeastern University	500488-78050 500550 78050	93.113	Environmental Health	695	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Northeastern University University of Chicago	500550-78050 FP057364-B	93.113 93.113	Environmental Health Environmental Health	131,070 6,545	-
Health and Human Services, Department of	Pass-Through	University of New Mexico	3RDG3	93.113	Environmental Health	28,880	-
Health and Human Services, Department of	Pass-Through	University of Toronto	495477	93.113	Environmental Health	19,282	
						\$ 8,100,746 \$	206,150

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
					Preventive Medicine and Public Health Residency Training		
M 1H C - D 4 4 C	D'		1D22HD21/700100	02 117	Program, Integrative Medicine Program, and National Center		¢.
ealth and Human Services, Department of	Direct		1D33HP316700100	93.117	for Integrative Primary Healthcare Preventive Medicine and Public Health Residency Training	\$ 15,454	\$ -
					Program, Integrative Medicine Program, and National Center		
ealth and Human Services, Department of	Direct		5 D33 HP25796-04-00	93.117	for Integrative Primary Healthcare	379,040	
earm and Human Services, Department of	Direct		3 D33 HP23/90-04-00	93.117	for integrative Primary Heatthcare	\$ 394,494	
ealth and Human Services, Department of	Direct		1 F30 DE027605-01	93.121	Oral Diseases and Disorders Research	\$ 21,683	
lealth and Human Services, Department of	Direct		1 F31 DE027600-01	93.121	Oral Diseases and Disorders Research	31,254	<u>-</u>
ealth and Human Services, Department of	Direct		1 F32 DE027604-01	93.121	Oral Diseases and Disorders Research	57,214	-
ealth and Human Services, Department of	Direct		1 K08 DE026500-01	93.121	Oral Diseases and Disorders Research	16,415	-
lealth and Human Services, Department of	Direct		1 K99 DE026810-02	93.121	Oral Diseases and Disorders Research	104,744	-
lealth and Human Services, Department of	Direct		1 R01 DE026578-01	93.121	Oral Diseases and Disorders Research	174,258	-
ealth and Human Services, Department of	Direct		1 R01 DE026630-01	93.121	Oral Diseases and Disorders Research	197,858	
ealth and Human Services, Department of	Direct		1 R01 DE026666-01A1	93.121	Oral Diseases and Disorders Research	180,409	-
ealth and Human Services, Department of	Direct		1 R01 DE026728-01A1	93.121	Oral Diseases and Disorders Research	61,623	-
ealth and Human Services, Department of	Direct		1 R21 DE027169-01	93.121	Oral Diseases and Disorders Research	54,309	-
ealth and Human Services, Department of	Direct		1 R35 DE027551-01	93.121	Oral Diseases and Disorders Research	410,231	140.1
ealth and Human Services, Department of	Direct		1 R56 DE026464-01A1	93.121	Oral Diseases and Disorders Research	314,347	148,1
ealth and Human Services, Department of	Direct		1 U01 DE027372 01	93.121	Oral Diseases and Disorders Research	827,959	
ealth and Human Services, Department of	Direct		2 U01 DE021412-07 4 R01 DE016530-10	93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research	1,160,365 6,866	660,7
ealth and Human Services, Department of	Direct			93.121			
ealth and Human Services, Department of	Direct Direct		4 R01 DE022327-05 4 R01 DE022567-04	93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research	61,868 353,132	
alth and Human Services, Department of alth and Human Services, Department of	Direct Direct		4 R01 DE022567-04 4 R01 DE024450-04	93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research	353,132 153,367	10,6
ealth and Human Services, Department of	Direct		4 K01 DE024450-04 4 U01 DE021412-06	93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research	363,556	•
ealth and Human Services, Department of	Direct		5 F30 DE023479-04	93.121	Oral Diseases and Disorders Research	28,860	
ealth and Human Services, Department of	Direct		5 F30 DE025471-03	93.121	Oral Diseases and Disorders Research	49,403	
ealth and Human Services, Department of	Direct		5 F30 DE026048-03	93.121	Oral Diseases and Disorders Research	51,421	
ealth and Human Services, Department of	Direct		5 F32 DE026346-04	93.121	Oral Diseases and Disorders Research	54,222	_
ealth and Human Services, Department of	Direct		5 K12 DE023574-05	93.121	Oral Diseases and Disorders Research	285,497	42,5
alth and Human Services, Department of	Direct		5 R00 DE022557-04	93.121	Oral Diseases and Disorders Research	315,043	,-
alth and Human Services, Department of	Direct		5 R00 DE022564-05	93.121	Oral Diseases and Disorders Research	40,700	,
alth and Human Services, Department of	Direct		5 R00 DE024173-05	93.121	Oral Diseases and Disorders Research	296,572	
alth and Human Services, Department of	Direct		5 R01 DE011723-19	93.121	Oral Diseases and Disorders Research	348,950	
alth and Human Services, Department of	Direct		5 R01 DE013397-13	93.121	Oral Diseases and Disorders Research	59,262	
ealth and Human Services, Department of	Direct		5 R01 DE015846-14	93.121	Oral Diseases and Disorders Research	515,588	
ealth and Human Services, Department of	Direct		5 R01 DE020843-09	93.121	Oral Diseases and Disorders Research	549,711	109,1
ealth and Human Services, Department of	Direct		5 R01 DE021139-07	93.121	Oral Diseases and Disorders Research	453,880	-
ealth and Human Services, Department of	Direct		5 R01 DE021410-06	93.121	Oral Diseases and Disorders Research	326,423	-
ealth and Human Services, Department of	Direct		5 R01 DE023220-04	93.121	Oral Diseases and Disorders Research	(16,658)	
ealth and Human Services, Department of	Direct		5 R01 DE025225-04	93.121	Oral Diseases and Disorders Research	759,553	446,2
ealth and Human Services, Department of	Direct		5 R01 DE025827-03	93.121	Oral Diseases and Disorders Research	439,271	83,8
ealth and Human Services, Department of	Direct		5 R01 DE026116-02	93.121	Oral Diseases and Disorders Research	208,664	
ealth and Human Services, Department of	Direct		5 R21 DE023845-02	93.121	Oral Diseases and Disorders Research	(173)	
ealth and Human Services, Department of	Direct		5 R21 DE024384-02	93.121	Oral Diseases and Disorders Research	(408)	
ealth and Human Services, Department of	Direct		5 R21 DE025598-02	93.121	Oral Diseases and Disorders Research	126,400	
ealth and Human Services, Department of	Direct		5 R56 DE025097-02	93.121	Oral Diseases and Disorders Research	207,107	42,2
ealth and Human Services, Department of	Direct		5 U01 DE023771-03 5 U01 DE023771-05	93.121	Oral Diseases and Disorders Research	2,113	-
ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct		5 U01 DE025771-03 5 U01 DE025184-04	93.121 93.121	Oral Diseases and Disorders Research Oral Diseases and Disorders Research	526,446 1,170,377	-
alth and Human Services, Department of	Direct		5 U01 DE025633-02	93.121	Oral Diseases and Disorders Research	344,721	•
ealth and Human Services, Department of	Direct		5 U24 DE026915-02	93.121	Oral Diseases and Disorders Research	1,932,098	1,143,2
ealth and Human Services, Department of	Direct		7 K08 DE023552-06	93.121	Oral Diseases and Disorders Research	113,758	
ealth and Human Services, Department of	Direct		7 R01 DE024796-04	93.121	Oral Diseases and Disorders Research	276,809	
ealth and Human Services, Department of	Direct		T32 DE007057	93.121	Oral Diseases and Disorders Research	(86,468)	
ealth and Human Services, Department of	Direct		T32 DE007057	93.121	Oral Diseases and Disorders Research	681,370	
ealth and Human Services, Department of		Carolinas HealthCare System	3000300177	93.121	Oral Diseases and Disorders Research	109,958	
ealth and Human Services, Department of	-	Forsyth Institute, The	21127UM-2335	93.121	Oral Diseases and Disorders Research	(1,002)	
ealth and Human Services, Department of	-	Fukuoka Dental College	Prime 7 R01 DE023538 04	93.121	Oral Diseases and Disorders Research	18,820	
ealth and Human Services, Department of	_	Johns Hopkins University	Subaward#2002809952	93.121	Oral Diseases and Disorders Research	37,662	
alth and Human Services, Department of	_	Kitware, Inc	K002137-00-S02	93.121	Oral Diseases and Disorders Research	86,758	
alth and Human Services, Department of		Research Foundation of City University of New York (CUNY)	R923393	93.121	Oral Diseases and Disorders Research	34,630	
alth and Human Services, Department of	Pass-Through	Sanford Burnham Prebys Medical Research Institute	59276-12718-UOM-02	93.121	Oral Diseases and Disorders Research	112,275	
alth and Human Services, Department of		University of Florida, The	UFDSP00010750 / 00112186	93.121	Oral Diseases and Disorders Research	8,964	
alth and Human Services, Department of		University of Pittsburgh	0051687 (128031-1)	93.121	Oral Diseases and Disorders Research	38,740	
ealth and Human Services, Department of	_	University of Pittsburgh	0051687 (129710-2)	93.121	Oral Diseases and Disorders Research	401,804	
alth and Human Services, Department of	Pass-Through	University of Pittsburgh	0056235 (130270-2)	93.121	Oral Diseases and Disorders Research	31,645	
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ealth and Human Services, Department of	Direct		1 A22 HP31014-01-00	93.124	Nurse Anesthetist Traineeship	\$ 43,677	
alth and Human Services, Department of	_	The Research Institute at Nationwide Children's Hospital	710040-0818-00	93.127	Emergency Medical Services for Children	\$ 230,632	
alth and Human Services, Department of	Pass-Through	National Kidney Foundation of Michigan	R39OT26992	93.134	Grants to Increase Organ Donations	\$ 15,704	\$
alth and Human Camina D	D:4		1 LIO1 (JE002700 01	02.126	Injury Prevention and Control Research and State and	0 107.007	¢
ealth and Human Services, Department of	Direct		1 U01 CE002780-01	93.136	Community Based Programs Injury Prevention and Control Research and State and	\$ 126,927	
					mpary a revenuon and control rescalen and State and		
alth and Human Sarvices Denortment of	Direct		5 DOI CE002552 02	02 126		111757	
ealth and Human Services, Department of	Direct		5 R01 CE002552-03	93.136	Community Based Programs Injury Prevention and Control Research and State and	114,757	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 U01 CE002698-03	93.136	Injury Prevention and Control Research and State and Community Based Programs	1,641,602	349,957
Treates and Traines Services, Department of	Birect		3 601 62002070 03	73.130	Injury Prevention and Control Research and State and	1,011,002	313,557
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172274-001	93.136	Community Based Programs	29,526	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20181635-001	93.136	Injury Prevention and Control Research and State and Community Based Programs	85,273	_
Treatur and Truman Services, Department of	1 ass-1 mough	Whenigan, State of, Treatur and Truman Services, Department of	120101033-001	75.150	Injury Prevention and Control Research and State and	03,273	_
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182818-00	93.136	Community Based Programs	56,285	-
H M - H- C - D - 4 - C	D TI 1	M. I	F20192920 001	02.126	Injury Prevention and Control Research and State and	50.217	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182839-001	93.136	Community Based Programs Injury Prevention and Control Research and State and	59,317	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU16141	93.136	Community Based Programs	31,610	-
					Injury Prevention and Control Research and State and		
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17145	93.136	Community Based Programs	\$ 34,250 \$ 3,056,605	349,957
					Community Programs to Improve Minority Health Grant	3,030,003	349,937
Health and Human Services, Department of	Direct		1CPIMP171156-01-00	93.137	Program	\$ 170,547 \$	102,953
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Health and Human Services, Department of	Pass-Through	International Union, UAW	Agreement dated 8/28/12	93.142	NIEHS Hazardous Waste Worker Health and Safety Training NIEHS Superfund Hazardous Substances Basic Research and	\$ 149,220 \$	-
Health and Human Services, Department of	Pass-Through	Northeastern University	500460-78050	93.143	Education	\$ (5,776) \$	-
					NIEHS Superfund Hazardous Substances_Basic Research and		
Health and Human Services, Department of	Pass-Through	Northeastern University	500461-78050	93.143	Education NIEHS Superfund Hazardous Substances Basic Research and	(382)	-
Health and Human Services, Department of	Pass-Through	Northeastern University	500524-78050	93.143	Education	457,503	-
	g	- · · · · · · · · · · · · · · · · · · ·		, , , ,	NIEHS Superfund Hazardous Substances_Basic Research and	,	
Health and Human Services, Department of	Pass-Through	Northeastern University	500525-78050	93.143	Education	192,681	-
Health and Human Services, Department of	Pass-Through	Northeastern University	500589-78050	93.143	NIEHS Superfund Hazardous Substances_Basic Research and Education	17,678	_
Treatin and Truman Services, Department of	1 ass-1 iii ougii	Notification Oniversity	300307-70030	73.143	NIEHS Superfund Hazardous Substances Basic Research and	17,070	
Health and Human Services, Department of	Pass-Through	Northeastern University	500590-78050	93.143	Education	50,131	-
Health and Hymnan Complete Department of	Direct		2 R56 HG000376-28A1	93.172	Human Genome Research	\$ 711,835 \$ \$ 357,487 \$	
Health and Human Services, Department of Health and Human Services, Department of	Direct		3 R01 HG000376-27S1	93.172	Human Genome Research	62,614	-
Health and Human Services, Department of	Direct		4 R01 HG007022-05	93.172	Human Genome Research	255,399	-
Health and Human Services, Department of	Direct		4 R01 HG007068-04	93.172	Human Genome Research	282,905	-
Health and Human Services, Department of	Direct		4 UM1 HG006508-04	93.172	Human Genome Research	78,429	16,266
Health and Human Services, Department of	Direct		5 R00 HG007356-04	93.172	Human Genome Research	49,134	-
Health and Human Services, Department of	Direct		5 R01 HG000376-27	93.172	Human Genome Research	(4,328)	<u>-</u>
Health and Human Services, Department of	Direct		5 R01 HG007172-03	93.172	Human Genome Research	31,177	31,177
Health and Human Services, Department of	Direct		5 R01 HG008773-03	93.172	Human Genome Research	397,347	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HG009124-02 5 R21HG009205-02	93.172 93.172	Human Genome Research Human Genome Research	356,358 90,844	-
Health and Human Services, Department of	Direct		5 K2 111G009203-02 5UM1 HG009382-02	93.172	Human Genome Research	515,439	-
Health and Human Services, Department of	Direct		T32 HG000040	93.172	Human Genome Research	513,137	_
Health and Human Services, Department of	Direct		T32 HG000040	93.172	Human Genome Research	440,181	-
Health and Human Services, Department of	Pass-Through	Broad Institute	5000057-5500000825	93.172	Human Genome Research	319,482	64,978
Health and Human Services, Department of	Pass-Through	Jackson Laboratory/MMRRC	Research Agreement	93.172	Human Genome Research	30,782	-
Health and Human Services, Department of	Pass-Through	Jackson Laboratory/MMRRC	TBI	93.172	Human Genome Research	65,574	-
Health and Human Services, Department of	Pass-Through	Rutgers University	5849	93.172	Human Genome Research	(3,021)	-
Health and Human Services, Department of	Pass-Through	Rutgers University	6121 0354/PO765768	93.172	Human Genome Research	31,907	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Rutgers University Stanford University	61448507-123432	93.172 93.172	Human Genome Research Human Genome Research	6,527 286,268	-
Health and Human Services, Department of	Pass-Through	Stanford University	61630349-104913	93.172	Human Genome Research	130,669	<u>-</u>
Health and Human Services, Department of	Pass-Through	University of Ghana School of Medicine and Dentistry	5U54HG00693904	93.172	Human Genome Research	(5,040)	_
Health and Human Services, Department of	Pass-Through	University of Ghana School of Medicine and Dentistry	5U54HG006939-05	93.172	Human Genome Research	27,618	-
Health and Human Services, Department of	Pass-Through	Washington University School of Medicine	WU-18-165	93.172	Human Genome Research	24,665	-
	D: .		1 001 0001(171 01 41	02.172		\$ 3,828,931 \$	112,421
Health and Human Services, Department of	Direct		1 R21 DC016171-01A1	93.173	Research Related to Deafness and Communication Disorders	\$ 28,890 \$	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R21 DC016456-01A1 1 R21 DC016681-01	93.173 93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	16,901 81,245	-
Health and Human Services, Department of	Direct		2 R01 DC004084-16	93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	45,911	-
Health and Human Services, Department of	Direct		2 R56 DC010786-06A1	93.173	Research Related to Deafness and Communication Disorders	(511)	_
Health and Human Services, Department of	Direct		4 K08 DC012535-06	93.173	Research Related to Deafness and Communication Disorders	192,340	_
Health and Human Services, Department of	Direct		4 P30 DC005188-15	93.173	Research Related to Deafness and Communication Disorders	337,102	_
Health and Human Services, Department of	Direct		4 R01 DC004084-15	93.173	Research Related to Deafness and Communication Disorders	54,313	-
Health and Human Services, Department of	Direct		4 R01 DC004825-15	93.173	Research Related to Deafness and Communication Disorders	206,331	-
Health and Human Services, Department of	Direct		5 F31 DC014407-02	93.173	Research Related to Deafness and Communication Disorders	(9,676)	-
Health and Human Services, Department of	Direct		5 F32 DC015381-02	93.173	Research Related to Deafness and Communication Disorders	49,291	-
Health and Human Services, Department of	Direct		5 R01 DC004820-15	93.173	Research Related to Deafness and Communication Disorders	405,919	39,290
Health and Human Services, Department of	Direct		5 R01 DC009410-10	93.173	Research Related to Deafness and Communication Disorders	324,686	26,386
Health and Human Services, Department of	Direct		5 R01 DC011277-09	93.173	Research Related to Deafness and Communication Disorders	568,522	16,157
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 DC012760-03 5 R01 DC012760-05	93.173 93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	(20) 671,110	-
• •	Direct		5 R01 DC012/60-05 5 R01 DC013885-04	93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	263,763	-
Health and Human Services Denartment of							
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 DC014428-04	93.173	Research Related to Deafness and Communication Disorders	695,069	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 DC014703-03	93.173	Research Related to Deafness and Communication Disorders	631,753	241,471
Health and Human Services, Department of	Direct		5 R01 DC015799-02	93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	457,735	- 4 2 1 0
Health and Human Services, Department of	Direct		5 R01 DC015809-02 5 R21 DC015097-02	93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	611,951	4,310
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R21 DC013097-02 5 R21 DC015312-02	93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	153,051 160,683	32,673
Health and Human Services, Department of	Direct		5 R21 DC013512-02 5 R21 DC015853-02	93.173 93.173	Research Related to Deafness and Communication Disorders Research Related to Deafness and Communication Disorders	36,653	2,818
Health and Human Services, Department of	Direct		5 R33 DC013678-05	93.173	Research Related to Deafness and Communication Disorders	400,307	84,390
Health and Human Services, Department of	Direct		8 R00 DC013828-04	93.173	Research Related to Deafness and Communication Disorders	304,514	-
Health and Human Services, Department of	Direct		T32 DC000011	93.173	Research Related to Deafness and Communication Disorders	360,918	_
Health and Human Services, Department of	Direct		T32 DC005356	93.173	Research Related to Deafness and Communication Disorders	(289)	_
Health and Human Services, Department of	Direct		T32 DC005356	93.173	Research Related to Deafness and Communication Disorders	8,624	_
Health and Human Services, Department of	Direct		T32 DC005356	93.173	Research Related to Deafness and Communication Disorders	156,010	_
Health and Human Services, Department of	Pass-Through	Alfred I dupont Hospital, DE	3023854003	93.173	Research Related to Deafness and Communication Disorders	47,226	_
Health and Human Services, Department of	Pass-Through	Baylor University	PO 5601176401	93.173	Research Related to Deafness and Communication Disorders	200,529	-
Iealth and Human Services, Department of	Pass-Through	Boston University	4500002041	93.173	Research Related to Deafness and Communication Disorders	11,780	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	118484	93.173	Research Related to Deafness and Communication Disorders	135,029	80,878
Health and Human Services, Department of	Pass-Through	University of Georgia	RC287-423/4353688	93.173	Research Related to Deafness and Communication Disorders	(16,351)	- -
Health and Human Services, Department of	Pass-Through	University of Iowa	W001066783 PO#1001942196	93.173	Research Related to Deafness and Communication Disorders	6,634	-
Health and Human Services, Department of	Pass-Through	University of Southern California	63773594	93.173	Research Related to Deafness and Communication Disorders	42,320	_
, 1	8					\$ 8,228,736	\$ 528,373
					Immunization Research, Demonstration, Public Information		
					and Education Training and Clinical Skills Improvement		
Health and Human Services, Department of	Direct		5 U01 IP001034-02	93.185	Projects	\$ 1,393,685	\$ -
					Childhood Lead Poisoning Prevention Projects, State and Local		
	D TI 1	Military Control of the Control of t	DO107/52 IB4	02.107	Childhood Lead Poisoning Prevention and Surveillance of	ф. 157.760	Ф
Health and Human Services, Department of	Pass-Through	Michigan State University	RC107653-UM	93.197	Blood Lead Levels in Children Research and Training in Complementary and Integrative	\$ 157,768	5 -
Health and Human Services, Department of	Direct		5 R01 AT007550-05	93.213	Health	\$ 512,719	\$ 86,236.00
realth and Trainan Services, Department of	Bilect		2 101 11100/220 02	75.215	Research and Training in Complementary and Integrative	ψ 312,717	00,230.00
Health and Human Services, Department of	Direct		5 R01 AT009003-03	93.213	Health	238,637	31,333
, 1					Research and Training in Complementary and Integrative	,	- ,
Health and Human Services, Department of	Direct		5 R21 AT009253-02	93.213	Health	434,367	-
					Research and Training in Complementary and Integrative		
Health and Human Services, Department of	Pass-Through	Arizona State University	17-126	93.213	Health	10,386	-
					Research and Training in Complementary and Integrative		
Health and Human Services, Department of	Pass-Through	Baylor University	3220170-01	93.213	Health	132,342	-
Isolth and Human Caminas Donartment of	Dogg Theoryale	Dath Israel December Medical Conton	01020595	02 212	Research and Training in Complementary and Integrative Health	22 001	
Health and Human Services, Department of	Pass-Through	Beth Israel Deaconess Medical Center	01029585	93.213	Research and Training in Complementary and Integrative	22,891	-
Health and Human Services, Department of	Pass-Through	Ohio University	UT17564	93.213	Health	26,018	_
reardinand Truman Services, Department of	1 ass-1 inough	Onlo Oniversity	011/304	73.213	Research and Training in Complementary and Integrative	20,016	_
Health and Human Services, Department of	Pass-Through	Temple University	259415-UM	93.213	Health	6,354	-
	Tuss Timeugh	Tompto Can office	20,110 011)	Research and Training in Complementary and Integrative	3,55	
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	10348sc	93.213	Health	7,420	-
•	_	·			Research and Training in Complementary and Integrative		
Health and Human Services, Department of	Pass-Through	Yale University	GR102053 (CON-80001172)	93.213	Health	12,820	-
						\$ 1,403,954	\$ 117,569
	D' .		T22 HG000052	02.225	National Research Service Awards Health Services Research	Φ 426.101	Φ.
Health and Human Services, Department of	Direct		T32 HS000053	93.225	Training	\$ 436,191	<u> - </u>
Health and Human Services, Department of	Direct Direct		1 K08 HS025465 01A1 1 P30 HS024385-01	93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	\$ 33,413	5 19,064
Health and Human Services, Department of Health and Human Services, Department of	Direct		1 R01 HS022305-01A1	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	1,146,441 383,307	19,004
Health and Human Services, Department of	Direct		1 R01 HS023597-01	93.226	Research on Healthcare Costs, Quality and Outcomes	284,009	35,966
Health and Human Services, Department of	Direct		1 R01 HS025707-01	93.226	Research on Healthcare Costs, Quality and Outcomes	203,410	-
Health and Human Services, Department of	Direct		1 R03 HS024760-01	93.226	Research on Healthcare Costs, Quality and Outcomes	38,223	_
Health and Human Services, Department of	Direct		1 R13 HS025316-01	93.226	Research on Healthcare Costs, Quality and Outcomes	7,162	-
Health and Human Services, Department of	Direct		1 R21 HS023786-01	93.226	Research on Healthcare Costs, Quality and Outcomes	(2,469)	3,848
Health and Human Services, Department of	Direct		1R03HS02290902	93.226	Research on Healthcare Costs, Quality and Outcomes	(465)	-
Health and Human Services, Department of	Direct		4 R01 HS020644-05	93.226	Research on Healthcare Costs, Quality and Outcomes	118,506	1,202
Iealth and Human Services, Department of	Direct		4 R01 HS021681-03	93.226	Research on Healthcare Costs, Quality and Outcomes	44,584	-
Health and Human Services, Department of	Direct		5 K08 HS020672-05	93.226	Research on Healthcare Costs, Quality and Outcomes	20,804	-
Health and Human Services, Department of	Direct		5 K08 HS022835-04	93.226	Research on Healthcare Costs, Quality and Outcomes	118,478	-
Health and Human Services, Department of	Direct		5 K08 HS023313-04	93.226	Research on Healthcare Costs, Quality and Outcomes	151,549	-
Health and Human Services, Department of	Direct		5 K08 HS023621-03 5 K08 HS024160-03	93.226	Research on Healthcare Costs, Quality and Outcomes	150,691	-
Iealth and Human Services, Department of Iealth and Human Services, Department of	Direct Direct		5 K08 HS024160-03 5 K08 HS024552-03	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	156,125 141,533	-
lealth and Human Services, Department of	Direct		5 K08 HS024763-03 5 K08 HS024763-02	93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	141,333 147,972	-
Health and Human Services, Department of	Direct		5 R01 HS018334-08	93.226	Research on Healthcare Costs, Quality and Outcomes	424,798	-
Health and Human Services, Department of	Direct		5 R01 HS022535-04	93.226	Research on Healthcare Costs, Quality and Outcomes	185,206	-
Health and Human Services, Department of	Direct		5 R01 HS023784-03	93.226	Research on Healthcare Costs, Quality and Outcomes	194,197	-
Health and Human Services, Department of	Direct		5 R01 HS024512-02	93.226	Research on Healthcare Costs, Quality and Outcomes	251,766	_
Iealth and Human Services, Department of	Direct		5 R01 HS024525-02	93.226	Research on Healthcare Costs, Quality and Outcomes	298,482	40,323
Iealth and Human Services, Department of	Direct		5 R01 HS024728-03	93.226	Research on Healthcare Costs, Quality and Outcomes	292,766	12,699
Health and Human Services, Department of	Direct		5 R01 HS024914-02	93.226	Research on Healthcare Costs, Quality and Outcomes	436,914	=
Iealth and Human Services, Department of	Direct		5 R01 HS024953-03	93.226	Research on Healthcare Costs, Quality and Outcomes	365,692	35,997
Health and Human Services, Department of	Direct		5 R01 HS025451-02	93.226	Research on Healthcare Costs, Quality and Outcomes	333,423	-
Health and Human Services, Department of	Direct		5 R01HS024709-03	93.226	Research on Healthcare Costs, Quality and Outcomes	537,305	400,766

