

The Trustees of Columbia University in the City of New York

**Report on Federal Awards in Accordance with
OMB Circular A-133**

For the year ended June 30, 2012

Employer Identification Number 13-5598093

The Trustees of Columbia University in the City of New York
Report in Connection with OMB Circular A-133
For the year ended June 30, 2012
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Report of Independent Auditors

The Board of the Trustees of
Columbia University in the City of New York

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of activities and cash flows present fairly, in all material respects, the financial position of The Trustees of Columbia University in the City of New York (the "University") at June 30, 2012, and the changes in its net assets and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the University's management. Our responsibility is to express an opinion on these financial statements based on our audit. The prior year summarized comparative information has been derived from the University's June 30, 2011 financial statements, and in our report dated October 21, 2011, we expressed an unqualified opinion on those financial statements. We conducted our audit of these statements 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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In accordance with Government Auditing Standards, we have also issued our report dated October 16, 2012 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, for the year ended June 30, 2012. The purpose of that report is 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 internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards and should be considered in assessing the results of our audit.

Our audit was conducted for the purpose of forming an opinion on the consolidated financial statements taken as a whole. The accompanying Schedule of Expenditures of Federal Awards for the year ended June 30, 2012 is presented for purposes of additional analysis as required by U.S. Office of Management and Budget Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations, and is not a required part of the financial statements. The information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The Schedule of Expenditures of Federal Awards has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or the 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 are fairly stated in all material respects, in relation to the financial statements taken as a whole.

PricewaterhouseCoopers LLP

October 16, 2012

The Trustees of Columbia University in the City of New York
Consolidated Balance Sheets
At June 30, 2012, with Comparative Totals at June 30, 2011
(in thousands of dollars)

	June 2012	June 2011
Assets		
Cash and cash equivalents	\$434,635	\$254,444
Accounts receivable, net:		
Government agencies	119,189	116,054
Patient receivables	71,770	67,999
Other	193,869	183,354
Investment income receivable, net	2,130	3,035
Receivable for securities sold	32,942	56,759
Cash and securities held in trust by others	88,092	119,415
Pledges receivable, net	920,195	882,704
Student loans receivable, net	93,313	87,959
Collateral for securities loaned	30,536	9,681
Investments, at fair value	7,591,982	7,901,194
Institutional real estate	815,379	800,023
Land, buildings, and equipment, net	2,906,411	2,710,218
Other assets	194,366	160,159
Net assets held by CPMC Fund, Inc.	78,914	89,860
Interest in perpetual trusts held by others	153,168	161,256
Total assets	\$13,726,891	\$13,604,114
Liabilities		
Accounts payable and accrued expenses	\$232,340	\$254,112
Liabilities for securities purchased	10,026	29,022
Securities loan agreement payable	30,536	9,681
Prepaid tuition and other deferred credits	64,319	42,248
Deferred revenue and unamortized bond premium	89,901	63,742
Refundable advances	85,820	90,908
Capital lease obligations	114,421	114,756
Conditional asset retirement obligations	106,282	105,291
Accrued employee benefit liabilities	229,928	182,253
Federal student loan funds	79,603	78,889
Actuarial liability for split-interest agreements	41,444	45,010
Bonds and notes payable	1,535,900	1,539,160
Other long term liabilities	454,320	386,736
Total liabilities	3,074,840	2,941,808
Net assets		
Unrestricted	4,661,233	4,763,715
Temporarily restricted	3,685,376	3,726,513
Permanently restricted	2,305,442	2,172,078
Total net assets	10,652,051	10,662,306
Total liabilities and net assets	\$13,726,891	\$13,604,114

See accompanying notes to financial statements.

The Trustees of Columbia University in the City of New York
Consolidated Statements of Activities
For the Year Ended June 30, 2012, with Comparative Totals at June 30, 2011

(in thousands of dollars)

	Unrestricted	Temporarily Restricted	Permanently Restricted	June 2012	June 2011
Operating activities					
Revenues and support					
Tuition and fees	\$1,084,831			\$1,084,831	\$1,011,632
Less financial aid grants	(298,949)			(298,949)	(282,102)
Net tuition and fees	785,882			785,882	729,530
Government grants and contracts:					
Direct	658,384			658,384	675,320
Indirect	199,203			199,203	207,661
Private gifts, grants and contracts:					
Direct	233,460	198,197		431,657	978,456
Indirect	16,916			16,916	15,293
Revenue from other educational and research activities	196,177	6,058		202,235	182,184
Patient care revenue	866,736			866,736	807,092
Investment income and gains utilized	309,187	111,998		421,185	395,872
Sales and services of auxiliary enterprises	121,687			121,687	115,878
Other sources	8,388			8,388	7,810
Net assets released from restrictions	199,499	(199,499)			
Total operating revenues and support	3,595,519	116,754		3,712,273	4,115,096
Expenses					
Instruction and educational administration	1,242,689			1,242,689	1,179,399
Research	578,151			578,151	559,326
Patient care expense	740,486			740,486	718,552
Library	61,700			61,700	61,284
Operation and maintenance of plant	224,614			224,614	223,670
Institutional support	210,091			210,091	226,643
Auxiliary enterprises	92,604			92,604	87,986
Depreciation expense	191,470			191,470	175,248
Interest expense	57,117			57,117	59,086
Other	26,139			26,139	23,621
Total expenses	3,425,061			3,425,061	3,314,815
Change in net assets from operating activities	170,458	116,754		287,212	800,281
Nonoperating activities					
Endowment gifts			114,793	114,793	97,965
Current year realized and unrealized capital gains (losses)	(56,639)	26,915	(755)	(30,479)	1,445,868
Endowment appreciation utilized	(118,554)	(183,915)		(302,469)	(288,428)
Change in net assets held by CPMC Fund, Inc.	(2,921)	(6,577)	(1,448)	(10,946)	16,284
Change in funds held by others in perpetuity			(8,088)	(8,088)	25,211
Present value adjustment to split-interest agreements	(151)	354	2,704	2,907	(769)
Changes in pension and post retirement obligations	(56,415)			(56,415)	66,599
Other	(6,770)			(6,770)	
Reclassification	(31,490)	5,332	26,158		
Change in net assets from nonoperating activities	(272,940)	(157,891)	133,364	(297,467)	1,362,730
Change in net assets	(102,482)	(41,137)	133,364	(10,255)	2,163,011
Net assets at beginning of year	4,763,715	3,726,513	2,172,078	10,662,306	8,499,295
Net assets at end of period	\$4,661,233	\$3,685,376	\$2,305,442	\$10,652,051	\$10,662,306

See accompanying notes to financial statements.

The Trustees of Columbia University in the City of New York
Consolidated Statements of Cash Flows
For the Years Ended June 30, 2012 and 2011
(in thousands of dollars)

	June 2012	June 2011
Cash flows from operating activities		
(Includes adjustments to reconcile change in net assets to net cash provided by operating activities):		
Change in net assets	(\$10,255)	\$2,163,011
Depreciation expense	191,470	175,248
Interest on capital lease obligations and CARO	10,925	11,008
Institutional real estate depreciation	19,871	19,406
Realized and unrealized (gains) losses	30,479	(1,445,868)
Partnership distributions	315,946	307,087
Contributions restricted for permanent investment, plant, and split-interest agreements	(194,434)	(99,707)
Contributions other than cash	(15,034)	(45,022)
Present value adjustments to split-interest agreements	(1,009)	229
Accreted interest on bonds	906	976
Change in fair value of net assets held by CPMC Fund, Inc.	10,946	(16,284)
Change in fair value of interest in perpetual trusts held by others	8,088	(25,211)
Change in operating assets and liabilities:		
Accounts receivable, net	(17,421)	24,061
Investment income receivable, net	905	(13)
Pledges receivable, net	(37,491)	(619,047)
Other assets	(34,207)	(99,430)
Accounts payable and accrued expenses	(29,460)	1,098
Prepaid tuition and other deferred credits	22,071	7,133
Deferred revenue and unamortized bond premium	26,159	8,015
Refundable advances	(5,088)	(6,633)
Accrued employee benefit liabilities	47,675	(69,668)
Other long-term liabilities	17,924	110,290
Net cash provided by operating activities	358,966	400,679
Cash flows from investing activities		
Proceeds from sales of investments	3,231,487	4,360,484
Purchases of investments	(3,201,653)	(4,561,067)
Collections from student notes	10,188	11,714
Student notes issued	(15,542)	(11,158)
Investment in cash and securities held in trust by others	31,323	(116,590)
Purchases of institutional real estate	(33,999)	(34,051)
Purchases of plant and equipment	(381,331)	(295,286)
Net cash used by investing activities	(359,527)	(645,954)
Cash flows from financing activities		
Proceeds from contributions for:		
Investment in endowment	107,597	82,123
Investment in plant	32,035	15,865
Investment in split-interest agreements	54,802	1,719
Investment income on split-interest agreements	3,442	6,126
Payments on split-interest agreements	(5,999)	(5,871)
Payments on capital lease obligations	(7,673)	(8,702)
Repayment of bonds and notes payable	(392,101)	(194,949)
Proceeds from bond issuance	387,935	400,000
Net change in federal student loan funds	714	584
Net cash provided by financing activities	180,752	296,895
Net change in cash and cash equivalents	180,191	51,620
Cash and cash equivalents at beginning of year	254,444	202,824
Cash and cash equivalents at end of year	\$434,635	\$254,444
Supplemental disclosure of cash flow information:		
Equipment and space acquired through capital leases	\$2,068	\$1,992
Cash paid during the year for interest	\$81,646	\$69,876

See accompanying notes to financial statements.

The Trustees of Columbia University in the City of New York
Notes to the Consolidated Financial Statements
For the Years Ended June 30, 2012 and 2011
(in thousands of dollars)

1. Organization

The Trustees of Columbia University in the City of New York (the “University”) is a private, nonsectarian, nonprofit institution of higher education whose activities are concentrated at two locations in New York City and extend around the globe. The University provides instruction through sixteen undergraduate, graduate, and professional schools. It operates a variety of research institutes and a library system to support its teaching, learning, and research activities. The University performs research, training, and other services under grants and contracts with agencies of the federal government and other sponsoring organizations. The University enrolls approximately 28,221 full-time and part-time students and employs approximately 14,506 full-time employees, including 5,459 full-time faculty members and research staff. Of these, 1,400 hold positions in the arts and sciences; 3,230 hold health science positions; and the remainder hold positions in the other professional schools.

The University is a nonprofit corporation under Section 501(c)(3) of the Internal Revenue Code.

2. Columbia University Medical Center

Columbia University Medical Center (“CUMC”), a division of the University, located in the Washington Heights section of northern Manhattan, is one of the largest academic medical centers in the United States. It is composed of four schools: College of Physicians and Surgeons, Mailman School of Public Health, College of Dental Medicine, and School of Nursing.

CUMC has three primary areas of focus: scientific research, education, and patient care. CUMC offers a wide variety of degrees, certifications, and continuing education in health sciences. Sponsored research, faculty patient care services, tuition, endowment income, patent royalties, and gifts provide the majority of CUMC’s revenues. Approximately 4,102 students are enrolled at CUMC, with a full-time faculty of 2,123, of whom approximately 317 are tenured. Additionally, CUMC’s staff includes 3,571 part-time faculty instructors, 1,152 full-time researcher staff members, 216 part-time researchers, 256 post doctoral research trainees and 1,055 post doctoral clinical trainees. Approximately 65 percent of the full-time faculty and 25 percent of the part-time faculty hold clinical appointments and have admitting privileges at New York-Presbyterian Hospital (“NYPH”).

Patient care activities include patient visits performed by Columbia full-time faculty through its medical faculty practice plan, as well as clinical, educational and administration services provided to hospitals and other health care institutions through contractual agreements for services.

CUMC maintains several clinical and education affiliation agreements with other organizations. The most significant affiliation agreements are with NYPH, St. Luke’s–Roosevelt Hospital Center, and Bassett Medical Center, and Harlem Hospital. Certain faculty physicians also provide patient care and supervision of residents at NYPH network hospitals and other affiliates. In addition, through interinstitutional “medical service agreements,” CUMC faculty provide patient care in specialty and subspecialty areas at hospitals in the tristate area and occasionally in other parts of the country and the world.

The Trustees of Columbia University in the City of New York
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(in thousands of dollars)

In fiscal 2012, the clinical faculty handled approximately 1.8 million outpatient and emergency room visits and participated in instruction and supervision of 660 University medical students and 950 residents and fellows at NYPH. CUMC physicians generated 64,000 NYPH hospital admissions during the year.

Payments for patient-care services provided by the full-time faculty in both institutional and private office settings are derived mainly from third-party payers, including managed care companies (57 percent), Medicare (16 percent), Medicaid (11 percent), commercial insurance (5 percent), and other (1 percent). Direct patient payments comprise 10 percent of total payments.

3. Summary of Significant Accounting Policies

The significant accounting policies of the University are as follows:

Basis of Consolidation

The accompanying consolidated financial statements of the University include the accounts of all academic and administrative departments of the University. Additionally, the consolidated financial statements include the net assets and activities of the following entities, for which the University maintains managerial and financial control:

- Columbia Investment Management Company, LLC—Columbia Investment Management Company, LLC is a New York limited liability company formed by the University to manage the University's investment assets under the supervision of a Board appointed by the Trustees of the University and subject to the oversight of the Committee on Finance of the Trustees.
- Columbia University Press—Columbia University Press is a not-for-profit corporation formed to promote the study of economic, historical, literary, philosophical, scientific, and other subjects and to encourage and promote the publication of literary works embodying original research in such subjects.
- Reid Hall, Inc.—Reid Hall, located in Paris, France, was donated to the University in 1964. Reid Hall, Inc., a corporation organized under New York membership corporation law as an educational and charitable organization, operates Reid Hall to promote, facilitate, and aid the educational, cultural, and social interests of students studying in France.
- The University holds a number of other New York limited liability companies, Delaware not-for-profit corporations, and international organizations, which are established to facilitate various program and research objectives.

The University provides investment custodial services and manages all of the assets of Columbia Presbyterian Medical Center Fund, Inc. ("CPMC Fund, Inc."), a not-for-profit corporation that was created to hold and receive gifts for the University and NYPH. The consolidated financial statements reflect the University's interest in the net assets of CPMC Fund, Inc. as well as the assets and amounts due NYPH.

The University is also the sole corporate member of two not-for-profit practice entities, Columbia Ophthalmology Consultants, Inc., and Columbia University Healthcare, Inc., and a professional corporation, Columbia Doctors of New Jersey, and as such, consolidates these entities into the University's consolidated financial statements.

All significant intercompany accounts have been eliminated in consolidation.

The Trustees of Columbia University in the City of New York
Notes to the Consolidated Financial Statements
For the Years Ended June 30, 2012 and 2011
(in thousands of dollars)

Accrual Basis

The consolidated financial statements of the University have, in all material respects, been prepared on an accrual basis.

Basis of Presentation

The University maintains its accounts in accordance with the principles of fund accounting. Under this method of accounting, resources for various purposes are classified into funds that are consistent with activities or objectives specified by donors. Separate accounts are maintained for each fund.

For reporting purposes, the University prepares its consolidated financial statements in accordance with accounting principles generally accepted in the United States of America (“GAAP”) that requires resources be classified for reporting purposes based on the existence or absence of donor-imposed restrictions. This is accomplished by classification of fund balances into three categories of net assets – unrestricted, temporarily restricted, and permanently restricted. Periodically, donor redesignations may result in reclassifications of net assets. Descriptions of the three net asset categories and the type of transactions affecting each category follow.

Unrestricted—Net assets that are not subject to donor-imposed restrictions. This category includes unrestricted gifts, certain endowment income balances, certain board-designated endowment principal balances, including capital appreciation on such balances, certain plant funds, University-designated loan funds, and other unrestricted designated and undesignated current funds.

Temporarily restricted—Net assets that are subject to legal or donor-imposed stipulations that will be satisfied either by actions of the University, the passage of time, or both. These net assets include gifts donated for a particular purpose, certain other balances with donor-imposed restrictions, amounts subject to time restrictions such as funds pledged for future payment, or amounts subject to legal restrictions, such as the portion of a donor-restricted permanent endowment fund that is not classified as permanently restricted net assets, as required by the New York Prudent Management of Institutional Funds Act (“NYPMIFA”), adopted on September 17, 2010. Once the time and purpose restriction are satisfied, or have been deemed to have been satisfied, those temporarily restricted net assets are released from restrictions.

Permanently restricted—Net assets that are subject to donor-imposed stipulations that will be invested to provide a perpetual source of income to the University. Donors of these assets require the University to maintain an endowment fund in perpetuity. The University classifies as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) realized and unrealized gains and losses to the permanent endowment when stipulated by the donor gift instrument.

Revenues and Expenses

Revenues are reported as increases in unrestricted net assets unless the use of those assets is limited by donor-imposed restrictions. Expenses are reported as decreases in unrestricted net assets. Gains and losses on investments are reported as increases or decreases in unrestricted net assets, unless their use is restricted by explicit donor stipulation or by law.

The Trustees of Columbia University in the City of New York
Notes to the Consolidated Financial Statements
For the Years Ended June 30, 2012 and 2011
(in thousands of dollars)

Tuition and Fees and Financial Aid

Tuition and fees are derived from degree programs as well as executive and continuing education programs. Tuition and fee revenue is recognized as operating income in the period in which it is earned. Tuition and fee receipts received in advance are recorded as deferred revenue. Net tuition and fees are computed after deducting certain scholarships and fellowships awarded to students. In order to assist students in meeting tuition and other costs of attendance, the University administers a variety of federal, state, institutional, and private programs. Financial aid packages to students may include direct grants, loans, and employment.

