



**UNIVERSITY OF PITTSBURGH – OF THE COMMONWEALTH
SYSTEM OF HIGHER EDUCATION**

Consolidated Financial Statements and Independent Auditors' Reports Required
by Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative
Requirements, Cost Principles, and Audit Requirements for Federal Awards*, and
Related Information

Year ended June 30, 2017

**UNIVERSITY OF PITTSBURGH – OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

June 30, 2017

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UNIVERSITY OF PITTSBURGH



FINANCIAL REPORT

FISCAL YEAR 2017



KPMG LLP
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Independent Auditors' Report

The Board of Trustees of the
University of Pittsburgh – Of the Commonwealth
System of Higher Education:

Report on the Financial Statements

We have audited the accompanying consolidated financial statements of the University of Pittsburgh – Of the Commonwealth System of Higher Education (the University), which comprise the consolidated balance sheets as of June 30, 2017 and 2016, and the related consolidated statements of activities and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; 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 these consolidated financial statements based on our audit. 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 the auditors' 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, the auditor considers internal control relevant to the entity'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 entity'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 Pittsburgh – Of the Commonwealth System of Higher Education as of June 30, 2017 and 2016, and the changes in its net assets and its cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.



University of Pittsburgh – Of the Commonwealth
System of Higher Education
September 22, 2016
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Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated September 22, 2017 on our consideration of the University'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 the University's 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's internal control over financial reporting and compliance.

KPMG LLP

Pittsburgh, Pennsylvania
September 22, 2017

CONSOLIDATED FINANCIAL STATEMENTS

UNIVERSITY OF PITTSBURGH
CONSOLIDATED BALANCE SHEETS
JUNE 30, 2017 AND 2016
(in thousands of dollars)

| | 2017 | 2016 |
|---|---------------------|---------------------|
| ASSETS: | | |
| Cash and cash equivalents (Notes 1 and 5) | \$ 22,494 | \$ 6,400 |
| Operating investments (Notes 4 and 5) | 521,879 | 558,801 |
| Inventories and deferred charges | 20,924 | 20,984 |
| Accounts and notes receivable, net (Note 2) | 192,103 | 188,277 |
| Contributions receivable, net (Note 3) | 33,193 | 31,935 |
| Student loans receivable, net | 45,384 | 47,611 |
| Deposits of bond proceeds (Notes 1 and 5) | - | 6,598 |
| Foundation assets (Note 1) | 27,893 | 26,351 |
| Endowment investments (Notes 4 and 5) | 3,970,047 | 3,546,458 |
| Endowed funds held by third parties (Note 5) | 22,944 | 22,079 |
| Property, plant, and equipment, net (Note 6) | 1,783,096 | 1,774,065 |
| TOTAL ASSETS | \$ 6,639,957 | \$ 6,229,559 |
| LIABILITIES: | | |
| Accounts payable and accrued expenses | \$ 96,032 | \$ 95,212 |
| Accrued payroll and related liabilities | 80,779 | 74,796 |
| Deferred student and other revenue | 53,238 | 50,801 |
| Advanced receipt of grant funds | 64,061 | 62,689 |
| Refundable U.S. government student loans | 34,338 | 33,897 |
| Other liabilities (Notes 5 and 8) | 112,330 | 148,811 |
| Pension and postretirement obligations (Note 9) | 554,086 | 589,385 |
| Conditional asset remediation obligation (Note 6) | 30,644 | 37,346 |
| Bonds and notes payable (Note 7) | 939,379 | 948,949 |
| TOTAL LIABILITIES | 1,964,887 | 2,041,886 |
| NET ASSETS: | | |
| Unrestricted (Notes 1 and 10) | 3,105,495 | 2,764,269 |
| Temporarily restricted (Notes 1 and 10) | 829,574 | 714,738 |
| Permanently restricted (Notes 1 and 10) | 740,001 | 708,666 |
| TOTAL NET ASSETS | 4,675,070 | 4,187,673 |
| TOTAL LIABILITIES AND NET ASSETS | \$ 6,639,957 | \$ 6,229,559 |

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

CONSOLIDATED FINANCIAL STATEMENTS

UNIVERSITY OF PITTSBURGH
CONSOLIDATED STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2017
COMPARED TO SUMMARY INFORMATION FOR THE YEAR ENDED JUNE 30, 2016
(in thousands of dollars)

| | 2017 | | | Total | 2016 |
|--|---------------------|------------------------|------------------------|---------------------|---------------------|
| | Unrestricted | Temporarily Restricted | Permanently Restricted | | |
| OPERATING REVENUES: | | | | | |
| Tuition and fees | \$ 788,455 | \$ - | \$ - | \$ 788,455 | \$ 764,499 |
| Tuition discounts | (187,897) | - | - | (187,897) | (176,412) |
| Net tuition and fees | 600,558 | - | - | 600,558 | 588,087 |
| Commonwealth appropriation | 158,899 | - | - | 158,899 | 154,335 |
| Commonwealth construction grants | 24,645 | - | - | 24,645 | 21,289 |
| Grants and contracts | 764,478 | - | - | 764,478 | 726,531 |
| Contributions for operations | 32,462 | 12,361 | - | 44,823 | 54,011 |
| Investment income – operating investments | 6,808 | - | - | 6,808 | 6,080 |
| Endowment distributions for operations | 126,472 | - | - | 126,472 | 118,245 |
| Sales and services, educational and other | 193,600 | - | - | 193,600 | 186,864 |
| Sales and services, auxiliary | 152,767 | - | - | 152,767 | 150,533 |
| Rental revenue | 18,261 | - | - | 18,261 | 18,351 |
| Other | 78,351 | - | - | 78,351 | 82,463 |
| Net assets released from restrictions | 13,667 | (13,667) | - | - | - |
| Total operating revenues | 2,170,968 | (1,306) | - | 2,169,662 | 2,106,789 |
| OPERATING EXPENSES: | | | | | |
| Salaries and wages | 949,288 | - | - | 949,288 | 906,494 |
| Fringe benefits | 300,772 | - | - | 300,772 | 273,652 |
| Total compensation | 1,250,060 | - | - | 1,250,060 | 1,180,146 |
| Supplies | 115,802 | - | - | 115,802 | 106,618 |
| Business and professional | 347,621 | - | - | 347,621 | 332,685 |
| Utilities | 47,018 | - | - | 47,018 | 46,658 |
| Maintenance and facilities | 52,152 | - | - | 52,152 | 48,674 |
| Depreciation | 177,781 | - | - | 177,781 | 175,135 |
| Interest | 31,343 | - | - | 31,343 | 42,212 |
| Other | 62,222 | - | - | 62,222 | 70,265 |
| Total operating expenses (Note 11) | 2,083,999 | - | - | 2,083,999 | 2,002,393 |
| Change in net assets from operating activities | 86,969 | (1,306) | - | 85,663 | 104,396 |
| OTHER ACTIVITIES: | | | | | |
| Investment gains (losses), net of endowment distributions for operations | 212,108 | 116,142 | 2,329 | 330,579 | (208,241) |
| Contributions for endowment | - | - | 29,006 | 29,006 | 22,123 |
| Change in fair value of interest rate swaps | 33,826 | - | - | 33,826 | (34,522) |
| Nonperiodic changes in benefit plans (Note 9) | 54,787 | - | - | 54,787 | (96,523) |
| Bond refunding (Note 7) | (46,464) | - | - | (46,464) | - |
| Total other activities | 254,257 | 116,142 | 31,335 | 401,734 | (317,163) |
| CHANGE IN NET ASSETS | 341,226 | 114,836 | 31,335 | 487,397 | (212,767) |
| NET ASSETS, BEGINNING OF YEAR | 2,764,269 | 714,738 | 708,666 | 4,187,673 | 4,400,440 |
| NET ASSETS, END OF YEAR | \$ 3,105,495 | \$ 829,574 | \$ 740,001 | \$ 4,675,070 | \$ 4,187,673 |

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

UNIVERSITY OF PITTSBURGH
CONSOLIDATED STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2016
(in thousands of dollars)

| | 2016 | | | |
|--|---------------------|---------------------------|---------------------------|---------------------|
| | Unrestricted | Temporarily Restricted | Permanently Restricted | Total |
| OPERATING REVENUES: | | | | |
| Tuition and fees | \$ 764,499 | \$ - | \$ - | \$ 764,499 |
| Tuition discounts | (176,412) | - | - | (176,412) |
| Net tuition and fees | 588,087 | - | - | 588,087 |
| Commonwealth appropriation | 154,335 | - | - | 154,335 |
| Commonwealth construction grants | 21,289 | - | - | 21,289 |
| Grants and contracts | 726,531 | - | - | 726,531 |
| Contributions for operations | 35,158 | 18,853 | - | 54,011 |
| Investment income – operating investments | 6,080 | - | - | 6,080 |
| Endowment distributions for operations | 118,245 | - | - | 118,245 |
| Sales and services, educational and other | 186,864 | - | - | 186,864 |
| Sales and services, auxiliary | 150,533 | - | - | 150,533 |
| Rental revenue | 18,351 | - | - | 18,351 |
| Other | 82,463 | - | - | 82,463 |
| Net assets released from restrictions | 13,753 | (13,753) | - | - |
| Total operating revenues | 2,101,689 | 5,100 | - | 2,106,789 |
| OPERATING EXPENSES: | | | | |
| Salaries and wages | 906,494 | - | - | 906,494 |
| Fringe benefits | 273,652 | - | - | 273,652 |
| Total compensation | 1,180,146 | - | - | 1,180,146 |
| Supplies | 106,618 | - | - | 106,618 |
| Business and professional | 332,685 | - | - | 332,685 |
| Utilities | 46,658 | - | - | 46,658 |
| Maintenance and facilities | 48,674 | - | - | 48,674 |
| Depreciation | 175,135 | - | - | 175,135 |
| Interest | 42,212 | - | - | 42,212 |
| Other | 70,265 | - | - | 70,265 |
| Total operating expenses (Note 11) | 2,002,393 | - | - | 2,002,393 |
| Change in net assets from operating activities | 99,296 | 5,100 | - | 104,396 |
| OTHER ACTIVITIES: | | | | |
| Investment (losses) gains, net of endowment distributions for operations | (115,864) | (94,750) | 2,373 | (208,241) |
| Contributions for endowment | - | - | 22,123 | 22,123 |
| Change in fair value of interest rate swaps | (34,522) | - | - | (34,522) |
| Nonperiodic changes in benefit plans (Note 9) | (96,523) | - | - | (96,523) |
| Bond refunding | - | - | - | - |
| Total other activities | (246,909) | (94,750) | 24,496 | (317,163) |
| CHANGE IN NET ASSETS | (147,613) | (89,650) | 24,496 | (212,767) |
| NET ASSETS, BEGINNING OF YEAR | 2,911,882 | 804,388 | 684,170 | 4,400,440 |
| NET ASSETS, END OF YEAR | \$ 2,764,269 | \$ 714,738 | \$ 708,666 | \$ 4,187,673 |

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

CONSOLIDATED FINANCIAL STATEMENTS

UNIVERSITY OF PITTSBURGH
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016
(in thousands of dollars)

| | 2017 | 2016 |
|---|------------------|--------------------|
| CASH AND CASH EQUIVALENTS: | | |
| End of year | \$ 22,494 | \$ 6,400 |
| Beginning of year | 6,400 | 49,582 |
| CHANGE IN CASH AND CASH EQUIVALENTS | \$ 16,094 | \$ (43,182) |
| CASH FLOWS FROM OPERATING ACTIVITIES: | | |
| Change in net assets | \$ 487,397 | \$ (212,767) |
| Adjustments to reconcile change in net assets to net cash provided by operating activities: | | |
| Depreciation | 177,781 | 175,135 |
| Nonperiodic changes in benefit plans | (54,787) | 96,523 |
| Bond refunding | 46,464 | - |
| Write-off of issuance costs and net premiums on refunded bonds | (5,467) | - |
| Net bond premium amortization | (2,360) | (4,163) |
| Loss on disposal of plant assets | 2,882 | 1,254 |
| Investment (gains) losses | (437,093) | 110,426 |
| Change in fair value of interest rate swaps | (33,826) | 34,522 |
| Contributions restricted for long-term investment | (57,024) | (46,431) |
| Changes in operating assets and liabilities: | | |
| Accounts, notes, contributions, and loans receivable, net | 13,195 | (56,695) |
| Other assets | 60 | (438) |
| Accounts payable and accrued expenses | (3,648) | (289) |
| Pension and postretirement obligations | 19,488 | 13,528 |
| Conditional asset remediation obligation | (6,702) | (3,873) |
| Other liabilities | 3,328 | 507 |
| Government student loans and deferred revenue | 4,250 | 7,892 |
| Net cash provided by operating activities | 153,938 | 115,131 |
| CASH FLOWS FROM INVESTING ACTIVITIES: | | |
| Expended for property, plant, and equipment - University | (165,049) | (143,416) |
| Expended for property, plant, and equipment - commonwealth | (24,645) | (21,289) |
| Change in accounts payable for property, plant, and equipment | 4,468 | (2,624) |
| Purchases/sales of operating investments, net | 29,875 | 12,067 |
| Purchases of endowment investments | (2,163,200) | (1,646,384) |
| Proceeds from sales/maturities of endowment investments | 2,182,433 | 1,600,290 |
| Change in endowed funds held by third parties, excluding gains | 453 | (396) |
| Change in foundation assets | (1,542) | 68 |
| Net cash used for investing activities | (137,207) | (201,684) |
| CASH FLOWS FROM FINANCING ACTIVITIES: | | |
| Principal repayment of debt including bond refundings | (846,161) | (130,500) |
| Proceeds from issuance of debt including bond refundings | 847,881 | 101,980 |
| Defeasance of debt | (49,927) | - |
| Change in deposits of bond proceeds | 6,598 | 12,693 |
| Contributions restricted for long-term investment | 40,972 | 59,198 |
| Net cash (used for) provided by financing activities | (637) | 43,371 |
| CHANGE IN CASH AND CASH EQUIVALENTS | \$ 16,094 | \$ (43,182) |
| Supplemental disclosure of cash flow information: | | |
| Cash paid for interest (excluding fees) | \$ 43,071 | \$ 46,194 |
| Noncash investing activity for property, plant, and equipment - accounts payable | \$ 25,274 | \$ 20,806 |

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

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING AND REPORTING PRACTICES

Organization

Founded in 1787, the University of Pittsburgh (the University) is one of the oldest institutions of higher education in the United States. The University's mission is to provide high-quality undergraduate and graduate programs in the arts and sciences and professional fields; engage in research, artistic, and scholarly activities that advance learning through the extension of the frontiers of knowledge and creative endeavor; cooperate with industrial and governmental institutions to transfer knowledge in science, technology, and health care; offer continuing educational programs adapted to the personal enrichment, professional upgrading, and career advancement interests and needs of adult Pennsylvanians; and make available to local communities and public agencies the expertise of the University in ways that are consistent with the primary teaching and research functions and contribute to social, intellectual, and economic development in the commonwealth, the nation, and the world.

The University's main campus in the City of Pittsburgh comprises 16 schools and several academic centers educating nearly 29,000 students in various undergraduate, graduate, and doctorate-professional programs. Four regional campuses with a total enrollment approximating 6,100 students are located throughout western Pennsylvania.

Relationship with the Commonwealth of Pennsylvania

The University derives its corporate existence under the laws of the Commonwealth of Pennsylvania (the commonwealth) by reason of the act of the General Assembly of the commonwealth establishing an "Academy or Public School in the town of Pittsburgh" on February 28, 1787 and from the act of February 18, 1819 incorporating the "Western University of Pennsylvania." In 1908, the University's name was changed to the "University of Pittsburgh" by order of the Court of Common Pleas of Allegheny County. In 1966, the Pennsylvania State Legislature enacted the "University of Pittsburgh-Commonwealth Act," which changed the name of the University to the "University of Pittsburgh – of the Commonwealth System of Higher Education" and established the University as an instrumentality of the commonwealth to serve as a state-related institution in the Commonwealth System of Higher Education. The University is a Pennsylvania nonprofit corporation subject to the Nonprofit Corporation Law of 1988.

The entire management, control, and conduct of the instructional, administrative, and financial affairs of the University are vested in the Board of Trustees. The Board of Trustees is comprised of fifty-two members

(thirty-six voting members), including twelve commonwealth trustees and sixteen special trustees elected by the board. Special trustees may attend all meetings of the board and are entitled to and exercise all rights, responsibilities, and privileges of trusteeship, except the right to vote at board meetings.

As a state-related institution, the University receives an annual operating and capital appropriation from the commonwealth. The appropriation results from the commonwealth's annual budget process, which as of the auditor's opinion date, has not been completed for 2018. There is no assurance that such appropriation will continue to be made, or will be made, at current levels or at levels requested by the University. The appropriation from the commonwealth was \$158.9 million in 2017 and \$154.3 million in 2016. In addition to the annual appropriation, the commonwealth also funds certain capital projects in support of the University's mission. Amounts funded by the commonwealth for capital projects were \$24.6 million in 2017 and \$21.3 million in 2016.

Basis of Presentation

The consolidated financial statements include the accounts of the University, which do not include the net assets or activities of the University of Pittsburgh Medical Center (UPMC) or the University of Pittsburgh Physicians (UPP) clinical practice plans, as they are separate legal entities not controlled by the University. The University does have the right to designate one-third of the members of the UPMC Board of Directors and any Executive Committee thereof.

The other activities section of the Consolidated Statements of Activities includes investment gains (losses), net of endowment distributions for operations; contributions for endowment; change in fair value of interest rate swaps; nonperiodic changes in pension and postretirement benefit plans; and certain bond refunding activities. Endowment distributions for operations represent those distributions not reinvested in the endowment (see Note 10).

Basis of Accounting

The consolidated financial statements have been prepared on the accrual basis of accounting in conformity with accounting principles generally accepted in the United States of America (GAAP) as promulgated by the Financial Accounting Standards Board (FASB).

In accordance with GAAP, the University's net assets have been classified as unrestricted, temporarily restricted, or permanently restricted based upon the

existence or absence of donor-imposed restrictions. Unrestricted net assets are not subject to donor-imposed restrictions and are used for general operating purposes of the University. This class of net assets also includes certain contributions and endowment distributions from earnings whose donor-imposed restrictions have been met within the fiscal year. Temporarily restricted net assets are subject to certain time or purpose restrictions by the donor. Upon satisfaction of these restrictions, the net assets are transferred to unrestricted. Amounts released from restrictions relate primarily to cash collections on pledges, where purpose restrictions had already been met. Temporarily restricted net assets at June 30, 2017 and 2016 consist of endowment balances (\$801.6 million and \$686.1 million, respectively); the net present value of temporarily restricted contributions and unconditional pledges (\$22.6 million and \$23.7 million, respectively); and split-interest agreements (\$5.4 million and \$4.9 million, respectively). Permanently restricted net assets are those subject to permanent donor-imposed restrictions and at June 30, 2017 and 2016 consist of endowment balances (\$713.5 million and \$684.9 million, respectively); the net present value of permanently restricted contributions and unconditional pledges (\$13.1 million and \$10.7 million, respectively); and private student loan funds (\$13.4 million and \$13.1 million, respectively). Net assets restricted for purpose are for programmatic purposes including scholarships, instruction, and research.

Donor-restricted endowed contributions require that the original corpus of the contributions be maintained in perpetuity. The distributions from earnings generated by these contributions may be either expended or reinvested in the endowment, in accordance with donor restrictions and endowment contribution and spending policies (see Note 10).

Estimates

The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ materially from those estimates.

Revenue Recognition

Revenue for programs or activities to be conducted in future periods, such as student tuition and room and board, is classified as deferred revenue. Revenue for these activities is recognized as services are provided.

Advanced receipts of grants and contracts are also classified as deferred revenue, with revenue being recognized as funds are expended and sponsored programs are executed.

Tuition discounts are recorded to the extent that either institutional financial aid or aid funded by contributions, endowment distributions, and grant activities are awarded. Tuition discounts attributable to institutional funds in 2017 and 2016 were \$162.6 million and \$152.1 million, respectively. Tuition discounts attributable to contributions, endowment distributions, and grant activities were \$25.3 million and \$24.3 million in 2017 and 2016, respectively.

Cash and Cash Equivalents and Operating Investments

Cash equivalents consist of operating investments with original maturities of 90 days or less. Operating investments include U.S. Treasury instruments and other high-quality, liquid securities that at the time of purchase are rated A3/P-1 or better by Moody's Investors Service or A-/A-1 or better by Standard & Poor's Ratings Services. Operating investments, together with cash, are utilized to fund the University's short-term operating needs and are invested with the expectation that such securities can be liquidated at their current value within a seven-day period. Cash and cash equivalents that are part of endowment investments are shown therewith, as such funds are utilized for endowment purposes rather than University operating needs.

Allowance for Doubtful Accounts

The University maintains allowances for doubtful accounts to reflect management's best estimate of probable losses inherent in receivable balances. Management determines the allowances for doubtful accounts based on known troubled accounts, historical experience, and other currently available evidence. Receivables are written off when management determines they will not be collected.

Contributions

The University records at fair value unconditional pledges (which are agreements with donors involving non-reciprocal transfers of cash or other assets) as either temporarily restricted or permanently restricted contributions depending on the nature of the donor-imposed restrictions. Contributions whose restrictions are met in the same fiscal year in which they are received are combined and reported with unrestricted contributions. Contributions receivable are discounted at a risk-adjusted rate commensurate with the donor's payment plan.

Conditional pledges of cash or other assets are recognized as contribution revenues and receivables when the conditions surrounding the pledge are substantially met.

Bequests are considered to be intentions to give and do not fall within the definition of an unconditional pledge, and hence, are not recognized in the consolidated financial statements.

Deposits of Bond Proceeds

Deposits of bond proceeds consist of unspent funds, which will be used for certain capital projects or for repayment of certain debt obligations. These funds are invested in cash, cash equivalents, U.S. Treasury instruments, and other high-quality, liquid securities and are reported on the Consolidated Balance Sheets at fair value.

Foundation Assets

The University's foundation assets represent the Bradford Educational Foundation (BEF). The BEF is a 509(a)(3) Type III supporting organization whose sole purpose is to receive, administer, and distribute property for the benefit of the University of Pittsburgh Bradford campus. The BEF is governed by an independent board of directors, with the majority of members being non-University members. Although the University does not exercise control of the BEF, all assets held by the BEF are held for the financial benefit of the University. As such, the consolidated financial statements include the net assets and annual change in net assets of the BEF.

Endowment Investments

The University's endowment investments are reported at fair value. The fair value of direct University holdings in publicly traded securities and exchange traded funds are based upon quoted or published market prices. The fair value of all other investments, which consist of indirect holdings in both privately and publicly traded assets, is determined using net asset value (NAV) per share or unit of interest. Used as a practical expedient for the estimated fair value, NAV per share or its equivalent is provided by the fund manager and reviewed by the University. Indirect holdings of private assets primarily consist of University interests in funds investing in nonmarketable alternatives, real assets, and/or distressed securities, whereas indirect holdings of publicly traded assets primarily consist of University interests in marketable alternatives or other commingled funds. Nonmarketable alternatives are private equity or equity-

like holdings, such as mezzanine and subordinated debt interests, in venture, buyout, or recapitalized companies or properties. Real assets are physical assets, or financial assets associated with such physical assets, whose income streams and/or fair values tend to rise with inflation; they include real estate, natural resources, commodities, and other hard assets. Marketable alternatives consist of distressed debt and hedging strategies, including event-driven hedging strategies, such as merger or credit arbitrage, and value-driven hedging strategies, such as long/short, market neutral, and other hedging strategies.

In the case of indirect holdings, changes in market conditions, economic environment, regulatory environment, currency exchange rates, interest rates, and commodity prices may significantly impact the NAV of the funds holding the investments and, consequently, the fair value of the University's interest in such funds and could materially affect the amounts reported in the consolidated financial statements. Although a secondary market exists for these investments, it is not active, and individual transactions are typically not observable. When transactions do occur in this limited secondary market, they may occur at discounts to the reported NAV. It is therefore possible that if the University were to sell these investments in the secondary market, a buyer may require a discount to the reported NAV, and the discount could be significant. The University attempts to manage these risks through diversification, ongoing due diligence of fund managers, maintaining adequate liquidity, and continuously monitoring economic and market conditions.

Dividend income is recognized net of applicable withholding taxes on the ex-dividend date. Noncash dividends are recorded at the fair value of the securities received. Interest income and expenses are recorded net of applicable withholding taxes on the accrual basis of accounting.

Fair Value Measurements

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The three levels of the fair value hierarchy are as follows:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities that are available at the measurement date.

- Level 2 – Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 – Unobservable inputs for the asset or liability that are used to measure fair value when observable inputs are not available. These inputs are developed based upon the best information available in such circumstances.

In the event that changes in the inputs used in the fair value measurement of an asset or liability result in a transfer of the fair value measurement into a different level, such transfers are recognized at the end of the reporting period.

Derivative Financial Instruments

The University records derivatives at fair value on the Consolidated Balance Sheets with changes in fair value reflected in the Consolidated Statements of Activities (see Note 8).

Split-Interest Agreements

These agreements with donors consist primarily of charitable gift annuities, pooled income funds, and irrevocable charitable remainder trusts for which the University serves as trustee. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements. Other liabilities include \$12.3 million and \$11.5 million at June 30, 2017 and 2016, respectively, for split-interest agreements.

Property, Plant, and Equipment, Net

Property, plant, and equipment is recorded at cost, or if acquired by contribution, at fair value as of the date of the contribution. Depreciation is calculated using the straight-line method. Useful lives generally range from 15 to 40 years for buildings and improvements and 5 to 10 years for furnishings and equipment. As assets are retired, sold, or otherwise disposed, the cost and related accumulated depreciation are removed from the accounts, and gains or losses are recognized in the Consolidated Statements of Activities. Costs associated with the construction of new facilities and renovation and expansion of existing facilities are capitalized within construction in progress until such projects are placed in service. The University capitalizes software and certain implementation costs and

generally depreciates such assets over 5 to 10 years. Works of art, historical treasures, and similar assets include a variety of paintings, sculptures, photographs, antiques, and furnishings, as well as scholarly papers and archives. These assets are used for public exhibition, the preservation of artifacts and antiques for future generations, and scholarly research. Due to their nature, these assets are not depreciated. Library books, which include hard copy publications, periodicals, and electronic publications with rights to archival content, are depreciated over a period of 7 years. Maintenance and repairs are expensed as incurred.

Insurance Liabilities

The University is self-insured through an agreement with UPMC to provide medical coverage for its employees. A liability for estimated incurred but unreported claims of \$8.6 million and \$6.3 million has been recorded at June 30, 2017 and 2016, respectively, based upon management's analysis of claims history. This liability is reflected in accrued payroll and related liabilities on the Consolidated Balance Sheets.

The University is also self-insured for certain other activities, including workers' compensation, unemployment compensation, and litigation claims. Liabilities have been established for these programs generally based on third-party administrators' estimates using the University's historical loss experience. The self-insurance accrual is subject to periodic adjustment by the University based on actual loss experience factors. Liabilities for these other self-insured obligations aggregated \$9.0 million and \$10.5 million at June 30, 2017 and 2016, respectively, and are included in accrued payroll and related liabilities on the Consolidated Balance Sheets.

Grants and Contracts

The University conducts sponsored program activity with various sponsors, including agencies and departments of the federal government, the commonwealth, local government entities, companies, and foundations. Sponsored activity in 2017 and 2016 was \$764.5 million and \$726.5 million, respectively, with approximately 66% of the funding awarded through the National Institutes of Health. Most University sponsored activity is conducted on a cost reimbursable basis with the University receiving funding after the related expenses have been incurred.

Certain sponsors, however, provide funding in advance of related expenses, and such funding is recorded as advanced receipt of grant funds on the Consolidated Balance Sheets. Revenue from sponsored awards is recognized as the related expenses are incurred. There is no assurance that sponsored awards will continue to be made at current levels.

The University incurs both direct and indirect costs in the conduct of its sponsored activity. Recovery of indirect costs through federal awards is based upon predetermined rates negotiated with the Department of Health and Human Services. Indirect cost recovery rates from nonfederal sources may vary. Funds received through federal sources are subject to audit each year in accordance with the Office of Management and Budget's Uniform Guidance.

Government Loan Funds

U.S. government student loans are recorded as liabilities because these funds are refundable to the federal government under certain conditions. Student loan funds donated by private groups, organizations, or individuals are recorded as permanently restricted net assets since such funds operate on a revolving fund basis with principal and interest payments remaining in the fund for future lending.