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R18 HS021425-05	93.226	Research on Healthcare Costs, Quality and Outcomes	118,760	-
Health and Human Services, Department of	Direct		5 R18 HS022258-05	93.226	Research on Healthcare Costs, Quality and Outcomes	302,267	-
Health and Human Services, Department of	Direct		5 R21 HS022336-02	93.226	Research on Healthcare Costs, Quality and Outcomes	(2,053)	(1,325)
Health and Human Services, Department of	Direct		5 R21 HS023566-02	93.226	Research on Healthcare Costs, Quality and Outcomes	(3,002)	-
Health and Human Services, Department of	Direct		5 R21 HS023865-02	93.226	Research on Healthcare Costs, Quality and Outcomes	73,933	28,288
Health and Human Services, Department of	Direct Direct		5 R21 HS024567-02 5 U18 HS025292-02	93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	113,504	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	Dartmouth-Hitchcock Medical Center (DHMC)	1P3-HS024403-01	93.226 93.226	Research on Healthcare Costs, Quality and Outcomes Research on Healthcare Costs, Quality and Outcomes	749,713 81,182	-
Health and Human Services, Department of	Pass-Through	Duke University	203-7634	93.226	Research on Healthcare Costs, Quality and Outcomes	100,089	-
Health and Human Services, Department of	Pass-Through	Duke University	203-7034	93.226	Research on Healthcare Costs, Quality and Outcomes	67,967	<u>-</u>
Health and Human Services, Department of	Pass-Through	Northwestern University	60047941 UM	93.226	Research on Healthcare Costs, Quality and Outcomes	22,578	_
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005864 UMICH	93.226	Research on Healthcare Costs, Quality and Outcomes	(4,229)	_
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	10588sc	93.226	Research on Healthcare Costs, Quality and Outcomes	31,991	_
Health and Human Services, Department of	Pass-Through	Washington Unversity in St. Louis	WU-17-424	93.226	Research on Healthcare Costs, Quality and Outcomes	20,966	-
W 14 1W 0 1 B 1 1 C	D' .		4 P.01 JH 105000 05	02.222	N. da a da Di la Da la	\$ 8,137,488	
Health and Human Services, Department of	Direct		4 R01 HL105999-05	93.233	National Center on Sleep Disorders Research	\$ 138,166	\$ 42,402.00
Health and Human Services, Department of	Direct		5 K23 HL122461-04	93.233	National Center on Sleep Disorders Research	172,478	-
Health and Human Services, Department of	Direct		5 R01 HL123379-04	93.233	National Center on Sleep Disorders Research	\$ 363,729 \$ 674,373	\$ 42,402
Health and Human Services, Department of	Pass-Through	Surraquea University	Subaward 29756-04701-S01	93.239	Policy Research and Evaluation Grants	\$ 074,373	
Health and Human Services, Department of	Direct	Syracuse University	1 K01 MH110605-01A1	93.242	Mental Health Research Grants	\$ 113,498	
Health and Human Services, Department of	Direct		1 K01 MH110003-01A1 1 K01 MH112876-01	93.242	Mental Health Research Grants	25,421	5 -
Health and Human Services, Department of	Direct		1 K08 MH116267-01	93.242	Mental Health Research Grants	29,659	-
Health and Human Services, Department of	Direct		1 K08 MH110207-01 1 K23 MH112852-01A1	93.242	Mental Health Research Grants	29,039	-
Health and Human Services, Department of	Direct		1 K23 MH113776-01	93.242	Mental Health Research Grants	81,917	-
Health and Human Services, Department of	Direct		1 R01 MH112669-01A1	93.242	Mental Health Research Grants	255,028	- -
Health and Human Services, Department of	Direct		1 R01 MH11511-01	93.242	Mental Health Research Grants	90,232	_
Health and Human Services, Department of	Direct		1 R01MH113582-01	93.242	Mental Health Research Grants	541,483	137,159
Health and Human Services, Department of	Direct		1 R03 MH111316-01	93.242	Mental Health Research Grants	60,470	-
Health and Human Services, Department of	Direct		1 R21 MH108989-01A1	93.242	Mental Health Research Grants	70,290	-
Health and Human Services, Department of	Direct		1 R21 MH114835-01	93.242	Mental Health Research Grants	72,433	34,700
Health and Human Services, Department of	Direct		1 R56MH110872-01	93.242	Mental Health Research Grants	372,138	147,651
Health and Human Services, Department of	Direct		1 RF MH114244-01	93.242	Mental Health Research Grants	251,991	-
Health and Human Services, Department of	Direct		2 R01 MH101459-06	93.242	Mental Health Research Grants	20,526	-
Health and Human Services, Department of	Direct		3 R01 MH101459-05S1	93.242	Mental Health Research Grants	397,527	-
Health and Human Services, Department of	Direct		4 R01 MH093486-05	93.242	Mental Health Research Grants	210,044	-
Health and Human Services, Department of	Direct		4 R01 MH096699-05	93.242	Mental Health Research Grants	367,005	40,606
Health and Human Services, Department of	Direct		4 R01 MH101493-04	93.242	Mental Health Research Grants	204,365	58,306
Health and Human Services, Department of	Direct		5 F30 MH112328-02	93.242	Mental Health Research Grants	39,206	-
Health and Human Services, Department of	Direct		5 K01 MH095920-05	93.242	Mental Health Research Grants	113,548	-
Health and Human Services, Department of	Direct		5 K08 MH104743-03	93.242	Mental Health Research Grants	204,086	-
Health and Human Services, Department of	Direct		5 K08 MH107662-05	93.242	Mental Health Research Grants	156,238	-
Health and Human Services, Department of	Direct		5 K23 MH108823-03	93.242	Mental Health Research Grants	185,426	=
Health and Human Services, Department of	Direct		5 K23 MH109762-02	93.242	Mental Health Research Grants	126,964	-
Health and Human Services, Department of	Direct		5 R01 MH063649-15	93.242	Mental Health Research Grants	306,136	-
Health and Human Services, Department of	Direct		5 R01 MH082784-10	93.242	Mental Health Research Grants	297,826	-
Health and Human Services, Department of	Direct		5 R01 MH085321-09	93.242	Mental Health Research Grants	283,198	-
Health and Human Services, Department of	Direct		5 R01 MH096699-04	93.242	Mental Health Research Grants	(233)	-
Health and Human Services, Department of	Direct		5 R01 MH099898-04	93.242	Mental Health Research Grants	144,742	34,281
Health and Human Services, Department of	Direct		5 R01 MH102242-04	93.242	Mental Health Research Grants	674,863	-
Health and Human Services, Department of	Direct		5 R01 MH102263-05	93.242	Mental Health Research Grants	312,746	66,193
Health and Human Services, Department of	Direct Direct		5 R01 MH103244-05 5 R01 MH103761-05	93.242 93.242	Mental Health Research Grants Mental Health Research Grants	739,799 478,522	338,892 36,393
Health and Human Services, Department of			5 R01 MH104261-05	93.242	Mental Health Research Grants	644,157	30,393
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 MH104261-05 5 R01 MH107419-03	93.242	Mental Health Research Grants Mental Health Research Grants	542,923	61,268
Health and Human Services, Department of	Direct		5 R01 MH107419-03 5 R01 MH107741-04	93.242	Mental Health Research Grants	661,472	01,208
Health and Human Services, Department of	Direct		5 R01 MH10872-02	93.242	Mental Health Research Grants	403,885	<u>-</u>
Health and Human Services, Department of	Direct		5 R01 MH110932-02	93.242	Mental Health Research Grants	754,805	386,707
Health and Human Services, Department of	Direct		5 R01 MH114203-02	93.242	Mental Health Research Grants	444,027	-
Health and Human Services, Department of	Direct		5 R21 MH102539-02	93.242	Mental Health Research Grants	44,947	_
Health and Human Services, Department of	Direct		5 R21 MH109932-02	93.242	Mental Health Research Grants	180,523	34,178
Health and Human Services, Department of	Direct		5 R21 MH111445-03	93.242	Mental Health Research Grants	333,115	52,077
Health and Human Services, Department of	Direct		5 R25 MH071279-13	93.242	Mental Health Research Grants	221,340	-
Health and Human Services, Department of	Direct		5 R34 MH103447-03	93.242	Mental Health Research Grants	35,163	_
Health and Human Services, Department of	Direct		5 R34 MH111531-02	93.242	Mental Health Research Grants	139,338	25,036
Health and Human Services, Department of	Direct		5 U01 MH104311-03	93.242	Mental Health Research Grants	2,187,791	1,037,226
Health and Human Services, Department of	Direct		5 U01 MH105653-04	93.242	Mental Health Research Grants	532,372	50,898
Health and Human Services, Department of	Direct		5 U01 MH106892-04	93.242	Mental Health Research Grants	903,962	-
Health and Human Services, Department of	Direct		7 R01 MH095676-05	93.242	Mental Health Research Grants	469,441	185,928
Health and Human Services, Department of	Direct		7 R01 MH110524-02	93.242	Mental Health Research Grants	424,849	312,103
Health and Human Services, Department of	Pass-Through	Care New England Health System	9272-8179	93.242	Mental Health Research Grants	137,085	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R751	93.242	Mental Health Research Grants	68,912	-
Health and Human Services, Department of	Pass-Through	Emory University	T461601	93.242	Mental Health Research Grants	102,544	-
Health and Human Services, Department of	Pass-Through	Emory University	T714734	93.242	Mental Health Research Grants	33,790	-
Health and Human Services, Department of	Pass-Through	Hektoen Institute for Medical Research, The	50081-R01-Umich01	93.242	Mental Health Research Grants	6,278	-
Health and Human Services, Department of	Pass-Through	Hektoen Institute for Medical Research, The	50502-324-UMICH	93.242	Mental Health Research Grants	48,314	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	6806	93.242	Mental Health Research Grants	131,855	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2002745506	93.242	Mental Health Research Grants	14,802	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	JHU Agreement	93.242	Mental Health Research Grants	(32,599)	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	PTE 5R25MH104660-02	93.242	Mental Health Research Grants	36,809	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC107579UM	93.242	Mental Health Research Grants	345,567	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC107692UM	93.242	Mental Health Research Grants	1,492	-
Health and Human Services, Department of	Pass-Through	New York University	13-A0-00-001751-01	93.242	Mental Health Research Grants	97,236	-
Health and Human Services, Department of	Pass-Through	Research Foundation of Mental Hygiene, Inc. San Francisco State University	P30MH043520 PO #S16-0020	93.242 93.242	Mental Health Research Grants Mental Health Research Grants	44,241 48,652	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Simmersion L.L.C.	5065-UM	93.242	Mental Health Research Grants	44,410	- -
Health and Human Services, Department of	Pass-Through	Stony Brook University	1125719-2-71758	93.242	Mental Health Research Grants Mental Health Research Grants	339,702	- -
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000504051-003	93.242	Mental Health Research Grants	4,236	_
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	9940sc	93.242	Mental Health Research Grants	12,640	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	78750147	93.242	Mental Health Research Grants	42,735	-
Health and Human Services, Department of	Pass-Through	University of Colorado Boulder	1554505	93.242	Mental Health Research Grants	9,725	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill-MMRRC	5102700	93.242	Mental Health Research Grants	3,354	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	569745	93.242	Mental Health Research Grants	20,419	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	572689 416926-G	93.242 93.242	Mental Health Research Grants Mental Health Research Grants	618,406	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Rochester University of Rochester	PO#416188-G, UR#5-28681	93.242	Mental Health Research Grants	(44) (38)	-
Health and Human Services, Department of	Pass-Through	University of Texas Health Science Center at San Antonio	162919/161086	93.242	Mental Health Research Grants Mental Health Research Grants	99,521	<u>-</u>
Health and Human Services, Department of	Pass-Through	University of Toledo	F-2017-128	93.242	Mental Health Research Grants	40,448	-
Health and Human Services, Department of	Pass-Through	University of Wisconsin	796K633	93.242	Mental Health Research Grants	3,523	_
Health and Human Services, Department of	Pass-Through	Vanderbilt University	VUMC62534	93.242	Mental Health Research Grants	14,951	-
•	_					\$ 18,510,383	\$ 3,039,602
					Substance Abuse and Mental Health Services Projects of		
Health and Human Services, Department of	Direct		1 G02HP30572-01-00	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	\$ 45,698	\$ -
Health and Human Services, Department of	Direct		1 U79 SM062492-01	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	122,520	-
Health and Human Services, Department of	Direct		5 G02 HP27954-03-00	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	15,846	-
Health and Human Services, Department of	Pass-Through	American Indian Health and Family Services of SE Michigan, Inc (AIHFS)	Research Agreement	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	102,338	-
Health and Human Services, Department of	Pass-Through	Behavioral Connections of Wood County Inc	Research Agreement	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	76,808	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171039-00	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	36,464	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180858-00	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	117,860	-
Health and Human Services, Department of	Pass-Through	Teen HYPE	Agreement	93.243	Regional and National Significance Substance Abuse and Mental Health Services Projects of	40,633	-
Health and Human Services, Department of	Pass-Through	The University of Texas Health Science Center at Houston	0012268A	93.243	Regional and National Significance	\$ 559,186	
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 D09 HP2867702-00 5 T94 HP30911-02-00	93.247 93.247	Advanced Nursing Education Workforce Grant Program Advanced Nursing Education Workforce Grant Program	\$ 141,380 313,585	
						\$ 454,965	
Health and Human Services, Department of	Direct		5 R01 OH010297-03	93.262	Occupational Safety and Health Program	\$ 20,471	\$ 3,000.00
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 OH010582-04 5 R21 OH010482-02	93.262 93.262	Occupational Safety and Health Program Occupational Safety and Health Program	517,641 7,086	-
Health and Human Services, Department of	Direct		T42 OH008455	93.262	Occupational Safety and Health Program	1,585,414	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC8024	93.262	Occupational Safety and Health Program	2,287	_
, 1	8	, .				\$ 2,132,899	\$ 3,000
					Health Systems Strengthening and HIV/AIDS Prevention, Ca		
					and Treatment under the President's Emergency Plan for AID		
Health and Human Services, Department of	Direct		5 R01 HS024698-02	93.266	Relief	\$ 259,037	
Health and Human Services, Department of	Direct		1 R01 AA023187-02	93.273	Alcohol Research Programs	\$ 112,047	\$ 16,864.00
Health and Human Services, Department of	Direct Direct		1 R01 AA023504-03 1 R01 AA024433-01A1	93.273 93.273	Alcohol Research Programs Alcohol Research Programs	145,867 226,837	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		1 R01 AA025684-01	93.273	Alcohol Research Programs Alcohol Research Programs	19,041	-
Health and Human Services, Department of	Direct		1 R01 AA025084-01 1 R03 AA025449-01A1	93.273	Alcohol Research Programs	35,702	- -
Health and Human Services, Department of	Direct		4 K23 AA020297-05	93.273	Alcohol Research Programs	19,503	_
Health and Human Services, Department of	Direct		5 F31 AA023121-03	93.273	Alcohol Research Programs	7,789	-
Health and Human Services, Department of	Direct		5 K01 AA024804-02	93.273	Alcohol Research Programs	106,654	-
Health and Human Services, Department of	Direct		5 K23 AA023869-04	93.273	Alcohol Research Programs	169,707	-
Health and Human Services, Department of	Direct		5 R01 AA007065-28	93.273	Alcohol Research Programs	(7,750)	-
Health and Human Services, Department of	Direct		5 R01 AA007065-30	93.273	Alcohol Research Programs	568,907	-
Health and Human Services, Department of	Direct		5 R01 AA012217-15	93.273	Alcohol Research Programs	57,696	-
Health and Human Services, Department of	Direct		5 R01 AA023122-03	93.273	Alcohol Research Programs	(2,797)	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 AA023122-05 5 R01 AA024175-03	93.273 93.273	Alcohol Research Programs	457,970 654,414	11.760
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AA024175-03 5 R01 AA024755-02	93.273 93.273	Alcohol Research Programs Alcohol Research Programs	654,414 376,955	11,760
Health and Human Services, Department of	Direct		5 R21 AA022720-02	93.273	Alcohol Research Programs Alcohol Research Programs	16,553	-
Health and Human Services, Department of	Direct		5K21AA022720-02 5K23AA022641-03	93.273	Alcohol Research Programs	138,604	-
Health and Human Services, Department of	Direct		T32 AA007477	93.273	Alcohol Research Programs	335,604	-
Health and Human Services, Department of	Pass-Through	Arborsense, Inc.	R44AA026119	93.273	Alcohol Research Programs	78,986	-
Health and Human Services, Department of	Pass-Through	Cornell University	69951-10235	93.273	Alcohol Research Programs	60,186	-
Health and Human Services, Department of	Pass-Through	Idaho State University	11-255X	93.273	Alcohol Research Programs	29,582	-
Health and Human Services, Department of	Pass-Through	University of Colorado	1552087	93.273	Alcohol Research Programs	2,863	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC10134	93.273	Alcohol Research Programs	7,455	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Washington University of Washington	UWSC7440 UWSc9090	93.273 93.273	Alcohol Research Programs Alcohol Research Programs	17,970 14,557	_
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC9350	93.273	Alcohol Research Programs	42,474	-
, 1	S	, ,			5	\$ 3,693,376	\$ 28,624
Health and Human Services, Department of	Direct		1 R01 DA043696-01A1	93.279	Drug Abuse and Addiction Research Programs	\$ 169,437	\$ -
Health and Human Services, Department of	Direct		1 R01 DA044245-01A1	93.279	Drug Abuse and Addiction Research Programs	458,669	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R01 DA045705-01 1 R21 DA040752-01A1	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	10,630 178,812	-
Health and Human Services, Department of	Direct		2 R01 DA031160-06	93.279	Drug Abuse and Addiction Research Programs	188,924	-
Health and Human Services, Department of	Direct		3 R01 DA030339-05S2	93.279	Drug Abuse and Addiction Research Programs	(1,512)	_
Health and Human Services, Department of	Direct		4 K01 DA034765-04	93.279	Drug Abuse and Addiction Research Programs	60,388	14,45
Health and Human Services, Department of	Direct		4 P01 DA031656-05	93.279	Drug Abuse and Addiction Research Programs	293,683	-
Health and Human Services, Department of	Direct		4 R01 DA001411-42	93.279	Drug Abuse and Addiction Research Programs	(14,326)	8,68
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		4 R01 DA011697-14 4 R01 DA016575-14	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	(123,175) (25,382)	-
Health and Human Services, Department of	Direct		4 R01 DA033397-04	93.279	Drug Abuse and Addiction Research Programs	165,197	-
Health and Human Services, Department of	Direct		4 R01 DA035811-05	93.279	Drug Abuse and Addiction Research Programs	654,180	237,18
Health and Human Services, Department of	Direct		5 F31 DA041083-02	93.279	Drug Abuse and Addiction Research Programs	48,662	-
Health and Human Services, Department of	Direct		5 K01 DA036681-04	93.279	Drug Abuse and Addiction Research Programs	196,183	-
Health and Human Services, Department of	Direct		5 K08 DA037912-05	93.279	Drug Abuse and Addiction Research Programs	164,833	-
Health and Human Services, Department of	Direct Direct		5 K23 DA036008-05 5 K23 DA038718-03	93.279	Drug Abuse and Addiction Research Programs	197,394	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 K23 DA038/18-03 5 K23 DA039341-03	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	131,069 166,112	-
Health and Human Services, Department of	Direct		5 R01 DA001411-44	93.279	Drug Abuse and Addiction Research Programs	5,305,324	75,15
Iealth and Human Services, Department of	Direct		5 R01 DA003910-31	93.279	Drug Abuse and Addiction Research Programs	347,541	-
Health and Human Services, Department of	Direct		5 R01 DA015188-10	93.279	Drug Abuse and Addiction Research Programs	1,522	-
Health and Human Services, Department of	Direct		5 R01 DA015188-12	93.279	Drug Abuse and Addiction Research Programs	150,760	-
Iealth and Human Services, Department of	Direct		5 R01 DA016575-16	93.279	Drug Abuse and Addiction Research Programs	2,298,553	-
Health and Human Services, Department of	Direct		5 R01 DA029587-05	93.279	Drug Abuse and Addiction Research Programs	(194)	-
Iealth and Human Services, Department of Iealth and Human Services, Department of	Direct Direct		5 R01 DA030339-05 5 R01 DA034606-03	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	(38,983) 20,634	20,63
Health and Human Services, Department of	Direct		5 R01 DA035183-03	93.279	Drug Abuse and Addiction Research Programs	(241)	20,03
lealth and Human Services, Department of	Direct		5 R01 DA035183-05	93.279	Drug Abuse and Addiction Research Programs	219,802	61,43
Iealth and Human Services, Department of	Direct		5 R01 DA035316-05	93.279	Drug Abuse and Addiction Research Programs	442,199	146,51
Health and Human Services, Department of	Direct		5 R01 DA037902-04	93.279	Drug Abuse and Addiction Research Programs	309,879	62,81
Iealth and Human Services, Department of	Direct		5 R01 DA038261-03	93.279	Drug Abuse and Addiction Research Programs	497,122	-
Health and Human Services, Department of	Direct		5 R01 DA038599-04	93.279	Drug Abuse and Addiction Research Programs	628,662	98,764
Health and Human Services, Department of	Direct		5 R01 DA039159-02 5 R01 DA039901-03	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	655,366	94.50
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 DA039901-03 5 R01 DA039952-03	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	542,639 371,944	84,583 2,548
Health and Human Services, Department of	Direct		5 R01 DA041032-04	93.279	Drug Abuse and Addiction Research Programs	761,896	268,09
Iealth and Human Services, Department of	Direct		5 R01 DA042092-02	93.279	Drug Abuse and Addiction Research Programs	137,072	-
Health and Human Services, Department of	Direct		5 R01 DA042859-02	93.279	Drug Abuse and Addiction Research Programs	231,874	-
Iealth and Human Services, Department of	Direct		5 R03 DA039003-02	93.279	Drug Abuse and Addiction Research Programs	51,431	-
Iealth and Human Services, Department of	Direct		5 R03 DA041891-02	93.279	Drug Abuse and Addiction Research Programs	128,919	-
lealth and Human Services, Department of	Direct Direct		5 R21 DA041202-02 5 R21 DA041565-02	93.279 93.279	Drug Abuse and Addiction Research Programs	199,353 237,985	-
lealth and Human Services, Department of lealth and Human Services, Department of	Direct		5 R34 DA035331-03	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	6,702	-
Health and Human Services, Department of	Direct		5 R37 DA039997-04	93.279	Drug Abuse and Addiction Research Programs	544,651	107,839
Health and Human Services, Department of	Direct		5 U01 DA041106-04	93.279	Drug Abuse and Addiction Research Programs	2,939,287	1,125,959
Iealth and Human Services, Department of	Direct		5 U01 DA043098-02	93.279	Drug Abuse and Addiction Research Programs	850,116	204,01
Health and Human Services, Department of	Direct		5R01DA036541-03	93.279	Drug Abuse and Addiction Research Programs	123,812	-
Health and Human Services, Department of	Direct		T32 DA007268	93.279	Drug Abuse and Addiction Research Programs	39,639	-
Health and Human Services, Department of	Direct Direct		T32 DA007268 T32 DA007281	93.279 93.279	Drug Abuse and Addiction Research Programs	343,967 314,740	-
Iealth and Human Services, Department of Iealth and Human Services, Department of	Pass-Through	Albert Einstein College of Medicine, Inc.,	310734	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	16,468	-
lealth and Human Services, Department of	Pass-Through	Boys Town National Research Hospital	97008	93.279	Drug Abuse and Addiction Research Programs	15,699	-
Iealth and Human Services, Department of	Pass-Through	Brown University	00001179	93.279	Drug Abuse and Addiction Research Programs	21,280	_
lealth and Human Services, Department of	Pass-Through	Children's Research Institute	30003671-01	93.279	Drug Abuse and Addiction Research Programs	95,181	-
ealth and Human Services, Department of	Pass-Through	Emory University	Subaward 40036	93.279	Drug Abuse and Addiction Research Programs	25,870	-
ealth and Human Services, Department of	Pass-Through	Michigan State University	RC104851UM	93.279	Drug Abuse and Addiction Research Programs	192,209	-
ealth and Human Services, Department of	Pass-Through	Pennsylvania State University Research Foundation of Montal Hygiene Inc.	5276-UM-DHHS-9838	93.279	Drug Abuse and Addiction Research Programs	159,821	-
lealth and Human Services, Department of lealth and Human Services, Department of	Pass-Through Pass-Through	Research Foundation of Mental Hygiene, Inc. Stanford University	PO # 108074 60364390-109591-A	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	7,571 201	-
ealth and Human Services, Department of	Pass-Through	Texas State University, San Marcos	18012-82851-1	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	6,056	-
ealth and Human Services, Department of	Pass-Through	Texas State University, San Marcos	18013-82803-1	93.279	Drug Abuse and Addiction Research Programs	6,056	-
ealth and Human Services, Department of	Pass-Through	University of Bath	Subcontract	93.279	Drug Abuse and Addiction Research Programs	349,395	-
ealth and Human Services, Department of	Pass-Through	University of California-San Diego	69115330	93.279	Drug Abuse and Addiction Research Programs	69,678	-
ealth and Human Services, Department of	Pass-Through	University of California-San Diego	72012619	93.279	Drug Abuse and Addiction Research Programs	316,932	-
ealth and Human Services, Department of	Pass-Through	University of Colorado	1552655	93.279	Drug Abuse and Addiction Research Programs	19,858	-
ealth and Human Services, Department of	Pass-Through	University of Maryland, The	1801973 P004670602	93.279	Drug Abuse and Addiction Research Programs	32,838	-
lealth and Human Services, Department of lealth and Human Services, Department of	Pass-Through Pass-Through	University of Minnesota University of Washington	P004670602 UWSC8498	93.279 93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	15,043 113,082	-
lealth and Human Services, Department of	Pass-Through	Virginia Commonwealth University	FP00000224 SA002	93.279	Drug Abuse and Addiction Research Programs Drug Abuse and Addiction Research Programs	13,432	-
lealth and Human Services, Department of	Pass-Through	Washington Unversity in St. Louis	WU-13-78/ PO # 2916721W	93.279	Drug Abuse and Addiction Research Programs	5,525	-
Health and Human Services, Department of	Pass-Through	Women and Infants Hospital	9522	93.279	Drug Abuse and Addiction Research Programs	13,258	
•	C	-			Č	\$ 23,079,204	\$ 2,518,673

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 U01 DP003250-04	93.283	Centers for Disease Control and Prevention Investigations and Technical Assistance	\$ (1,938)	\$ -
Health and Human Services, Department of	Direct		5 U01 DP006265-02	93.283	Centers for Disease Control and Prevention Investigations and Technical Assistance	832,534	-
Health and Human Services, Department of	Direct		5 U50 MN000039-05	93.283	Centers for Disease Control and Prevention Investigations and Technical Assistance	309,661	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171320-00	93.283	Centers for Disease Control and Prevention Investigations and Technical Assistance	291	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171467-00	93.283	Centers for Disease Control and Prevention Investigations and Technical Assistance	22,692	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180447-001	93.283	Centers for Disease Control and Prevention Investigations and Technical Assistance Centers for Disease Control and Prevention Investigations and	1,246	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182522-00	93.283	Technical Assistance	1,590 \$ 1,166,076	- \$ -
Health and Human Services, Department of	Direct		1 R21 EB019221-02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	\$ 102,123	
Health and Human Services, Department of	Direct		1 R21 EB021562-02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	169,297	· .
Health and Human Services, Department of	Direct		2 R01 EB003320-22	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	325,179	-
Health and Human Services, Department of	Direct		4 R01 EB006476-08	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	(6,773)	-
Health and Human Services, Department of	Direct		4 R01 EB016079-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	222,454	-
Health and Human Services, Department of	Direct		5 01 EB008998-09	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	491,868	-
Health and Human Services, Department of	Direct		5 R01 EB005678-12	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	717,759	247,067
Health and Human Services, Department of	Direct		5 R01 EB009910-09	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	298,636	159,860
Health and Human Services, Department of	Direct		5 R01 EB013198-09	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	852,060	430,338
Health and Human Services, Department of	Direct		5 R01 EB018297-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	272,971	-
Health and Human Services, Department of	Direct		5 R01 EB019436-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	440,190	-
Health and Human Services, Department of	Direct		5 R01 EB019834-03	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health Discovery and Applied Research for Technological Innovations	108,887	41,689
Health and Human Services, Department of	Direct		5 R01 EB020644-04	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	320,516	-
Health and Human Services, Department of	Direct		5 R01 EB021155-03	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	406,958	-
Health and Human Services, Department of	Direct		5 R01 EB022028-03	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	660,942	203,363
Health and Human Services, Department of	Direct		5 R01 EB022033-03	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	441,214	-
Health and Human Services, Department of	Direct		5 R01 EB022075-03	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	576,606	-
Health and Human Services, Department of	Direct		5 R01 EB022563-03	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	432,262	-
Health and Human Services, Department of	Direct		5 R01 EB023294-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	430,946	122,442
Health and Human Services, Department of	Direct		5 R01 EB023618-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	227,943	-
Health and Human Services, Department of	Direct		5 R03 EB019352-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	57,548	-
Health and Human Services, Department of	Direct		5 R03 EB023459-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	45,323	-
Health and Human Services, Department of	Direct		5 R21 EB017078-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	(2,781)	-
Health and Human Services, Department of	Direct		5 R21 EB017865-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	25	-
Health and Human Services, Department of	Direct		5 R21 EB018537-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	110	-
Health and Human Services, Department of	Direct		5 R21 EB019566-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	108,989	-
Health and Human Services, Department of	Direct		5 R21 EB019653-02	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	115,717	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R21 EB020811-02 5 R21 EB021546-02	93.286 93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations to Improve Human Health	110,480 238,750	-
Health and Human Services, Department of	Direct		5 R21 EB021346-02 5 R21 EB024038-02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	238,730	- -
Health and Human Services, Department of	Direct		5 R21 EB024410-02	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	163,923	_
Treatur and Truman Services, Department of	DIICCI		J K21 EDU2 11 10-02	73.400	to improve riuman ricaim	103,923	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R25 EB019898-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	56,794	-
Health and Human Services, Department of	Direct		5 R37 EB003320-20	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	48,974	-
Health and Human Services, Department of	Direct		5 U01EB018753-04	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health	385,693	-
Health and Human Services, Department of	Direct		T32 EB005582	93.286	Discovery and Applied Research for Technological Innovations to Improve Human Health Discovery and Applied Research for Technological Innovations	318,197	-
Health and Human Services, Department of	Pass-Through	Harvard University	130307-5074036	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	170,249	-
Health and Human Services, Department of	Pass-Through	Tulane University	TUL-SCC-555609-17/18	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	50,507	-
Health and Human Services, Department of	Pass-Through	University of Buffalo	R1080444	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	6,952	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	72696776	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	(2,002)	-
Health and Human Services, Department of	Pass-Through	University of Memphis	5-40513	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	102,781	-
Health and Human Services, Department of	Pass-Through	University of Mississippi	66107990617	93.286	to Improve Human Health Discovery and Applied Research for Technological Innovations	11,547	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University Medical Center	VUMC 58730	93.286	to Improve Human Health	\$ 9,696,830 S	- \$ 1,204,759
Health and Human Services, Department of	Direct		6 TPSAH160002-01-02	93.297	Teenage Pregnancy Prevention Program	\$ 8,584	\$ -
Health and Human Services, Department of	Direct		5 U81 HP29300-03-00	93.300	National Center for Health Workforce Analysis	\$ 1,047,821	\$ 234,715
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		4 P60 MD002249-10 5 P60 MD002249 09	93.307 93.307	Minority Health and Health Disparities Research Minority Health and Health Disparities Research	\$ 417,517 S 3,105	\$ 235,742.00
Health and Human Services, Department of	Direct		5 R01 CA071699-20	93.307	Minority Health and Health Disparities Research	332,485	-
Health and Human Services, Department of	Direct		5 R01 MD008879-05	93.307	Minority Health and Health Disparities Research	376,076	-
Health and Human Services, Department of	Direct		5 R01 MD011516-02	93.307	Minority Health and Health Disparities Research	380,450	-
Health and Human Services, Department of	Direct		5 R01 MD011570-03	93.307	Minority Health and Health Disparities Research	642,657	17,375
Health and Human Services, Department of	Direct		5 R01 MD011716-02	93.307	Minority Health and Health Disparities Research	53,393	862
Health and Human Services, Department of	Direct		5 R01 MD011721-02 5 R24 MD001619-11	93.307	Minority Health and Health Disparities Research	56,356	4,424
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R24 MD001619-11 5 T37 MD001425-21	93.307 93.307	Minority Health and Health Disparities Research Minority Health and Health Disparities Research	115,721 294,186	-
Health and Human Services, Department of	Direct		5 U01 MD010579-03	93.307	Minority Health and Health Disparities Research	442,875	(13,000
Health and Human Services, Department of	Pass-Through	Boston College	5105591-4	93.307	Minority Health and Health Disparities Research	2,892	-
Health and Human Services, Department of	Pass-Through	Boston College	5105592-3	93.307	Minority Health and Health Disparities Research	3,856	_
Health and Human Services, Department of	Pass-Through	Harvard TH Chan School of Public Health	116557-5103714	93.307	Minority Health and Health Disparities Research	12,013	-
Health and Human Services, Department of	Pass-Through	MEI Research, Ltd.	STTR Phase II	93.307	Minority Health and Health Disparities Research	16,565	-
Health and Human Services, Department of	Pass-Through	Thomas Jefferson University	080-18060-S10702	93.307	Minority Health and Health Disparities Research	(56,135)	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of Pennsylvania University of Utah	571099 10046673-01 PO#U000091714	93.307 93.307	Minority Health and Health Disparities Research Minority Health and Health Disparities Research	522,643 246,906	-
Health and Human Services, Department of	Pass-Through	Zansors	Agreement	93.307	Minority Health and Health Disparities Research	162,097	- - -
Health and Human Services, Department of	Direct		1 DP2 GM114848-01	93.310	Trans-NIH Research Support	\$ 4,025,658 \$ \$ 446,173 \$	\$ 245,403 \$ -
Health and Human Services, Department of	Direct		1 DP2 HL117748-01	93.310	Trans-NIH Research Support	(4,363)	-
Health and Human Services, Department of	Direct		1 DP2DK113750-01	93.310	Trans-NIH Research Support	314,300	-
Health and Human Services, Department of	Direct		1 DP2-MH104119-01	93.310	Trans-NIH Research Support	891,482	-
Health and Human Services, Department of	Direct		1 OT2 OD024907-01	93.310	Trans-NIH Research Support	712,156	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R56 CA203290-01 1 U2C ES026553-01	93.310 93.310	Trans-NIH Research Support Trans-NIH Research Support	36,396 1,468,602	-
Health and Human Services, Department of	Direct		3 U18 EB021760-02S1	93.310	Trans-NIH Research Support	154,690	5,706
Health and Human Services, Department of	Direct		4 U24 DK097153-05	93.310	Trans-NIH Research Support	460,581	34,391
Health and Human Services, Department of	Direct		5 DP5 OD009154-06	93.310	Trans-NIH Research Support	21,769	-
Health and Human Services, Department of	Direct		5 R01 ES026877-03	93.310	Trans-NIH Research Support	520,082	108,435
Health and Human Services, Department of	Direct		5 R01 HD086676-03	93.310	Trans-NIH Research Support	343,464	35,744
Health and Human Services, Department of	Direct		5 R21 GM114529-02	93.310	Trans-NIH Research Support	(18,675)	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R25 EB022363-03 5 R25 GM111837-04	93.310 93.310	Trans-NIH Research Support Trans-NIH Research Support	201,466 212,342	- 9,492
Health and Human Services, Department of	Direct		5 U01 GM1252740-02	93.310	Trans-NIH Research Support	485,707	J, T J2
Health and Human Services, Department of	Direct		5 U24 DK112342-02	93.310	Trans-NIH Research Support	365,945	_
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Lerner College of Medicine	Subaward	93.310	Trans-NIH Research Support	22,168	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106694A	93.310	Trans-NIH Research Support	1,112,275	-
Health and Human Services, Department of	Pass-Through	Northeastern University	500502-78051	93.310	Trans-NIH Research Support	26,468	-
Health and Human Services, Department of	Pass-Through	Rockefeller University The University of Tayon Health Science Conten at Hoyeten	5UH3TR000933-05	93.310	Trans-NIH Research Support	128,597	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	The University of Texas Health Science Center at Houston University of Alabama	0012225A 000430850-002	93.310 93.310	Trans-NIH Research Support Trans-NIH Research Support	133,165 (16,400)	-
Health and Human Services, Department of	Pass-Through	University of Chicago	FP054192	93.310	Trans-NIH Research Support	(4,653)	- -
Health and Human Services, Department of	Pass-Through	University of Mississippi	66100920516-01UM	93.310	Trans-NIH Research Support	(3,134)	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University	VUMC59304	93.310	Trans-NIH Research Support	231,800	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University Medical Center	VUMC 58159	93.310	Trans-NIH Research Support	18,648	-
Health and Human Services, Department of	Pass-Through	Yale University	M15A11925 (A10717)	93.310	Trans-NIH Research Support	\$1,324 \$202,275	- t 102.769
Health and Human Services, Department of	Direct		4 KL2 TR000434-10	93.350	National Center for Advancing Translational Sciences	\$ 8,292,375 \$ (17,501)	
	Direct		4 KL2 1R000434-10 4 UL1 TR000433-10	93.350	National Center for Advancing Translational Sciences National Center for Advancing Translational Sciences	(120,045)	ψ -
Health and Human Services Department of							
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 KL2 TR002241-02	93.350	National Center for Advancing Translational Sciences	1,963,126	-

Health and Human Services, Department of	Direct Direct		5 UL1 TR002240-02 TL1 TR000435	93.350	National Center for Advancing Translational Sciences	12,065,471	23,179
Health and Human Services, Department of	Direct		TI 1 TP000435	02.250	37 . 1	(100.055)	
Iealth and Human Services, Department of			1L1 1R000433	93.350	National Center for Advancing Translational Sciences	(128,355)	-
lealth and Human Services, Department of lealth and Human Services, Department of lealth and Human Services, Department of	D T1 1		TL1 TR002242	93.350	National Center for Advancing Translational Sciences	823,065	-
lealth and Human Services, Department of lealth and Human Services, Department of	Pass-Through	Johns Hopkins University	2003177745	93.350	National Center for Advancing Translational Sciences	21,432	-
ealth and Human Services, Department of	Pass-Through	University of Alabama	000508606-018	93.350	National Center for Advancing Translational Sciences	34,042	-
· •	Pass-Through	University of South Florida	6119-1359-11-B	93.350	National Center for Advancing Translational Sciences	273,220	-
lealth and Human Services, Department of	Pass-Through	University of Washington	UWSC9391	93.350	National Center for Advancing Translational Sciences	(3,063)	-
	Pass-Through	Washington University	UWSC10033 / BPO 26355	93.350	National Center for Advancing Translational Sciences	77,549	-
						\$ 15,781,236	\$ 393,96
lealth and Human Services, Department of	Direct		1 R21 OD024789-01A1	93.351	Research Infrastructure Programs	\$ 20,884	\$ 4,373.0
Iealth and Human Services, Department of	Direct		5 K26 OD016502-05	93.351	Research Infrastructure Programs	44,472	-
lealth and Human Services, Department of	Direct		5 P40OD021331-03	93.351	Research Infrastructure Programs	74,619	-
lealth and Human Services, Department of	Direct		5 R21 OD018265-02	93.351	Research Infrastructure Programs	65,572	-
ealth and Human Services, Department of	Direct		5 R21 OD0201087-02	93.351	Research Infrastructure Programs	188,846	-
ealth and Human Services, Department of	Direct		5 R21 OD023194-02	93.351	Research Infrastructure Programs	244,035	-
ealth and Human Services, Department of	Pass-Through	North Carolina State University	2018-0522-01	93.351	Research Infrastructure Programs	24,893	=
						\$ 663,321	\$ 4,37
ealth and Human Services, Department of	Direct		1U01CA224145-01	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	\$ 147,843	\$ -
lealth and Human Services, Department of	Pass-Through	Magee Womens Research Institute	680	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	13,738	-
ealth and Human Services, Department of	Pass-Through	University of Minnesota	H006354701	93.353	21st Century Cures Act - Beau Biden Cancer Moonshot	126,115	-
•	-	·			·	\$ 287,696	\$ -
Iealth and Human Services, Department of	Direct		4 UF1HP26979-03-02	93.359	Nurse Education, Practice Quality and Retention Grants	\$ 287,909	\$ -
Iealth and Human Services, Department of	Direct		6UD7HP28536-01-02	93.359	Nurse Education, Practice Quality and Retention Grants	344,986	243,234.00
						\$ 632,895	
ealth and Human Services, Department of	Direct		1 R21 NR016802-01A1	93.361	Nursing Research	\$ 37,163	
ealth and Human Services, Department of	Direct		4 R01 NR013658-05	93.361	Nursing Research	533,078	90,22
ealth and Human Services, Department of	Direct		4 R01 NR013861-05	93.361	Nursing Research	183,081	-
lealth and Human Services, Department of	Direct		5 P20 NR015331-04	93.361	Nursing Research	246,999	-
lealth and Human Services, Department of	Direct		5 R01 NR013658-04	93.361	Nursing Research	23,239	59,53
lealth and Human Services, Department of	Direct		5 R01 NR014200-04	93.361	Nursing Research	(3,646)	(85
Iealth and Human Services, Department of	Direct		5 R01 NR014484-03	93.361	Nursing Research	(180)	-
lealth and Human Services, Department of	Direct		5 R01 NR016093-02	93.361	Nursing Research	477,243	_
ealth and Human Services, Department of	Direct		5 R01 NR016123-03	93.361	Nursing Research	569,731	_
ealth and Human Services, Department of	Direct		5 R01 NR017096-02	93.361	Nursing Research	410,484	51,52
ealth and Human Services, Department of	Direct		5 R21 NR016332-02	93.361	Nursing Research	177,238	13,79
ealth and Human Services, Department of	Direct		T32 NR016914	93.361	Nursing Research	142,996	15,77
ealth and Human Services, Department of	Pass-Through	Henry Ford Health System	B11112MSU	93.361	Nursing Research	40,269	_
lealth and Human Services, Department of	Pass-Through	Indiana University	IN4679348UM	93.361	Nursing Research	106,708	_
lealth and Human Services, Department of	Pass-Through	Michigan State University	RC106854UM	93.361	Nursing Research	9,750	_
lealth and Human Services, Department of	Pass-Through	Michigan State University Michigan State University	RC106970UM	93.361	Nursing Research	113,898	_
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17046	93.361	Nursing Research	(3,401)	-
rearth and fruman services, Department of	1 ass-1 ill ough	wayne state Oniversity	W3017040	93.301	Nuising Research	\$ 3,064,650	\$ 214,228
Iealth and Human Services, Department of	Pass-Through	Michigan State University	RC103659UM	93.389	National Center for Research Resources	\$ 84,593	
Health and Human Services, Department of	Direct	intelligent state contractly	1 R01 CA214787-01A1	93.393	Cancer Cause and Prevention Research	\$ 131,261	
Iealth and Human Services, Department of	Direct		1 R01 CA214829 01A1	93.393	Cancer Cause and Prevention Research	140,621	-
lealth and Human Services, Department of	Direct		1 R01 CA215981-01A1	93.393	Cancer Cause and Prevention Research	223,298	_
Iealth and Human Services, Department of	Direct		1 R01 CA222885-01	93.393	Cancer Cause and Prevention Research	144,721	_
Iealth and Human Services, Department of	Direct		1 R03 CA184478-02	93.393	Cancer Cause and Prevention Research	(529)	_
Iealth and Human Services, Department of	Direct		1 U24 CA204863-01A1	93.393	Cancer Cause and Prevention Research	524,358	90,374
Iealth and Human Services, Department of	Direct		2 R01 CA129102-08A1	93.393	Cancer Cause and Prevention Research	254,673	70,203
Iealth and Human Services, Department of	Direct		2 R21 CA190911-02	93.393	Cancer Cause and Prevention Research	18,517	70,20.
lealth and Human Services, Department of	Direct		4 P01 CA163233-05	93.393	Cancer Cause and Prevention Research	730,691	195,502
lealth and Human Services, Department of lealth and Human Services, Department of	Direct		4 R01 CA163233-03 4 R01 CA168691-04	93.393	Cancer Cause and Prevention Research Cancer Cause and Prevention Research	81,374	193,30.
lealth and Human Services, Department of	Direct		4 W1 CA168091-04 4 W1 CA162147-05	93.393	Cancer Cause and Prevention Research	7,066	50,72
ealth and Human Services, Department of	Direct		5 21 CA191186-04	93.393	Cancer Cause and Prevention Research	109,898	38,67
ealth and Human Services, Department of ealth and Human Services, Department of	Direct		5 R00-CA167644-05	93.393	Cancer Cause and Prevention Research		30,07
			5 R00-CA16/644-05 5 R01 CA152192-05			(136)	-
ealth and Human Services, Department of	Direct		5 R01 CA152192-05 5 R01 CA158286- 05	93.393	Cancer Cause and Prevention Research	203,782	-
ealth and Human Services, Department of	Direct			93.393	Cancer Cause and Prevention Research	(160)	-
fealth and Human Services, Department of	Direct		5 R01 CA171277 05	93.393	Cancer Cause and Prevention Research	85,492	-
ealth and Human Services, Department of	Direct		5 R01 CA171277-05	93.393	Cancer Cause and Prevention Research	172,337	-
ealth and Human Services, Department of	Direct		5 R01 CA174768-05	93.393	Cancer Cause and Prevention Research	296,511	-
ealth and Human Services, Department of	Direct		5 R01 CA189352-04	93.393	Cancer Cause and Prevention Research	355,762	-
ealth and Human Services, Department of	Direct		5 R01 CA200731-02	93.393	Cancer Cause and Prevention Research	549,667	-
ealth and Human Services, Department of	Direct		5 R01 CA201198-03	93.393	Cancer Cause and Prevention Research	725,125	<u>-</u>
ealth and Human Services, Department of	Direct		5 R01 CA201356-02	93.393	Cancer Cause and Prevention Research	473,044	65,78
ealth and Human Services, Department of	Direct		5 R01 CA201415-02	93.393	Cancer Cause and Prevention Research	439,691	108,96
ealth and Human Services, Department of	Direct		5 R01 CA203542-02	93.393	Cancer Cause and Prevention Research	334,299	-
ealth and Human Services, Department of	Direct		5 R01 CA206010-03	93.393	Cancer Cause and Prevention Research	440,970	-
ealth and Human Services, Department of	Direct		5 R01CA21251702	93.393	Cancer Cause and Prevention Research	205,849	18,68
ealth and Human Services, Department of	Direct		5 R03 CA186183-02	93.393	Cancer Cause and Prevention Research	3,489	-
ealth and Human Services, Department of	Direct		5 R21 CA172892-03	93.393	Cancer Cause and Prevention Research	57,428	50,62
ealth and Human Services, Department of	Direct		5 R21 CA187537-02	93.393	Cancer Cause and Prevention Research	60,688	-
ealth and Human Services, Department of	Direct		5 R21 CA191744-02	93.393	Cancer Cause and Prevention Research	(4,112)	-
ealth and Human Services, Department of	Direct		5 R21 CA201782-02	93.393	Cancer Cause and Prevention Research	256,768	-
ealth and Human Services, Department of	Direct		5 R21 CA204560-02	93.393	Cancer Cause and Prevention Research	177,760	-
ealth and Human Services, Department of	Direct		5 R21 CA219300-02	93.393	Cancer Cause and Prevention Research	209,801	-
earm and Traman Services, Department of	Direct		5 U01 CA182915-04	93.393	Cancer Cause and Prevention Research	686,320	-
lealth and Human Services, Department of				· -			