Contributions

Contributions for University operations and plant, including unconditional promises to give (“pledges”), are recognized as operating revenue in the period earned. Contributions to endowment are recognized as nonoperating revenue in the period earned. Pledges that are expected to be collected within one year are recorded net of an allowance for uncollectable pledges. Amounts expected to be collected in future years are recorded at the present value of estimated future cash flows. The discounts on those pledges are computed using an interest rate for the year in which the promise was received and considers market and credit risk as applicable. Subsequent years’ accretion of the discount is included in contribution revenue. Conditional promises to give are not recognized as revenue until such time as the conditions are substantially met.

Patient Care Revenue and Expense

Patient care activities relate to three distinct areas: medical faculty practice plans, affiliation agreements, and medical service agreements.

Patient Care expenses include direct expenses associated with providing patient care services, as well as administrative functions within the University’s faculty practice organization. Patient Care expense does not include rent or utilities in clinical space, as those costs are aggregated with all University space costs within “Operations and Maintenance of plant”.

The University provides medical care to patients via its faculty practice through CUMC, primarily under agreements with third-party payors. Agreements with third-party payors, including health maintenance organizations, provide payment for medical services at amounts different from standard rates established by the University. Medical faculty practice plan revenue is reported net of two items: (a) contractual allowances from third-party payors for services rendered and (b) estimates of uncollectible amounts. Included within the faculty practice revenues and expenses are financial arrangements associated with several physician professional corporations.

The University maintains several clinical and education affiliation agreements with other organizations. The University provides medical, professional, and supervisory staff as well as other technical assistance. Revenues and expenses from these agreements are accounted for in patient care categories of the operating activity in the Consolidated Statement of Activities.

Grant and Contract Income

The University receives grant and contract income from governmental and private sources. The University recognizes revenue associated with the direct costs of sponsored programs as the related costs are incurred. Recovery of facilities and administrative costs of federally sponsored programs are at reimbursement rates negotiated with the University’s cognizant agency, the Department of Health and Human Services. The University and the federal government are currently operating under an agreement that provides for facilities and administrative cost rates under federal grants and contracts through June 30, 2014.

The Trustees of Columbia University in the City of New York
Notes to the Consolidated Financial Statements
For the Years Ended June 30, 2012 and 2011
(in thousands of dollars)

Research and Development

The University engages in numerous research and development projects, partially or fully sponsored by governmental and private funds. These costs are charged to operating expense as incurred. The University periodically funds and develops patents for certain technologies, then licenses the usage of these patents to companies over several years. The revenue, net of payments due to third parties, is recorded in "Revenue from other educational and research activities" in the Consolidated Statement of Activities. Costs incurred with developing and maintaining these patents are expensed as incurred.

Institutional Support

Institutional Support expense includes central administrative functions and expenses that support the management of the University. This category also includes any net operating surplus or deficit of the University's benefit pool, as recoveries from units across the University may be less than or greater than benefits paid in a given year.

Cash and Cash Equivalents

Cash and cash equivalents are recorded at fair value and include several depository accounts, checking accounts, institutional money market funds, and similar temporary investments with maturities of three months or less at the date of purchase.

Investments

The University's investments, consisting primarily of publicly traded fixed income and equity securities, alternative investments, and cash held for reinvestment, are stated at fair value as of June 30, 2012 and 2011. Alternative investments include investments in absolute return strategy funds, private equity funds, and real asset funds (collectively, the 'funds'). The management of the respective fund provides the fair value of the investment. The University reflects its share of the partnerships or corporations in the consolidated financial statements.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The University believes that the net asset value of its alternative investments is a reasonable estimate of fair value as of June 30, 2012 and 2011. Because alternative investments are not marketable, the estimated value is subject to uncertainty and, therefore, may differ from the value that would have been used had a ready market for the investment existed. Such differences could be material. The amount of gain or loss associated with these investments is reflected in the accompanying consolidated financial statements based on the University's proportionate share in the net assets of these investments.

The University records both the assets and corresponding liabilities generated by securities lending transactions as "Collateral for securities loaned" and "Securities loan agreement payable". The loaned securities are returnable on demand and are collateralized by cash and cash equivalents.

The University's presentation in the Consolidated Statement of Cash Flows for limited liability partnerships, limited liability corporations, and other similarly structured investments is consistent with the accounting for equity method investments as it represents the underlying nature of these investments in which the University has a capital account.

The University records purchases and sales of securities on a trade-date basis. Realized gains and losses are determined on the basis of average cost of securities sold and are reflected in the Consolidated Statement of Activities. Dividend income is recorded on the ex-dividend date, and interest income is recorded on an accrual basis.

The Trustees of Columbia University in the City of New York
Notes to the Consolidated Financial Statements
For the Years Ended June 30, 2012 and 2011
(in thousands of dollars)

Split-Interest Agreements

The University's split-interest agreements with donors consist primarily of charitable gift annuities, pooled income funds, and irrevocable charitable remainder trusts for which the University serves as custodian and trustee. Assets are invested and payments are made to donors and/or other beneficiaries in accordance with the respective agreements. In the case of irrevocable split-interest agreements whose assets are held in trusts not administered by the University (third-party charitable trusts), the University will recognize its beneficial interest when it is provided sufficient reliable information and documentation that establishes the trust's existence, assets and the University's remainder interest.

Contribution revenues for split-interest agreements are recognized at the dates the agreements are established net of the present value of the estimated future payments to be made to the beneficiaries, if applicable, under these agreements. The discounts on those agreements are computed using an interest rate for the year in which the promise was received and considers market and credit risk as applicable. Assets related to these agreements are recorded in "Investments, at fair value," and the liability for the present value of the estimated future payments to be made to the beneficiaries is recorded in "Actuarial liability for split-interest agreements." Adjustments to the fair value of these agreements are recorded in the Consolidated Statement of Activities under "Present value adjustment to split-interest agreements."

Institutional Real Estate

Institutional real estate consists primarily of properties proximate to the University's Morningside and Washington Heights campuses, the primary purpose of which is to house faculty, staff, and graduate students. The income earned on this investment is used primarily to finance operating expenditures. The properties are valued at cost and depreciated over a useful life of fifty years.

Land, Buildings, and Equipment

Land, buildings, and equipment are stated at cost net of accumulated depreciation. Depreciation is calculated on a straight-line basis over useful lives ranging from ten to forty years for buildings and improvements and three to twenty years for equipment, consistent with the method used for government cost reimbursement purposes. Capitalized software costs are amortized over seven years. Upon disposal of assets, the costs and accumulated depreciation are removed from the accounts, and the resulting gain or loss is included in operations.

Other Assets

Prepaid expenses, bond issuance costs, the University's investment in the Medical Center Insurance Company ("MCIC"), and insurance recovery receivable are categorized within other assets. Bond issuance costs are amortized over the expected holding period of the specific debt issue.

Collections

Collections at the University include works of art, literary works, historical treasures, and artifacts that are maintained in the University's galleries, libraries, and buildings. These collections are protected and preserved for public exhibition, education, research, and the furtherance of public service and, therefore, are not recognized as assets on the Consolidated Balance Sheet. Costs associated with purchasing additions to and maintaining these collections are recorded as operating expenses in the period in which the items are acquired.

The Trustees of Columbia University in the City of New York
Notes to the Consolidated Financial Statements
For the Years Ended June 30, 2012 and 2011
(in thousands of dollars)

Interest in Perpetual Trusts Held by Others

The University is the beneficiary of certain perpetual trusts administered by others. These trusts are recognized as permanently restricted contributions upon receipt of documentation evidencing that the trust has been established and a statement of its assets, and adjusted to fair value each year. The fair value of the interest in the perpetual trust is based on the University's share of the income generated by the trust, ascribed to the fair value of assets reported by the trust. Gains and losses resulting from the change in fair value of trust assets are reported as nonoperating activity in the Consolidated Statement of Activities.

Capital Lease Obligations

Capital lease obligations are recognized for equipment and space where substantially all of the risks of ownership have been transferred to the University. The obligations extend up to five years for equipment and up to fifty years for space.

Conditional Asset Retirement Obligations

Conditional asset retirement obligations are recognized for remediation or disposal of asbestos, underground storage tanks, soil, and radioactive sources and equipment as required by law. The fair value of the liability for a conditional asset retirement obligation is recognized in the period in which it occurred, provided that it can be reasonably estimated.

Other Long Term Liabilities

Other long term liabilities are obligations that extend beyond one year, or operating cycle, whichever is longer. The obligations for the medical malpractice liabilities, self-insurance reserves, the fixed payor swap agreement and other commitments are categorized in other long term liabilities.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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 from those estimates. The most significant estimates include valuation of investments without readily determinable public markets, estimated useful life of land, buildings and equipment, actuarially determined costs associated with split-interest agreements, pension, postemployment and postretirement benefits, contractual allowances for patient receivables, allowances for doubtful accounts, insurance obligations and conditional asset retirement obligations.

2011 Presentation

While comparative information is not required under GAAP, the University believes that this information is useful and has included summarized financial information from the consolidated financial statements for 2011. This summarized information is not intended to be a full presentation in conformity with GAAP, which would require certain additional information. Accordingly, such information should be read in conjunction with the University's audited consolidated financial statements for the year ended June 30, 2011. In addition, certain amounts in the summarized consolidated financial statements for fiscal year 2011 have been reclassified to conform to the fiscal year 2012 presentation.

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New Authoritative Pronouncements

Effective for the fiscal year ended June 30, 2012, the University adopted additional disclosures related to the fair value measurements of investments as it relates to gross reporting of changes in Level 3 investments. This standard requires that the University present separately information about purchases, sales, issuances, and settlements on a gross basis rather than as a net number-effective in fiscal year 2012.

Effective for the fiscal year ended June 30, 2012, the University adopted new authoritative guidance requiring that anticipated insurance recoveries and estimated liabilities for medical malpractice claims be presented gross on the balance sheet. The University included such presentation on the consolidated balance sheet at June 2012, and June 2011 for comparability. At June 30, 2012 and 2011, the University recorded a receivable for anticipated insurance recoveries of \$110.4 million and \$96.7 million, respectively in Other assets and offsetting liabilities in Other long term liabilities of \$110.4 million \$96.7 million, respectively. The University's reinsurance receivables are due from fully funded captive companies and as such there is no provision for uncollectibility.

4. Operating Measurement

The University divides its Consolidated Statement of Activities into operating and nonoperating activities. The operating activities of the University include all income and expenses related to carrying out its educational and research mission. Operating revenues include investment income and endowment appreciation utilized to fund current operations, the largest portion of which is the distribution of funds budgeted in accordance with the endowment spending rule.

Nonoperating activities include current year realized and unrealized gains and losses on investments, including realized gain distributions from fund investments, less amounts withdrawn from endowment appreciation to fund operations. Nonoperating activities also include new gifts to permanently restricted endowments, changes in net assets held by CPMC Fund, Inc., changes in perpetual trusts held by others, present value adjustments to split-interest agreements, changes in pension and postretirement obligations, other items and reclassifications.

5. Patient Care Revenue

The University's affiliation agreements with area hospitals generated \$250,382 and \$242,771 of revenue for the years ended June 30, 2012 and 2011, respectively. As of June 30, 2012 and 2011, accounts receivable includes \$73,972 and \$76,087, respectively, relating to these agreements.

Medical faculty practice revenue is reported at the estimated net realizable amounts from patients, third-party payors, and others for services rendered. Medical faculty practice revenues are \$579,423 and \$531,623 for the years ended June 30, 2012 and 2011, respectively. As of June 30, 2012 and 2011, patient accounts receivable amounts to \$71,770 and \$67,999, respectively, while medical service agreements generated \$22,855 and \$18,779 of revenue for the years ended June 30, 2012 and 2011, respectively.

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6. Long-Term Investments and Fair Value

The University values its investments in accordance with GAAP and consistent with the FASB official pronouncement on *Fair Value Measurements* for financial assets and liabilities. The pronouncement defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. GAAP establishes a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Observable inputs reflect market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the entities own assumptions about how market participants would value an asset or liability based on the best information available. Valuation techniques used to measure fair value utilize relevant observable inputs and minimize the use of unobservable inputs.

The University follows a fair value hierarchy based on three levels of inputs, described below:

Fair value for Level 1 is based upon quoted prices in active markets that the University has the ability to access for identical assets and liabilities. Market price data is generally obtained from exchange or dealer markets. The University does not adjust the quoted price for such assets and liabilities.

Fair value for Level 2 is based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, or inputs other than quoted prices that are observable.

Fair value for Level 3 is based on valuation techniques that use significant inputs that are unobservable as they are not actively traded.

Investments categorized as Level 2 and Level 3 include the University's ownership in funds that invest in alternative assets (i.e. absolute return strategy funds, private equity funds, and real asset funds) and funds that invest in equity and fixed income strategies. The value of the University's investments in these funds represents the University's ownership interest in the net asset value (NAV) of the respective fund. The University is permitted under GAAP to estimate the fair value of an investment at the measurement date using the NAV reported by the fund without further adjustment, provided the NAV has been calculated in accordance with or in a manner consistent with GAAP, and provided further that the University does not expect to sell the investment at a value other than NAV. The University performs due diligence procedures of its investments including an assessment of applicable accounting policies, a review of the valuation procedures employed, and consideration of redemption features and price transparency.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. In determining the categorization of the University's investments within the fair value hierarchy, the University has considered market information, including observable net asset values, and the length of time until the investment will become redeemable. Investments which can be redeemed at NAV by the University up to 180 days beyond the measurement date are classified as Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3. The categorization of a financial instrument within the hierarchy is based upon the pricing transparency of that instrument and does not necessarily correspond to the University's perceived risk of that instrument.

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The following tables presents assets and liabilities measured at fair value at June 30, 2012 and at June 30, 2011.

Assets	2012			
	Level 1	Level 2	Level 3	Total
Investments:				
Cash and cash equivalents	\$ 120,176	\$ 273,113		\$ 393,289
Global equities	939,014	182,026	\$ 336,822	1,457,862
Fixed income	22,822	407,714	125	430,661
Absolute return strategies		1,175,930	1,077,306	2,253,236
Private equity	1,387		1,766,982	1,768,369
Real assets	10,854		1,277,711	1,288,565
Investments, at fair value	<u>1,094,253</u>	<u>2,038,783</u>	<u>4,458,946</u>	<u>7,591,982</u>
Interest in perpetual trusts held by others			153,168	153,168
Total assets at fair value	<u>\$ 1,094,253</u>	<u>\$ 2,038,783</u>	<u>\$ 4,612,114</u>	<u>\$ 7,745,150</u>
Liabilities				
Swaps payable		86,337		86,337
Total liabilities at fair value		<u>\$ 86,337</u>		<u>\$ 86,337</u>

Assets	2011			
	Level 1	Level 2	Level 3	Total
Investments:				
Cash and cash equivalents	\$ 66,297	\$ 280,157		\$ 346,454
Global equities	1,064,826	259,743	\$ 233,854	1,558,423
Fixed income	25,075	541,120	435	566,630
Absolute return strategies		1,258,294	1,026,265	2,284,559
Private equity	43,746		1,877,965	1,921,711
Real assets	5,505		1,217,912	1,223,417
Investments, at fair value	<u>1,205,449</u>	<u>2,339,314</u>	<u>4,356,431</u>	<u>7,901,194</u>
Interest in perpetual trusts held by others			161,256	161,256
Total assets at fair value	<u>\$ 1,205,449</u>	<u>\$ 2,339,314</u>	<u>\$ 4,517,687</u>	<u>\$ 8,062,450</u>
Liabilities				
Swaps payable		39,167		39,167
Total liabilities at fair value		<u>\$ 39,167</u>		<u>\$ 39,167</u>

Cash and cash equivalents

Cash and cash equivalents includes government securities and money market instruments and are valued at amortized cost which approximates fair value.

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Global Equities and Fixed Income

Global equities and fixed income consists of investments in publicly traded U.S. and foreign common and preferred equities, funds that invest in equity and fixed income based strategies, and cash held in separate accounts committed to these strategies. The fair value of these investments is based on quoted market prices. Investments that are listed on an exchange are valued, in general, at the last reported sale price (or, if there is no sales price, at the last reported bid price, or, in the absence of reported bid prices, at the mean between the last reported bid and asked prices thereof). Fund investments in equity and fixed income based strategies are valued in accordance with valuations provided by the investment managers of the underlying funds. If the University has the ability to redeem from a fund up to 180 days beyond the measurement date at NAV, the investment is categorized as Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3.

Alternative Investments

Alternative investments include interests in absolute return strategy funds, private equity funds, and real asset funds. These private equity funds include large market, leveraged buyout and venture capital based strategies. The University values these investments in accordance with valuations provided by the investment managers of the underlying funds. These funds may make investments in securities that are publicly traded, which are generally valued based on observable market prices, unless a restriction exists. In addition, interests in a private equity fund may be publicly traded and valued based on observable market prices. As a general rule, managers of funds invested in alternative investments value those investments based upon the best information available for a given circumstance and may incorporate assumptions that are the investment manager's best estimates after consideration of a variety of internal and external factors. If no public market exists for the investments, the fair value is determined by the investment manager taking into consideration, among other things, the cost of the investment, prices of recent significant placements of similar investments of the same issuer, and subsequent developments concerning the companies to which the investments relate. The University's management may consider other factors in assessing the fair value of these investments. If the University has the ability to redeem from an absolute return strategy fund up to 180 days beyond the measurement date at NAV, the investment is categorized as Level 2. If the redemption period extends beyond 180 days, the investment is categorized as Level 3. All private equity funds and real asset funds, with the exception of directly-held public securities, are categorized as Level 3 given that the University does not have discretion for timing of withdrawal.