Tax-Exempt Status

The University is exempt from federal income tax under Section 501(c)(3) of the United States Internal Revenue Code. Accordingly, it is not subject to income taxes except to the extent it has taxable income from activities that are not related to its exempt purpose. The University annually reviews its tax positions and has determined that there are no material uncertain tax positions that require recognition in the consolidated financial statements. No provision for income taxes was required for 2017 or 2016.

Reclassifications

Certain 2016 operating expense line items include reclassifications related to the presentation of internal cost recovery to conform with the 2017 presentation.

Recent Accounting Pronouncements

In March 2017, FASB issued the Accounting Standards Update (ASU) No. 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. This ASU requires presentation of the service cost component of the net periodic benefit cost within the same line item or items as other compensation costs arising from services rendered by relevant employees during the period, and presentation of the other cost components of net periodic benefit cost separately and outside of the change in net assets from operating activities. The ASU is effective for the

University for fiscal year 2020, and early adoption is permitted. The University is currently evaluating the impact this ASU will have on the consolidated financial statements and related disclosures.

In August 2016, FASB issued ASU No. 2016-14, *Not-for-Profit Entities (NFPs) (Topic 958): Presentation of Financial Statements for Not-for-Profit Entities*. The ASU is effective for the University for fiscal year 2019, and early adoption is permitted. The ASU reduces the number of net asset classes presented from three to two: with donor restrictions and without donor restrictions; requires all NFPs to present expenses by their functional and natural classifications in one location in the financial statements; and requires NFPs to provide quantitative and qualitative information about management of liquid resources and availability of financial assets to meet cash needs within one year of the balance sheet date. The University is currently evaluating the impact this ASU will have on the consolidated financial statements and related disclosures.

In February 2016, FASB issued ASU No. 2016-02, *Leases (Topic 842)*. The ASU is effective for fiscal year 2020, and early adoption is permitted. The ASU will require lessees to report most leases as assets and liabilities on the balance sheet, while lessor accounting will remain substantially unchanged. The ASU requires a modified retrospective transition approach for existing leases, whereby the new rules will be applied to the earliest year presented. The University is currently evaluating the impact this ASU will have on the consolidated financial statements and related disclosures.

In May 2014, FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which will replace the current revenue recognition requirements in GAAP. The core principle of this ASU is that a company should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In addition, the ASU requires disclosures about the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Two transition methods are permitted: the full retrospective method, in which case the standard would be applied to each prior reporting period presented and the cumulative effect of applying the standard would be recognized at the earliest period shown; or the modified retrospective method, in which case the cumulative effect of applying the standard would be recognized at the date of initial application. The ASU is effective for fiscal year 2019. The University is currently evaluating the impact this ASU will have on the consolidated financial statements and related disclosures.

NOTE 2: ACCOUNTS AND NOTES RECEIVABLE, NET

Accounts and notes receivable, net, at June 30 consists of the following:

| | 2017 | 2016 |
|---|----------------------------------|-------------------|
| | <i>(in thousands of dollars)</i> | |
| Sponsored grant receivables, net | \$ 109,813 | \$ 105,398 |
| Hospitals and affiliated organizations receivables, net | 31,944 | 40,580 |
| Plant construction receivables due from commonwealth | 22,708 | 9,090 |
| Other receivables, net | 12,930 | 11,199 |
| Student receivables, net | 11,745 | 9,173 |
| Interest income receivables | 1,926 | 1,694 |
| Commonwealth appropriation receivable | 1,037 | 11,143 |
| Total accounts and notes receivable, net | \$ 192,103 | \$ 188,277 |

NOTE 3: CONTRIBUTIONS RECEIVABLE, NET

Contributions receivable, net, at June 30 consists of the following:

| | 2017 | 2016 |
|--|----------------------------------|------------------|
| | <i>(in thousands of dollars)</i> | |
| Amounts due in: | | |
| Less than one year | \$ 14,856 | \$ 15,599 |
| One to five years | 18,322 | 16,558 |
| Greater than five years | 2,350 | 2,153 |
| Gross contributions receivable | 35,528 | 34,310 |
| Less: | | |
| Allowance for uncollectible pledges | (846) | (1,654) |
| Unamortized discounts | (1,489) | (721) |
| Total contributions receivable, net | \$ 33,193 | \$ 31,935 |

At June 30, 2017 and 2016, the five largest outstanding pledge balances represented 29% and 37%, respectively, of the University's net contributions receivable.

The University has been named a beneficiary in the wills of numerous donors or has received conditional pledges

totaling \$239.5 million and \$207.9 million at June 30, 2017 and 2016, respectively. These bequests and conditional pledges have not been recognized in the consolidated financial statements.

NOTE 4: ENDOWMENT AND OPERATING INVESTMENTS

Investments at June 30 consist of the following:

| | 2017 | 2016 |
|--|----------------------------------|---------------------|
| | <i>(in thousands of dollars)</i> | |
| Endowment investments: | | |
| Pooled | \$ 3,934,117 | \$ 3,513,665 |
| Nonpooled | 35,930 | 32,793 |
| Subtotal endowment investments | 3,970,047 | 3,546,458 |
| Operating investments (<i>Note 1</i>) | 521,879 | 558,801 |
| Total endowment and operating investments | \$ 4,491,926 | \$ 4,105,259 |
| Composition of endowment investments: | | |
| Cash and cash equivalents | \$ 99,132 | \$ 65,204 |
| Domestic equities | 628,229 | 554,918 |
| International equities | 841,031 | 715,179 |
| U.S. government and government agencies' securities, bank acceptances and certificates, and commercial paper | 222,563 | 173,468 |
| Corporate bonds and other obligations | 121,745 | 143,856 |
| Alternative investment funds, partnerships, and exchange traded funds: | | |
| Marketable alternatives | 739,118 | 679,765 |
| Nonmarketable alternatives | 681,045 | 624,905 |
| Real assets | 637,184 | 589,163 |
| Total endowment investments | \$ 3,970,047 | \$ 3,546,458 |
| Composition of operating investments: | | |
| U.S. government and government agencies' securities, repurchase agreements, and commercial paper | \$ 300,341 | \$ 347,117 |
| Corporate bonds and other obligations | 201,126 | 192,190 |
| Other | 20,412 | 19,494 |
| Total operating investments | \$ 521,879 | \$ 558,801 |

Unless precluded by size or donor restrictions, individual endowment fund assets are pooled and collectively managed on a unitized basis. Each endowment fund subscribes to or disposes of units in the pool using fair value per unit at the beginning of the month such subscription or disposition occurs to account for the transaction.

The philosophies and policies employed in the management of the endowment are long-term by definition, as they are based on the expectation that the endowment will continue to provide financial support to

the University in perpetuity. Accordingly, the University's investment policy is intended to optimize long-term total return — income plus capital appreciation — relative to the level of risk taken.

The University's investment policy contemplates the effects of its spending policy. The endowment spending policy balances the need for reliable and predictable earnings distributions to support current University activities with the desire to maintain the purchasing power of endowment assets so that they can continue providing financial support for future generations (see Note 10).

The following table summarizes the University's investments at June 30, 2017 and 2016, for which NAV was used as a practical expedient to estimate fair value:

| Asset Class | Fair Value Determined Using NAV | | Unfunded Commitments | Redemption | Redemption |
|-------------------------------|------------------------------------|--------------|-------------------------|-------------|------------------|
| | 2017 | 2016 | at June 30, 2017 | Frequency | Notice Period |
| (in thousands of dollars) | | | | | |
| International equities | \$ 127,969 | \$ 108,485 | \$ - | Quarterly | 60-120 days |
| Marketable alternatives: | | | | | |
| Redeemable within one year | 585,896 | 483,100 | - | 90-365 days | 30-180 days |
| Redeemable beyond one year | 45,829 | 156,848 | - | 1-3 years | 30-60 days |
| Nonredeemable | 35,957 | 39,817 | 30,079 | NA | NA |
| Total marketable alternatives | 667,682 | 679,765 | 30,079 | | |
| Nonmarketable alternatives | 681,045 | 624,905 | 403,483 | NA | NA |
| Real assets: | | | | | |
| Redeemable | 52,718 | 65,811 | - | Monthly | 10 days |
| Nonredeemable | 570,938 | 523,352 | 313,274 | NA | NA |
| Total real assets | 623,656 | 589,163 | 313,274 | | |
| Total | \$ 2,100,352 | \$ 2,002,318 | \$ 746,836 | | |

Descriptions follow for each asset class set forth in the table above:

International Equities

A portion of the University's investments in emerging market equities includes an interest in one fund that holds publicly traded emerging market equities.

Marketable Alternatives

The University's investments in marketable alternatives are interests in commingled funds that hold various combinations of long and short positions predominantly in publicly traded equities, fixed income, and financial derivatives. Funds that are nonredeemable typically have investment periods of three or more years during which committed capital may be called and invested. The University's interests in the nonredeemable funds are considered to be illiquid in that they are not easily transferable and typically achieve liquidity over multi-year periods when and if the fund managers distribute proceeds realized from the underlying fund assets.

Nonmarketable Alternatives

The University's investments in nonmarketable alternatives are interests in commingled, private equity funds, including venture capital. These funds are invested

in equity and equity-like securities of mostly nonpublicly traded companies over investment periods of typically three to five years during which committed capital may be called and invested. The University's interests in private equity funds are considered to be illiquid in that they are not easily transferable and typically achieve liquidity over multi-year periods when and if the fund managers distribute proceeds realized from underlying fund assets.

Real Assets

The University's investments in real assets are interests in commingled funds that hold various combinations of publicly and nonpublicly traded physical assets (such as real estate, natural resources, commodities, and utilities), the financial assets and derivatives associated with such physical assets, and the equity and equity-like securities of companies engaged in physical asset ownership, operations and/or services. Funds that are nonredeemable typically have investment periods of three or more years during which committed capital may be called and invested. The University's interests in the nonredeemable funds are considered to be illiquid in that they are not easily transferable and typically achieve liquidity over multi-year periods when and if the fund managers distribute proceeds realized from the underlying fund assets.

NOTE 5: FAIR VALUE MEASUREMENTS

The following tables summarize the inputs used in valuing the University's assets and liabilities carried at fair value, excluding investments stated at NAV as a practical expedient, at June 30, 2017 and 2016:

| 2017 | | | | |
|--|----------------------------------|-------------------|------------------|---------------------|
| | Level 1 | Level 2 | Level 3 | Total |
| | <i>(in thousands of dollars)</i> | | | |
| Assets | | | | |
| Cash and cash equivalents | \$ 21,173 | \$ 1,321 | \$ - | \$ 22,494 |
| Endowment investments: | | | | |
| Cash and cash equivalents | 57,510 | 41,622 | - | 99,132 |
| Domestic equities | 615,254 | 12,975 | - | 628,229 |
| International equities | 708,761 | - | 4,301 | 713,062 |
| U.S. government, corporate bonds, and other obligations | 278,319 | 56,641 | 9,348 | 344,308 |
| Marketable alternatives | 71,436 | - | - | 71,436 |
| Real assets | 13,528 | - | - | 13,528 |
| Subtotal endowment investments ⁽¹⁾ | 1,744,808 | 111,238 | 13,649 | 1,869,695 |
| Operating investments: | | | | |
| U.S. government, corporate bonds, and other obligations | 412,748 | 88,719 | - | 501,467 |
| Other | 1,699 | - | 18,713 | 20,412 |
| Endowed funds held by third parties | - | - | 22,944 | 22,944 |
| Total assets | \$ 2,180,428 | \$ 201,278 | \$ 55,306 | \$ 2,437,012 |
| Liabilities | | | | |
| Interest rate swaps | \$ - | \$ 77,315 | \$ - | \$ 77,315 |
| | | | | |
| 2016 | | | | |
| | Level 1 | Level 2 | Level 3 | Total |
| | <i>(in thousands of dollars)</i> | | | |
| Assets | | | | |
| Cash and cash equivalents | \$ 4,057 | \$ 2,343 | \$ - | \$ 6,400 |
| Endowment investments: | | | | |
| Cash and cash equivalents | 35,539 | 29,665 | - | 65,204 |
| Domestic equities | 541,057 | 13,861 | - | 554,918 |
| International equities | 598,898 | - | 7,796 | 606,694 |
| U.S. government, corporate bonds, and other obligations | 257,724 | 55,820 | 3,780 | 317,324 |
| Subtotal endowment investments ⁽¹⁾ | 1,433,218 | 99,346 | 11,576 | 1,544,140 |
| Operating investments: | | | | |
| U.S. government, corporate bonds, and other obligations | 441,045 | 98,262 | - | 539,307 |
| Other | 1,397 | - | 18,097 | 19,494 |
| Deposits of bond proceeds | 5,806 | 792 | - | 6,598 |
| Endowed funds held by third parties | - | - | 22,079 | 22,079 |
| Total assets | \$ 1,885,523 | \$ 200,743 | \$ 51,752 | \$ 2,138,018 |
| Liabilities | | | | |
| Interest rate swaps | \$ - | \$ 111,141 | \$ - | \$ 111,141 |

⁽¹⁾ The subtotals of endowment investments within the fair value tables above exclude investments of \$2,100,352 and \$2,002,318 as of June 30, 2017 and 2016, respectively, which are measured at NAV and are not classified in the fair value hierarchy (see Note 4).

The following table summarizes the change in the Level 3 activity for the years ended June 30, 2017 and 2016:

| | International Equities | U.S. Government Corporate and Other | Other and Endowed Funds Held by Third Parties | Total |
|-----------------------------------|----------------------------------|---|---|-----------|
| | <i>(in thousands of dollars)</i> | | | |
| Fair Value - June 30, 2015 | \$ 12,848 | \$ 3,780 | \$ 41,326 | \$ 57,954 |
| Capital calls/purchases | 3,485 | - | 894 | 4,379 |
| Distributions/sales | (6,499) | - | (495) | (6,994) |
| Realized gains | 263 | - | - | 263 |
| Unrealized losses | (2,301) | - | (1,549) | (3,850) |
| Fair Value - June 30, 2016 | 7,796 | 3,780 | 40,176 | 51,752 |
| Capital calls/purchases | - | 5,380 | 1,537 | 6,917 |
| Distributions/sales | (3,018) | - | (638) | (3,656) |
| Transfers out | (1,275) | - | - | (1,275) |
| Realized gains | 675 | - | - | 675 |
| Unrealized gains | 123 | 188 | 582 | 893 |
| Fair Value - June 30, 2017 | \$ 4,301 | \$ 9,348 | \$ 41,657 | \$ 55,306 |

Realized and unrealized gains (losses) for Level 3 activity are reported in other activities in the Consolidated Statements of Activities. Unrealized gains related to

investments held at June 30, 2017 were \$0.03 million. Unrealized losses related to investments held at June 30, 2016 were \$2.8 million.

NOTE 6: PROPERTY, PLANT, AND EQUIPMENT, NET

Property, plant, and equipment, net, at June 30 is summarized below:

| | 2017 | 2016 |
|--|----------------------------------|---------------------|
| | <i>(in thousands of dollars)</i> | |
| Land | \$ 63,533 | \$ 61,546 |
| Buildings and improvements | 3,150,047 | 3,048,432 |
| Equipment | 746,030 | 750,761 |
| Library books | 287,073 | 276,837 |
| Works of art, historical treasures, and similar assets | 20,949 | 20,838 |
| Construction in progress | 120,102 | 93,484 |
| Subtotal | 4,387,734 | 4,251,898 |
| Less: Accumulated depreciation | (2,604,638) | (2,477,833) |
| Total property, plant, and equipment, net | \$ 1,783,096 | \$ 1,774,065 |

The amount capitalized in property, plant, and equipment related to expenditures funded by the commonwealth on behalf of the University totaled \$729.5 million and \$707.3 million at June 30, 2017 and 2016, respectively. The net book value of these items was \$331.5 million and \$335.5 million at June 30, 2017 and 2016, respectively.

The University has recognized a liability for conditional asset retirement obligations. The University performed an

analysis of such obligations and determined that asbestos remediation costs represented the primary source of the liability. The University reviewed facilities on all campuses and estimated the timing, method, and cost of remediation. The resulting liability for conditional asset retirement obligations recognized at June 30, 2017 and 2016 was \$30.6 million and \$37.3 million, respectively.

NOTE 7: BONDS AND NOTES PAYABLE

Bonds and notes payable at June 30 are reported based upon outstanding principal and consist of the following:

| | Range of Years | | Outstanding Principal | |
|--|----------------|----------------|---------------------------|------------|
| | Remaining | 2017 Effective | (in thousands of dollars) | |
| | to Maturity | Interest Rates | 2017 | 2016 |
| Variable-rate bonds: | | | | |
| Series 2017-C1, taxable | 14-22 | 1.00%-1.12% | \$ 55,000 | \$ - |
| Series 2017-C2, taxable | 22-24 | 1.00%-1.12% | 55,000 | - |
| Series 2017-C3, taxable | 15-20 | 1.00%-1.27% | 50,000 | - |
| Series 2014-B1/B2, tax-exempt | 8-18 | 0.50%-0.92% | 46,000 | 46,000 |
| Series 2007-B, tax-exempt | - | 0.48%-0.93% | - | 44,621 |
| Series 2005-A, tax-exempt | - | 0.45%-0.91% | - | 40,000 |
| Series 2005-B, tax-exempt | - | 0.50%-0.92% | - | 45,000 |
| Series 2005-C, tax-exempt | - | 0.47%-0.95% | - | 30,000 |
| Series 2002-B, tax-exempt | - | 0.50%-0.78% | - | 15,000 |
| Total variable-rate bonds | | | 206,000 | 220,621 |
| Fixed-rate bonds and notes: | | | | |
| Series 2017-A, taxable | 3 mos.-19 | 1.00%-3.65% | 512,480 | - |
| Series 2017-B, taxable | 3 mos.-13 | 0.91%-3.60% | 104,380 | - |
| Series 2014-A, tax-exempt | 19-27 | 3.51%-3.65% | 49,000 | 49,000 |
| Series 2009-A/B, tax-exempt | - | 3.88%-5.10% | - | 312,640 |
| Series 2007-B, tax-exempt | - | 4.28%-4.69% | - | 60,000 |
| Series 2005-A, tax-exempt | - | 4.69%-4.83% | - | 35,000 |
| Series 2002-A, tax-exempt | - | 3.31%-4.31% | - | 25,000 |
| Series 2002-B, tax-exempt | - | 4.53%-4.74% | - | 14,500 |
| Series 2000-A/B/C, tax-exempt | - | 4.37%-5.07% | - | 124,400 |
| Series 2016 PANTHER Notes, due August 15, 2017 | | 0.60% | 70,000 | - |
| Series 2015 PANTHER Notes, due August 2, 2016 | | 0.30% | - | 100,000 |
| Noninterest-bearing promissory note | | | 171 | 171 |
| Total fixed-rate bonds and notes | | | 736,031 | 720,711 |
| Unamortized net premium | | | 1,517 | 12,125 |
| Debt issuance costs | | | (4,169) | (4,508) |
| Total bonds and notes payable | | | \$ 939,379 | \$ 948,949 |

The principal payments of bonds and notes payable for the next five years ending June 30 in millions of dollars are:

| | |
|------|----------|
| 2018 | \$ 106.0 |
| 2019 | \$ 43.6 |
| 2020 | \$ 42.6 |
| 2021 | \$ 41.6 |
| 2022 | \$ 41.2 |

The foregoing principal payments do not include \$206.0 million of variable-rate demand bonds (VRDBs) in commercial paper (CP) mode, all of which have final maturity dates between 2030 and 2041. These bonds bear short-term rates that are fixed over staggered periods of approximately 45 days each and are remarketed at the expiry of their respective rate periods.

Liquidity support for the \$206.0 million of outstanding VRDBs in CP mode is provided by the University. In the event that the University receives notice of an optional tender on its VRDBs in CP mode, the tendered bonds will be purchased with remarketing proceeds. If the remarketing proceeds are insufficient to purchase all tendered bonds, the University would have a current obligation to meet the shortfall. As an additional source of liquidity for this situation, the University entered into a \$75.0 million unsecured standby liquidity agreement with a financial institution that matures in June 2018. Since the University commenced providing self-liquidity in October 2009, there have been no failed remarketings.

On January 17, 2017, the University issued \$512.5 million fixed-rate Taxable University Refunding Bonds (Series 2017-A). The proceeds were used to fund an escrow account that was irrevocably placed with a trustee to meet the principal and interest payments of the Series 2000-A/B/C (\$124.4 million), Series 2002-A (\$20.0 million), Series 2002-B (\$14.5 million) and Series 2009-A/B (\$290.3 million) fixed-rate bonds until their respective first call date and to redeem \$15.0 million tax-exempt Series 2002-B VRDBs in CP mode. The Series 2017-A bonds were issued at par.

On March 21, 2017, the University issued \$104.4 million fixed-rate Taxable University Refunding Bonds (Series 2017-B). The proceeds were used to fund an escrow account that was irrevocably placed with a trustee to meet the principal and interest payments of the Series 2005-A (\$35.0 million) and Series 2007-B (\$60.0 million) fixed-rate bonds until their respective first call date. The Series 2017-B bonds were issued at par.

The Series 2017-A and Series 2017-B refundings (A/B refundings) referenced above meet the legal requirements

for defeasance of bond liabilities. Therefore, neither the escrow accounts nor the refunded bonds are included in the Consolidated Balance Sheet at June 30, 2017. The A/B refundings resulted in a \$46.5 million reduction to net assets, which is reflected in the other activities section of the Consolidated Statement of Activities for the year ended June 30, 2017. This reduction in net assets represents the amount of principal required from the A/B refundings in excess of the face value of the refunded bonds, net of interest expense up to the date of the refundings and new debt issuance costs. A \$5.5 million write-off of debt issuance costs and net premiums associated with the refunded bonds is reflected as a net decrease in interest expense in the Consolidated Statement of Activities for the year ended June 30, 2017.

On May 4, 2017, the University issued \$160.0 million in Taxable University Refunding Bonds (Series 2017-C); such bonds were issued as VRDBs in CP mode. The proceeds were used to redeem \$159.6 million tax-exempt Series 2005-A/B/C and Series 2007-B VRDBs at their CP maturity date.

In July 2016, the University issued its Pitt Asset Notes – Tax-Exempt Higher Education Series (PANTHERS) of 2016 in the amount of \$70.0 million. The entire amount was used to partially refund the \$100.0 million of PANTHERS of 2015 that matured on August 2, 2016. The PANTHERS of 2016 matured and were repaid on August 15, 2017.

The University had three general unsecured credit facilities aggregating \$75.0 million at June 30, 2017. No draws were made under the facilities during 2017 or 2016. Although each of the three credit facilities carry an expiry date of October 24, 2017, it is management's intention to extend each facility for another 364-day term.

Interest costs incurred in 2017 and 2016 were \$31.3 million and \$42.2 million, respectively. Included in these amounts are net swap payments and capitalized interest associated with various construction projects. Capitalized interest for 2017 and 2016 was \$0.7 million and \$0.8 million, respectively.

NOTE 8: DERIVATIVE AND OTHER FINANCIAL INSTRUMENTS

The University does not issue or trade derivative financial instruments except as described herein. University financial assets are invested on its behalf with various investment managers, some of whom are authorized to employ derivative instruments, including swaps, futures, forwards, and options. These derivatives are generally used for managing interest rate or foreign currency risk or to attain or hedge a specific financial market position. Additionally, the University has entered into various interest rate swap agreements to hedge its interest rate risk associated with certain debt obligations.

The University may be exposed to financial loss should a derivative counterparty fail to perform pursuant to the instrument. In the case of exchange-traded derivatives, the counterparty is the exchange itself. In the case of over-the-counter derivatives, the counterparty is typically a financial institution. Counterparty risks are mitigated by using creditworthy counterparties, settling positions periodically, and requiring collateral to be posted at predetermined levels of exposure.

Not including University derivative instruments held by various alternative investment funds, the University invested in futures contracts with gross notional values of \$50.9 million and \$51.2 million at June 30, 2017 and 2016, respectively. When the University uses futures to replicate an investment position, it has opted to do so on a fully collateralized basis. Futures contracts are marked-to-market daily based on settlement prices established by the board of trade or exchange on which they are traded. Gains and losses are realized when the contracts expire or are closed. There was an unrealized loss on these future contracts of \$0.2 million at June 30, 2017 and an unrealized gain of \$1.4 million at June 30, 2016.

The University liabilities arising from variable-to-fixed interest rate swap agreements associated with certain University debt obligations had an aggregated fair value of \$77.3 million and \$111.1 million at June 30, 2017 and 2016, respectively, and are included in other liabilities on the Consolidated Balance Sheets (see also Note 5). The fair value represents the estimated amount the University would be required to pay to terminate these agreements as of the respective fiscal year-end. The University recorded in the Consolidated Statements of Activities unrealized gains of \$33.8 million in 2017 and unrealized losses of \$34.5 million in 2016 due to changes in fair value of the swaps.

The aggregate notional amount of the swap agreements associated with University debt was \$350.3 million and \$365.3 million at June 30, 2017 and 2016, respectively. These swaps were entered into for the sole purpose of hedging interest payable on certain University VRDBs. The variable interest rates received by the University under the swap agreements are either 67% or 70% of one- or three-month London Interbank Offered Rates (LIBOR), while the fixed rates paid by the University range from 3.25% to 5.14%. Net swap payments made or received by the University are reported in interest expense in the Consolidated Statements of Activities. No collateral was called or posted during 2017 or 2016 with respect to these swap agreements. Furthermore, the University does not anticipate posting collateral pursuant to these swap agreements since there are no collateral thresholds applicable to the University given the University's current credit ratings.

NOTE 9: PENSION AND POSTRETIREMENT OBLIGATIONS

Pension

The University provides retirement benefits under contributory or noncontributory plans to substantially all employees. The University's contributory plan provides for participant directed investment in certain investments managed by the Teachers Insurance and Annuity Association (TIAA) and College Retirement Equities Fund (CREF) and in certain investment funds of the Vanguard Group. The plan requires three years of service for vesting of the University contribution. Employees hired before January 1, 1995 were immediately vested. University contributions to this plan in 2017 and 2016 were \$79.0 million and \$76.2 million, respectively.

The noncontributory plan is a defined-benefit pension plan that covers employees who do not participate in the contributory plan. The plan was amended to freeze new entrants effective November 3, 2015. The plan provides for vesting after five years with pension benefits accruing at 2.1% of base salary or the Social Security wage base, whichever is lower. Pension benefits are payable upon normal retirement at age 65 or early retirement at age 55, in accordance with the conditions and pension eligibility criteria described in the plan. University contributions to this plan in 2017 and 2016 were \$15.0 million and \$10.9 million, respectively.

Postretirement

The University also provides postretirement medical and life insurance benefits to eligible employees and their spouses upon retirement through a contributory benefit plan.

Though funding is not required, the University has elected to fund its postretirement liability via a quasi-endowment fund, which is managed within the University's pooled endowment investments (see Notes 4 and 10). The fair value of these investments at June 30, 2017 and 2016 was \$410.6 million and \$354.3 million, respectively, and is included in endowment investments on the Consolidated Balance Sheets. Although the University has established this quasi-endowment for the postretirement plan, payments to beneficiaries of this plan are currently made through nonendowed operating funds.

Under the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, the federal government provides a subsidy to employers equal to 28% of the employer's qualifying prescription drug costs for retirees if the plan offered by the employer is at least actuarially equivalent to Medicare Part D. The University is qualified for and receives the subsidy via a reduction in premiums charged by its provider.