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		7 R01 CA158319-06	93.393	Cancer Cause and Prevention Research	238,508	-
Iealth and Human Services, Department of	Pass-Through	Brown University	00001193	93.393	Cancer Cause and Prevention Research	13,826	-
lealth and Human Services, Department of	Pass-Through	Georgetown University	412187 GR411954-UM	93.393	Cancer Cause and Prevention Research	5,864	-
lealth and Human Services, Department of	Pass-Through	Harvard University	112185-5101412	93.393	Cancer Cause and Prevention Research	33,475	-
lealth and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000844751	93.393	Cancer Cause and Prevention Research	11,722	-
ealth and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	000879633	93.393	Cancer Cause and Prevention Research	18,609	-
ealth and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000917146	93.393	Cancer Cause and Prevention Research	9,139	-
ealth and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000918478	93.393	Cancer Cause and Prevention Research	209,063	-
ealth and Human Services, Department of	Pass-Through	ImBio	20	93.393	Cancer Cause and Prevention Research	(10,412)	_
ealth and Human Services, Department of	Pass-Through	ImBio	1 R44 CA210825 02	93.393	Cancer Cause and Prevention Research	167,565	_
ealth and Human Services, Department of	Pass-Through	Massachusetts General Hospital	226969	93.393	Cancer Cause and Prevention Research	18,274	_
ealth and Human Services, Department of	Pass-Through	Memorial Sloan-Kettering Cancer Center (MSKCC)	BD519865A	93.393	Cancer Cause and Prevention Research	64,448	_
ealth and Human Services, Department of	Pass-Through	Northwestern University	60041989 UM	93.393	Cancer Cause and Prevention Research	105,910	_
ealth and Human Services, Department of	Pass-Through	Ohio State University, The	RF01456068	93.393	Cancer Cause and Prevention Research	37,316	_
ealth and Human Services, Department of	Pass-Through	Purdue University	4102-41070	93.393	Cancer Cause and Prevention Research	4,999	_
ealth and Human Services, Department of	Pass-Through	RAND Corporation	9920180056	93.393	Cancer Cause and Prevention Research	14,628	_
ealth and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	Subaward No. 3000993722	93.393	Cancer Cause and Prevention Research	33,521	_
ealth and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5106265	93.393	Cancer Cause and Prevention Research	33,485	_
ealth and Human Services, Department of	Pass-Through	University of Pennsylvania	569853/10058259/25386-00	93.393	Cancer Cause and Prevention Research	16,603	=
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ealth and Human Services, Department of	Pass-Through	University of South Carolina	16-3106	93.393	Cancer Cause and Prevention Research	(12,009)	-
ealth and Human Services, Department of	Pass-Through	University of South Carolina	18-3419	93.393	Cancer Cause and Prevention Research	152,714	-
ealth and Human Services, Department of	Pass-Through	University of Southern California	57914989	93.393	Cancer Cause and Prevention Research	17,577	-
ealth and Human Services, Department of	Pass-Through	University of Southern California	65281593	93.393	Cancer Cause and Prevention Research	25,357	<u>-</u>
	F.		4204 2000000000000000000000000000000000	A ·		\$ 11,037,206	\$ 1,831,37
ealth and Human Services, Department of	Direct		1 R01 CA211217-01A1	93.394	Cancer Detection and Diagnosis Research	\$ 105,710	\$ -
ealth and Human Services, Department of	Direct		1 R01 CA214981 01A1	93.394	Cancer Detection and Diagnosis Research	88,818	-
ealth and Human Services, Department of	Direct		1 R01 CA215574-01A1	93.394	Cancer Detection and Diagnosis Research	145,963	34,03
ealth and Human Services, Department of	Direct		1 U01 CA216459-01A1	93.394	Cancer Detection and Diagnosis Research	31,888	-
ealth and Human Services, Department of	Direct		1 U01 CA225753-01	93.394	Cancer Detection and Diagnosis Research	28,177	-
ealth and Human Services, Department of	Direct		5 P01 CA085878-14	93.394	Cancer Detection and Diagnosis Research	1,575,318	290,05
ealth and Human Services, Department of	Direct		5 R01 CA151443-05	93.394	Cancer Detection and Diagnosis Research	9,532	-
ealth and Human Services, Department of	Direct		5 R01 CA160254-07	93.394	Cancer Detection and Diagnosis Research	414,467	41,37
ealth and Human Services, Department of	Direct		5 R01 CA186769-05	93.394	Cancer Detection and Diagnosis Research	384,154	-
ealth and Human Services, Department of	Direct		5 R01 CA190299-03	93.394	Cancer Detection and Diagnosis Research	769,898	554,43
ealth and Human Services, Department of	Direct		5 R01 CA194536-03	93.394	Cancer Detection and Diagnosis Research	489,197	-
ealth and Human Services, Department of	Direct		5 R01 CA208335-02	93.394	Cancer Detection and Diagnosis Research	546,273	_
ealth and Human Services, Department of	Direct		5 R01 CA210237-02	93.394	Cancer Detection and Diagnosis Research	468,491	_
ealth and Human Services, Department of	Direct		5 R21 CA188481-02	93.394	Cancer Detection and Diagnosis Research	66,352	48,93
ealth and Human Services, Department of	Direct		5 R21 CA189775-02	93.394	Cancer Detection and Diagnosis Research	118,347	-
ealth and Human Services, Department of	Direct		5 R21 CA191052-02	93.394	Cancer Detection and Diagnosis Research	18,682	_
ealth and Human Services, Department of	Direct		5 R21 CA198730-02	93.394	Cancer Detection and Diagnosis Research	78,253	_
ealth and Human Services, Department of	Direct		5 R21 CA205414-02	93.394	Cancer Detection and Diagnosis Research	150,891	51,07
ealth and Human Services, Department of	Direct		5 R33 CA202867-03	93.394	Cancer Detection and Diagnosis Research	334,656	31,07
ealth and Human Services, Department of	Direct		5 R35 CA197701-03	93.394	Cancer Detection and Diagnosis Research	1,068,897	_
ealth and Human Services, Department of	Direct		5 U01 CA086400-18	93.394	Cancer Detection and Diagnosis Research	1,008,897	237,77
							•
ealth and Human Services, Department of	Direct		5 U01 CA166104-06	93.394	Cancer Detection and Diagnosis Research	663,279	102,52
ealth and Human Services, Department of	Direct		5 U01 CA179106-04	93.394	Cancer Detection and Diagnosis Research	434,695	-
ealth and Human Services, Department of	Direct		5 U01 CA183027-03	93.394	Cancer Detection and Diagnosis Research	(513)	-
ealth and Human Services, Department of	Direct		5 U01 CA183848-05	93.394	Cancer Detection and Diagnosis Research	364,185	-
ealth and Human Services, Department of	Direct		5 U01 CA189291-03	93.394	Cancer Detection and Diagnosis Research	271,694	-
ealth and Human Services, Department of	Direct		5 U01 CA195599-03	93.394	Cancer Detection and Diagnosis Research	371,659	-
ealth and Human Services, Department of	Direct		5 U01 CA214170-02	93.394	Cancer Detection and Diagnosis Research	663,099	-
ealth and Human Services, Department of	Direct		5 U24 CA210967-02	93.394	Cancer Detection and Diagnosis Research	879,239	-
ealth and Human Services, Department of	Direct		7 R33 CA177462-04	93.394	Cancer Detection and Diagnosis Research	54,191	20,91
ealth and Human Services, Department of	Pass-Through	Case Western Reserve University	RES511502	93.394	Cancer Detection and Diagnosis Research	2,963	-
ealth and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000853873	93.394	Cancer Detection and Diagnosis Research	136,537	-
ealth and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000879068-Project 214681	93.394	Cancer Detection and Diagnosis Research	62,875	-
ealth and Human Services, Department of	Pass-Through	Light Age, Inc	Grant #: 1R43CA206756-01	93.394	Cancer Detection and Diagnosis Research	(1,365)	-
ealth and Human Services, Department of	Pass-Through	Sloan-Kettering Cancer Institute	Subaward Agreement	93.394	Cancer Detection and Diagnosis Research	14,280	-
ealth and Human Services, Department of	Pass-Through	The Research Institute at Nationwide Children's Hospital	820389BF	93.394	Cancer Detection and Diagnosis Research	26,369	-
ealth and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	00004191	93.394	Cancer Detection and Diagnosis Research	17,096	-
ealth and Human Services, Department of	Pass-Through	University of Colorado	Project No. 2-5-27544	93.394	Cancer Detection and Diagnosis Research	(135)	-
ealth and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 170509	93.394	Cancer Detection and Diagnosis Research	33,739	-
ealth and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 180111 PO RGC0000001422	93.394	Cancer Detection and Diagnosis Research	15,223	-
ealth and Human Services, Department of	Pass-Through	University of Virginia	432045-19337	93.394	Cancer Detection and Diagnosis Research	54,565	_
ealth and Human Services, Department of	Pass-Through	University of Washington	UWSC8459	93.394	Cancer Detection and Diagnosis Research	204,496	_
ealth and Human Services, Department of	Pass-Through	Vanderbilt University Medical Center	VUMC 58570	93.394	Cancer Detection and Diagnosis Research	1,524	_
and framan services, Department of	1 ass Through	· ansorone one votory relocation	VOINC 303/V	/3.3/4	Cancel Decodon and Diagnosis Research	\$ 12,238,733	\$ 1,381,13
ealth and Human Services, Department of	Direct		1 R01 CA208267 01A1	93.395	Cancer Treatment Research	\$ 12,236,733	
	Direct		1 R01 CA208267 01A1 1 R01 CA217156-01A1	93.395	Cancer Treatment Research	\$ 71,348 274,484	5,32
ealth and Human Services, Department of							5,3
alth and Human Services, Department of	Direct		1 R01 CA219345-01	93.395	Cancer Treatment Research	487,710	-
alth and Human Services, Department of	Direct		1 R01 CA220199-01A1	93.395	Cancer Treatment Research	73,242	-
alth and Human Services, Department of	Direct		1 R21 CA218498-01	93.395	Cancer Treatment Research	215,963	-
alth and Human Services, Department of	Direct		1 R21 CA226962-01	93.395	Cancer Treatment Research	43,347	-
alth and Human Services, Department of	Direct		3 U01 CA216449-02S1	93.395	Cancer Treatment Research	645,148	-
alth and Human Services, Department of	Direct		4 R00 - CA197672-03	93.395	Cancer Treatment Research	113,813	-
			4 DO1 CA 155100 05	02 205	Company Transference Donor and	(25.157)	
ealth and Human Services, Department of ealth and Human Services, Department of	Direct Direct		4 R01 CA155198-05 4 R01 CA163345-05	93.395 93.395	Cancer Treatment Research Cancer Treatment Research	(25,157) (1,616)	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		4 R01 CA163737-05	93.395	Cancer Treatment Research	141,390	-
Health and Human Services, Department of	Direct		4 R01 CA163895-05	93.395	Cancer Treatment Research	59,475	-
Health and Human Services, Department of	Direct		4 R01 CA166033-05	93.395	Cancer Treatment Research	359,721	-
Health and Human Services, Department of	Direct		4 R01 CA177307-04	93.395	Cancer Treatment Research	267,225	-
Health and Human Services, Department of	Direct		5 P01 CA059827-20 5 R00 CA194163-04	93.395 93.395	Cancer Treatment Research Cancer Treatment Research	3,148,729 260,424	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R00 CA194163-04 5 R01 CA108874-10	93.395	Cancer Treatment Research Cancer Treatment Research	(311)	-
Health and Human Services, Department of	Direct		5 R01 CA125187-10S1	93.395	Cancer Treatment Research	227,020	_
Health and Human Services, Department of	Direct		5 R01 CA132834-06	93.395	Cancer Treatment Research	(153,234)	_
Health and Human Services, Department of	Direct		5 R01 CA133046-10	93.395	Cancer Treatment Research	330,754	_
Health and Human Services, Department of	Direct		5 R01 CA140667-08	93.395	Cancer Treatment Research	322,647	_
Health and Human Services, Department of	Direct		5 R01 CA160467-05	93.395	Cancer Treatment Research	(462)	_
Health and Human Services, Department of	Direct		5 R01 CA160467-07	93.395	Cancer Treatment Research	344,665	18,000
Health and Human Services, Department of	Direct		5 R01 CA160981-05	93.395	Cancer Treatment Research	16,513	-
Health and Human Services, Department of	Direct		5 R01 CA170198-04	93.395	Cancer Treatment Research	(7,715)	-
Health and Human Services, Department of	Direct		5 R01 CA181185-03	93.395	Cancer Treatment Research	82,432	-
Health and Human Services, Department of	Direct		5 R01 CA184153-04	93.395	Cancer Treatment Research	465,868	-
Health and Human Services, Department of	Direct		5 R01 CA187004-03	93.395	Cancer Treatment Research	325,405	-
Health and Human Services, Department of	Direct		5 R01 CA188252-03	93.395	Cancer Treatment Research	381,688	-
Health and Human Services, Department of	Direct		5 R01 CA188323-05	93.395	Cancer Treatment Research	515,288	-
Health and Human Services, Department of	Direct		5 R01 CA190498-04	93.395	Cancer Treatment Research	190,620	-
Health and Human Services, Department of	Direct		5 R01 CA193690-04	93.395	Cancer Treatment Research	438,354	-
Health and Human Services, Department of	Direct		5 R01 CA200660-02	93.395	Cancer Treatment Research	371,191	-
Health and Human Services, Department of	Direct		5 R01 CA201204-03	93.395	Cancer Treatment Research	367,279	-
Health and Human Services, Department of	Direct		5 R01 CA207272-03	93.395	Cancer Treatment Research	462,339 756,333	61,832
Health and Human Services, Department of	Direct		5 R01 CA211016-02	93.395	Cancer Treatment Research	756,333	92,025
Health and Human Services, Department of	Direct Direct		5 R01 CA214567-02 5 R01 CA215758-02	93.395 93.395	Cancer Treatment Research Cancer Treatment Research	566,881 799,548	•
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 CA217/38-02 5 R01CA217141-02	93.395	Cancer Treatment Research	435,539	- 189,601
Health and Human Services, Department of	Direct		5 R21 CA184479-02	93.395	Cancer Treatment Research	(49,811)	169,001
Health and Human Services, Department of	Direct		5 R21 CA198776-02	93.395	Cancer Treatment Research	(6,372)	_
Health and Human Services, Department of	Direct		5 R21 CA198770-02 5 R21 CA205636-02	93.395	Cancer Treatment Research	190,638	_
Health and Human Services, Department of	Direct		5 R21 CA209166-02	93.395	Cancer Treatment Research	209,616	_
Health and Human Services, Department of	Direct		5 U10 CA180801-05	93.395	Cancer Treatment Research	801,223	_
Health and Human Services, Department of	Pass-Through	Cancer Trials Support Unit (CTSU)	Various Checks	93.395	Cancer Treatment Research	(75)	_
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation (CCF)	R01 CA168899	93.395	Cancer Treatment Research	76,993	_
Health and Human Services, Department of	Pass-Through	Cold Spring Harbor Lab	55600215	93.395	Cancer Treatment Research	41,148	-
Health and Human Services, Department of	Pass-Through	Colorado State University	G-33008-1	93.395	Cancer Treatment Research	92,807	_
Health and Human Services, Department of	Pass-Through	ECOG-ACRIN Medical Research Foundation, Inc	1UG1CA18928-01-MICH1	93.395	Cancer Treatment Research	10,148	_
Health and Human Services, Department of	Pass-Through	ECOG-ACRIN Medical Research Foundation, Inc	1UG1CA189828-01-MICH3	93.395	Cancer Treatment Research	112,186	-
Health and Human Services, Department of	Pass-Through	ECOG-ACRIN Medical Research Foundation, Inc	5UG1CA189828-04-MICH4	93.395	Cancer Treatment Research	19,154	-
Health and Human Services, Department of	Pass-Through	Emory University	T791626	93.395	Cancer Treatment Research	69,822	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4684921UM	93.395	Cancer Treatment Research	2,563	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005019_UMI	93.395	Cancer Treatment Research	5,537	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005019_UMI_Baker	93.395	Cancer Treatment Research	5,390	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005019_UMI_Leja	93.395	Cancer Treatment Research	83,013	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005019_UMI_Valdivieso	93.395	Cancer Treatment Research	36,421	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627 UMI HAYES	93.395	Cancer Treatment Research	16,642	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627_UMI_Baker	93.395	Cancer Treatment Research	86,860	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627_UMI_Rae	93.395	Cancer Treatment Research	96,241	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627_UMI_SCHOTT	93.395	Cancer Treatment Research	(15,105)	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	9009627_UMI_Valdivieso	93.395	Cancer Treatment Research	67,942	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	accept today's date	93.395	Cancer Treatment Research	5,146	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS) University of Alabama at Birmingham (UAB)	0254-3841-4609 7R01CA166559-04	93.395 93.395	Cancer Treatment Research Cancer Treatment Research	332,498	-
Health and Human Services, Department of	Pass-Through Pass-Through	University of Kansas	FY2016-041-M1	93.395	Cancer Treatment Research	(27) 2,161	-
Health and Human Services, Department of	Pass-Through	University of Notre Dame, The	203234UM	93.395	Cancer Treatment Research	32,395	_
Treatur and Truman Services, Department of	1 ass-1 iii ougii	Oniversity of route Dame, The	2032340W	73.373	Cancer Treatment Research	\$ 15,699,042	\$ 366,780
Health and Human Services, Department of	Direct		1 R01 CA203810-01A1	93.396	Cancer Biology Research	\$ 36,420	•
Health and Human Services, Department of	Direct		1 R01 CA215596-01	93.396	Cancer Biology Research	293,980	<u>-</u>
Health and Human Services, Department of	Direct		1 R01 CA217510-01	93.396	Cancer Biology Research	523,047	_
Health and Human Services, Department of	Direct		1 R03 CA211817-01	93.396	Cancer Biology Research	45,413	_
Health and Human Services, Department of	Direct		1 R03 CA212990-01	93.396	Cancer Biology Research	52,652	-
Health and Human Services, Department of	Direct		2 UH2 CA213386-02	93.396	Cancer Biology Research	122,738	-
Health and Human Services, Department of	Direct		5 P01 CA093900-14	93.396	Cancer Biology Research	1,535,695	188,675
Health and Human Services, Department of	Direct		5 R01 CA082223-15	93.396	Cancer Biology Research	9,732	-
Health and Human Services, Department of	Direct		5 R01 CA107469-12	93.396	Cancer Biology Research	377,662	-
Health and Human Services, Department of	Direct		5 R01 CA1090554-04	93.396	Cancer Biology Research	318,890	-
Health and Human Services, Department of	Direct		5 R01 CA118762-10	93.396	Cancer Biology Research	(136)	-
Health and Human Services, Department of	Direct		5 R01 CA125577-10	93.396	Cancer Biology Research	375,433	3,706
Health and Human Services, Department of	Direct		5 R01 CA131045-07	93.396	Cancer Biology Research	(33,720)	-
Health and Human Services, Department of	Direct		5 R01 CA148621-05	93.396	Cancer Biology Research	(4,027)	-
Health and Human Services, Department of	Direct		5 R01 CA148828-09	93.396	Cancer Biology Research	477,339	-
Health and Human Services, Department of	Direct		5 R01 CA151588-07S1	93.396	Cancer Biology Research	367,180	-
Health and Human Services, Department of	Direct		5 R01 CA156744-08	93.396	Cancer Biology Research	401,740	-
	Direct		5 R01 CA171306-05	93.396	Cancer Biology Research	724,573	-
Health and Human Services, Department of					••		
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 CA173745-07 5 R01 CA173878-05	93.396 93.396	Cancer Biology Research Cancer Biology Research	517,578 72,950	192,961 19,539

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 CA183857-05	93.396	Cancer Biology Research	344,702	
Health and Human Services, Department of	Direct		5 R01 CA187903-03	93.396	Cancer Biology Research	331,853	-
Health and Human Services, Department of	Direct		5 R01 CA190176-04	93.396	Cancer Biology Research	530,977	-
Health and Human Services, Department of	Direct		5 R01 CA190384-04	93.396	Cancer Biology Research	454,263	· · · · · · · · · · · · · · · · · · ·
Health and Human Services, Department of	Direct Direct		5 R01 CA193136-04 5 R01 CA195655-04	93.396 93.396	Cancer Biology Research	611,970 355,030	
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 CA193633-04 5 R01 CA196018-04	93.396	Cancer Biology Research Cancer Biology Research	461,831	
Health and Human Services, Department of	Direct		5 R01 CA19604-03	93.396	Cancer Biology Research	384,011	05,055
Health and Human Services, Department of	Direct		5 R01 CA196619-03	93.396	Cancer Biology Research	506,292	_
Health and Human Services, Department of	Direct		5 R01 CA198074-03	93.396	Cancer Biology Research	409,004	<u>-</u>
Health and Human Services, Department of	Direct		5 R01 CA202018-02	93.396	Cancer Biology Research	349,598	-
Health and Human Services, Department of	Direct		5 R01 CA204969-02	93.396	Cancer Biology Research	328,256	
Health and Human Services, Department of	Direct		5 R21 CA195016-02	93.396	Cancer Biology Research	188,998	-
Health and Human Services, Department of	Direct		5 R21 CA198404-02	93.396	Cancer Biology Research	168,037	-
Health and Human Services, Department of	Direct		5 R21 CA214233-02	93.396	Cancer Biology Research	191,867	-
Health and Human Services, Department of	Direct		5 R35 CA197585-03	93.396	Cancer Biology Research	720,262	
Health and Human Services, Department of	Direct		5 U01 CA210152-02	93.396	Cancer Biology Research	646,706	
Health and Human Services, Department of	Direct		5R21 CA181855-03	93.396	Cancer Biology Research	28,582	
Health and Human Services, Department of	Direct		9 R01 CA214384-06A1	93.396	Cancer Biology Research	273,819	
Health and Human Services, Department of	Pass-Through	Arizona State University	18-323	93.396	Cancer Biology Research	44,481	
Health and Human Services, Department of	Pass-Through	Baylor College of Medicine	7000000298	93.396	Cancer Biology Research	48,125	
Health and Human Services, Department of	Pass-Through	Beth Israel Deaconess Medical Center	Sub award 01029116	93.396	Cancer Biology Research	89,660	
Health and Human Services, Department of	Pass-Through	Cold Spring Harbor Lab	30003498-01 Ayyard# 25604557: PO# 920800 SV	93.396	Cancer Biology Research	196,724 65,516	
Health and Human Services, Department of	Pass-Through	Cold Spring Harbor Lab	Award# 25604557; PO# 920809-SV Sub#25604657-PO# 921008-SV	93.396 93.396	Cancer Biology Research	65,516 27,224	
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Cold Spring Harbor Lab Columbia University	1 (GG010518)	93.396	Cancer Biology Research Cancer Biology Research	27,224 23,849	-
Health and Human Services, Department of	Pass-Through	Columbia University	1 (GG010318) 1 GG012766-01	93.396	Cancer Biology Research	51,792	
Health and Human Services, Department of	Pass-Through	Mayo Clinic	UOW-208812	93.396	Cancer Biology Research	6,350	
Health and Human Services, Department of	Pass-Through	Purdue University	4102-85284	93.396	Cancer Biology Research	29,249	
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0034092 (123677-1)	93.396	Cancer Biology Research	(29,159)	
Health and Human Services, Department of	Pass-Through	University of Rochester	416456-G	93.396	Cancer Biology Research	11,396	•
Health and Human Services, Department of	Pass-Through	University of Southern California	58065388	93.396	Cancer Biology Research	89,704	
Health and Human Services, Department of	Pass-Through	University of Southern California	94435417	93.396	Cancer Biology Research	45,518	
Health and Human Services, Department of	Pass-Through	University of Texas at Dallas	3001141555	93.396	Cancer Biology Research	1,531	-
H 14 1H C 1 D 1 1 C	D		2 P20 C + 04 (502 2005	02.207		\$ 14,203,157	· · · · · · · · · · · · · · · · · · ·
Health and Human Services, Department of	Direct		3 P30 CA046592-28S5	93.397	Cancer Centers Support Grants	\$ 6,137,295	
Health and Human Services, Department of	Direct		3 P50 CA130810-05S2 5 P50 CA186786-04	93.397	Cancer Centers Support Grants	253,151 2,166,252	
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 CA193377-03	93.397 93.397	Cancer Centers Support Grants Cancer Centers Support Grants	2,166,252 360,415	
Health and Human Services, Department of	Direct		5 U54 CA163059-07	93.397	Cancer Centers Support Grants Cancer Centers Support Grants	1,061,211	
Health and Human Services, Department of	Direct		5 U54 CA163124-05	93.397	Cancer Centers Support Grants Cancer Centers Support Grants	2,518	· · · · · · · · · · · · · · · · · · ·
Health and Human Services, Department of	Pass-Through	Sarcoma Alliance for Research Through Collaboration (SARC)	7.3	93.397	Cancer Centers Support Grants	7,891	_
Health and Human Services, Department of	Pass-Through	Sarcoma Alliance for Research Through Collaboration (SARC)	7.3	93.397	Cancer Centers Support Grants	7,057	_
Health and Human Services, Department of	Pass-Through	Sarcoma Alliance for Research Through Collaboration (SARC)	SPORE-Y5-CORE B-PATEL	93.397	Cancer Centers Support Grants	11,716	
Health and Human Services, Department of	Pass-Through	Sarcoma Alliance for Research Through Collaboration (SARC)	SPORE-Y5-CORE C-UM-SCHUETZE	93.397	Cancer Centers Support Grants	4,578	
Health and Human Services, Department of	Pass-Through	Sarcoma Alliance for Research Through Collaboration (SARC)	Subaward No. 7.2- project 3	93.397	Cancer Centers Support Grants	41,176	-
Health and Human Services, Department of	Pass-Through	Weill Cornell Medical College of Cornell University	17030366-01	93.397	Cancer Centers Support Grants	116,712	
W 14 1W 0 1 D 1 1 C	D		1 520 6 4220220 01	02.200	G	\$ 10,169,972	
Health and Human Services, Department of	Direct		1 F30 CA22828-01	93.398	Cancer Research Manpower	\$ 9,090	
Health and Human Services, Department of	Direct		1 F31 CA221066-01	93.398	Cancer Research Manpower	19,313	-
Health and Human Services, Department of	Direct		1 F31 CA224982-01	93.398	Cancer Research Manpower	25,984	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 F32 CA228262-01 1 F32 CA228328-01	93.398 93.398	Cancer Research Manpower Cancer Research Manpower	13,679 11,979	
Health and Human Services, Department of	Direct		1 K08 CA208013-01	93.398	Cancer Research Manpower	160,666	
Health and Human Services, Department of	Direct		1 K08 CA208013-01 1 K08 CA211362-01	93.398	Cancer Research Manpower	11,023	
Health and Human Services, Department of	Direct		1 K08 CA218460-01	93.398	Cancer Research Manpower	53,270	
Health and Human Services, Department of	Direct		1 R25 CA214227-01	93.398	Cancer Research Manpower	129,736	
			5 F30 CA196084-03	93.398	Cancer Research Manpower	32,986	
Health and Human Services. Department of	Direct				<u>*</u>		
<u> </u>	Direct Direct				Cancer Research Manbower	20,443	
Health and Human Services, Department of	Direct		5 F30 CA210379-03	93.398	Cancer Research Manpower Cancer Research Manpower	38,423 29,121	
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 F30 CA210379-03 5 F30 CA213664-02	93.398 93.398	Cancer Research Manpower	29,121	-
Health and Human Services, Department of Health and Human Services, Department of Health and Human Services, Department of	Direct Direct Direct		5 F30 CA210379-03	93.398 93.398 93.398	Cancer Research Manpower Cancer Research Manpower	29,121 (777)	- -
Health and Human Services, Department of	Direct Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03	93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539	- - -
Health and Human Services, Department of	Direct Direct Direct Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02	93.398 93.398 93.398	Cancer Research Manpower Cancer Research Manpower Cancer Research Manpower	29,121 (777)	-) - -
Health and Human Services, Department of	Direct Direct Direct Direct Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02	93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower Cancer Research Manpower Cancer Research Manpower Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951	- - - -) - -
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390	- - -) - - -
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841)	-) -) - - - - -
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045	-) - -) - - -) -
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045	-) -) - - - -) - -
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400	-) -) - - - -) - - -
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05 5 K08 CA181475-06	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400 144,348	-) -) - - - -) - - -
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05 5 K08 CA181475-06 5 K08 CA190645-02	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400 144,348 185,783	-) -)
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05 5 K08 CA181475-06 5 K08 CA201335-02	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400 144,348 185,783 198,359	-))
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05 5 K08 CA181475-06 5 K08 CA190645-02 5 K08 CA201335-02 5 K08 CA201581-03	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400 144,348 185,783 198,359 150,447	-)
Health and Human Services, Department of Health and Human Services, Department	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05 5 K08 CA181475-06 5 K08 CA201335-02 5 K08 CA201581-03 5 R25 CA203651-02	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400 144,348 185,783 198,359 150,447 118,153	-))
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05 5 K08 CA181475-06 5 K08 CA201335-02 5 K08 CA201581-03 5 R25 CA2009357	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400 144,348 185,783 198,359 150,447 118,153 346,676	-))
Health and Human Services, Department of	Direct		5 F30 CA210379-03 5 F30 CA213664-02 5 F31 CA189440-03 5 F31 CA200113-02 5 F31 CA203272-02 5 F31 CA203563-02 5 F31 CA206259-02 5 F31 CA206341-02 5 F32 CA200144-03 5 K07 CA196752-03 5 K07 CA201052-02 5 K08 CA172215-05 5 K08 CA181475-06 5 K08 CA201335-02 5 K08 CA201581-03 5 R25 CA203651-02	93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398 93.398	Cancer Research Manpower	29,121 (777) 5,539 (5,970) 6,352 5,951 39,390 (12,841) 159,045 152,770 89,400 144,348 185,783 198,359 150,447 118,153	-))

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		T32 CA083654	93.398	Cancer Research Manpower	286,439	-
Iealth and Human Services, Department of	Direct		T32 CA083654	93.398	Cancer Research Manpower	688	-
Iealth and Human Services, Department of	Direct		T32 CA140044	93.398	Cancer Research Manpower	261,099	-
Iealth and Human Services, Department of	Direct		T32 CA180984	93.398	Cancer Research Manpower	175,846	_
, 1					1	\$ 3,395,038	\$ -
Iealth and Human Services, Department of	Direct		1 R01 CA203809-02	93.399	Cancer Control	\$ 138,698	
Iealth and Human Services, Department of	Direct		3 U54 CA163059-05S1	93.399	Cancer Control	15,474	_
Health and Human Services, Department of	Direct		5 U54 CA163059-05	93.399	Cancer Control	(49,477)	5,548.00
riearur and riuman Services, Department of	Direct		3 034 CA103039-03	93.399	Cancer Control	\$ 104,695	\$ 5,548
					ACL National Institute on Disability, Independent Living, and	3 104,093	\$ 3,340
U-141 1 II C D	D:4		00 A D 5020, 0200	02 422	Rehabilitation Research	¢ 104.007	¢
Health and Human Services, Department of	Direct		90AR5020-0200	93.433		\$ 184,987	5 -
H 14 1H C ' D	D: .		00150047 02 02	02.422	ACL National Institute on Disability, Independent Living, and	4.600	4.605
Health and Human Services, Department of	Direct		90IF0047-02-02	93.433	Rehabilitation Research	4,680	4,695
			207770224.24.22	0.0 1.00	ACL National Institute on Disability, Independent Living, and		
Health and Human Services, Department of	Direct		90IF0094-03-00	93.433	Rehabilitation Research	226,642	-
					ACL National Institute on Disability, Independent Living, and		
Health and Human Services, Department of	Direct		90IF0102-03-00	93.433	Rehabilitation Research	76,787	-
					ACL National Institute on Disability, Independent Living, and		
Health and Human Services, Department of	Direct		90IFDV0002-01-00	93.433	Rehabilitation Research	69,495	18,427
					ACL National Institute on Disability, Independent Living, and		
Health and Human Services, Department of	Direct		90IFRE0002-01-00	93.433	Rehabilitation Research	84,866	_
				701.00	ACL National Institute on Disability, Independent Living, and	- 1,000	
Health and Human Services, Department of	Direct		90RES5012-04-00	93.433	Rehabilitation Research	995,632	_
realth and Human Services, Department of	Direct		70KL53012-04-00	73.433	ACL National Institute on Disability, Independent Living, and	775,032	_
II1411 II C D	D:4		90SI5000-02-00	02 422	Rehabilitation Research	(95)	
Health and Human Services, Department of	Direct		90813000-02-00	93.433		(85)	-
W 11 1W 0 1 D	D 751 1	D 11 77 1	102215	02.422	ACL National Institute on Disability, Independent Living, and	10.244	
Health and Human Services, Department of	Pass-Through	Brandeis University	403315	93.433	Rehabilitation Research	10,344	-
					ACL National Institute on Disability, Independent Living, and		
Health and Human Services, Department of	Pass-Through	Craig Hospital	UM001	93.433	Rehabilitation Research	23,615	-
					ACL National Institute on Disability, Independent Living, and		
Health and Human Services, Department of	Pass-Through	Research Foundation of State University of New York	R1111535	93.433	Rehabilitation Research	78,794	-
					ACL National Institute on Disability, Independent Living, and		
Health and Human Services, Department of	Pass-Through	University of Buffalo	R1084164	93.433	Rehabilitation Research	6,956	-
						\$ 1,762,713	\$ 23,122
					CDC Undergraduate Public Health Scholars Program (CUPS):	,	
					A Public Health Experience to Expose Undergraduates		
					Interested in Minority Health to Public Health and the Public		
Health and Human Services, Department of	Direct		1 NU50 MN000001-01-00	93.456	Health Professions	\$ 270,509	•
Health and Human Services, Department of	Pass-Through	University of Illinois at Chicago	2014-06897-08-00	93.516	Public Health Training Centers Program	\$ 23,437	
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Health and Human Services, Department of	Pass-Through	University of Illinois at Chicago	7601-03	93.516	Public Health Training Centers Program	57,285	- -
					DDITECT TO DOTTE A STATE OF A DOTTE	\$ 80,722	<u> </u>
					PPHF Capacity Building Assistance to Strengthen Public		
					Health Immunization Infrastructure and Performance financed		
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171471-00	93.539	in part by Prevention and Public Health Funds	\$ 3,440	\$ -
					PPHF Capacity Building Assistance to Strengthen Public		
					Health Immunization Infrastructure and Performance financed		
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180446-00	93.539	in part by Prevention and Public Health Funds	21,520	-
						\$ 24,960	\$ -
Health and Human Services, Department of	Pass-Through	University of Massachusetts Medical Center	WA001358840/RFS2013044	93.583	Refugee and Entrant Assistance Wilson/Fish Program	\$ 2,955	\$ -
Health and Human Services, Department of	Direct	•	1C1CMS331340-01-00	93.610	Health Care Innovation Awards (HCIA)	\$ 315,781	\$ -
Health and Human Services, Department of	Pass-Through	Altarum Institute	SC-14-021	93.610	Health Care Innovation Awards (HCIA)	12,402	· _
reading and realism services, Beparations of	Tubb Tineugn	That all librate	56 11 021	75.010	Treater care innovation (Terri)	\$ 328,183	\$ -
					ACA - State Innovation Models: Funding for Model Design	320,103	Ψ
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172452-00	93.624	and Model Testing Assistance	\$ 521,811	\$ -
ricaltif and fruman Scrvices, Department of	1 ass-1 iii ougii	whenigan, state of, freath and framan services, Department of	L201/2 1 32-00	73.024	ACA - State Innovation Models: Funding for Model Design	521,011	Ψ –
II141 II C D	D Tl1	Millian Character of Harlet and Harrison Committee December of	F20190501 001	02 (24		1 202 151	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180501-001	93.624	and Model Testing Assistance	1,393,151	-
			Tanana 40 004	00.504	ACA - State Innovation Models: Funding for Model Design	0.4.000	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20182349-001	93.624	and Model Testing Assistance	84,830	-
						\$ 1,999,792	\$ -
					Affordable Care Act Implementation Support for State		
					Demonstrations to Integrate Care for Medicare-Medicaid		
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172069-00	93.628	Enrollees	\$ 9,567	\$ -
					Affordable Care Act Implementation Support for State		
					Demonstrations to Integrate Care for Medicare-Medicaid		
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180665-00	93.628	Enrollees	31,522	-
, 1	Č					\$ 41,089	\$ -
Health and Human Services, Department of	Direct		90PD0301-01-00	93.647	Social Services Research and Demonstration	\$ 16,630	
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	7384sc	93.701	Trans-NIH Recovery Act Research Support	\$ 36,865	
Health and Human Services, Department of	Direct	,	1-M01-HP-31331-01-00	93.732	Mental and Behavioral Health Education and Training Grants	\$ 391,601	\$ -
rround and rrunkan bervices, Department of	DiiCl		1-14101-111-31331-01-00	93.134	Capacity Building Assistance to Strengthen Public Health	ψ 371,001	Ψ -
					Immunization Infrastructure and Performance financed in part		
и м. ти. с : В	p m 1	Military Committee of the committee of t	F20171200 00	00.700	±	6 17.2 (2)	¢.
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171299-00	93.733	by the Prevention and Public Health Fund (PPHF)	\$ 15,269	> -
					Capacity Building Assistance to Strengthen Public Health		
					Immunization Infrastructure and Performance financed in part		
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180650-00	93.733	by the Prevention and Public Health Fund (PPHF)	33,906	
						\$ 49,175	\$ -
					State and Local Public Health Actions to Prevent Obesity,		
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172043-001	93.757	Diabetes, Heart Disease and Stroke (PPHF)	\$ 7,012	\$ -
· <u>*</u>	Č	- · · ·				· ·	

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Harld and Harris Cambre December of	D Th1	Mishing Carte of Health and Hanney Coming Department of	F20172044 02	02.757	State and Local Public Health Actions to Prevent Obesity,	2.044	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172044-02	93.757	Diabetes, Heart Disease and Stroke (PPHF) State and Local Public Health Actions to Prevent Obesity,	2,944	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172515-001	93.757	Diabetes, Heart Disease and Stroke (PPHF)	(152)	_
	8	, _F		,,,,,,,	()	\$ 9,804	\$ -
					Preventive Health and Health Services Block Grant funded	-	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20173018-00	93.758	solely with Prevention and Public Health Funds (PPHF)	\$ 10,291	\$ -
			1000-1	22.24=	Hospital Preparedness Program (HPP) Ebola Preparedness an		•
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	100074	93.817	Response Activities Ebola Support: Transmission and Prevention Control, Public	\$ 415,034	\$ -
Health and Human Services, Department of	Pass-Through	University of Utah	100038850-01	93.823	Health Preparedness, Vaccine Development	\$ 230,616	•
Treatur and Truman Services, Department of	1 ass-1 iii ougii	Oniversity of Otali	100038630-01	93.023	Supporting and Maintaining a Surveillance System for Chroni		<u> </u>
Health and Human Services, Department of	Direct		5 U58DP006254-02	93.833	Kidney Disease (CKD) in the United States	\$ 705,559	\$ 213,569
Health and Human Services, Department of	Direct		1 F32 HL140728-01	93.837	Cardiovascular Diseases Research	\$ 31,304	
Health and Human Services, Department of	Direct		1 K01 HL171701 01	93.837	Cardiovascular Diseases Research	32,898	-
Health and Human Services, Department of	Direct		1 K23 HL135397-01A1	93.837	Cardiovascular Diseases Research	1,708	-
Health and Human Services, Department of	Direct		1 R01 HL134344-01A1	93.837	Cardiovascular Diseases Research	183,584	13,500
Health and Human Services, Department of	Direct		1 R01 HL134846-01A1	93.837	Cardiovascular Diseases Research	290,307	26.063
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R01 HL137964-01 1 R01 HL139656-01	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	277,584 232,252	36,962
Health and Human Services, Department of	Direct		1 R01 HL139672-01	93.837	Cardiovascular Diseases Research	232,134	_
Health and Human Services, Department of	Direct		1 R01 HL139813-01A1	93.837	Cardiovascular Diseases Research	15,260	_ _
Health and Human Services, Department of	Direct		1 R01 HL141891-01	93.837	Cardiovascular Diseases Research	58,927	_
Health and Human Services, Department of	Direct		1 R01 HL142023-01	93.837	Cardiovascular Diseases Research	27,607	-
Health and Human Services, Department of	Direct		1 R01HL137731-01	93.837	Cardiovascular Diseases Research	352,691	90,964
Health and Human Services, Department of	Direct		1 R03 HL138310-01	93.837	Cardiovascular Diseases Research	54,658	-
Health and Human Services, Department of	Direct		1 R35 HL135824-02	93.837	Cardiovascular Diseases Research	688,615	-
Health and Human Services, Department of	Direct		3 R01 HL132979-02S1	93.837	Cardiovascular Diseases Research	558,349	40,416
Health and Human Services, Department of	Direct		4 R01 HL058984-17	93.837	Cardiovascular Diseases Research	(5,251)	-
Health and Human Services, Department of	Direct		4 R01 HL088419-08	93.837	Cardiovascular Diseases Research	15,826	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		4 R01 HL109054-05 4 R01 HL110990-04	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	180,250 349,841	-
Health and Human Services, Department of	Direct		4 R01 HL114595-05	93.837	Cardiovascular Diseases Research	128,585	_
Health and Human Services, Department of	Direct		4 R01 HL115138-05	93.837	Cardiovascular Diseases Research	114,590	_
Health and Human Services, Department of	Direct		4 R01 HL117491-04	93.837	Cardiovascular Diseases Research	(161,522)	_
Health and Human Services, Department of	Direct		4 R01 HL118259-04	93.837	Cardiovascular Diseases Research	326,607	-
Health and Human Services, Department of	Direct		4 U01 HL094345-06	93.837	Cardiovascular Diseases Research	761,875	339,727
Health and Human Services, Department of	Direct		4 U10 HL069330-16	93.837	Cardiovascular Diseases Research	12,382	-
Health and Human Services, Department of	Direct		4R01 HL114038-04	93.837	Cardiovascular Diseases Research	103,362	-
Health and Human Services, Department of	Direct		5 F31 HL131327-02	93.837	Cardiovascular Diseases Research	34,349	-
Health and Human Services, Department of	Direct		5 F31 HL132567-02	93.837	Cardiovascular Diseases Research	6,278	-
Health and Human Services, Department of	Direct		5 F32 HL131288-03	93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	61,697	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 K01 HL132057-03 5 K08 HL116639-05	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	98,780 146,419	-
Health and Human Services, Department of	Direct		5 K08 HL123621-04	93.837	Cardiovascular Diseases Research	154,034	- -
Health and Human Services, Department of	Direct		5 K08 HL130455-02	93.837	Cardiovascular Diseases Research	158,333	_
Health and Human Services, Department of	Direct		5 K08 HL131993-03	93.837	Cardiovascular Diseases Research	162,859	-
Health and Human Services, Department of	Direct		5 K08 HL13614-03	93.837	Cardiovascular Diseases Research	229,507	-
Health and Human Services, Department of	Direct		5 K08HL130944-02	93.837	Cardiovascular Diseases Research	185,930	-
Health and Human Services, Department of	Direct		5 K12 HL133304-02	93.837	Cardiovascular Diseases Research	325,879	-
Health and Human Services, Department of	Direct		5 K23 HL119623-04	93.837	Cardiovascular Diseases Research	213,696	-
Health and Human Services, Department of	Direct		5 K23 HL128909-03	93.837	Cardiovascular Diseases Research	146,857	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 K23 HL130641-03 5 K24 HL111316-05	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	189,737 115,982	-
Health and Human Services, Department of	Direct		5 R00 HL124322-04	93.837	Cardiovascular Diseases Research	229,860	- -
Health and Human Services, Department of	Direct		5 R01 HL055438-20	93.837	Cardiovascular Diseases Research	155,048	_
Health and Human Services, Department of	Direct		5 R01 HL058984-19	93.837	Cardiovascular Diseases Research	390,579	-
Health and Human Services, Department of	Direct		5 R01 HL068878-18	93.837	Cardiovascular Diseases Research	359,393	-
Health and Human Services, Department of	Direct		5 R01 HL071818-13	93.837	Cardiovascular Diseases Research	56,482	10,049
Health and Human Services, Department of	Direct		5 R01 HL072011-13	93.837	Cardiovascular Diseases Research	273,919	113,692
Health and Human Services, Department of	Direct		5 R01 HL079118-12	93.837	Cardiovascular Diseases Research	462,664	
Health and Human Services, Department of	Direct		5 R01 HL085339-09	93.837	Cardiovascular Diseases Research	270,197	76
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL105297-07 5 R01 HL112610-04	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	332,048 258,388	167,363
Health and Human Services, Department of	Direct		5 R01 HL112010-04 5 R01 HL115138-04	93.837	Cardiovascular Diseases Research	28,840	-
Health and Human Services, Department of	Direct		5 R01 HL117626-0582	93.837	Cardiovascular Diseases Research	6,230,747	528,498
Health and Human Services, Department of	Direct		5 R01 HL117860-03	93.837	Cardiovascular Diseases Research	75,579	2,351
Health and Human Services, Department of	Direct		5 R01 HL119215-05	93.837	Cardiovascular Diseases Research	436,745	_,551
Health and Human Services, Department of	Direct		5 R01 HL119443-04	93.837	Cardiovascular Diseases Research	284,311	75,145
Health and Human Services, Department of	Direct		5 R01 HL119542-04	93.837	Cardiovascular Diseases Research	345,722	1,457
Health and Human Services, Department of	Direct		5 R01 HL120888-04	93.837	Cardiovascular Diseases Research	367,022	-
Health and Human Services, Department of	Direct		5 R01 HL122261-04	93.837	Cardiovascular Diseases Research	528,279	242,531
Health and Human Services, Department of	Direct		5 R01 HL122352-04	93.837	Cardiovascular Diseases Research	336,978	-
Health and Human Services, Department of	Direct		5 R01 HL122416-03	93.837	Cardiovascular Diseases Research	79,043	-
Health and Human Services, Department of	Direct		5 R01 HL122664-05	93.837	Cardiovascular Diseases Research	323,285	164041
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL122684-04 5 R01 HL123333-04	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	757,867 308 720	164,241
The annual of the property of the partial of the pa	DIFECT		J NUI FIL123333-U4	93.83/	Catulovasculai Discases Reseafeli	398,729	=