The fair value of the alternative investment funds in the table above represents the amount the University would have expected to receive at June 30, 2012 and 2011, if it had liquidated its investments in the funds on these dates. The University has performed due diligence around these investments and believes that the NAV of its alternative investments is a reasonable estimate of fair value as of June 30, 2012 and 2011. Alternative investments may allocate a high percentage of their assets in specific sectors of the market in order to achieve a potentially greater investment return. As a result, the investments may be susceptible to economic, political, and regulatory developments in a particular sector of the market, positive or negative, and may experience increased volatility in net asset values.

Absolute return strategies also include separate accounts with direct investments in fixed income (which include mortgage back securities and convertible bonds) and cash committed to these strategies. The fair value of these investments is based on quoted market prices and is categorized as Level 2.

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Perpetual Trusts

The fair value of interest in perpetual trust held by third parties is based on the University's share of the income generated by the trust, ascribed to the fair value of the assets reported by the trust.

Derivatives

Investment fund managers may invest in derivatives, and the value of these positions is reflected in the NAV of the respective funds. Separately, the University employs derivatives primarily to hedge its risks and to rebalance its market exposures. Derivatives used may include futures, swaps, options, and forward contracts and are reflected at fair value following the definition of Level 1 and Level 2 assets as described above. The equity derivatives held directly by the University within the endowment portfolio had a fair value of \$2.4 million and \$1.6 million at June 30, 2012 and 2011, respectively. As of June 30, 2012 and 2011, the notional amounts of long equity derivative contracts were \$430.0 million and \$583.9 million, respectively, and the notional amounts of short equity derivative contracts were \$112.6 million and \$434.5million, respectively. The fair value of the equity swaps was \$1.5 million and \$1.0 million at June 30, 2012 and 2011, respectively. In addition, the University also held currency derivative contracts with an aggregate notional amount of \$161 million and a fair value of (\$1.0) million as of June 30, 2012. Outside of the endowment portfolio, the University entered into a fixed payor interest rate swap as described in Footnote 16. The estimated fair value of the agreement was (\$86.3) million and (\$39.2) million at June 30, 2012 and 2011, respectively, and is included in "Swaps payable" in the tables above. The derivatives are reflected as a receivable or payable, as appropriate, on the Consolidated Balance Sheet. Unrealized gain or loss from derivative investments is a component of the current year realized and unrealized capital gains (losses) in the Consolidated Statement of Activities.

The methods described above may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the University believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

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The following table is a rollforward of the Consolidated Balance Sheet amounts for financial instruments classified by the University within Level 3 of the fair value hierarchy defined above at June 30, 2012 and 2011.

	June 30, 2011	Transfers In/Out	Purchases	Sales	Realized gain/loss	Unrealized gain/loss	June 30, 2012
Global equities	\$ 233,853		\$ 104,151	\$ (44,122)	\$ (8,730)	\$ 51,670	\$ 336,822
Fixed income	435			(311)		1	125
Absolute return strategies	1,026,265	\$ 58,811	167,800	(185,905)	57,432	(47,097)	1,077,306
Private equity	1,877,965	(576)	237,909	(342,747)	177,788	(183,357)	1,766,982
Real assets	1,217,912		251,779	(203,274)	49,913	(38,619)	1,277,711
Total level 3 investments	\$ 4,356,431	\$ 58,235	\$ 761,639	\$ (776,359)	\$ 276,403	\$ (217,402)	\$ 4,458,946

	June 30, 2011	Disburse- ments	Realized/ Unrealized gain/loss, net	June 30, 2012
Interest in perpetual trusts held by others	\$ 161,256	\$ (7,300)	\$ (788)	\$ 153,168

	June 30, 2010	Transfers In/Out	Purchases & Sales, net	Realized gain/loss	Unrealized gain/loss	June 30, 2011
Global equities	\$ 207,310	\$ 416	\$ (1,795)	\$ (3,365)	\$ 31,287	\$ 233,853
Fixed income	523		(88)		1	436
Absolute return strategies	978,375	(57,599)	(58,090)	18,454	145,125	1,026,265
Private equity	1,555,071		(159,131)	201,545	280,480	1,877,965
Real assets	1,057,797		(15,413)	93,371	82,157	1,217,912
Total level 3 investments	\$ 3,799,076	\$ (57,183)	\$ (234,517)	\$ 310,005	\$ 539,050	\$ 4,356,431

	June 30, 2010	Disburse- ments	Realized/ Unrealized gain/loss, net	June 30, 2011
Interest in perpetual trusts held by others	\$ 136,045	\$ (5,137)	\$ 30,348	\$ 161,256

All net realized and unrealized gains/(losses) in the tables above are reflected in the Consolidated Statement of Activities. Net unrealized gains/(losses) relate to those financial instruments held by the University at June 30, 2012 and 2011. The University's policy is to recognize transfers in and transfers out as of the end of the period. The transfer from Level 3 to Level 2 are reported at gross, due to the criteria described above. During the year ended June 30, 2012, there were no significant transfers between Level 1 and Level 2.

Certain investments in global equities and alternative investments may be subject to restrictions that i) limit the University's ability to withdraw capital after such investment and ii) limit the amount that may be withdrawn as of a given redemption date. The redemption terms of the University's investments in absolute return strategy funds vary from daily to triennial, with a portion of these investments designated as "illiquid" in "sidepockets" and that portion may not be available for

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withdrawal until liquidated by the investing fund and redemption notice periods range from 0 days to 180 days. Generally, as noted above, the University has no discretion as to withdrawal with respect to its investment in private equity and real asset funds; distributions are made when sales of assets are made with the funds. The remaining life of these private equity and real asset funds is up to 12 years.

The University is obligated under certain investment fund agreements to advance additional funding up to specified levels over a period several years. These commitments have fixed expiration dates and other termination clauses. At June 30, 2012, the University had unfunded commitments of approximately \$1.2 billion as displayed in the table below.

Asset class (\$ in millions)	Remaining life	Unfunded commitments	Timing to draw commitments
Global equities	N/A	\$ 14	1 to 8 years
Absolute return strategies	N/A	124	1 to 5 years
Private equity	1 to 12 years	549	1 to 12 years
Real assets	1 to 12 years	498	1 to 12 years
Total		<u>\$ 1,185</u>	

Management's estimate of the lives of the funds could vary significantly depending on the investment decisions of the external fund managers, changes in the University's portfolio, and other circumstances. Furthermore, the University's obligation to fund the commitments noted above may be waived by the fund manager for a variety of reasons including market conditions and/or changes in investment strategy.

The University does have various sources of internal liquidity at its disposal, including cash, cash equivalents, marketable debt and equity securities and lines of credit.

Securities Lending

At June 30, 2012 and 2011, investment securities having a fair value of \$29.5 million and \$9.4 million, respectively, were loaned to various brokerage firms through a securities lending agent. The loaned securities are returnable on demand and are collateralized by cash and cash equivalents. The University recorded the value of the collateral received of \$30.5 million and \$9.7 million and an offsetting liability for the return of the collateral on the Consolidated Balance Sheet at June 30, 2012 and 2011, respectively.

Investment Return

Investment income and gains utilized on the Consolidated Statement of Activities contains interest and dividend income net of fees, institutional real estate revenue net of operating expenses and depreciation, other investment income, and endowment appreciation utilized to fund the spending rule. Endowment appreciation utilized was \$302.5 million and \$288.4 million during 2012 and 2011, respectively. The nonoperating section of the Consolidated Statement of Activities contains realized and unrealized gains reduced by endowment appreciation utilized to fund the spending rule.

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7. Endowment Funds

The University's endowment consists of approximately almost 4,600 separate funds established over many years for a wide variety of purposes. The endowment includes permanent endowments, term endowments, and funds designated by the Board of Trustees to function as endowments. As required by GAAP, net assets associated with endowment funds, including funds designated by the Board of Trustees to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

The University employs a market value unit method of accounting for pooled general investments. Each participating fund enters and withdraws from the pooled investment account based on monthly unit market values. Changes in the market value of investments are distributed proportionately to each fund that participates in the investment pool. Net investment income distributed during the year is allocated on a per unit basis to each participating fund.

Relevant Law

Under NYPMIFA, the University may appropriate so much of an endowment fund as it deems prudent, considering the specific factors set forth in NYPMIFA and subject to the intent of the donor as expressed in the gift instrument. Unless stated otherwise in the gift instrument, the earnings in an endowment fund are donor-restricted assets until appropriated.

The University continues to classify as permanently restricted net assets (a) the original value of gifts donated to the permanent endowment, (b) the original value of subsequent gifts to the permanent endowment, and (c) realized and unrealized gains and losses to the permanent endowment when stipulated by the donor gift instrument. In accordance with NYPMIFA and authoritative guidance, effective June 30, 2011 the remaining portion of the donor-restricted endowment funds not classified in permanently restricted net assets which had previously been classified as unrestricted net assets is now classified as temporarily restricted net assets. As a result, in fiscal year 2011, the University reclassified \$1.7 billion of unrestricted net assets to temporarily restricted net assets. Such amounts relate to accumulated earnings on endowment funds and other funds, including distributions from the endowment unspent due to timing.

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The composition and changes in the University's endowment net assets as of June 30, 2012 and 2011, are as follows:

	2012			Total
	Unrestricted Net Assets	Temporarily Restricted Net Assets	Permanently Restricted Net Assets	
Changes in University endowment net assets				
Opening balance - June 30, 2011	\$ 2,906,157	\$ 2,869,739	\$ 2,013,683	\$ 7,789,579
Investment return:				
Investment income	71,441	242	7,127	78,810
Net appreciation	30,697	29,317	(9,536)	50,478
Total investment return	102,138	29,559	(2,409)	129,288
New gifts	6,332	4,907	140,810	152,049
Appropriation for expenditure	(209,411)	(231,596)	(7,127)	(448,134)
Other Changes:				
Transfers to create endowments	5,572	25,654		31,226
Other / Reclassifications	(10,365)	4,712	5,797	144
	(4,793)	30,366	5,797	31,370
Closing balance - June 30, 2012	\$ 2,800,423	\$ 2,702,975	\$ 2,150,754	\$ 7,654,152
University endowment composition				
Endowment funds		\$ 2,454,784	\$ 1,974,578	\$ 4,429,362
Funds functioning as endowment:				
Departmental funds	\$ 1,180,529	204,487		1,385,016
University funds	1,239,872			1,239,872
Institutional real estate, net	367,820			367,820
CPMC Fund, Inc.	12,202	43,704	23,008	78,914
Interests in perpetual trusts held by others			153,168	153,168
University's endowment value	\$ 2,800,423	\$ 2,702,975	\$ 2,150,754	\$ 7,654,152

Note: The tables above do not include split-interest agreements, net of \$98,588 and pledges receivable, net of \$131,994.

Reconciliation to Investments, at fair value

Investments, at fair value		\$ 7,591,982
Add:		
Interests in perpetual trusts held by others	153,168	
CPMC Fund, Inc.	78,914	
Institutional real estate, net	367,820	
Investment receivables and payables	53,315	653,217
Subtract:		
Other long-term investments	(399,404)	
Split-interest agreements, net	(149,641)	
Funds held on behalf of others	(42,002)	(591,047)
University's endowment value		\$ 7,654,152

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	2011			
	Unrestricted	Temporarily	Permanently	
	Net Assets	Restricted	Restricted	Total
Changes in University endowment net assets				
Opening balance - June 30, 2010	\$ 4,124,063	\$ 543,658	\$ 1,848,791	\$ 6,516,512
Cumulative Balance Reclass	(1,651,515)	1,651,515		
Investment return:				
Investment income	57,560	363	5,137	63,060
Net appreciation	503,479	879,533	26,188	1,409,200
Total investment return	561,039	879,896	31,325	1,472,260
New gifts	27,108	210	124,177	151,495
Appropriation for expenditure	(195,309)	(200,922)	(5,137)	(401,368)
Other Changes:				
Transfers to create endowments	22,888	12,602	17,109	52,599
Other / Reclassifications	17,883	(17,220)	(2,582)	(1,919)
	40,771	(4,618)	14,527	50,680
Closing balance - June 30, 2011	\$ 2,906,157	\$ 2,869,739	\$ 2,013,683	\$ 7,789,579
University endowment composition				
Endowment funds		\$ 2,611,498	\$ 1,823,093	\$ 4,434,591
Funds functioning as endowment:				
Departmental funds	\$ 1,243,608	212,838		1,456,446
University funds	1,288,264			1,288,264
Institutional real estate, net	359,162			359,162
CPMC Fund, Inc.	15,123	45,403	29,334	89,860
Interests in perpetual trusts held by others			161,256	161,256
University's endowment value	\$ 2,906,157	\$ 2,869,739	\$ 2,013,683	\$ 7,789,579
Note: The tables above do not include split-interest agreements, net of \$53,304 and pledges receivable, net of \$132,751.				
Reconciliation to Investments, at fair value				
Investments, at fair value				\$ 7,901,194
Add:				
Interests in perpetual trusts held by others			161,256	
CPMC Fund, Inc.			89,860	
Institutional real estate, net			359,162	
Investment receivables and payables			61,182	671,460
Subtract:				
Other long-term investments			(626,725)	
Split-interest agreements, net			(107,636)	
Funds held on behalf of others			(48,714)	(783,075)
University's endowment value				\$ 7,789,579

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Return Objectives and Risk Parameters

Endowment assets include those assets of donor-restricted funds that the University must hold in perpetuity or for a donor-specified period(s) as well as Board-designated funds. Under the University's investment policies, as approved by the Board of Trustees, the endowment assets are invested in a manner that is intended to produce performance which exceeds that of relevant indices for each asset class while assuming a moderate level of investment risk.

Strategies Employed for Achieving Objectives

The University relies on a total return strategy in which investment returns are achieved through both capital appreciation (realized and unrealized) and current yield (interest and dividends). The University targets a diversified asset allocation to achieve its long-term return objectives within prudent risk constraints.

Endowment Spending Rule

The endowment spending rule utilized by the University is designed to be directly responsive to both investment returns and the current level of price inflation. Its long-term objectives are:

- To protect the corpus of the endowment by spending no more than the real investment return;
- To cushion spending against market volatility; and
- To provide specific spending instructions and multiyear spending projections based on explicit future investment return assumptions.

The current endowment spending rule is based on two factors: first, the market value multiplied by a 5 percent target spending rate, which provides a response to investment market conditions; and second, the prior year's spending plus inflation, which ties spending increases to operating needs and cushions spending against market volatility. This allows the University to maintain the purchasing power of the endowment assets held in perpetuity or for a specified term as well as to provide additional real growth through new gifts and investment return.

As a general policy, each fiscal year's distribution is calculated by adding together the following:

- a. The market value of the endowment at a point twelve months prior to the beginning of the given fiscal year, multiplied by the 5 percent target spending rate, multiplied by a 40 percent weighting; and
- b. Endowment spending in the year immediately preceding the given fiscal year, grown or reduced by an inflation factor, which is defined as the Higher Education Price Index ("HEPI"), multiplied by a 60 percent weighting.

The Trustees conduct a special review in any year in which either projected endowment distributions are 0.5 percent higher or lower than the 5 percent target spending rate, or if the increase in endowment distributions over the previous year is more than 3 percentage points higher or lower than HEPI.

The Trustees approved a decision to temporarily override the spending rule formula described above in fiscal 2010 and 2011 in order to begin to absorb the endowment losses experienced in fiscal 2009 earlier than the spending rule formula would allow, given the market lag effect inherent

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in the formula. The approved plan prescribed an 8 percent decrease of the per share spending rate in fiscal 2010, and a subsequent 5 percent decrease in fiscal 2011.

In addition to the base spending rate described above, two additional payout components were approved as temporary measures by the Trustees in 2008. The first is an increase in annual spending of up to 1.75 percent of the prior year beginning market value of endowments that are designated for undergraduate financial aid support. This increase began in fiscal 2009 and will be phased out as new endowments substitute for this funding source. The amount of the incremental payout for the coming year is approved annually by the Trustees' Committee on Finance as part of the budget process. The second component is 0.70 percent of the prior year beginning market value for certain endowments in categories key to the University's current development efforts, primarily unrestricted endowment and endowments for financial aid and faculty support.

The appropriation process for fiscal year 2011 occurred prior to the enactment of NYPMIFA on September 17, 2010. Beginning in fiscal year 2012, appropriations under the spending rule were governed by NYPMIFA, which permits the University to appropriate so much of an endowment fund as it deems prudent following consideration of certain specific factors set forth in NYPMIFA.

8. Accounts Receivable

Accounts receivable, net, consists of the following as of June 30:

	2012	2011
Patient receivables, net of contractual allowances	\$ 119,725	\$ 106,413
Government agencies	123,867	121,590
NewYork-Presbyterian Hospital	72,664	67,530
Patent and licensing	22,354	24,799
Student receivables	25,986	15,603
Other receivables, gross	82,990	84,976
	<u>447,586</u>	<u>420,911</u>
Less: Allowance for doubtful accounts	(62,758)	(53,504)
Accounts receivable, net	<u>\$ 384,828</u>	<u>\$ 367,407</u>

Patient receivables for medical services are net of an allowance for contractual reserves in the amount of \$103.9 million and \$92.2 million at June 30, 2012 and 2011, respectively.

9. Student Loans Receivable and Financial Aid

The University participates in various federal loan programs, in addition to administering institutional loan programs. Loans receivable from students as of June 30 are as follows:

	2012	2011
Government revolving loans	\$ 71,546	\$ 67,720
Institutional loans	<u>23,087</u>	<u>23,911</u>
Gross student loans	94,633	91,631
Less: Allowance for doubtful collections	(1,320)	(3,672)
Student loans receivable, net	<u>\$ 93,313</u>	<u>\$ 87,959</u>

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In addition to the loans identified above, the University processes and authorizes loans to students through the Stafford Loan program and Federal Plus Loan program. These loans are not recorded in the University's consolidated financial statement since the University does not guarantee any federal loan funds related to these programs. The amount of loans issued under these programs was \$298.6 million and \$303.5 million for the years ended June 30, 2012 and 2011, respectively.