The University uses a measurement date of June 30 for plan assets and the benefit obligations. Information related to the benefit obligation, assets, and funded status of the defined-benefit pension plan and the postretirement benefit plan as of and for the years ended June 30, 2017 and 2016 is summarized in the table below:

| | Defined-Benefit Plan | | Postretirement Plan | |
|---|----------------------------------|--------------------|---------------------|---------------------|
| | 2017 | 2016 | 2017 | 2016 |
| | <i>(in thousands of dollars)</i> | | | |
| Net periodic benefit cost: | | | | |
| Service cost | \$ 8,136 | \$ 6,255 | \$ 19,525 | \$ 15,276 |
| Interest cost | 5,851 | 5,605 | 20,237 | 21,431 |
| Expected return on plan assets | (7,427) | (6,990) | - | - |
| Actuarial loss | 3,443 | 1,113 | 5,789 | 2,897 |
| Amortization of prior service credit | - | (52) | (4,025) | (3,964) |
| Net periodic benefit cost | \$ 10,003 | \$ 5,931 | \$ 41,526 | \$ 35,640 |
| Funded status: | | | | |
| Benefit obligation at beginning of year | \$ 151,266 | \$ 117,822 | \$ 541,785 | \$ 455,755 |
| Service cost | 8,136 | 6,255 | 19,525 | 15,276 |
| Interest cost | 5,851 | 5,605 | 20,237 | 21,431 |
| Actuarial (gain) loss | (7,000) | 22,722 | (36,470) | 66,435 |
| Benefits paid | (1,376) | (1,138) | (17,037) | (17,112) |
| Benefit obligation at end of year | \$ 156,877 | \$ 151,266 | \$ 528,040 | \$ 541,785 |
| Fair value of plan assets at beginning of year | \$ 103,666 | \$ 94,243 | | |
| Actual return on plan assets | 13,537 | (370) | | |
| Actual plan contributions | 15,004 | 10,931 | | |
| Benefits paid | (1,376) | (1,138) | | |
| Fair value of plan assets at end of year | \$ 130,831 | \$ 103,666 | | |
| Funded status – liability recognized on Consolidated Balance Sheets: | | | | |
| Pension and postretirement obligations | \$ (26,046) | \$ (47,600) | \$ (528,040) | \$ (541,785) |
| Accumulated benefit obligation | \$ 149,723 | \$ 144,496 | | |

Estimated 2018 employer contribution to the defined-benefit plan:
(in thousands of dollars)

\$ 6,652

| | Defined-Benefit Plan | | Postretirement Plan | |
|--|----------------------|------|---------------------|------|
| | 2017 | 2016 | 2017 | 2016 |
| Weighted-average assumptions used to determine the benefit obligation (liability) at June 30: | | | | |
| Discount rate | 3.9% | 3.9% | 3.9% | 3.8% |
| Rate of compensation increase | 3.0% | 3.0% | - | - |
| Assumed health care trend cost: | | | | |
| Initial trend – pre-age 65 retirees | - | - | 7.0% | 7.0% |
| Initial trend – post-age 65 retirees | - | - | 7.0% | 7.0% |
| Ultimate trend | - | - | 4.5% | 4.5% |
| Year to reach ultimate | - | - | 2025 | 2024 |

Weighted-average assumptions used to determine the net periodic cost (expense) for the years ended June 30:

| | | | | |
|--|-------|------|------|------|
| Discount rate | 3.9% | 4.8% | 3.8% | 4.8% |
| Rate of compensation increase | 3.0% | 3.0% | - | - |
| Expected long-term return on plan assets | 7.25% | 7.5% | - | - |
| Assumed health care trend cost: | | | | |
| Initial trend – pre-age 65 retirees | - | - | 7.0% | 7.0% |
| Initial trend – post-age 65 retirees | - | - | 7.0% | 6.0% |
| Ultimate trend | - | - | 4.5% | 4.5% |
| Year to reach ultimate | - | - | 2024 | 2023 |

| | Defined-Benefit Plan | Postretirement Plan |
|---|----------------------------------|---------------------|
| Estimated future benefit payments: | | |
| | <i>(in thousands of dollars)</i> | |
| 2018 | \$ 2,540 | \$ 16,878 |
| 2019 | \$ 2,821 | \$ 19,343 |
| 2020 | \$ 3,176 | \$ 20,587 |
| 2021 | \$ 3,578 | \$ 22,188 |
| 2022 | \$ 4,024 | \$ 23,884 |
| 2023 - 2027 | \$ 27,357 | \$ 140,502 |

A one-percentage point change in assumed health care cost trend rates would have the following effects on the postretirement plan:

| | Increase | | Decrease | |
|---|--------------------------|-------------------|-------------------|-------------------|
| | (in millions of dollars) | | | |
| | Revised Amount | Percent Change | Revised Amount | Percent Change |
| Service and interest cost (medical component only) | \$ 39.3 | 6.1% | \$ 32.6 | 12.1% |
| Total periodic benefit cost | \$ 45.5 | 9.5% | \$ 34.2 | 17.7% |
| Benefit obligation for health care benefits | \$ 510.7 | 5.8% | \$ 435.9 | 9.7% |
| Total benefit obligation | \$ 556.0 | 5.3% | \$ 481.6 | 8.8% |

Pension Assets

Assets related to the University's defined-benefit pension plan are segregated in a trust managed by a third-party investment manager. The fair value of these assets at June 30, 2017 and 2016 was \$130.8 million and \$103.7 million, respectively. The fund is invested through common collective trust funds in domestic and international equities and fixed-income securities using the S&P 500 Index as a benchmark for domestic equities, the MSCI EAFE Index for international equities, and the Barclays Intermediate Government/Credit Bond Index for the fixed-income securities. Common collective trust funds are similar to mutual funds; however, they are generally not registered with the U.S. Securities and Exchange Commission and participation is not open to the public but limited to institutional investors. The specific investment objective is to meet or exceed the investment policy benchmark over the long term. Plan investments are determined using NAV per share available at the measurement date, as published by the fund manager. The plan has no unfunded commitments. Pension plan assets are Level 1 in the fair value hierarchy.

The long-term investment strategy for pension plan assets is to meet present and future benefit obligations to all

participants and beneficiaries; cover reasonable expenses incurred to provide such benefits, including expenses incurred in the administration of the trust and the plan; provide sufficient liquidity to meet benefit and expense payment requirements on a timely basis; and provide a total return that, over the long term, maximizes the ratio of trust assets to liabilities by maximizing investment return, at an appropriate level of risk. The expected return on plan assets is based on a weighted average of the individual expected return for each asset category in the plan's portfolio. Expected return comprises inflation plus the real rate of return for each asset class.

Over the long term, asset allocation is believed to be the single greatest determinant of risk and return. Asset allocation will deviate from the target percentages due to market movement, cash flows, and investment manager performance. Material deviations from the asset allocation target can alter the expected return and risk of the trust. However, frequent rebalancing to the asset allocation targets may result in significant transaction costs, which can impair the trust's ability to meet its investment objective.

The target allocation for both fiscal years and the fair value of the University's pension plan assets at June 30, by asset category, were as follows:

| | Target Allocation | 2017 | 2016 |
|----------------------------------|----------------------|----------------------------------|-------------------|
| Asset class: | | <i>(in thousands of dollars)</i> | |
| Equity securities: | | | |
| Stock index and small cap | 35% | \$ 45,684 | \$ 36,616 |
| International | 35% | 45,748 | 35,438 |
| Debt securities | 30% | 39,098 | 31,312 |
| Cash and cash equivalents | - | 301 | 300 |
| Total pension plan assets | | \$ 130,831 | \$ 103,666 |

NOTE 10: ENDOWMENT NET ASSETS

The commonwealth has not adopted The Uniform Prudent Management of Institutional Funds Act of 2006 (UPMIFA) and, instead, enacted in December 1998 Pennsylvania Act 141 (codified as Title 15 of the Pennsylvania Consolidated Statutes §5548(c) and referred to herein as Title 15) to govern the investment of restricted funds held in trust by Pennsylvania nonprofit corporations. Title 15 permits Pennsylvania nonprofit corporations to elect a total return approach for determining income distributions from restricted funds held in trust, whereby income is defined as a stipulated percentage of the value of the assets held; the stipulated percentage must be determined at least annually and may be no less than 2% nor more than 7%, and the value of the assets held must be averaged over a period of three or more preceding years. A resolution to elect a total return approach for determining endowment income distributions for the University's consolidated investment pool was passed by the University's Board of Trustees on October 21, 1999. The University's endowment income distribution is determined annually using a stipulated

percentage of 4.25% of the endowment's three-year average fair value, provided that such distribution is not less than the amount distributed in the previous year. The endowment income distribution amounts for both 2017 and 2016 represent 4.25% of the endowment's three-year average fair value.

Employing the total return approach, the University records the original value of an endowed contribution as a permanently restricted asset, along with any endowment income distributions that are reinvested in the endowment. Nonendowed funds that lack third-party donor restrictions but function as endowments (quasi-endowments) are classified as unrestricted net assets. Gains and losses attributable to donor-restricted endowed funds are recorded as temporarily restricted net assets, whereas gains and losses attributable to quasi-endowment funds are recorded as unrestricted net assets.

The University's endowment net assets at June 30 were as follows:

| 2017 | | | | |
|-----------------------------------|----------------------------------|------------------------|------------------------|---------------------|
| | Unrestricted | Temporarily Restricted | Permanently Restricted | Total |
| | <i>(in thousands of dollars)</i> | | | |
| Donor-restricted endowment funds | \$ - | \$ 801,566 | \$ 713,522 | \$ 1,515,088 |
| Quasi-endowment funds | 2,439,453 | - | - | 2,439,453 |
| Total endowment net assets | \$ 2,439,453 | \$ 801,566 | \$ 713,522 | \$ 3,954,541 |
| 2016 | | | | |
| | Unrestricted | Temporarily Restricted | Permanently Restricted | Total |
| | <i>(in thousands of dollars)</i> | | | |
| Donor-restricted endowment funds | \$ - | \$ 686,118 | \$ 684,922 | \$ 1,371,040 |
| Quasi-endowment funds | 2,163,439 | - | - | 2,163,439 |
| Total endowment net assets | \$ 2,163,439 | \$ 686,118 | \$ 684,922 | \$ 3,534,479 |

The change in endowment net assets for the years ended June 30, 2017 and 2016 was as follows:

| | Unrestricted | Temporarily Restricted | Permanently Restricted | Total |
|---|----------------------------------|---------------------------|---------------------------|--------------|
| | <i>(in thousands of dollars)</i> | | | |
| Endowment net assets – June 30, 2015 | \$ 2,164,556 | \$ 780,998 | \$ 653,935 | \$ 3,599,489 |
| Endowment return: | | | | |
| Endowment earnings | 14,978 | - | 2,237 | 17,215 |
| Losses | (15,270) | (94,880) | (62) | (110,212) |
| Total endowment return | (292) | (94,880) | 2,175 | (92,997) |
| Contributions | 173 | - | 28,812 | 28,985 |
| Distributions for operations | (118,245) | - | - | (118,245) |
| Net transfers | 117,247 | - | - | 117,247 |
| Endowment net assets – June 30, 2016 | 2,163,439 | 686,118 | 684,922 | 3,534,479 |
| Endowment return: | | | | |
| Endowment earnings | 17,146 | - | 2,057 | 19,203 |
| Gains | 326,039 | 115,448 | 117 | 441,604 |
| Total endowment return | 343,185 | 115,448 | 2,174 | 460,807 |
| Contributions | 497 | - | 26,426 | 26,923 |
| Distributions for operations | (126,472) | - | - | (126,472) |
| Net transfers | 58,804 | - | - | 58,804 |
| Endowment net assets – June 30, 2017 | \$ 2,439,453 | \$ 801,566 | \$ 713,522 | \$ 3,954,541 |

Approximately 99% of the University's endowment funds are collectively managed in a broadly diversified pool of assets called the consolidated investment pool. The Investment Committee of the Board of Trustees

provides general oversight, policy guidance, and performance review of the consolidated investment pool and approves asset allocation and spending policies.

NOTE 11: FUNCTIONAL EXPENSES

The University accounts for expenses according to major classes of program services or functions. Functional expenses for the years ended June 30 consist of the following:

| | 2017 | 2016 |
|----------------------------------|----------------------------------|---------------------|
| | <i>(in thousands of dollars)</i> | |
| Instruction | \$ 581,624 | \$ 566,786 |
| Research | 707,495 | 676,069 |
| Public service | 85,899 | 85,449 |
| Academic support | 205,833 | 193,807 |
| Libraries | 47,342 | 47,240 |
| Student services | 166,434 | 150,751 |
| Institutional support | 145,404 | 139,898 |
| Auxiliary enterprises | 143,968 | 142,393 |
| Total functional expenses | \$ 2,083,999 | \$ 2,002,393 |

Costs related to the operation and maintenance of property, including depreciation of property and equipment and interest on related debt, are primarily allocated to program and support activities based upon salary effort.

NOTE 12: RELATED PARTIES

The University has relationships and affiliation agreements with separately incorporated entities including UPMC and affiliated hospitals and UPP. These relationships include a common paymaster arrangement for certain University School of Medicine (SOM) faculty with academic and clinical responsibilities; contractual obligations for UPMC and UPP to support certain educational and research functions at the University; and property rental agreements. Transactions with all related entities are conducted in the ordinary course of business and are discussed below.

Certain University SOM faculty and staff provide clinical services through their University appointments to UPMC, UPP, and affiliated hospitals. The University invoices these entities monthly for reimbursement of the clinical portion of the associated compensation costs. SOM faculty members, having both a University academic appointment and a separate, external appointment for clinical responsibilities, participate in the common paymaster arrangement for purposes of determining appropriate FICA taxation. In addition to the reimbursable compensation costs, the University also engages in other

transactions with these entities, which include providing certain facilities-related services, telephone, mailing, printing, and various other services, which are reimbursed at cost. Reimbursements from UPMC, UPP, and affiliated hospitals for clinical compensation and other costs totaled \$136.8 million and \$137.6 million in 2017 and 2016, respectively.

In 1998, the University signed a 10-year agreement with UPMC that included financial commitments designed to further the two entities' commitment to their interrelated teaching, research, clinical care, and community service missions. As part of the agreement, UPMC provides \$12.5 million annually in funding for the SOM. UPMC also provides additional funding up to \$2.5 million annually on a matching basis. The match is on a one-to-two basis with UPMC matching \$1 for every \$2 provided by the University to support health sciences programs. The University has received this match each year since the inception of the agreement. This agreement was amended in 2007 under essentially the same terms, except for a provision to provide an additional \$10.0 million per year in 2007, increased annually by \$0.5 million from

2008 through 2016. The University received \$30.0 million and \$29.5 million (including the annual match) in 2017 and 2016, respectively. Effective July 1, 2016, the term of the agreement was extended through June 30, 2020. The amounts from this agreement are reported as other revenue in the Consolidated Statements of Activities.

The UPMC agreement was further amended in 2009 to include additional financial support through the Children's Hospital of Pittsburgh of UPMC (CHP) to the University of at least \$7.5 million annually related to an agreement detailing the transfer of certain pediatric research programs from CHP to the University. This transfer standardized procedures, eliminated duplication of services, improved efficiency, reduced costs, and enhanced recruitment efforts for pediatric programs. The University received \$11.6 million and \$10.9 million in 2017 and 2016, respectively, related to this additional support. These amounts are reported as sales and services, educational and other in the Consolidated Statements of Activities.

UPMC also provided \$15.1 million and \$14.7 million in 2017 and 2016, respectively, of contractual dean's tax, which represents support for the academic and research activities of the SOM. This activity is reported as sales and services, educational and other in the Consolidated Statements of Activities.

UPMC provides additional academic support to the SOM for new programs, faculty recruitment, and general support of the School's academic mission. The University received \$52.5 million and \$59.5 million in 2017 and 2016, respectively, related to this additional support. These amounts are reported as sales and services, educational and other in the Consolidated Statements of Activities.

UPMC also provided \$2.3 million and \$2.9 million in 2017 and 2016, respectively, for the Institute for Personalized Medicine. These amounts are reported as other revenue in the Consolidated Statements of Activities.

Additionally, UPMC provided support to various departments within the SOM to augment their operating budgets. These payments were made to those departments that do not generate sufficient revenues to meet their research and academic costs. Payments made by UPMC for this purpose totaled \$9.3 million and \$9.0

million in 2017 and 2016, respectively, and are reported as sales and services, educational and other in the Consolidated Statements of Activities.

The University is involved in certain rental arrangements in which the University acts as both lessor or lessee with UPMC and its affiliates. Rental revenue from UPMC and affiliates totaled \$10.2 million and \$10.0 million in 2017 and 2016, respectively. Rent expense paid to UPMC and affiliates totaled \$21.9 million in both 2017 and 2016.

In April 2013, the University entered into a five-year agreement with UPMC to provide full-time, armed police aid, support, and assistance for certain UPMC facilities. Payments made by UPMC for these services totaled \$2.4 million and \$2.3 million in 2017 and 2016, respectively, and are reported as other revenue in the Consolidated Statements of Activities.

UPMC serves as the provider of health insurance coverage to all eligible University employees who enroll in the plan. The University is self-insured for these costs and reimburses UPMC for actual claims cost. Health insurance expense including administrative fees totaled \$118.4 million and \$107.2 million in 2017 and 2016, respectively, and is reported as fringe benefits in the Consolidated Statements of Activities.

UPMC receives federal matching funds for costs incurred by academic medical centers for medical assistance services. The funds are remitted to the University to support the activities of the SOM, the Western Psychiatric Institute and Clinic (WPIC), the Center for Public Health Practice, and the clinic within the School of Dental Medicine. These remittances were \$12.1 million and \$11.1 million in 2017 and 2016, respectively, and are reported as commonwealth appropriation revenue in the Consolidated Statements of Activities.

In 2003, the University and UPMC created the Medical and Health Sciences Foundation (MHSF), a separate 501(c)(3) organization. The MHSF serves as a unified fundraising organization for the University's schools of the health sciences and UPMC. The arrangement calls for the cost of MHSF to be split between the University and UPMC. UPMC's share of total operating costs for MHSF totaled \$3.6 million and \$3.7 million in 2017 and 2016, respectively, and is reported as other revenue in the Consolidated Statements of Activities. All contributions generated by MHSF are credited to the University or UPMC based upon donor intent.

In November 2004, the University entered into an agreement with UPMC to jointly construct and own the Carrillo Street steam plant, a gas-fired steam-generating facility. The University funded 78.1% of construction costs with UPMC funding the remaining 21.9%. The plant provides steam to each entity's respective buildings and is managed by the University.

A lease arrangement exists between the University and the commonwealth for WPIC. Since 1949, the University has managed WPIC under an agreement between the University and the commonwealth whereby the University rents for a consideration of \$1 per year the land, building, equipment, and other items that are used by WPIC. The agreement provides for continuing terms of 10 years each; however, this agreement is cancelable by either party on one year's written notice. In 1992, the University subleased to UPMC the land, building, equipment, and other items subject to the current lease arrangement between the commonwealth and the University. This sublease arrangement continued to be in effect during 2017 and 2016. Included in property, plant,

and equipment is \$191.9 million and \$190.7 million at June 30, 2017 and 2016, respectively, related to the land, buildings, and equipment used by WPIC. Accumulated depreciation related to these assets totaled \$163.8 million and \$159.9 million at June 30, 2017 and 2016, respectively.

The University also has an arrangement with UPMC whereby certain research-related costs incurred by UPMC (primarily staff compensation) in relation to WPIC and the UPMC Hillman Cancer Center (UHCC) research awards are charged to such awards via an electronic billing and reimbursed to UPMC each month. Payments totaled \$23.1 million in 2017 and \$23.2 million in 2016 and are recorded as expenses in the Consolidated Statements of Activities. All billings are recorded at cost.

UPMC provided support payments to UHCC for various subsidies, research initiatives, and general support. These payments totaled \$14.4 million in both 2017 and 2016, and are primarily reported in other revenue in the Consolidated Statements of Activities.

NOTE 13: COMMITMENTS AND CONTINGENCIES

At June 30, 2017 and 2016, the University had outstanding contractual commitments of \$75.6 million and \$63.4 million, respectively, for property, plant, and equipment expenditures.

The University engages in various leasing activities as both a lessor and lessee. Rental revenue from operating leases was \$18.3 million and \$18.4 million in 2017 and 2016, respectively. Rental expense for operating leases was \$47.8 million in 2017 and \$45.5 million in 2016. Minimum future rental revenue and expense under operating leases that have initial or remaining noncancelable lease terms for the years ended June 30 are as follows:

| | Rental Revenue | Rental Expense |
|------------|----------------------------------|-------------------|
| | <i>(in thousands of dollars)</i> | |
| 2018 | \$ 16,524 | \$ 46,303 |
| 2019 | \$ 13,439 | \$ 45,130 |
| 2020 | \$ 6,631 | \$ 36,617 |
| 2021 | \$ 6,179 | \$ 22,796 |
| 2022 | \$ 3,574 | \$ 16,829 |
| Thereafter | \$ 11,606 | \$ 105,670 |

The University is a defendant in a number of legal actions seeking damages and other relief from the University. While the final outcome of each action cannot be determined at this time, legal counsel and University management are of the opinion that the liability, if any, in these legal actions will not have a material adverse effect on the University's consolidated financial statements.

The University receives significant support from UPMC to continue the two entities' commitment to their interrelated teaching, research, clinical care, and community service missions. There are various agreements between the University and UPMC that provide for this support (see Note 12), but there is no guarantee these agreements will be renewed in future periods.

The University receives significant financial assistance from the federal government including the sponsorship of federal research projects. Grants and contracts normally provide for the recovery of direct and indirect costs. Recovery of indirect costs is recorded at predetermined rates negotiated with the federal government. Entitlement to these resources for the recovery of the applicable direct and related indirect costs is generally conditioned upon compliance with the terms and conditions of the grant agreements and applicable federal regulations, including the expenditure of the resources for eligible purposes. Substantially all grants and the University's indirect cost rate are subject to financial and compliance reviews and audits by the grantors. In management's opinion, the likelihood of a material adverse outcome on the University's financial position from those reviews and audits is remote.

As part of ongoing operations, the University enters into utility contracts to secure electric and natural gas rates. These contracts are with various utility suppliers and some of the contracts cover multiple years. The University monitors the energy markets on an ongoing basis and will make commitments on new rates if deemed in the best interest of the University.

The University conducts a review of contracts and agreements that may contain guarantees, including loan guarantees such as standby letters of credit and indemnifications. In certain contracts, the University agrees to indemnify a third-party service provider under certain circumstances. Pursuant to its bylaws, the University provides indemnification to directors, officers, and, in some cases, employees and agents against certain liabilities incurred as a result of service provided on behalf of or at the request of the University. The terms of indemnity vary from agreement to agreement, and the amount of indemnification, if any, cannot be reasonably determined.

NOTE 14: SUBSEQUENT EVENTS

The University has evaluated subsequent events through September 22, 2017, the date on which the consolidated financial statements were issued, and determined that

there were no subsequent events requiring disclosure or adjustment to the consolidated financial statements.

MEMBERSHIP OF THE BOARD OF TRUSTEES FISCAL YEAR 2017

| | | | |
|---|---|---|---|
| <p>MEMBERS EX OFFICIO (NONVOTING)</p> <p>Tom Wolf, Governor of the Commonwealth of Pennsylvania</p> <p>Pedro Rivera, Secretary of Education of the Commonwealth of Pennsylvania</p> <p>Rich Fitzgerald, Chief Executive of Allegheny County</p> <p>William Peduto, Mayor of the City of Pittsburgh</p> | <p><i>2016 – 20</i></p> <p>John A. Barbour Eva Tansky Blum Edward J. Grefenstette Patricia D. Horoho John H. Pelusi Jr.</p> <p><i>2017 – 21</i></p> <p>Ira J. Gumberg Dawne S. Hickton Roberta A. Luxbacher Thomas E. Richards</p> | <p>ALUMNI TRUSTEES</p> <p><i>2014 – 18</i></p> <p>Jane Bilewicz Allred F. James McCarl III</p> <p><i>2015 – 19</i></p> <p>Michael A. Bryson</p> <p><i>2016 – 20</i></p> <p>S. Jeffrey Kondis Jack D. Smith</p> <p><i>2017 – 21</i></p> <p>Larry J. Merlo</p> | <p>EMERITUS TRUSTEES</p> <p>J. David Barnes Steven C. Beering Thomas G. Bigley John G. Conomikes George A. Davidson Jr. Catherine D. DeAngelis Herbert P. Douglas Jr. D. Michael Fisher E. Jeanne Gleason J. Roger Glunt Earl F. Hord A. Alice Kindling Paul E. Lego George L. Miles Jr. Frank E. Mosier Alfred L. Moyé Thomas H. O'Brien Anthony J.F. O'Reilly Robert A. Paul James C. Roddey Farrell Rubenstein Richard P. Simmons Charles M. Steiner John A. Swanson Burton M. Tansky Dick Thornburgh Thomas J. Usher Edward P. Zemprelli</p> |
| <p>MEMBER EX OFFICIO (VOTING)</p> <p>Patrick Gallagher, Chancellor and Chief Executive Officer</p> | <p>SPECIAL TRUSTEES</p> <p><i>2014 – 18</i></p> <p>Brian Generalovich Robert M. Hernandez Robert P. Randall Sam S. Zacharias</p> <p><i>2015 – 19</i></p> <p>G. Nicholas Beckwith III Louis R. Cestello Thomas M. Kurtz Jeannine T. Schoenecker</p> <p><i>2016 – 20</i></p> <p>David C. Chavern Marlee S. Myers Shawndya L. Simpson</p> <p><i>2017 – 21</i></p> <p>Douglas M. Browning Deborah J. Gillotti Tamara M. Haddad</p> | <p>COMMONWEALTH TRUSTEES</p> <p><i>G: Governor appointment H: House appointment S: Senate appointment</i></p> <p><i>2013 – 17</i></p> <p>Sy Holzer (G) Thomas VanKirk (H) William K. Lieberman (S)</p> <p><i>2014 – 18</i></p> <p>Kevin Washo Jr. (G) John A. Maher III (H) John J. Verbanac (S)</p> <p><i>2015 – 19</i></p> <p>Jake Wheatley Jr. (G) Herbert S. Shear (H) Peter C. Varischetti (S)</p> <p><i>2016 – 20</i></p> <p>Bradley J. Franc (G) Thomas O. Johnson II (H) Jay Costa Jr. (S)</p> | |
| <p>TERM TRUSTEES</p> <p><i>2014 – 18</i></p> <p>Mary Ellen Callahan James Covert Terrence P. Laughlin Keith E. Schaefer</p> <p><i>2015 – 19</i></p> <p>Robert G. Lovett Martha Hartle Munsch William E. Strickland Jr. Stephen R. Tritch</p> | | | |

The consolidated financial statements have been reviewed and approved by the University's Audit Committee. The Audit Committee is comprised of outside directors having requisite financial expertise and meets regularly with University management and both internal and external auditors to review internal accounting controls, audit issues, and financial reporting matters. The committee meets with the external auditors in private sessions and is also responsible for approving the independent auditing firm retained each year. Nonvoting representatives on the committee include members of the University's administration as well as student, faculty, and staff representatives.