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 HL126700-03	93.837	Cardiovascular Diseases Research	775,881	100.000
Health and Human Services, Department of	Direct		5 R01 HL126969-03 5 R01 HL127023-04	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	479,868	100,660
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL127023-04 5 R01 HL127151-04	93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	310,973 622,032	-
Health and Human Services, Department of	Direct		5 R01 HL127151-04 5 R01 HL127215-02	93.837	Cardiovascular Diseases Research	505,363	240,011
Health and Human Services, Department of	Direct		5 R01 HL127564-04	93.837	Cardiovascular Diseases Research	539,306	145,602
Health and Human Services, Department of	Direct		5 R01 HL127687-03	93.837	Cardiovascular Diseases Research	484,338	-
Health and Human Services, Department of	Direct		5 R01 HL127805-03	93.837	Cardiovascular Diseases Research	577,784	_
Health and Human Services, Department of	Direct		5 R01 HL128231-03	93.837	Cardiovascular Diseases Research	867,996	450,608
Health and Human Services, Department of	Direct		5 R01 HL1283307-03	93.837	Cardiovascular Diseases Research	562,634	-
Health and Human Services, Department of	Direct		5 R01 HL129778-04	93.837	Cardiovascular Diseases Research	485,079	-
Health and Human Services, Department of	Direct		5 R01 HL130106-03	93.837	Cardiovascular Diseases Research	406,372	=
Health and Human Services, Department of	Direct		5 R01 HL131610-02	93.837	Cardiovascular Diseases Research	760,780	224,023
Health and Human Services, Department of	Direct		5 R01 HL132037-02	93.837	Cardiovascular Diseases Research	469,172	38,027
Health and Human Services, Department of	Direct		5 R01 HL133129-02	93.837	Cardiovascular Diseases Research	418,088	-
Health and Human Services, Department of	Direct		5 R01 HL133221-03	93.837	Cardiovascular Diseases Research	668,020	405,477
Health and Human Services, Department of	Direct		5 R01 HL136231-02	93.837	Cardiovascular Diseases Research	700,009	-
Health and Human Services, Department of	Direct		5 R01 HL137214-02	93.837	Cardiovascular Diseases Research	540,264	-
Health and Human Services, Department of	Direct		5 R01 HL138094-02	93.837	Cardiovascular Diseases Research	197,338	-
Health and Human Services, Department of	Direct		5 R01 HL138139-02	93.837	Cardiovascular Diseases Research	484,952	=
Health and Human Services, Department of	Direct		5 R01 H0132988-03	93.837	Cardiovascular Diseases Research	566,023	-
Health and Human Services, Department of	Direct		5 R01HL120108-04	93.837	Cardiovascular Diseases Research	110,767	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01HL134569-02 5 R21 HL125961-02	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	652,772 (1,993)	-
Health and Human Services, Department of	Direct		5 R21 HL133758-02	93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	52,695	-
Health and Human Services, Department of	Direct		5 R21 HL135/38-02 5 R21 HL138054-02	93.837	Cardiovascular Diseases Research	151,156	<u>-</u>
Health and Human Services, Department of	Direct		5 R25 HL108842-05	93.837	Cardiovascular Diseases Research	(646)	- -
Health and Human Services, Department of	Direct		5 R25 HL108842-07	93.837	Cardiovascular Diseases Research	121,878	_
Health and Human Services, Department of	Direct		5 R34 HL130738-02	93.837	Cardiovascular Diseases Research	291,712	_
Health and Human Services, Department of	Direct		5 R35 HL135823-03	93.837	Cardiovascular Diseases Research	519,932	_
Health and Human Services, Department of	Direct		5 U01 HL118738-06	93.837	Cardiovascular Diseases Research	698,480	481,200
Health and Human Services, Department of	Direct		5 U01 HL126499-05	93.837	Cardiovascular Diseases Research	423,632	39,981
Health and Human Services, Department of	Direct		5 U01 HL135842-02	93.837	Cardiovascular Diseases Research	457,758	165,518
Health and Human Services, Department of	Direct		5 UG1 HL135665-02	93.837	Cardiovascular Diseases Research	350,378	-
Health and Human Services, Department of	Direct		7 R01 HL111664-05	93.837	Cardiovascular Diseases Research	(39)	-
Health and Human Services, Department of	Direct		T32 HL007853	93.837	Cardiovascular Diseases Research	574,214	-
Health and Human Services, Department of	Direct		T32 HL076123	93.837	Cardiovascular Diseases Research	70,263	-
Health and Human Services, Department of	Direct		T32 HL125242	93.837	Cardiovascular Diseases Research	172,170	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES511861	93.837	Cardiovascular Diseases Research	17,867	-
Health and Human Services, Department of	Pass-Through	Children's Hospital of Pittsburgh	0046317 (126441-4)	93.837	Cardiovascular Diseases Research	35,027	=
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation	U54HL119810	93.837	Cardiovascular Diseases Research	87,771	-
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation (CCF)	981-SUB	93.837	Cardiovascular Diseases Research	46,347	-
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Health System	U 54 HL119810-05 PO#943-SUB	93.837	Cardiovascular Diseases Research	133,113	=
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Lerner College of Medicine	Subaward No. 840-SUB	93.837	Cardiovascular Diseases Research	43,775	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	1583R57	93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	11,072	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Duke University	203-7664 T699185	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	43,335	-
Health and Human Services, Department of	Pass-Through	Emory University Emory University	T714754	93.837	Cardiovascular Diseases Research	(11,304)	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4687768MICH	93.837	Cardiovascular Diseases Research	(2) 1,517	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4687798UM	93.837	Cardiovascular Diseases Research	265,115	_
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	100047	93.837	Cardiovascular Diseases Research	23,835	_
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Research Foundation Institute	2017110692	93.837	Cardiovascular Diseases Research	32,316	_
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Research Foundation Institute	2018103713	93.837	Cardiovascular Diseases Research	34,519	_
Health and Human Services, Department of	Pass-Through	Massachusetts General Hospital	230189	93.837	Cardiovascular Diseases Research	51,248	_
Health and Human Services, Department of	Pass-Through	MC3 Inc	14-PAF03089	93.837	Cardiovascular Diseases Research	9,346	_
Health and Human Services, Department of	Pass-Through	New England Research Institute	Pediatric Heart Network Sub-Aw	93.837	Cardiovascular Diseases Research	15,495	=
Health and Human Services, Department of	Pass-Through	New England Research Institute	U10HL068270	93.837	Cardiovascular Diseases Research	28,939	-
Health and Human Services, Department of	Pass-Through	New England Research Institute	U10HL068270	93.837	Cardiovascular Diseases Research	1,644	-
Health and Human Services, Department of	Pass-Through	New York University	16-A0-00-005932-01	93.837	Cardiovascular Diseases Research	44,119	-
Health and Human Services, Department of	Pass-Through	Purdue University	4102-84856	93.837	Cardiovascular Diseases Research	164,930	-
Health and Human Services, Department of	Pass-Through	San Francisco State University	S18-0010	93.837	Cardiovascular Diseases Research	12,844	-
Health and Human Services, Department of	Pass-Through	St. Luke's Hospital	Agreement	93.837	Cardiovascular Diseases Research	402,530	-
Health and Human Services, Department of	Pass-Through	The Children's Hospital of Philadelphia	3210920617	93.837	Cardiovascular Diseases Research	259,423	=
Health and Human Services, Department of	Pass-Through	The Children's Mercy Hospital	16-0003	93.837	Cardiovascular Diseases Research	31,760	-
Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0255-7875-4609	93.837	Cardiovascular Diseases Research	115,063	-
Health and Human Services, Department of	Pass-Through	University of California - Davis	201501430-01	93.837	Cardiovascular Diseases Research	117,627	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	7732sc	93.837	Cardiovascular Diseases Research	47,496	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	57898298	93.837	Cardiovascular Diseases Research	26,230	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	N003357702	93.837	Cardiovascular Diseases Research	113,447	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	570048	93.837	Cardiovascular Diseases Research	1,179	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	571903	93.837	Cardiovascular Diseases Research	41,965	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	571903	93.837	Cardiovascular Diseases Research	60,173	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	571903	93.837	Cardiovascular Diseases Research	10,874	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	566754/570048	93.837	Cardiovascular Diseases Research	1,183	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	568465/10040395/7136-02	93.837	Cardiovascular Diseases Research	24,908	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0035420 (122755-1)	93.837	Cardiovascular Diseases Research	13,700	-
	D '			02 027	t in advance and an I Arana and I Arana and	20.177	
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of South Carolina University of Washington	14-2607 UWSC8792	93.837 93.837	Cardiovascular Diseases Research Cardiovascular Diseases Research	39,177 130,445	-