Government revolving loans are funded principally with federal advances to the University under the Perkins Loan Program and certain other programs. Advances under the Perkins Loan Program totaled \$66.0 million and \$65.5 million and advances under the other federally sponsored loan programs are \$13.7 million and \$13.4 million as of June 30, 2012 and 2011, respectively. These advances are classified as liabilities on the Balance Sheet. Interest earned on the revolving and institutional loan programs is reinvested to support additional loans. The repayment and interest rate terms of the institutional loans vary considerably.

Management regularly assesses the adequacy of the allowance for credit losses by performing ongoing evaluation of the student loan and student accounts receivable portfolios.

Loans receivable under federally guaranteed student loan programs are subject to significant restrictions.

Undergraduate financial aid represents packages for all or part of a student's tuition, fees, room, and board. Graduate financial aid represents packages for all or part of a student's tuition and fees. Funding from external sources is obtained through government and private grants and contracts as well as private gifts and payout from certain endowment funds.

	2012			2011		
	University Sources	External Sources	Total Financial Aid	University Sources	External Sources	Total Financial Aid
Undergraduate	\$ 88,533	\$ 40,320	\$ 128,853	\$ 78,911	\$ 42,606	\$ 121,517
Graduate	108,682	61,414	170,096	104,773	55,812	160,585
Total financial aid grants	<u>\$ 197,215</u>	<u>\$ 101,734</u>	<u>\$ 298,949</u>	<u>\$ 183,684</u>	<u>\$ 98,418</u>	<u>\$ 282,102</u>

Agency activities such as tuition aid grants, federal supplemental educational opportunity grants, federal Pell, SMART, and ACG grant program are not included in the University's consolidated financial statements. Receipts from agency transactions were \$8.1 million and \$13.9 million, and disbursements were \$8.1 million and \$13.9 million in fiscal year 2012 and 2011, respectively.

10. Pledges Receivable

Unconditional promises to give appear as pledges receivable and revenue of the appropriate net asset category. Pledges are recorded after recognizing an allowance for uncollectible contributions and a discount to reflect the net present value based on projected cash flows.

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The June 30 balances of unconditional promises to give are:

	2012	2011
Less than one year	\$ 420,449	\$ 415,825
One to five years	540,425	386,175
More than five years	44,960	176,551
Total unconditional promises	1,005,834	978,551
Less: Allowance for doubtful contributions	(30,397)	(30,156)
Less: Net present-value discount	(55,242)	(65,691)
Net pledges receivable	<u>\$ 920,195</u>	<u>\$ 882,704</u>

New pledges recorded in 2012 and 2011 were discounted at an average annual rate of 1.5 percent and 2.7 percent, respectively, using a rate that considers market and credit risk. Credit risk is also considered in the allowance for doubtful contributions.

Pledges receivable are intended for the following purposes:

	2012	2011
Endowment for educational and general purposes	\$ 131,994	\$ 132,751
New construction and modernization of plant	349,577	339,448
Support of University operations	438,624	410,505
Net pledges receivable	<u>\$ 920,195</u>	<u>\$ 882,704</u>

The University also has other outstanding pledges of \$167.4 million as of June 30, 2012. These pledges represent either conditional gifts for which the probability of meeting the conditions is uncertain, verbal pledges, or other pledges that have not met the requirements for recognition.

11. Land, Buildings, and Equipment

Investments in land, buildings, and equipment, net, consisted of the following at June 30:

	2012			2011		
	Total Assets	Accumulated Depreciation	Net Assets	Total Assets	Accumulated Depreciation	Net Assets
Land	\$ 442,353		\$ 442,353	\$ 373,791		\$ 373,791
Building and building improvements	4,072,941	\$ 1,786,345	2,286,596	3,816,927	\$ 1,631,119	2,185,808
Equipment	368,661	191,199	177,462	326,298	175,679	150,619
	<u>\$ 4,883,955</u>	<u>\$ 1,977,544</u>	<u>\$ 2,906,411</u>	<u>\$ 4,517,016</u>	<u>\$ 1,806,798</u>	<u>\$ 2,710,218</u>

The University uses componentized depreciation to calculate depreciation expense for buildings and building improvements for research facilities included in operations. The costs of research facilities are separated into the building shell, building service systems, and fixed equipment, and each component is separately depreciated.

Equipment includes physical assets owned by the University as well as capitalized software costs and moveable equipment acquired through capitalized leases.

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Building and building improvements include physical assets owned by the University as well as leasehold improvements, capitalized space leases, and construction in progress. Capital space leases at June 30, 2012 and 2011, were \$88.7 million and \$91.3 million, respectively.

12. Accrued Employee Benefit Liabilities

Accrued employee benefit liabilities arise from employment at the University. These include liabilities for pension, postretirement benefits, postemployment benefits, unused vacation, and deferred compensation.

Postemployment benefits relating to workers' compensation, short-term disability, and continuation of medical benefits for those on long-term disability are provided to former or inactive employees after employment but before retirement. The University records the costs of such benefits on an accrual basis if the employee has provided the services from which those benefits are derived. In 2012 and 2011, the University recognized actuarially computed liabilities of \$30.7 million and \$29.0 million, respectively.

13. Pension and Other Postretirement Benefit Costs

Pension Plan Benefits

The University has five non-contributory pension plans (the "pension plans") for supporting staff employees. Four of the pension plans are subject to collective bargaining agreements. The fifth pension plan covers former employees of the Arden Conference Center, which closed in 2005. Three of the plans include defined benefits plans for past service, and in the case of two plans, defined benefit for future service. Two of the pension plans provide defined benefits for service prior to 1976 (January 1, in one case, and prior to July 1, 1976, in the other). For these two pension plans, future benefits are provided by defined contribution plans. Charges to expenditures for the defined contribution segments of the plans amounted to \$5.4 million and \$5.5 million for the years ended June 30, 2012 and 2011, respectively.

In addition, the University provides retirement benefits for full-time faculty, officers, and certain other employees under a separate defined contribution plan (the "officer plan"). Charges to expenditures for the officer plan amounted to \$91.8 million and \$90.1 million for the years ended June 30, 2012 and 2011, respectively.

Postretirement Health Care and Life Insurance Benefits

The University provides postretirement health care and life insurance benefits for certain employees. The University accrues the estimated cost of these benefits over the years that employees who are eligible render service.

Obligations and Funded Status

The University adopted authoritative guidance, which requires the recognition on the Balance Sheet of the difference between benefit obligations and any plan assets of the University's defined benefit and other postretirement benefit plans. In addition, the authoritative guidance requires unamortized amounts (e.g., net actuarial gains or losses and prior service cost or credits) to be recognized as changes to unrestricted net assets and that those amounts be adjusted as they are subsequently recognized as components of net periodic pension cost.

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Amounts recognized in unrestricted net assets are as follows:

	Pension Plan Benefits		Other Postretirement Benefits	
	2012	2011	2012	2011
Net actuarial loss	\$ 60,998	\$ 38,083	\$ 100,859	\$ 78,091
Prior service cost	763	856	(37,195)	(48,020)
Total amount recognized	<u>\$ 61,761</u>	<u>\$ 38,939</u>	<u>\$ 63,664</u>	<u>\$ 30,071</u>

The components of accrued benefit costs for pension benefits and other postretirement benefits are as follows:

	Pension Plan Benefits		Other Postretirement Benefits	
	2012	2011	2012	2011
Change in benefit obligation:				
Benefit obligation, beginning of year	\$ 117,602	\$ 115,968	\$ 172,454	\$ 202,146
Service cost	3,796	3,718	5,825	7,004
Interest cost	6,726	6,330	9,426	10,239
Plan participants' contributions			4,183	4,054
Actuarial (gain) loss	28,637	(3,027)	22,916	(16,030)
Plan amendments				(23,149)
Assumption Changes	1,020	(119)		
Net disbursements and transfers	(5,048)	(5,268)	(11,928)	(11,810)
Benefit obligation, end of year	<u>\$ 152,733</u>	<u>\$ 117,602</u>	<u>\$ 202,876</u>	<u>\$ 172,454</u>
Change in plan assets:				
Fair value of assets, beginning of year	\$ 90,823	\$ 77,000	\$ 121,908	\$ 92,963
Actual return on plan assets	10,908	10,605	4,893	21,982
Employer contributions	13,389	8,237	11,195	15,096
Plan participants' contributions			4,183	4,054
Net disbursements and transfers	(5,303)	(5,019)	(12,887)	(12,187)
Fair value of assets, end of year	<u>\$ 109,817</u>	<u>\$ 90,823</u>	<u>\$ 129,292</u>	<u>\$ 121,908</u>
Net amount recognized	<u>\$ (42,916)</u>	<u>\$ (26,779)</u>	<u>\$ (73,584)</u>	<u>\$ (50,546)</u>

Weighted-average assumptions used to determine end of year benefit obligation	2012	2011
Discounted rate	3.45% to 4.35%	4.75% to 5.7%
Rate of compensation increase	2.7% to 3.25%	1.9% to 4.25%

The accumulated benefit obligations for the pension plans at June 30, 2012 and 2011 were \$122.7 and \$93.5 million, respectively.

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At the end of 2012 and 2011, the projected benefit obligation exceeded the pension plan assets for three of the five plans. The projected benefit obligation for the pension plans with a benefit obligation in excess of plan assets were as follows:

End of year	2012	2011
Projected benefit obligation	\$ 140,006	\$ 105,338
Fair value of plan assets	95,882	77,293

The accumulated postretirement benefit obligation for the other postretirement benefit plan and the fair value of plan assets with an accumulated postretirement benefit obligation in excess of plan assets were as follows:

End of year	2012	2011
Accumulated postretirement benefit obligation	\$ 202,876	\$ 172,545
Fair value of plan assets	129,292	121,908

A 7.5 percent annual rate of increase in the per capita cost of covered health care benefits for the other postretirement benefit plan was assumed for 2013. The rate was assumed to decrease gradually to 5 percent for 2017 and remain at that level thereafter. Assumed health care cost trend rates have a significant effect on the amounts reported for the health care plans. A one-percentage-point change in assumed health care cost trend rates would have the following effect:

	1-%-point increase	1-%-point decrease
Effect on accumulated postretirement benefit obligation	\$ 28,493	\$ (22,793)

The asset allocation for the two defined benefit plans for both past and future service at June 30, 2012 and 2011, and the target allocation for 2013, by asset category, follows:

Asset category	Target allocation 2013	Percentage of plan assets at year's end 2012	2011
U.S. large cap equity	20%	23%	22%
International equities	15%	14%	15%
High yield fixed income securities	15%	16%	15%
U.S. core fixed income	50%	47%	48%
	<u>100%</u>	<u>100%</u>	<u>100%</u>

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The asset allocation for the two defined benefit plans for prior service only at June 30, 2012 and 2011, and the target allocation for 2013, by asset category, follows:

Asset category	Target allocation	Percentage of plan assets at year's end	
	2013	2012	2011
U.S. large cap equity	10%	9%	10%
International equities	5%	4%	5%
High yield fixed income securities	5%	5%	5%
U.S. core fixed income	80%	82%	80%
	<u>100%</u>	<u>100%</u>	<u>100%</u>

The retirement plan for the employees of Arden Conference Center was invested in equity securities, including mutual funds, 25 percent, and debt securities, 75 percent.

The following presents investments of the pension plans as of June 30, 2012. The Plans' investments in common collective trusts and mutual funds are included as Level 2 because fair value is based on quoted prices for similar instruments or other observable inputs. Level 3 assets represent fixed income related investment contracts with a major life insurance company.

	Level 1	Level 2	Level 3	Total
Common collective trust funds				
Global equity	\$ -	\$ 36,445		\$ 36,445
Fixed income		70,482		70,482
Mutual funds		713		713
Fixed income investment contracts			\$ 2,177	2,177
Investments, at fair value	<u>\$ -</u>	<u>\$ 107,640</u>	<u>\$ 2,177</u>	<u>\$ 109,817</u>

The following table is a roll forward of the amounts for investments classified within Level 3 as described above.

	June 30, 2011	Purchases (Gross)	Sales (Gross)	Investment gain/(loss)	June 30, 2012
Investment contracts	\$ 2,088	\$ 142	\$ (154)	\$ 101	\$ 2,177
Total level 3 investments	<u>\$ 2,088</u>	<u>\$ 142</u>	<u>\$ (154)</u>	<u>\$ 101</u>	<u>\$ 2,177</u>

The following presents investments of the pension plans as of June 30, 2011.

	Level 1	Level 2	Level 3	Total
Common collective trust funds				
Global equity	\$ -	\$ 29,547		\$ 29,547
Fixed income		58,454		58,454
Mutual funds		734		734
Fixed income investment contracts			\$ 2,088	2,088
Investments, at fair value	<u>\$ -</u>	<u>\$ 88,735</u>	<u>\$ 2,088</u>	<u>\$ 90,823</u>

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The following table is a roll forward of the amounts for investments classified within Level 3 as described above.

	June 30, 2010	Purchases & Sales, Net	Investment gain/(loss)	June 30, 2011
Investment contracts	\$ 1,962	\$ -	\$ 126	\$ 2,088
Total level 3 investments	<u>\$ 1,962</u>	<u>\$ -</u>	<u>\$ 126</u>	<u>\$ 2,088</u>

The asset allocation for the other postretirement benefit plan at June 30, 2012 and 2011, and the target allocation for 2013, by asset category, follows:

Asset category	Target allocation 2013	Percentage of plan assets at year's end	
	2012	2011	
U.S. large cap equity	60%	59%	59%
International equity	15%	16%	16%
U.S. fixed income	25%	25%	25%
	<u>100%</u>	<u>100%</u>	<u>100%</u>

The following presents investments of the other postretirement benefit plan as of June 30, 2012. The Plans' investments in common collective trusts are included as Level 2 because the fair value is based on quoted prices for similar instruments or other observable inputs.

	Level 1	Level 2	Level 3	Total
Common collective trust funds				
Global Equity	\$ -	\$ 97,593	\$ -	\$ 97,593
Fixed Income		31,699		31,699
Investments, at fair value	<u>\$ -</u>	<u>\$ 129,292</u>	<u>\$ -</u>	<u>\$ 129,292</u>

The following presents investments of the other postretirement benefit plan as of June 30, 2011.

	Level 1	Level 2	Level 3	Total
Common collective trust funds				
Global Equity	\$ -	\$ 91,966	\$ -	\$ 91,966
Fixed Income		29,942		29,942
Investments, at fair value	<u>\$ -</u>	<u>\$ 121,908</u>	<u>\$ -</u>	<u>\$ 121,908</u>

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Net Periodic Pension Cost

The components of net periodic benefit cost for pension benefits and other postretirement benefits are as follows:

	Pension Plan Benefits		Other Postretirement Benefits	
	2012	2011	2012	2011
Components of net periodic benefit cost				
Service cost	\$ 3,796	\$ 3,718	\$ 5,825	\$ 7,004
Interest cost on projected benefit obligation	6,726	6,330	9,426	10,239
Expected return on assets	(6,060)	(5,514)	(9,203)	(7,177)
Amortization of prior service cost	93	93	(10,825)	(6,577)
Amortization of unrecognized net losses	2,148	2,234	5,132	7,706
Net periodic benefit cost	<u>6,703</u>	<u>6,861</u>	<u>355</u>	<u>11,195</u>
Other changes in plan assets and benefit obligations recognized in the Consolidated Statement of Activities				
Current year actuarial (gain)/loss	25,063	(8,485)	27,900	(31,509)
Amortization of actuarial gain/(loss)	(2,148)	(2,234)	(5,132)	(7,706)
Current year prior service (credit)/cost				(23,149)
Amortization of prior service credit/(cost)	(93)	(93)	10,825	6,577
Total recognized in nonoperating	<u>22,822</u>	<u>(10,812)</u>	<u>33,593</u>	<u>(55,787)</u>
Total recognized in net periodic benefit cost and nonoperating	<u>\$ 29,525</u>	<u>\$ (3,951)</u>	<u>\$ 33,948</u>	<u>\$ (44,592)</u>

Amounts in net unrestricted assets expected to be recognized in net periodic pension cost in fiscal 2013 are as follows:

	Pension Plan Benefits	Other Postretirement Benefits
Actuarial (gain)/loss	\$ 4,274	\$ 7,514
Prior service (credit)/cost	93	(10,824)
	<u>\$ 4,367</u>	<u>\$ (3,310)</u>

Weighted-average assumptions used to determine net periodic pension cost

	2012	2011
Discount rate	3.45% to 4.35%	4.6% to 5.5%
Expected return on plan assets	5% to 6.5%	5% to 6.5%
Rate of compensation increase	2.70% to 3.25%	1.9% to 4.25%

To arrive at assumptions for expected long term rates of return on asset in the pension plan and the postretirement benefit plan, the University considered historical returns and future expectations for returns in each asset class in the asset allocation for the previously described pension and postretirement benefit portfolios.

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Assumed health care cost trend rates have a significant effect on the amounts reported for the other postretirement benefit plan. A one-percentage-point change in the assumed health care cost trend rates would have had the following effect:

	% -point increase	% -point decrease
Effect on total service and interest cost	\$ 2,536	\$ (1,983)

Expected Cash Flows

Information about the expected cash flows for the plans is as follows:

	Pension Benefits	Other Postretirement Pension Benefits
University contributions:		
2013 (expected)	\$ 7,254	\$ 4,209
Expected benefit payments:		
2013	5,566	9,278
2014	5,821	9,546
2015	6,086	9,759
2016	6,355	9,826
2017	6,657	9,680
2018-2022	38,539	48,764
Total	<u>\$ 69,023</u>	<u>\$ 96,852</u>

Total benefits expected to be paid include both the University's share of the benefit cost and the participants' share of the cost, which is funded by participant contributions to the other postretirement benefit plan. The University receives a Medicare Part D subsidy from the federal government as reimbursement for certain retiree health benefits paid to plan participants.