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
AND AUDITORS' REPORT AS REQUIRED BY TITLE 2 U.S. CODE OF
FEDERAL REGULATIONS PART 200**

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| I. RESEARCH & DEVELOPMENT CLUSTER: | | | | |
| <u>Department of Health and Human Services:</u> | | | | |
| Administration for Children and Families: | | | | |
| Child Care and Development Block Grant | 93.575 | Direct | - | 56,740 |
| Westat, Inc. | 93.000 | HHSP2332015000671 | - | 20,524 |
| Total Administration for Children and Families | | | - | 77,264 |
| Administration for Community Living: | | | | |
| ACL National Institute on Disability, Independent Living, and Rehabilitation Research | 93.433 | Direct | 750,842 | 3,477,369 |
| Gallaudet University | 93.433 | 90RES5020-02 | - | 97,307 |
| University of Alabama | 93.433 | 90RE5009-02 | - | 33,435 |
| University of Alabama | 93.433 | 90RE5009-03 | - | 15,727 |
| University of Massachusetts | 93.433 | 90RT5031-02-01 | - | 20,504 |
| University of Massachusetts | 93.433 | 90RT5031-03 | - | 57,964 |
| Total Administration for Community Living | | | 750,842 | 3,702,306 |
| Agency for Healthcare Research and Quality: | | | | |
| Research on Healthcare Costs, Quality and Outcomes | 93.226 | Direct | 334,897 | 2,989,886 |
| Commonwealth of Pennsylvania | 93.226 | 1R18 HS025072-01 | 10,343 | 324,768 |
| Dartmouth College | 93.226 | 5R01 HS021747-05 | - | 8,390 |
| NorthShore University HealthSystem Research Institute | 93.226 | 1R21 HS024100-01 | - | 554 |
| University of Arizona | 93.226 | 1R21 HS023826-01 | - | 5,388 |
| University of Maryland | 93.226 | 5R01 HS018975-03 | - | (9,868) |
| University of Massachusetts | 93.226 | 1R01 HS024422-01 | - | 2,701 |
| University of Wisconsin | 93.226 | 5R18 HS022465-02 | - | 122,261 |
| Veterans Medical Research Foundation | 93.226 | 5R01 HS021290-04 | - | (77) |
| Subtotal 93.226 | | | 345,240 | 3,444,003 |
| American Institutes for Research | 93.000 | HHSA290201000018I | - | 2,625 |
| Total Agency for Healthcare Research and Quality | | | 345,240 | 3,446,628 |
| Centers for Disease Control and Prevention: | | | | |
| Baobab Health Trust | 93.067 | 5U2G GH000729-04 | - | 93,161 |
| University of Rwanda | 93.067 | 5U01 GH000782-02 | - | 7,894 |
| Subtotal 93.067 | | | - | 101,055 |
| Commonwealth of Pennsylvania | 93.070 | 5U35 EH000352-05 | - | 47,266 |
| Birth Defects and Developmental Disabilities - Prevention and Surveillance | 93.073 | Direct | 75,000 | 254,049 |
| Prevention of Disease, Disability, and Death through Immunization and Control of Respiratory and Related Diseases | 93.083 | Direct | - | 521,528 |
| Commonwealth of Pennsylvania | 93.094 | 6U58 DP004857-04 | - | 72,278 |
| Centers for Research and Demonstration for Health Promotion and Disease Prevention | 93.135 | Direct | - | 720,754 |
| Injury Prevention and Control Research and State and Community Based Programs | 93.136 | Direct | 47,640 | 1,098,466 |
| University of Illinois | 93.136 | 5R01 CE002340-03 | - | 10,602 |
| Subtotal 93.136 | | | 47,640 | 1,109,068 |
| Immunization Research, Demonstration, Public Information and Education Training and Clinical Skills Improvement Projects | 93.185 | Direct | - | 1,278,841 |
| Occupational Safety and Health Program | 93.262 | Direct | 405,262 | 2,033,886 |
| Mount Sinai School of Medicine | 93.262 | 5U01 OH010401-04 | - | 29,583 |
| University of Southern California | 93.262 | 1R01 OH010665-01A1 | - | 2,138 |
| University of Southern California | 93.262 | 5R01 OH010665-02 | - | 2,778 |
| Subtotal 93.262 | | | 405,262 | 2,068,385 |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| American Association of Colleges of Nursing | 93.283 | 3U36 OE000003-03 | - | (1,653) |
| Association of Schools of Public Health | 93.283 | 5U36 OE000002-05 | - | 346,391 |
| Johns Hopkins University | 93.283 | 5U01 CK000337-03 | - | 952 |
| Johns Hopkins University | 93.283 | 5U50 CK000203-05 | - | 154,606 |
| Johns Hopkins University | 93.283 | 5U50 CK000203-06 | - | 87,708 |
| University of Florida | 93.283 | 6U01 CK000337-04 | - | 264,891 |
| Subtotal 93.283 | | | - | 852,895 |
| Rare Disorders: Research, Surveillance, Health Promotion and Education | 93.315 | Direct | - | 71,663 |
| Spina Bifida Association | 93.315 | 5U01 DD001077-02 | - | 3,383 |
| Spina Bifida Association | 93.315 | 5U01 DD001077-03 | - | 19,462 |
| Subtotal 93.315 | | | - | 94,508 |
| Commonwealth of Pennsylvania | 93.336 | 1U58 DP006054-01 | - | 478,687 |
| American Academy of Pediatrics | 93.424 | 5U38 OT000167-04 | - | 21,227 |
| Johns Hopkins University | 93.521 | 5U50 CK000316-04 | - | 8,054 |
| Johns Hopkins University | 93.521 | 5U50 CK000316-05 | - | 35,651 |
| Subtotal 93.521 | | | - | 43,705 |
| Prevention and Public Health Fund (Affordable Care Act) Enhanced Surveillance for New Vaccine Preventable Disease | 93.533 | Direct | - | 519,285 |
| Vanderbilt University | 93.533 | 3U01 IP000464-05S2 | - | 15,796 |
| Subtotal 93.533 | | | - | 535,081 |
| National Association of Chain Drug Stores Foundation | 93.733 | 1H23 IP000985-01 | 42,065 | 154,052 |
| Pennsylvania Pharmacists Association | 93.945 | 5U58 DP131305-02 | - | 26,252 |
| Other Centers for Disease Control and Prevention | 93.000 | Direct | - | 34,141 |
| Johns Hopkins University | 93.000 | 2011-N-13526 | - | 29,563 |
| Subtotal 93.000 | | | - | 63,704 |
| Total Centers for Disease Control and Prevention | | | 569,967 | 8,443,335 |
| Centers for Medicare and Medicaid Services: Centers for Medicare and Medicaid Services (CMS) Research, Demonstrations and Evaluations | 93.779 | Direct | - | 10,515 |
| Total Centers for Medicare and Medicaid Services | | | - | 10,515 |
| Food and Drug Administration: Duke University | 93.103 | 5R18 FD005292-02 | - | 72,820 |
| Emory University | 93.103 | 5R01 FD004814-02 | - | 5,949 |
| Magee-Womens Research Institute & Foundation | 93.103 | 1U01 FD005447-01 | - | 33,704 |
| Magee-Womens Research Institute & Foundation | 93.103 | 3U01 FD005447-02S1 | - | 7,494 |
| Magee-Womens Research Institute & Foundation | 93.103 | 5U01 FD005447-02 | - | 25,913 |
| Subtotal 93.103 | | | - | 145,880 |
| Other Food and Drug Administration | 93.000 | Direct | - | 5,852 |
| Oak Ridge Associated Universities | 93.000 | FDA-CDRH-2017-0014 | - | 17,934 |
| Subtotal 93.000 | | | - | 23,786 |
| Total Food and Drug Administration | | | - | 169,666 |
| Health Resources and Services Administration: Maternal & Child Health Federal Consolidated Programs | 93.110 | Direct | - | 10,294 |
| Massachusetts General Hospital | 93.110 | 2UA3 MC11054-07 | - | (2,160) |
| Massachusetts General Hospital | 93.110 | 5UA3 MC11054-08 | - | 26,444 |
| Massachusetts General Hospital | 93.110 | 6UA3 MC11054-07 | - | 15,733 |
| Rand Corporation | 93.110 | 1R40 MC29451-01 | - | 54,035 |
| Subtotal 93.110 | | | - | 104,346 |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|--|------------------------|---|--|---------------------------------|
| Emergency Medical Services for Children | 93.127 | Direct | 36,171 | 72,778 |
| Research Institute at Nationwide Children's Hospital | 93.127 | 6U03 MC28844-02 | - | 91,310 |
| Subtotal 93.127 | | | 36,171 | 164,088 |
| Grants to Increase Organ Donations | 93.134 | Direct | 87,727 | 362,767 |
| HIV-Related Training and Technical Assistance | 93.145 | Direct | 2,208,532 | 3,220,310 |
| Rutgers University | 93.145 | 6U10 HA28686-02 | - | 12,170 |
| Subtotal 93.145 | | | 2,208,532 | 3,232,480 |
| National Research Service Award in Primary Care Medicine | 93.186 | Direct | - | 295,561 |
| Total Health Resources and Services Administration | | | 2,332,430 | 4,159,242 |
| National Institutes of Health: | | | | |
| Family Smoking Prevention and Tobacco Control Act Regulatory Research | 93.077 | Direct | 8,504,780 | 9,944,202 |
| Duke University | 93.077 | 1R01 HD083404-01 | - | 2,681 |
| Duke University | 93.077 | 5R01 HD083404-02 | - | 273,785 |
| University of Minnesota | 93.077 | 1R03 DA041870-01 | - | 8,696 |
| University of Texas M.D. Anderson Cancer Center | 93.077 | 1R01 DA042526-01 | - | 17,393 |
| Subtotal 93.077 | | | 8,504,780 | 10,246,757 |
| Environmental Health | 93.113 | Direct | 99,938 | 4,650,065 |
| Trevigen, Inc. | 93.113 | 2R44 ES021116-02A1 | - | 5,925 |
| University of Cincinnati | 93.113 | 1R01 ES026446-01A1 | - | 51,783 |
| University of New Mexico | 93.113 | 2R01 ES012512-12A1 | - | 45,297 |
| Wayne State University | 93.113 | 5R01 ES022606-04 | - | 38,812 |
| Subtotal 93.113 | | | 99,938 | 4,791,882 |
| Oral Diseases and Disorders Research | 93.121 | Direct | 1,460,911 | 7,170,872 |
| Forsyth Institute | 93.121 | 4R01 DE023091-04 | - | 66,984 |
| Forsyth Institute | 93.121 | 5R01 DE023091-05 | - | 56,075 |
| HealthPartners Institute for Education and Research | 93.121 | 1U01 DE026135-01 | - | 5,857 |
| International Agency for Research on Cancer | 93.121 | 1R01 DE025712-01A1 | - | 33,681 |
| Johns Hopkins University | 93.121 | 1R35 DE026631-01 | - | 5,358 |
| Johns Hopkins University | 93.121 | 3P50 DE019032-14S1 | - | 1,468 |
| Johns Hopkins University | 93.121 | 3P50 DE019032-14S2 | - | (1,229) |
| Johns Hopkins University | 93.121 | 4P50 DE019032-15 | - | 34,416 |
| NanoMAG, LLC | 93.121 | 1R44 DE024919-01 | - | (29,309) |
| Seattle Children's Hospital | 93.121 | 4R01 DE022438-05 | 28,272 | 62,119 |
| Seattle Children's Hospital | 93.121 | 5R01 DE022438-04 | - | 13,744 |
| University of California at San Francisco | 93.121 | 5R01 DE023685-03 | - | 2,827 |
| West Virginia University | 93.121 | 5F31 DE023493-02 | - | (7) |
| Subtotal 93.121 | | | 1,489,183 | 7,422,856 |
| Human Genome Research | 93.172 | Direct | 1,033,120 | 3,967,231 |
| Vanderbilt University Medical Center | 93.172 | 4R01 HG006857-04 | - | 19,970 |
| Vanderbilt University Medical Center | 93.172 | 5R01 HG006857-03 | - | (1,621) |
| Subtotal 93.172 | | | 1,033,120 | 3,985,580 |
| Research Related to Deafness and Communication Disorders | 93.173 | Direct | 753,485 | 6,314,130 |
| Arizona State University | 93.173 | 5R01 DC008329-08 | - | 199,645 |
| Cornell University | 93.173 | 5R03 DC013376-03 | - | 81 |
| Neuro Kinetics, Inc. | 93.173 | 1R43 DC014611-01 | - | 6,903 |
| University of Michigan | 93.173 | 5R21 DC012410-02 | - | 15,544 |
| University of Utah | 93.173 | 5R01 DC011311-06 | - | 216,913 |
| Veterans Research Foundation of Pittsburgh | 93.173 | 1R01 DC013803-01A1 | - | 32,438 |
| Subtotal 93.173 | | | 753,485 | 6,785,654 |
| Research and Training in Complementary and Integrative Health | 93.213 | Direct | - | 49,843 |
| Carnegie Mellon University | 93.213 | 1R01 AT008685-01 | - | 42,518 |
| Carnegie Mellon University | 93.213 | 5R01 AT008685-02 | - | 218,433 |
| Carnegie Mellon University | 93.213 | 5R21 AT008493-02 | - | 27,933 |
| Case Western Reserve University | 93.213 | 5R21 AT008265-02 | - | 20,749 |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| University of Utah | 93.213 | 5R01 AT007262-06 | - | (1,454) |
| University of Washington | 93.213 | 5U54 AT008909-02 | - | 30,311 |
| Subtotal 93.213 | | | - | 388,333 |
| National Center on Sleep Disorders Research | 93.233 | Direct | 6,086 | 377,166 |
| Beth Israel Deaconess Medical Center | 93.233 | 4R01 HL110350-05 | 140,513 | 265,874 |
| Beth Israel Deaconess Medical Center | 93.233 | 5R01 HL110350-04 | 51,874 | 34,226 |
| California Pacific Medical Center Research Institute | 93.233 | 5R01 HL071194-11 | - | 46 |
| Magee-Womens Research Institute & Foundation | 93.233 | 5R01 HL120354-03 | - | 370,524 |
| Rand Corporation | 93.233 | 5R01 HL122460-02 | - | 42,652 |
| Subtotal 93.233 | | | 198,473 | 1,090,488 |
| Mental Health Research Grants | 93.242 | Direct | 2,128,040 | 36,343,306 |
| Autism Speaks | 93.242 | 5R01 MH081754-06 | - | 2,231 |
| Beth Israel Deaconess Medical Center | 93.242 | 4R01 MH092440-05 | - | 136,637 |
| Beth Israel Deaconess Medical Center | 93.242 | 5R01 MH092440-04 | - | (5,520) |
| Brigham & Women's Hospital | 93.242 | 5R01 MH091448-07 | - | 5,669 |
| Brown University | 93.242 | 5R25 MH101076-04 | - | 26,753 |
| Carnegie Mellon University | 93.242 | 5R01 MH097849-03 | - | 14,565 |
| Carnegie Mellon University | 93.242 | 5R21 MH099487-02 | - | 15,057 |
| Carnegie Mellon University | 93.242 | 5R21 MH106880-02 | - | 9,614 |
| Center for Psychological Consultation | 93.242 | 5R44 MH094092-05 | - | 74,363 |
| Centre for Addiction and Mental Health | 93.242 | 3R01 MH093723-05S1 | - | 79,822 |
| Centre for Addiction and Mental Health | 93.242 | 5R01 MH099167-04 | - | 30,968 |
| Electrical Geodesics, Inc. | 93.242 | 9R44 MH100707-02 | - | 5,397 |
| Magee-Womens Research Institute & Foundation | 93.242 | 5R01 MH105538-02 | - | 38,909 |
| Mount Sinai School of Medicine | 93.242 | 1R01 MH109677-01 | - | 78,041 |
| Mount Sinai School of Medicine | 93.242 | 1R01 MH110921-01 | - | 89,657 |
| Mount Sinai School of Medicine | 93.242 | 1R03 MH109008-01A1 | - | 29,096 |
| Mount Sinai School of Medicine | 93.242 | 1U01 MH106891-01A1 | - | (9,038) |
| Mount Sinai School of Medicine | 93.242 | 5U01 MH103392-02 | - | (7,497) |
| Mount Sinai School of Medicine | 93.242 | 5U01 MH103392-03 | - | 99,314 |
| Mount Sinai School of Medicine | 93.242 | 5U01 MH106891-02 | - | 69,071 |
| Northwestern University | 93.242 | 5U2C CA186878-02 | - | 7,284 |
| Pennsylvania State University | 93.242 | 5K01 MH097091-05 | - | 34,216 |
| Rand Corporation | 93.242 | 5R01 MH106682-02 | - | 6,451 |
| Research Foundation for Mental Hygiene, Inc. | 93.242 | 5R01 MH085921-05 | - | (390) |
| Stellenbosch University | 93.242 | 5R01 MH105134-03 | - | 37,960 |
| University of California | 93.242 | 5R01 MH092793-05 | - | 104,908 |
| University of California at Berkeley | 93.242 | 5R01 MH105513-03 | - | 14,185 |
| University of California at San Francisco | 93.242 | 4R01 MH098062-04 | - | 49,942 |
| University of California San Diego | 93.242 | 5R01 MH098062-02 | - | 18,912 |
| University of Chicago | 93.242 | 4R01 MH100155-04 | - | 543,141 |
| University of Chicago | 93.242 | 5R01 MH093605-02 | - | 8,546 |
| University of Florida | 93.242 | 5R34 MH100253-03 | - | 53,461 |
| University of Maryland | 93.242 | 1R21 MH106813-01A1 | - | 7,385 |
| University of Maryland | 93.242 | 5R01 MH107459-02 | - | 37,224 |
| University of Michigan | 93.242 | 3U01 MH104311-03S1 | - | 8,903 |
| University of Michigan | 93.242 | 5U01 MH104311-02 | - | 8,482 |
| University of Michigan | 93.242 | 5U01 MH104311-03 | - | 153,638 |
| University of Pennsylvania | 93.242 | 1U01 MH105634-01 | - | 154 |
| University of Pennsylvania | 93.242 | 5U01 MH105634-02 | - | 30,105 |
| University of Pennsylvania | 93.242 | 5U01 MH105634-03 | - | 10,899 |
| University of Rochester | 93.242 | 1P50 MH106435-01 | - | (18,472) |
| University of Rochester | 93.242 | 1P50 MH106435-02 | - | 331,994 |
| University of Rochester | 93.242 | 5P50 MH106435-03 | - | 2,239 |
| University of Southern California | 93.242 | 4R01 MH098062-04 | - | 7,214 |
| University of Texas Southwestern Medical Center | 93.242 | 5U01 MH092221-04 | - | 3,919 |
| Washington University in St. Louis | 93.242 | 5R21 MH105822-02 | - | 13,478 |
| Subtotal 93.242 | | | 2,128,040 | 38,602,193 |
| Alcohol Research Programs | 93.273 | Direct | 1,034,717 | 6,137,922 |
| ABT Holding Company | 93.273 | 1R42 AA024003-01A1 | - | (6,601) |
| Athersys, Inc. | 93.273 | 4R42 AA024003-02 | - | 67,051 |
| Children's Hospital and Research Center Oakland | 93.273 | 5R21 AA022753-02 | - | (1,457) |
| Dartmouth College | 93.273 | 4R01 AA021347-04 | - | 1,466 |
| New York University School of Medicine | 93.273 | 4U24 AA022007-05 | - | 28,282 |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| Federal Grantor/Pass Through Grantor/Program Title | CFDA Number | Direct Award or Pass Through # | Passed Through to Subrecipients | Federal Expenditures |
|---|------------------------|---|--|---------------------------------|
| New York University School of Medicine | 93.273 | 5U24 AA022007-04 | - | 5,126 |
| Oregon Health & Science University | 93.273 | 5R13 AA023455-03 | - | 3,219 |
| Rhode Island Hospital | 93.273 | 4R01 AA021900-05 | - | 4,579 |
| Rhode Island Hospital | 93.273 | 5R21 AA024185-02 | - | 30,485 |
| University of Texas at Austin | 93.273 | 5R01 AA006399-33 | - | (4,731) |
| University of Washington | 93.273 | 5R34 AA023047-03 | - | 9,812 |
| Yale University | 93.273 | 2U24 AA022001-05 | - | 12,442 |
| Yale University | 93.273 | 5R01 AA023549-03 | - | 65,501 |
| Yale University | 93.273 | 5U24 AA020794-05 | - | 3,864 |
| Yale University | 93.273 | 5U24 AA022001-04 | - | 21,322 |
| Subtotal 93.273 | | | 1,034,717 | 6,378,282 |
| Drug Abuse and Addiction Research Programs | 93.279 | Direct | 2,436,006 | 12,567,223 |
| Brigham & Women's Hospital | 93.279 | 5UM1 AI068636-11 | - | 3,559 |
| Carnegie Mellon University | 93.279 | 2R90 DA023426-11 | - | 46,788 |
| Carnegie Mellon University | 93.279 | 5R90 DA023426-10 | - | 16,452 |
| Decision Science Research Institute, Inc. | 93.279 | 5R01 DA033322-02 | - | (3) |
| Diagnostic Biochips, Inc. | 93.279 | 5R43 DA036264-02 | - | (50) |
| Duke University | 93.279 | 5R01 DA033080-05 | - | 24,122 |
| Duke University | 93.279 | 5R01 DA038442-03 | - | 20,275 |
| Emory University | 93.279 | 5R01 DA037568-03 | - | 184,517 |
| Family Health International 360 | 93.279 | 5UM1 AI068619-10 | 90,237 | 103,737 |
| Harvard University | 93.279 | 5R01 DA035214-03 | - | 18,609 |
| Jackson Laboratory | 93.279 | 1P50 DA039841-01A1 | - | 77,059 |
| Magee-Womens Research Institute & Foundation | 93.279 | 1K23 DA038789-01A1 | - | 120,334 |
| Magee-Womens Research Institute & Foundation | 93.279 | 1R56 DA040617-01 | - | 84,249 |
| Magee-Womens Research Institute & Foundation | 93.279 | 5R21 DA039345-02 | - | 56,521 |
| McGill University | 93.279 | 5R01 DA037911-02 | - | 27,221 |
| MOSAIX Software, Inc. | 93.279 | 1R43 DA041030-01 | - | 21,710 |
| Oregon Health & Science University | 93.279 | 2R01 DA004523-28A1 | - | (7,318) |
| Oregon Health & Science University | 93.279 | 5R01 DA004523-29 | - | 58,755 |
| RTI International | 93.279 | 5R01 DA036628-03 | - | 561,694 |
| Rutgers University | 93.279 | 5R01 DA033303-03 | - | (114) |
| Temple University | 93.279 | 5R25 DA033270-03 | - | 7,558 |
| Tufts Medical Center | 93.279 | 5R01 DA032889-04 | - | 19,265 |
| University of Florida | 93.279 | 5R01 DA038598-03 | - | 69,298 |
| University of Massachusetts | 93.279 | 1R01 DA042074-01 | - | 97,241 |
| University of Miami | 93.279 | 3UG1 DA013720-17 | - | 29,508 |
| University of Miami | 93.279 | 5R01 DA034749-03 | - | 14,694 |
| University of Michigan | 93.279 | 4R01 DA001411-42 | - | 81,028 |
| US WorldMeds, LLC | 93.279 | 5U01 DA033276-03 | - | 342 |
| Yale University | 93.279 | 5P30 DA018343-12 | - | 10,893 |
| Yale University | 93.279 | 5P50 DA009241-22 | - | 4,792 |
| Yale University | 93.279 | 5P50 DA009241-23 | - | 21,945 |
| Yale University | 93.279 | 5R01 DA035775-03 | - | 17,990 |
| Subtotal 93.279 | | | 2,526,243 | 14,359,894 |
| Discovery and Applied Research for Technological Innovations to Improve Human Health | 93.286 | Direct | 168,164 | 3,572,728 |
| Carnegie Mellon University | 93.286 | 4R01 EB017268-04 | 10,495 | 249,365 |
| Carnegie Mellon University | 93.286 | 5T32 EB009403-07 | - | 9,234 |
| Carnegie Mellon University | 93.286 | 5T32 EB009403-08 | - | 87,890 |
| Love Research Foundation | 93.286 | 5UH2 EB019889-02 | - | 10,300 |
| Sheehan Medical LLC | 93.286 | 5R42 EB018124-03 | - | 2,526 |
| Texas A&M Engineering Experiment Station | 93.286 | 5R21 EB020398-02 | - | 25,617 |
| University of Michigan | 93.286 | 2R01 EB012579-04 | - | (163) |
| Yale University | 93.286 | 3R01 EB016629-03S1 | - | 50,581 |
| Yale University | 93.286 | 5R01 EB016629-04 | - | 7,312 |
| Subtotal 93.286 | | | 178,659 | 4,015,390 |
| Minority Health and Health Disparities Research | 93.307 | Direct | 434,410 | 991,450 |
| University of Maryland | 93.307 | 5R01 MD010255-02 | - | 37,224 |
| University of Mississippi Medical Center | 93.307 | 5R01 MD009162-02 | - | 20,447 |
| Virginia Commonwealth University | 93.307 | 1R01 MD011277-01 | - | 31,031 |
| Subtotal 93.307 | | | 434,410 | 1,080,152 |
| Trans-NIH Research Support | 93.310 | Direct | 207,169 | 6,396,725 |

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| Federal Grantor/Pass Through Grantor/Program Title | CFDA Number | Direct Award or Pass Through # | Passed Through to Subrecipients | Federal Expenditures |
|---|------------------------|---|--|---------------------------------|
| Boston College | 93.310 | 5U54 GM119023-03 | 5,093 | 318,776 |
| Boston College | 93.310 | 8U54 GM119023-02S1 | 2,012 | 6,165 |
| Massachusetts General Hospital | 93.310 | 1UG3 OD023253-01 | - | 3,260 |
| Mount Sinai School of Medicine | 93.310 | 1U24 DK112331-01 | - | 732 |
| University of Pennsylvania | 93.310 | 4U01 MH098953-05 | - | 308,827 |
| University of Pennsylvania | 93.310 | 5U01 MH098953-04 | - | (577) |
| University of Southern California | 93.310 | 5UH3 TR000967-03 | - | 36,246 |
| University of Toledo | 93.310 | 1OT2 OD023859-01 | - | 360,450 |
| University of Washington | 93.310 | 1UG3 OD023271-01 | - | 9,272 |
| Virginia Commonwealth University | 93.310 | 5UH3 TR000958-03R | - | 363,641 |
| Virginia Tech University | 93.310 | 1DP2 AI112243-01 | - | 118,957 |
| Subtotal 93.310 | | | 214,274 | 7,922,474 |
| National Center for Advancing Translational Sciences | 93.350 | Direct | 1,164,038 | 16,356,600 |
| Allegheny Singer Research Institute | 93.350 | 1UH3 TR001372-01 | - | (16,336) |
| Allegheny Singer Research Institute | 93.350 | 5UH3 TR001372-02 | - | 109,270 |
| EXCMR, Ltd | 93.350 | 5R42 TR000473-03 | - | 112 |
| Massachusetts Institute of Technology | 93.350 | 3UH3 TR000496-05S1 | - | 56,920 |
| Massachusetts Institute of Technology | 93.350 | 5UH3 TR000496-04 | - | (84) |
| Massachusetts Institute of Technology | 93.350 | 5UH3 TR000496-05 | - | 486,076 |
| Subtotal 93.350 | | | 1,164,038 | 16,992,558 |
| Research Infrastructure Programs | 93.351 | Direct | 287,648 | 1,385,882 |
| Emory University | 93.351 | 4R24 OD010445-04 | - | 71,186 |
| Emory University | 93.351 | 5R24 OD010445-03 | - | (2,538) |
| Oregon Health & Science University | 93.351 | 2R24 OD011883-05A1 | - | 57,284 |
| Oregon Health & Science University | 93.351 | 5R24 OD011883-04 | - | 8,212 |
| Scripps Research Institute | 93.351 | 5R24 OD018254-03 | - | 12,770 |
| Subtotal 93.351 | | | 287,648 | 1,532,796 |
| Nursing Research | 93.361 | Direct | 570,651 | 5,474,759 |
| Duke University | 93.361 | 5R01 NR015348-02 | - | 2,101 |
| University of Miami | 93.361 | 4R01 NR014434-04 | - | 31,903 |
| University of North Carolina | 93.361 | 1R01 NR016459-01 | - | 57,571 |
| Subtotal 93.361 | | | 570,651 | 5,566,334 |
| Cancer Cause and Prevention Research | 93.393 | Direct | 812,797 | 7,475,963 |
| Fred Hutchinson Cancer Research Center | 93.393 | 5U01 CA137088-06 | - | 2,764 |
| Fred Hutchinson Cancer Research Center | 93.393 | 5U01 CA137088-07 | - | 14,776 |
| Fred Hutchinson Cancer Research Center | 93.393 | 5U01 CA164930-04 | - | 2,351 |
| Harvard University | 93.393 | 5R01 CA168959-05 | - | 153,712 |
| Kaiser Foundation Research Institute | 93.393 | 4UM1 CA173642-04 | - | 19,338 |
| Minneapolis Medical Research Foundation | 93.393 | 4U01 AG029824-06 | - | 18,092 |
| Northwestern University | 93.393 | 5U2C CA186878-03 | - | 40,215 |
| Rand Corporation | 93.393 | 4R01 CA164137-05 | - | 35,386 |
| The Ohio State University | 93.393 | 5P01 CA163205-05 | - | 408,231 |
| University of Michigan | 93.393 | 3R01 CA158286-05S1 | - | (3,500) |
| University of Minnesota | 93.393 | 5R01 CA172555-03 | - | 10,919 |
| University of North Carolina | 93.393 | 4R01 CA150980-05 | - | 36,640 |
| University of Pennsylvania | 93.393 | 1R01 CA206058-01 | - | 34,166 |
| University of Southern California | 93.393 | 2P01 CA138338-06 | - | 16,478 |
| University of Texas M.D. Anderson Cancer Center | 93.393 | 5R01 CA186566-02 | - | 11,313 |
| University of Texas M.D. Anderson Cancer Center | 93.393 | 5R01 CA186566-03 | - | 3,738 |
| University of Virginia | 93.393 | 5R01 CA113863-07 | - | 113,896 |
| University of Washington | 93.393 | 5R01 CA173754-05 | - | 21,423 |
| Vanderbilt University | 93.393 | 5R01 CA141596-07 | - | (5,832) |
| Vanderbilt University Medical Center | 93.393 | 6R01 CA141596-07 | - | 5,838 |
| Wake Forest University | 93.393 | 5R01 CA199137-02 | - | 5,281 |
| Subtotal 93.393 | | | 812,797 | 8,421,188 |
| Cancer Detection and Diagnosis Research | 93.394 | Direct | 1,810,964 | 6,121,382 |
| Boston University | 93.394 | 1R01 CA208599-01A1 | - | 47,646 |
| Brigham & Women's Hospital | 93.394 | 1R01 CA207490-01 | - | 81,574 |
| California Pacific Medical Center Research Institute | 93.394 | 5R01 CA114337-11 | - | (122) |
| Cernostics, Inc. | 93.394 | 5R44 CA192416-02 | - | 106,659 |
| Duquesne University | 93.394 | 5R01 CA182840-04 | - | 79,910 |
| Ecog-Acrin Medical Research Foundation, Inc | 93.394 | 5U24 CA196172-02 | - | 44,486 |