Health and Human Services, Department of	Pass-Through Pass-Through Pass-Through Pass-Through Direct	Washington University Yale University Yale University	WU-17-326 M15A12119 (CON-80000358) M17A12503(A10362) 1 K23 HL136934-01A1 1 K99 HL139996 01 1 R01 HL138417-01A1 1 R01 HL141195-01 1 R21 HL139156-01 1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04 4 R01 HL115618-04	93.837 93.837 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Cardiovascular Diseases Research Cardiovascular Diseases Research Cardiovascular Diseases Research Lung Diseases Research	50,781 33,054 189,912 \$ 39,320,016 \$ 51,973 51,380 44,169 137,896 12,675 11,989 177,600 132,107 321,141 628,871 (13,203)	
Health and Human Services, Department of	Pass-Through Direct	· · · · · · · · · · · · · · · · · · ·	M17A12503(A10362) 1 K23 HL136934-01A1 1 K99 HL139996 01 1 R01 HL138417-01A1 1 R01 HL141195-01 1 R21 HL139156-01 1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.837 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Cardiovascular Diseases Research Lung Diseases Research	189,912 \$ 39,320,016 \$ 51,973 51,380 44,169 137,896 12,675 11,989 177,600 132,107 321,141 628,871	\$ 4,123,894 \$ - - - - - - 383,331
Health and Human Services, Department of Health and Human Services, Department	Direct	Yale University	1 K23 HL136934-01A1 1 K99 HL139996 01 1 R01 HL138417-01A1 1 R01 HL141195-01 1 R21 HL139156-01 1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research	\$ 39,320,016 \$ 51,973 51,380 44,169 137,896 12,675 11,989 177,600 132,107 321,141 628,871	\$ 4,123,894 \$ - - - - - - 383,331
Health and Human Services, Department of Health and Human Services, Department	Direct		1 K99 HL139996 01 1 R01 HL138417-01A1 1 R01 HL141195-01 1 R21 HL139156-01 1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research	\$ 51,973 51,380 44,169 137,896 12,675 11,989 177,600 132,107 321,141 628,871	\$
Health and Human Services, Department of Health and Human Services, Department	Direct		1 K99 HL139996 01 1 R01 HL138417-01A1 1 R01 HL141195-01 1 R21 HL139156-01 1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research	51,380 44,169 137,896 12,675 11,989 177,600 132,107 321,141 628,871	383,331
Health and Human Services, Department of	Direct		1 R01 HL141195-01 1 R21 HL139156-01 1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research	137,896 12,675 11,989 177,600 132,107 321,141 628,871	-
Health and Human Services, Department of	Direct		1 R21 HL139156-01 1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838 93.838 93.838	Lung Diseases Research	12,675 11,989 177,600 132,107 321,141 628,871	•
Health and Human Services, Department of	Direct		1 R21 HL140995-01 1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838 93.838	Lung Diseases Research	11,989 177,600 132,107 321,141 628,871	-
Health and Human Services, Department of	Direct		1 R56 HL126754-01A1 1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research Lung Diseases Research Lung Diseases Research	177,600 132,107 321,141 628,871	-
Health and Human Services, Department of	Direct		1R01HL14057201A1 2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research Lung Diseases Research	132,107 321,141 628,871	-
Health and Human Services, Department of	Direct		2 R01 HL116434-05A1 3 R01 HL122438-04S1 4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838 93.838 93.838	Lung Diseases Research Lung Diseases Research	321,141 628,871	•
Health and Human Services, Department of	Direct Direct Direct Direct Direct Direct Direct Direct		4 R01 HL108904-05 4 R01 HL112880-04 4 R01 HL112897-04	93.838	Lung Diseases Research		-
Health and Human Services, Department of	Direct Direct Direct Direct Direct Direct		4 R01 HL112880-04 4 R01 HL112897-04		Lung Diseases Research	(13.203)	
Health and Human Services, Department of	Direct Direct Direct Direct Direct		4 R01 HL112897-04	93.838	e e		-
Health and Human Services, Department of	Direct Direct Direct Direct			02.020	Lung Diseases Research	(6,316)	-
Health and Human Services, Department of	Direct Direct Direct			93.838 93.838	Lung Diseases Research Lung Diseases Research	(21,962) 54,020	-
Health and Human Services, Department of	Direct Direct		4 R01 HL115010-04 4 R01 HL116434-04	93.838	Lung Diseases Research	156,477	-
Health and Human Services, Department of Health and Human Services, Department of			5 K01 HL136687-02	93.838	Lung Diseases Research	187,548	_
Health and Human Services, Department of	Direct		5 K23 HL128936-02	93.838	Lung Diseases Research	30,686	-
			5 K24 HL138188-02	93.838	Lung Diseases Research	77,722	-
	Direct		5 R01 HL031237-32	93.838	Lung Diseases Research	274,549	-
Health and Human Services, Department of	Direct		5 R01 HL052285-22	93.838	Lung Diseases Research	376,799 534,904	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL078871-10 5 R01 HL079339-10	93.838 93.838	Lung Diseases Research Lung Diseases Research	534,904 (2,348)	-
Health and Human Services, Department of	Direct		5 R01 HL0/9339-10 5 R01 HL094622-09	93.838	Lung Diseases Research	348,408	- -
Health and Human Services, Department of	Direct		5 R01 HL105489-05	93.838	Lung Diseases Research	(10)	_
Health and Human Services, Department of	Direct		5 R01 HL108904-07	93.838	Lung Diseases Research	392,856	-
Health and Human Services, Department of	Direct		5 R01 HL114858-06	93.838	Lung Diseases Research	472,534	-
Health and Human Services, Department of	Direct		5 R01 HL118017-04	93.838	Lung Diseases Research	246,593	4,026
Health and Human Services, Department of	Direct		5 R01 HL119682-04	93.838	Lung Diseases Research	243,415	262 152
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL121774-02 5 R01 HL123515-04	93.838 93.838	Lung Diseases Research Lung Diseases Research	872,713 683,245	363,152
Health and Human Services, Department of	Direct		5 R01 HL125555-04	93.838	Lung Diseases Research	531,837	- -
Health and Human Services, Department of	Direct		5 R01 HL127203-04	93.838	Lung Diseases Research	407,874	-
Health and Human Services, Department of	Direct		5 R01 HL131608-04	93.838	Lung Diseases Research	385,355	-
Health and Human Services, Department of	Direct		5 R01 HL134369-03	93.838	Lung Diseases Research	447,435	-
Health and Human Services, Department of	Direct		5 R01 HL13667-02	93.838	Lung Diseases Research	157,662	10,781
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL137816-02 5 U01 HL123031-05	93.838 93.838	Lung Diseases Research Lung Diseases Research	195,028 395,347	28,465 71,534
Health and Human Services, Department of	Direct		5 U01 HL128952-03	93.838	Lung Diseases Research	281,987	38,029
Health and Human Services, Department of	Direct		5 U01 HL131072-02	93.838	Lung Diseases Research	659,677	139,112
Health and Human Services, Department of	Direct		5 U01 HL137182-02	93.838	Lung Diseases Research	542,030	-
Health and Human Services, Department of	Direct		7 R01 HL108949-05	93.838	Lung Diseases Research	210,836	-
Health and Human Services, Department of	Direct		7 R01 HL109288-06	93.838	Lung Diseases Research	39,560	-
Health and Human Services, Department of	Direct		T32 HL007517	93.838	Lung Diseases Research	485,720	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		T32 HL007749 T32 HL007749	93.838 93.838	Lung Diseases Research Lung Diseases Research	(45,458) 1,084,879	-
Health and Human Services, Department of	Direct		T32 HL007749	93.838	Lung Diseases Research	12,936	- -
Health and Human Services, Department of	Direct		T35 HL007690	93.838	Lung Diseases Research	185,864	-
Health and Human Services, Department of	Pass-Through	Cincinnati Children's Hospital Medical Center (CCHMC)	138002	93.838	Lung Diseases Research	34,676	-
Health and Human Services, Department of	Pass-Through	Cornell University	16121993-11	93.838	Lung Diseases Research	274,715	-
Health and Human Services, Department of	Pass-Through	Georgia Institute of Technology	RJ062-G1	93.838	Lung Diseases Research	360,986	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	ImBio Massachusetts General Hospital	Research Agreement 224404	93.838 93.838	Lung Diseases Research Lung Diseases Research	(27) 204,109	-
Health and Human Services, Department of	Pass-Through	National Jewish Health	20051811	93.838	Lung Diseases Research	60,210	<u>-</u>
Health and Human Services, Department of	Pass-Through	National Jewish Health	2020051807	93.838	Lung Diseases Research	7,528	_
Health and Human Services, Department of	Pass-Through	National Jewish Health	20024306_Mich sub	93.838	Lung Diseases Research	9,175	-
Health and Human Services, Department of	Pass-Through	National Jewish Health	20114601_Mich sub	93.838	Lung Diseases Research	6,237	-
Health and Human Services, Department of	Pass-Through	Oakland University	33098-01	93.838	Lung Diseases Research	9,917	-
Health and Human Services, Department of	Pass-Through	Palo Alto Veterans Institute for Research	NIM054043	93.838	Lung Diseases Research	18,779	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of California - San Francisco University of Iowa	10443sc W000705540	93.838 93.838	Lung Diseases Research Lung Diseases Research	448,455 164,881	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	565138	93.838	Lung Diseases Research	31,725	-
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	0024088 (127910-1)	93.838	Lung Diseases Research	276,104	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC7902	93.838	Lung Diseases Research	166,160	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC9344	93.838	Lung Diseases Research	95,967	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU16126	93.838	Lung Diseases Research	202,454	-
Health and Human Services, Department of	Pass-Through	Weill Cornell Medical College of Cornell University Weill Cornell Medical College of Cornell University	16121993-10 16121003-0	93.838	Lung Diseases Research	124,416	-
Health and Human Services, Department of	Pass-Through	Weill Cornell Medical College of Cornell University	16121993-9	93.838	Lung Diseases Research	\$ 15,063,422	\$ 1,038,430
Health and Human Services, Department of	Direct		1 K01 HL135392-01	93.839	Blood Diseases and Resources Research	\$ 180,360	
Health and Human Services, Department of	Direct		1 K99 HL136784-01A1	93.839	Blood Diseases and Resources Research	45,969	-
Health and Human Services, Department of	Direct		1 R01 HL125774 01A1	93.839	Blood Diseases and Resources Research	91,732	-
Health and Human Services, Department of	Direct		1 R01 HL136420-01A1	93.839	Blood Diseases and Resources Research	101,736	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R01 HL137919-01 1 R01 HL141399-01	93.839 93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	240,012 27,801	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		1 R21 HL140274-01	93.839	Blood Diseases and Resources Research	53,089	11,281
Health and Human Services, Department of	Direct		4 R01 HL090775-09	93.839	Blood Diseases and Resources Research	45,165	- -
Health and Human Services, Department of	Direct		5 F31 HL129481-03	93.839	Blood Diseases and Resources Research	5,878	-
Health and Human Services, Department of	Direct		5 F32 HL127981-02	93.839	Blood Diseases and Resources Research	4,660	-
Health and Human Services, Department of	Direct		5 F32 HL129491-03	93.839	Blood Diseases and Resources Research	44,696	-
Health and Human Services, Department of	Direct		5 K08 HL119597-04	93.839	Blood Diseases and Resources Research	246,654	-
Health and Human Services, Department of	Direct		5 K08 HL128794-04	93.839	Blood Diseases and Resources Research	181,936	-
Health and Human Services, Department of	Direct		5 R01 HL055374-19	93.839	Blood Diseases and Resources Research	352,878	5,706
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 HL094311-09 5 R01 HL114405-05	93.839 93.839	Blood Diseases and Resources Research Blood Diseases and Resources Research	314,980 391,586	3,706 15,706
Health and Human Services, Department of	Direct		5 R01 HL114403-03 5 R01 HL124232-04	93.839	Blood Diseases and Resources Research	343,983	13,700
Health and Human Services, Department of	Direct		5 R01 HL128046-03	93.839	Blood Diseases and Resources Research	350,964	42,802
Health and Human Services, Department of	Direct		5 R01 HL132392-03	93.839	Blood Diseases and Resources Research	668,676	12,401
Health and Human Services, Department of	Direct		5 R35 HL135793-02	93.839	Blood Diseases and Resources Research	551,556	-
Health and Human Services, Department of	Direct		5 U01 HL117658-05	93.839	Blood Diseases and Resources Research	1,632,129	907,526
Health and Human Services, Department of	Direct		5 UG1HL069330-18	93.839	Blood Diseases and Resources Research	147,310	-
Health and Human Services, Department of	Direct		T32 HL007622	93.839	Blood Diseases and Resources Research	65,323	-
Health and Human Services, Department of	Pass-Through	Massachusetts General Hospital	230952	93.839	Blood Diseases and Resources Research	6,920	=
Health and Human Services, Department of	Pass-Through	Oklahoma Medical Research Foundation (OMRF)	0280-04/Umich_JM	93.839	Blood Diseases and Resources Research	198,446	-
Health and Human Services, Department of	Pass-Through	University of Georgia	RR645-478/S001636	93.839	Blood Diseases and Resources Research	17,827	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	564154/10042446/14843/01	93.839	Blood Diseases and Resources Research	99,175	-
						\$ 6,411,441	\$ 995,422
			4 774 8 777 4 8 8 8 8 8 8	22.040	Translation and Implementation Science Research for Heart,		•
Health and Human Services, Department of	Direct		1 K12 HL138039-01	93.840	Lung, Blood Diseases, and Sleep Disorders	\$ 65,601	\$ -
Health and Human Services, Department of	Direct		1 F31 AR073677-01A1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	\$ 8,804	\$ -
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 K01 AR073340-01 1 K01AR072129-01	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	15,680 66,711	-
Health and Human Services, Department of	Direct		1 R01AR0/2129-01 1 R01 AR0704700-1A1	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research	86,755	-
Health and Human Services, Department of	Direct		1 R01 AR0704700-1A1 1 R01 AR071384-01A1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	315,387	-
Health and Human Services, Department of	Direct		1 R03 AR072107-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	77,316	_
Health and Human Services, Department of	Direct		1 R21 AR065010-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	5,039	_
Health and Human Services, Department of	Direct		1 R21 AR066213-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	65,330	_
Health and Human Services, Department of	Direct		1 R21 AR072284-01A1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	2,202	_
Health and Human Services, Department of	Direct		1 R21 AR072314-01A1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	13,599	-
Health and Human Services, Department of	Direct		1 R21 AR072511-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	130,357	-
Health and Human Services, Department of	Direct		1 R21 AR072931-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	64	-
Health and Human Services, Department of	Direct		1 R34 AR068027-01A1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	251,695	-
Health and Human Services, Department of	Direct		1 R61 AR073014-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	279,078	=
Health and Human Services, Department of	Direct		1 R61 AR073523-01	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	22,797	-
Health and Human Services, Department of	Direct		2 R01 AR060350-06A1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	778,374	368,115
Health and Human Services, Department of	Direct		4 K24 AR063120-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	55,767	28,908
Health and Human Services, Department of	Direct		4 R01 AR047328-10	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	39,577	-
Health and Human Services, Department of	Direct		4 R01 AR060837-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	167,932	-
Health and Human Services, Department of	Direct		4 R01 AR062030-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	198,713	3,485
Health and Human Services, Department of	Direct		4 R01 AR062066-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	359,821	-
Health and Human Services, Department of	Direct		4 R01 AR062522-05S1	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	149,403	100 101
Health and Human Services, Department of	Direct Direct		4 R01 AR063611-05 4 R01 AR063649-04	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	570,865	109,181
Health and Human Services, Department of Health and Human Services, Department of	Direct		4 R01 AR065183-04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(13,307) 174,226	-
Health and Human Services, Department of	Direct		5 F31 AR065931-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(5,573)	-
Health and Human Services, Department of	Direct		5 F32 AR066499-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	979	_
Health and Human Services, Department of	Direct		5 F32 AR000499-02 5 F32 AR067086-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(2,485)	- -
Health and Human Services, Department of	Direct		5 F32 AR068902-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	976	-
Health and Human Services, Department of	Direct		5 K01 AR064275-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	144,147	-
Health and Human Services, Department of	Direct		5 K01 AR064765-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(243)	-
Health and Human Services, Department of	Direct		5 K01 AR064765-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	82,842	-
Health and Human Services, Department of	Direct		5 K08 AR063668-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	103,813	-
Health and Human Services, Department of	Direct		5 K08 AR066569-04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	179,614	-
Health and Human Services, Department of	Direct		5 K24 AR053120-09	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	200,433	-
Health and Human Services, Department of	Direct		5 K99 AR 070903-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	100,525	-
Health and Human Services, Department of	Direct		5 P30 AR069620-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	860,879	-
Health and Human Services, Department of	Direct		5 P50 AR070600-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	916,622	-
Health and Human Services, Department of	Direct		5 R0 1AR044232-23	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	472,713	-
Health and Human Services, Department of	Direct		5 R01 AR042742-21	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	714,696	-
Health and Human Services, Department of	Direct		5 R01 AR052010-09	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	3,740	-
Health and Human Services, Department of	Direct		5 R01 AR054821-08	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	308,156	-
Health and Human Services, Department of	Direct		5 R01 AR059085-07	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	450,884	-
Health and Human Services, Department of	Direct Direct		5 R01 AR060350-05 5 R01 AR060892-04	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	1,727 74,581	74,581
Health and Human Services, Department of	Direct Direct		5 R01 AR060892-04 5 R01 AR061402-05	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	-	/4,381
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AR061402-05 5 R01 AR061402-07	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	(33) 307,375	-
	Direct		5 R01 AR061402-07 5 R01 AR062066-04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(55,789)	25,733
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AR062000-04 5 R01 AR062636-05	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	353,743	25,/33
Health and Human Services, Department of	Direct		5 R01 AR062036-05 5 R01 AR063056-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	132,320	-
Health and Human Services, Department of	Direct		5 R01 AR065403-05	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	365,318	-
Health and Human Services, Department of	Direct		5 R01 AR065409-05	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research	312,346	-
				93.846	Arthritis, Musculoskeletal and Skin Diseases Research		-
Health and Human Services, Department of	Direct		5 R01 AR065424-05	91 X4h	Arthritis, Musculoskelelai and Skin Liteagee Recearch	531,116	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 AR066028-04	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	223,122	-
Health and Human Services, Department of	Direct		5 R01 AR066049-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	106,623	77,901
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AR067744-04 5 R01 AR068428-03	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	342,673 355,060	-
Health and Human Services, Department of	Direct		5 R01 AR066426-03 5 R01 AR069071-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	347,703	172,596
Health and Human Services, Department of	Direct		5 R01 AR069303-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	316,074	172,370
Health and Human Services, Department of	Direct		5 R01 AR070148-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	257,752	27,134
Health and Human Services, Department of	Direct		5 R01 AR071379-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	359,212	· -
Health and Human Services, Department of	Direct		5 R03 AR066337-03	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	10,289	-
Health and Human Services, Department of	Direct		5 R21 AR067330-02	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	118,159	-
Health and Human Services, Department of	Direct		7 R01 AR042047-22	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	297,404	-
Health and Human Services, Department of	Direct		T32 AR007080	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	137,747	-
Health and Human Services, Department of	Direct Pass-Through	Brigham and Women's Hospital	T32 AR007197 114522	93.846 93.846	Arthritis, Musculoskeletal and Skin Diseases Research Arthritis, Musculoskeletal and Skin Diseases Research	206,068 53,125	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	117592	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	3,713	-
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation (CCF)	985-SUB	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	27,612	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1016 - Core B	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	4,125	-
Health and Human Services, Department of	Pass-Through	IF, LLC	Agreement	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	22,955	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60049341 UMich	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	41,795	-
Health and Human Services, Department of	Pass-Through	State University of New York	68055	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	92,926	-
Health and Human Services, Department of	Pass-Through	The Feinstein Institute for Medical Research	500678UMICH	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	(2,530)	-
Health and Human Services, Department of	Pass-Through	Thomas Jefferson University	080-23000-R92203	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	35,064	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	570153	93.846	Arthritis, Musculoskeletal and Skin Diseases Research	510	- 007.624
H M - 1H - 0 ' - B 2	D'		1 DB2 DW000120 01	00.045		14,098,308	
Health and Human Services, Department of	Direct		1 DP3 DK098129-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research		\$ 8,738.00
Health and Human Services, Department of	Direct		1 F30 DK117615-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	9,098	-
Health and Human Services, Department of	Direct		1 F31 DK116555- 01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	32,696	-
Health and Human Services, Department of	Direct Direct		1 F31 DK117610-01 1 F32 DK112642-01A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	7,794 45,487	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		1 K01 DK111794-01A1	93.847 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	10,580	-
Health and Human Services, Department of	Direct		1 K01 DK111/94-01A1 1 K01 DK114376-01A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	32,982	-
Health and Human Services, Department of	Direct		1 K01 DK114370-01A1 1 K01 DK114390-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	30,136	_
Health and Human Services, Department of	Direct		1 R01 DK097362-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(2,612)	<u>-</u>
Health and Human Services, Department of	Direct		1 R01 DK108901-01A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	196,383	_
Health and Human Services, Department of	Direct		1 R01 DK112800-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	401,523	_
Health and Human Services, Department of	Direct		1 R01 DK115474-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	149,309	_
Health and Human Services, Department of	Direct		1 R01 DK115646-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	143,580	_
Health and Human Services, Department of	Direct		1 R01 DK115844-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	64,817	<u>-</u>
Health and Human Services, Department of	Direct		1 R01 DK116548-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	420,895	_
Health and Human Services, Department of	Direct		1 R01 DK117565-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	5,546	-
Health and Human Services, Department of	Direct		1 R01DK114220-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	235,605	-
Health and Human Services, Department of	Direct		1 R13 DK111272-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(450)	-
Health and Human Services, Department of	Direct		1 R21DK109447-01A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	115,167	-
Health and Human Services, Department of	Direct		1 R56 DK116617-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	176,720	-
Health and Human Services, Department of	Direct		1 UG3 DK114907-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	362,743	137,199
Health and Human Services, Department of	Direct		2 P30 DK020572-41	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	768,699	-
Health and Human Services, Department of	Direct		2 P30 DK034933-31A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	702,203	-
Health and Human Services, Department of	Direct		2 R01 DK043140-21A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	351,849	-
Health and Human Services, Department of	Direct		2 R01 DK061379-15	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	42,530	-
Health and Human Services, Department of	Direct		2 R01 DK071771-10A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	97,804	-
Health and Human Services, Department of	Direct		2 R25 DK088752-06	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	102,207	-
Health and Human Services, Department of	Direct		3 U01 DK062456-16S1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	4,305,282	3,234,680
Health and Human Services, Department of	Direct		3 U01 DK062498-12S3	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	18,348	18,348
Health and Human Services, Department of	Direct		3 U01 DK106893-03S1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	415,713	-
Health and Human Services, Department of	Direct		4 R01 DK053904-17	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	161,903	-
Health and Human Services, Department of	Direct		4 R01 DK062027-13	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(68,394)	-
Health and Human Services, Department of	Direct		4 R01 DK095137-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(57,858)	-
Health and Human Services, Department of	Direct		4 R01 DK096972-04 4 R37 DK045729-23	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	144,768	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 F30 DK 105749-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	41,218	-
• •	Direct Direct		5 F30 DK 103749-03 5 F31 DK103524-03	93.847 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	25,405	-
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 F31 DK103324-03 5 F31 DK111194-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(758) 42,904	_
Health and Human Services, Department of	Direct		5 F31 DK112625-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	16,355	_
Health and Human Services, Department of	Direct		5 F31 DK112023-02 5 F31 DK113653-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	46,612	-
Health and Human Services, Department of	Direct		5 F32 DK105676-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	11,622	- -
Health and Human Services, Department of	Direct		5 F32 DK108493-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	25,249	_
Health and Human Services, Department of	Direct		5 F32 DK108531-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	27,343	_
Health and Human Services, Department of	Direct		5 F32 DK106551-02 5 F32 DK112627-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	47,620	- -
Health and Human Services, Department of	Direct		5 K01 DK106296-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	138,393	_
Health and Human Services, Department of	Direct		5 K01 DK106322-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	178,333	_
Health and Human Services, Department of	Direct		5 K01 DK100322-03 5 K01 DK107456-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	160,951	_
Health and Human Services, Department of	Direct		5 K01 DK11710-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	56,755	_
Health and Human Services, Department of	Direct		5 K01DK113115-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	120,624	-
Treatur and Truman Services. Denarment of				75.517	, 6 -, J Distance Entrantarian resourch	120,021	
Health and Human Services, Department of	Direct		5 K08 DK088946-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(10,142)	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct	g	5 K08 DK101755-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	152,714	
Health and Human Services, Department of	Direct		5 K08 DK102357-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	140,463	-
Health and Human Services, Department of	Direct		5 K08 DK102526-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	151,534	-
Health and Human Services, Department of	Direct		5 K08 DK109116-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	203,940	-
Health and Human Services, Department of	Direct		5 K12 DK111011-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	216,814	-
Health and Human Services, Department of	Direct		5 K23 DK097183-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	186,714	-
Health and Human Services, Department of	Direct		5 K23 DK101687-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	168,998	-
Health and Human Services, Department of	Direct		5 K99 DK105205-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	10,252	-
Health and Human Services, Department of	Direct		5 K99 DK10664-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	88,158	-
Health and Human Services, Department of	Direct		5 K99 DK110537- 02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	99,137	-
Health and Human Services, Department of	Direct		5 P01 DK062041-15	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,468,414	-
Health and Human Services, Department of	Direct		5 P30 DK020572-40	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	932,720	70,909
Health and Human Services, Department of	Direct		5 P30 DK034933-30	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(11,893)	- -
Health and Human Services, Department of	Direct		5 P30 DK089503-08	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,038,397	-
Health and Human Services, Department of	Direct		5 P30 DK092926-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	616,268	143,818
Health and Human Services, Department of	Direct		5 R00 DK091405-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(319)	· -
Health and Human Services, Department of	Direct		5 R00 DK097141-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,401	-
Health and Human Services, Department of	Direct		5 R00 DK099240-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	175,033	_
Health and Human Services, Department of	Direct		5 R01 DK040344-30	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	464,600	_
Health and Human Services, Department of	Direct		5 R01 DK04203-28	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	371,633	_
Health and Human Services, Department of	Direct		5 R01 DK045776-27	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	392,909	_
Health and Human Services, Department of	Direct		5 R01 DK046073-21	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	12,002	_
Health and Human Services, Department of	Direct		5 R01 DK046409-25	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	607,061	_
Health and Human Services, Department of	Direct		5 R01 DK046960-26	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	454,061	- -
Health and Human Services, Department of	Direct		5 R01 DK047918-25	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	134,593	_
Health and Human Services, Department of	Direct		5 R01 DK048280-25	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	570,423	_
Health and Human Services, Department of	Direct		5 R01 DK052951-18	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(21,821)	_
Health and Human Services, Department of	Direct		5 R01 DK054222-18	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	516,755	_
Health and Human Services, Department of	Direct		5 R01 DK054740-18	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	361,286	_
Health and Human Services, Department of	Direct		5 R01 DK054740-18 5 R01 DK055679-19	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	253,843	_
Health and Human Services, Department of	Direct		5 R01 DK053079-19 5 R01 DK058913-12	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(850)	-
Health and Human Services, Department of	Direct		5 R01 DK058913-12 5 R01 DK058913-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	200,760	-
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Health and Human Services, Department of	Direct		5 R01 DK059888-18	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	695,231	-
Health and Human Services, Department of	Direct		5 R01 DK061707-15	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	174,080	-
Health and Human Services, Department of	Direct		5 R01 DK062027-12	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(551)	-
Health and Human Services, Department of	Direct		5 R01 DK062876-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	390,162	-
Health and Human Services, Department of	Direct		5 R01 DK066604-12	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	459,891	-
Health and Human Services, Department of	Direct		5 R01 DK067287-11	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(6,388)	-
Health and Human Services, Department of	Direct		5 R01 DK068400-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	457,473	88,576
Health and Human Services, Department of	Direct		5 R01 DK069950-11	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(11)	-
Health and Human Services, Department of	Direct		5 R01 DK069950-13	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	265,309	20,399
Health and Human Services, Department of	Direct		5 R01 DK070869-10	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	162,574	148
Health and Human Services, Department of	Direct		5 R01 DK072564-23	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	469,195	-
Health and Human Services, Department of	Direct		5 R01 DK073722-12	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	329,388	-
Health and Human Services, Department of	Direct		5 R01 DK077966-08	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	462,886	5,557
Health and Human Services, Department of	Direct		5 R01 DK078056-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	210,208	-
Health and Human Services, Department of	Direct		5 R01 DK079392-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	415,310	-
Health and Human Services, Department of	Direct		5 R01 DK083491-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	240,257	-
Health and Human Services, Department of	Direct		5 R01 DK088856- 05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(255)	-
Health and Human Services, Department of	Direct		5 R01 DK089763-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	466,808	113,198
Health and Human Services, Department of	Direct		5 R01 DK089933-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	395,441	-
Health and Human Services, Department of	Direct		5 R01 DK090165-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(7,596)	-
Health and Human Services, Department of	Direct		5 R01 DK090262-08	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	375,938	-
Health and Human Services, Department of	Direct		5 R01 DK091191-13	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	329,789	-
Health and Human Services, Department of	Direct		5 R01 DK091267-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	2,548	-
Health and Human Services, Department of	Direct		5 R01 DK091267-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	406,110	-
Health and Human Services, Department of	Direct		5 R01 DK091591-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	519,049	-
Health and Human Services, Department of	Direct		5 R01 DK093513-06	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	344,323	52,299
Health and Human Services, Department of	Direct		5 R01 DK094014-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	399	-
Health and Human Services, Department of	Direct		5 R01 DK094777-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	723,018	=
Health and Human Services, Department of	Direct		5 R01 DK095201-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	392,541	_
Health and Human Services, Department of	Direct		5 R01 DK095210-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	256,708	183,922
Health and Human Services, Department of	Direct		5 R01 DK095782-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	284,485	
Health and Human Services, Department of	Direct		5 R01 DK097027-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	343,412	_
Health and Human Services, Department of	Direct		5 R01 DK097374-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(391)	_
Health and Human Services, Department of	Direct		5 R01 DK097374-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(4,160)	_
Health and Human Services, Department of	Direct		5 R01 DK097449-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	203,776	-
Health and Human Services, Department of	Direct		5 R01 DK09/449-03 5 R01 DK098032-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	146,553	134,724
Health and Human Services, Department of	Direct		5 R01 DK098032-04 5 R01 DK098205-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research		134,/24
			5 R01 DK098205-05 5 R01 DK098205-05		Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	(92) 56.017	-
Health and Human Services, Department of	Direct			93.847	•	56,917	-
Health and Human Services, Department of	Direct		5 R01 DK098853-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	117,868	-
Health and Human Services, Department of	Direct		5 R01 DK099034-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	293,201	-
Health and Human Services, Department of	Direct		5 R01 DK099593-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	352,192	-
Health and Human Services, Department of	Direct		5 R01 DK100449-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	291,531	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 DK100722-08	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	329,600	-
Health and Human Services, Department of	Direct		5 R01 DK101423-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	622,614	157,966
Health and Human Services, Department of	Direct		5 R01 DK101473-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	255,757	171,566
Health and Human Services, Department of	Direct		5 R01 DK102456-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	345,036	-
Health and Human Services, Department of	Direct		5 R01 DK102532-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	377,876	103,970
Health and Human Services, Department of	Direct		5 R01 DK102643-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	249,527	-
Health and Human Services, Department of	Direct		5 R01 DK102663-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	391,479	-
Health and Human Services, Department of	Direct		5 R01 DK102850-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	395,785	-
Health and Human Services, Department of	Direct		5 R01 DK103877-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	180,570	-
Health and Human Services, Department of	Direct		5 R01 DK104733-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	743,485	-
Health and Human Services, Department of	Direct		5 R01 DK104999-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	510,320	-
Health and Human Services, Department of	Direct		5 R01 DK105393-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	349,441	_
Health and Human Services, Department of	Direct		5 R01 DK106188- 03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	535,075	-
Health and Human Services, Department of	Direct		5 R01 DK106304-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(36)	-
Health and Human Services, Department of	Direct		5 R01 DK106618-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	700,750	-
Health and Human Services, Department of	Direct		5 R01 DK106621-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	786,087	145,853
Health and Human Services, Department of	Direct		5 R01 DK107282-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	274,355	<u>-</u>
Health and Human Services, Department of	Direct		5 R01 DK107535-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	342,184	_
Health and Human Services, Department of	Direct		5 R01 DK107583-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	393,268	_
Health and Human Services, Department of	Direct		5 R01 DK107652-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	406,946	_
Health and Human Services, Department of	Direct		5 R01 DK107730-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	454,489	_
Health and Human Services, Department of	Direct		5 R01 DK107904-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	646,092	164,401
Health and Human Services, Department of	Direct		5 R01 DK107956-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	489,762	-
Health and Human Services, Department of	Direct		5 R01 DK107750-03 5 R01 DK108805-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	374,169	11,364
Health and Human Services, Department of	Direct		5 R01 DK108921-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	472,029	-
Health and Human Services, Department of	Direct		5 R01 DK100921 02 5 R01 DK109032-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	462,561	129,646
Health and Human Services, Department of	Direct		5 R01 DK109052-03 5 R01 DK109995-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	439,773	127,040
Health and Human Services, Department of	Direct		5 R01 DK109793-03 5 R01 DK110273-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	355,624	_
Health and Human Services, Department of	Direct		5 R01 DK110275-02 5 R01 DK110436-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	575,538	_
Health and Human Services, Department of	Direct		5 R01 DK110450-02 5 R01 DK111174-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	593,115	-
Health and Human Services, Department of	Direct		5 R01 DK111174-03 5 R01 DK111465-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	535,503	39,715
Health and Human Services, Department of	Direct		5 R01 DK111405-02 5 R01 DK115190-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	436,064	39,713
			5 R03 DK102480-02		•	*	9 679
Health and Human Services, Department of	Direct		5 R18 DK088294-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	54,701	8,678
Health and Human Services, Department of	Direct			93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	14,203	-
Health and Human Services, Department of	Direct		5 R21 DK100710-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(25,757)	-
Health and Human Services, Department of	Direct		5 R21 DK101654-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	102,343	-
Health and Human Services, Department of	Direct		5 R21 DK103183-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	26,193	10.021
Health and Human Services, Department of	Direct		5 R21 DK106647-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	263,018	18,031
Health and Human Services, Department of	Direct		5 R21 DK110146-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	133,989	-
Health and Human Services, Department of	Direct		5 R24 DK082841-08	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,442,594	265,439
Health and Human Services, Department of	Direct		5 R37 DK056731-19	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	264,220	-
Health and Human Services, Department of	Direct		5 U01 DK061028-17	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	775,286	98,059
Health and Human Services, Department of	Direct		5 U01 DK062370-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	830,598	85,382
Health and Human Services, Department of	Direct		5 U01 DK062498-12S2	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	2,588	2,589
Health and Human Services, Department of	Direct		5 U01 DK065184-12	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(310)	-
Health and Human Services, Department of	Direct		5 U01 DK065184-15	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	307,655	3,487
Health and Human Services, Department of	Direct		5 U01 DK073985-10	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	226	-
Health and Human Services, Department of	Direct		5 U01 DK082345-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	819,804	-
Health and Human Services, Department of	Direct		5 U01 DK082863-07	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(175)	-
Health and Human Services, Department of	Direct		5 U01 DK082863-10	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	276,324	26,038
Health and Human Services, Department of	Direct		5 U01 DK085584 05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(10,106)	(10,744)
Health and Human Services, Department of	Direct		5 U01 DK099932-05	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	361,136	-
Health and Human Services, Department of	Direct		5 U01 DK103141-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	489,598	107,211
Health and Human Services, Department of	Direct		5 U2C DK110768-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,127,105	-
Health and Human Services, Department of	Direct		5 U54 DK083912-09	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,230,218	336,687
Health and Human Services, Department of	Direct		5 UM1 DK100845-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,181,914	684,023
Health and Human Services, Department of	Direct		5K08 DK106523-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	157,253	6,627
Health and Human Services, Department of	Direct		5P30DK081943-10	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	1,207,561	266,462
Health and Human Services, Department of	Direct		7 R01 DK061379-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	99,548	_
Health and Human Services, Department of	Direct		7 R01 DK070332-14	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	388,260	_
Health and Human Services, Department of	Direct		7 R01 DK072564-21	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,668	_
Health and Human Services, Department of	Direct		7 R01 DK101591-04	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	131,987	_
Health and Human Services, Department of	Direct		7 R21 DK110688-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	168,171	48,700
Health and Human Services, Department of	Direct		T32 DK007245	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	395,933	-
Health and Human Services, Department of	Direct		T32 DK007378	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	535,321	-
Health and Human Services, Department of	Direct		T32 DK007782	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	81,927	_
Health and Human Services, Department of	Direct		T32 DK062708	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	173,244	_
Health and Human Services, Department of	Direct		T32 DK002708	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	359,961	_
Health and Human Services, Department of	Direct		T32 DK071212	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(13,143)	- -
Health and Human Services, Department of	Direct		T32 DK094775	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	18,663	<u>-</u>
Health and Human Services, Department of	Direct		T32 DK094775	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	233,646	-
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. 1	Direct		T22 DK 101257	02 847	Dighetes Digestive and Kidney Digeoges Extremumal Descend	255 020	
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		T32 DK101357 T32 DK108740	93.847 93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research Diabetes, Digestive, and Kidney Diseases Extramural Research	255,839 178,300	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	American Gastroenterological Association	002	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,432	-
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	Apendix J	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	22,984	-
Health and Human Services, Department of	Pass-Through	Augusta University	30835-12	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	16,103	-
Health and Human Services, Department of	Pass-Through	Augusta University	30835-27	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	11,530	-
Health and Human Services, Department of	Pass-Through	Augusta University	30835-35	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	19,108	-
Health and Human Services, Department of	Pass-Through	Augusta University	30835-44	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	83,500	-
Health and Human Services, Department of	Pass-Through	Augusta University	30835-5	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	33,039	10,000
Health and Human Services, Department of	Pass-Through	Augusta University	32307-20	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	5,633	-
Health and Human Services, Department of	Pass-Through	Baylor College of Medicine	102226345	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,861	-
Health and Human Services, Department of	Pass-Through	Baylor College of Medicine	Research Subaward Agreement	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	43,922	-
Health and Human Services, Department of	Pass-Through	Boston Medical Center	0334601	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,665	-
Health and Human Services, Department of	Pass-Through	Boston Medical Center	0472601	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	58,204	-
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	114935	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	4,125	-
Health and Human Services, Department of	Pass-Through	Broad Institute	5000100-5500000844	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	91,349	-
Health and Human Services, Department of	Pass-Through	Broad Institute	5216273-5500000917	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	128,428	-
Health and Human Services, Department of	Pass-Through	Broad Institute	5216282-5500001001	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	15,500	-
Health and Human Services, Department of	Pass-Through	Broad Institute	GENFD0001324559	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	34,621	_
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES508628	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	5,478	_
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES509482	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	2,310	_
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES510378/ZDT1600153	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	571	_
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES511137	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	139	_
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES511137 RES512236	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	171,953	- -
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512237	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,505	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512566	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	40,430	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512851	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	194	- -
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512883	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	17,943	_
Health and Human Services, Department of	Pass-Through	Central Michigan University	F62720	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,683	_
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Foundation (CCF)	971-SUB	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	2,954	_
Health and Human Services, Department of	Pass-Through	Duke University	2033652	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	70,194	_
Health and Human Services, Department of	Pass-Through	Duke University	Duke Univ U01 DK065176	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	29,561	_
Health and Human Services, Department of	Pass-Through	George Washington University	S-GRD1617-LL27	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	45,224	-
Health and Human Services, Department of	Pass-Through	George Washington University	S-GRD1617-LL27 S-GRD1617-LL39	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	14,893	-
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Health and Human Services, Department of	Pass-Through	George Washington University		93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	350,299	-
Health and Human Services, Department of	Pass-Through	George Washington University	S-GRD1718-MD39	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	212,273	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000916784	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	3,093	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN-4687635-MICH	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	44,959	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4689775UM	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	310,606	-
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	100061	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	372,791	- 0.20
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	1987203-1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	73,782	9,28
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	1987203-3	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	122,983	-
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Northern California	RNG209397-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	196,484	-
Health and Human Services, Department of	Pass-Through	Kaiser Permanente Research Foundation Institute	115-9249-021-484	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	34,587	-
Health and Human Services, Department of	Pass-Through	Maine Medical Center	ROSEN R24-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	253,817	-
Health and Human Services, Department of	Pass-Through	Medical University of South Carolina	MUSC15-034	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	103,584	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC104839UM	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	48,491	-
Health and Human Services, Department of	Pass-Through	Mount Sinai Hospital	Subaward Agreement	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	22,421	-
Health and Human Services, Department of	Pass-Through	Nemours Foundation, The	3002707020	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	16,796	-
Health and Human Services, Department of	Pass-Through	North Shore University Hospital	EH13-094-S1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	14,079	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60042628 UM	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	20,559	-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	60062217	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	12,032	-
Health and Human Services, Department of	Pass-Through	Sanford Burnham Prebys Medical Research Institute	59630-12824-UM	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	313,580	-
Health and Human Services, Department of	Pass-Through	State University of New York	1098984-76334	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	42,956	-
Health and Human Services, Department of	Pass-Through	The Children's Hospital Corporation	0000654093	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	2,447	-
Health and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0255-1942-4609	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	64,420	-
Health and Human Services, Department of	Pass-Through	University of Arizona	1U01DK107131-01	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	134,115	-
Health and Human Services, Department of	Pass-Through	University of California - Los Angeles	1555 G SA861	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	29,600	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	9082sc	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	20,672	-
Health and Human Services, Department of	Pass-Through	University of California-San Diego	71080934	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	115,791	-
Health and Human Services, Department of	Pass-Through	University of California-Santa Cruz	A17-0039-S002-P0630740	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	64,458	-
Health and Human Services, Department of	Pass-Through	University of Chicago	FP053842-02	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	23,932	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5101189	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,349	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5101564	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	46,311	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5107938	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	36,425	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	565718	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	101,855	-
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	568355	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	104,660	79,63
Health and Human Services, Department of	Pass-Through	University of Pennsylvania	572695	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	22,161	-
Health and Human Services, Department of	Pass-Through	University of Southern California	73735617 / 80965568	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	74,136	-
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	160234-Registry	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	87,830	_
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO111129	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	(93)	_
Health and Human Services, Department of	Pass-Through	University of Utah	10045205-03	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	6,282	
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC10198	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	300,435	-
Health and Human Services, Department of	Pass-Through	Virginia Commonwealth University	FP00005212 SA002	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	49,875	-
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Health and Human Services, Department of	Pass-Through	Wake Forest University	WFUHS 114580	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	10,393	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	8	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through Wayne State University		WSU14093	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	19,715	-
Health and Human Services, Department of	Pass-Through Wayne State University		WSU16006	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	68,885	-
Health and Human Services, Department of	Pass-Through Wayne State University		WSU16145-A1	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	78,441	-
Health and Human Services, Department of	Pass-Through Wayne State University		WSU16146, 301197	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	10,614	_
Health and Human Services, Department of	Pass-Through Yale University		GR102060 (CON-80001142)	93.847	Diabetes, Digestive, and Kidney Diseases Extramural Research	24,628	-
, 1	,		, , , , , , , , , , , , , , , , , , , ,			\$ 64,922,717	\$ 7,182,580
Health and Human Services, Department of	Direct		1 F31 NS103377-01	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	\$ 40,521	\$ -
Treatar and Transan Services, Department of	Birect		11311\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	73.033	Extramural Research Programs in the Neurosciences and	40,321	Ψ
Health and Human Services, Department of	Direct		1 F31 NS103500-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	35,155	-
Health and Human Services, Department of	Direct		1 R01 NS101597-01A1	93.853	Neurological Disorders	161,473	-
	D'		1 DOL MOLOGO (01	02.052	Extramural Research Programs in the Neurosciences and	105.015	
Health and Human Services, Department of	Direct		1 R01 NS104776-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	105,815	-
Health and Human Services, Department of	Direct		1 R01 NS105385-01	93.853	Neurological Disorders	222,522	-
Health and Human Services, Department of	Direct		1 R01 NS105556-01	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	76,048	_
Treatal and Transan Services, Department of					Extramural Research Programs in the Neurosciences and	•	
Health and Human Services, Department of	Direct		1 R01 NS10674-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	99,641	-
Health and Human Services, Department of	Direct		1 R01-NS100687-01A1	93.853	Neurological Disorders	716,893	-
Health and Hyman Carriage Department of	Direct		1 D12 NS006024 01	93.853	Extramural Research Programs in the Neurosciences and	(70)	
Health and Human Services, Department of	Direct		1 R13 NS096934-01	93.833	Neurological Disorders Extramural Research Programs in the Neurosciences and	(78)	-
Health and Human Services, Department of	Direct		1 R21 NS101030-01A1	93.853	Neurological Disorders	332,372	-
Health and Human Services, Department of	Direct		1 R21 NS102960-01A1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	20,889	_
-					Extramural Research Programs in the Neurosciences and		
Health and Human Services, Department of	Direct		1 R21 NS103754-01	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	79,815	-
Health and Human Services, Department of	Direct		1 R21 NS104584-01	93.853	Neurological Disorders	113,645	-
Health and Human Services, Department of	Direct		1 R21 NS107879-01	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	21,607	-
					Extramural Research Programs in the Neurosciences and		
Health and Human Services, Department of	Direct		1 R56 NS082941-01A1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	44,674	-
Health and Human Services, Department of	Direct		1 U01 NS090526-03	93.853	Neurological Disorders	213,725	1,410
Health and Human Services, Department of	Direct		1 U01 NS106670-01	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	24,067	-
•					Extramural Research Programs in the Neurosciences and		
Health and Human Services, Department of	Direct		1R21NS088062-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	23,520	-
Health and Human Services, Department of	Direct		1R21NS104774 01A1	93.853	Neurological Disorders	2,829	-
Health and Human Services, Department of	Direct		2 R01 NS034509-21A1	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	156,238	-
-					Extramural Research Programs in the Neurosciences and		
Health and Human Services, Department of	Direct		2 R01 NS077933-06	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	281,367	-
Health and Human Services, Department of	Direct		2 R37 NS076752-06	93.853	Neurological Disorders	774,946	-
Health and Human Services, Department of	Direct		2 R56 NS076752-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	(56,766)	_
readin and remain services, Department of	Birect				Extramural Research Programs in the Neurosciences and		
Health and Human Services, Department of	Direct		3 R01 GM081772-11S1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	442,501	25,200
Health and Human Services, Department of	Direct		3 R15 NS081691-01S2	93.853	Neurological Disorders	(2,678)	-
Health and Human Services, Department of	Direct		4 K08 NS072183-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	163,081	_
Treatur and Truman Services, Department of	Direct		4 K00 NS0/2103-03	73.833	Extramural Research Programs in the Neurosciences and	103,001	-
Health and Human Services, Department of	Direct		4 R01 NS034509-20S1	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	(74,833)	-
Health and Human Services, Department of	Direct		4 R01 NS055746-10	93.853	Neurological Disorders	(19,599)	-
Health and Human Services, Department of	Direct		4 R01 NS073595-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	104,630	
neatth and numan Services, Department of	Direct		4 KUI NSU/3393-U3	93.833	Extramural Research Programs in the Neurosciences and	104,030	-
Health and Human Services, Department of	Direct		4 R01 NS075066-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	94,334	-
Health and Human Services, Department of	Direct		4 R01 NS077914-05	93.853	Neurological Disorders	2,160	-
Harldton d Harran Cambras Danistan of	Dimed		4 DO1 NG077046 05	02.052	Extramural Research Programs in the Neurosciences and	249.004	(0.759
Health and Human Services, Department of	Direct		4 R01 NS077946-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	248,094	60,758
Health and Human Services, Department of	Direct		4 R01 NS079157-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	182,135	-
Health and Human Services, Department of	Direct		4 R01 NS079639-05	93.853	Neurological Disorders	(26,954)	-
-			4 DO1 NG001201 05	02 052	Extramural Research Programs in the Neurosciences and		25 572
Health and Human Services, Department of	Direct		4 R01 NS081281-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	51,326	35,572
Health and Human Services, Department of	Direct		4 R01 NS085798-04	93.853	Neurological Disorders	38,645	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 F30 NS090780-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	28,961	-
Health and Human Services, Department of	Direct		5 F30 NS098571-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	34,405	-
Health and Human Services, Department of	Direct		5 F31 NS087883-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	11,831	-
Health and Human Services, Department of	Direct		5 F31 NS090883-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	27,944	-
Health and Human Services, Department of	Direct		5 F31 NS096734-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	11,998	_
Health and Human Services, Department of	Direct		5 F31 NS100302-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	41,123	_
Health and Human Services, Department of	Direct		5 F31 NS100391-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	46,569	<u>-</u>
Health and Human Services, Department of	Direct		5 F31 NS103378-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	52,221	_
Health and Human Services, Department of	Direct		5 F32 NS098611-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	61,391	
					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 K08 NS082597-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	184,960	-
Health and Human Services, Department of	Direct		5 K08 NS099379-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	163,851	-
Health and Human Services, Department of	Direct		5 K08 NS099427-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	177,349	-
Health and Human Services, Department of	Direct		5 K08 NS101054-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	228,729	-
Health and Human Services, Department of	Direct		5 K23 NS073685-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	(79,335)	(75,000)
Health and Human Services, Department of	Direct		5 K23 NS079417-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	175,313	-
Health and Human Services, Department of	Direct		5 P50 NS091856-04	93.853	Neurological Disorders	1,943,688	-
Health and Human Services, Department of	Direct		5 R01 NS038712-20	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	515,886	93,577
Health and Human Services, Department of	Direct		5 R01 NS038916-20	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	790,139	-
Health and Human Services, Department of	Direct		5 R01 NS055746-12	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	644,459	56,385
Health and Human Services, Department of	Direct		5 R01 NS058585-09	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	282,717	_
Health and Human Services, Department of	Direct		5 R01 NS062792-10	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	534,026	_
Health and Human Services, Department of	Direct		5 R01 NS063967-09	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	417,179	
· · · · · · · · · · · · · · · · · · ·					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 R01 NS064015-10	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	363,711	-
Health and Human Services, Department of	Direct		5 R01 NS069844-07	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	397,890	-
Health and Human Services, Department of	Direct		5 R01 NS070856-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	8,722	-
Health and Human Services, Department of	Direct		5 R01 NS070941-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	(170)	-
Health and Human Services, Department of	Direct		5 R01 NS074387-06	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	26,974	-
Health and Human Services, Department of	Direct		5 R01 NS077730-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	250,324	-
Health and Human Services, Department of	Direct		5 R01 NS077933-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	87,034	-
Health and Human Services, Department of	Direct		5 R01 NS082304-04	93.853	Neurological Disorders	172,643	164,836
Health and Human Services, Department of	Direct		5 R01 NS082311-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	391,568	-
Health and Human Services, Department of	Direct		5 R01 NS085054-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	187,107	10,775
Health and Human Services, Department of	Direct		5 R01 NS086810-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	469,915	8,664
Health and Human Services, Department of	Direct		5 R01 NS087147-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	533,187	<u>-</u>
Health and Human Services, Department of	Direct		5 R01 NS088571-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	653,457	_
•					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 R01 NS089585-04	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	143,201	-
Health and Human Services, Department of	Direct		5 R01 NS089896-04	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	352,786	-
Health and Human Services, Department of	Direct		5 R01 NS090925-04	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	382,641	-
Health and Human Services, Department of	Direct		5 R01 NS091112-03	93.853	Neurological Disorders	450,493	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 NS092695-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	65,922	72,483
Health and Human Services, Department of	Direct		5 R01 NS092706-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	604,930	112,608
Health and Human Services, Department of	Direct		5 R01 NS094399-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	329,512	41,444
Health and Human Services, Department of	Direct		5 R01 NS094413-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	427,827	-
Health and Human Services, Department of	Direct		5 R01 NS094678-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	352,977	-
Health and Human Services, Department of	Direct		5 R01 NS096756-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	373,334	-
Health and Human Services, Department of	Direct		5 R01 NS096785-08	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	784,800	-
Health and Human Services, Department of	Direct		5 R01 NS096917-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	409,061	_
Health and Human Services, Department of	Direct		5 R01 NS097498-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	475,696	-
Health and Human Services, Department of	Direct		5 R01 NS097525-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	403,775	-
Health and Human Services, Department of	Direct		5 R01 NS097542-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	360,350	_
•	Direct		5 R01 NS099280-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	448,041	
Health and Human Services, Department of					Extramural Research Programs in the Neurosciences and	·	-
Health and Human Services, Department of	Direct		5 R01 NS099340-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	417,600	16,035
Health and Human Services, Department of	Direct		5 R01 NS099535-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	257,553	-
Health and Human Services, Department of	Direct		5 R01 NS100156-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	473,131	-
Health and Human Services, Department of	Direct		5 R01 NS102715-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	514,776	41,849
Health and Human Services, Department of	Direct		5 R01NS091242-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	118,378	-
Health and Human Services, Department of	Direct		5 R03 NS090142-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	(139)	-
Health and Human Services, Department of	Direct		5 R03 NS096484-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	33,581	-
Health and Human Services, Department of	Direct		5 R21 NS082615-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	82,942	-
Health and Human Services, Department of	Direct		5 R21 NS086758-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	52,072	-
Health and Human Services, Department of	Direct		5 R21 NS088302-02	93.853	Neurological Disorders	75,208	-
Health and Human Services, Department of	Direct		5 R21 NS091545-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	62,309	-
Health and Human Services, Department of	Direct		5 R21 NS091555-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	13,708	-
Health and Human Services, Department of	Direct		5 R21 NS093121-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	119,973	-
Health and Human Services, Department of	Direct		5 R21 NS093399-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	41,944	-
Health and Human Services, Department of	Direct		5 R21 NS093469-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	713	_
Health and Human Services, Department of	Direct		5 R21 NS094047-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	59,171	28,506
Health and Human Services, Department of	Direct		5 R21 NS094091-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	187,719	
Health and Human Services, Department of	Direct		5 R21 NS098003-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	122,449	
•					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Direct		5 R21 NS098066-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	149,051	-
Health and Human Services, Department of	Direct		5 R21 NS098200-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	221,143	-
Health and Human Services, Department of	Direct		5 R21 NS098211-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	159,991	-
Health and Human Services, Department of	Direct		5 R21 NS099684-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	134,329	-
Health and Human Services, Department of	Direct		5 R21 NS099783-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	121,555	-
Health and Human Services, Department of	Direct		5 R21 NS103215-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	205,449	-
Health and Human Services, Department of	Direct		5 R25 NS088248-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	441,528	98,672
Health and Human Services, Department of	Direct		5 R25 NS089450-05	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	86,082	-
Health and Human Services, Department of	Direct		5 R37 NS094804-03	93.853	Neurological Disorders	431,786	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 U01 NS056975-10	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	666,621	35,421
Health and Human Services, Department of	Direct		5 U01 NS090364-04	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	641,564	-
Health and Human Services, Department of	Direct		5 U01 NS094375-03	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	856,968	447,788
Health and Human Services, Department of	Direct		5 U01 NS100611-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	313,303	<u>.</u>
Health and Human Services, Department of	Direct		5 U10 NS086526-05	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	339,152	
•					Extramural Research Programs in the Neurosciences and		52.026
Health and Human Services, Department of	Direct		5 U24 NS100659-02	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	475,453	53,036
Health and Human Services, Department of	Direct		5 UH3 NS09298-103	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	515,700	103,222
Health and Human Services, Department of	Direct		T32 NS007222	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	14,899	-
Health and Human Services, Department of	Direct		T32 NS007222	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	355,853	-
Health and Human Services, Department of	Direct		T32 NS076401	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	171,093	-
Health and Human Services, Department of	Pass-Through	Case Western Reserve University	RES512072	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	203,478	-
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Lerner College of Medicine	841-SUB	93.853	Neurological Disorders	56,580	-
Health and Human Services, Department of	Pass-Through	Columbia University	2 (GG010337-01)	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	11,019	-
Health and Human Services, Department of	Pass-Through	Houston Methodist Research Institute	AGMT00000657	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	28,917	-
Health and Human Services, Department of	Pass-Through	Mayo Clinic	5P01NS044233-10	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	38,195	-
Health and Human Services, Department of	Pass-Through	Minneapolis Medical Research Foundation (MMRF)	15007-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	123,416	_
Health and Human Services, Department of	C	Temple University	360908-05430-02	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	104,831	
-					Extramural Research Programs in the Neurosciences and		-
Health and Human Services, Department of	Pass-Through	University of California - Los Angeles	1580 G UE874	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	72,666	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	10069	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	134,812	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	10180sc	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	1,335,272	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	7938sc	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	143,868	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	N003439222	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	126	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	N004631406	93.853	Neurological Disorders Extramural Research Programs in the Neurosciences and	5,773	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	P006124701	93.853	Neurological Disorders	14,509	-
Health and Human Services, Department of	Pass-Through	University of Virginia	GB10094-147355	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	1,844,302	-
Health and Human Services, Department of	Pass-Through	University of Virginia	GC12107-149698	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	1,659,809	-
Health and Human Services, Department of	Pass-Through	Vanderbilt University	UNIV59892	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	140,794	_
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU18027	93.853	Extramural Research Programs in the Neurosciences and Neurological Disorders	257,639	<u>-</u>
•	_	Wayne State Chivelony			•	\$ 36,007,486	\$ 1,433,241
Health and Human Services, Department of	Direct		1 F30 AI136315-01 1 F31 AI129697-01A1	93.855	Allerry and Infectious Diseases Research	\$ 7,948	\$ -
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 F31 AI129697-01A1 1 F31 AI131957-01A1	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	32,896 31,764	-
Health and Human Services, Department of	Direct		1 F32 AI134016-01A1	93.855	Allergy and Infectious Diseases Research	9,229	- -
Health and Human Services, Department of	Direct		1 K08AI130362-01A1	93.855	Allergy and Infectious Diseases Research	41,375	-
Health and Human Services, Department of	Direct		1 R01 AI132372-01	93.855	Allergy and Infectious Diseases Research	166,650	15,837
Health and Human Services, Department of	Direct		1 R01 AI138347-01	93.855	Allergy and Infectious Diseases Research	117,836	-
Health and Human Services, Department of	Direct		1 R03 AI137658 01	93.855	Allergy and Infectious Diseases Research	25,672	-
Health and Human Services, Department of	Direct		1 R21 AI114220-02	93.855	Allergy and Infectious Diseases Research	47,244	-
Health and Human Services, Department of	Direct		1 R21 AI130328 01A1	93.855	Allergy and Infectious Diseases Research	32,725	-
Health and Human Services, Department of	Direct		1 R21 AI132379 01A1	93.855	Allergy and Infectious Diseases Research	23,524	-
Health and Human Services, Department of	Direct		1 R21 AI136657-01A1	93.855	Allergy and Infectious Diseases Research	10,413	-
Health and Human Services, Department of	Direct		1 R21 AI137669-01	93.855	Allergy and Infectious Diseases Research	448	-
Health and Human Services, Department of	Direct		1 R56 AI120954-01	93.855	Allergy and Infectious Diseases Research	45,712 82,507	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		1 R56 AI123262-01 1 R56 AI127070-01	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	82,597 (3,259)	-
Health and Human Services, Department of	Direct		1 R56 AI12/0/0-01 1 R56 AI130004-01A1	93.855 93.855	Allergy and Infectious Diseases Research Allergy and Infectious Diseases Research	168,448	- -
Health and Human Services, Department of	Direct		1 R56 AI130130-01	93.855	Allergy and Infectious Diseases Research	358,745	114,184
-	Direct		1 R56AI129428-01	93.855	Allergy and Infectious Diseases Research	535,489	-
Health and Human Services, Department of	Direct						
Health and Human Services, Department of Health and Human Services, Department of	Direct		2 R01AI071727-11A1	93.855	Allergy and Infectious Diseases Research	509,808	37,208

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct	n - · · · · · · ·	2 R56 AI049294-12A1	93.855	Allergy and Infectious Diseases Research	(31,009)	
Health and Human Services, Department of	Direct		2 R56 AI097150-05	93.855	Allergy and Infectious Diseases Research	185,135	-
Health and Human Services, Department of	Direct		4 R01 AI064296-10	93.855	Allergy and Infectious Diseases Research	(15,101)	-
Health and Human Services, Department of	Direct		4 R01 AI071727-10	93.855	Allergy and Infectious Diseases Research	(32,068)	-
Health and Human Services, Department of	Direct		4 R01 AI094642-05	93.855	Allergy and Infectious Diseases Research	(6,568)	-
Health and Human Services, Department of	Direct		4 R01 AI096962-05	93.855	Allergy and Infectious Diseases Research	122,502	=
Health and Human Services, Department of	Direct		4 R01 AI101155-05	93.855	Allergy and Infectious Diseases Research	123,115	67,839
Health and Human Services, Department of	Direct		5 F31 AI118274-02	93.855	Allergy and Infectious Diseases Research	(7,987)	-
Health and Human Services, Department of	Direct		5 F31 AI126651-03	93.855	Allergy and Infectious Diseases Research	39,872	_
Health and Human Services, Department of	Direct		5 K01 AI099006-06	93.855	Allergy and Infectious Diseases Research	(1,219)	_
Health and Human Services, Department of	Direct		5 K08 AI119182-03	93.855	Allergy and Infectious Diseases Research	201,132	_
Health and Human Services, Department of	Direct		5 K08 AI128006-02	93.855	Allergy and Infectious Diseases Research	191,200	
Health and Human Services, Department of	Direct		5 K23 AI108951-04	93.855	Allergy and Infectious Diseases Research	115,380	_
_	Direct		5 K23 AI108951-04 5 K23 AI123595-02	93.855	Allergy and Infectious Diseases Research	167,378	-
Health and Human Services, Department of					••		-
Health and Human Services, Department of	Direct		5 R00 AI093884-03	93.855	Allergy and Infectious Diseases Research	(46,991)	-
Health and Human Services, Department of	Direct		5 R01 AI036302-20	93.855	Allergy and Infectious Diseases Research	688,674	-
Health and Human Services, Department of	Direct		5 R01 AI044115-18	93.855	Allergy and Infectious Diseases Research	444,570	-
Health and Human Services, Department of	Direct		5 R01 AI046675-16	93.855	Allergy and Infectious Diseases Research	(21,808)	=
Health and Human Services, Department of	Direct		5 R01 AI046675-18	93.855	Allergy and Infectious Diseases Research	307,801	-
Health and Human Services, Department of	Direct		5 R01 AI060584-12	93.855	Allergy and Infectious Diseases Research	388,725	-
Health and Human Services, Department of	Direct		5 R01 AI063331-13	93.855	Allergy and Infectious Diseases Research	234,005	-
Health and Human Services, Department of	Direct		5 R01 AI064296-12	93.855	Allergy and Infectious Diseases Research	428,504	-
Health and Human Services, Department of	Direct		5 R01 AI080870-09	93.855	Allergy and Infectious Diseases Research	138,314	_
Health and Human Services, Department of	Direct		5 R01 AI091627-07	93.855	Allergy and Infectious Diseases Research	322,511	65,423
Health and Human Services, Department of	Direct		5 R01 AI091721-05	93.855	Allergy and Infectious Diseases Research	(1,260)	03,72.
	Direct		5 R01 A1091721-03 5 R01 A1094563-05	93.855 93.855	•	(1,260) 86,848	-
Health and Human Services, Department of	Direct Direct		5 R01 A1094563-05 5 R01 A1097134-05	93.855 93.855	Allergy and Infectious Diseases Research	234,490	12,381
Health and Human Services, Department of					Allergy and Infectious Diseases Research	*	12,381
Health and Human Services, Department of	Direct		5 R01 AI101285-05	93.855	Allergy and Infectious Diseases Research	337,323	-
Health and Human Services, Department of	Direct		5 R01 AI105068-05	93.855	Allergy and Infectious Diseases Research	311,078	-
Health and Human Services, Department of	Direct		5 R01 AI106806-03	93.855	Allergy and Infectious Diseases Research	323,981	-
Health and Human Services, Department of	Direct		5 R01 AI110780-04	93.855	Allergy and Infectious Diseases Research	646,871	206,021
Health and Human Services, Department of	Direct		5 R01 AI117229-04	93.855	Allergy and Infectious Diseases Research	383,952	-
Health and Human Services, Department of	Direct		5 R01 AI118886-03	93.855	Allergy and Infectious Diseases Research	252,235	-
Health and Human Services, Department of	Direct		5 R01 AI119446-05	93.855	Allergy and Infectious Diseases Research	782,664	29,335
Health and Human Services, Department of	Direct		5 R01 AI120526-03	93.855	Allergy and Infectious Diseases Research	376,908	-
Health and Human Services, Department of	Direct		5 R01 AI120607-03	93.855	Allergy and Infectious Diseases Research	396,872	69,120
Health and Human Services, Department of	Direct		5 R01 AI120997-02	93.855	Allergy and Infectious Diseases Research	799,687	520,621
Health and Human Services, Department of	Direct		5 R01 AI123093-03	93.855	Allergy and Infectious Diseases Research	421,590	190,485
Health and Human Services, Department of	Direct		5 R01 AI123957-03	93.855	Allergy and Infectious Diseases Research	334,552	170,403
							141 716
Health and Human Services, Department of	Direct		5 R01 AI125307-02	93.855	Allergy and Infectious Diseases Research	624,426	141,716
Health and Human Services, Department of	Direct		5 R01 AI127070-02	93.855	Allergy and Infectious Diseases Research	414,083	-
Health and Human Services, Department of	Direct		5 R01 AI129958-02	93.855	Allergy and Infectious Diseases Research	638,897	-
Health and Human Services, Department of	Direct		5 R01 AI130025-02	93.855	Allergy and Infectious Diseases Research	462,373	-
Health and Human Services, Department of	Direct		5 R01 Al059722-13	93.855	Allergy and Infectious Diseases Research	646,851	-
Health and Human Services, Department of	Direct		5 R01 Al116791-03	93.855	Allergy and Infectious Diseases Research	468,225	-
Health and Human Services, Department of	Direct		5 R01AI121156-03	93.855	Allergy and Infectious Diseases Research	345,555	-
Health and Human Services, Department of	Direct		5 R21 AI107184-02	93.855	Allergy and Infectious Diseases Research	(2,228)	-
Health and Human Services, Department of	Direct		5 R21 AI110907-02	93.855	Allergy and Infectious Diseases Research	126,994	-
Health and Human Services, Department of	Direct		5 R21 AI111182-02	93.855	Allergy and Infectious Diseases Research	(55,798)	_
Health and Human Services, Department of	Direct		5 R21 AI115117-02	93.855	Allergy and Infectious Diseases Research	(54,670)	_
Health and Human Services, Department of	Direct		5 R21 AI116158-02	93.855	Allergy and Infectious Diseases Research	(554)	_
Health and Human Services, Department of	Direct		5 R21 AI116416-02	93.855	Allergy and Infectious Diseases Research	64,898	_
Health and Human Services, Department of	Direct		5 R21 AI117371-02	93.855	Allergy and Infectious Diseases Research	130,944	
			5 R21 AII17561-02		=-		_
Health and Human Services, Department of	Direct Direct		5 R21 A117/301-02 5 R21 A1120599-02	93.855 93.855	Allergy and Infectious Diseases Research	77,016 74,684	-
Health and Human Services, Department of					Allergy and Infectious Diseases Research		-
Health and Human Services, Department of	Direct		5 R21 AI120815-02	93.855	Allergy and Infectious Diseases Research	31,927	-
Health and Human Services, Department of	Direct		5 R21 AI121721-02	93.855	Allergy and Infectious Diseases Research	146,569	-
Health and Human Services, Department of	Direct		5 R21 AI122098-02	93.855	Allergy and Infectious Diseases Research	180,971	-
Health and Human Services, Department of	Direct		5 R21 AI122244-02	93.855	Allergy and Infectious Diseases Research	160,972	-
Health and Human Services, Department of	Direct		5 R21 AI126054-02	93.855	Allergy and Infectious Diseases Research	93,624	-
Health and Human Services, Department of	Direct		5 R21 AI127492-02	93.855	Allergy and Infectious Diseases Research	185,607	-
Health and Human Services, Department of	Direct		5 R21 AI128120-02	93.855	Allergy and Infectious Diseases Research	192,130	-
Health and Human Services, Department of	Direct		5 R33 AI116158-04	93.855	Allergy and Infectious Diseases Research	409,860	-
Health and Human Services, Department of	Direct		5 R33 AI116190-04	93.855	Allergy and Infectious Diseases Research	402,750	-
Health and Human Services, Department of	Direct		5 R33AI102106-05	93.855	Allergy and Infectious Diseases Research	(15,769)	_
Health and Human Services, Department of	Direct		5 U01 AI24255-03	93.855	Allergy and Infectious Diseases Research	2,597,974	253,022
Health and Human Services, Department of	Direct		5 U19 AI110502-05	93.855	Allergy and Infectious Diseases Research	396,857	17,140
	Direct		5 U19 A1116482-04	93.855	Allergy and Infectious Diseases Research	1,468,044	46,760
Health and Human Services, Department of					•		40,700
Health and Human Services, Department of	Direct		5 UH2 AI128900-02	93.855	Allergy and Infectious Diseases Research	90,228	-
Health and Human Services, Department of	Direct		5 UM1 AI110557-05	93.855	Allergy and Infectious Diseases Research	78,280	-
Health and Human Services, Department of	Direct		7 K08 AI101008-06	93.855	Allergy and Infectious Diseases Research	95,447	-
Health and Human Services, Department of	Direct		7 R01 AI121302-03	93.855	Allergy and Infectious Diseases Research	73,404	-
Health and Human Services, Department of	Direct		T32 AI007413	93.855	Allergy and Infectious Diseases Research	77,285	-
Health and Human Services, Department of	Direct		T32 AI007413	93.855	Allergy and Infectious Diseases Research	233,934	-
Health and Human Services, Department of	Direct		T32 AI007528	93.855	Allergy and Infectious Diseases Research	360,224	_
Health and Human Services, Department of		Institute at Virginia Mason (BRI)	FY15ITN079	93.855	Allergy and Infectious Diseases Research	15,400	=
Treath and Transan Services, Debaranen of	S =	<u> </u>				12,.30	
Health and Human Services, Department of	Pass-Through Benaroya Research I	Institute at Virginia Mason (BRI)	FY17ITN211	93.855	Allergy and Infectious Diseases Research	54,064	_