14. Lease Obligations

The University is the lessee of various equipment and space under noncancelable operating and capital leases. Capital lease obligations at June 30, 2012 and 2011, were \$114.4 million and \$114.8 million, respectively. Operating lease rental expense for the years ended June 30, 2012 and 2011, were approximately \$37.6 million and \$33.0 million, respectively. Space leases contained customary escalation clauses, which are included in annual aggregate minimum rentals.

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Future aggregate minimum rental payments under operating and capital leases are as follows:

Future minimum rental payments:	Operating	Capital
2013	\$ 35,424	\$ 7,220
2014	25,606	6,130
2015	21,443	5,234
2016	19,337	4,901
2017	17,457	4,941
Thereafter	249,051	254,223
Less: Interest at 1.48 percent to 5.31 percent		(168,228)
Capital lease obligations at June 30, 2012		<u>\$ 114,421</u>

15. Conditional Asset Retirement Obligations

Conditional asset retirement obligations are a legal obligation to perform an asset retirement activity in which the timing and/or method of settlement are conditional on a future event that may or may not be within the control of the entity. Uncertainty with respect to the timing and/or method of settlement of the asset retirement obligation does not defer recognition of a liability. GAAP requires that the fair value of a liability for a conditional asset retirement obligation be recognized in the period in which it occurred if a reasonable estimate of fair value can be made.

Conditional asset retirement obligations related to remediation or disposal of asbestos, underground storage tanks, soil, and radioactive sources and equipment were \$106.3 million and \$105.3 million at June 30, 2012 and 2011, respectively.

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16. Bonds and Notes Payable

Bonds and notes payable outstanding at June 30, 2012 and 2011, are as follows:

	2012	2011
Dormitory Authority of the State of New York, tax exempt revenue bonds, Columbia University issues		
Series 2012 A, 3.00% to 5.00%, maturing 2023	\$ 137,935	
Series 2011 A, 3.00% to 5.00%, maturing 2042	300,000	\$ 300,000
Series 2009 A, variable rate, 0.01% to 0.24%, maturing 2039	117,000	117,000
Series 2008 A, 5.00%, maturing 2038	200,000	282,715
Series 2006 A, 4.75% to 5.25%, maturing 2031	197,080	203,220
Series 2006 B, 3.50% to 5.25%, maturing 2022	135,330	143,265
Series 2004 A2, 5.00%, maturing 2014	23,690	35,380
Series 2004 B, 4.75% to 5.125%, maturing 2024	70,850	75,345
Series 2004 C, 5.00%, maturing 2029	48,270	48,270
Series 2003 A, 3.50% to 5.125%, maturing 2024		63,120
Series 2003 B, variable rate, 0.01% to 0.20%, maturing 2028	30,000	30,000
Series 2002 A, 5.25%, maturing 2014		15,485
Series 2002 B, 5.00% to 5.25%, maturing 2024		30,260
Series 2002 C, variable rate, 0.09% to 0.17%, maturing 2027	23,300	23,300
	<u>1,283,455</u>	<u>1,367,360</u>
 Taxable Series 2012, 3.827%, maturing 2043	 100,000	
Dormitory Authority of the State of New York, tax-exempt commercial paper		
Series 1997, variable rate, 0.07% to 0.16%, final maturity 2015	13,395	19,095
New Jersey Economic Development Corporation		
Series 2002, variable rate, 0.07% to 0.16%, final maturity 2028	7,530	7,890
Medium-Term Notes, Taxable Series C 6.53% to 7.36%, maturing 2022	102,769	115,299
Empire State Development Corporation Issues:		
Interest-free, maturing 2029	7,804	8,012
Interest-free, maturing 2015	8,100	8,100
Economic Development Corporation		
Interest-free, maturing 2015	10,000	10,000
Dormitory Authority of the State of New York College and University Education Loan Revenue Bonds		
Series 1993, 5.60% to 5.65%, maturing 2013	1,589	1,834
Series 1992, 6.80%, maturing 2013	1,258	1,570
	<u>252,445</u>	<u>171,800</u>
Total bonds and notes payable	<u>\$ 1,535,900</u>	<u>\$ 1,539,160</u>

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Estimated principal payments on bonds and certificates are summarized below:

Year	Principal
2013	\$ 57,004
2014	56,172
2015	58,409
2016	55,613
2017	38,904
Thereafter (through 2043)	1,269,798
Total	\$ 1,535,900

At June 30, 2012, the University's bonds and notes payable had a carrying amount of approximately \$1.5 billion, compared to an estimated fair value of \$1.7 billion. The estimated fair value of bonds and notes payable was calculated using a discounted cash flow method, where the estimated cash flows were based on contractual principal and interest payments. The discount rates used were based on the University's borrowing rate for similar obligations. Fair values represent the lower of the estimated value at call or maturity of each respective issue.

The University may offer from time to time up to \$400 million aggregate principal amount of Medium-Term Notes. As of June 30, 2012, \$102.8 million was outstanding. The University also has a \$150 million taxable commercial paper program. As of June 30, 2012, none of the taxable commercial paper was outstanding.

As of June 30, 2012, the University had a \$100 million operating line of credit, which expires in December, 2014. Additionally, as of June 30, 2012, the University had two \$100 million standby lines of credit supporting self-liquidity for variable rate debt outstanding, one of which expires in May, 2014. The other expired in July 2011 and was replaced subsequent to year end with a new \$100 million line of credit expiring in July, 2014. Each of the lines is with a different lending institution and, as of June 30, 2012, no balances were outstanding on the lines of credit.

The University issues most of its tax-exempt debt through the Dormitory Authority of the State of New York ("DASNY"). On June 7, 2012, the University issued \$137.9 million of Series 2012A fixed rate bonds. Series 2012A was issued at a premium of \$36.2 million, which will be amortized over 10 years. The proceeds from Series 2012A were used to finance various construction and renovation projects and to advance refund select maturities of DASNY Series 2008A. On May 15, 2012, the University issued \$100 million of Series 2012 taxable fixed rate bonds. The proceeds from taxable Series 2012 were used to finance various construction and renovation projects, to current refund outstanding maturities of Series 2002B, and advance refund Series 2003A. The advance refunding of these issues resulted in reduced bond principal of \$11.5 million and an accounting charge of \$6.8 million. The accounting charge represents the prepayment of interest and the expensing of deferred bond premiums on the extinguished issues. The University also chose to redeem Series 2002A bonds totaling \$10.6 million with a call date of July 1, 2012. The refunded and redeemed bonds were legally defeased and, as such, are not reflected in "Bonds and notes payable" at June 30, 2012. On October 1, 2008, the University entered into a \$200 million notional value forward starting, fixed payor swap agreement to protect against the risk of interest rate changes. The estimated fair value of the liability was (\$86.3) million and (\$39.5) million at June 30, 2012 and 2011, respectively. The fair value of the swap is obtained by taking the present value of all future cash flows on the swap implied by the forward curve.

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(in thousands of dollars)

The University has certain financial and administrative covenants with which it was in compliance as of June 30, 2012 and 2011.

17. Insurance

In connection with managing financial risks through various third-party insurance programs, the University is self-insured in certain areas. Funded self-insurance liabilities primarily cover deductibles on general liability and property insurance claims. Self-insurance liabilities are actuarially calculated on an annual basis. The University's core liability coverage is purchased through Pinnacle RRG, a Vermont-based risk retention group with fifteen other universities.

The University obtains medical malpractice insurance through MCIC and MLMIC. MCIC is a group-captive insurance company owned by the University, Johns Hopkins, Yale, Rochester, and Weill Cornell Medical School and their respective major teaching hospitals, including NYPH. MLMIC is a mutual company where policyholders are owners, with full voting rights to elect the company's Board of Directors, thereby having direct input into vital areas of operation. The governing Board is comprised primarily of practicing physicians, dentists, and hospital administrators. More than 1,010 of the University's faculty physicians and dentists are enrolled in MCIC or MLMIC. The University has recorded self insurance and medical malpractice liabilities of approximately \$246.6 million and \$218.0 million as of June 30, 2012 and 2011, respectively. The medical malpractice liabilities of approximately \$173.4 million and \$150.7 million as of June 30, 2012 and 2011, respectively, are reported gross with an offsetting receivable for anticipated recoveries of \$110.4 million and \$96.7 million, respectively, recorded in Other assets, as discussed in Footnote No. 3.

18. Related Party Transactions

The University maintains several clinical and education affiliation agreements with other organizations. Revenues and expenses from these agreements are accounted for in the operating activities segment of the Consolidated Statement of Activities. The most significant affiliation agreement is with NYPH.

The University has an alliance dating back to 1921 with Presbyterian Hospital, which merged with New York Hospital effective January 1, 1998, and formed the new corporate entity called NewYork-Presbyterian Hospital. The University provides NYPH with medical, professional, and supervisory staff as well as other technical assistance. These services are reimbursed by NYPH. NYPH provides funding to the clinical departments for specific purposes, including administration, supervision, and teaching of the NYPH resident staff and salary support for faculty and staff providing services to NYPH. In addition, NYPH provides funding for clinical programs that the University and NYPH would like to see developed or expanded. NYPH also provides the departments with certain facilities and services (outpatient faculty practice offices, nursing, telecommunications, etc.) for which the University is invoiced on a monthly basis. Finally, the University and NYPH collaborate and fund joint projects for which specific agreements are negotiated.

In addition the University and NYPH negotiate a joint budget, which forms the basis for the reimbursement agreement. The fiscal year 2012 joint budget was approximately \$215 million. The payments to NYPH for goods and services were \$90 million. The majority of revenues received pursuant to this reimbursement arrangement for services rendered are reflected in the consolidated

The Trustees of Columbia University in the City of New York
Notes to the Consolidated Financial Statements
For the Years Ended June 30, 2012 and 2011
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financial statements as a portion of “Patient care revenue.” The majority of the expenses related to this agreement are reflected in “Patient care expense.”

The University records both receivables from and payables to NYPH on the Consolidated Balance Sheet. The University has no liability for obligations and debt incurred by NYPH.

The University has financial arrangements with several physician professional corporations (“PCs”), whereby the University provides facilities and other services to these PCs for a negotiated fee. These PCs provide clinical services to patients and are owned and controlled by physicians who are also faculty members of the University. These non-controlled PCs generated revenue of approximately \$76 million and \$75 million during fiscal year 2012 and 2011, respectively, which has not been consolidated into the University’s consolidated financial statements. The University is also the sole corporate member of two not-for-profit practice entities and a professional corporation and as such, consolidates these entities into the University’s consolidated financial statements.

Pursuant to the consent of the Trustees of the CPMC Fund, Inc., during fiscal 2012, the CPMC Fund, Inc. transferred to the University ten endowments previously held for CPMC Fund, Inc. for the University. The value of the endowments at the time of transfer was \$6.5 million, with \$1.2 million being permanently restricted.

19. Contingencies and Commitments

From time to time, various claims and suits generally incident to the conduct of normal business are pending or may arise against the University.

In the opinion of counsel and management of the University, after taking into account insurance coverage, losses, if any, from the resolution of pending litigation should not have a material effect on the University’s financial position or results of operations.

All funds expended in connection with government grants and contracts are subject to audit by government agencies. While the ultimate liability, if any, from audits of government grants and contracts by government agencies, claims, and suits is presently not determinable, it should not, in the opinion of counsel and management, have a material effect on the University’s financial position or results of activities.

The University is subject to laws and regulations concerning environmental remediation and will, from time to time, establish reserves for potential obligations that management considers probable and for which reasonable estimates can be made. As of June 30, 2012, the University has recorded \$106.3 million for conditional asset retirement obligations. These estimates may change depending upon the nature and extent of contamination, appropriate remediation technologies, and regulatory approvals. The University is not aware of any existing conditions that it currently believes are likely to have a material adverse effect on the University’s financial position, changes in net assets, or cash flows.

The University’s capital improvement program and related commitments includes projects that address the major strategic objectives of the University. As part of the capital improvement program, the University has entered into contracts to purchase properties with an aggregate value of \$41.1million. As of June 30, 2012 approximately \$34.2 million is still outstanding.

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(in thousands of dollars)

The University has made commitments related to its expansion in Manhattanville, certain of which are based upon events in the future which would result in cash and in-kind payments from the University.

The University offered a loan program for students and families to pay tuition, fees and other costs. Loans were issued by a private lending institution and are guaranteed by the University. Upon default by the borrower, the University is required to pay all or a portion of the outstanding loan balance. The amount guaranteed is \$3.7 million and \$4.6 million as of June 30, 2012 and 2011, respectively.

The University has performed an evaluation of subsequent events through October 16, 2012, which is the date the consolidated financial statements were issued.

20. Expense Allocation by Program

Expenses are reported for the University's primary program activities. The consolidated financial statements also report certain categories of expenditures that support more than one major program of the University. These expenses include operation and maintenance of plant, depreciation expense, and interest expense.

These costs are allocated to the applicable program activities as indicated in the following chart:

	2012			2011		
	Expenses per Statement of Activities	Allocation	Final Allocated Expenses	Expenses per Statement of Activities	Allocation	Final Allocated Expenses
Instruction and educational administration	\$ 1,242,689	\$ 189,601	\$ 1,432,290	\$ 1,179,399	\$ 181,356	\$ 1,360,755
Research	578,151	92,743	670,894	559,326	89,193	648,519
Patient care expense	740,486	42,524	783,010	718,552	45,507	764,059
Library	61,700	40,935	102,635	61,284	36,502	97,786
Operation and maintenance of plant	224,614	(224,614)		223,670	(223,670)	
Institutional support	210,091	31,424	241,515	226,643	29,048	255,691
Auxiliary enterprise	92,604	75,723	168,327	87,986	76,213	164,199
Depreciation expense	191,470	(191,470)		175,248	(175,248)	
Interest expense	57,117	(57,117)		59,086	(59,086)	
Other	26,139	251	26,390	23,621	185	23,806
	<u>\$ 3,425,061</u>		<u>\$ 3,425,061</u>	<u>\$ 3,314,815</u>		<u>\$ 3,314,815</u>

The allocation of operation and maintenance of plant is based on square footage occupancy with the exception of certain rent costs directly attributable to patient care expense. Depreciation expense includes depreciation of buildings and building improvements and equipment. The allocation of depreciation on buildings and building improvements is based on square footage occupancy. Depreciation on equipment is allocated to the programs for which the equipment was purchased. Interest expense is allocated according to the same methodologies used for building depreciation.

Supplemental Schedule

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

	R&D Cluster			
Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
RESEARCH & DEVELOPMENT CLUSTER				
Department of Health & Human Services				
Direct Awards				
Center for Disease Control				
TUBERCULOSIS TRIALS CONSORTIUM	93.	CDC 200-2009-32593		321,693
TUBERCULOSIS EPIDEMIOLOGIC STUDIES CONSORTIUM (T.O. 1)	93.	CDC 200-2001-00076/0		237,433
IMPROVING TESTING FOR TB AND LTBI FOR PERSONS WITH HIV AT HRSA TITLE III-FUNDED CLINICS (TBESC TASK ORDER 29)	93.	CDC 200-2001-00076/0		157,971
TO28: TREATMENT PRACTICES, OUTCOMES AND COST OF MULTIDRUG-RESISTANT (MDR TB) AND EXTENSIVELY DRUG RESISTANT TUBERCULOSIS	93.	CDC20020010007663478		2,081
EVALUATION OF NEW INTERFERON Y RELEASE ASSAYS IN THE DIAGNOSIS OF LATENT TUBERCULOSIS INFECTION IN HEALTHCARE WORKERS:18	93.	CDC 200200100076/001		387
NATIONAL STUDY OF DETERMINANTS OF EARLY DIAGNOSIS, PREVENTION, AND TREATMENT OF TB IN THE AFRICAN-AMERICAN COMMUNITY	93.	CDC20020010007641287		135
FACTORS ASSOCIATED WITH TREATMENT FOR LATENT TUBERCULOSIS INFECTION--PHASES 2 & 3 (T.O. 13)	93.	CDC2002001000760013		-54
TUBERCULOSIS MORTALITY IN THE UNITED STATES:EPIDEMIOLOGY AND PREVENTION OPPORTUNITIES TASK ORDER 25	93.	CDC20020010007663568		-737
Food & Drug Administration				
SAFETY OF KEY INHALED AND INTRAVENOUS DRUGS IN PEDIATRICS (SAFEKIDS) INITIATIVE	93.	HHSF 223200810036C		192,803
Substance Abuse & MHS Admin				
MENTAL HEALTH CONSEQUENCES OF THE U.S. ECONOMIC DOWNTURN: WHAT DO WE KNOW AND WHAT CAN BE DONE?	93.	HHSP233200900241A		7,634
				\$919,346
Innovations in Applied Public Health Research				
A STUDY OF AN EHR TO TRANSLATE PUBLIC HEALTH PRACTICES	93.061	5 R18 HK000057-03		69,874
LATE 20TH-CENTURY CONSUMER ADVOCACY AND THE SHAPING OF PUBLIC HEALTH POLICY AND PRACTICE	93.061	1 R36 CD000985-01		996
				\$70,870
Food and Drug Administration_Research				
TREATMENT OF HYPOPARATHYROIDISM WITH PARATHYROID HORMONE	93.103	5 R01 FD002525-06		332,446
PHASE 2 STUDY OF VITAMIN D FOR TX OF RESPIRATORY COMPLICATIONS IN SICKLE CELLS DS	93.103	1 R01 FD003894-01A1		328,870
HIGH-T SUSCEPTOMETER TO MONITOR TRANSFUSIONAL IRON OVERLOAD (NSR DEVICE)	93.103	5 R01 FD003702-02		279,281
PHASE II TRIAL TIOPRONIN ANEURYSMAL SUBARACHNOID HEMORRHAGE	93.103	5 R01 FD003728-03		236,641
PHASE 2 TERIPARATIDE FOR TX OF IDIOPATHIC OSTEOPOROSIS IN PREMENOPAUSAL WOMEN	93.103	1 R01 FD003902-01		99,494
HIGH-T SUSCEPTOMETER TO MONITOR TRANSFUSIONAL IRON OVERLOAD (NSR DEVICE)	93.103	5 R01 FD003702-03		10,648
PHASE 2 STUDY OF VITAMIN D FOR TX OF RESPIRATORY COMPLICATIONS IN SICKLE CELLS DS	93.103	5 R01 FD003894-02		8,637
				\$1,296,017
Maternal and Child Health Federal Consolidated Programs				
TEXTFLUENZA: USING TECHNOLOGY TO PROMOTE FLU VACCINATION IN UNDERSERVED MATERNAL AND CHILD POPULATIONS	93.110	6 R40MC17169-02-01		143,754
TEXTFLUENZA: USING TECHNOLOGY TO PROMOTE FLU VACCINATION IN UNDERSERVED MATERNAL AND CHILD POPULATIONS	93.110	5 R40 MC17169-03-00		106,917
TEXTFLUENZA: USING TECHNOLOGY TO PROMOTE FLU VACCINATION IN UNDERSERVED MATERNAL AND CHILD POPULATIONS	93.110	1 R40 MC17169-01-00		65
				\$250,736
Emergency Medical Services for Children				
EMERGENCY MEDICAL SERVICES FOR CHILDREN NETWORK DEVELOPMENT DEMONSTRATION PROJECT: THE PEDIATRIC EMERGENCY DEPARTMENT NO	93.127	U03 MC00007-11-00		428,596
EMSC NETWORK DEVELOPMENT DEMONSTRATION PROJECT (NDDP)	93.127	6 U03MC00007-10-02		260,246
EMSC NETWORK DEVELOPMENT DEMONSTRATION PROJECT (NDDP)	93.127	5 U03 MC00007-09-00		2,000
EMERGENCY MEDICAL SERVICES FOR CHILDREN NETWORK DEVELOPMENT DEMONSTRATION PROJECT (EMSC-NDDP)	93.127	5 U03 MC00007-05-00		-2,000