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|---|------------------------|---|--|---------------------------------|
| Ecog-Acrin Medical Research Foundation, Inc | 93.394 | 5U24 CA196172-03 | - | 14,327 |
| Fred Hutchinson Cancer Research Center | 93.394 | 2U01 CA152637-06 | - | 13,824 |
| Fred Hutchinson Cancer Research Center | 93.394 | 5U01 CA152637-07 | - | 3,433 |
| Fred Hutchinson Cancer Research Center | 93.394 | 5U01 CA185094-02 | - | (890) |
| Fred Hutchinson Cancer Research Center | 93.394 | 5U01 CA185094-03 | - | 11,515 |
| Johns Hopkins University | 93.394 | 1U01 CA210170-01 | - | 45,848 |
| Magee-Womens Research Institute & Foundation | 93.394 | 1R01 CA188900-01A1 | - | (1,741) |
| Magee-Womens Research Institute & Foundation | 93.394 | 5R01 CA188900-02 | - | 21,263 |
| Massachusetts General Hospital | 93.394 | 1U01 CA182367-01A1 | - | 1,204 |
| Massachusetts General Hospital | 93.394 | 5U01 CA182367-02 | - | 66,540 |
| Memorial Sloan Kettering Cancer Center | 93.394 | 1R01 CA182076-01A1 | - | 13,198 |
| NRG Oncology Foundation, Inc. | 93.394 | 5U24 CA196067-02 | 29,308 | 55,015 |
| NRG Oncology Foundation, Inc. | 93.394 | 5U24 CA196067-03 | - | 4,358 |
| University of Texas Health Science Center at San Antonio | 93.394 | 5U01 CA086402-14 | 54,560 | 93,641 |
| University of Washington | 93.394 | 5P01 CA042045-26 | - | 1,198 |
| Van Andel Institute | 93.394 | 2U01 CA152653-06 | - | 105,254 |
| Van Andel Institute | 93.394 | 2U01 CA152653-07 | - | 24,225 |
| Van Andel Institute | 93.394 | 4U01 CA168896-05 | - | 42,905 |
| Van Andel Institute | 93.394 | 5U01 CA168896-04 | - | 395 |
| Subtotal 93.394 | | | 1,894,832 | 6,997,047 |
| Cancer Treatment Research | 93.395 | Direct | 6,253,528 | 19,133,785 |
| Brigham & Women's Hospital | 93.395 | 5U10 CA031946-32 | - | 3,027 |
| Children's Hospital of Philadelphia | 93.395 | 3U10 CA180886-03S7 | - | 49,853 |
| Children's Hospital of Philadelphia | 93.395 | 5R01 CA196854-02 | - | 318 |
| Children's Hospital of Philadelphia | 93.395 | 5U10 CA180866-02 | - | 77 |
| Children's Hospital of Philadelphia | 93.395 | 5U10 CA180886-03 | - | 100,628 |
| Children's Hospital of Philadelphia | 93.395 | 5U10 CA180886-04 | - | 32,615 |
| Children's Hospital of Philadelphia | 93.395 | 5UG1 CA189955-02 | - | 7,721 |
| Children's Hospital of Philadelphia | 93.395 | 5UM1 CA097452-14 | - | 88,443 |
| Dana Farber Cancer Institute | 93.395 | 5UG1 CA189823-02 | - | 7,282 |
| Dana Farber Cancer Institute | 93.395 | 5UG1 CA189823-03 | - | 64,942 |
| Ecog-Acrin Medical Research Foundation, Inc | 93.395 | 5U10 CA180820-02 | - | 7,647 |
| Ecog-Acrin Medical Research Foundation, Inc | 93.395 | 5U10 CA180820-03 | - | 226,535 |
| Ecog-Acrin Medical Research Foundation, Inc | 93.395 | 5U10 CA180820-04 | - | 7,301 |
| Emory University | 93.395 | 4R01 CA165306-05 | - | 25,883 |
| Fred Hutchinson Cancer Research Center | 93.395 | 5U01 CA154967-06 | - | 10,571 |
| Frontier Science & Technology Research Foundation | 93.395 | 5U10 CA021115-39 | - | 102,846 |
| IGI Technologies, Inc. | 93.395 | 2R42 CA192504-02 | - | 17,755 |
| Johns Hopkins University | 93.395 | 2UM1 CA137443-06 | - | 1,186 |
| Johns Hopkins University | 93.395 | 5U01 CA137443-05 | - | 995 |
| Magee-Womens Research Institute & Foundation | 93.395 | 4R01 CA163462-05 | - | 127,958 |
| Michigan State University | 93.395 | 4R01 CA162401-04 | - | (797) |
| NRG Oncology Foundation, Inc. | 93.395 | 5UG1 CA189867-02 | 417,355 | 596,284 |
| NRG Oncology Foundation, Inc. | 93.395 | 5UG1 CA189867-03 | 740,934 | 2,212,538 |
| NSABP Foundation, Inc. | 93.395 | 5U10 CA180868-03 | - | 126,481 |
| NSABP Foundation, Inc. | 93.395 | 5U10 CA180868-04 | - | 65,355 |
| Oncovir, Inc. | 93.395 | 4R44 CA183075-02 | - | 3,774 |
| ReveraGen BioPharma, Inc. | 93.395 | 5R01 CA095423-05 | - | 65,571 |
| St. Jude Children's Research Hospital | 93.395 | 5UM1 CA081457-18 | - | 77,877 |
| The Ohio State University | 93.395 | 2R01 CA150153-06 | - | 7,045 |
| University of California at San Francisco | 93.395 | 5R01 CA151692-05 | - | 18,392 |
| University of California at San Francisco | 93.395 | 5R01 CA187160-02 | - | 31,616 |
| University of California at San Francisco | 93.395 | 5R21 CA177787-02 | - | 58,657 |
| University of Illinois | 93.395 | 1R01 CA216410-01 | - | 9,978 |
| University of Rochester | 93.395 | 4R01 CA159013-05 | - | 101,838 |
| University of Rochester | 93.395 | 5R01 CA159013-04 | - | (13,122) |
| University of South Florida | 93.395 | 5R21 CA167259-02 | - | (2,173) |
| University of Texas Health Science Center at San Antonio | 93.395 | 4R01 CA172886-04 | - | 95,953 |
| Virginia Commonwealth University | 93.395 | 5R01 CA149305-03 | - | (174) |
| Yale University | 93.395 | 5P01 CA154295-04 | - | 8,552 |
| Yale University | 93.395 | 5P01 CA154295-06 | - | 47,071 |
| Subtotal 93.395 | | | 7,411,817 | 23,528,084 |
| Cancer Biology Research | 93.396 | Direct | 219,944 | 6,045,453 |
| Fred Hutchinson Cancer Research Center | 93.396 | 5R01 CA188341-02 | - | 19,404 |
| Fred Hutchinson Cancer Research Center | 93.396 | 5R01 CA188341-03 | - | 9,702 |

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|---|------------------------|---|--|---------------------------------|
| Love Research Foundation | 93.396 | 4UH3 CA189966-03 | - | 3,337 |
| Tuskegee University | 93.396 | 5R21 CA188799-02 | - | 4,180 |
| University of Pennsylvania | 93.396 | 5R01 CA206012-02 | - | 21,827 |
| Wistar Institute | 93.396 | 4R01 CA165065-05 | - | 77,203 |
| Subtotal 93.396 | | | 219,944 | 6,181,106 |
| Cancer Centers Support Grants | 93.397 | Direct | 164,661 | 10,412,452 |
| Dana Farber Cancer Institute | 93.397 | 3P30 CA006516-51S8 | - | 10,423 |
| Health Research Inc. - Roswell Park Division | 93.397 | 4P50 CA159981-04 | - | 509,067 |
| Health Research Inc. - Roswell Park Division | 93.397 | 5P50 CA159981-03 | - | (77) |
| Northwestern University | 93.397 | 1P50 CA180995-01A1 | - | 34,320 |
| Washington University in St. Louis | 93.397 | 1U54 CA199092-01 | - | 18,356 |
| Washington University in St. Louis | 93.397 | 5U54 CA199092-02 | - | 66,977 |
| Subtotal 93.397 | | | 164,661 | 11,051,518 |
| Cancer Research Manpower | 93.398 | Direct | - | 1,828,495 |
| Magee-Womens Research Institute & Foundation | 93.398 | 2R25 CA163168-06 | - | 96,893 |
| Magee-Womens Research Institute & Foundation | 93.398 | 5R25 CA163168-05 | - | 30,646 |
| University of Rochester | 93.398 | 1R25 CA183725-01A1 | - | (747) |
| University of Rochester | 93.398 | 5R25 CA183725-02 | - | 59,967 |
| University of Rochester | 93.398 | 5R25 CA183725-03 | - | 6,649 |
| Subtotal 93.398 | | | - | 2,021,903 |
| Children's Hospital of Philadelphia | 93.399 | 5UG1 CA189955-03 | - | 9,016 |
| NSABP Foundation, Inc. | 93.399 | 5U10 CA037377-28 | - | 19,349 |
| Subtotal 93.399 | | | - | 28,365 |
| Cardiovascular Diseases Research | 93.837 | Direct | 1,911,492 | 28,331,314 |
| Albert Einstein College of Medicine of Yeshiva University | 93.837 | 5R01 HL113180-02 | - | (88) |
| Beth Israel Deaconess Medical Center | 93.837 | 5K24 HL127101-02 | - | 506 |
| Brigham & Women's Hospital | 93.837 | 1U01 HL130163-01 | - | 2,051 |
| Brigham & Women's Hospital | 93.837 | 5R01 HL117713-03 | - | 13,220 |
| Brigham & Women's Hospital | 93.837 | 5R01 HL129920-02 | - | 66,532 |
| Brown University | 93.837 | 2R01 HL093093-06 | - | 347,886 |
| Brown University | 93.837 | 5R01 HL093093-07 | - | 31,022 |
| Carnegie Mellon University | 93.837 | 1R01 HL122639-02 | - | 26,451 |
| Carnegie Mellon University | 93.837 | 5R01 HL122639-03 | - | 25,995 |
| Carnegie Mellon University | 93.837 | 5R21 HL126081-02 | - | 1,223 |
| Cincinnati Children's Hospital Medical Center | 93.837 | 4R24 HL105333-05 | - | 8,360 |
| Cincinnati Children's Hospital Medical Center | 93.837 | 5R24 HL105333-04 | - | (5) |
| Duke University | 93.837 | 5P01 HL075443-12 | - | 116,579 |
| Duke University | 93.837 | 5R01 HL121689-03 | - | 37,305 |
| Elex Biotech, LLC | 93.837 | 1R41 HL129570-01 | - | 30,892 |
| Emory University | 93.837 | 4U01 HL117721-04 | - | 202,469 |
| Emory University | 93.837 | 5U01 HL117721-03 | - | (57,766) |
| Emory University | 93.837 | 5U01 HL128566-02 | - | 3,972 |
| Feinstein Institute for Medical Research | 93.837 | 2R01 HL076179-09 | - | 85,381 |
| Florida International University | 93.837 | 1R21 HL128141-01A1 | - | 11,916 |
| Indiana University | 93.837 | 5R01 HL126557-03 | - | 87,981 |
| Johns Hopkins University | 93.837 | 5R01 HL125053-03 | - | 68,315 |
| Kaiser Foundation Research Institute | 93.837 | 1R01 HL130462-01A1 | - | 20,876 |
| Magee-Womens Research Institute & Foundation | 93.837 | 4U10 HL120006-04 | - | 15,432 |
| Magee-Womens Research Institute & Foundation | 93.837 | 5U01 HL120338-02 | - | (2,272) |
| Magee-Womens Research Institute & Foundation | 93.837 | 5U10 HL119991-03 | - | 17,636 |
| Magee-Womens Research Institute & Foundation | 93.837 | 5U10 HL120006-03 | - | (2,481) |
| Massachusetts General Hospital | 93.837 | 4R01 HL111821-05 | - | 26,855 |
| Massachusetts General Hospital | 93.837 | 5R01 HL125869-03 | - | 37,530 |
| Massachusetts General Hospital | 93.837 | 5U01 HL123009-04 | - | 2,939 |
| Massachusetts General Hospital | 93.837 | 5U01 HL123336-04 | - | 9,550 |
| Mount Sinai School of Medicine | 93.837 | 4U01 HL088942-09 | - | 45,874 |
| Mount Sinai School of Medicine | 93.837 | 5U01 HL088942-08 | - | (3,174) |
| Mount Sinai School of Medicine | 93.837 | 5U01 HL088942-09 | - | 29,538 |
| Mount Sinai School of Medicine | 93.837 | 5U01 HL088942-10 | - | 25,469 |
| New England Research Institutes | 93.837 | 4U01 HL107407-03 | - | 12,845 |
| New England Research Institutes | 93.837 | 4U10 HL068270-15 | - | 67,725 |
| New England Research Institutes | 93.837 | 5U01 HL107407-03 | - | 10,013 |
| New England Research Institutes | 93.837 | 5U01 HL107407-04 | - | 270 |

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|---|------------------------|---|--|---------------------------------|
| New York University School of Medicine | 93.837 | 1R01 HL127930-01A1 | - | 42,540 |
| New York University School of Medicine | 93.837 | 5R01 HL127930-02 | - | 61,447 |
| Northwestern University | 93.837 | 5R01 HL122846-03 | - | 5,203 |
| Oklahoma Medical Research Foundation | 93.837 | 1UM1 HL120877-03 | - | (42,970) |
| Oklahoma Medical Research Foundation | 93.837 | 7UM1 HL120877-04 | 38,272 | 1,015,631 |
| Palo Alto Medical Foundation Research Institute | 93.837 | 5R01 HL119453-03 | - | 7,546 |
| Palo Alto Medical Foundation Research Institute | 93.837 | 5R01 HL119453-04 | - | 2,271 |
| Pennsylvania State University | 93.837 | 5U10 HL098115-07 | 97,261 | 293,356 |
| Progenra, Inc. | 93.837 | 1R43 HL134411-01 | - | 28,442 |
| Rand Corporation | 93.837 | 1R01 HL131531-01 | - | 109,089 |
| Seattle Children's Hospital | 93.837 | 4U01 HL114623-04 | - | 28,731 |
| Seattle Children's Hospital | 93.837 | 4UM1 HL119073-03 | - | 17,594 |
| Seattle Children's Hospital | 93.837 | 5U01 HL114623-03 | - | 11,648 |
| University of Alabama | 93.837 | 1UH2 HL125163-01 | - | (2,429) |
| University of Alabama | 93.837 | 4UH3 HL125163-02 | - | 10,237 |
| University of Alabama | 93.837 | 5R01 HL118067-03 | - | (5) |
| University of Alabama | 93.837 | 5R01 HL118067-04 | - | 14,040 |
| University of Alabama | 93.837 | 5R01 HL119960-04 | - | 91,037 |
| University of Alabama | 93.837 | 5UH3 HL125163-03 | - | 24,000 |
| University of California | 93.837 | 5R01 HL125084-07 | - | 14,299 |
| University of California at Irvine | 93.837 | 5R01 HL125084-07 | - | 52,593 |
| University of Delaware | 93.837 | 1R01 HL128388-01A1 | - | 64,208 |
| University of Iowa | 93.837 | 4R01 HL115955-04 | - | 18,484 |
| University of Iowa | 93.837 | 5R01 HL115955-03 | - | 1,535 |
| University of Maryland | 93.837 | 4R01 HL088120-08 | - | 18,104 |
| University of Michigan | 93.837 | 1U01 HL131072-01 | - | 56,762 |
| University of Michigan | 93.837 | 4U01 HL094345-06 | - | 496 |
| University of Minnesota | 93.837 | 1R01 HL133818-01 | - | 19,409 |
| University of Pennsylvania | 93.837 | 4R01 HL115041-04 | - | 13,837 |
| University of Pennsylvania | 93.837 | 5R01 HL115041-03 | - | 686 |
| University of Rochester | 93.837 | 5U01 HL096607-05 | - | 19,287 |
| University of Utah | 93.837 | 5R01 HL107241-04 | - | 2,869 |
| University of Vermont | 93.837 | 1UM1 HL120877-03 | - | (819) |
| University of Vermont | 93.837 | 5UM1 HL120877-03 | - | (75) |
| University of Washington | 93.837 | 1R01 HL129722-01A1 | - | 77,530 |
| University of Washington | 93.837 | 1U01 HL122894-01A1 | - | (2,760) |
| University of Washington | 93.837 | 1U01 HL130114-01 | - | 72,010 |
| University of Washington | 93.837 | 5R01 HL080295-09 | - | 4,343 |
| University of Washington | 93.837 | 5U01 HL122894-02 | - | 269,699 |
| University of Washington | 93.837 | 5U01 HL122894-03 | - | 17,773 |
| Vadovations, Inc | 93.837 | 4R44 HL118907-02 | - | 558,299 |
| Vanderbilt University | 93.837 | 5R01 HL125032-02 | - | (23,271) |
| Vanderbilt University Medical Center | 93.837 | 5R01 HL125032-03 | - | 122,883 |
| Vanderbilt University Medical Center | 93.837 | 5R01 HL126555-02 | - | (1,212) |
| Vanderbilt University Medical Center | 93.837 | 5R01 HL126555-03 | - | 65,633 |
| Wake Forest University | 93.837 | 5U01 HL101066-05 | - | 60,842 |
| Washington University in St. Louis | 93.837 | 5P01 DK096990-04 | - | (84) |
| Wayne State University | 93.837 | 5R01 HL109090-04 | - | 1,589 |
| Yale University | 93.837 | 1R01 HL115295-01 | - | 34,173 |
| Yale University | 93.837 | 1R01 HL126770-01A1R | - | 59,526 |
| Yale University | 93.837 | 5R01 HL125918-02 | - | 2,350 |
| Yale University | 93.837 | 5R01 HL127349-02 | - | 151,072 |
| Yale University | 93.837 | 5R01 HL128602-02 | - | 176,256 |
| Subtotal 93.837 | | | 2,047,025 | 33,401,870 |
| Lung Diseases Research | 93.838 | Direct | 2,322,309 | 28,550,177 |
| Carnegie Mellon University | 93.838 | 4R01 HL105470-05 | - | 148,090 |
| Duke University | 93.838 | 4R01 HL109823-05 | - | 87,299 |
| Fred Hutchinson Cancer Research Center | 93.838 | 5U01 HL102547-03 | - | 2,580 |
| Johns Hopkins University | 93.838 | 5U01 HL121814-03 | - | 23,088 |
| Johns Hopkins University | 93.838 | 5U01 HL121814-04 | - | 252,628 |
| Louisiana State University | 93.838 | 5P01 HL076100-11 | - | 47,922 |
| Massachusetts General Hospital | 93.838 | 5U01 HL123009-02 | - | 275,186 |
| Massachusetts General Hospital | 93.838 | 5U01 HL123009-03 | - | 41,807 |
| Massachusetts General Hospital | 93.838 | 5U01 HL123009-04 | - | 39,363 |
| National Jewish Medical and Research Center | 93.838 | 4R01 HL089897-10 | - | 373,227 |
| Pennsylvania State University | 93.838 | 4U01 HL109086-06 | - | 34,617 |

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|--|------------------------|---|--|---------------------------------|
| Pennsylvania State University | 93.838 | 5U10 HK109086-03 | - | 26,952 |
| Progenra, Inc. | 93.838 | 5R44 HL114299-03 | - | (4,727) |
| Research Institute at Nationwide Children's Hospital | 93.838 | 1R56 HL117032-01A1 | - | 8,567 |
| University of Alabama | 93.838 | 5R01 HL119960-04 | - | 65,383 |
| University of Alabama | 93.838 | 5R01 HL119960-05 | - | 71,647 |
| University of California at San Francisco | 93.838 | 5U01 HL108713-03 | - | 71,203 |
| University of Colorado | 93.838 | 7R01 HL123385-02 | - | 2,291 |
| University of Georgia | 93.838 | 7R01 HL131449-02 | - | 8,904 |
| University of Pennsylvania | 93.838 | 5R01 HL087115-08 | - | 30,748 |
| Subtotal 93.838 | | | 2,322,309 | 30,156,952 |
| Blood Diseases and Resources Research | 93.839 | Direct | 272,569 | 5,911,452 |
| BloodCenter of Wisconsin, Inc. | 93.839 | 5P01 HL081588-10 | - | 5,345 |
| BloodCenter of Wisconsin, Inc. | 93.839 | 5R01 HL112614-04 | - | 8,717 |
| Emory University | 93.839 | 4U01 HL117721-04 | - | 594,085 |
| Fred Hutchinson Cancer Research Center | 93.839 | 5R01 HL121568-03 | - | 33,068 |
| Fred Hutchinson Cancer Research Center | 93.839 | 5R01 HL121568-04 | - | 2,971 |
| Howard University | 93.839 | 4P50 HL118006-04 | - | 27,109 |
| Massachusetts Institute of Technology | 93.839 | 5R01 HL121386-02 | - | 151,244 |
| Medical College of Wisconsin | 93.839 | 1R01 HL128371-01A1 | - | 35,467 |
| Medical College of Wisconsin | 93.839 | 5R01 HL128371-02 | - | 8,913 |
| Rutgers University | 93.839 | 1R34 HL125804-01A1 | - | 14,956 |
| Rutgers University | 93.839 | 5R34 HL125804-02 | - | 12,096 |
| The Ohio State University | 93.839 | 1R01 HL131720-01A1 | - | 10,258 |
| University of Miami | 93.839 | 5R01 HL131013-02 | - | 66,138 |
| Virginia Commonwealth University | 93.839 | 4P01 HL107152-06 | 88,345 | 115,603 |
| Virginia Commonwealth University | 93.839 | 5P01 HL107152-05 | (1,808) | (3,100) |
| Wake Forest University | 93.839 | 4R37 HL058091-20 | - | 24,907 |
| Washington University in St. Louis | 93.839 | 5U01 HL088476-05 | - | 22,402 |
| Subtotal 93.839 | | | 359,106 | 7,041,631 |
| Arthritis, Musculoskeletal & Skin Diseases Research | 93.846 | Direct | 646,648 | 7,098,168 |
| Baylor College of Medicine | 93.846 | 5R03 AR069323-02 | - | 15,965 |
| Boston University | 93.846 | 5P30 AR061271-05 | - | 406 |
| Boston University | 93.846 | 5P30 AR061271-05R | - | 33,395 |
| Boston University | 93.846 | 5P50 AR060780-05 | - | 103,724 |
| Brigham & Women's Hospital | 93.846 | 4R01 AR064850-04 | - | 64,026 |
| Brigham & Women's Hospital | 93.846 | 5R01 AR064367-03 | - | 33,135 |
| Brigham & Women's Hospital | 93.846 | 5R01 AR064850-03 | - | 12,090 |
| Brigham & Women's Hospital | 93.846 | 5U01 AR068043-02 | - | 2,285 |
| California Pacific Medical Center Research Institute | 93.846 | 4R01 AR065268-04 | - | 19,456 |
| Case Western Reserve University | 93.846 | 4R01 AR062546-04 | - | 51,191 |
| Children's Research Institute | 93.846 | 5P50 AR060836-03 | - | 2 |
| Children's Research Institute | 93.846 | 5P50 AR060836-05 | - | 12,784 |
| Children's Research Institute | 93.846 | 5R01 AR062380-02 | - | 707 |
| Cincinnati Children's Hospital Medical Center | 93.846 | 5P01 AR048929-10 | - | 5,201 |
| C-Motion, Inc. | 93.846 | 2R44 AR064620-02 | - | 69,846 |
| Columbia University | 93.846 | 5R01 AR068133-02 | - | 39,978 |
| Feinstein Institute for Medical Research | 93.846 | 5U34 AR063407-02 | - | 15,400 |
| Johns Hopkins University | 93.846 | 5R01 AR064066-03 | - | 2,031 |
| Michigan State University | 93.846 | 5R01 AR066028-02 | - | 45,926 |
| Northwestern University | 93.846 | 5R01 AR065473-02 | - | (922) |
| Northwestern University | 93.846 | 5R01 AR065473-03 | - | 181,124 |
| University of Alabama | 93.846 | 5R01 AR060240-05 | - | 15,457 |
| University of Arizona | 93.846 | 5R01 AR066601-02 | - | 18,371 |
| University of Arizona | 93.846 | 5R01 AR066601-03 | - | 152,255 |
| University of Michigan | 93.846 | 4R01 AR062066-05 | - | 31,302 |
| University of Pennsylvania | 93.846 | 5R01 AR064153-04 | - | 3,397 |
| University of Pennsylvania | 93.846 | 5U54 AR057319-13 | - | 3,085 |
| University of Pennsylvania | 93.846 | 5U54 AR057319-14 | - | 34,041 |
| University of Texas | 93.846 | 7R01 AR065445-03 | - | (21,300) |
| University of Texas Health Science Center at Houston | 93.846 | 7R21 AR066206-03 | - | 30,940 |
| Washington University in St. Louis | 93.846 | 4R01 AR062947-05 | - | 116,788 |
| Subtotal 93.846 | | | 646,648 | 8,190,254 |
| Diabetes, Digestive, and Kidney Diseases Extramural Research | 93.847 | Direct | 2,290,292 | 37,353,047 |
| Augusta University | 93.847 | 2U24 DK076169-11 | - | 58,216 |