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Columbia University	4(GG011022-01)	93.855	Allergy and Infectious Diseases Research	24,265	
alth and Human Services, Department of	Pass-Through	Emory University	T525829	93.855	Allergy and Infectious Diseases Research	1,683	_
alth and Human Services, Department of	Pass-Through	Emory University	T939626	93.855	Allergy and Infectious Diseases Research	13,276	-
olth and Human Services, Department of	Pass-Through	FHI 360 Headquarters	PO16001198	93.855	Allergy and Infectious Diseases Research	126,388	-
Ith and Human Services, Department of	Pass-Through	Henry Ford Health System	P01 AI089473	93.855	Allergy and Infectious Diseases Research	16,717	_
Ith and Human Services, Department of	Pass-Through	Johns Hopkins University	2002228577	93.855	Allergy and Infectious Diseases Research	5,914	_
th and Human Services, Department of	Pass-Through	Johns Hopkins University	UM1AI068632 / JHU PI - Nachman	93.855	Allergy and Infectious Diseases Research	28,820	_
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th and Human Services, Department of	Pass-Through	Michigan State University	61-0860UM Prm#1U19AI08968301	93.855	Allergy and Infectious Diseases Research	3,799	-
th and Human Services, Department of	Pass-Through	Michigan State University	RC105644UofM	93.855	Allergy and Infectious Diseases Research	106,070	-
th and Human Services, Department of	Pass-Through	Michigan State University	RC107329UM	93.855	Allergy and Infectious Diseases Research	37,031	-
th and Human Services, Department of	Pass-Through	New York University	iB00153609	93.855	Allergy and Infectious Diseases Research	62,989	-
th and Human Services, Department of	Pass-Through	Northwestern University	60047274RUM	93.855	Allergy and Infectious Diseases Research	31,247	-
th and Human Services, Department of	Pass-Through	Rush University Medical Center	Sub award 14102310-MICH	93.855	Allergy and Infectious Diseases Research	50,450	<u>-</u>
h and Human Services, Department of	Pass-Through	State University of New York	1136031/76463	93.855	Allergy and Infectious Diseases Research	66,762	
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h and Human Services, Department of	Pass-Through	State University of New York at Buffalo	R1056568	93.855	Allergy and Infectious Diseases Research	173,756	
th and Human Services, Department of	Pass-Through	Sustainable Sciences Institute	Subaward Agreement	93.855	Allergy and Infectious Diseases Research	4,707	
th and Human Services, Department of	Pass-Through	The Icahn School of Medicine at Mount Sinai (ISMMS)	0255-1351-4609	93.855	Allergy and Infectious Diseases Research	167,259	
h and Human Services, Department of	Pass-Through	Tufts University	100610-00001	93.855	Allergy and Infectious Diseases Research	333,977	
h and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	0000421524-005	93.855	Allergy and Infectious Diseases Research	9,792	
th and Human Services, Department of	Pass-Through	University of California - Berkeley	00008952	93.855	Allergy and Infectious Diseases Research	143,149	
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th and Human Services, Department of	Pass-Through	University of California - San Francisco	8246SC	93.855	Allergy and Infectious Diseases Research	432,755	
th and Human Services, Department of	Pass-Through	University of California - San Francisco	8808sc	93.855	Allergy and Infectious Diseases Research	42,675	
h and Human Services, Department of	Pass-Through	University of California - San Francisco	8970sc	93.855	Allergy and Infectious Diseases Research	182,989	
h and Human Services, Department of	Pass-Through	University of California - San Francisco	9433sc	93.855	Allergy and Infectious Diseases Research	258,561	
h and Human Services, Department of	Pass-Through	University of California - San Francisco	9438sc	93.855	Allergy and Infectious Diseases Research	208,029	
h and Human Services, Department of	Pass-Through	University of California - San Francisco	9495SC	93.855	Allergy and Infectious Diseases Research	54,354	
and Human Services, Department of	Pass-Through	University of California - San Francisco	Subaward 7196sc	93.855	Allergy and Infectious Diseases Research	49,807	
•	•	•			••	-	
h and Human Services, Department of	Pass-Through	University of California-San Diego	56811375	93.855	Allergy and Infectious Diseases Research	98,346	
h and Human Services, Department of	Pass-Through	University of Pennsylvania	573861	93.855	Allergy and Infectious Diseases Research	97,499	
h and Human Services, Department of	Pass-Through	University of Pittsburgh	0050569 (127631-2)	93.855	Allergy and Infectious Diseases Research	216,251	
th and Human Services, Department of	Pass-Through	University of Rochester	415740-G	93.855	Allergy and Infectious Diseases Research	(766)	
h and Human Services, Department of	Pass-Through	Vanderbilt University	VUMC64255	93.855	Allergy and Infectious Diseases Research	99,931	
th and Human Services, Department of	Pass-Through	Wayne State University	WSU17079	93.855	Allergy and Infectious Diseases Research	40,493	
th and Human Services, Department of	Pass-Through	Western Michigan University	500.009-A	93.855	Allergy and Infectious Diseases Research	34,850	
ui and ruman services, Department of	rass-fillough	western witchigan University	300.009-A	93.633	Affergy and infectious Diseases Research		e 1.700
			4 **** *** *** *** ***	22.22		\$ 26,553,404	\$ 1,792,4
th and Human Services, Department of	Direct		1 K99 GM120388-01	93.859	Biomedical Research and Research Training	\$ 22,842	\$
lth and Human Services, Department of	Direct		1 K99 GM120457-01	93.859	Biomedical Research and Research Training	100,753	
th and Human Services, Department of	Direct		1 R01 GM11000-02	93.859	Biomedical Research and Research Training	34,637	
lth and Human Services, Department of	Direct		1 R01 GM118644-02	93.859	Biomedical Research and Research Training	278,760	
th and Human Services, Department of	Direct		1 R01 GM120093-03	93.859	Biomedical Research and Research Training	333,903	
th and Human Services, Department of	Direct		1 R01 GM121919-01A1	93.859	Biomedical Research and Research Training	130,229	
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th and Human Services, Department of	Direct		1 R01 GM123069-01A1	93.859	Biomedical Research and Research Training	197,560	
th and Human Services, Department of	Direct		1 R01 GM124283-01	93.859	Biomedical Research and Research Training	191,352	
th and Human Services, Department of	Direct		1 R01 GM124571-01	93.859	Biomedical Research and Research Training	359,511	
h and Human Services, Department of	Direct		1 R01GM121656-02	93.859	Biomedical Research and Research Training	270,088	53
and Human Services, Department of	Direct		1 R21 GM128022 01	93.859	Biomedical Research and Research Training	20,752	
and Human Services, Department of	Direct		1 R35 GM124875-01	93.859	Biomedical Research and Research Training	158,329	
-	Direct		1 R35 GM12480-01	93.859	Biomedical Research and Research Training	342,055	
h and Human Services, Department of					_		
h and Human Services, Department of	Direct		1 R35 GM126917-01	93.859	Biomedical Research and Research Training	12	
n and Human Services, Department of	Direct		2 R01 GM050403-22	93.859	Biomedical Research and Research Training	93,404	
h and Human Services, Department of	Direct		2 R01 GM083107-12	93.859	Biomedical Research and Research Training	393,177	
and Human Services, Department of	Direct		2 R01 GM083241-09	93.859	Biomedical Research and Research Training	386,140	
and Human Services, Department of	Direct		2 R01GM065372-10	93.859	Biomedical Research and Research Training	47,492	
h and Human Services, Department of	Direct		2 U54GM103297-06	93.859	Biomedical Research and Research Training	2,709,044	1,685
h and Human Services, Department of	Direct		2T32GM007315	93.859	Biomedical Research and Research Training	914,676	1,000
					_		1 200
and Human Services, Department of	Direct		4 P50 GM103297-05	93.859	Biomedical Research and Research Training	1,564,383	1,308
and Human Services, Department of	Direct		4 R00 GM117268-03	93.859	Biomedical Research and Research Training	204,937	
n and Human Services, Department of	Direct		4 R01 GM049500-18	93.859	Biomedical Research and Research Training	151,546	
h and Human Services, Department of	Direct		4 R01 GM083107-10	93.859	Biomedical Research and Research Training	(25,108)	
h and Human Services, Department of	Direct		4 R01 GM083241-08	93.859	Biomedical Research and Research Training	107,772	
<u> </u>			4 R01 GM097117-05		Biomedical Research and Research Training	-	
h and Human Services, Department of	Direct			93.859		29,945	
h and Human Services, Department of	Direct		4 R01 GM099513-04	93.859	Biomedical Research and Research Training	(38,929)	
n and Human Services, Department of	Direct		4 R01 GM099549-04	93.859	Biomedical Research and Research Training	174,706	68
and Human Services, Department of	Direct		4 R01 GM101171-05	93.859	Biomedical Research and Research Training	97,807	
and Human Services, Department of	Direct		4 R01 GM101189-04	93.859	Biomedical Research and Research Training	(13,106)	
and Human Services, Department of	Direct		4 R01 GM102279-04	93.859	Biomedical Research and Research Training	156,687	
	Direct		4 R01 GM102829-04	93.859	Biomedical Research and Research Training	261,150	
h and Human Services, Department of						The state of the s	62
and Human Services, Department of	Direct		4 R01 GM103232-04	93.859	Biomedical Research and Research Training	191,632	
and Human Services, Department of	Direct		4 R01 GM103961-04	93.859	Biomedical Research and Research Training	(33,873)	1
and Human Services, Department of	Direct		4 R01 GM105942-04	93.859	Biomedical Research and Research Training	136,736	
and Human Services, Department of	Direct		4 R01 GM108022-09	93.859	Biomedical Research and Research Training	52,173	
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and Human Services, Department of	Direct		4 R01GM106180-04	93.859	Biomedical Research and Research Training	248,357	
and Human Services, Department of	Direct		4 R25 GM058641-17	93.859	Biomedical Research and Research Training	483,069	
and Human Services, Department of	Direct		4 R37 GM039451-30	93.859	Biomedical Research and Research Training	(11,071)	
h and Human Services, Department of	Direct		5 R01 GM105920-04	93.859	Biomedical Research and Research Training	361,579	
· •	Direct		5 R01 GM111486-04	93.859	Biomedical Research and Research Training	317,732	
n and Hilman Services Denartment of	DHOOL						
	Direct		5 E21 CM112470 02	02.050	Diamedical Descends and Descends To-inin-	(11 265)	
alth and Human Services, Department of alth and Human Services, Department of alth and Human Services, Department of	Direct Direct		5 F31 GM112470-02 5 F31 GM113561-03	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	(11,265) 9,533	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 F31 GM116619-02	93.859	Biomedical Research and Research Training	(11)	-
Health and Human Services, Department of	Direct		5 F32 GM113405-02	93.859	Biomedical Research and Research Training	1,182	-
Health and Human Services, Department of	Direct		5 F32 GM115198-03	93.859	Biomedical Research and Research Training	60,987	-
Health and Human Services, Department of	Direct		5 F32 GM119203-02	93.859	Biomedical Research and Research Training	21,169	-
Health and Human Services, Department of	Direct		5 F32 GM122357-02	93.859	Biomedical Research and Research Training	54,805	-
Health and Human Services, Department of	Direct		5 K08 GM109105-04	93.859	Biomedical Research and Research Training	208,570	-
Health and Human Services, Department of	Direct		5 K08 GM115859-03	93.859	Biomedical Research and Research Training	196,477	-
Health and Human Services, Department of	Direct		5 K12 GM111725-02	93.859	Biomedical Research and Research Training	526,432	69,069
Health and Human Services, Department of	Direct		5 K23 GM104354-04	93.859	Biomedical Research and Research Training	170,449	-
Health and Human Services, Department of	Direct		5 K99 GM120511-02	93.859	Biomedical Research and Research Training	83,734	-
Health and Human Services, Department of	Direct		5 P50 GM094503-06	93.859	Biomedical Research and Research Training	(150,097)	73,569
Health and Human Services, Department of	Direct		5 P50 GM103297-04	93.859	Biomedical Research and Research Training	(6,743)	-
Health and Human Services, Department of	Direct		5 R00 GM097033-05	93.859	Biomedical Research and Research Training	113,126	-
Health and Human Services, Department of	Direct		5 R00 GM111767-05	93.859	Biomedical Research and Research Training	148,150	-
Health and Human Services, Department of	Direct		5 R01 GM024872-41	93.859	Biomedical Research and Research Training	437,117	-
Health and Human Services, Department of	Direct		5 R01 GM037554-28	93.859	Biomedical Research and Research Training	86,163	-
Health and Human Services, Department of	Direct		5 R01 GM040602-29	93.859	Biomedical Research and Research Training	249,868	=
Health and Human Services, Department of	Direct		5 R01 GM053396-29	93.859	Biomedical Research and Research Training	875,016	-
Health and Human Services, Department of	Direct		5 R01 GM053536-20	93.859	Biomedical Research and Research Training	561,778	-
Health and Human Services, Department of	Direct		5 R01 GM056398-19	93.859	Biomedical Research and Research Training	250,557	-
Health and Human Services, Department of	Direct		5 R01 GM065330-13	93.859	Biomedical Research and Research Training	427,906	-
Health and Human Services, Department of	Direct		5 R01 GM070862-12	93.859	Biomedical Research and Research Training	392,830	68,158
Health and Human Services, Department of	Direct		5 R01 GM076477-12	93.859	Biomedical Research and Research Training	466,015	-
Health and Human Services, Department of	Direct		5 R01 GM077430-12	93.859	Biomedical Research and Research Training	422,776	-
Health and Human Services, Department of	Direct		5 R01 GM078200-11	93.859	Biomedical Research and Research Training	(15,710)	-
Health and Human Services, Department of	Direct		5 R01 GM078553-08	93.859	Biomedical Research and Research Training	(114)	_
Health and Human Services, Department of	Direct		5 R01 GM079533-09	93.859	Biomedical Research and Research Training	68,169	_
Health and Human Services, Department of	Direct		5 R01 GM081702-08	93.859	Biomedical Research and Research Training	298,824	_
Health and Human Services, Department of	Direct		5 R01 GM082856-09	93.859	Biomedical Research and Research Training	(7,019)	_
Health and Human Services, Department of	Direct		5 R01 GM084018-08	93.859	Biomedical Research and Research Training	555,827	_
Health and Human Services, Department of	Direct		5 R01 GM084127-08	93.859	Biomedical Research and Research Training	306,603	_
Health and Human Services, Department of	Direct		5 R01 GM086596-07	93.859	Biomedical Research and Research Training	332,579	_
Health and Human Services, Department of	Direct		5 R01 GM086610-09	93.859	Biomedical Research and Research Training	145,750	_
Health and Human Services, Department of	Direct		5 R01 GM088242-10	93.859	Biomedical Research and Research Training	360,050	_
Health and Human Services, Department of	Direct		5 R01 GM000242-10 5 R01 GM092741-06	93.859	Biomedical Research and Research Training	(8,748)	_
Health and Human Services, Department of	Direct		5 R01 GM092741-00 5 R01 GM093088-08	93.859	Biomedical Research and Research Training	251,173	_
Health and Human Services, Department of	Direct		5 R01 GM09423105-08	93.859	Biomedical Research and Research Training	225,110	_
Health and Human Services, Department of	Direct		5 R01 GM095832-07	93.859	Biomedical Research and Research Training	344,091	29,284
Health and Human Services, Department of	Direct		5 R01 GM097220-05	93.859	Biomedical Research and Research Training	1,128	29,204
Health and Human Services, Department of	Direct		5 R01 GM097220-03 5 R01 GM098578-07	93.859	Biomedical Research and Research Training	303,141	-
Health and Human Services, Department of	Direct		5 R01 GM098378-07 5 R01 GM099143-05	93.859	Biomedical Research and Research Training	-	-
Health and Human Services, Department of	Direct		5 R01 GM099145-03 5 R01 GM099514-04	93.859	Biomedical Research and Research Training	(8,070) (5,836)	-
	Direct		5 R01 GM102236-04	93.859	Biomedical Research and Research Training	126,261	-
Health and Human Services, Department of			5 R01 GM102230-04 5 R01 GM103695-11		E		150 242
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 GM103693-11 5 R01 GM103894-05	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	449,787 48,490	150,342 8,201
Health and Human Services, Department of	Direct		5 R01 GM103894-03 5 R01 GM104130-06	93.859	Biomedical Research and Research Training	100,291	0,201
<u> </u>	Direct		5 R01 GM104130-00 5 R01 GM105671-06	93.859	Biomedical Research and Research Training	268,621	57,323
Health and Human Services, Department of							31,323
Health and Human Services, Department of	Direct		5 R01 GM105948-05	93.859	Biomedical Research and Research Training	246,550	-
Health and Human Services, Department of	Direct		5 R01 GM107146-04	93.859	Biomedical Research and Research Training	251,677	-
Health and Human Services, Department of	Direct		5 R01 GM107148-05	93.859	Biomedical Research and Research Training	220,774	-
Health and Human Services, Department of	Direct		5 R01 GM107233-04	93.859	Biomedical Research and Research Training	174,773	-
Health and Human Services, Department of	Direct		5 R01 GM107312-05	93.859	Biomedical Research and Research Training	289,384	-
Health and Human Services, Department of	Direct		5 R01 GM108468-04	93.859	Biomedical Research and Research Training	286,854	-
Health and Human Services, Department of	Direct		5 R01 GM108722-04	93.859	Biomedical Research and Research Training	338,291	-
Health and Human Services, Department of	Direct		5 R01 GM109896-04	93.859	Biomedical Research and Research Training	129,983	30,824
Health and Human Services, Department of	Direct		5 R01 GM110019-04	93.859	Biomedical Research and Research Training	379,636	9,880
Health and Human Services, Department of	Direct		5 R01 GM110052-05	93.859	Biomedical Research and Research Training	303,268	-
Health and Human Services, Department of	Direct		5 R01 GM110215-04	93.859	Biomedical Research and Research Training	376,905	11,050
Health and Human Services, Department of	Direct		5 R01 GM110289-04	93.859	Biomedical Research and Research Training	444,812	=
Health and Human Services, Department of	Direct		5 R01 GM111293-03	93.859	Biomedical Research and Research Training	335,219	-
Iealth and Human Services, Department of	Direct		5 R01 GM111305-04	93.859	Biomedical Research and Research Training	275,752	-
Iealth and Human Services, Department of	Direct		5 R01 GM111400-03	93.859	Biomedical Research and Research Training	244,964	15,972
Iealth and Human Services, Department of	Direct		5 R01 GM111735-05	93.859	Biomedical Research and Research Training	384,011	-
Iealth and Human Services, Department of	Direct		5 R01 GM111997-03	93.859	Biomedical Research and Research Training	363,969	-
Iealth and Human Services, Department of	Direct		5 R01 GM112455-04	93.859	Biomedical Research and Research Training	226,116	-
Health and Human Services, Department of	Direct		5 R01 GM112786-04	93.859	Biomedical Research and Research Training	373,273	-
Iealth and Human Services, Department of	Direct		5 R01 GM112794-04	93.859	Biomedical Research and Research Training	231,388	-
Health and Human Services, Department of	Direct		5 R01 GM112799-04	93.859	Biomedical Research and Research Training	301,617	-
Health and Human Services, Department of	Direct		5 R01 GM112992-03	93.859	Biomedical Research and Research Training	313,575	-
Iealth and Human Services, Department of	Direct		5 R01 GM113188-05	93.859	Biomedical Research and Research Training	335,705	-
Health and Human Services, Department of	Direct		5 R01 GM113722-04	93.859	Biomedical Research and Research Training	209,710	-
Health and Human Services, Department of	Direct		5 R01 GM115481-03	93.859	Biomedical Research and Research Training	315,619	-
Iealth and Human Services, Department of	Direct		5 R01 GM115601-03	93.859	Biomedical Research and Research Training	(11,043)	-
Health and Human Services, Department of	Direct		5 R01 GM116204-03	93.859	Biomedical Research and Research Training	633,126	282,800
Health and Human Services, Department of	Direct		5 R01 GM116582-02	93.859	Biomedical Research and Research Training	(15,678)	-
							171.002
Jealth and Human Services. Department of	Direct		5 ROLGM116960-03	91 879	Biomedical Research and Research Training	/XX 4 4 A	1/1/194
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 GM116960-03 5 R01 GM118308-03	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	288,434 338,088	171,093

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	8	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 GM118475-03	93.859	Biomedical Research and Research Training	427,064	-
Health and Human Services, Department of	Direct		5 R01 GM118524-02	93.859	Biomedical Research and Research Training	329,030	-
Health and Human Services, Department of	Direct		5 R01 GM118647-02	93.859	Biomedical Research and Research Training	416,451	-
Health and Human Services, Department of	Direct		5 R01 GM118751-03	93.859	Biomedical Research and Research Training	509,157	-
Health and Human Services, Department of	Direct		5 R01 GM118928-03	93.859	Biomedical Research and Research Training	205,233	-
Health and Human Services, Department of	Direct		5 R01 GM120056-02	93.859	Biomedical Research and Research Training	321,292	-
Health and Human Services, Department of	Direct		5 R01 GM120094-02	93.859	Biomedical Research and Research Training	212,400	-
Health and Human Services, Department of	Direct		5 R01 GM120110-03	93.859	Biomedical Research and Research Training	284,333	-
Health and Human Services, Department of	Direct		5 R01 GM120142-04	93.859	Biomedical Research and Research Training	76,182	-
Health and Human Services, Department of	Direct		5 R01 GM120767-13	93.859	Biomedical Research and Research Training	411,104	41.000
Health and Human Services, Department of	Direct		5 R01 GM122803-02	93.859	Biomedical Research and Research Training	225,959	41,809
Health and Human Services, Department of	Direct		5 R01 GM123513-02	93.859	Biomedical Research and Research Training	512,228	49,720
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 GM124248-02 5 R01 GM124251-02	93.859 93.859	Biomedical Research and Research Training Biomedical Research and Research Training	272,306 195,303	96,967
Health and Human Services, Department of	Direct		5 R01GM062357-16	93.859	Biomedical Research and Research Training	351,652	90,907
Health and Human Services, Department of	Direct		5 R01-GM062337-10 5 R01-GM065318-13	93.859	Biomedical Research and Research Training	(11,349)	-
Health and Human Services, Department of	Direct		5 R01GM073836-13	93.859	Biomedical Research and Research Training	242,423	_
Health and Human Services, Department of	Direct		5 R01GM098350- 05	93.859	Biomedical Research and Research Training	56	_
Health and Human Services, Department of	Direct		5 R01GM10432-05	93.859	Biomedical Research and Research Training	128,411	13,918
Health and Human Services, Department of	Direct		5 R01GM111476-05	93.859	Biomedical Research and Research Training	253,809	15,710
Health and Human Services, Department of	Direct		5 R01GM118651-03	93.859	Biomedical Research and Research Training	292,607	_
Health and Human Services, Department of	Direct		5 R01-GM125881-02	93.859	Biomedical Research and Research Training	204,561	_
Health and Human Services, Department of	Direct		5 R25 GM086262-10	93.859	Biomedical Research and Research Training	398,094	- -
Health and Human Services, Department of	Direct		5 R25 GM080202-10 5 R25GM116149-02	93.859	Biomedical Research and Research Training	12,547	- -
Health and Human Services, Department of	Direct		5 R35 GM118101-03	93.859	Biomedical Research and Research Training	175,910	- -
Health and Human Services, Department of	Direct		5 R35 GM119688-03	93.859	Biomedical Research and Research Training	322,724	_
Health and Human Services, Department of	Direct		5 R35 GM119080-03 5 R35 GM122506-02	93.859	Biomedical Research and Research Training	659,104	- -
Health and Human Services, Department of	Direct		5 R35GM118073-03	93.859	Biomedical Research and Research Training	370,408	_
Health and Human Services, Department of	Direct		5 R35GM118133-03	93.859	Biomedical Research and Research Training	397,340	_
Health and Human Services, Department of	Direct		5 R37 GM039451-32	93.859	Biomedical Research and Research Training	531,626	_
Health and Human Services, Department of	Direct		5 R37 GM062261-19	93.859	Biomedical Research and Research Training	318,160	_
Health and Human Services, Department of	Direct		5 R37 GM076343-14	93.859	Biomedical Research and Research Training	444,302	_
Health and Human Services, Department of	Direct		5 U01 GM110712-04	93.859	Biomedical Research and Research Training	643,973	_
Health and Human Services, Department of	Direct		7 R01 GM056398-17	93.859	Biomedical Research and Research Training	(4,200)	_
Health and Human Services, Department of	Direct		7 R01 GM102505-05	93.859	Biomedical Research and Research Training	(1,178)	_
Health and Human Services, Department of	Direct		7 R01 GM115598-05	93.859	Biomedical Research and Research Training	189,834	_
Health and Human Services, Department of	Direct		7 R01 GM1173576 05	93.859	Biomedical Research and Research Training	277,320	_
Health and Human Services, Department of	Direct		T32 GM007315	93.859	Biomedical Research and Research Training	(88,363)	_
Health and Human Services, Department of	Direct		T32 GM007515	93.859	Biomedical Research and Research Training	337,697	_
Health and Human Services, Department of	Direct		T32 GM007767	93.859	Biomedical Research and Research Training	518,872	_
Health and Human Services, Department of	Direct		T32 GM007863	93.859	Biomedical Research and Research Training	1,318,785	_
Health and Human Services, Department of	Direct		T32 GM008322	93.859	Biomedical Research and Research Training	285,746	_
Health and Human Services, Department of	Direct		T32 GM008353	93.859	Biomedical Research and Research Training	(35,324)	_
Health and Human Services, Department of	Direct		T32 GM008353	93.859	Biomedical Research and Research Training	454,068	_
Health and Human Services, Department of	Direct		T32 GM008597	93.859	Biomedical Research and Research Training	369,680	_
Health and Human Services, Department of	Direct		T32 GM008616	93.859	Biomedical Research and Research Training	119,813	_
Health and Human Services, Department of	Direct		T32 GM070449	93.859	Biomedical Research and Research Training	137,473	_
Health and Human Services, Department of	Direct		T32 GM103730	93.859	Biomedical Research and Research Training	110,205	_
Health and Human Services, Department of	Direct		T32 GM113900	93.859	Biomedical Research and Research Training	185,793	_
Health and Human Services, Department of	Pass-Through	Arizona State University	18-305	93.859	Biomedical Research and Research Training	55,781	_
Health and Human Services, Department of	Pass-Through	ATGC, Inc	Research Agreement	93.859	Biomedical Research and Research Training	22,115	_
Health and Human Services, Department of	Pass-Through	Boston University	4500002268	93.859	Biomedical Research and Research Training	66,269	_
Health and Human Services, Department of	Pass-Through	Cleveland Clinic Lerner College of Medicine	897-SUB	93.859	Biomedical Research and Research Training	5,481	-
Health and Human Services, Department of	Pass-Through	Emory University	T855282	93.859	Biomedical Research and Research Training	93,404	_
Health and Human Services, Department of	Pass-Through	Georgia Institute of Technology	RJ559-G1	93.859	Biomedical Research and Research Training	149,605	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000815003/Project 215916	93.859	Biomedical Research and Research Training	170,574	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000815018/Project 215917	93.859	Biomedical Research and Research Training	35,413	-
Health and Human Services, Department of	Pass-Through	Hutchinson, Fred, Cancer Research Center	0000815339/Project 215920	93.859	Biomedical Research and Research Training	152,937	-
Health and Human Services, Department of	Pass-Through	Li-Cor, Inc	Subaward under NIH Contract 2R	93.859	Biomedical Research and Research Training	106,545	-
Health and Human Services, Department of	Pass-Through	Long Island University	3	93.859	Biomedical Research and Research Training	32,130	-
Health and Human Services, Department of	Pass-Through	Long Island University	Research Subaward	93.859	Biomedical Research and Research Training	(1,702)	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC105133UM	93.859	Biomedical Research and Research Training	98,485	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC105935A	93.859	Biomedical Research and Research Training	161,610	-
Health and Human Services, Department of	Pass-Through	New York Hall of Science	Agreement	93.859	Biomedical Research and Research Training	683	-
Health and Human Services, Department of	Pass-Through	Ohio State University, The	60048848	93.859	Biomedical Research and Research Training	27,543	-
Health and Human Services, Department of	Pass-Through	Pennsylvania State University	UMI GM094526	93.859	Biomedical Research and Research Training	22,815	-
Health and Human Services, Department of	Pass-Through	Stanford University	61574013-130764	93.859	Biomedical Research and Research Training	62,135	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	7834sc	93.859	Biomedical Research and Research Training	(4,701)	-
Health and Human Services, Department of	Pass-Through	University of Chicago	FP056334	93.859	Biomedical Research and Research Training	25,176	-
Health and Human Services, Department of	Pass-Through	University of Chicago	FP066905-A	93.859	Biomedical Research and Research Training	127,487	-
Health and Human Services, Department of	Pass-Through	University of Georgia	RR551-614/S000389	93.859	Biomedical Research and Research Training	111,511	-
Health and Human Services, Department of	Pass-Through	University of Illinois-Urbana-Champaign	084206-16671	93.859	Biomedical Research and Research Training	229,554	-
Health and Human Services, Department of	Pass-Through	University of Kentucky Research Foundation	3048112251-15-165	93.859	Biomedical Research and Research Training	149,974	-
Health and Human Services, Department of	Pass-Through	University of Maryland, The	0000015164	93.859	Biomedical Research and Research Training	204,989	_
. 1	Pass-Through	Wayne State University	WSU15015	93.859	Biomedical Research and Research Training	36,932	_
Health and Human Services. Department of	1 433 1111011711						
Health and Human Services, Department of Health and Human Services, Department of	•			93.859	Biomedical Research and Research Training		-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	William Marsh Rice University	R22841	93.859	Biomedical Research and Research Training	\$ 122,845 \$ 46,694,391	\$ 4,369,898

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct	g :	1 F31 HD088091-01	93.865	Child Health and Human Development Extramural Research	2,351	-
Health and Human Services, Department of	Direct		1 F31 HD094480-01A1	93.865	Child Health and Human Development Extramural Research	3,974	-
Health and Human Services, Department of	Direct		1 F32 HD091938-01	93.865	Child Health and Human Development Extramural Research	52,252	-
Health and Human Services, Department of	Direct		1 F32 HD093145-01	93.865	Child Health and Human Development Extramural Research	48,137	-
Health and Human Services, Department of	Direct		1 F32 HD095620-01	93.865	Child Health and Human Development Extramural Research	18,114	-
Health and Human Services, Department of	Direct		1 P01 HD087155-02	93.865	Child Health and Human Development Extramural Research	2,095,119	38,937
Health and Human Services, Department of	Direct		1 R01 HD094954-01	93.865	Child Health and Human Development Extramural Research	18,078	-
Health and Human Services, Department of	Direct		1 R03 HD083656-02	93.865	Child Health and Human Development Extramural Research	10,959	-
Health and Human Services, Department of	Direct		1 R03 HD084708-02	93.865	Child Health and Human Development Extramural Research	39,529	-
Health and Human Services, Department of	Direct		1 R03 HD086430-01	93.865	Child Health and Human Development Extramural Research	19,637	-
Health and Human Services, Department of	Direct		1 R03 HD092516-01	93.865	Child Health and Human Development Extramural Research	41,196	-
Health and Human Services, Department of	Direct		1 R03 HD092855-01A1	93.865	Child Health and Human Development Extramural Research	5,234	-
Health and Human Services, Department of	Direct		1 R03 HD093876-01	93.865	Child Health and Human Development Extramural Research	46,444	-
Health and Human Services, Department of	Direct		1 R21 HD090366-01A1	93.865	Child Health and Human Development Extramural Research	140,951	_
Health and Human Services, Department of	Direct		1 R21 HD090371-01A1	93.865	Child Health and Human Development Extramural Research	67,845	7,517
Health and Human Services, Department of	Direct		1 R21 HD092526-01A1	93.865	Child Health and Human Development Extramural Research	6,666	- -
Health and Human Services, Department of	Direct		1 R21 HD092614-01	93.865	Child Health and Human Development Extramural Research	94,770	_
Health and Human Services, Department of	Direct		1 R21 HD093835-01	93.865	Child Health and Human Development Extramural Research	88,373	_
Health and Human Services, Department of	Direct		1 R24 HD087149-01A1	93.865	Child Health and Human Development Extramural Research	171,425	_
Health and Human Services, Department of	Direct		1 UH2 HD08797901-03	93.865	Child Health and Human Development Extramural Research	644,884	_
Health and Human Services, Department of	Direct		1R03HD092609-01	93.865	Child Health and Human Development Extramural Research	53,747	_
Health and Human Services, Department of	Direct		2 K12 HD028820-26	93.865	Child Health and Human Development Extramural Research	147,540	_
Health and Human Services, Department of	Direct		3 P50 HD044406-15S1	93.865	Child Health and Human Development Extramural Research	829,789	41,503
Health and Human Services, Department of	Direct		4 K23 HD070913-05	93.865	Child Health and Human Development Extramural Research	(23,032)	-
Health and Human Services, Department of	Direct		4 R01 HD015434-33	93.865	Child Health and Human Development Extramural Research	92,456	_
Health and Human Services, Department of	Direct		4 R01 HD030428-24	93.865	Child Health and Human Development Extramural Research	(20,959)	_
Health and Human Services, Department of	Direct		4 R01 HD034860-20	93.865	Child Health and Human Development Extramural Research	71,603	_
Health and Human Services, Department of	Direct		4 R01 HD070950-05	93.865	Child Health and Human Development Extramural Research	81,754	82,311
Health and Human Services, Department of	Direct		4 R01 HD072493-05	93.865	Child Health and Human Development Extramural Research	170,725	62,311
Health and Human Services, Department of	Direct		5 F30 HD085721-03	93.865	Child Health and Human Development Extramural Research	9,220	-
Health and Human Services, Department of	Direct		5 F30 HD088055-02	93.865	Child Health and Human Development Extramural Research	35,227	-
Health and Human Services, Department of	Direct		5 F30 HD088029-02	93.865	Child Health and Human Development Extramural Research	56,490	-
			5 K01 HD074706-05		÷	100,371	-
Health and Human Services, Department of	Direct			93.865	Child Health and Human Development Extramural Research	-	-
Health and Human Services, Department of	Direct		5 K01 HD079554-04	93.865	Child Health and Human Development Extramural Research	52,330	-
Health and Human Services, Department of	Direct		5 K08 HD078506-04 5 K12 HD028820-25	93.865	Child Health and Human Development Extramural Research	141,915	-
Health and Human Services, Department of	Direct			93.865	Child Health and Human Development Extramural Research	254,592	-
Health and Human Services, Department of	Direct		5 K12 HD065257-08	93.865	Child Health and Human Development Extramural Research	329,660	-
Health and Human Services, Department of	Direct		5 K23 HD078502-03	93.865	Child Health and Human Development Extramural Research	27,175	-
Health and Human Services, Department of	Direct		5 K23 HD083527-03	93.865	Child Health and Human Development Extramural Research	185,139	-
Health and Human Services, Department of	Direct		5 K23 HD084744-02	93.865	Child Health and Human Development Extramural Research	141,745	-
Health and Human Services, Department of	Direct		5 K23 HD092626-02	93.865	Child Health and Human Development Extramural Research	172,144	-
Health and Human Services, Department of	Direct		5 P01 HD044232-10	93.865	Child Health and Human Development Extramural Research	66,063	(509)
Health and Human Services, Department of	Direct		5 P2C HD041028-17	93.865	Child Health and Human Development Extramural Research	294,479	-
Health and Human Services, Department of	Direct		5 R00 HD064753-05	93.865	Child Health and Human Development Extramural Research	33	-
Health and Human Services, Department of	Direct		5 R00 HD084758-04	93.865	Child Health and Human Development Extramural Research	151,961	=
Health and Human Services, Department of	Direct		5 R01 HD006656-41	93.865	Child Health and Human Development Extramural Research	255,465	=
Health and Human Services, Department of	Direct		5 R01 HD015434-35	93.865	Child Health and Human Development Extramural Research	446,036	-
Health and Human Services, Department of	Direct		5 R01 HD034283-22	93.865	Child Health and Human Development Extramural Research	326,376	-
Health and Human Services, Department of	Direct		5 R01 HD041469-16	93.865	Child Health and Human Development Extramural Research	382,713	-
Health and Human Services, Department of	Direct		5 R01 HD052646-09	93.865	Child Health and Human Development Extramural Research	2,127,987	192,705
Health and Human Services, Department of	Direct		5 R01 HD061356 05	93.865	Child Health and Human Development Extramural Research	(7)	-
Health and Human Services, Department of	Direct		5 R01 HD062565-05	93.865	Child Health and Human Development Extramural Research	(162)	-
Health and Human Services, Department of	Direct		5 R01 HD067184-05	93.865	Child Health and Human Development Extramural Research	252,107	-
Health and Human Services, Department of	Direct		5 R01 HD069609-08	93.865	Child Health and Human Development Extramural Research	1,929,641	=
Health and Human Services, Department of	Direct		5 R01 HD069702-08	93.865	Child Health and Human Development Extramural Research	418,767	-
Health and Human Services, Department of	Direct		5 R01 HD073475-04	93.865	Child Health and Human Development Extramural Research	876,164	-
Health and Human Services, Department of	Direct		5 R01 HD074559-05	93.865	Child Health and Human Development Extramural Research	1,232,030	-
Health and Human Services, Department of	Direct		5 R01 HD075655- 05	93.865	Child Health and Human Development Extramural Research	508,248	326,819
Health and Human Services, Department of	Direct		5 R01 HD075806-05	93.865	Child Health and Human Development Extramural Research	714,143	18,574
Health and Human Services, Department of	Direct		5 R01 HD078131-04	93.865	Child Health and Human Development Extramural Research	450,462	-
Health and Human Services, Department of	Direct		5 R01 HD078397-05	93.865	Child Health and Human Development Extramural Research	607,506	230,904
Health and Human Services, Department of	Direct		5 R01 HD079467-03	93.865	Child Health and Human Development Extramural Research	179,556	90,220
Health and Human Services, Department of	Direct		5 R01 HD0811290-03	93.865	Child Health and Human Development Extramural Research	173,476	27,621
Health and Human Services, Department of	Direct		5 R01 HD082122-04	93.865	Child Health and Human Development Extramural Research	592,649	391,204
Health and Human Services, Department of	Direct		5 R01 HD084163-04	93.865	Child Health and Human Development Extramural Research	707,923	-
Health and Human Services, Department of	Direct		5 R01 HD084526-03	93.865	Child Health and Human Development Extramural Research	623,270	62,582
Health and Human Services, Department of	Direct		5 R01 HD084652-03	93.865	Child Health and Human Development Extramural Research	374,809	147,555
Health and Human Services, Department of	Direct		5 R01 HD086583-03	93.865	Child Health and Human Development Extramural Research	485,917	213,846
Health and Human Services, Department of	Direct		5 R01 HD088506-03	93.865	Child Health and Human Development Extramural Research	389,718	146,164
Health and Human Services, Department of	Direct		5 R01 HD088521-03	93.865	Child Health and Human Development Extramural Research	940,949	-
Health and Human Services, Department of	Direct		5 R01 HD088638-02	93.865	Child Health and Human Development Extramural Research	196,590	5,728
	Direct		5 R01 HD088038-02 5 R01 HD088712-02	93.865	Child Health and Human Development Extramural Research	470,778	51,473
Health and Human Services Department of							JI.+/7
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 HD091323-02	93.865	Child Health and Human Development Extramural Research	131,167	01,170