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
				\$688,842
Grants to Increase Organ Donations				
CLINICAL INTERVENTIONS TO INCREASE ORGAN PROCUREMENT	93.134	5 R38OT10588-03-02		66,398
				\$66,398
Centers for Research and Demonstration for Health Promotion and Disease Prevention				
CATEGORY I: TECHNOLOGY AND COMMUNITY-BASED APPROACHES TO IMPROVE HEALTH IN HARLEM	93.135	5 U48 DP001916-03		605,776
PARTNERSHIP FOR INTERDISCIPLINARY HEALTH SYSTEMS CAPACITY, EVALUATION AND SUPPORT - PISCES (SIP 10-038)	93.135	5 U48 DP001916-03 S4		427,791
INCIDENCE AND PROGNOSIS OF EPILEPSY IN HARLEM, NY (SIP 09-013)	93.135	5 U48 DP001916-03 S1		232,445
PARTNERSHIP FOR INTERDISCIPLINARY HEALTH SYSTEMS CAPACITY, EVALUATION AND SUPPORT - PISCES (SIP 10-038)	93.135	5 U48 DP001916-02 S4		196,300
CATEGORY I: TECHNOLOGY AND COMMUNITY-BASED APPROACHES TO IMPROVE HEALTH IN HARLEM	93.135	5 U48 DP001916-02		170,085
INCIDENCE AND PROGNOSIS OF EPILEPSY IN HARLEM, NY (SIP 09-013)	93.135	5 U48 DP001916-02 S1		86,261
A COST ANALYSIS OF A FAMILY BASED HYPERTENSION INTERVENTION (SIP 09-021)	93.135	5 U48 DP001916-02 S3		16,964
CDC SIP GRANT ON COMMUNITY CELLS & CIRCLES FOR PH MESSAGING (SIP 09-024)	93.135	1 U48 DP001916-01 S2		805
				\$1,736,427
Injury Prevention and Control Research and State and Community Based Programs				
COLUMBIA CENTER FOR YOUTH VIOLENCE PREVENTION	93.136	5 U49 CE000731-05		23,423
COLUMBIA CENTER FOR YOUTH VIOLENCE PREVENTION	93.136	5 U49 CE000731-05 SC2		11,989
COLUMBIA CENTER FOR YOUTH VIOLENCE PREVENTION	93.136	5 U49 CE000731-05 SC1		6,134
Injury Prevention and Control Research and State and Community Based Programs				
CHILD PEDESTRIAN INJURIES AND BUILD URBAN ENVIRONMENTAL EVALUATION OF A SAFE ROUTE	93.136	1 R21 CE001816-02		108,479
				\$150,025
Immunization Research, Demonstration, Public Information and Education_Training and Clinical Skills Improvement Projects				
TEXT 4 HEALTH-KIDS: TEXT MESSAGE REMINDER-RECALLS FOR EARLY CHILDHOOD VACCINATION	93.185	5 U01 IP000313-02		179,903
TEXT 4 HEALTH-KIDS: TEXT MESSAGE REMINDER-RECALLS FOR EARLY CHILDHOOD VACCINATION	93.185	1 U01IP000313-01		35,656
				\$215,559
National Research Service Award in Primary Care Medicine				
NRSA FOR PRIMARY MEDICAL CARE	93.186	2 T32HP10260-04-01		132,589
				\$132,589
Research on Healthcare Costs, Quality and Outcomes				
FLU ALERT: INFLUENZA VACCINE ALERTS FOR PROVIDERS IN THE ELECTRONIC HEALTH RECORD	93.226	5 R18 HS018158-03		276,696
BUILDING TOWARD ICD-11: IMPROVING THE CODING OF QUALITY AND PATIENT SAFETY DATA	93.226	1 R13 HS020543-01		55,171
THE SPATIOTEMPORAL ANATOMY OF SEASONAL INFLUENZA IN THE UNITED STATES, 1968-2007	93.226	1 R36 HS021085-01		34,393
VALIDATION OF NURSE PRACTITIONER PRIMARY CARE ORGANIZATIONAL CLIMATE QUESTIONNAIRE	93.226	1 R03 HS020999-01		26,617
USER INTERFACES FOR COMMUNICATING INPATIENT MEDICATION THERAPIES	93.226	1R36HS021393-01		12,653
OFF-SHIFT NURSING AND QUALITY PATIENT OUTCOME	93.226	1 R36 HS018216-01		4,787
				\$410,317
Health Systems Strengthening and HIV/AIDS Prevention, Care and Treatment under the President's Emergency Plan for AIDS Relief				
GLOBAL HIV/AIDS NURSING INITIATIVE - NEPI NY	93.266	2 U92 HA12772-04-00		79,920
GLOBAL HIV/AIDS NURSING INITIATIVE - NEPI MALAWI	93.266	2 U92 HA12772-04-00 MAL		56,296
GLOBAL HIV/AIDS NURSING INITIATIVE - NEPI DRC	93.266	2 U92 HA12772-04-00 DRC		15,219
GLOBAL HIV/AIDS NURSING INITIATIVE - NEPI ETHIOPIA	93.266	2 U92 HA12772-04-00 ET		6,754

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
GLOBAL HIV/AIDS NURSING INITIATIVE - NEPI ZAMBIA	93.266	2 U92 HA12772-04-00 ZAM		4,444
GLOBAL HIV/AIDS NURSING INITIATIVE - NEPI LESOTHO	93.266	2 U92 HA12772-04-00 LSO		1,448
				\$164,081
The Affordable Care Act: Centers for Disease Control and Prevention_Investigations and Technical Assistance				
TUBERCULOSIS TRIALS CONSORTIUM	93.283	3 N01 CDC 200-1999-0		-8,767
The Affordable Care Act: Centers for Disease Control and Prevention_Investigations and Technical Assistance				
CENTERS FOR PUBLIC HEALTH PREPAREDNESS	93.283	U90/CCU224241-03-1		0
				\$-8,767
ARRA Grants for Training in Primary Care Medicine and Dentistry Training and Enhancement				
ARRA-TRAINING IN PRIMARY CARE MEDICINE AND DENTISTRY: PHYSICIAN FACULTY DEVELOPMENT IN PRIMARY CARE	93.403	1 D5 CHP19229-01-01		280,193
				\$280,193
ARRA Equipment to Enhance Training for Health Professionals				
ARRA - EQUIPMENT TO ENHANCE TRAINING FOR HEALTH PROFESSIONALS (EETHP)- PUBLIC HEALTH TRAINING CENTERS (PHTC) PROGRAM	93.411	4 D76 HP20788-01-02		27,351
				\$27,351
Health Resources & Services Admin				
ARRA-IMPLEMENTATION OF THE PECARN TRAUMATIC BRAIN INJURY PREDICTION RULES USING COMPUTERIZED CLINICAL DECISION SUPPORT: AN IN	93.418	1 S02 MC19289-01-00		1,251,013
				\$1,251,013
Affordable Care Act (ACA) Public Health Training Centers Prgrm, Resources Dvlpmnt & Academic Support to the Public Health Trng Ctr				
AFFORDABLE CARE ACT (ACA) PUBLIC HEALTH TRAINING CENTERS	93.516	1 UB6 HP22830-01-00		380,153
				\$380,153
Social Services Research and Demonstration				
CHILD CARE AND EARLY EDUCATION RESEARCH CONNECTIONS	93.647	90YE0104/04		927,378
CHILD CARE AND EARLY EDUCATION RESEARCH CONNECTIONS	93.647	90YE0104/03		454,573
				\$1,381,951
Trans-NIH Recovery Act Research Support				
ARRA-WASHINGTON HEIGHTS INITIATIVE COMMUNITY-BASED COMPARATIVE EFFECTIVENESS RESEARCH (WICER)	93.701	1 R01 HS019853-01 SC1		391,049
				\$391,049
Recovery Act Comparative Effectiveness Research - AHRQ				
ARRA-COMPARATIVE EFFECTIVENESS OF ENVIRONMENTAL INTERVENTION AND STANDARD CARE IN ABILITY TO REDUCE PHARMACOLOGIC THERAPY FOR	93.715	5 R01 HS019384-02		2,114,523
ARRA-WASHINGTON HEIGHTS INITIATIVE COMMUNITY-BASED COMPARATIVE EFFECTIVENESS RESEARCH (WICER)	93.715	1 R01 HS019853-01		1,908,673
ARRA-COMPARATIVE EFFECTIVENESS OF ENVIRONMENTAL INTERVENTION AND STANDARD CARE IN ABILITY TO REDUCE PHARMACOLOGIC THERAPY FOR	93.715	1 R01 HS019384-01 PED		561,908
ARRA-COMPARATIVE EFFECTIVENESS OF ENVIRONMENTAL INTERVENTION AND STANDARD CARE IN ABILITY TO REDUCE PHARMACOLOGIC THERAPY FOR	93.715	1 R01 HS019384-01 NYP		173,984
ARRA-WASHINGTON HEIGHTS INITIATIVE COMMUNITY-BASED COMPARATIVE EFFECTIVENESS RESEARCH (WICER)	93.715	1 R01 HS019853-01 SC2		144,124
ARRA-COMPARATIVE EFFECTIVENESS OF ENVIRONMENTAL INTERVENTION AND STANDARD CARE IN ABILITY TO REDUCE PHARMACOLOGIC THERAPY FOR	93.715	1 R01 HS019384-01 EHS		134,999
				\$5,038,211
ARRA - Health Information Technology Professionals in Health Care				
ARRA-COLUMBIA CURRICULUM DEVELOPMENT CENTER	93.721	1 U24 C000003-01		682,506
				\$682,506
Grants for Primary Care Training and Enhancement				
POSTDOCTORAL TRAINING IN GENERAL, PEDIATRIC AND PUBLIC HEALTH DENTISTRY AND DENTAL HYGIENE	93.884	1 D88HP20109-02-00		288,697
PREDOCTORAL TRAINING IN GENERAL, PEDIATRICS, AND PUBLIC HEALTH DENTISTRY AND DENTAL HYGIENE	93.884	5 D85HP20031-03-00		280,740
TRAINING DENTAL STUDENTS FOR COMMUNITY-BASED PRIMARY CARE ACROSS THE LIFESPAN	93.884	1 D85HP20031-01-00 SC1		44,145
POSTDOCTORAL TRAINING IN GENERAL, PEDIATRIC AND PUBLIC HEALTH DENTISTRY AND DENTAL HYGIENE	93.884	1 D88HP20109-02-00 SC1		35,664

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The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
				\$649,246
HIV Demonstration, Research, Public and Professional Education Projects				
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF				
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF	93.941	1 B04 U62/CCU223540-		453
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF	93.941	1 B04 U62/CCU223540- SC1		-204,354
				\$-203,901
Epidemiologic Research Studies of Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) Infection				
EVALUATION OF PHARMACY SYRINGE ACCESS LINKED TO HIV TESTING IN BLACK/HISPANIC IDU	93.943	3 U01 PS000698-05W1		105,223
PS07-003, MINORITY HIV/AIDS RESEARCH INITIATIVE (MARI)	93.943	3 U01 PS000700-04 S1		33,044
PS07-003, MINORITY HIV/AIDS RESEARCH INITIATIVE (MARI)	93.943	5 U01 PS000700-04		4,555
				\$142,822
Family Planning Service Delivery Improvement Research Grants				
FAMILY PLANNING SERVICE DELIVERY IMPROVEMENT RESEARCH	93.974	5 FPRPA006032-03-00		9,264
				\$9,264
Total Direct Award Programs:				\$16,122,298
Pass-through Awards				
Admin for Children & Families				
RHODE ISLAND FOSTER PARENTS ASSOCIATION	93.	RIFP CU11-2269	DHHS ACF	75,744
Agency for Healthcare Research & Quality				
BLUE CROSS, BLUE SHIELD OF GREATER NEW YORK	93.	BCBSA CU11-3517	AHRQ	63,473
RUTGERS UNIVERSITY	93.	RUTGER 4359	HHS29032002T	32,810
Center for Disease Control				
SYSTEMS RESEARCH AND APPLICATIONS CORPORATION (SRA)	93.	SRAC S928000011	CDC #200-2004-10182	50,817
TEMPLE UNIVERSITY	93.	TEMPLE 400648	CDC	14,406
Health Resources & Services Admin				
PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.	NYPH CU12-1229	H97HA08483	30,301
ALTARUM INSTITUTE	93.	ALTARUM CU08-8678	HHS250200646028I	22,776
Misc HSS Funding				
ARIZONA STATE UNIVERSITY	93.	ASU 10-378	HHSO100201000008C	472,982
NORTHROP GRUMMAN CORPORATION	93.	NGC 8140000646	BARDA HHSO100201000048C	409,937
Other DHHS (Non-NIH)				
NORTHROP GRUMMAN CORPORATION	93.	NGC 8140000583	HHSO100201000002C	607,019
NEW YORK BLOOD CENTER	93.	NYBC 33210707	*NIH	105,244
MONTEFIORE MEDICAL CENTER	93.	MMC CU09-4453	HHSN268200700015C	5,791
NATIONAL ACADEMIES	93.	NAS IOM-2000000821	HHSP233200800007T	2,756
URBAN INSTITUTE	93.	URBAN 08350-006-00-C	HHSP23320095654WC	200
Substance Abuse & MHS Admin				
AMERICAN PSYCHIATRIC ASSOCIATION	93.	APA CU10-2390	SAMHSA	980
				\$1,895,236
Civil Rights and Privacy Rule Compliance Activities				
BOWLING GREEN STATE UNIVERSITY	93.001	10450045 CUNY	5 U01 AE000001-04	19,770
				\$19,770
Food and Drug Administration Research				
SEATTLE CHILDREN'S RESEARCH INSTITUTE	93.103	SCRI 10169SUB	R01 FD003526-03	3,840