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|---|------------------------|---|--|---------------------------------|
| Augusta University | 93.847 | 5U24 DK076169-10 | - | 32,864 |
| Brigham & Women's Hospital | 93.847 | 5R01 DK102146-02 | - | 80,312 |
| Carnegie Mellon University | 93.847 | 4R01 DK060586-15 | - | 117,374 |
| Carnegie Mellon University | 93.847 | 4R01 DK095780-05 | - | 18,576 |
| Carnegie Mellon University | 93.847 | 5DP3 DK103999-03 | - | 41,861 |
| Case Western Reserve University | 93.847 | 1DP3 DK101074-01 | - | 132 |
| Case Western Reserve University | 93.847 | 1DP3 DK104438-01 | - | 12,030 |
| Case Western Reserve University | 93.847 | 4U01 DK094157-06 | - | 140,502 |
| Case Western Reserve University | 93.847 | 5U01 DK094157-05 | - | 3,293 |
| Children's Hospital of Boston | 93.847 | 5R01 DK108642-02 | - | 229,678 |
| Cincinnati Children's Hospital Medical Center | 93.847 | 2UM1 DK072493-11 | - | 17,300 |
| Cincinnati Children's Hospital Medical Center | 93.847 | 5UM1 DK072493-10 | - | 10,226 |
| Cleveland Clinic Lerner College of Medicine | 93.847 | 1U34 DK107917-01 | - | 367 |
| Cleveland Clinic Lerner College of Medicine | 93.847 | 5U34 DK107917-02 | - | 33,851 |
| Columbia University | 93.847 | 5R01 DK108580-02 | - | 3,180 |
| Columbia University | 93.847 | 7R01 DK072507-08 | - | 44,034 |
| Dartmouth College | 93.847 | 5R01 DK104847-02 | - | 278,530 |
| George Washington University | 93.847 | 2U01 DK061230-12 | - | 20,953 |
| George Washington University | 93.847 | 2U01 DK061230-13 | - | 191,386 |
| George Washington University | 93.847 | 4U01 DK096037-04 | - | 98,276 |
| George Washington University | 93.847 | 5U01 DK061230-14 | - | 21,701 |
| George Washington University | 93.847 | 5U01 DK096037-03 | - | (1,638) |
| Georgia Regents University | 93.847 | 5U24 DK076169-10 | - | 20,244 |
| Group Health Cooperative | 93.847 | 1R01 DK105960-01 | - | 2,472 |
| Kaiser Foundation Health Plan of Washington | 93.847 | 5R01 DK105960-02 | - | 29,252 |
| Kaiser Foundation Research Institute | 93.847 | 5R01 DK106201-02 | - | 44,638 |
| Lipella Pharmaceuticals, Inc. | 93.847 | 1R41 DK108397-01 | - | 52,326 |
| Lipella Pharmaceuticals, Inc. | 93.847 | 1R44 DK102247-01 | - | (676) |
| Lipella Pharmaceuticals, Inc. | 93.847 | 5R44 DK102247-03 | - | 99,791 |
| Massachusetts General Hospital | 93.847 | 5P01 DK011794-49 | - | 31,586 |
| Mayo Clinic Rochester | 93.847 | 5U01 DK079856-05 | - | 56,232 |
| Medical College of Wisconsin | 93.847 | 2R01 DK083538-06A1 | - | 2,878 |
| Medical College of Wisconsin | 93.847 | 5R01 DK083538-07 | - | 3,171 |
| Medical University of South Carolina | 93.847 | 1U01 DK104833-01 | - | (57,150) |
| Medical University of South Carolina | 93.847 | 1U34 DK112673-01 | - | 27,041 |
| Medical University of South Carolina | 93.847 | 5U01 DK104833-02 | - | 78,760 |
| Michigan State University | 93.847 | 5R01 DK107697-02 | - | 37,886 |
| Mount Sinai School of Medicine | 93.847 | 1U34 DK112661-01 | - | 5,319 |
| Mount Sinai School of Medicine | 93.847 | 5R01 DK038470-28 | - | 209,004 |
| Neuropsychiatric Research Institute | 93.847 | 5R01 DK084979-07 | - | 58,959 |
| Oregon Health & Science University | 93.847 | 5R01 DK103842-03 | - | 38,657 |
| Research Institute - McGill University Health Center | 93.847 | 1R01 DK110737-01 | - | 156,000 |
| Stanford University | 93.847 | 5R01 DK092241-04 | - | (6,347) |
| University of Bristol | 93.847 | 5R01 DK103246-03 | - | 1,677 |
| University of Chicago | 93.847 | 5R01 DK098435-03 | - | 172,992 |
| University of Colorado | 93.847 | 2UM1 DK072493-11 | - | 29,849 |
| University of Colorado | 93.847 | 5U01 DK062453-14 | - | 150 |
| University of Colorado | 93.847 | 5U01 DK062453-15 | - | 537 |
| University of Colorado | 93.847 | 5U01 DK094467-05 | - | 418,052 |
| University of Iowa | 93.847 | 1U01 DK108334-01 | - | 10,821 |
| University of Michigan | 93.847 | 3U01 DK062456-14S1 | - | 1,352 |
| University of Michigan | 93.847 | 5U01 DK062456-15 | - | 9,367 |
| University of Michigan | 93.847 | 5U01 DK082316-08 | - | 3,616 |
| University of Michigan | 93.847 | 5U01 DK082316-09 | - | 109,997 |
| University of Michigan | 93.847 | 5U54 DK083912-08 | - | 31,226 |
| University of Minnesota | 93.847 | 1R01 DK109124-01 | - | 4,814 |
| University of North Carolina | 93.847 | 1UC4 DK101132-01 | - | 1,740 |
| University of Pennsylvania | 93.847 | 1R01 DK112812-01 | - | 4,622 |
| University of Pennsylvania | 93.847 | 4UM1 DK100846-04 | - | 39,904 |
| University of Pennsylvania | 93.847 | 5UM1 DK100846-03 | - | (4,941) |
| University of Pennsylvania | 93.847 | 5UM1 DK100846-05 | - | 75 |
| University of South Florida | 93.847 | 1UC4 DK095300-01 | - | 566 |
| University of South Florida | 93.847 | 1UC4 DK097835-01 | - | 101,805 |
| University of South Florida | 93.847 | 1UC4 DK100238-01 | - | 2,183 |
| University of South Florida | 93.847 | 1UC4 DK106993-01 | - | 126,111 |
| University of Utah | 93.847 | 5R01 DK091437-04 | - | (5,738) |
| University of Washington | 93.847 | 1DP3 DK108209-01 | - | 35,197 |

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|---|------------------------|---|--|---------------------------------|
| Vanderbilt University Medical Center | 93.847 | 1R56 DK108352-02 | - | 10,426 |
| Vanderbilt University Medical Center | 93.847 | 5K23 DK090304-04 | - | 11,026 |
| Vanderbilt University Medical Center | 93.847 | 5R56 DK108352-03 | - | 55,833 |
| Virginia Commonwealth University | 93.847 | 4R01 DK094818-04 | - | 58,534 |
| Virginia Commonwealth University | 93.847 | 5R01 DK094818-03 | - | 19,610 |
| Wake Forest University | 93.847 | 3R01 DK092237-02S2 | - | (173) |
| Wake Forest University | 93.847 | 4R01 DK099164-04 | - | 19,219 |
| Wake Forest University | 93.847 | 5R01 DK092237-04 | - | 16,566 |
| Wake Forest University | 93.847 | 5R01 DK099164-03 | - | 17,180 |
| Washington University in St. Louis | 93.847 | 7P01 DK096990-05 | - | 734,636 |
| Subtotal 93.847 | | | 2,290,292 | 41,734,925 |
| | | | | |
| Extramural Research Programs in the Neurosciences and Neurological Disorders | 93.853 | Direct | 1,934,284 | 27,397,506 |
| Carnegie Mellon University | 93.853 | 5R21 NS095250-02 | - | 59,665 |
| Case Western Reserve University | 93.853 | 5R01 NS094152-02 | - | 131,779 |
| Cincinnati Children's Hospital Medical Center | 93.853 | 1R01 NS096053-01A1 | - | 19,115 |
| Columbia University | 93.853 | 5U54 NS078059-05 | - | (526) |
| Columbia University | 93.853 | 5U54 NS078059-06 | - | 1,907 |
| Emory University | 93.853 | 3U01 NS038455-14 | - | 11,799 |
| Emory University | 93.853 | 4U01 NS038455-15 | - | 14,119 |
| Emory University | 93.853 | 5R01 NS071867-05 | - | (2,213) |
| Harvard University | 93.853 | 5R01 NS089638-02 | - | 46,754 |
| Johns Hopkins University | 93.853 | 4U01 NS080824-04 | - | 4,308 |
| Johns Hopkins University | 93.853 | 5U01 NS062851-05 | - | (11) |
| Johns Hopkins University | 93.853 | 5U01 NS080824-03 | - | 22,748 |
| Massachusetts General Hospital | 93.853 | 3U01 NS090259-02S1 | - | 15,406 |
| Massachusetts General Hospital | 93.853 | 4U01 NS082329-04 | - | 6,628 |
| Massachusetts General Hospital | 93.853 | 4U01 NS090616-04 | - | 2,871 |
| Massachusetts General Hospital | 93.853 | 5U01 NS082329-03 | - | 976 |
| Massachusetts General Hospital | 93.853 | 5U01 NS088312-02 | - | 41,823 |
| Massachusetts General Hospital | 93.853 | 5U01 NS088312-03 | - | 144,686 |
| Mayo Clinic Jacksonville | 93.853 | 5U01 NS080168-03 | - | 37,768 |
| Mayo Clinic Jacksonville | 93.853 | 5U01 NS080168-04 | - | 2,518 |
| Mayo Clinic Rochester | 93.853 | 5R21 NS088256-02 | - | 29,765 |
| Medical College of Wisconsin | 93.853 | 5R01 NS070711-07 | - | 35,468 |
| Medical College of Wisconsin | 93.853 | 5R01 NS070711-08 | - | 8,913 |
| Mount Sinai School of Medicine | 93.853 | 5U01 HL088942-10 | - | 1,709 |
| NeuroDx Development | 93.853 | 5R44 NS067772-04 | - | 14,143 |
| Rutgers University | 93.853 | 5R01 NS038384-09 | - | 7,834 |
| Stanford University | 93.853 | 5R01 NS066506-06 | - | 21,916 |
| Synzyme Technologies | 93.853 | 5U44 NS070324-04 | - | (25,165) |
| University of California at San Francisco | 93.853 | 1U01 NS092764-01A1 | - | 38,208 |
| University of California at San Francisco | 93.853 | 5U01 NS058634-05 | - | 4 |
| University of California at San Francisco | 93.853 | 5U01 NS086090-03 | - | 353,576 |
| University of Colorado | 93.853 | 5R01 NS074343-04 | - | 17,699 |
| University of Michigan | 93.853 | 1U01 NS088034-01 | - | 64,798 |
| University of Michigan | 93.853 | 4U01 NS069498-06 | - | 60,241 |
| University of Michigan | 93.853 | 5U01 NS056975-10 | - | 51,433 |
| University of Michigan | 93.853 | 5U01 NS062091-04 | - | 278 |
| University of Michigan | 93.853 | 5U01 NS062835-04 | - | 33,833 |
| University of Michigan | 93.853 | 5U01 NS069498-03 | - | 20,941 |
| University of New Mexico | 93.853 | 5R21 NS091600-02 | - | 21,837 |
| University of Virginia | 93.853 | 5U01 NS088034-02 | - | 22,497 |
| University of Wisconsin | 93.853 | 1R01 NS092870-01A1 | - | 35,424 |
| University of Wisconsin | 93.853 | 5R01 NS092870-02 | - | 12,565 |
| Subtotal 93.853 | | | 1,934,284 | 28,787,543 |
| | | | | |
| Allergy and Infectious Diseases Research | 93.855 | Direct | 6,091,676 | 46,384,664 |
| Albany Medical College | 93.855 | 5R01 AI123129-02 | - | 260,986 |
| Albert Einstein College of Medicine of Yeshiva University | 93.855 | 5R01 AI094745-04 | - | 39,097 |
| Albert Einstein College of Medicine of Yeshiva University | 93.855 | 5R01 AI094745-06 | - | 43,145 |
| Albert Einstein College of Medicine of Yeshiva University | 93.855 | 5R01 AI097548-03 | - | (1,540) |
| Albert Einstein College of Medicine of Yeshiva University | 93.855 | 5R01 AI097548-05 | - | 85,914 |
| Allegheny Singer Research Institute | 93.855 | 1R21 AI126335-01 | - | 831 |
| Benaroya Research Institute at Virginia Mason | 93.855 | 5UM1 AI109565-03 | - | 383,674 |
| Benaroya Research Institute at Virginia Mason | 93.855 | 5UM1 AI109565-04 | - | 48,226 |

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|---|------------------------|---|--|---------------------------------|
| Beth Israel Deaconess Medical Center | 93.855 | 1UM1 AI126603-01 | - | 433,480 |
| Boston College | 93.855 | 1U01 AI124302-01 | - | 342,071 |
| Brigham & Women's Hospital | 93.855 | 5UM1 AI068636-10 | - | 776,712 |
| Brigham & Women's Hospital | 93.855 | 5UM1 AI068636-11 | - | 301,736 |
| Brigham & Women's Hospital | 93.855 | 5UM1 AI106701-03 | - | 354,096 |
| Brigham & Women's Hospital | 93.855 | 5UM1 AI106701-04 | - | 382,524 |
| Columbia University | 93.855 | 2U19 AI067773-11 | - | 34,604 |
| Columbia University | 93.855 | 5P01 AI106697-03 | - | 67 |
| Columbia University | 93.855 | 5P01 AI106697-05 | - | 226,244 |
| Columbia University | 93.855 | 5U19 AI067773-12 | - | 139,967 |
| Cornell University | 93.855 | 1R56 AI122811-01 | - | 48,837 |
| Duke University | 93.855 | 4UM1 AI104681-04 | - | 85,855 |
| Duke University | 93.855 | 5R01 AI103315-03 | - | 1,194 |
| Duke University | 93.855 | 5U19 AI056363-10 | - | (14,562) |
| Duke University | 93.855 | 5U19 AI056363-10R | - | 38,676 |
| Duke University | 93.855 | 5UM1 AI104681-05 | - | 13,234 |
| East Carolina University | 93.855 | 5R01 AI076272-08 | - | 9,079 |
| George Washington University | 93.855 | 1UM1 AI126617-01 | - | 304,009 |
| Harvard University | 93.855 | 1R21 AI128623-01 | - | 15,574 |
| Health Research, Incorporated | 93.855 | 4R01 AI097191-05 | - | 101,667 |
| Hospital for Sick Children | 93.855 | 1R21 AI126110-01 | - | 41,767 |
| ImQuest BioSciences, Inc. | 93.855 | 5U19 AI101961-04 | - | (1,995) |
| ImQuest BioSciences, Inc. | 93.855 | 5U19 AI101961-05 | - | 19,509 |
| Institute for Clinical Research Inc. | 93.855 | 5UM1 AI068641-09 | - | 26,840 |
| Johns Hopkins University | 93.855 | 5R01 AI093520-04 | - | 19,024 |
| Johns Hopkins University | 93.855 | 5U01 AI109657-03 | - | 461 |
| Johns Hopkins University | 93.855 | 5U19 AI113127-02 | - | 8,066 |
| Johns Hopkins University | 93.855 | 5U19 AI113127-03 | - | 159,737 |
| Johns Hopkins University | 93.855 | 5UM1 AI035043-23 | - | 9,005 |
| Johns Hopkins University | 93.855 | 5UM1 AI035043-25 | - | 6,468 |
| Magee-Womens Research Institute & Foundation | 93.855 | 1R01 AI122301-01 | - | 34,582 |
| Magee-Womens Research Institute & Foundation | 93.855 | 1U19 AI120249-01 | - | (49,569) |
| Magee-Womens Research Institute & Foundation | 93.855 | 4R01 AI102835-05 | - | 131,731 |
| Magee-Womens Research Institute & Foundation | 93.855 | 5R01 AI102835-04 | - | (8,490) |
| Magee-Womens Research Institute & Foundation | 93.855 | 5U19 AI082637-05 | - | 5,742 |
| Magee-Womens Research Institute & Foundation | 93.855 | 5U19 AI082639-05 | - | 287,193 |
| Magee-Womens Research Institute & Foundation | 93.855 | 5U19 AI120249-02 | - | 611,040 |
| Magee-Womens Research Institute & Foundation | 93.855 | 5UM1 AI068633-10 | - | 460,250 |
| Magee-Womens Research Institute & Foundation | 93.855 | 5UM1 AI068633-11 | - | 453,588 |
| Magee-Womens Research Institute & Foundation | 93.855 | 5UM1 AI106707-03 | - | 398,705 |
| Magee-Womens Research Institute & Foundation | 93.855 | 5UM1 AI106707-04 | - | 411,061 |
| Massachusetts General Hospital | 93.855 | 1R01 AI127507-01 | - | 5,936 |
| Massachusetts General Hospital | 93.855 | 5R01 AI114552-02 | - | 1,462 |
| Massachusetts General Hospital | 93.855 | 5R01 AI114552-03 | - | 1,773 |
| New York University | 93.855 | 5U01 AI111598-04 | - | 35,105 |
| New York University | 93.855 | 5U01 AI111598-05 | - | 89,746 |
| Pennsylvania State University | 93.855 | 5R01 AI107121-03 | - | 50,224 |
| Stanford University | 93.855 | 4U01 AI104342-04 | - | 94,994 |
| Stanford University | 93.855 | 4U01 AI104342-05 | - | 5,561 |
| State University of New York | 93.855 | 5R01 AI124677-02 | - | 11,304 |
| University of California | 93.855 | 5UM1 AI110498-02 | - | 10,422 |
| University of California | 93.855 | 5UM1 AI110498-03 | - | 14,982 |
| University of California at Berkeley | 93.855 | 2R01 AI092531-06 | - | 160,225 |
| University of California at Berkeley | 93.855 | 5R01 AI092531-05 | - | (688) |
| University of California at San Francisco | 93.855 | 1UM1 AI110498-01 | - | 20,577 |
| University of California at San Francisco | 93.855 | 4U01 AI100807-05 | - | 141,497 |
| University of California at San Francisco | 93.855 | 4U01 AI104347-04 | - | 40,179 |
| University of California at San Francisco | 93.855 | 5U01 AI100807-04 | - | 20,600 |
| University of California at San Francisco | 93.855 | 5U01 AI104347-05 | - | 8,635 |
| University of California at San Francisco | 93.855 | 5UM1 AI110498-03 | - | 53,324 |
| University of Florida | 93.855 | 1P01 AI123036-01 | - | 99,517 |
| University of Louisville | 93.855 | 5U19 AI113182-02 | - | 8,125 |
| University of Louisville | 93.855 | 5U19 AI113182-03 | - | 468,794 |
| University of Maryland | 93.855 | 1R56 AI118908-01A1 | - | 196,687 |
| University of Maryland | 93.855 | 5R01 AI102966-02 | - | 20,510 |
| University of Maryland | 93.855 | HHSN2722013000221 | - | 10,826 |
| University of Michigan | 93.855 | 5R01 AI123093-02 | - | 517,447 |

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|---|------------------------|---|--|---------------------------------|
| University of Minnesota | 93.855 | 1R34 AI118416-01A1 | - | 13,448 |
| University of Missouri | 93.855 | 5R01 AI100890-05 | - | 112,975 |
| University of North Carolina | 93.855 | 7U19 AI084024-06 | - | 17,944 |
| University of Pennsylvania | 93.855 | 5P01 AI088564-06 | - | 12,569 |
| University of Pennsylvania | 93.855 | 5R01 AI094604-06 | - | 106,214 |
| University of Texas | 93.855 | 5R21 AI116030-02 | - | 102,571 |
| University of Washington | 93.855 | 5R21 AI119258-02 | - | 73,690 |
| University of Wisconsin | 93.855 | 1R21 AI127127-01 | - | 42,025 |
| University of Wisconsin | 93.855 | 5U01 AI102456-03 | - | 6,189 |
| University of Wisconsin | 93.855 | 5U01 AI102456-04 | - | 26,505 |
| Vanderbilt University | 93.855 | 4U01 AI104336-04 | - | (197) |
| Vanderbilt University Medical Center | 93.855 | 5U01 AI104336-06 | - | 103,615 |
| Vanderbilt University Medical Center | 93.855 | 6U01 AI104336-05 | - | 339,275 |
| Washington University in St. Louis | 93.855 | 4U01 AI077810-09 | - | 1,907 |
| Yale University | 93.855 | 5R01 AI104739-04 | - | 31,946 |
| Subtotal 93.855 | | | 6,091,676 | 56,943,216 |
| Biomedical Research and Research Training | 93.859 | Direct | 6,146,417 | 37,839,561 |
| Carnegie Mellon University | 93.859 | 1R01 GM114311-01A1 | - | 4,626 |
| Carnegie Mellon University | 93.859 | 5R01 GM114311-02 | - | 36,642 |
| Carnegie Mellon University | 93.859 | 5T36 GM095335-05 | - | 646 |
| Cincinnati Children's Hospital Medical Center | 93.859 | 3R01 GM108025-02S1 | - | (691) |
| Cincinnati Children's Hospital Medical Center | 93.859 | 5R01 GM108025-03 | - | 7,399 |
| Fox Chase Chemical Diversity Center | 93.859 | 1R41 GM112156-01 | - | (6,849) |
| Fox Chase Chemical Diversity Center | 93.859 | 2R42 GM112516-02 | - | 395,688 |
| Magee-Womens Research Institute & Foundation | 93.859 | 5R01 GM104007-05 | - | 104,201 |
| Pennsylvania State University | 93.859 | 5R01 GM087350-06 | - | 8,415 |
| PNA Innovations, Inc | 93.859 | 2R44 GM108187-03 | - | 104,242 |
| Princeton University | 93.859 | 1R01 GM112758-01A1 | - | 42,160 |
| Princeton University | 93.859 | 5R01 GM114093-03 | - | 150,733 |
| Rutgers University | 93.859 | 5R01 GM104037-03 | - | (1,995) |
| Stanford University | 93.859 | 5R01 GM108952-03 | - | 158,356 |
| State University of New York | 93.859 | 1R01 GM115762-01 | - | (1,177) |
| State University of New York | 93.859 | 5R01 GM115762-02 | - | 26,250 |
| Temple University | 93.859 | 5R01 GM113243-02 | - | (9,812) |
| The Ohio State University | 93.859 | 1R01 GM118664-01 | - | 9,448 |
| University of California | 93.859 | 5R01 GM079383-08 | - | 25,025 |
| University of California | 93.859 | 5R01 GM089740-06 | - | (4,527) |
| University of Colorado | 93.859 | 5R01 GM107122-03 | - | 231,229 |
| University of Connecticut | 93.859 | 5R01 GM118367-02 | - | 30,708 |
| University of Maryland Baltimore County | 93.859 | 1R01 GM118837-01A1 | - | 6,217 |
| University of Massachusetts | 93.859 | 5P01 GM109767-02 | - | 47,240 |
| University of Massachusetts | 93.859 | 5P01 GM109767-03 | - | 189,444 |
| University of Miami | 93.859 | 4R01 GM105004-04 | 109,985 | 201,201 |
| University of Pennsylvania | 93.859 | 4P01 GM055876-17 | - | 358,970 |
| University of Pennsylvania | 93.859 | 5P01 GM055876-16 | - | (9,047) |
| University of Pennsylvania | 93.859 | 5P01 GM055876-18 | - | 27,678 |
| University of Pennsylvania | 93.859 | 5R01 GM084979-07 | - | 7,054 |
| Washington University in St. Louis | 93.859 | 5R01 GM113838-02 | - | 10,967 |
| Washington University in St. Louis | 93.859 | 5R01 GM113838-03 | - | 4,587 |
| Subtotal 93.859 | | | 6,256,402 | 39,994,589 |
| Baylor College of Medicine | 93.864 | 1R03 AR069323-01 | - | 33,285 |
| Child Health and Human Development Extramural Research | 93.865 | Direct | 2,521,392 | 10,294,977 |
| Accessible Designs Inc | 93.865 | 2R44 HD060335-02 | - | 24,900 |
| Arizona State University | 93.865 | 1R01 HD082094-01A1 | - | 42,971 |
| Arizona State University | 93.865 | 1R01 HD086761-01 | - | 64,433 |
| Arizona State University | 93.865 | 5R01 HD075800-04 | - | 153,066 |
| Baebies, Inc. | 93.865 | 1R44 HD088211-01 | - | 18,849 |
| Carnegie Mellon University | 93.865 | 5R01 HD071686-05 | - | 40,251 |
| Children's Hospital of Philadelphia | 93.865 | 5R01 HD079419-04 | - | 64,042 |
| Children's Research Institute | 93.865 | 4R01 HD058567-08 | - | 14,065 |
| Cincinnati Children's Hospital Medical Center | 93.865 | 5R01 HD067174-05 | - | 2,765 |
| C-Motion, Inc. | 93.865 | 2R44 HD066831-02A1 | - | 71,496 |
| Cornell University | 93.865 | 5R01 HD075929-03 | - | 7,147 |
| Duke University | 93.865 | 5R01 HD081044-02 | - | 2,486 |

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|---|------------------------|---|--|---------------------------------|
| George Washington University | 93.865 | 5U01 HD068541-05 | - | 59,941 |
| Magee-Womens Research Institute & Foundation | 93.865 | 1R01 HD086916-01A1 | - | 71,137 |
| Magee-Womens Research Institute & Foundation | 93.865 | 1R21 HD084914-01A1 | - | 164,596 |
| Magee-Womens Research Institute & Foundation | 93.865 | 1R21 HD089457-01 | - | 61,096 |
| Magee-Womens Research Institute & Foundation | 93.865 | 1R21 HD089732-01 | - | 106,548 |
| Magee-Womens Research Institute & Foundation | 93.865 | 1UG1 HD087230-01 | - | 53,097 |
| Magee-Womens Research Institute & Foundation | 93.865 | 2K12 HD063087-06 | - | 3,915 |
| Magee-Womens Research Institute & Foundation | 93.865 | 2U54 HD047905-11 | - | 208 |
| Magee-Womens Research Institute & Foundation | 93.865 | 2UG1 HD069006-06 | - | 124,915 |
| Magee-Womens Research Institute & Foundation | 93.865 | 4K12 HD043441-15 | - | 344,682 |
| Magee-Womens Research Institute & Foundation | 93.865 | 4P01 HD069316-05 | - | 625,878 |
| Magee-Womens Research Institute & Foundation | 93.865 | 4R01 HD044858-09 | - | 182,730 |
| Magee-Womens Research Institute & Foundation | 93.865 | 4R01 HD070647-05 | - | 141,876 |
| Magee-Womens Research Institute & Foundation | 93.865 | 4R01 HD075665-05 | - | 316,825 |
| Magee-Womens Research Institute & Foundation | 93.865 | 4T32 HD071859-05 | - | 124,053 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5K12 HD043441-14 | - | (880) |
| Magee-Womens Research Institute & Foundation | 93.865 | 5K12 HD043441-15 | - | 81,745 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5K12 HD063087-07 | - | 132,501 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5P01 HD069316-04 | - | 44 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5P01 HD075795-02 | - | 7,997 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5P01 HD075795-03 | - | 224,813 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R01 HD044858-08 | - | (17) |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R01 HD065893-05 | - | (523) |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R01 HD068578-05 | - | 17,322 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R01 HD076412-03 | - | 280,476 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R01 HD082065-02 | - | 3,511 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R01 HD083383-02 | - | 237,003 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R01 HD086325-02 | - | 314,579 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R03 HD082446-02 | - | 45,671 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R21 HD080755-02 | - | 14,000 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5R21 HD083659-02 | - | 164,211 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5T15 HD072833-03 | - | 5,596 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5T32 HD071859-04 | - | (16,868) |
| Magee-Womens Research Institute & Foundation | 93.865 | 5U10 HD069006-05 | - | (28) |
| Magee-Womens Research Institute & Foundation | 93.865 | 5U54 HD047905-12 | - | 413,119 |
| Magee-Womens Research Institute & Foundation | 93.865 | 5UG1 HD087230-02 | - | 17,826 |
| Magee-Womens Research Institute & Foundation | 93.865 | HHSN275201300001I | - | 20,419 |
| Medical University of South Carolina | 93.865 | 5P2C HD086844-02 | - | 24,423 |
| New York University | 93.865 | 5R01 HD076390-03 | - | 635,881 |
| Next Health, Inc. | 93.865 | 1R44 HD085702-01 | - | 150,690 |
| Oregon Health & Science University | 93.865 | 5P50 HD071836-04 | - | 13,707 |
| Oregon Health & Science University | 93.865 | 5P50 HD071836-05 | - | 4,569 |
| Rhode Island Hospital | 93.865 | 4R01 HD072693-05 | - | 129,767 |
| Seattle Children's Hospital | 93.865 | 5R01 HD074757-05 | - | 54,366 |
| University of Chicago | 93.865 | 1R01 HD084586-01R | - | 8,481 |
| University of Nebraska Medical Center | 93.865 | 5U54 HD061939-07 | - | 19,222 |
| University of Nebraska Medical Center | 93.865 | 5U54 HD061939-08 | - | 2,463 |
| University of Texas Medical Branch at Galveston | 93.865 | 5P2C HD065702-07 | - | 18,825 |
| University of Utah | 93.865 | 5U01 HD049934-12 | - | 96,347 |
| Washington University in St. Louis | 93.865 | 1R21 HD086644-01A1 | - | 27,719 |
| Washington University in St. Louis | 93.865 | 4K12 HD055931-10 | - | 138,714 |
| Washington University in St. Louis | 93.865 | 5K12 HD055931-09 | - | 26,121 |
| Wayne State University | 93.865 | 5R01 HD085233-02 | - | 18,140 |
| Yale University | 93.865 | 5R01 HD076248-04 | - | 36,565 |
| Subtotal 93.865 | | | 2,521,392 | 16,551,462 |
| Aging Research | 93.866 | Direct | 2,468,642 | 29,911,274 |
| Brigham & Women's Hospital | 93.866 | 1U01 AG051421-01 | - | 7,931 |
| Brigham & Women's Hospital | 93.866 | 5U01 AG048270-02 | - | 88,297 |
| Brigham & Women's Hospital | 93.866 | 5U01 AG048270-03 | - | 121,952 |
| Brigham & Women's Hospital | 93.866 | 5U01 AG051421-02 | - | 25,365 |
| California Pacific Medical Center Research Institute | 93.866 | 1R01 AG052964-01 | - | 14,249 |
| California Pacific Medical Center Research Institute | 93.866 | 4R01 AG026720-09 | - | 14,833 |
| Columbia University | 93.866 | 4R01 AG041797-05 | - | 31,916 |
| Green Technologies Inc | 93.866 | 2R44 AG042664-02A1 | - | 64,179 |
| Jackson Laboratory | 93.866 | 2P30 AG038070-06 | - | (90) |
| Jackson Laboratory | 93.866 | 5P30 AG038070-07 | - | 50,041 |