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct	g ···	5 R03 HD082434-02	93.865	Child Health and Human Development Extramural Research	82,822	-
Health and Human Services, Department of	Direct		5 R03 HD083397-02	93.865	Child Health and Human Development Extramural Research	61,598	_
Health and Human Services, Department of	Direct		5 R03 HD086301-02	93.865	Child Health and Human Development Extramural Research	103,716	36,439
Health and Human Services, Department of	Direct		5 R03 HD087520-02	93.865	Child Health and Human Development Extramural Research	71,118	-
Health and Human Services, Department of	Direct		5 R03 HD091480-02	93.865	Child Health and Human Development Extramural Research	52,458	-
Health and Human Services, Department of	Direct		5 R21 HD077465-02	93.865	Child Health and Human Development Extramural Research	(2,749)	-
Health and Human Services, Department of	Direct		5 R21 HD079908-02	93.865	Child Health and Human Development Extramural Research	94,227	-
Health and Human Services, Department of	Direct		5 R21 HD083409-02	93.865	Child Health and Human Development Extramural Research	46,302	-
Health and Human Services, Department of	Direct		5 R21 HD086696-02	93.865	Child Health and Human Development Extramural Research	170,203	-
Health and Human Services, Department of	Direct		5 R21 HD087071-02	93.865	Child Health and Human Development Extramural Research	137,279	-
Health and Human Services, Department of	Direct		5 R21 HD087840-02	93.865	Child Health and Human Development Extramural Research	260,829	-
Health and Human Services, Department of	Direct		5 R21 HD087881-02	93.865	Child Health and Human Development Extramural Research	146,161	-
Health and Human Services, Department of	Direct		5 R21 HD090567-02	93.865	Child Health and Human Development Extramural Research	148,570	-
Health and Human Services, Department of	Direct		5 R25 HD078226-05	93.865	Child Health and Human Development Extramural Research	181,325	-
Health and Human Services, Department of	Direct		5 R25 HD082971-04	93.865	Child Health and Human Development Extramural Research	181,585	74,141
Health and Human Services, Department of	Direct		5 R25 HD083146-03	93.865	Child Health and Human Development Extramural Research	147,677	-
Health and Human Services, Department of	Direct		5 R25 HD084385-03	93.865	Child Health and Human Development Extramural Research	161,077	_
Health and Human Services, Department of	Direct		5 R37 HD034860-22	93.865	Child Health and Human Development Extramural Research	408,747	_
Health and Human Services, Department of	Direct		5 T32 HD079342-04	93.865	Child Health and Human Development Extramural Research	200,817	_
Health and Human Services, Department of	Direct		5 U24 HD048404-14	93.865	Child Health and Human Development Extramural Research	669,499	20,385
Health and Human Services, Department of	Direct		7 K01 HD071949-05	93.865	Child Health and Human Development Extramural Research	112,988	
Health and Human Services, Department of	Direct		7 R01 HD085233-04	93.865	Child Health and Human Development Extramural Research	1,308,649	938,429
Health and Human Services, Department of	Direct		T32 HD007109	93.865	Child Health and Human Development Extramural Research	(26,464)	-
Health and Human Services, Department of	Direct		T32 HD007109	93.865	Child Health and Human Development Extramural Research	318,066	_
Health and Human Services, Department of	Direct		T32 HD007109	93.865	Child Health and Human Development Extramural Research	(118,808)	_
Health and Human Services, Department of	Direct		T32 HD007339	93.865	Child Health and Human Development Extramural Research	641,131	_
Health and Human Services, Department of	Direct		T32 HD007505	93.865	Child Health and Human Development Extramural Research	24,087	_
Health and Human Services, Department of	Direct		T32 HD007505	93.865	Child Health and Human Development Extramural Research	275,496	_
Health and Human Services, Department of	Direct		T32 HD0079350	93.865	Child Health and Human Development Extramural Research	257,934	-
Health and Human Services, Department of	Pass-Through	Albert Einstein College of Medicine, Inc.,	310897	93.865	Child Health and Human Development Extramural Research	51,949	-
Health and Human Services, Department of	Pass-Through	Bowling Green State University	10008712-UMICH	93.865	Child Health and Human Development Extramural Research	81,524	-
Health and Human Services, Department of	Pass-Through	Brandeis University	403519	93.865	Child Health and Human Development Extramural Research	31,134	-
	•	•	00000911		-	7,682	-
Health and Human Services, Department of	Pass-Through	Brown University	203-6211	93.865	Child Health and Human Development Extramural Research	-	-
Health and Human Services, Department of	Pass-Through	Duke University		93.865	Child Health and Human Development Extramural Research	82,779	-
Health and Human Services, Department of	Pass-Through	Emory University	T502357	93.865	Child Health and Human Development Extramural Research	14,490	-
Health and Human Services, Department of	Pass-Through	Emory University	T852991	93.865	Child Health and Human Development Extramural Research	75,090	-
Health and Human Services, Department of	Pass-Through	Florida State University	R01930	93.865	Child Health and Human Development Extramural Research	18,706	-
Health and Human Services, Department of	Pass-Through	George Washington University	17-M102	93.865	Child Health and Human Development Extramural Research	11,069	-
Health and Human Services, Department of	Pass-Through	Georgia Technology Research Corporation	RJ381-G1	93.865	Child Health and Human Development Extramural Research	30,588	-
Health and Human Services, Department of	Pass-Through	Harvard Pilgrim Health Care	AH000630	93.865	Child Health and Human Development Extramural Research	7,823	-
Health and Human Services, Department of	Pass-Through	Henry Ford Health System	Subcontract MENU Gen Y Stdy	93.865	Child Health and Human Development Extramural Research	51,367	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4381950UM	93.865	Child Health and Human Development Extramural Research	43,461	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4686883UM; PO# 963639	93.865	Child Health and Human Development Extramural Research	2,735	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	JHU Checklist# 5957, Task Orde	93.865	Child Health and Human Development Extramural Research	979,336	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	JHU Checklist# 5957, Task Orde	93.865	Child Health and Human Development Extramural Research	916,520	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	Task Order #5	93.865	Child Health and Human Development Extramural Research	545,600	-
Health and Human Services, Department of	Pass-Through	Mayo Clinic	THE-208735	93.865	Child Health and Human Development Extramural Research	36,817	-
Health and Human Services, Department of	Pass-Through	Medical University of South Carolina	MUSC17-038-8B465	93.865	Child Health and Human Development Extramural Research	34,615	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106674B	93.865	Child Health and Human Development Extramural Research	257,632	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106691C	93.865	Child Health and Human Development Extramural Research	172,313	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC107642UM	93.865	Child Health and Human Development Extramural Research	231,720	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60040592 UM	93.865	Child Health and Human Development Extramural Research	27,777	-
Health and Human Services, Department of	Pass-Through	Northwestern University	60042448 UM	93.865	Child Health and Human Development Extramural Research	51,065	-
Health and Human Services, Department of	Pass-Through	Pennsylvania State University	5469-UM-DHHS-0659	93.865	Child Health and Human Development Extramural Research	287,242	-
Health and Human Services, Department of	Pass-Through	Princeton University	SUB0000060	93.865	Child Health and Human Development Extramural Research	16,987	-
Health and Human Services, Department of	Pass-Through	Princeton University	SUB0000113	93.865	Child Health and Human Development Extramural Research	33,153	-
Health and Human Services, Department of	Pass-Through	The Children's Hospital of Philadelphia	3210050618	93.865	Child Health and Human Development Extramural Research	2,400	-
Health and Human Services, Department of	Pass-Through	The Children's Hospital of Philadelphia	3210580717	93.865	Child Health and Human Development Extramural Research	3,139	-
Health and Human Services, Department of	Pass-Through	Tulane University	TUL-HSC-554777-16/17	93.865	Child Health and Human Development Extramural Research	53,621	-
Health and Human Services, Department of	Pass-Through	University of Alabama	000513964-002	93.865	Child Health and Human Development Extramural Research	677	-
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000388010-063	93.865	Child Health and Human Development Extramural Research	13,166	-
Health and Human Services, Department of	Pass-Through	University of Alabama at Birmingham (UAB)	000509380-SP004-002	93.865	Child Health and Human Development Extramural Research	3,618	-
Health and Human Services, Department of	Pass-Through	University of California - Irvine	2017-3508	93.865	Child Health and Human Development Extramural Research	382,613	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	9564sc	93.865	Child Health and Human Development Extramural Research	161,398	-
Health and Human Services, Department of	Pass-Through	University of Colorado	FY14.613.006	93.865	Child Health and Human Development Extramural Research	14,436	-
Health and Human Services, Department of	Pass-Through	University of Denver	SC37627-01-00	93.865	Child Health and Human Development Extramural Research	22,407	_
Health and Human Services, Department of	Pass-Through	University of Minnesota	P006823101	93.865	Child Health and Human Development Extramural Research	138,070	_
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5105611	93.865	Child Health and Human Development Extramural Research	91,009	_
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5106200	93.865	Child Health and Human Development Extramural Research	49,057	56,300
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill University of North Carolina at Chapel Hill	5100200	93.865	Child Health and Human Development Extramural Research	697,223	223,239
· •	•	•	5107/10		•		443,439
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill		93.865	Child Health and Human Development Extramural Research	173,988	-
Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5108929	93.865	Child Health and Human Development Extramural Research	28,213	_
Health and Human Services, Department of	Pass-Through	University of Pittsburgh	2639	93.865	Child Health and Human Development Extramural Research	90,288	-
Health and Human Services, Department of	Pass-Through	University of South Carolina	17-3195/13580-FB41	93.865	Child Health and Human Development Extramural Research	18,979	-

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	University of Texas Medical Branch at Galveston (UTMB)	16-063	93.865	Child Health and Human Development Extramural Research	10,140	
Health and Human Services, Department of	Pass-Through	University of Texas Medical Branch at Galveston (UTMB)	17-069	93.865	Child Health and Human Development Extramural Research	251,375	_
Health and Human Services, Department of	Pass-Through	University of Texas Medical Branch at Galveston (UTMB)	17-072	93.865	Child Health and Human Development Extramural Research	6,522	_
Health and Human Services, Department of	Pass-Through	University of Texas Southwestern Medical Center	GMO 161107	93.865	Child Health and Human Development Extramural Research	131,089	_
Health and Human Services, Department of	Pass-Through	University of Virginia	GB10015 148247	93.865	Child Health and Human Development Extramural Research	(382)	
Health and Human Services, Department of	Pass-Through	University of Virginia University of Virginia	GB10015 140247 GB10015 154834	93.865	Child Health and Human Development Extramural Research	421,023	_
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Health and Human Services, Department of	Pass-Through	University of Washington	UWSC10068	93.865	Child Health and Human Development Extramural Research	27,432	-
Health and Human Services, Department of	Pass-Through	Washington University	WU-14-232	93.865	Child Health and Human Development Extramural Research	7,383	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU16017-A2	93.865	Child Health and Human Development Extramural Research	(91)	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17085	93.865	Child Health and Human Development Extramural Research	25,816	-
						\$ 36,295,066	\$ 3,424,087
Health and Human Services, Department of	Direct		1 F30 AG050398-01A1	93.866	Aging Research	\$ 7,327	\$ -
Health and Human Services, Department of	Direct		1 F31 AG057205-01A1	93.866	Aging Research	27,702	-
Health and Human Services, Department of	Direct		1 K08 AG056591-01	93.866	Aging Research	119,251	-
Health and Human Services, Department of	Direct		1 K99 AG056599-01	93.866	Aging Research	102,679	=
Health and Human Services, Department of	Direct		1 R01 AG055406-01A1	93.866	Aging Research	176,239	30,310
Health and Human Services, Department of	Direct		1 R01 AG056407-01A1	93.866	Aging Research	33,490	-
Health and Human Services, Department of	Direct		1 R01 AG057701-01	93.866	Aging Research	7,453	-
Health and Human Services, Department of	Direct		1 R01 AG058599-01	93.866	Aging Research	8,898	-
Health and Human Services, Department of	Direct		1 R03 AG048806-02	93.866	Aging Research	(107)	-
Health and Human Services, Department of	Direct		1 R21 AG053561-01	93.866	Aging Research	48,570	-
Health and Human Services, Department of	Direct		1 R21 AG054818-01A1	93.866	Aging Research	97,956	-
Health and Human Services, Department of	Direct		1 R21 AG056912-01	93.866	Aging Research	43,047	-
Health and Human Services, Department of	Direct		1 R56 AG043402-01A1	93.866	Aging Research	73,062	-
Health and Human Services, Department of	Direct		1 R56 AG048937-01A1	93.866	Aging Research	8,697	12,026
Health and Human Services, Department of	Direct		1 RF0 AG057540-01	93.866	Aging Research	190,972	-
Health and Human Services, Department of	Direct		1 RF1 AG051710-01	93.866	Aging Research	418,137	239,637
Health and Human Services, Department of	Direct		1 RF1 AG057928-01	93.866	Aging Research	340,024	-
Health and Human Services, Department of	Direct		1 U01 AG058499-01	93.866	Aging Research	164,739	19,240
Health and Human Services, Department of	Direct		2 U01 AG009740-29	93.866	Aging Research	12,309,582	263,738
Health and Human Services, Department of	Direct		4 P01 AG029409-10	93.866	Aging Research	1,543,452	770,589
Health and Human Services, Department of	Direct		4 P30 AG004590-32	93.866	Aging Research	28,359	-
Health and Human Services, Department of	Direct		4 P30 AG015281-20	93.866	Aging Research	610,925	337,614
Health and Human Services, Department of	Direct		4 R01 AG043401-04	93.866	Aging Research	35,438	348
Health and Human Services, Department of	Direct		5 F32 AG052320-03	93.866	Aging Research	66,611	-
Health and Human Services, Department of	Direct		5 K01 AG050706-03	93.866	Aging Research	112,830	_
Health and Human Services, Department of	Direct		5 K01 AG054615-02	93.866	Aging Research	118,485	_
Health and Human Services, Department of	Direct		5 K01 AG056557-02	93.866	Aging Research	99,132	_
Health and Human Services, Department of	Direct		5 K07 AG050096-04	93.866	Aging Research	103,769	_
Health and Human Services, Department of	Direct		5 K08 AG047252-03	93.866	Aging Research	108,001	_
Health and Human Services, Department of	Direct		5 K08 AG048321-04	93.866	Aging Research	203,234	_
Health and Human Services, Department of	Direct		5 K08 AG049684-03	93.866	Aging Research	166,174	_
Health and Human Services, Department of	Direct		5 K23 AG056638-02	93.866	Aging Research	107,997	_
Health and Human Services, Department of	Direct		5 K24 AG050685-04	93.866	Aging Research	139,605	_
Health and Human Services, Department of	Direct		5 K99 AG046370-02	93.866	Aging Research	(117)	_
Health and Human Services, Department of	Direct		5 P01 AG026571-08	93.866	Aging Research	(943)	_
Health and Human Services, Department of	Direct		5 P01 AG050371-08 5 P01 AG051442-03	93.866	Aging Research	2,020,996	1,460,576
Health and Human Services, Department of	Direct		5 P30 AG012846-24	93.866	Aging Research	1,124,897	84,089
Health and Human Services, Department of	Direct		5 P30 AG024824-14	93.866	Aging Research	796,522	10,467
Health and Human Services, Department of	Direct		5 P30 AG053760-02	93.866	Aging Research	1,785,986	105,792
Health and Human Services, Department of	Direct		5 R00 AG045200-05	93.866	Aging Research	282,278	103,792
	Direct		5 R00 AG043200-03 5 R00 AG047963-05	93.866		366,644	314,791
Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 AG010026-25	93.866	Aging Research Aging Research	95,645	314,791
	Direct		5 R01 AG010020-23 5 R01 AG018418-12	93.866		(1,908)	-
Health and Human Services, Department of	Direct		5 R01 AG018418-12 5 R01 AG028516-10	93.866	Aging Research	388,789	-
Health and Human Services, Department of			5 R01 AG030593-10	93.866	Aging Research	284,606	-
Health and Human Services, Department of	Direct				Aging Research	-	-
Health and Human Services, Department of	Direct		5 R01 AG040138-05	93.866	Aging Research	(5,065)	-
Health and Human Services, Department of	Direct		5 R01 AG040213-08	93.866	Aging Research	2,501,564	-
Health and Human Services, Department of	Direct		5 R01 AG040635-04	93.866	Aging Research	187,886	- (2)
Health and Human Services, Department of	Direct		5 R01 AG040787-05	93.866	Aging Research	(127)	(2)
Health and Human Services, Department of	Direct		5 R01 AG041780-05	93.866	Aging Research	211,607	=
Health and Human Services, Department of	Direct		5 R01 AG045423-05	93.866	Aging Research	429,631	- 26.505
Health and Human Services, Department of	Direct		5 R01 AG047167-03	93.866	Aging Research	225,464	26,582
Health and Human Services, Department of	Direct		5 R01 AG047178-04	93.866	Aging Research	501,191	11,527
Health and Human Services, Department of	Direct		5 R01 AG047203-03	93.866	Aging Research	545,659	102,436
Health and Human Services, Department of	Direct		5 R01 AG047932-03	93.866	Aging Research	474,166	42,333
Health and Human Services, Department of	Direct		5 R01 AG048072-05	93.866	Aging Research	405,602	<u>-</u>
Health and Human Services, Department of	Direct		5 R01 AG04871-04	93.866	Aging Research	627,125	59,268
Health and Human Services, Department of	Direct		5 R01 AG049624-05	93.866	Aging Research	662,332	=
Health and Human Services, Department of	Direct		5 R01 AG049634-03	93.866	Aging Research	261,234	78,486
Health and Human Services, Department of	Direct		5 R01 AG049716-03	93.866	Aging Research	296,452	91,070
Health and Human Services, Department of	Direct		5 R01 AG050509-04	93.866	Aging Research	644,767	-
Health and Human Services, Department of	Direct		5 R01 AG050523-03	93.866	Aging Research	501,202	-
_	Direct		5 R01 AG050676-03	93.866	Aging Research	604,917	355,587
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Health and Human Services, Department of Health and Human Services, Department of	Direct		5 R01 AG051142-04	93.866	Aging Research	445,506	-
-	Direct Direct		5 R01 AG051142-04 5 R01 AG051439-04	93.866 93.866	Aging Research Aging Research	445,506 619,614	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number		CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Direct		5 R01 AG051827-03	93.866	Aging Research		681,926 247,206	65,887
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R01 AG051849-03 5 R01 AG052934-03	93.866 93.866	Aging Research Aging Research		347,206 452,149	-
Health and Human Services, Department of	Direct		5 R01 AG052934-03 5 R01 AG054371-03	93.866	Aging Research		1,026,392	- -
Health and Human Services, Department of	Direct		5 R01 AG054571-05 5 R01 AG054835-02	93.866	Aging Research		300,504	- -
Health and Human Services, Department of	Direct		5 R01AG045136-05	93.866	Aging Research		257,171	_
Health and Human Services, Department of	Direct		5 R01AG048934-03	93.866	Aging Research		350,270	_
Health and Human Services, Department of	Direct		5 R03 AG047860-02	93.866	Aging Research		87,025	-
Health and Human Services, Department of	Direct		5 R21 AG043739-03	93.866	Aging Research		51,319	89,018
Health and Human Services, Department of	Direct		5 R21 AG045460-02	93.866	Aging Research		65,943	-
Health and Human Services, Department of	Direct		5 R21 AG047931-02	93.866	Aging Research		101,850	-
Health and Human Services, Department of	Direct		5 R21 AG048500-02	93.866	Aging Research		51,086	205
Health and Human Services, Department of	Direct		5 R21 AG050903-02	93.866	Aging Research		(24,110)	-
Health and Human Services, Department of	Direct		5 R21 AG052709-02	93.866	Aging Research		163,067	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		5 R21 AG053186-02 5 R21 AG055090-02	93.866 93.866	Aging Research		167,323 236,745	- 47,979
Health and Human Services, Department of	Direct		5 R21 AG055379-02	93.866	Aging Research Aging Research		242,535	47,979
Health and Human Services, Department of	Direct		5 R21 AG0555/9-02 5 R21AG055863-02	93.866	Aging Research		116,397	-
Health and Human Services, Department of	Direct		5 R24 AG045061-05	93.866	Aging Research		384,376	219,802
Health and Human Services, Department of	Direct		5 R25 AG053227-03	93.866	Aging Research		150,403	-
Health and Human Services, Department of	Direct		5 U01 AG009740-28S1	93.866	Aging Research		19,050,254	6,553,519
Health and Human Services, Department of	Direct		5 U01 AG012495-24	93.866	Aging Research		1,362,864	130,030
Health and Human Services, Department of	Direct		5 U01 AG017719-17	93.866	Aging Research		1,127,327	-
Health and Human Services, Department of	Direct		5 U01 AG022303-15	93.866	Aging Research		1,732,605	-
Health and Human Services, Department of	Direct		5 U01NR004061-23	93.866	Aging Research		562,707	-
Health and Human Services, Department of	Direct		5 U24 AG056918-02	93.866	Aging Research		681,995	-
Health and Human Services, Department of	Direct		6 R01 AG039434-06	93.866	Aging Research		382,419	-
Health and Human Services, Department of	Direct		7 R01 AG028082-10	93.866	Aging Research		86,487	-
Health and Human Services, Department of	Direct		T32 AG000114	93.866	Aging Research		467,601	-
Health and Human Services, Department of	Direct		T32 AG000221	93.866	Aging Research		(36,152)	-
Health and Human Services, Department of	Direct		T32 AG000221	93.866	Aging Research		727,634	-
Health and Human Services, Department of	Direct	5	T32 AG027708	93.866	Aging Research		221,876	-
Health and Human Services, Department of	Pass-Through	Banner Health	0435-02-42376	93.866	Aging Research		32,933	-
Health and Human Services, Department of	Pass-Through	Banner Health	No. 0435-02-61926	93.866	Aging Research		54,950 267,246	=
Health and Human Services, Department of	Pass-Through	Brigham and Women's Hospital	111014 113049	93.866	Aging Research		267,246	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Brigham and Women's Hospital Brigham and Women's Hospital	115359	93.866 93.866	Aging Research Aging Research		199,282 4,125	-
Health and Human Services, Department of	Pass-Through	California Pacific Medical Center	2803227-S142	93.866	Aging Research		(185)	<u>-</u>
Health and Human Services, Department of	Pass-Through	Columbia University	1 (GG007688)	93.866	Aging Research		(2,534)	_
Health and Human Services, Department of	Pass-Through	Columbia University	1(GG012967-01)	93.866	Aging Research		53,589	_
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1012 - Core B	93.866	Aging Research		12,375	_
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1013 - Project 1	93.866	Aging Research		12,375	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R1014 - Project 2	93.866	Aging Research		4,125	-
Health and Human Services, Department of	Pass-Through	Dartmouth College	R143	93.866	Aging Research		87,752	-
Health and Human Services, Department of	Pass-Through	Indiana University	IN4683234UM	93.866	Aging Research		38,465	-
Health and Human Services, Department of	Pass-Through	Intelligent Prosthetic Systems	Roundtable Resrch Agmnt	93.866	Aging Research		(51,927)	-
Health and Human Services, Department of	Pass-Through	InvivoSciences Inc.	Research Collaboration Agreeme	93.866	Aging Research		31,537	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2002394114	93.866	Aging Research		101,266	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2003150570	93.866	Aging Research		22,465	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	2003318486	93.866	Aging Research		69,337	-
Health and Human Services, Department of	Pass-Through	Johns Hopkins University	Agreement	93.866	Aging Research		484	-
Health and Human Services, Department of	Pass-Through	Mayo Clinic	1 P01 AG041122-01	93.866	Aging Research		(658)	-
Health and Human Services, Department of	Pass-Through	Mayo Clinic	THE-216968	93.866	Aging Research		194,695	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	Michigan State University National Bureau of Economic Research	RC106375A 33-4157-UMich	93.866 93.866	Aging Research		55,770 271,075	-
Health and Human Services, Department of	Pass-Through Pass-Through	New York University School of Medicine	17-A1-00-006174-01 Proj #10823	93.866	Aging Research Aging Research		55,171	-
Health and Human Services, Department of	Pass-Through	Northern California Institute for Research & Education, Inc. (NCIRE)	WEI2015-08	93.866	Aging Research		167,615	_
Health and Human Services, Department of	Pass-Through	Northwestern University	60040682 UM	93.866	Aging Research		25,920	_
Health and Human Services, Department of	Pass-Through	Northwestern University	60048330 UM	93.866	Aging Research		14,381	_
Health and Human Services, Department of	Pass-Through	Northwestern University	60048332 UM	93.866	Aging Research		9,926	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1005150 UMI	93.866	Aging Research		12,868	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1008469 UMI	93.866	Aging Research		(11,133)	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1008640_UMI	93.866	Aging Research		121,320	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1010251_UMI	93.866	Aging Research		132,387	-
Health and Human Services, Department of	Pass-Through	Oregon Health and Science University	1011170_UMI	93.866	Aging Research		70,050	-
Health and Human Services, Department of	Pass-Through	President and Fellows of Harvard College	150173.5080550.0024	93.866	Aging Research		33,896	-
Health and Human Services, Department of	Pass-Through	RAND Corporation	9920170017	93.866	Aging Research		120,495	-
Health and Human Services, Department of	Pass-Through	Southern Illinois University Medical School	520395	93.866	Aging Research		5,919	-
Health and Human Services, Department of	Pass-Through	Texas A & M University	M1403198	93.866	Aging Research		11,842	-
Health and Human Services, Department of	Pass-Through	Tufts Medical Center	5012748-SERV	93.866	Aging Research		(720)	-
Health and Human Services, Department of	Pass-Through	University of California - Irvine	2015-3301	93.866	Aging Research		168,050	-
Health and Human Services, Department of	Pass-Through	University of California-Santa Cruz	A00-0516-S003-S0184287	93.866	Aging Research		1,424	548
Health and Human Services, Department of	Pass-Through	University of Florida, The	UFDSP00011879	93.866	Aging Research		24,688	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	University of Iowa University of Minnesota	1001311943 H004986802	93.866 93.866	Aging Research		(172) 166,497	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	University of New Mexico	045446-871E	93.866	Aging Research Aging Research		148,601	-
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Health and Human Services, Department of	Pass-Through	University of North Carolina at Chapel Hill	5050166	93.866	Aging Research		14,692	_

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Sealth and Human Services, Department of lealth and Human Services, Departme	Health and Human Services, Department of	Pass-Through	Columbia University	1 (GG008092-01)	93.867	Vision Research	21,628	-
Relik and Human Services, Department of leath and Human Services, Department of least and Human Services, Department of leas	Health and Human Services, Department of	Pass-Through	Massachusetts Eye & Ear Infirmary	2300142-07 Subcontracts	93.867	Vision Research	24,195	-
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Health and Human Services, Department of Health Programs to Prevent the Spread of HIV and Other Health and Human Services, Department of Health Programs to Prevent the Spread of HIV and Other 5 F30 CA221011-02 93.938 Hiv Demonstration, Research, Public and Professional Health and Human Services, Department of Health Problems Figure 1: 10 F30 CA221011-02 1 Health Programs to Prevent the Spread of HIV and Other 1 Health Programs to Prevent the Spread of HIV and Other 1 Health Programs to Prevent the Spread of HIV and Other 1 10 F30 CA221011-02 1 Health Programs to Prevent the Spread of HIV and Other 1 10 F30 CA221011-02 1 10 F30 CA221011-02 1 Health and Human Services, Department of HIV Demonstration, Research, Public and Professional 1 Health and Human Services, Department of Pass-Through Emory University 1 T727372 1 Health Programs to Prevent the Spread of HIV and Other 1 Health Programs to Prevent the Spread of HIV and Other 1 Square 1 Health Programs to Prevent the Spread of HIV and Other 1 Health Programs to Prevent the Spread of HIV and Other 1 Square 1 Health Problems 1 Health Problems 1 Health Programs to Prevent the Spread of HIV and Other 1 Health Problems 1 H	nealin and Human Services, Department of	Pass-Through	iviicnigan, State of, Health and Human Services, Department of	E201/1181-002	93.889		\$ 36,451	\$ -
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Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expendito	ures P	Pass-Through
					Assistance Programs for Chronic Disease Prevention and	\$ 34	11,105 \$	
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172515-001	93.945	Control	\$	(33) \$	- 01 202 06
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		4 D43 TW009310-05 4 D43 TW009315-05	93.989 93.989	International Research and Research Training International Research and Research Training		91,613 \$ 20,159	91,292.00 16,686
Health and Human Services, Department of	Direct		4 D43 TW009313-03 4 D43 TW009353-05	93.989	International Research and Research Training		41,260	84,564
Health and Human Services, Department of	Direct		5 D43 TW009883-05	93.989	International Research and Research Training		44,938	59,351
Health and Human Services, Department of	Direct		5 K02 TW009483-06	93.989	International Research and Research Training		16,923	-
Health and Human Services, Department of	Direct	Million Control in	5 U2 RTW010110-03	93.989	International Research and Research Training		26,018	2,576
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan State University Michigan State University	RC103305A RC108046UM	93.989 93.989	International Research and Research Training International Research and Research Training		10,256 20,174	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC9899	93.989	International Research and Research Training		25,971	_
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC9905	93.989	International Research and Research Training		21,780	-
Health and Human Services, Department of	Pass-Through	University of Washington	UWSC9906	93.989	International Research and Research Training		32,688	- 254.466
Health and Human Services, Department of	Direct		14IPA1405517	93.RD			51,780 \$ 20,154 \$	254,469
Health and Human Services, Department of	Direct		16IPA1604636 Mod2	93.RD			29,766	-
Health and Human Services, Department of	Direct		16IPA1605200	93.RD			767	-
Health and Human Services, Department of	Direct		16IPA1609409	93.RD			3,025	-
Health and Human Services, Department of	Direct		200-2010-33976	93.RD			26,489	-
Health and Human Services, Department of	Direct		200-2013-56856 200-2017-95888	93.RD			14,874	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Direct		200-2017-93888 2016-07-HP-MOD/EXT	93.RD 93.RD			57,837 21,290	-
Health and Human Services, Department of	Direct		2010-07-HP-MOD/EX1 211-2014-58744	93.RD 93.RD			08,897	66,910
Health and Human Services, Department of	Direct		HHSF223201510146C	93.RD			44,973	-
Health and Human Services, Department of	Direct		HHSF223201510157C	93.RD			87,307	385,711
Health and Human Services, Department of	Direct		HHSF223201510170C	93.RD		29	98,496	-
Health and Human Services, Department of	Direct		HHSN263201600572A	93.RD			4,532	-
Health and Human Services, Department of	Direct		HHSN268200900016C	93.RD		24	6,517	-
Health and Human Services, Department of	Direct Direct		HHSN268201100026C HHSN268201600006I	93.RD 93.RD			95,741 08,311	43,087
Health and Human Services, Department of Health and Human Services, Department of	Direct		HHSN26820170000001 HHSN268201700004C	93.RD 93.RD			75,535	-
Health and Human Services, Department of	Direct		HHSN268201800002I	93.RD			87,423	_
Health and Human Services, Department of	Direct		HHSN271201400033C	93.RD			67,762	-
Health and Human Services, Department of	Direct		HHSN272201600049C	93.RD			28,799	-
Health and Human Services, Department of	Direct		HHSN273201600123P	93.RD			691	-
Health and Human Services, Department of	Direct		HHSN276201400001C	93.RD		2,53	37,729	720,287
Health and Human Services, Department of	Direct		HHSP233201600166A	93.RD		,	54	-
Health and Human Services, Department of Health and Human Services, Department of	Direct Pass-Through	Abt Associates, Inc.	IPA Chen, Lena 49104	93.RD 93.RD			22,300 29,651	-
Health and Human Services, Department of	Pass-Through	Abt Associates, Inc.	41782 / ISIS-UMI-14981	93.RD		•	5,499	_ _
Health and Human Services, Department of	Pass-Through	Abt Associates, Inc.	44098 / AG-3198-C-14-0017	93.RD			8,058	_
Health and Human Services, Department of	Pass-Through	Alaska, State of	0617-130	93.RD		20	02,839	-
Health and Human Services, Department of	Pass-Through	Albany College of Pharmacy	2016-728-1	93.RD			05,021	25,544
Health and Human Services, Department of	Pass-Through	Altarum Institute	Agreement	93.RD			21,033)	-
Health and Human Services, Department of	Pass-Through	American Academy of Pediatrics American Academy of Pediatrics	6670-99957-753102 6670-99957-753104	93.RD 93.RD			(19)	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	American Indian Health and Family Services of SE Michigan, Inc (AIHFS)	Research Agreement	93.RD 93.RD			2,363 35,254	-
Health and Human Services, Department of	Pass-Through	Applied StemCell, Inc (ASC)	Agreement	93.RD			1,631	- -
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	Appendix O to Project Master A	93.RD			12,792	-
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	HHSM-500_T0003	93.RD		68	85,979	-
Health and Human Services, Department of	Pass-Through	Arbor Research Collaborative For Health	HHSM-500-2014-0029ITask HHSM-5	93.RD			1,114	-
Health and Human Services, Department of	Pass-Through	ArchieMD, Inc.	Agreement	93.RD			56,906	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	ATGC, Inc Biocrede, Inc	Subcontract Research Agreement	93.RD 93.RD		Ģ	92,995 7,263	-
Health and Human Services, Department of	Pass-Through	Blaze Medical Devices, LLC	Agreement	93.RD 93.RD		(13,617)	-
Health and Human Services, Department of	Pass-Through	BlueWillow Biologics, Inc.	17030-276 Study A NBRA	93.RD 93.RD			25,496	- -
Health and Human Services, Department of	Pass-Through	BlueWillow Biologics, Inc.	HHSN272201300028C	93.RD			38,275	-
Health and Human Services, Department of	Pass-Through	BlueWillow Biologics, Inc.	Roundtable Research	93.RD			26,539	-
Health and Human Services, Department of	Pass-Through	BlueWillow Biologics, Inc.	Roundtable Research Agreemen	93.RD			36,885	-
Health and Human Services, Department of	Pass-Through	Catholic Social Services	Agreement	93.RD			36,266	-
Health and Human Services, Department of	Pass-Through Pass-Through	Chaperone Therapeutics, Inc Cleveland Clinic Foundation (CCF)	Roundtable Research Agreement 953-SUB	93.RD 93.RD			70,144 7,580	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through	COPD Foundation, Inc	FDP CR Sub agreement	93.RD 93.RD		,	7,380 29,332	-
Health and Human Services, Department of	Pass-Through	Duke University	2035949	93.RD		•	4,050	- -
Health and Human Services, Department of	Pass-Through	Duke University	2037579	93.RD		8	89,756	=
Health and Human Services, Department of	Pass-Through	Duke University	203-8171	93.RD			18,196	-
Health and Human Services, Department of	Pass-Through	Duke University	203-8327	93.RD			10,856	-
Health and Human Services, Department of	Pass-Through	Echelon Biosciences, Inc (EBI)	13-PAF05069	93.RD		-	16,406	-
Health and Human Services, Department of	Pass-Through	Exo Dynamics, LLC	Roundtable Research Agreement	93.RD		11	3,403	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Flint, City of Harvard Pilgrim Health Care	Research Agreement HHSF223201400030I	93.RD 93.RD			03,900 42,332	_
Health and Human Services, Department of	Pass-Through	Health Research and Educational Trust	80772	93.RD 93.RD			42,332 78,683	5,314
Health and Human Services, Department of	Pass-Through	Health Research and Educational Trust	80776	93.RD			23,572	-
Health and Human Services, Department of	Pass-Through	Health Research and Educational Trust	87707	93.RD			49,900	-
Health and Human Services, Department of	Pass-Through	Invenio Imaging, Inc.	Research Agreement	93.RD			99,270	-
Health and Human Services, Department of	Pass-Through	Joslin Diabetes Center	19-880-10	93.RD		•	79,403	-
Health and Human Services, Department of	Pass-Through	Leidos Biomedical Research, Inc.	15X118	93.RD			47,295	