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				\$3,840
Area Health Education Centers Point of Service Maintenance and Enhancement Awards				
PUBLIC HEALTH SOLUTIONS	93.107	PUBHS 07-CU-01	H12 HA07835	26,189
PUBLIC HEALTH SOLUTIONS	93.107	PUBHS 07-CU-01	H12 HA07834	15,507
				\$41,696
Maternal and Child Health Federal Consolidated Programs				
MASSACHUSETTS GENERAL HOSPITAL	93.110	MGH 220554	6 UA3MC110564-04-02	63,428
MASSACHUSETTS GENERAL HOSPITAL	93.110	MGH CU11-1667	5 UA3MC11054-03-00	31,139
MASSACHUSETTS GENERAL HOSPITAL	93.110	MGH CU09-1178	UA3MC11054	-468
				\$94,099
Project Grants and Cooperative Agreements for Tuberculosis Control Programs				
UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY	93.116	UMDNJ CU00-0713	CDC CU00-0713	70,829
				\$70,829
Health Program for Toxic Substances and Disease Registry				
NEW YORK STATE DEPARTMENT OF HEALTH	93.161	SDH C021002	HRSA C-021002	110,330
NEW YORK STATE DEPARTMENT OF HEALTH	93.161	SDH C021002	HRSA C-021002	71,633
NEW YORK STATE DEPARTMENT OF HEALTH	93.161	SDH C-021002	HRSA C-021002	-966
				\$180,997
Research on Healthcare Costs, Quality and Outcomes				
NATIONAL COMMITTEE FOR QUALITY ASSURANCE	93.226	NCINQ-04	1 U18 HS020503	105,989
MOUNT SINAI SCHOOL OF MEDICINE	93.226	MSSM 0254-5682-4609	5 R01 HS019670-02	61,435
UNIVERSITY OF CALIFORNIA, DAVIS	93.226	UCD CU10-1003	R01 JS019712-01	33,789
RUTGERS UNIVERSITY	93.226	RUTGER 4630	U19 HS021112-01	32,531
MOUNT SINAI SCHOOL OF MEDICINE	93.226	MSSM 0254-5681-4609	1 R01 HS019670-01	194
RUTGERS UNIVERSITY	93.226	RUTGER 00003650	1 U18 HS017918-01	-63
				\$233,875
Substance Abuse and Mental Health Services_Projects of Regional and National Significance				
AMERICAN PSYCHIATRIC ASSOCIATION	93.243	APA CU10-2191	SAMHSA	3,334
				\$3,334
The Affordable Care Act: Centers for Disease Control and Prevention_Investigations and Technical Assistance				
HEALTH RESEARCH INCORPORATED	93.283	SHRI 3476-04	5 U58 DP00078303	275,296
HEALTH RESEARCH INCORPORATED	93.283	SHRI 3476-03	5 U58 DP00078303	128,475
ASSOCIATION FOR PREVENTION TEACHING AND RESEARCH	93.283	APTAR CU08-9263	5 U50CD300860-22W1	54,367
				\$458,138
Teenage Pregnancy Prevention Program				
ENGENDERHEALTH	93.297	ENGENDER PSA-655-01	5 TP2AH000001-02-00	154,433
ENGENDERHEALTH	93.297	ENGENDER TPP-001-01	1 TP2 AH000001-01-00	101,605
UNIVERSITY OF COLORADO	93.297	UCOL Y11-355.001	1 TP2AH0003-01-00	31,326
				\$287,364
PPHF 2012 National Public Health Improvement Initiative				
FLORIDA STATE UNIVERSITY	93.507	FSU R01529	FDOH A5530C	25,548
				\$25,548
Child Support Enforcement Research				

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MARYLAND DEPARTMENT OF HUMAN RESOURCES	93.564	MDHR OGM/ETE 10-001	HHS209ACFOCFD0093	53,787
				\$53,787
Recovery Act Comparative Effectiveness Research - AHRQ				
ARRA -RUTGERS UNIVERSITY	93.715	RUTGRS 4207	R18 HS019937-01	175,125
				\$175,125
ARRA - Prevention and Wellness Communities Putting Prevention to Work Funding Opportunities Announcement (FOA)				
ARRA -FUND FOR PUBLIC HEALTH IN NEW YORK	93.724	6101COLUMBIA001	3U58DP002418-01S1	6,706
				\$6,706
Microbiology and Infectious Diseases Research				
AMERICA/ES HEALTH INSURANCE PLANS	93.856	AAHP 200-2002-00732	CDC 200-2002-00732	304,202
AMERICA/ES HEALTH INSURANCE PLANS	93.856	AAHP 200-2002-00732 SC2	CDC 200-2002-00732	228,919
AMERICA/ES HEALTH INSURANCE PLANS	93.856	AAHP 200-2002-00732	CDC 200-2002-00732	137,838
AMERICA/ES HEALTH INSURANCE PLANS	93.856	AAHP 200-2002-00732 SC1	CDC 200-2002-00732	81,524
AMERICA/ES HEALTH INSURANCE PLANS	93.856	AAHP 200-2002-00732 SC2	CDC 200-2002-00732	52,622
				\$805,105
Child Health and Human Development Extramural Research				
CHILDRENS HOSPITAL LOS ANGELES	93.865	CHLA 000222A4	5 R01 HD040777-10	55,039
				\$55,039
National Bioterrorism Hospital Preparedness Program				
FUND FOR PUBLIC HEALTH IN NEW YORK	93.889	FPHNY 7710TRUCO-001	5U3REP090251-03-00	62,243
				\$62,243
Family and Community Violence Prevention Program				
HETRICK-MARTIN INSTITUTE	93.910	HMI CU09-3535	DHHS CU09-3535	61,826
HETRICK-MARTIN INSTITUTE	93.910	HMI CU09-3535	DHHS CU09-3535	5,541
				\$67,367
PPHF-2012 Geriatric Education Centers				
MOUNT SINAI SCHOOL OF MEDICINE	93.969	MSSM CU10-2186	5 UB4 HP19194-02-00	55,985
				\$55,985
Total Pass-through Programs:				\$4,596,083
Total: Department of Health & Human Services (Excluding NIH)				\$20,718,381

National Institute of Health
Direct Awards

Nat. Inst. of Child Health & Human Dvlpt.

THE NATIONAL STANDARD FOR NORMAL FETAL GROWTH	93.	HHSN275200800013C	1,184,842
PARALLEL GROUP STUDY TO EVALUATE... PATCHES CONTAINING DIFFERENT DOSES OF LEVONORGRDYTRL(LNG) PATCH STUDY	93.	HHSN275201000019U -T	218,082
CONTRACEPTIVE EFFICACY EVALUATION OF THE PATH FEMALE CONDOM	93.	HHSN2752009000099U	149,511
THE NATIONAL STANDARD FOR NORMAL FETAL GROWTH	93.	HHSN275200800013C SC1	142,821
NESTORONE/ESTRADIOL-RELEASING VAGINAL RING STUDY	93.	NICHD HHSN2752011000	78,558
CORE FUNCTION ACTIVITIES TASK ORDER	93.	NICHD CU11-1362	42,600
CENTRAL LAB FOR THE NESTORONE/ESTRADIOL-RELEASING VAGINAL RING FOR FEMALE CONTRACEPTION	93.	NICHD HHSN2752011000 SC1	26,603
CLINICAL EVALUATION OF LEVONORGESTREL BUTANOATE FOR FEMALE CONTRACEPTION	93.	NICHD CU11-1363	14,312

National Heart, Lung, & Blood Institute

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MULTI-ETHNIC STUDY OF ATHEROSCLEROSIS (MESA)- FIELD CENTER	93.	N01-HC-95161		1,399,779
SUBPOPULATIONS AND INTERMEDIATE OUTCOME MEASURE IN COPD STUDY (SPIROMICS: CLINICAL CENTER)	93.	HHSN268200900017C		395,643
SUBPOPULATIONS AND INTERMEDIATE OUTCOME MEASUER IN COPD STUDY (SPIROMICS: CLINICAL CENTER)	93.	HHSN268200900017C		345,386
National Institute on Drug Abuse				
NIMH/NIH PROFESSIONAL SERVICES CONTRACT: PATTERNS OF PSYCHOTROPIC UTILIZATION IN THE UNITED STATES, 2004-2008	93.	HHSN 271201000725P		95,687
PILOT PROJECT IN PATIENTS PRE AND POSTOP AORTIC VALVE SURGERY	93.	HHSN271201100704P		35,408
National Library of Medicine				
ARRA-CAUSAL INFERENCE ON NARRATIVE AND STRUCTURED TEMPORAL DATA TO AUGMENT DISCOVERY AND CARE	93.	HHSN276201000024C		227,611
Other NIH				
HIV AND HEALTH SYSTEMS: LEVERAGING HIV SCALE TO STRENGTHEN CHRONIC DISEASES SERVICES NIH CONFERENCE	93.	OAR CU11-1358		70,627
JAIDS SUPPLEMENT	93.	OAR CU10-2978		2,806
				\$4,430,276
Environmental Health				
MOLECULAR AND BEHAVIORAL EFFECTS OF LOW LEVEL MN EXPOSURE	93.113	5 R01 ES010975-09		792,451
MULTICENTER ALS COHORT STUDY OF OXIDATIVE STRESS AND DISEASE PROGRESSION	93.113	5 R01 ES016348-04		737,338
HEALTH EFFECTS OF EARLY-LIFE EXPOSURE TO URBAN POLLUTANTS IN MINORITY CHILDREN	93.113	5 R01 ES008977-14		663,721
NMDA RECEPTOR FUNCTION IN LEAD NEUROTOXICITY	93.113	5 R01 ES006189-19		627,997
EARLY-LIFE PHTHALATE EXPOSURE, THYROID FUNCTION AND CHILD COGNITIVE DEVELOPMENT	93.113	5 R01 ES013543-07		567,492
ASSESS THE EFFECTS OF PRE- AND POSTNATAL EXPOSURE TO THE ORGANOPHOSPHORUS	93.113	5 R01 ES015579-04		566,544
BIOLOGICAL MARKERS OF AFLATOXIN EXPOSURE AND METHYLATION	93.113	5 R01 ES005116-21		519,572
DEVELOPMENTAL EFFECTS OF EARLY-LIFE EXPOSURE TO AIRBORNE PAHS	93.113	5 R01 ES015282-04		506,543
BIOMARKERS FOR ARSENIC TOXICITY: GENETICS, EPIGENETICS AND FOLATE	93.113	5 R01 ES017875-03		458,225
PHTHALATE EXPOSURE AND INNER CITY PEDIATRIC ASTHMA	93.113	5 R01 ES014393-05		453,906
INTERVENING TO IMPROVE BIRTH WEIGHT AND INFANT RESPIRATORY HEALTH IN RURAL GHANA	93.113	5 R01 ES019547-02		420,616
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S1		413,316
HEALTH EFFECTS OF EARLY-LIFE EXPOSURE TO URBAN POLLUTANTS IN MINORITY CHILDREN	93.113	5 R01 ES008977-14 SC1		412,174
NMDA RECEPTOR FUNCTION IN LEAD NEUROTOXICITY - VICTER	93.113	5 R01 ES006189-19 S1		388,090
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S3		345,213
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S4		303,145
INTEGRATIVE HEALTH SCIENCES FACILITY CORE	93.113	5 P30 ES009089-13 SC2		297,422
PRENATAL PAH EXPOSURE AND GENOME-WIDE METHYLATION IN A COHORT OF SIBLING-PAIRS	93.113	5 R00 ES017051-04		247,101
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S2		230,633
CENTER FOR ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN	93.113	5 P30 ES009089-13		221,021
PERIPHERAL BDZ RECEPTOR: BIOMARKER OF NEUROTOXICITY	93.113	5 R01 ES007062-14		208,080
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05		186,086
VALIDATING PARTICULATE MATTER MONITORS FOR MULTIPLE PARAMETERS	93.113	1R01ES020424-01		170,945
PROJECT 2 - NEURODEVELOPMENT	93.113	5 P01 ES009600-13 PJ2		169,013
TRACE METALS FACILITY CORE	93.113	5 P30 ES009089-13 SC1		162,283

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HIGH THROUGHPUT TECHNOLOGY FOR ASSESSING GLOBAL DSB REPAIR CAPACITY	93.113	5 R21 ES019494-02		150,298
EXPOSURE ASSESSMENT FACILITY CORE/MSPH	93.113	5 P30 ES009089-13 SC3		136,131
SMART MINIATURIZED PERSONAL MONITORS FOR BLACK CARBON AND MULTIPLE AIR POLLUTANTS	93.113	5 U01 ES016110-04		135,466
PROJECT 1 - OBESITY	93.113	5 P01 ES009600-13 PJ1		132,542
INTERDISCIPLINARY TRAINING IN ENVIRONMENTAL HEALTH	93.113	5 T32 ES007322-10		132,087
RISK FACTORS ACCOUNTING FOR NEIGHBORHOOD DIFFERENCES IN ASTHMA PREVALENCE	93.113	5 R01 ES014400-04		120,299
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S7		119,517
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S6		110,177
COMMUNITY OUTREACH & EDUCATION CORE	93.113	5 P30 ES009089-13 SC6		106,007
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S5		105,249
EXPOSURE ASSESSMENT FACILITY CORE/LAMONT	93.113	5 P30 ES009089-13 SC4		99,505
BLACK CARBON EXPOSURE, DNA METHYLATION, AIRWAY INFLAMMATION IN PEDIATRIC ASTHMA	93.113	2 R01 ES013163-06		98,827
PRENATAL EXPOSURE TO A MIXTURE OF EDCS, MATERNAL THYROID FUNCTION AND CHILD NEURODEVELOPMENT	93.113	1 K99 ES020364-01		97,463
ROLE OF ULTRAVIOLET RADIATION IN MERKEL CELL CARCINOGENESIS	93.113	5 R21 ES020060-02		93,386
PROJECT 3 - MECHANISTIC PRIMARY SCOPE - PSYCH	93.113	5 P01 ES009600-13 PS3		87,689
COLUMBIA CENTER FOR CHILDREN'S ENVIRONMENTAL HEALTH - ADMIN CORE	93.113	5 P01 ES009600-13		80,127
SMART MINIATURIZED PERSONAL MONITORS FOR BLACK CARBON AND MULTIPLE AIR POLLUTANTS	93.113	3 U01 ES016110-04S1 CHI		78,246
DSM CORE	93.113	5 P01 ES009600-13 DSM		72,131
CAREER DVLPMNT/JR. FACULTY SUPPORT	93.113	5 P30 ES009089-13 CD2		70,844
COTC CORE SCOPE - CCCEH	93.113	5 P01 ES009600-13 COT		66,740
CENTER FOR ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN	93.113	5 P30 ES009089-14		63,084
INTERRELATIONSHIPS AMONG NUTRIENTS INVOLVED IN ONE-CARBON METABOLISM IN BANGLADESHI ADULTS: INFLUENCES ON METHYLATION OF	93.113	5 K99 ES018890-02		61,897
ADMIN CORE/DIRECTOR'S FUND	93.113	5 P30 ES009089-13 S1		52,613
INTEGRATIVE HEALTH SCIENCES FACILITY CORE	93.113	5 P30 ES009089-14 SC2		51,691
PROJECT 3 - MECHANISTIC PRIMARY SCOPE - MED	93.113	5 P01 ES009600-13 M3		43,626
TRACE METALS FACILITY CORE	93.113	5 P30 ES009089-14 SC1		42,323
CENTER FOR ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN - PILOT PRJT	93.113	5 P30 ES009089-13 LP		39,972
ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN - PILOT PRJT	93.113	5 P30 ES009089-13 JS		39,562
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-05 S8		38,246
PILOT PROJECT	93.113	5 P30 ES009089-13 BY		37,902
ENDOCRINE DISRUPTION IN PREGNANT WOMEN: THYROID DISRUPTION AND INFANT DEVELOPMENT	93.113	3 R21 ES016610-02S1		37,582
CAREER DEVELOPMENT	93.113	5 P30 ES009089-13 S10		35,446
CAREER DVLPMNT/JR. FACULTY SUPPORT	93.113	5 P30 ES009089-13 CD1		33,685
NUTRIENTS INVOLVED IN 1- CARBON METABOLISM AND THE METHYLATION OF ARSENIC AND DNA	93.113	4 R00 ES018890-03		31,895
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-04 S2		31,725
PRESYNAPTIC MECHANISMS OF LEAD NEUROTOXICITY	93.113	1 R01 ES020465-01A1		31,168

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HEALTH EFFECTS OF EARLY-LIFE EXPOSURE TO URBAN POLLUTANTS IN MINORITY CHILDREN	93.113	5 R01 ES008977-14 SC2		22,615
PROJECT 3 - MECHANISTIC PRIMARY SCOPE - MED	93.113	5 P01 ES009600-12 M3		21,689
CENTER FOR ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN - PILOT PRJT	93.113	5 P30 ES009089-13 LL		19,315
EXPOSURE ASSESSMENT FACILITY CORE/LAMONT	93.113	5 P30 ES009089-14 SC4		16,138
PROJECT 1 - OBESITY	93.113	5 P01 ES009600-12 PJ1		15,925
VALIDATING PARTICULATE MATTER MONITORS FOR MULTIPLE PARAMETERS	93.113	1R01ES020424-01 MSP		14,583
BIOMARKERS FOR ARSENIC TOXICITY: GENETICS, EPIGENETICS AND FOLATE	93.113	5 R01 ES017875-03 S1		12,118
PROJECT 2 - NEURODEVELOPMENT	93.113	5 P01 ES009600-12 PJ2		11,452
CAREER DEVELOPMENT	93.113	5 P30 ES009089-14 S10		10,423
MECHANISM-BASED ABRIGATION OF BCC PATHOGENESIS	93.113	1 R01 ES020344-01A1		10,265
ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN - PILOT PRJT	93.113	5 P30 ES009089-13 AK		9,632
VALIDATING PARTICULATE MATTER MONITORS FOR MULTIPLE PARAMETERS	93.113	1R01ES020424-01 CUM		9,064
PROJECT 3 - MECHANISTIC PRIMARY SCOPE - CCCEH	93.113	5 P01 ES009600-13 PJ3		8,901
EXPOSURE ASSESSMENT FACILITY CORE/MSPH	93.113	5 P30 ES009089-14 SC3		8,477
COMMUNITY OUTREACH & EDUCATION CORE	93.113	5 P30 ES009089-14 SC6		6,990
SMART MINIATURIZED PERSONAL MONITORS FOR BLACK CARBON AND MULTIPLE AIR POLLUTANTS	93.113	3 U01 ES016110-04S1 MED		5,746
MULTICENTER ALS COHORT STUDY OF OXIDATIVE STRESS AND DISEASE PROGRESSION	93.113	5 R01 ES016348-03S1 SC2		5,608
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-04 S3		4,854
BLACK CARBON EXPOSURE, DNA METHYLATION, AIRWAY INFLAMMATION IN PEDIATRIC ASTHMA	93.113	2 R01 ES013163-06 SC1		3,979
COTC CORE SCOPE - CCCEH	93.113	5 P01 ES009600-12 COT		3,876
ENV HLTH IN N. MANH - PILOT PRJT	93.113	5 P30 ES009089-14 AK		3,261
COLUMBIA CENTER FOR CHILDREN'S ENVIRONMENTAL HEALTH - ADMIN CORE	93.113	5 P01 ES009600-12		3,138
ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN - PILOT PRJT	93.113	5 P30 ES009089-13 ST		2,995
SMART MINIATURIZED PERSONAL MONITORS FOR BLACK CARBON AND MULTIPLE AIR POLLUTANTS	93.113	3 U01 ES016110-04S1 SPH		2,972
CNTR FOR ENV HLTH IN N. MANH - PILOT PRJT	93.113	5 P30 ES009089-14 JEP		2,936
RAD9-BASED MOUSE MODEL OF PROSTATE CARCINOGENESIS	93.113	5 R21 ES017557-02		2,582
DSM CORE	93.113	5 P01 ES009600-12 DSM		2,489
CENTER FOR ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN - PILOT PRJT	93.113	5 P30 ES009089-13 JEP		1,992
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-04 S4		1,985
SMART MINIATURIZED PERSONAL MONITORS FOR BLACK CARBON AND MULTIPLE AIR POLLUTANTS	93.113	5 U01 ES016110-04 SPH		1,519
SMART MINIATURIZED PERSONAL MONITORS FOR BLACK CARBON AND MULTIPLE AIR POLLUTANTS	93.113	5 U01 ES016110-04 CIE		1,333
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-04 S6		927
MULTICENTER ALS COHORT STUDY OF OXIDATIVE STRESS AND DISEASE PROGRESSION	93.113	5 R01 ES016348-04		842
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-04		296
CAREER DVLPMNT/JR. FAC SUPPORT	93.113	5 P30 ES009089-14 CD1		242
THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.113	5 P50 ES015905-04 S7		100