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|---|------------------------|---|--|---------------------------------|
| Magee-Womens Research Institute & Foundation | 93.866 | 1R01 AG050455-01 | - | 38,404 |
| Magee-Womens Research Institute & Foundation | 93.866 | 3R25 AG043365-04 | - | 18,798 |
| Magee-Womens Research Institute & Foundation | 93.866 | 5R25 AG043365-04 | - | 66,978 |
| Massachusetts General Hospital | 93.866 | 5U01 AG012531-22 | - | (6) |
| Minneapolis Medical Research Foundation | 93.866 | 5U01 AG029824-03 | - | 31,729 |
| Northern California Institute for Research and Education | 93.866 | 5U01 AG024904-10 | - | 3,278 |
| Northwestern University | 93.866 | 1R01 AG047416-01A1 | - | (431) |
| Northwestern University | 93.866 | 5R01 AG047416-02 | - | 28,761 |
| Northwestern University | 93.866 | 5R01 AG047416-03 | - | 3,967 |
| Scripps Research Institute | 93.866 | 4P01 AG043376-04 | 5,057 | 363,230 |
| Scripps Research Institute | 93.866 | 5P01 AG043376-03 | - | (5,609) |
| Scripps Research Institute | 93.866 | 5P01 AG043376-05 | - | 78,705 |
| St. Joseph's Hospital and Medical Center | 93.866 | 5P01 AG014449-19 | - | 408,759 |
| University of California | 93.866 | 5U19 AG010483-24 | - | (3,893) |
| University of California San Diego | 93.866 | 5U01 AG024904-08 | - | (8,953) |
| University of Delaware | 93.866 | 4R01 AG041202-05 | - | 20,897 |
| University of Florida | 93.866 | 1U01 AG050499-01 | - | (5,519) |
| University of Florida | 93.866 | 5U01 AG022376-10 | - | 39,651 |
| University of Florida | 93.866 | 5U01 AG050499-02 | - | 354,830 |
| University of Kansas | 93.866 | 5R01 AG051470-02 | - | 122,524 |
| University of Maryland | 93.866 | 5R01 AG037120-05 | - | 24,265 |
| University of Massachusetts | 93.866 | 5R24 AG045050-03 | - | 8,846 |
| University of Miami | 93.866 | 1R01 AG054009-01 | - | 39,971 |
| University of Pennsylvania | 93.866 | 5U01 AG030644-06 | - | (47) |
| University of Southern California | 93.866 | 2U19 AG024904-11 | - | 12,650 |
| University of Southern California | 93.866 | 5U01 AG024904-10 | - | 9,433 |
| University of Southern California | 93.866 | 5U19 AG010483-25 | - | 18,789 |
| University of Texas Health Science Center at San Antonio | 93.866 | 4R01 AG044768-05 | - | 8,987 |
| University of Washington | 93.866 | 5U01 AG016976-18 | - | 26,147 |
| Wake Forest University | 93.866 | 5R01 AG033087-04 | - | 2,127 |
| Washington University in St. Louis | 93.866 | 5U19 AG032438-07 | - | 104,549 |
| Subtotal 93.866 | | | 2,473,699 | 32,141,764 |
| Vision Research | 93.867 | Direct | 144,136 | 7,185,020 |
| Carnegie Mellon University | 93.867 | 5R01 EY024912-03 | - | 48,450 |
| JAEB Center for Health Research, Inc. | 93.867 | 5U01 EY011751-19 | - | 5,881 |
| Johns Hopkins University | 93.867 | 1U10 EY024527-01 | - | 30,620 |
| New York University | 93.867 | 7R01 EY013178-17 | - | 132,623 |
| Tufts University | 93.867 | 5R01 EY020856-07 | - | 63,170 |
| University of Mississippi Medical Center | 93.867 | 2R01 EY014263-09 | - | 75,532 |
| University of Pennsylvania | 93.867 | 5R01 EY014943-10 | - | 1,799 |
| West Virginia University | 93.867 | 5R01 EY023620-02 | - | 3,532 |
| West Virginia University | 93.867 | 5R01 EY023620-03 | - | 10,729 |
| Subtotal 93.867 | | | 144,136 | 7,557,356 |
| Medical Library Assistance | 93.879 | Direct | 859,167 | 4,874,594 |
| Brigham & Women's Hospital | 93.879 | 5R01 LM011966-03 | - | 85,733 |
| University of Utah | 93.879 | 5R01 LM010964-05 | - | 16,520 |
| Subtotal 93.879 | | | 859,167 | 4,976,847 |
| International Research and Research Training | 93.989 | Direct | 157,083 | 1,350,540 |
| Other National Institutes of Health: | | | | |
| Allergy and Infectious Diseases | 93.000 | Direct | 569,107 | 1,177,845 |
| Cancer | 93.000 | Direct | - | 75,836 |
| Child Health | 93.000 | Direct | - | 18,629 |
| Clinical Center | 93.000 | Direct | - | 7,121 |
| Drug Abuse | 93.000 | Direct | - | 1,296,227 |
| Heart, Lung & Blood | 93.000 | Direct | - | 86,649 |
| National Library of Medicine | 93.000 | Direct | - | 710 |
| Blood Systems, Inc. | 93.000 | HHSN268201100001I | - | (978) |
| Cancer Targeted Technology, LLC | 93.000 | HHSN261201500074C | - | 292,506 |
| Children's Hospital of Philadelphia | 93.000 | HHSN261200622012C | - | 2,915 |
| Children's Hospital of Philadelphia | 93.000 | HHSN272200900022C | - | 789,695 |
| Children's Hospital of Philadelphia | 93.000 | HHSN272201600014C | - | 43,743 |
| Children's National Medical Center | 93.000 | EARLY AWARD | - | 83,644 |
| Columbus Nanoworks, Inc. | 93.000 | HHSN268201500011C | - | 39,245 |

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|---|------------------------|---|--|---------------------------------|
| Duke University | 93.000 | HHSN272201100025C | - | 4,320 |
| Hager Sharp, Inc. | 93.000 | HHSN276201200001U | - | 10,908 |
| Institute for Transfusion Medicine | 93.000 | HHSN268201100004I | - | 248,259 |
| Leidos Biomedical Research, Inc. | 93.000 | HHSN261200800001E | - | 1,801,772 |
| Magee-Womens Research Institute & Foundation | 93.000 | HHSN261201300016C | - | 915 |
| Mayo Clinic Rochester | 93.000 | HHSN261201200042I | - | 88,495 |
| Medical University of South Carolina | 93.000 | EARLY AWARD | - | 14,164 |
| Mimetas US, Inc. | 93.000 | HHSN271201600011C | - | 69,128 |
| Social & Scientific Systems, Inc. | 93.000 | HHSN261200800001E | - | 36,007 |
| Social & Scientific Systems, Inc. | 93.000 | HHSN273201600002I | - | 251 |
| Social & Scientific Systems, Inc. | 93.000 | N01ES55553 | - | 5,224 |
| The Ohio State University | 93.000 | HHSN268201600002C | - | 152,413 |
| University of Alabama | 93.000 | HHSN268201100025C | - | 23,045 |
| University of Alabama | 93.000 | HHSN272201100034C | - | 41,558 |
| University of Alabama | 93.000 | HHSN272201300012I | - | (2,936) |
| University of Alabama | 93.000 | EARLY AWARD | - | 56,223 |
| University of California | 93.000 | HHSN261201100038C | - | 37,006 |
| University of California at San Francisco | 93.000 | EARLY AWARD | - | 46,747 |
| University of Illinois | 93.000 | HHS0100201500008I | - | 2,145 |
| University of Michigan | 93.000 | HHSN268201100026C | - | 46,674 |
| University of Michigan | 93.000 | EARLY AWARD | - | 79,212 |
| University of Minnesota | 93.000 | HHSN276201200017C | - | 231,960 |
| University of Texas M.D. Anderson Cancer Center | 93.000 | HHSN268200900039C | - | 5,352 |
| University of Texas M.D. Anderson Cancer Center | 93.000 | EARLY AWARD | - | 25 |
| University of Utah | 93.000 | HHSN268200900046C | - | 78,166 |
| Vanderbilt University Medical Center | 93.000 | HHSN272201300023I | - | 294,151 |
| Westat, Inc. | 93.000 | HHSN261201600007I | - | 11,960 |
| Subtotal 93.000 | | | 569,107 | 7,296,931 |
| Total National Institutes of Health | | | 59,794,036 | 505,549,999 |
| Substance Abuse and Mental Health Services Administration: | | | | |
| Other Substance Abuse and Mental Health Services | | | | |
| Administration | 93.000 | Direct | - | 54,248 |
| Commonwealth of Pennsylvania | 93.243 | 1H79 TI026666-01 | - | 183,931 |
| Total Substance Abuse and Mental Health Services Administration | | | - | 238,179 |
| DHHS Other: | | | | |
| Johns Hopkins University | 93.088 | 6AST WH150032-01-03 | - | 75,490 |
| Carnegie Mellon University | 93.297 | 5TP1 AH000040-05 | - | (2,738) |
| Total DHHS Other | | | - | 72,752 |
| Total Department of Health and Human Services | | | 63,792,515 | 525,869,886 |
| Department of Defense: | | | | |
| Advanced Research Projects Agency: | | | | |
| Rutgers University | 12.431 | W911NF-15-2-0036 | 24,452 | 481,754 |
| Research and Technology Development | 12.910 | Direct | - | (2,203) |
| Carnegie Mellon University | 12.910 | D14AP00040 | - | 37,442 |
| HRL Laboratories, LLC | 12.910 | HR0011-13-C-0052 | - | 47,770 |
| Subtotal 12.910 | | | - | 83,009 |
| Other Advanced Research Projects Agency | 12.000 | Direct | - | 255,966 |
| Triton Systems, Inc. | 12.000 | W31P4Q-16-C-0057 | - | 22,474 |
| University of Notre Dame | 12.000 | FA8650-15-C-7546 | - | 54,147 |
| Subtotal 12.000 | | | - | 332,587 |
| Total Advanced Research Projects Agency | | | 24,452 | 897,350 |

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|--|------------------------|---|--|---------------------------------|
| Defense Threat Reduction Agency: | | | | |
| Scientific Research - Combating Weapons of Mass Destruction | 12.351 | Direct | 382,022 | 1,935,210 |
| University of Arizona | 12.351 | HDTRA1-16-1-0054 | - | 24,889 |
| University of Texas at Austin | 12.351 | HDTRA1-14-1-0021 | - | 139,116 |
| Washington State University | 12.351 | HDTRA1-15-1-0013 | - | 284,263 |
| Total Defense Threat Reduction Agency | | | 382,022 | 2,383,478 |
| Department of the Air Force: | | | | |
| Basic and Applied Scientific Research | 12.300 | Direct | - | 453,322 |
| Air Force Defense Research Sciences Program | 12.800 | Direct | 362,992 | 1,773,038 |
| Carnegie Mellon University | 12.800 | FA9550-13-1-0129 | - | 100,155 |
| Carnegie Mellon University | 12.800 | FA9550-15-1-0442 | - | 81,563 |
| Northwestern University | 12.800 | FA9550-11-1-0275 | - | 26,754 |
| Washington University in St. Louis | 12.800 | FA9550-16-1-0386 | - | 4,036 |
| Subtotal 12.800 | | | 362,992 | 1,985,546 |
| Cornell University | 12.910 | FA8750-13-2-0015 | - | 21,909 |
| National Center for Defense Manufacturing & Machining | 12.000 | FA8650-12-2-7230 | 722,896 | 1,135,418 |
| Triton Systems, Inc. | 12.000 | FA9550-16-C-0037 | - | 103,517 |
| Subtotal 12.000 | | | 722,896 | 1,238,935 |
| Total Department of the Air Force | | | 1,085,888 | 3,699,712 |
| Department of the Army: | | | | |
| Research on Chemical and Biological Defense | 12.360 | Direct | - | 1,690,099 |
| Military Medical Research and Development | 12.420 | Direct | 3,763,275 | 18,697,349 |
| Brigham & Women's Hospital | 12.420 | W81XWH-15-1-0263 | - | 53,241 |
| Craig Hospital | 12.420 | W81XWH-14-1-0564 | - | 2,784 |
| Duquesne University | 12.420 | W81XWH-16-1-0690 | - | 8,248 |
| Geneva Foundation | 12.420 | W81XWH-13-2-0004 | - | 43,548 |
| Geneva Foundation | 12.420 | W81XWH-14-2-0178 | - | 33,910 |
| Geneva Foundation | 12.420 | W81XWH-15-2-0047 | - | 123,567 |
| Geneva Foundation | 12.420 | W81XWH-15-2-0061 | - | 75,309 |
| Henry M. Jackson Foundation | 12.420 | W81XWH-14-2-0145 | - | 591,673 |
| Lipella Pharmaceuticals, Inc. | 12.420 | W81XWH-12-1-0565 | - | 32,760 |
| Magee-Womens Research Institute & Foundation | 12.420 | W81XWH-16-1-0133 | - | 61,746 |
| Minnesota Veterans Medical Research and Education Foundation | 12.420 | W81XWH-16-1-0312 | - | 10,165 |
| TDA Research, Inc. | 12.420 | W81XWH-13-C-0157 | - | 206,286 |
| Tissue Genesis Institute, LLC | 12.420 | W81XWH-13-2-0030 | - | 6 |
| University of Alabama | 12.420 | W81XWH-15-1-0705 | - | 106,905 |
| University of California | 12.420 | W81XWH-14-2-0176 | - | 151,597 |
| University of Cincinnati | 12.420 | W81XWH-16-2-0020 | - | 3,892 |
| University of Michigan | 12.420 | W81XWH-BAA-14-1 | - | 144,852 |
| University of Missouri | 12.420 | W81XWH-14-1-0604 | - | 5,470 |
| University of Pittsburgh Medical Center | 12.420 | W81XWH-04-1-0851 | 22,753 | 103,565 |
| University of Texas at Arlington | 12.420 | W81XWH-15-1-0719 | - | 106,194 |
| Wake Forest University | 12.420 | W81XWH-08-2-0032 | 136,516 | 334,620 |
| Wake Forest University | 12.420 | W81XWH-13-2-0052 | - | 115,267 |
| Wake Forest University | 12.420 | W81XWH-13-2-0053 | 126,756 | 278,919 |
| Wake Forest University | 12.420 | W81XWH-13-2-0054 | - | 172,668 |
| Wake Forest University | 12.420 | W81XWH-14-2-0003 | - | 507,551 |
| Wake Forest University | 12.420 | W81XWH-14-2-0004 | 74,724 | 561,294 |
| Subtotal 12.420 | | | 4,124,024 | 22,533,386 |
| Basic Scientific Research | 12.431 | Direct | 185,213 | 963,704 |
| Carnegie Mellon University | 12.431 | W911NF-14-1-0422 | - | 3,283 |
| Carnegie Mellon University | 12.431 | W911NF-17-1-0082 | - | 32,223 |
| Princeton University | 12.431 | W911NF-15-1-0397 | - | 205,784 |
| University of California at Santa Barbara | 12.431 | W911NF-16-1-0474 | - | 96,994 |
| Subtotal 12.431 | | | 185,213 | 1,301,988 |

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COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| Research and Technology Development | 12.910 | Direct | 179,343 | 1,239,143 |
| Other Department of the Army | 12.000 | Direct | 1,445,693 | 3,355,226 |
| Banyan Biomarkers Inc. | 12.000 | W911QY-15-C-0019 | - | 28,620 |
| Battelle Memorial Institute | 12.000 | W911NF-11-D-0001 | - | 43,737 |
| Children's Research Institute | 12.000 | W81XWH-12-1-0417 | - | 4,356 |
| DetectIR Technologies, Inc. | 12.000 | W911NF-16-P-0011 | - | 25,405 |
| Johns Hopkins University | 12.000 | W81XWH-10-2-0090 | - | 81,517 |
| Johns Hopkins University | 12.000 | W81XWH-10-2-0134 | - | 1,205 |
| KCF Technologies, INC | 12.000 | W81XWH-14-C-0013 | - | 19,733 |
| Lynntech, Inc. | 12.000 | W81XWH-16-C-0029 | - | 57,919 |
| Materials Sciences Corporation | 12.000 | W31P4Q-16-C-0125 | - | 26,171 |
| Materials Sciences Corporation | 12.000 | W31P4Q-16-P-0092 | - | 11,734 |
| MD Consulting, LLC. | 12.000 | W91YTZ-11-P-0929 | - | 50,325 |
| Neuren Pharmaceuticals, Ltd | 12.000 | W81XWH-08-2-0014 | - | (4) |
| Qrono, Inc. | 12.000 | W81XWH-15-C-0120 | - | 3,118 |
| TDA Research, Inc. | 12.000 | W31P4Q-16-C-0060 | - | 30,000 |
| University of Colorado | 12.000 | W81XWH-15-C-0095 | - | 90,116 |
| Subtotal 12.000 | | | 1,445,693 | 3,829,178 |
| Total Department of the Army | | | 5,934,273 | 30,593,794 |
| Department of the Navy: | | | | |
| Basic and Applied Scientific Research | 12.300 | Direct | 717,865 | 4,320,097 |
| Johns Hopkins University | 12.300 | N66001-10-C-4056 | - | 478,005 |
| University of California at Los Angeles | 12.300 | N00014-14-1-0650 | - | 134,091 |
| University of Kentucky | 12.300 | N00014-15-1-0069 | - | 237,819 |
| University of Virginia | 12.300 | N00014-14-1-0348 | - | 103,738 |
| University of Virginia | 12.300 | N00014-14-1-0637 | - | 113,292 |
| Subtotal 12.300 | | | 717,865 | 5,387,042 |
| Other Department of the Navy | 12.000 | Direct | 1,373,013 | 3,296,940 |
| Total Department of the Navy | | | 2,090,878 | 8,683,982 |
| National Security Agency: | | | | |
| Information Security Grants | 12.902 | | - | 189,956 |
| Total National Security Agency | | | - | 189,956 |
| Space and Naval Warfare Systems Command: | | | | |
| Paradromics Inc. | 12.000 | N66001-17-C-4005 | - | 407 |
| Total Space and Naval Warfare Systems Command | | | - | 407 |
| DoD Other: | | | | |
| Innovation Works | 12.617 | ST1429-14-01 | - | 113,214 |
| MD Consulting, LLC. | 12.000 | HT0014-16-C-0013 | - | 11,263 |
| Total DoD Other | | | - | 124,477 |
| Total Department of Defense | | | 9,517,513 | 46,573,156 |
| Other Agencies: | | | | |
| Agency for International Development: | | | | |
| Institute of International Education | 98.001 | AID-OAA-A-12-00039 | - | 16,014 |
| JSI Research & Training Institute, Inc | 98.001 | AID-OAA-A-12-00047 | 116,248 | 1,063,412 |
| Management Sciences For Health, Inc. | 98.001 | AID-OAA-A-11-00015 | - | 152,894 |
| Subtotal 98.001 | | | 116,248 | 1,232,320 |
| Other Agency for International Development | 98.000 | Direct | 335,609 | 840,176 |

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**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|--|------------------------|---|--|---------------------------------|
| Magee-Womens Research Institute & Foundation | 98.000 | AID-OAA-A-14-00011 | - | 80,943 |
| Mitchell Group, Inc. | 98.000 | AID-624-M-13-00001 | - | 335,632 |
| NORC | 98.000 | AID-OAA-M-13-00013 | - | 17,768 |
| RTI International | 98.000 | AID-OAA-A-14-00012 | - | 62,256 |
| Subtotal 98.000 | | | 335,609 | 1,336,775 |
| Total Agency for International Development | | | 451,857 | 2,569,095 |
| Department of Agriculture: | | | | |
| US Civilian Research & Development Foundation | 10.001 | 59-0210-2-160 | - | 87,694 |
| Center for Produce Safety | 10.170 | 024072 | - | 27,399 |
| Agricultural and Rural Economic Research, Cooperative Agreements and Collaborations | 10.250 | Direct | - | 14,967 |
| Clemson University | 10.310 | 2012-67009-25266 | - | 5,411 |
| Pennsylvania State University | 10.561 | SNAP | - | 293 |
| Total Department of Agriculture | | | - | 135,764 |
| Department of Commerce: | | | | |
| Science, Technology, Business and/or Education Outreach | 11.620 | Direct | - | 8,965 |
| Total Department of Commerce | | | - | 8,965 |
| Department of Education: | | | | |
| Commonwealth of Pennsylvania | 84.126 | H126A170056 | - | 719,455 |
| Innovative Design Labs, Inc. | 84.133 | H133S140099 | - | 5,032 |
| Propel Schools | 84.287 | 21st CCLC | - | 13,000 |
| Education Research, Development and Dissemination | 84.305 | Direct | 389,770 | 2,196,714 |
| Harvard University | 84.305 | R305A140121 | - | 67,186 |
| Pennsylvania State University | 84.305 | R305A160403 | - | 294,373 |
| Temple University | 84.305 | R305A160400 | - | 22,518 |
| University of Michigan | 84.305 | R305A140647 | - | 97,756 |
| University of Wisconsin | 84.305 | R305A130030 | - | (27) |
| Subtotal 84.305 | | | 389,770 | 2,678,520 |
| University of South Carolina | 84.324 | R305A130467 | - | 48,169 |
| Salus University | 84.325 | H325H140002 | - | 67,073 |
| Allegheny Intermediate Unit | 84.366 | Title IIB | - | 52,797 |
| Total Department of Education | | | 389,770 | 3,584,046 |
| Department of Energy: | | | | |
| Office of Science Financial Assistance Program | 81.049 | Direct | 284,357 | 3,788,672 |
| Harvard University | 81.049 | DE-SC0005247 | - | 95,000 |
| Kalos Technologies, Inc. | 81.049 | DE-SC0015077 | - | 48,000 |
| Northwestern University | 81.049 | DE-SC0000989 | - | 156,363 |
| University of Illinois | 81.049 | DE-FG02-03ER15476 | - | 6,406 |
| UT-Battelle, LLC | 81.049 | DE-AC05-00OR22725 | - | 1,796 |
| Subtotal 81.049 | | | 284,357 | 4,096,237 |
| Conservation Research and Development | 81.086 | Direct | - | 743,928 |
| University of Central Florida | 81.087 | DE-EE0006340 | - | 11,869 |
| University of Oklahoma | 81.087 | DE-EE0006287 | - | 98,072 |
| Subtotal 81.087 | | | - | 109,941 |
| Fossil Energy Research and Development | 81.089 | Direct | 109,728 | 1,006,892 |
| Pennsylvania State University | 81.089 | DE-FE0024056 | - | 39,463 |
| Subtotal 81.089 | | | 109,728 | 1,046,355 |

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**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| Federal Grantor/Pass Through Grantor/Program Title | CFDA Number | Direct Award or Pass Through # | Passed Through to Subrecipients | Federal Expenditures |
|--|------------------------|---|--|---------------------------------|
| Nuclear Energy Research, Development and Demonstration | 81.121 | Direct | - | 717,014 |
| Westinghouse Electric Company, LLC | 81.121 | DE-FOA-0001163 | - | 78,539 |
| Subtotal 81.121 | | | - | 795,553 |
| Advanced Research Projects Agency - Energy | 81.135 | Direct | 662 | (238) |
| Other Department of Energy | 81.000 | Direct | - | 22,946 |
| AECOM Energy and Construction, Incorporated | 81.000 | DE-FE0004000 | - | 363,390 |
| Battelle Energy Alliance, LLC | 81.000 | DE-AC07-05ID14517 | - | 30,610 |
| Battelle Memorial Institute | 81.000 | DE-AC05-76RL01830 | - | 334,331 |
| Bechtel Marine Propulsion Corporation | 81.000 | DE-NR0000031 | - | 8,107 |
| Brookhaven Science Associates, LLC | 81.000 | DE-AC02-98CH10886 | - | 318 |
| Brookhaven Science Associates, LLC | 81.000 | DE-SC0012704 | - | 140,873 |
| Directed Vapor Technologies International, Inc. | 81.000 | DE-SC0013098 | - | 46,365 |
| Leland Stanford, Jr. University | 81.000 | DE-AC02-76SF00515 | - | 51,942 |
| Los Alamos National Security, LLC | 81.000 | DE-AC52-06NA25396 | - | 779,617 |
| Sandia Corporation, a subsidiary of Lockheed Martin | 81.000 | DE-AC04-94AL85000 | - | 74,767 |
| Savannah River Nuclear Solutions, LLC | 81.000 | DE-AC09-08SR22470 | - | 64,792 |
| UT-Battelle, LLC | 81.000 | DE-AC05-00OR22725 | - | 87,751 |
| Subtotal 81.000 | | | - | 2,005,809 |
| Total Department of Energy | | | 394,747 | 8,797,585 |
| Department of Housing and Urban Development: | | | | |
| Municipality of Penn Hills | 14.218 | B-15-MC-42-0104 | - | 1,691 |
| Municipality of Penn Hills | 14.218 | B-16-MC-42-0104 | - | 3,021 |
| Subtotal 14.218 | | | - | 4,712 |
| Total Department of Housing and Urban Development | | | - | 4,712 |
| Department of the Interior: | | | | |
| Pennsylvania State University | 15.805 | G16AP00079 | - | 20,000 |
| University of Wyoming | 15.945 | P14AC00990 | - | 2,243 |
| Vanderbilt University | 15.000 | D15PC00304 | - | 145,639 |
| Total Department of the Interior | | | - | 167,882 |
| Department of Justice: | | | | |
| Juvenile Justice and Delinquency Prevention | 16.540 | Direct | - | 131,530 |
| Criminal Justice Research and Development Graduate Research Fellowships | 16.562 | Direct | - | 22,500 |
| PA Commission on Crime & Delinquency | 16.738 | 2012-DJ-BX-0176 | - | 45,465 |
| PA Commission on Crime & Delinquency | 16.812 | 2016-CZ-BX-0001 | - | 9,881 |
| Other Department of Justice | 16.000 | Direct | - | 34,432 |
| Total Department of Justice | | | - | 243,808 |
| Department of Labor: | | | | |
| Three Rivers Workforce Investment Board | 17.259 | WIA/WIOA | - | 99,739 |
| Total Department of Labor | | | - | 99,739 |
| Department of State: | | | | |
| Institute of International Education | 19.401 | S-ECAGD-13-CA-149 | - | 78,312 |
| Total Department of State | | | - | 78,312 |
| Department of Transportation: | | | | |
| University of Cincinnati | 20.200 | DTFH61-08-H-000035 | - | 16,654 |
| University of Cincinnati | 20.200 | DTFH61-13-H-000024 | - | 16,711 |
| Subtotal 20.200 | | | - | 33,365 |

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**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
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| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| Commonwealth of Pennsylvania | 20.205 | construct&planning | - | 388,292 |
| Transportation Planning, Research and Education | 20.931 | Direct | 77,339 | 74,925 |
| National Academy of Sciences | 20.000 | DC-2016-011-00 | - | 27,105 |
| National Association of EMS | 20.000 | DTNH2215C00029 | - | 429,794 |
| Subtotal 20.000 | | | - | 456,899 |
| Total Department of Transportation | | | 77,339 | 953,481 |
| Department of Veterans Affairs: | | | | |
| Other Department of Veterans Affairs | 64.000 | Direct | 101,468 | 5,373,658 |
| Total Department of Veterans Affairs | | | 101,468 | 5,373,658 |
| Environmental Protection Agency: | | | | |
| Vanderbilt University | 66.509 | RD-83573601 | - | 568,177 |
| Total Environmental Protection Agency | | | - | 568,177 |
| Institute of Museum and Library Services: | | | | |
| Children's Museum | 45.301 | MA-20-14-0473-14 | - | 6,237 |
| Children's Museum | 45.312 | LG-25-12-0577-12 | - | 7,000 |
| Laura Bush 21st Century Librarian Program | 45.313 | Direct | 1,850 | 113,563 |
| Total Institute of Museum and Library Services | | | 1,850 | 126,800 |
| N.A.S.A.: | | | | |
| Aerospace Education Services Program: | | | | |
| NNX11AP17G | 43.001 | Direct | - | 49 |
| NNX14AB41G | 43.001 | Direct | - | 108,062 |
| NNX14AK88H | 43.001 | Direct | - | 31,662 |
| NNX14AQ96G | 43.001 | Direct | 74,844 | 183,843 |
| NNX15AM03G | 43.001 | Direct | 14,188 | 77,890 |
| NNX15AQ72H | 43.001 | Direct | - | 28,788 |
| NNX15AU50G | 43.001 | Direct | - | 102,019 |
| NNX16AN66G | 43.001 | Direct | - | 38,068 |
| NNX17AB97G | 43.001 | Direct | - | 1,028 |
| NNX17AB69G | 43.001 | Direct | - | 5,550 |
| NNX17AC43G | 43.001 | Direct | - | 18,501 |
| Arizona State University | 43.001 | NMO7-10630 | - | 75,193 |
| Directed Vapor Technologies International, Inc. | 43.001 | NNX14CS63C | - | 36,584 |
| Smithsonian Astrophysical Observatory | 43.001 | NAS8-03060 | - | 16,394 |
| University of Maryland | 43.001 | NNX17AF90G | - | 1,818 |
| University of Montana | 43.001 | NNA15BB04A | - | 203,869 |
| Subtotal 43.001 | | | 89,032 | 929,318 |
| University of Houston | 43.003 | NNX15AC13G | - | 17,589 |
| Pennsylvania State University | 43.008 | NNX15AK06H | - | 55,069 |
| Space Technology | 43.012 | Direct | - | 50,822 |
| Center for the Advancement of Science in Space | 43.000 | NNH11CD70A | 9,736 | 135,001 |
| Space Telescope Science Institute | 43.000 | NAS5-26555 | - | 70,972 |
| Subtotal 43.000 | | | 9,736 | 205,973 |
| Total N.A.S.A | | | 98,768 | 1,258,771 |
| National Endowment for the Humanities: | | | | |
| Promotion of the Humanities Division of Preservation and Access | 45.149 | Direct | - | 52,030 |
| Promotion of the Humanities - Teaching and Learning | | | | |
| Resources and Curriculum Development | 45.162 | Direct | - | 33,396 |
| Promotion of the Humanities Office of Digital Humanities | 45.169 | Direct | - | 32,260 |