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
Health and Human Services, Department of	Pass-Through	Lewin Group	01.05645.010	93.RD		1,152,525	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Medical College of Wisconsin Mekanistic Therapeutics LLC	PO1764520 HHSN26100006 STTR Subcontract Research Agre	93.RD 93.RD		107,388 82,700	-
Health and Human Services, Department of	Pass-Through	Michigan Critical Care Consultants, Inc.	Appendix H to Master Agreement	93.RD 93.RD		43,438	- -
Health and Human Services, Department of	Pass-Through	Michigan Critical Care Consultants, Inc.	SBIR I - Small Business Innova	93.RD		185,420	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Agreement	93.RD		309,368	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Agreement	93.RD		163,176	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Agreement	93.RD		150,340	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Agreement	93.RD		119,009	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan Primary Care Association Michigan Primary Care Association	Agreement Agreement	93.RD 93.RD		142,851 471,634	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association Michigan Primary Care Association	Agreement	93.RD 93.RD		117,721	- -
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Agreement	93.RD		154,735	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Agreement	93.RD		105,102	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Check	93.RD		659	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Grant Agreement	93.RD		58,857	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	Grant Agreement LHS	93.RD		35,434	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan Primary Care Association Michigan Primary Care Association	RAHS Beecher HS RAHS Lincoln MS	93.RD 93.RD		29,204 26,940	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association Michigan Primary Care Association	RAHS Scarlett MS	93.RD 93.RD		51,841	-
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association Michigan Primary Care Association	RAHS Ypsilanti HS	93.RD		48,226	- -
Health and Human Services, Department of	Pass-Through	Michigan Primary Care Association	RAHS Ypsilanti MS	93.RD		49,770	-
Health and Human Services, Department of	Pass-Through	Michigan Public Health Institute	20180228-00	93.RD		16,526	-
Health and Human Services, Department of	Pass-Through	Michigan Public Health Institute	G-30327-115-504200	93.RD		58,549	-
Health and Human Services, Department of	Pass-Through	Michigan State University	RC106388E	93.RD		5,642	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20170293-00	93.RD		6,498	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172789-00	93.RD		155,394	16,327
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Michigan, State of, Health and Human Services, Department of Michigan, State of, Health and Human Services, Department of	E20172802-001 E20172821-001	93.RD 93.RD		89,032 43,400	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172821-001 E20172856-00	93.RD 93.RD		77,728	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20173008-00	93.RD		20,789	- -
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180568-001	93.RD		368,451	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180569-001	93.RD		14,817	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180569-001	93.RD		134,648	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180672-001	93.RD		259,840	-
Health and Human Services, Department of	Pass-Through	Minneapolis Medical Research Foundation (MMRF)	HHSH250201500009C	93.RD		43,747	-
Health and Human Services, Department of	Pass-Through	New England Research Institute	Procurement Services Agreement	93.RD		92,258	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	New England Research Institute New England Research Institute	PROCUREMENT SERVICES AGREEME PROCUREMENT SERVICES AGREEME	93.RD 93.RD		82,139 51,474	-
Health and Human Services, Department of	Pass-Through	New England Research Institute New England Research Institute	Procurement Services Agreement	93.RD 93.RD		20,394	- -
Health and Human Services, Department of	Pass-Through	New York, State of	C020206/Amd 1 Mod 2	93.RD		105,030	_
Health and Human Services, Department of	Pass-Through	Northeastern University	500559-78051	93.RD		215,688	-
Health and Human Services, Department of	Pass-Through	Northwell Health	500678 UMICH	93.RD		24,673	-
Health and Human Services, Department of	Pass-Through	Northwestern University	SP0033779 60044358 UM	93.RD		7,344	-
Health and Human Services, Department of	Pass-Through	NOTA Laboratories LLC	Award Letter	93.RD		5,471	-
Health and Human Services, Department of	Pass-Through	NOTA Laboratories LLC	Roundtable Research Agmt	93.RD		17,084	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Oak Ridge Institute for Science and Education Oak Ridge National Laboratory	Award Letter Dated 8/10/16 4000146828	93.RD 93.RD		2,889 (535)	-
Health and Human Services, Department of	Pass-Through	Opsidio, Inc.	Research Agreement	93.RD 93.RD		54,946	_
Health and Human Services, Department of	Pass-Through	PreDxion Bio, Inc.	Research Agreement	93.RD		39,303	_
Health and Human Services, Department of	Pass-Through	Prentke Romich Company	STTR research agreement	93.RD		35,286	-
Health and Human Services, Department of	Pass-Through	Research Foundation of State University of New York	18-25	93.RD		44,462	-
Health and Human Services, Department of	Pass-Through	Research Triangle Institute (RTI)	21-312-0214643-65091L	93.RD		18,573	-
Health and Human Services, Department of	Pass-Through	Scripps Research Institute, The	5-27048	93.RD		216,021	-
Health and Human Services, Department of	Pass-Through	Social & Scientific Systems, Inc.	PHR-SSS-S-16-005084	93.RD		14,093	-
Health and Human Services, Department of	Pass-Through	Social & Scientific Systems, Inc.	PHR-SSS-S-17-005257	93.RD		29,315	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Sonetics Ultrasound, Inc. St. Jude Children's Research Hospital	1U01EB020587-01 112092030-7698282	93.RD 93.RD		39,006 289,396	142,502
Health and Human Services, Department of	Pass-Through	St. Jude Children's Research Hospital	112103011-7790714	93.RD 93.RD		272,569	142,302
Health and Human Services, Department of	Pass-Through	St. Jude Children's Research Hospital	112104010-7617297	93.RD		100,246	55,737
Health and Human Services, Department of	Pass-Through	St. Jude Children's Research Hospital	112104020-7793820	93.RD		85,192	55,854
Health and Human Services, Department of	Pass-Through	State University of New York at Buffalo	R1097484	93.RD		9,969	-
Health and Human Services, Department of	Pass-Through	Tensive Controls, Inc.	Research Subaward	93.RD		248,391	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	00001338	93.RD		(10,165)	-
Health and Human Services, Department of	Pass-Through	The University of Texas MD Anderson Cancer Center	00001338	93.RD		12,363	-
Health and Human Services, Department of	Pass-Through	Therapeutics System Research Lab, Inc. (TSRL, Inc.)	20161107 5015500 SERV	93.RD		186,904	-
Health and Human Services, Department of Health and Human Services, Department of	Pass-Through Pass-Through	Tufts Medical Center University of Alabama at Birmingham (UAB)	5015500-SERV 000383981-002	93.RD 93.RD		5,272 (21,953)	-
Health and Human Services, Department of	Pass-Through	University of California - San Francisco	PO No. B000966067	93.RD 93.RD		5,950	-
Health and Human Services, Department of	Pass-Through	University of Ghana School of Medicine and Dentistry	9U54DK116913-06	93.RD 93.RD		33,001	- -
Health and Human Services, Department of	Pass-Through	University of Illinois at Chicago	16353	93.RD		592	-
Health and Human Services, Department of	Pass-Through	University of Illinois at Chicago	CC12001209	93.RD		144,848	-
Health and Human Services, Department of	Pass-Through	University of Minnesota	N006662505	93.RD		62	-
Health and Human Services, Department of	Pass-Through	University of Rochester	416942	93.RD		15,389	-
	T T 1	University of Rochester	417170	93.RD		20.950	
Health and Human Services, Department of	Pass-Through	· · · · · · · · · · · · · · · · · · ·				29,859	-
	Pass-Through Pass-Through Pass-Through	University of Southern California University of Southern California	78650327 102639403	93.RD 93.RD		29,839 29,154 115,675	-

Cluster Title/Federal Grantor/Program	Туре	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal l	Expenditures 26,750,718 \$	Pass-Through 1,517,273
			Total Health and Human Services, Departr	ment of		\$	615,374,940 \$	57,881,640
Corporation for National and Community Service	Direct		17REHMI001	94.026	National Service and Civic Engagement Research Competition	on \$	10,599 \$	-
			Total Corporation for National and Commi	unity Service		\$	10,599 \$	-
Social Security Administration	Direct		2 RRC08098401-10-00	96.007	Social Security Research and Demonstration	\$	1,986,281 \$	173,819
			Total Social Security Administration			\$	1,986,281 \$	173,819
Homeland Security, Department of	Pass-Through	Michigan, State of, State Police	PDMC-PL-05-MI-2015-002	97.047	Pre-Disaster Mitigation Homeland Security Research, Development, Testing,	\$	13,261 \$	-
					Evaluation, and Demonstration of Technologies Related to			
Homeland Security, Department of	Direct		18DNARI00023-01-00	97.077	Nuclear Threat Detection Homeland Security Research, Development, Testing,	\$	158,035 \$	-
					Evaluation, and Demonstration of Technologies Related to			
Homeland Security, Department of	Direct		2015-DN-077-097	97.077	Nuclear Threat Detection Homeland Security Research, Development, Testing,		217,303	-
					Evaluation, and Demonstration of Technologies Related to			
Homeland Security, Department of	Direct		2016-DN-077-ARI106	97.077	Nuclear Threat Detection Homeland Security Research, Development, Testing,		305,329	-
	D 77 1		DG152 G1	05.055	Evaluation, and Demonstration of Technologies Related to		210.416	
Homeland Security, Department of	Pass-Through	Georgia Technology Research Corporation	RG153-G1	97.077	Nuclear Threat Detection Homeland Security Research, Development, Testing,		218,416	-
I 1 10 - '- D 4 4 6	D TI 1	December 1 Control 11 in the	5427 UM HODIIG 7002	07.077	Evaluation, and Demonstration of Technologies Related to		264.020	
Homeland Security, Department of	Pass-Through	Pennsylvania State University	5427-UM-USDHS-7803	97.077	Nuclear Threat Detection	\$	264,929 1,164,012 \$	-
Iomeland Security, Department of	Direct	Advantinus Laba	D15PC00302 1048-UMI	97.RD		\$	416,320 \$	244,995.00
Iomeland Security, Department of Iomeland Security, Department of	Pass-Through Pass-Through	Adventium Labs National Strategic Research Institute	HSHQDC-13-C-B0036/001	97.RD 97.RD			24,631 (2,799)	-
Iomeland Security, Department of	Pass-Through	Radiation Monitoring Devices, Inc.	C16-20	97.RD			1,447	-
Iomeland Security, Department of	Pass-Through	Radiation Monitoring Devices, Inc.	HSHQDN16-C-00024/RMD Contract	97.RD		,	135,832	-
			Total Homeland Security, Department of			<u>\$</u> \$	575,431 \$ 1,752,704 \$	244,995 244,995
	D .			00.001	HIGHTO F. I. A. I. A. B. D. O.	Φ.		
United States Agency for International Development United States Agency for International Development	Direct Direct		AID-641-14-00008 AID-OAA-A-15-00075	98.001 98.001	USAID Foreign Assistance for Programs Overseas USAID Foreign Assistance for Programs Overseas	\$	517,750 \$ 390,535	219,558.00 262,176
Juited States Agency for International Development	Pass-Through	Duke University	16-WM-1004	98.001	USAID Foreign Assistance for Programs Overseas		2,946	202,170
United States Agency for International Development	Pass-Through	Jhpiego (Affiliated with Johns Hopkins University)	17-SBA-204	98.001	USAID Foreign Assistance for Programs Overseas		15,327	-
United States Agency for International Development	Pass-Through	University of California - Davis	201121454-28	98.001	USAID Foreign Assistance for Programs Overseas		16,765	-
United States Agency for International Development	Pass-Through	University of California - Davis	201121454-28	98.001	USAID Foreign Assistance for Programs Overseas	\$	537,957 1,481,280 \$	481,734
United States Agency for International Development	Pass-Through	Georgia Institute of Technology	RH089-S1	98.RD		\$	67,893 \$	-
United States Agency for International Development	Pass-Through	International Foundation for Electoral Systems (IFES)	S-17-093	98.RD			6,964	-
Jnited States Agency for International Development Jnited States Agency for International Development	Pass-Through Pass-Through	Oregon State University Research Triangle Institute (RTI)	RD011G-B 2-330-0212934-50928L	98.RD 98.RD			284,403 (676)	134,276
and state ingency for morning and accompanion	Tues Timough	Testinos Tranges Institute (Test)				\$	358,584 \$	134,276
			Total United States Agency for Internation	•		\$	1,839,864 \$	616,010
Consumer Financial Protection Bureau	Direct		TFSACFP15IPA0001 Total Consumer Financial Protection Burea	99.RD au		\$ \$	5,488 \$ 5,488 \$	-
Director of National Intelligence, Office of the	Direct		2016-16041300005	99.RD		\$	19,217 \$	-
Director of National Intelligence, Office of the	Direct		2017-17012600004/CLIN 0001	99.RD			1,043,090	-
Director of National Intelligence, Office of the Director of National Intelligence, Office of the	Direct Direct		2018-18020600001/CLIN 0001 2018-18032000001/CLIN 0001	99.RD 99.RD			190,757 12,141	-
Director of National Intelligence, Office of the	Pass-Through	Duke University	Subaward 313-0640	99.RD 99.RD			116,924	-
Director of National Intelligence, Office of the	Pass-Through	SRI International	Subcontract No. PO18259	99.RD			152,507	-
			Total Director of National Intelligence, Of	fice of the		\$	1,534,636 \$	-
President, Executive Office of the	Pass-Through	Washtenaw, County of	CR45854 Total President, Executive Office of the	99.RD		<u>\$</u> \$	52,891 \$ 52,891 \$	<u>-</u>
			,			•		02 227 442
			Total research and development cluster			3	923,982,106 \$	93,337,442
OTHER PROGRAMS Defense, Department of	Direct		W81XWH-14-1-0408	12.400	Military Construction, National Guard	\$	20,286 \$	_
Defense, Department of	Direct		W81XWH-15-1-0661	12.400	Military Construction, National Guard	•	299,400	107,239.00
·			Total Defense, Department of		·	\$	319,686 \$	107,239
National Endowment for the Humanities	Pass-Through	Michigan Humanities Council	HU029-16	45.129	Promotion of the Humanities Federal/State Partnership	\$	6,675 \$	-
			Total National Endowment for the Humani	ities		\$	6,675 \$	-
					Supporting Effective Instruction State Grants (formely			
ducation, Department of	Pass-Through	Michigan, State of, Education, Department of	160290-021	84.367	Improving Teacher Quality State Grants) Supporting Effective Instruction State Grants (formely	\$	94,392 \$	-
Education, Department of	Pass-Through	Michigan, State of, Education, Department of	170290-004	84.367	Improving Teacher Quality State Grants)		201,202	9,514
Education, Department of	Pass-Through	National Writing Project	00-MI03-SEED2016	84.367	Supporting Effective Instruction State Grants (formely Improving Teacher Quality State Grants)		1,764	-
-	3				- · · · · · · · · · · · · · · · · · · ·		•	

Cluster Title/Federal Grantor/Program	Type	Pass-Through Grantor	Award Identifier	CFDA Number	CFDA Program Title	Federal Expenditures	Pass-Through
			00.1004.0000000000000000000000000000000	0.4.0.5	Supporting Effective Instruction State Grants (formely		
Education, Department of	Pass-Through	National Writing Project	00-MI03-SEED2016-HNEval	84.367	Improving Teacher Quality State Grants)	4,443	-
Education, Department of	Does Through	National Writing Project	00-MI03-SEED2017-HNEval	84.367	Supporting Effective Instruction State Grants (formely Improving Teacher Quality State Grants)	13,397	
Education, Department of	rass-fillough	National Willing Project	00-WI03-SEED201/-HNEVal	04.307	Supporting Effective Instruction State Grants (formely	13,397	-
Education, Department of	Pass-Through	National Writing Project	00-MI03-SEED2017-ILI	84.367	Improving Teacher Quality State Grants)	15,617	_
			Total Education, Department of		<u> </u>	\$ 330,815 \$	9,514
	,						
Health and Human Services, Department of	2	Michigan, State of, Health and Human Services, Department of	E20171471-00	93.268	Immunization Cooperative Agreements	\$ 4,750 \$	
Health and Human Services, Department of	Pass-Through		05HP000104-01-00	93.600	Head Start	\$ 460,034 \$	-
Health and Human Services, Department of	Pass-Through		WSU17002/301226	93.600	Head Start	42,696	-
Health and Human Services, Department of	Pass-Through	Wayne State University	WSU17120	93.600	Head Start	\$ 53,551 \$ 556,281 \$	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	20171396	93.767	Children's Health Insurance Program	\$ 330,281 \$ \$ 4,981 \$	
Health and Human Services, Department of	Pass-Through		E20171396 E20171296-001	93.917	HIV Care Formula Grants	\$ (36,870) \$	
Health and Human Services, Department of	Pass-Through		E2017/1290-001 E20180243-002	93.917	HIV Care Formula Grants	37,208	-
Treatin and Truman Services, Department of	1 ass-1 in ough	Whenigan, State of, Health and Human Services, Department of	120100243-002	93.917	Til v Calc i Orinuta Grants	\$ 338 \$	-
					Grants to Provide Outpatient Early Intervention Services with	ψ 330 ψ	-
Health and Human Services, Department of	Direct		6 H76 HA00182-21	93.918	Respect to HIV Disease	\$ 287,733 \$	_
Trouter and Trainmin Sof vices, Department of	Bilect		011/0111100102 21	75.710	Grants to Provide Outpatient Early Intervention Services with	201,133 \$	•
Health and Human Services, Department of	Direct		6-H76HA00182-22-01	93.918	Respect to HIV Disease	287,627	_
210mm mm 11mmm 20171000, 2 opurumon 01	2		0 11/011100102 22 01	<i>y</i> 2. <i>y</i> 2. <i>y</i> 2. <i>y</i> 3. <i>y</i>		\$ 575,360 \$	· -
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172063-00	93.958	Block Grants for Community Mental Health Services	\$ 84,792 \$	
Health and Human Services, Department of		5 · · · · · · · · · · · · · · · · · · ·	E20180570-001	93.958	Block Grants for Community Mental Health Services	59,922	-
•	_				·	\$ 144,714 \$	-
Health and Human Services, Department of	Direct		5 R21 CA215968-02	93.959	Block Grants for Prevention and Treatment of Substance Abuse	\$ 193,225 \$	-
Health and Human Services, Department of	Pass-Through	Community Mental Health Partnership of Southeast Michigan	Agreement	93.959	Block Grants for Prevention and Treatment of Substance Abuse	42,929	-
Health and Human Services, Department of	Pass-Through	Community Mental Health Partnership of Southeast Michigan	CMHPSM Contract #2900	93.959	Block Grants for Prevention and Treatment of Substance Abuse	42,500	-
Health and Human Services, Department of	Pass-Through	Community Mental Health Partnership of Southeast Michigan	CMHPSM CONTRACT#2619	93.959	Block Grants for Prevention and Treatment of Substance Abuse	47,699	-
						\$ 326,353 \$	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20171453-00	93.994	Maternal and Child Health Services Block Grant to the States	\$ 5,543 \$	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20172058-00	93.994	Maternal and Child Health Services Block Grant to the States	5,372	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180450-00	93.994	Maternal and Child Health Services Block Grant to the States	11,459	-
Health and Human Services, Department of	Pass-Through	Michigan, State of, Health and Human Services, Department of	E20180500-00	93.994	Maternal and Child Health Services Block Grant to the States	17,964	-
						\$ 40,338 \$	-
			Total Health and Human Services, Dep	partment of	- -	\$ 1,653,115 \$	-
Corporation for National and Community Service	Pass-Through	Public Allies	14ESHMI0010004	94.006	AmeriCorps	\$ 92,486 \$	_
Corporation for National and Community Service	Pass-Through		15EDHWI0010008	94.006	AmeriCorps	47,801	, - -
Corporation for National and Community Service	Pass-Through		OP022-94.006-16-PADT	94.006	AmeriCorps	(32)	_
Corporation for National and Community Service	Pass-Through		OP022-94.006-17-PADT	94.006	AmeriCorps	411,588	_
Corporation for National and Community Service		Public Allies	OP022-94.006-18-PADT-SC	94.006	AmeriCorps	43,625	_
7	8		Total Corporation for National and Cor			\$ 595,468 \$	-
			Total other programs		<u>-</u>	\$ 2,905,759 \$	116,753
			Total federal expenditures		-	\$ 1,395,493,671 \$	93,488,262

1. Summary of Significant Accounting Policies

The accompanying Schedule of Expenditures of Federal Awards (the "SEFA") includes all federal grant transactions of the University of Michigan (the "University") recorded on the accrual basis of accounting. The information in the SEFA is presented in accordance with Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards ("Uniform Guidance"). As the SEFA presents only the federal award activity of the University, it is not intended to and does not present the financial position, changes in net assets and cash flows of the University.

Negative amounts presented in the SEFA represent adjustments, in the normal course of business, to expenditures reported in prior years. Complete CFDA numbers and pass-through numbers are provided on the SEFA when available.

2. Indirect Costs

The University applies its predetermined approved facilities and administrative rate when charging indirect costs to federal awards rather than the 10 percent de minimus cost rate as described in Section 200.414 of the Uniform Guidance. The indirect cost rates approved by the University's cognizant agency (the Department of Health and Human Services) for organized research, instruction and other sponsored activities through June 30, 2020 are as follows:

July 1, 2017 –	July 1, 2018 –
June 30, 2018	June 30, 2020
55%	56%
26%	26%
54%	54%
29%	29%
	June 30, 2018 55% 26% 54%

3. Federal Direct Loan Program

Under the William D. Ford Federal Direct Loan Program, students and parents borrow funds directly from the federal government; the University is responsible for verifying student eligibility, electronically transmitting the loan records to the federal processor and distributing the loan funds directly to the student account or parent borrower. During the year ended June 30, 2018, the University's students and parents received the following amount of new loans under this program:

	CFDA	
	<u>Number</u>	Loans Issued
Direct Student Loans:		
Undergraduate subsidized	84.268	\$ 52,762,044
Undergraduate unsubsidized	84.268	167,987,252
Graduate	84.268	19,452,268
Direct Parent Loans for Undergraduate Students	84.268	60,992,413
-		\$ 301,193,977

4. University-Administered Federal Loan Programs

The federal loan programs listed below are administered directly by the University, and balances and transactions related to these programs are included in the University's financial statements. The amount of loans outstanding at the beginning of the year, loans made during the year and the administrative cost allowance are included in the SEFA. The balance of loans outstanding at June 30, 2018 consists of:

	CFDA <u>Number</u>	Outstanding Balance at June 30, 2018
Department of Education, Federal Perkins Program	84.038	\$ 65,176,442
Department of Health and Human Services:		
Nursing Faculty Loan Program	93.264	3,726,685
Health Professions Loan Program – Medicine/Primary Care	93.342	1,608,709
Health Professions Loan Program – Pharmacy	93.342	1,057,744
Health Professions Loan Program – Dentistry	93.342	7,893,222
		10,559,675
Nursing Student Loan – Baccalaureate	93.364	1,484,101
Nursing Student Loan – Graduate	93.364	334,922
		1,819,023
Disadvantaged Student Loan Program – Medicine/Primary Care	93.925	4,274,004
Disadvantaged Student Loan Program – Pharmacy	93.925	181,307
Disadvantaged Student Loan Program – Dentistry	93.925	180,787
		4,636,098
Total federal loans outstanding		\$ 85,917,923



Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To The Regents of the University of Michigan:

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the consolidated financial statements of the University of Michigan (the "University"), which comprise the consolidated statement of net position as of June 30, 2018, and the related consolidated statements of revenues, expenses and changes in net position and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated October 18, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the University's internal control over financial reporting ("internal control") to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control. Accordingly, we do not express an opinion on the effectiveness of the University's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.



Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the University's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

October 18, 2018

recewaterkouseCoopers LLP



Report of Independent Auditors on Compliance with Requirements That Could Have a Direct and Material Effect on Each Major Program and on Internal Control Over Compliance in Accordance with the Uniform Guidance

To the Regents of the University of Michigan:

Report on Compliance for Each Major Federal Program

We have audited the University of Michigan's (the "University") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the University's major federal programs for the year ended June 30, 2018. The University's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations and the terms and conditions of its federal awards applicable to its federal programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for each of the University's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* ("Uniform Guidance"). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the University's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the University's compliance.



Opinion on Each Major Federal Program

In our opinion, the University complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2018.

Other Matters

The results of our auditing procedures disclosed instances of noncompliance, which are required to be reported in accordance with the Uniform Guidance and which are described in the accompanying schedule of findings and questioned costs as items 2018-001 and 2018-002. Our opinion on each major federal program is not modified with respect to these matters.

The University's response to the noncompliance findings identified in our audit is described in the accompanying management's corrective action plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

Report on Internal Control Over Compliance

Management of the University is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the University's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.



Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, we did identify a certain deficiency in internal control over compliance, as described in the accompanying schedule of findings and questioned costs as item 2018-002 that we consider to be a significant deficiency.

The University's response to the internal control over compliance finding identified in our audit is described in the accompanying management's corrective action plan. The University's response was not subjected to the auditing procedures applied in the audit of compliance and, accordingly, we express no opinion on the response.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

recewaterkouseCoopers LCP

March 27, 2019

Section I – Summary of Auditors' Results

None.

Financial Statements Type of auditor's report issued:	<u>Unmodified</u>	
Internal control over financial reporting:Material weakness(es) identified?	☐ Yes	⊠ No
• Significant deficiency(ies) identified not considered to be material weaknesses?	☐ Yes	None reported ■
 Noncompliance material to financial statements noted? 	Yes	⊠ No
Federal Awards Internal control over major programs: • Material weakness(es) identified?	Yes	⊠ No
• Significant deficiency(ies) identified not considered to be material weakness(es)?	⊠ Yes	☐ None reported
Type of auditor's report issued on compliance for major programs:	<u>Unmodified</u>	
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	⊠ Yes	☐ No
Identification of major programs: <u>CFDA Number(s)</u> Various Various 93.778	Research Student F	Federal Program or Cluster and Development Cluster inancial Assistance Cluster Medicaid Cluster
Dollar threshold used to distinguish between Type A and Type B programs:	<u>\$4,186,481</u>	
Auditee qualified as low-risk auditee?	Yes Yes	☐ No
Section II – Financial Statement Findings		

Section III – Federal Award Findings and Questioned Costs

Finding 2018-001 – Enrollment Reporting

Cluster: Student Financial Assistance

Grantor(s): Department of Education

Award(s): Federal Direct Student Loans, 84.268, Parent PLUS Loans, 84.268 and Federal Pell Grant, 84.063, academic year 2017-18

Condition: When testing enrollment status changes, (graduated, full time, half time, or withdrawn) four of 40 students tested at the Dearborn campus were not properly reported to the National Student Loan Data System ("NSLDS") within the appropriate window of time during the 2017-18 academic year. The statuses for these four students had not been reported when we selected them for testing; however, they have been subsequently updated and reported 81 days late.

Criteria: A student's enrollment status determines eligibility for in-school status, deferment and grace periods, as well as for the payment of interest subsidies. Enrollment reporting in a timely and accurate manner is critical for effective management of the programs. Changes to enrollment information must be reported within 30 days of knowledge of a change, unless a roster will be submitted within 60 days. These changes include reductions or increases in attendance levels, withdrawals, graduations, or approved leaves-of-absence. Institutions are responsible for timely reporting, whether they report directly or via a third-party servicer. (34 CFR 685.309(b) and 674.33(g))

Cause: The UM-Dearborn campus did not ensure timely reporting to the NSLDS of changes in enrollment status of certain students who officially graduated in the winter 2018 term. When the University submits enrollment records to the National Student Clearinghouse ("NSC"), the NSC's system records a "G" status for recent graduates and reports this change to the NSLDS and student loan servicing organizations. However, if the graduation information uploaded for a student does not match the NSC's existing records, the "G" status will not be applied, and the status change will not be communicated to the NSLDS or loan servicers.

The "G" status was not applied to the four exceptions identified during testing due to the following: two students dropped their secondary teaching certifications in the same semester in which they graduated, so the degree information the University submitted did not match the NSC's records, and two students graduated with both a Bachelor's degree and an undergraduate certificate of study, resulting in a mismatch with the NSC's records. The University was aware that this "G not applied" problem affected many students who graduated in the winter 2018 term, but failed to manually update affected students' status within the 60-day window, resulting in non-compliance.

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Effect: The effective administration of Title IV loans could be impacted when changes in students' status are not reported timely and accurately. The accuracy of enrollment information is important, as a student's enrollment status determines eligibility for in-school status, deferment, grace period, and repayments, as well as the government's payment of interest subsidies.

Questioned Costs: None noted.

Recommendation: The University should follow the NSC's directives for how to avoid the "G not applied" issue for future semesters by submitting a "Graduates Only" enrollment file, instead of relying on the NSC's DegreeVerify service to identify graduates within a file containing enrollment status changes for all students. The University should also implement a process to ensure that graduation records are properly received by the NSC and NSLDS, and that any errors are resolved timely. The Office of Financial Aid should coordinate with the Office of the Registrar to ensure that graduation records are properly processed by the NSC and NSLDS, and that any errors are resolved timely.

View of Responsible Officials: Refer to the Corrective Action Plan for management's view and corrective action plan for the finding described above.

Finding No. 2018-002 – Vendor Discounts (Significant Deficiency)

Cluster(s), Grantor(s), Award Name(s), Award Year(s), CDFA Number(s), Award Number(s): Applies to awards in various clusters, except Student Financial Assistance. All such awards are identified with the finding in the Data Collection Form.

Condition: The University has a Strategic Supplier Program (the "Program"), which includes attributes that management believes benefit participating vendors such as automated ordering and payment, online catalogs, real time invoicing and electronic billing, dedicated support from University procurement personnel and participation in marketing opportunities to University customers. The costs to the University to operate the Program have historically been offset by a Program fee paid by participating vendors, collected in the form of a discount applied to the charges on each invoice.

The Program fee was not considered a discount for purposes of the representations made in the University's Form DS-2 Disclosure Statement (the "DS-2") and has not been passed on to federal agencies and pass through entities in determining reimbursement for direct costs associated with sponsored activities. In 2018, the University reevaluated the historical treatment and concluded that the Program fee collected in the form of a discount should not be retained, but rather, treated as a discount.

From our sample of 60 direct costs tested in 2018, one selection related to equipment originally acquired in 2016 through the Program that was reclassified from university-owned equipment to federally-owned equipment within the same grant award in 2018, as the result of a data integrity review performed by the University. While this reclassification had no impact on direct costs charged to the award in 2018, we did note that the 2016 purchase of equipment included a two percent discount of \$60 that was retained by the University and not passed on to the related National Aeronautics and Space Administration Cyclone Global Navigation Satellite System award (NNL13AQ00C) in 2016.

In connection with its internal review, the University evaluated Program purchases made during 2018, noting that discounts of \$316,281 were retained by the University and not passed on to federal agencies and pass through entities, which resulted in the University being reimbursed for amounts in excess of the related paid invoices.

Criteria: Applicable credits refer to those receipts or reductions-of-expenditure-type transactions that offset or reduce expense items allocable to the federal award as direct or indirect costs. Examples of such transactions are: purchase discounts, rebates or allowances, recoveries or indemnities on losses, insurance refunds or rebates, and adjustment of overpayments or erroneous charges. To the extent that such credits accruing to or received by the non-federal entity relate to allowable costs, they must be credited to the federal award either as a cost reduction or cash refund, as appropriate. (2 CFR 200.406)

Cause: The University did not historically consider the Program fee to be a discount for purposes of determining direct cost reimbursement for federally sponsored activities. In 2018, the University reevaluated the historical treatment and concluded that the Program fee collected in the form of a discount should not be retained.

Effect: The discount was not passed on to federal agencies and pass through entities for the related grants that utilized the Program. As a result, the University was reimbursed for direct costs greater than the amount expended by the University to the vendor.

Questioned Costs: On February 28, 2019, the University disclosed to the Department of Health and Human Services ("DHHS"), its cognizant agency, that the amount of Program fees retained for purchases made on federally funded projects which were not passed on to federal agencies and pass through entities totaled \$316,281 for fiscal 2018. The agencies primarily impacted are DHHS (\$273,789); Department of Defense (\$16,209) and National Science Foundation (\$15,790). The remaining \$10,493 retained during 2018 impacted the following agencies: Agriculture, Department of; Commerce, Department of; Director of National Intelligence, Office of the; Education, Department of; Energy, Department of; Environmental Protection Agency; Homeland Security, Department of; Institute of Museum and Library Services; Interior, Department of the; Justice, Department of; Library of Congress; National Aeronautics and Space Administration; National Endowment for the Humanities; Nuclear Regulatory Commission; Peace Corps; Social Security Administration; State, Department of; Transportation, Department of; United States Agency for International Development; United States Postal Service; and Veterans Affairs, Department of.

Recommendation: We recommend the University work with DHHS and other agencies and organizations that passed funds through to the University to determine how best to resolve the questioned costs. In addition, we recommend the University implement its plan to apply Program discounts to the direct costs as listed on the vendor invoice for purposes of reimbursement for its federally sponsored activities.

View of Responsible Officials: Refer to the Corrective Action Plan for management's view and corrective action plan for the finding described above.

University of Michigan Summary Schedule of Prior Year Findings For the Year Ended June 30, 2018

Finding 2017-001 – Enrollment Reporting

Cluster: Student Financial Assistance

Grantor(s): Department of Education

Award(s): Federal Direct Student Loans, 84.268 and Federal Pell Grant, 84.063, academic year 2016-17

Summary: In a sample of 40 students selected for enrollment status changes testing on the Flint campus, it was identified that one of 40 students was not reported timely to NSLDS.

Status: As of November 2017, the enrollment status change for the one student identified during testing was submitted to and accepted by the NSC. The Office of Financial Aid and Registrar offices have streamlined processes and enhanced communication with stakeholders to help ensure timely submissions going forward.

Finding No. 2017-002 – Equipment Monitoring

Cluster: Research and Development Cluster

Grantor(s): Various

Award(s):

CFDA Number	CFDA Title	Award Number	Award Period	Pass Through Entity
66.509	Science to Achieve Results (STAR) Research Program	RD-83374001	03/01/2008 – 02/28/2014	N/A
93.185	Immunization Research, Demonstration, Public Information and Education Training and Clinical Skills Improvement Projects	U01-IP000088	09/30/2007 – 09/29/2010	N/A
93.395	Cancer Treatment Research	R01-CA48129	05/13/1996 – 02/28/2002	N/A

Summary: During equipment disposal compliance testing one item out of 15 items selected was reported as a disposal in the University's asset management system, however, the equipment had been physically moved to a different location and was still being used. This equipment was reinstated in the property records.

University of Michigan Summary Schedule of Prior Year Findings For the Year Ended June 30, 2018

In addition, two issues arose that related to a prior year finding (2016-002). The first asset was disposed of in 2014, however, was not removed from the accounting records at the time of disposal and was not detected through previous physical inventories. The second asset was disposed of in 2010 when the project ended and was reported as such by the unit. As of the 2011 physical inventory, however, the equipment remained on the University's equipment records. During the equipment inventories conducted in 2013, 2015 and 2017, this item was once reported by the unit as being on-site and twice reported by the unit as being disposed of, however, it remained on the University's equipment records until the disposal was recorded after the 2017 inventory.

Status: As of September 2017, updated inventory instructions and guidelines were provided to campus units performing inventories and central procedures have been updated to include more detailed documentation for asset disposals. A review of all 2018 sponsor funded equipment disposals was performed as of June 30, 2018. Departmental level internal control guidance is expected to be implemented during the 2019 Unit Internal Control Certification process.



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March 27, 2019

RE: Management's Corrective Action Plan

1. Name of the contact person responsible for corrective actions planned:

Cheryl Soper Controller and Director of Financial Operations University of Michigan (386006309) 6032 Wolverine Tower 3003 South State Street Ann Arbor, MI 48109-1287

Phone: 734-764-7214

E-mail: clsoper@umich.edu

2. Corrective actions planned:

Finding No. 2018-001 – Enrollment Reporting

View of Responsible Officials: The University concurs with the auditors' finding. The UM-Dearborn campus is taking actions to ensure that enrollment status changes are reported to the National Student Loan Data System ("NSLDS") on a timely basis.

UM-Dearborn's Office of the Registrar reports graduated students via an upload to the National Student Clearinghouse ("NSC") within six weeks of the actual student graduation dates. The NSC runs a process to assign a "G" (graduated) status to the student enrollment record after the upload file is processed. However, due to the program level reporting required for enrollment and degrees which began in fall 2014, the NSC's current DegreeVerify process cannot assign a "G" enrollment status to the student program record in certain situations, resulting in the need for manual updates to the NSC file prior to submission to the NSLDS.

In order to ensure accuracy going forward, UM-Dearborn has developed a graduates only enrollment file from its student information system which will be uploaded directly to the NSC, which will avoid any issue associated with the existing DegreeVerify process. Submitting this new file directly to the NSC will ensure that each student has a "G" enrollment status properly applied to their enrollment record with the correct graduation date, attached to the correct degree program, within 60 days of the official graduation date.

Anticipated Completion Date: October 2018

Finding No. 2018-002 – Vendor Discounts (Significant Deficiency)

View of Responsible Officials: The University concurs with the auditor's finding. The costs to operate the University's Strategic Supplier Program (the "Program") have historically been offset by a fee paid by participating vendors, collected in the form of a discount applied to the charges on each invoice.

The Program fee was not considered a discount for purposes of the representations made in the University's Form DS-2 Disclosure Statement (the "DS-2") and has not been passed on to federal agencies and pass through entities in determining reimbursement for direct costs associated with sponsored activities. In 2018, the University reevaluated the historical treatment and concluded that the Program fee collected in the form of a discount should not be retained, but rather, treated as a discount consistent with its DS-2.

On February 28, 2019, the University notified its cognizant agency, the Department of Health and Human Services ("DHHS"), of this discrepancy with its DS-2 and advised that processes will be changed to ensure that, as of April 1, 2019, Program discounts will be applied to direct costs as listed on the vendor invoice for purposes of reimbursement for its federally sponsored activities.

The University also notified DHHS that the amount of Program fees retained for purchases made on federally funded projects totaled \$316,281 for fiscal 2018 and \$1,783,228 during the six-year period from fiscal 2013 through 2018. The agencies primarily impacted during this period include DHHS (\$1,490,369); Department of Defense (\$117,626) and National Science Foundation (\$106,724). The remaining \$68,509 retained during this six-year period impacted the following agencies: Agriculture, Department of; Commerce, Department of; Corporation for National and Community Service; Director of National Intelligence, Office of the; Education, Department of; Energy, Department of; Environmental Protection Agency; Homeland Security, Department of; Institute of Museum and Library Services; Interior, Department of the; Justice, Department of; Library of Congress; National Aeronautics and Space Administration; National Endowment for the Arts; National Endowment for the Humanities; Nuclear Regulatory Commission; Peace Corps; Smithsonian Institution; Social Security Administration; State, Department of; Transportation, Department of; United States Agency for International Development; United States Postal Service; and Veterans Affairs, Department of.

The University is working with its cognizant agency to determine the proper resolution for Program fees retained for purchases made on federally funded projects prior to April 1, 2019.

Anticipated Completion Date: June 2019