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|---|------------------------|---|--|---------------------------------|
| Total National Endowment for the Humanities | | | - | 117,686 |
| National Science Foundation: | | | | |
| Engineering Grants | 47.041 | Direct | 102,191 | 4,954,752 |
| Duke University | 47.041 | IIP-1639076 | - | 18,030 |
| Liquid X Printed Metals, Inc. | 47.041 | IIP-1521413 | - | 32,875 |
| North Carolina A & T State University | 47.041 | EEC-0812348 | - | 992,233 |
| Rice University | 47.041 | CMMI-1642531 | - | 47,353 |
| Subtotal 47.041 | | | 102,191 | 6,045,243 |
| Mathematical and Physical Sciences | 47.049 | Direct | 149,857 | 6,534,097 |
| AURA, Inc. | 47.049 | AST-1258333 | - | 69,326 |
| Carnegie Mellon University | 47.049 | DMS-1516288 | - | 79,104 |
| Carnegie Mellon University | 47.049 | DMS-1557572 | - | 15,546 |
| Carnegie Mellon University | 47.049 | PHY-1306805 | - | 8,955 |
| Columbia University | 47.049 | PHY-1119200 | - | 44,826 |
| Research Foundation - State University of New York | 47.049 | PHY-1624739 | - | 34,591 |
| University of California at Irvine | 47.049 | CHE-1414466 | - | 238,845 |
| Subtotal 47.049 | | | 149,857 | 7,025,290 |
| Geosciences | 47.050 | Direct | 353,895 | 1,435,528 |
| University of Arizona | 47.050 | EAR-1338553 | - | 42,573 |
| Subtotal 47.050 | | | 353,895 | 1,478,101 |
| Computer and Information Science and Engineering | 47.070 | Direct | - | 3,309,580 |
| Carnegie Mellon University | 47.070 | IIS-1320347 | - | 8,626 |
| Rochester Institute of Technology | 47.070 | CCF-1331788 | - | 17,545 |
| Subtotal 47.070 | | | - | 3,335,751 |
| Biological Sciences | 47.074 | Direct | 289,387 | 1,783,949 |
| Baylor University | 47.074 | MCB-1613534 | - | 42,005 |
| Carnegie Mellon University | 47.074 | DBI-1356505 | - | 31,356 |
| Carnegie Mellon University | 47.074 | IOS-1553252 | - | 12,102 |
| Duquesne University | 47.074 | MCB-1553143 | - | 14,012 |
| Hauptman Woodward Medical Research Institute | 47.074 | DBI-1231306 | - | 63,627 |
| University of California | 47.074 | IOS-1626668 | - | (12,352) |
| University of Colorado | 47.074 | DEB-1115068 | - | 4,690 |
| University of Dayton | 47.074 | IOS-1555906 | - | 9,311 |
| Subtotal 47.074 | | | 289,387 | 1,948,700 |
| Social, Behavioral, and Economic Sciences | 47.075 | Direct | - | 535,586 |
| Carnegie Mellon University | 47.075 | BCS-1439237 | - | 578 |
| Carnegie Mellon University | 47.075 | BCS-1533672 | - | 78,530 |
| National Bureau of Economic Research | 47.075 | SES-1459847 | - | 46,404 |
| Rand Corporation | 47.075 | SES-1423635 | - | 38,870 |
| University of California | 47.075 | SES-1629193 | - | 38,964 |
| Subtotal 47.075 | | | - | 738,932 |
| Education and Human Resources | 47.076 | Direct | 354,874 | 5,453,747 |
| American Educational Research Association | 47.076 | DRL-0941014 | - | 18,608 |
| Carnegie Mellon University | 47.076 | DRL-1612744 | - | 7,092 |
| Carnegie Mellon University | 47.076 | DRL-1623969 | - | 16,670 |
| Community College of Allegheny County | 47.076 | DUE-1400575 | - | 15,990 |
| Duke University | 47.076 | DRL-1031351 | - | 41,065 |
| Educational Development Center | 47.076 | DRL-1321216 | - | 55,650 |
| Franklin Institute | 47.076 | DUE-1239782 | - | 94,790 |
| Fred Rogers Company | 47.076 | DRL-1323485 | - | 4,856 |
| Fred Rogers Company | 47.076 | DRL-1516446 | - | 74,674 |
| University of South Florida | 47.076 | DUE-1322586 | - | 20,848 |
| University of Wisconsin | 47.076 | DUE-1231286 | - | 14,944 |
| Subtotal 47.076 | | | 354,874 | 5,818,934 |
| Vanderbilt University Medical Center | 47.079 | OISE-9531011 | - | 6,257 |
| Office of Cyberinfrastructure | 47.080 | Direct | - | 50,210 |
| Trans-NSF Recovery Act Research Support - ARRA | 47.082 | Direct | - | 264 |

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YEAR ENDED JUNE 30, 2017**

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|--|------------------------|---|--|---------------------------------|
| Total National Science Foundation | | | 1,250,204 | 26,447,682 |
| Nuclear Regulatory Commission: | | | | |
| U. S. Nuclear Regulatory Commission Nuclear Education Grant Program | 77.006 | Direct | - | 103,302 |
| Total Nuclear Regulatory Commission | | | - | 103,302 |
| Total Other Agencies | | | 2,766,003 | 50,639,465 |
| TOTAL RESEARCH & DEVELOPMENT CLUSTER | | | 76,076,031 | 623,082,507 |
| II. STUDENT FINANCIAL ASSISTANCE CLUSTER: | | | | |
| Department of Education: | | | | |
| Federal Supplemental Educational Opportunity Grants | 84.007 | Direct | - | 1,275,603 |
| Federal Work-Study Program | 84.033 | Direct | - | 1,875,691 |
| Federal Pell Grant Program | 84.063 | Direct | - | 21,983,855 |
| Federal Perkins Loan Program | 84.038 | Direct | - | 30,417,340 |
| Direct Student Loans Program | 84.268 | Direct | - | 252,023,869 |
| Total Department of Education | | | - | 307,576,358 |
| Health Resources and Services Administration: | | | | |
| Nursing Faculty Loan Program | 93.264 | Direct | - | 630,950 |
| Health Professions Student Loan Program: | | | | |
| Medicine | 93.342 | Direct | - | 139,133 |
| Dentistry | 93.342 | Direct | - | 5,106,522 |
| Pharmacy | 93.342 | Direct | - | 1,608,599 |
| Subtotal 93.342 | | | - | 6,854,254 |
| Disadvantaged Student Loan Program: | | | | |
| Dentistry | 93.342 | Direct | - | 151,358 |
| Medicine | 93.342 | Direct | - | 293,073 |
| Subtotal 93.342 | | | - | 444,431 |
| Nursing Student Loan Program: | | | | |
| Baccalaureate | 93.364 | Direct | - | 2,165,769 |
| Nursing Faculty Loan Program - ARRA | 93.408 | Direct | - | 146,795 |
| Total Health Resources and Services Administration | | | - | 10,242,199 |
| TOTAL STUDENT FINANCIAL ASSISTANCE CLUSTER | | | - | 317,818,557 |
| III. TRIO CLUSTER: | | | | |
| Department of Education: | | | | |
| TRIO - Student Support Services | 84.042 | Direct | - | 631,022 |
| Total Department of Education | | | - | 631,022 |
| TOTAL TRIO CLUSTER | | | - | 631,022 |
| IV. HEAD START CLUSTER: | | | | |
| Administration for Children and Families: | | | | |
| Head Start | 93.600 | Direct | 3,331,999 | 4,088,563 |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| Total Administration for Children and Families | | | 3,331,999 | 4,088,563 |
| TOTAL HEAD START CLUSTER | | | 3,331,999 | 4,088,563 |
| V. CHILD NUTRITION CLUSTER: | | | | |
| Department of Agriculture: Commonwealth of Pennsylvania | 10.559 | SFSP | - | 5,524 |
| Total Department of Agriculture | | | - | 5,524 |
| TOTAL CHILDREN NUTRITION CLUSTER | | | - | 5,524 |
| VI. OTHER PROGRAMS: | | | | |
| <u>Department of Health and Human Services:</u> | | | | |
| Administration for Children and Families: | | | | |
| Commonwealth of Pennsylvania | 93.556 | 4100064360 | - | 41,239 |
| Commonwealth of Pennsylvania | 93.643 | 4100064360 | - | 319,455 |
| Commonwealth of Pennsylvania | 93.658 | 4100066356 | - | 8,154,957 |
| Commonwealth of Pennsylvania | 93.658 | 4100064360 | 87,412 | 10,022,589 |
| Subtotal 93.658 | | | 87,412 | 18,177,546 |
| Commonwealth of Pennsylvania | 93.669 | 4100064360 | - | 146,248 |
| Commonwealth of Pennsylvania | 93.674 | 4100064360 | - | 658,703 |
| Total Administration for Children and Families | | | 87,412 | 19,343,191 |
| Centers for Disease Control and Prevention: | | | | |
| Louisiana Department of Health | 93.069 | 3U90 TP000524-03S2 | - | 11,890 |
| Commonwealth of Pennsylvania | 93.074 | 3U90 TP000545-03S1 | - | 60,149 |
| Commonwealth of Pennsylvania | 93.074 | 3U90 TP000545-03S2 | - | 36,152 |
| Commonwealth of Pennsylvania | 93.074 | 5U90 TP000545-04 | - | 5,848 |
| District of Columbia | 93.074 | 3U90 TP000519-03S2 | - | 87,271 |
| Subtotal 93.074 | | | - | 189,420 |
| ChangeLab Solutions | 93.424 | 6U38 OT000141-04 | - | 50,075 |
| ChangeLab Solutions | 93.524 | 5U38 OT000141-03 | - | 18,978 |
| Children's Hospital of Philadelphia | 93.758 | 1NB01 OT009111-01 | - | 13,869 |
| Commonwealth of Pennsylvania | 93.758 | 2B01 OT009045-15 | - | (3,285) |
| Commonwealth of Pennsylvania | 93.758 | PHHSBG | 114,856 | 387,688 |
| Subtotal 93.758 | | | 114,856 | 398,272 |
| Commonwealth of Pennsylvania | 93.940 | 3U62 PS003643-06 | - | 710,877 |
| Commonwealth of Pennsylvania | 93.940 | 5U62 PS003643-05 | - | 849,221 |
| Subtotal 93.940 | | | - | 1,560,098 |
| Total Centers for Disease Control and Prevention | | | 114,856 | 2,228,733 |
| Centers for Medicare and Medicaid Services: | | | | |
| Allegheny County | 93.778 | Medical Assistance Program | - | 7,581 |
| Total Centers for Medicare and Medicaid Services | | | - | 7,581 |
| Health Resources and Services Administration: | | | | |
| Training in General, Pediatric, and Public Health Dentistry | 93.059 | Direct | - | 176,131 |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| Pennsylvania State University | 93.107 | 5U77 HP06111-11 | - | 28,469 |
| Pennsylvania State University | 93.107 | 5U77 HP06111-12 | - | 39,609 |
| Subtotal 93.107 | | | - | 68,078 |
| Maternal & Child Health Federal Consolidated Programs | 93.110 | Direct | - | 609,553 |
| Health Research, Incorporated | 93.110 | 5H46 MC24094-04 | - | (263) |
| Subtotal 93.110 | | | - | 609,290 |
| Nurse Anesthetist Traineeships | 93.124 | Direct | - | 55,635 |
| Emergency Medical Services for Children | 93.127 | Direct | - | (1,098) |
| Substance Abuse and Mental Health Services Projects of of Regional and National Significance | 93.243 | Direct | - | 398,554 |
| Advanced Nursing Education Grant Program | 93.247 | Direct | - | 1,063 |
| Leadership in Public Health Social Work Education Grant Program | 93.330 | Direct | - | 207,836 |
| Nurse Education, Practice Quality and Retention Grants | 93.359 | Direct | - | 427 |
| Public Health Training Centers Program | 93.516 | Direct | 364,396 | 955,103 |
| Grants for New and Expanded Services under the Health Center Program | 93.527 | Direct | - | 901,637 |
| Grants for Primary Care Training and Enhancement | 93.884 | Direct | - | (414) |
| Jewish Healthcare Foundation | 93.917 | Ryan White CARE Act | 68,078 | 178,239 |
| PPHF Geriatric Education Centers | 93.969 | Direct | 244,927 | 774,190 |
| Total Health Resources and Services Administration | | | 677,401 | 4,324,671 |
| Substance Abuse and Mental Health Services Administration: | | | | |
| CMSU Counties of Central Pennsylvania | 93.104 | 1U79 AM062468-01 | - | 19,653 |
| CMSU Counties of Central Pennsylvania | 93.104 | 2U79 AM062468-02 | - | 60,151 |
| Commonwealth of Pennsylvania | 93.104 | 5U79 SM059056-05 | - | 38,205 |
| Luzerne County | 93.104 | 1H79 SM063421-01 | - | 78,316 |
| Subtotal 93.104 | | | - | 196,325 |
| Substance Abuse and Mental Health Services Projects of Regional and National Significance | 93.243 | Direct | 104,310 | 955,660 |
| Allegheny County | 93.243 | 1H79 SM061548-01 | - | 284,398 |
| Allegheny Singer Research Institute | 93.243 | 1U79 SM080056-01 | - | 42,778 |
| Allegheny Singer Research Institute | 93.243 | 5U79 SM061257-04 | - | 3,565 |
| Allegheny Singer Research Institute | 93.243 | 5U79 SM061257-04R | - | 32,747 |
| Allegheny Singer Research Institute | 93.243 | 5U79 TI025406-03 | - | 56,293 |
| Chatham University | 93.243 | 1H79 TI025985-01 | - | 124,074 |
| Commonwealth of Pennsylvania | 93.243 | 5H79 SM061915-02 | - | 83,876 |
| Commonwealth of Pennsylvania | 93.243 | 5H79 SM061915-03 | - | 224,785 |
| Commonwealth of Pennsylvania | 93.243 | 5U79 SM061250-03 | - | 20,816 |
| Commonwealth of Pennsylvania | 93.243 | 5U79 SM061250-04 | - | 661,612 |
| Morehouse School of Medicine | 93.243 | 1H79 TI026010-01 | - | 119,592 |
| University of the Sciences in Philadelphia | 93.243 | 1H79 TI026008-01 | - | 120,449 |
| University of Utah | 93.243 | 1U79 SM080000-01 | 725 | 21,389 |
| Subtotal 93.243 | | | 105,035 | 2,752,034 |
| Total Substance Abuse and Mental Health Services Administration | | | 105,035 | 2,948,359 |
| Total Department of Health and Human Services | | | 984,704 | 28,852,535 |
| <u>Department of Defense:</u> | | | | |
| National Security Agency: | | | | |
| Language Grant Program | 12.900 | Direct | - | 153,202 |
| Total National Security Agency | | | - | 153,202 |
| DoD Other: | | | | |
| Institute of International Education | 12.357 | H98210-13-2-0001 | - | 569,304 |
| Total DoD Other | | | - | 569,304 |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|---|------------------------|---|--|---------------------------------|
| Total Department of Defense | | | - | 722,506 |
| Other Agencies: | | | | |
| Agency for International Development: Creative Associates International | 98.000 | AID-611-C-12-00003 | - | 4,872 |
| Total Agency for International Development | | | - | 4,872 |
| Appalachian Regional Commission: Innovation Works | 23.001 | PW-18685-IM-16 | - | 24,916 |
| Total Appalachian Regional Commission | | | - | 24,916 |
| Corporation for National and Community Services: Jumpstart for Young Children Inc | 94.006 | 090200 | - | 182,898 |
| Total Corporation for National and Community Services | | | - | 182,898 |
| Department of Agriculture: Commonwealth of Pennsylvania | 10.558 | CACFP | - | 18,372 |
| Total Department of Agriculture | | | - | 18,372 |
| Department of Commerce: Catalyst Connection | 11.307 | 01-69-14709 | - | 7,061 |
| Total Department of Commerce | | | - | 7,061 |
| Department of Education: National Resource Centers Program for Foreign Language and and Area Studies or Foreign Language and International Studies Program and Foreign Language and Area Studies Fellowship Program | 84.015 | Direct | - | 1,542,279 |
| Undergraduate International Studies and Foreign Language Programs | 84.016 | Direct | - | 33,108 |
| Higher Education Institutional Aid | 84.031 | Direct | - | 182,203 |
| Rehabilitation Long-Term Training | 84.129 | Direct | - | 540 |
| Graduate Assistance in Areas of National Need | 84.200 | Direct | - | 271,775 |
| Homewood Children's Village | 84.215 | U215J150122 | - | 25,000 |
| Special Education - Personnel Development to Improve Services and Results for Children with Disabilities | 84.325 | Direct | - | 560,889 |
| National Writing Project Corporation | 84.367 | U367D150004 | - | 30,756 |
| Northwest Tri-County Intermediate Unit | 84.412 | PPS Arsenal | - | 4,076 |
| Total Department of Education | | | - | 2,650,626 |
| Department of Homeland Security: Homeland Security-related Science, Technology, Engineering and Mathematics (HS STEM) Career Development Program | 97.104 | Direct | - | 20,698 |
| Total Department of Homeland Security | | | - | 20,698 |
| Department of Justice: Commonwealth of Pennsylvania | 16.000 | 2015-PM-0003 | - | 53,505 |
| Commonwealth of Pennsylvania | 16.754 | 2015-PM-BX-0003 | - | 5,132 |
| Total Department of Justice | | | - | 58,637 |
| Department of Labor: | | | | |

**UNIVERSITY OF PITTSBURGH OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

**SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
YEAR ENDED JUNE 30, 2017**

| <u>Federal Grantor/Pass Through Grantor/Program Title</u> | <u>CFDA Number</u> | <u>Direct Award or Pass Through #</u> | <u>Passed Through to Subrecipients</u> | <u>Federal Expenditures</u> |
|--|------------------------|---|--|---------------------------------|
| Commonwealth of Pennsylvania | 17.245 | TAA0249-14 | - | 40,979 |
| Westmoreland-Fayette Workforce Investment Board | 17.259 | WIOA15-17-003 | - | 1,200 |
| Total Department of Labor | | | - | 42,179 |
| Department of State: Partners of the Americas | 19.009 | S-ECAGD-15-CA-1108 | - | 20,743 |
| Total Department of State | | | - | 20,743 |
| Department of Treasury: Low-Income Taxpayer Clinics | 21.008 | Direct | - | 85,241 |
| Total Department of Treasury | | | - | 85,241 |
| Institute of Museum and Library Services: Commonwealth of Pennsylvania | 45.310 | LS-00-15-0039-15 | - | 45,558 |
| Commonwealth of Pennsylvania | 45.310 | LS-00-16-0039-16 | - | 30,494 |
| Subtotal 45.310 | | | - | 76,052 |
| Total Institute of Museum and Library Services | | | - | 76,052 |
| National Endowment for the Humanities: Promotion of the Humanities Fellowships and Stipends | 45.160 | Direct | - | 25,041 |
| Total National Endowment for the Humanities | | | - | 25,041 |
| Nuclear Regulatory Commission: U.S. Nuclear Regulatory Commission Scholarship and Fellowship Program | 77.008 | Direct | - | 56,000 |
| Total Nuclear Regulatory Commission | | | - | 56,000 |
| Peace Corps: Other Peace Corps | 08.000 | Direct | - | 21,929 |
| Total Peace Corps | | | - | 21,929 |
| Small Business Administration: University of Pennsylvania | 59.037 | SBAHQ-16-B-0043 | - | 212,121 |
| Other Small Business Administration | 59.000 | Direct | - | 16,520 |
| University of Pennsylvania | 59.000 | EARLY AWARD | - | 159,098 |
| Subtotal 59.000 | | | - | 175,618 |
| University of Pennsylvania | 59.058 | FAST-2016-R-0010A | - | 3,415 |
| Total Small Business Administration | | | - | 391,154 |
| Total Other Agencies | | | - | 3,686,419 |
| TOTAL OTHER PROGRAMS | | | 984,704 | 33,261,460 |
| GRAND TOTAL - FEDERAL AWARDS AND GRANTS | | | 80,392,734 | 978,887,633 |

See accompanying notes to schedule of expenditures of federal awards.

**UNIVERSITY OF PITTSBURGH – OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

Notes to Schedule of Expenditures of Federal Awards

Year ended June 30, 2017

(1) Basis of Presentation and Significant Accounting Policies

The accompanying schedule of expenditures of federal awards (the Schedule) includes all grants, contracts, and similar agreements of the University of Pittsburgh – Of the Commonwealth System of Higher Education (the University), which have been received from the U.S. federal government for the year ended June 30, 2017. The federal award information is presented in accordance with the 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).

For the purposes of the Schedule, federal awards have been classified in two types:

- Direct federal awards, and
- Pass-through funds received from nonfederal organizations made under federally sponsored programs conducted by those organizations.

The Schedule also presents expenditures passed through from the University to other nonfederal subrecipient organizations. Since the Schedule presents only a selected portion of the activities of the University, it is not intended to and does not present either the financial position, changes in net assets, or cash flows of the University. The Schedule is prepared on the accrual basis of accounting. Negative expenditures detailed in the Schedule result from current year adjustments to prior year award amounts.

Expenditures for federal awards (excluding student financial assistance) are determined using the uniform administrative requirements as set forth in OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations* or the administrative and cost principles contained in the Uniform Guidance, and the cost accounting principles and procedures set forth in OMB Circular A-21, *Cost Principles for Educational Institutions*, as applicable. Under these administrative requirements and cost principles, certain expenditures are not allowable or are limited as to reimbursement.

Expenditures for student financial assistance are recognized as incurred and include the federal share of students' Federal Supplemental Educational Opportunity Grants program and Federal Work-Study program earnings, Pell grants, loan disbursements, and administrative cost allowances, where applicable.

(2) Reimbursement of Facilities and Administrative Costs

Sponsored grants and contracts normally provide for the recovery of direct costs and facilities and administrative costs (F&A costs). Recovery of the related F&A costs is generally recorded at predetermined rates negotiated with the federal government. Entitlement to these resources for the recovery of the applicable direct and related F&A costs is generally conditioned upon compliance with the terms and conditions of the grant agreements and applicable federal regulations, including the expenditure of the resources for eligible purposes. Substantially all grants and the University's F&A cost rate are subject to financial and compliance reviews and audits by the grantors. In management's opinion, the likelihood of an adverse material outcome upon the University's financial position from those reviews and audits is remote. On June 10, 2015, the Department of Health and Human Services approved F&A cost recovery rates effective from July 1, 2015 through June 30, 2019. The University has elected not to use the 10-percent de minimis indirect cost rate as allowed under the Uniform Guidance.

**UNIVERSITY OF PITTSBURGH – OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

Notes to Schedule of Expenditures of Federal Awards

Year ended June 30, 2017

(3) Federal Loan Programs

The University administers the following federal loan programs with an outstanding loan balance as of June 30, 2017:

| Federal grant and program title | Federal CFDA number | Outstanding loan balance |
|---|------------------------------------|-------------------------------------|
| Department of Education – Federal Perkins Loan Program | 84.038 | \$ 27,737,628 |
| Department of Health and Human Services – Public Service: | | |
| Health Professions Student Loan Program: | | |
| Medicine | 93.342 | 124,369 |
| Dentistry | 93.342 | 4,354,079 |
| Pharmacy | 93.342 | 1,360,356 |
| Nursing Student Loan Program – Baccalaureate | 93.364 | 1,706,079 |
| Nursing Faculty Loan Program: | | |
| Nursing Faculty Loan ARRA | 93.408 | 146,795 |
| Nursing Faculty Loan | 93.264 | 615,832 |
| Disadvantaged Student Loan Program: | | |
| Medicine | 93.342 | 274,092 |
| Dentistry | 93.342 | 149,100 |

The Perkins and Department of Health and Human Services Public Service Loan Programs are administered directly by the University, and balances and transactions relating to these programs are included in the University's consolidated financial statements. The amounts included in the Schedule of Expenditures under the Perkins and Department of Health and Human Services Public Service Loan Programs include the balance of the respective loan program as of June 30, 2016, administrative costs, if any, and new loans issued during fiscal 2017.

(4) Department of Education Direct Loan Programs

The University is responsible only for the performance of certain administrative duties with respect to the Direct Loans; accordingly, these loans are not included in the University's consolidated financial statements and it is not practical to determine the balance of loans outstanding to students and former students of the University under these programs.

(5) Vendor Relationships

The Special Education Program (CFDA #84.027) constitutes a vendor relationship with the University in accordance with Uniform Guidance. This project is being excluded from the Schedule, although it represents federal funds of \$4,663,478 for the year ended June 30, 2017.



KPMG LLP
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Suite 3400
500 Grant Street
Pittsburgh, PA 15219-2598

Independent Auditors' Report 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*

The Board of Trustees
University of Pittsburgh – Of the Commonwealth
System of Higher Education:

We have audited, in accordance with the 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 Pittsburgh – Of the Commonwealth System of Higher Education (the University), which comprise the consolidated balance sheet as of June 30, 2017, and the related consolidated statements of activities and cash flows for the year then ended, and the related notes to the consolidated financial statements, and have issued our report thereon dated September 22, 2017.

Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated 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 consolidated 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 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 consolidated 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*.



University of Pittsburgh – Of the Commonwealth
System of Higher Education
September 22, 2017
Page 2 of 2

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 University'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 University's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Pittsburgh, Pennsylvania
September 22, 2017



KPMG LLP
BNY Mellon Center
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500 Grant Street
Pittsburgh, PA 15219-2598

**Independent Auditors' Report on Compliance for Each Major Federal Program;
Report on Internal Control Over Compliance; and Report on Schedule of Expenditures
of Federal Awards Required by the Uniform Guidance**

The Board of Trustees of the
University of Pittsburgh – Of the Commonwealth
System of Higher Education

Report on Compliance for Each Major Federal Program

We have audited the University of Pittsburgh – Of the Commonwealth System of Higher Education'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, 2017. The University's major federal programs are identified in the summary of auditors' 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, 2017.

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 a 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, material weaknesses may exist that have not been identified.

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.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the consolidated financial statements of the University as of and for the year ended June 30, 2017, and have issued our report thereon dated September 22, 2017, which contained an unmodified opinion on those financial statements. 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 the Uniform Guidance 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.

KPMG LLP

Pittsburgh, Pennsylvania
March 19, 2018

**UNIVERSITY OF PITTSBURGH – OF THE
COMMONWEALTH SYSTEM OF HIGHER EDUCATION**

Schedule of Findings and Questioned Costs

Year ended June 30, 2017

(1) Summary of Auditors' Results

- (a) Type of report issued on whether the consolidated financial statements were prepared in accordance with generally accepted accounting principles: **Unmodified**
- (b) Internal control deficiencies over financial reporting disclosed by the audit of the consolidated financial statements:
 - Material weaknesses: **No**
 - Significant deficiencies: **None reported**
- (c) Noncompliance material to the financial statements: **No**
- (d) Internal control deficiencies over major programs disclosed by the audit:
 - Material weaknesses: **No**
 - Significant deficiencies: **None reported**
- (e) Type of report issued on compliance for major programs: **Unmodified**
- (f) Audit findings that are required to be reported in accordance with 2 CFR 200.516(a): **No**
- (g) Major programs:
 - Research and Development Cluster – various CFDA numbers
 - Head Start – CFDA 93.600
 - Substance Abuse and Mental Health Services Projects of Regional and National Significance – CFDA 93.243
- (h) Dollar threshold used to distinguish between Type A and Type B programs: **\$3,000,000**
- (i) Auditee qualified as a low-risk auditee: **Yes**

(2) Findings Relating to the Financial Statements Reported in Accordance with *Government Auditing Standards*

None

(3) Findings and Questioned Costs Relating to Federal Awards

None