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PROJECT 3 - MECHANISTIC PRIMARY SCOPE - PSYCH	93.113	5 P01 ES009600-12 PS3		1
RAPID ALLERGENIC PARTICLE IDENTIFICATION (RAPID)	93.113	3 U01 ES016074-03S2 SC3		-3
CENTER FOR ENVIRONMENTAL HEALTH IN NORTHERN MANHATTAN	93.113	5 P30 ES009089-12		-36
RAPID ALLERGENIC PARTICLE IDENTIFICATION (RAPID)	93.113	5 U01 ES016074-03		-5,431
				\$13,079,865
Nat. Inst. of Environmental Health Sciences				
THE IMPACT OF ENVIRONMENTAL CONDITIONS ON THE PRODUCTIVITY OF AGRICULTURAL WORKERS	93.115	5 R21 ES019670-02		228,340
PRENATAL ORGANOCHLORINES, THYROID AND CHILDHOOD GROWTH AND DEVELOPMENT	93.115	5 R01 ES012460-03		-2
				\$228,338
Oral Diseases and Disorders Research				
ENGINEERING OF VASCULARIZED BONE	93.121	5 R01 DE018248-04		499,137
ORAL TRANSMISSION OF HIV THROUGH BREASTFEEDING	93.121	5 R01 DE021238-03		458,647
TIGHT ADHERENCE GENES OF A PERIODONTAL PATHOGEN	93.121	5 R01 DE014713-09		455,604
ORAL INFECTIONS, CAROTID ATHEROSCLEROSIS AND STROKE	93.121	5 R01 DE013094-10		404,562
ESTROGEN RECEPTOR BETA REGULATION OF MANDIBULAR CONDYLAR GROWTH	93.121	7 R01 DE020097-04		312,088
PERIODONTAL INFECTIONS AND TYPE 2 DIABETES MELLITUS RISK	93.121	5 R00 DE018739-04		238,786
DEVELOPING A DECISION SUPPORT SYSTEM TO PROMOTE TOBACCO COUNSELING BY DENTISTS	93.121	1 R34 DE022293-01		155,714
BRN3 TRANSCRIPTION FACTOR FAMILY IN OSTEOCLASTOGENESIS	93.121	5 K08 DE018968-03		135,805
ORAL INFECTIONS AND VASCULAR DISEASE EPIDEMIOLOGY STUDY (INVEST)	93.121	2 R01 DE013094-11		86,936
MICRORNA EXPRESSION IN GINGIVAL TISSUES IN PERIODONTAL HEALTH AND DISEASE	93.121	1 R21DE 021820-01A1		57,759
CRANIOFACIAL TISSUE ENGINEERING	93.121	5 R01 DE016525-05R1		3,734
				\$2,808,772
NIEHS Superfund Hazardous Substances_Basic Research and Education				
PJ2 - HEALTH EFFECTS OF AS COHORT STUDY	93.143	5 P42 ES010349-10 S7		463,069
PJ3 - CONSEQUENCES OF AS & MN EXPOSURE IN CHILDHOOD INTELLIGENCE	93.143	5 P42 ES010349-10 S8		391,446
CORE B - TRACE METALS LABORATORY CORE	93.143	5 P42 ES010349-10 S3		369,054
PJ 7 - MITIGATION OF AS MOBILIZATION IN GROUND WATER	93.143	5 P42 ES010349-10 S17		256,478
PJ1- GENOTOXIC & CELL SIGNALING PATHWAYS IN MAMMALIAN CELLS	93.143	5 P42 ES010349-10 S6		198,452
CORE C - BIOCHEMISTRY CORE	93.143	5 P42 ES010349-10 S14		177,013
PJ5 - MOBILIZATION OF NATURAL AS & MN IN GROUND WATER	93.143	5 P42 ES010349-10 S11		173,624
CORE D - HYDROGEOLOGY CORE	93.143	5 P42 ES010349-10 S15		123,836
PJ4-1 CARBON META, OXIDATIVE STRESS & TOXICITY IN BANGLADESH	93.143	5 P42 ES010349-10 S5		116,901
PJ6 - MOBILIZATION OF ANTHROPOGENIC AS IN GROUND WATER	93.143	5 P42 ES010349-10 S13		110,073
HEALTH EFFECTS AND GEOCHEMISTRY OF ARSENIC AND MANGANESE	93.143	5 P42 ES010349-10		88,417
CORE A - DATA MANAGEMENT CORE	93.143	5 P42 ES010349-10 S2		85,108
CORE C: BIOGEOCHEMISTRY	93.143	2 P42 ES010349-11 CCV		83,877
PROJECT NO 2	93.143	2 P42 ES010349-11 PJ2		82,044
RESEARCH TRANSLATION CORE - LDEO	93.143	5 P42 ES010349-10 S12		68,322

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HEALTH EFFECTS AND GEOCHEMISTRY OF ARSENIC AND MANGANESE - JG	93.143	5 P42 ES010349-10 JG		68,186
PROJECT NO 6	93.143	2 P42 ES010349-11 PJ6		57,774
RESEARCH TRANSLATION CORE - CIESIN	93.143	5 P42 ES010349-10 S1		55,797
PROJECT NO 4	93.143	2 P42 ES010349-11 PJ4		55,208
PJ3 - CONSEQUENCES OF AS & MN EXPO IN CHILDHOOD INTEL/BANGDSH	93.143	5 P42 ES010349-10 S9		51,564
THAILAND/VIETNAM SUPPLEMENT - SUPERFUND	93.143	5 P42 ES010349-10 THV		41,115
CORE B: TRACE METALS FACILITY	93.143	2 P42 ES010349-11 CBG		40,204
PROJECT NO 3	93.143	2 P42 ES010349-11 PJ3		31,231
CORE D: HYDROGEOLOGY	93.143	2 P42 ES010349-11 CDS		28,137
HEALTH EFFECTS AND GEOCHEMISTRY OF ARSENIC AND MANGANESE - ADMINISTRATIVE CORE	93.143	2 P42 ES010349-11		24,803
CORE A: DATA MANAGEMENT	93.143	2 P42 ES010349-11 CAL		23,826
RESEARCH TRANSLATION - GOLDEN	93.143	2 P42 ES010349-11 RTG		15,508
PJ 7 - MITIGATION OF AS MOBILIZATION IN GROUND WATER SUPP	93.143	3 P42 ES010349-10 VG5		15,052
RESEARCH TRANSLATION - CHILLRUD	93.143	2 P42 ES010349-11 RTC		11,269
CORE E - TRAINING CORE	93.143	5 P42 ES010349-10 S4		9,625
INNOVATIVE METHODOLOGIES & MAPPING TO ASSESS VULNERABLE POPULATIONS NEAR SF SITES	93.143	5 P42 ES010349-10 GOL		5,479
PROJECT NO 5	93.143	2 P42 ES010349-11 PJ5		4,729
PJ4 - 1 CARBON METABSM, OXIDATIVE STRESS & AS TOXICITY/BANGDSH	93.143	5 P42 ES010349-10 S16		3,297
PROJECT NO 2 - BANGLADESH	93.143	2 P42 ES010349-11 BA2		3,228
HEALTH EFFECTS AND GEOCHEMISTRY OF ARSENIC AND MANGANESE - PRJT 5 SUPP	93.143	5 P42 ES010349-10 YZ		168
HEALTH EFFECTS AND GEOCHEMISTRY OF ARSENIC AND MANGANESE	93.143	5 P42 ES010349-08		-3
PJ 7 - MITIGATION OF AS MOBILIZATION IN GROUND WATER	93.143	5 P42 ES010349-09 S17		-2,184
				\$3,331,727

Human Genome Research

INFERRING GENE REGULATORY CIRCUITRY FROM FUNCTIONAL GENOMICS DATA	93.172	5 R01 HG003008-08		347,274
IMPACT OF RETURN OF INCIDENTAL GENETIC TEST RESULTS TO RESEARCH PARTICIPANTS IN THE GENOMIC ERA	93.172	1 R01 HG006600-01		303,588
AN INTEGRATED FRAMEWORK OF EPIGENOMICS AND HUMAN DISEASE	93.172	5 K22 HG002915-05		200,606
CENTER FOR ELSI RESEARCH ON PSYCHIATRIC, NEUROLOGIC, AND BEHAVIORAL GENETICS	93.172	5 P20 HG005535-03		164,292
LOW-COST ACTIVE CMOS BIOCHIPS FOR WHOLE GENOME ANALYSIS	93.172	5 R33 HG003089-05 SHE		145,933
PREDICTIVE LEARNING OF TRANSCRIPTIONAL NETWORKS	93.172	7 R01 HG003219-08		121,657
LOW-COST ACTIVE CMOS BIOCHIPS FOR WHOLE GENOME ANALYSIS	93.172	5 R33 HG003089-05		76,007
STATISTICAL METHODS TO ASSESS THE ROLE OF RARE VARIANTS IN COMPLEX TRAITS	93.172	5 R03 HG005908-02		66,932
CHALLENGES OF INFORMED CONSENT IN RETURN OF DATA FROM GENOMIC RESEARCH	93.172	1 R21 HG006596-01		33,900
SINGLE MOLECULE DNA SEQUENCING BY FLUORESCENT NUCLEOTIDE REVERSIBLE TERMINATORS	93.172	5 R01 HG005109-03		-935,706
				\$524,483

Research Related to Deafness and Communication Disorders

OBSERVING AUDITORY MECHANICS WITH PRESSURE AND MOTION MEASUREMENTS	93.173	5 R01DC003130-18		342,980
NEURAL CODING AND PERCEPTION OF LEARNED VOCALIZATIONS	93.173	5 R01 DC009810-03		326,784

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INTRACOCHELEAR MEASURES OF ACTIVE COCHLEAR MECHANICS	93.173	5 R21 DC010416-02		129,067
EXPLORING OTOACOUSTIC EMISSIONS WITH INTRACOCHELEAR PRESSURE AND MOTION MEASUREMENTS	93.173	1 R01 DC011506-01A1		51,841
UNTETHERING ELECTROPHYSIOLOGY IN VIVO: AN OPTICAL NANOSCALE SEMICONDUCTOR ARRAY FOR NEURAL SENSING AND RECORDING	93.173	1R21DC012440-01		46,732
CRCHNS: INPUT/OUTPUT CHARACTERIZATION OF THE ANTENNAL LOBE OF THE DROSOPHILA	93.173	5 R01 DC008701-05		43,884
DISCRIMINATION OF COMMUNICATION SOUNDS IN AUDITORY SCENES	93.173	5 F31 DC010301-03		23,134
DISCRIMINATION OF COMMUNICATION SOUNDS IN AUDITORY SCENES	93.173	5 F31 DC010301-02		19,493
OBSERVING AUDITORY MECHANICS WITH PRESSURE MEASUREMENTS	93.173	2 R01DC003130-17A1 HUG		8,178
ADULT NEUROGENESIS IN THE MAMMALIAN OLFACTORY BULB	93.173	5 R01 DC009239-05		-4,793
				\$987,300
Research and Training in Complementary and Alternative Medicine				
ACUPUNCTURE OF ARMOBASE INHIBITOR RELATED ARTHRALGIAS IN BREAST CANCER PATIENTS	93.213	1 R01 AT006376		93,712
ACUPUNCTURE/MOXIBUSTIONS FOR PERIPHERAL IN PTS WITH HIV	93.213	5 R21 AT0030902-03		4,274
CHOLINE TREATMENT FOR INFLAMMATORY PAIN	93.213	5 R21 AT004708-03		-166
				\$97,820
National Center on Sleep Disorders Research				
REDUCING SLEEP DISPARITIES IN URBAN, MINORITY SCHOOL-AGED CHILDREN	93.233	5 R01 HL092856-03		809,729
VASCULAR ENDOTHELIAL ACTIVATION IN SLEEP	93.233	5 R01 HL106041-02		319,501
				\$1,129,230
Mental Health Research Grants				
BIOLOGY OF LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.242	5 P50 HL077096-04 R5 CL1		351,519
Mental Health Research Grants				
2/2 A COMPARISON OF LONG-ACTING INJECTABLE MEDICATIONS FOR SCHIZOPHRENIA-ACCLAIMS - SUB-SITES	93.242	5 R01 MH081107-05 SC SC2		2,324,929
2/2 A COMPARISON OF LONG-ACTING INJECTABLE MEDICATIONS FOR SCHIZOPHRENIA-ACCLAIMS	93.242	5 R01 MH081107-05		1,755,727
MAPPING GENES FOR SCHIZOPHRENIA IN A FOUNDER POPULATION	93.242	5 R01 MH061399-10		1,517,479
THE CONTE CENTER FOR SCHIZOPHRENIA RESEARCH	93.242	7 P50MH086385-03		1,126,054
MENTAL HEALTH AND SERVICE UTILIZATION AMONG RESERVE AND NATIONAL GUARD FORCES	93.242	5 R01 MH082729-05		1,107,009
BIOSIGNATURES OF TREATMENT REMISSION IN MAJOR DEPRESSION	93.242	5 U01 MH092250-02		1,098,301
HCN1 CHANNELS IN HIPPOCAMPAL FUNCTION AND SPATIAL MEMORY	93.242	5 R01 MH080745-05		594,103
NEUROBIOLOGY OF DEPRESSION AND ANTIDEPRESSANTS	93.242	5 R01 MH040695-20		583,909
MULTI-LEVEL DETERMINANTS OF LATE ART INITIATION IN SUB-SAHARAN AFRICA	93.242	5 R01 MH089831-03		546,462
THE EFFECTS OF PRENATAL STRESS & POOR NUTRITION ON BRAIN AND COGNITION	93.242	5 R01 MH093677-02		500,115
THERAPEUTIC POTENTIAL OF GLS1 INHIBITION FOR THE PHARMACOTHERAPY OF SCHIZOPHRENIA	93.242	5 R01 MH087758-03		472,980
MEDIUM SPINY NEURON EXCITABILITY AND MOTIVATION	93.242	5 R01 MH09367-02		456,539
MULTIMODAL NEUROIMAGING FOR MAPPING DECISION MAKING IN THE HUMAN BRAIN	93.242	5 R01 MH085092-04		454,956
A SCHOOL-BASED INTERVENTION TO REDUCE STIGMA AND PROMOTE MENTAL-HEALTH SERVICE USE	93.242	5 R01 MH095254-02		454,092
FUTURE SUICIDE ATTEMPT: PSYCHOBIOLOGICAL FEATURES	93.242	5 R01 MH048514-19		447,999
DESIGN OF MOLECULAR PROBES FOR OPTICAL IMAGING OF DOPAMINE NEUROTRANSMISSION	93.242	5R01MH086545-03R1		420,067
TRANSLATIONAL RESEARCH TRAINING IN CHILD PSYCHIATRY	93.242	5 T32 MH016434-32		405,739
5-HT1A RECEPTOR ANTI-APOPTOTIC TRANSDUCTION PATHWAYS IN SUICIDE	93.242	5 R01 MH079439-05		405,490

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HIV/STI RISK AMONG MIGRANT MARKET WORKERS IN KAZAKHTAN	93.242	5 R01 MH082684-03		384,709
NETWORK MODELS FOR TIMING AND SEQUENCE GENERATION	93.242	5 R01 MH093338-02		377,802
REGIONAL NETWORK FOR MENTAL HEALTH RESEARCH IN LATIN AMERICA	93.242	1 U19 MH095718-01		366,315
UNDERSTANDING DISCONTINUATION OF OUTPATIENT CARE AMONG HIV-POSITIVE INPATIENTS	93.242	5 R01 MH095849-02		363,177
CATEGORICAL DECISION-MAKING IN FRONTO-STRIATAL CIRCUITS	93.242	5 R01 MH059244-13		362,028
BIOLOGICAL PREDICTORS OF RESPONSE TO ANTIDEPRESSANTS	93.242	5 R01 MH074813-05		328,711
BEHAVIORAL SCIENCES RESEARCH IN HIV INFECTION	93.242	5 T32 MH019139-22		328,297
FUNCTIONAL ANALYSIS OF 22Q11 SCHIZ. SUSCEPTIBILITY GENES	93.242	5 R01 MH067068-10		328,175
FUNCTIONAL ANALYSIS OF 22Q11 SCHIZ. SUSCEPTIBILITY GENES	93.242	5 R01 MH067068-10 SC1		325,206
COMPLICATED GRIEF TREATMENT IN ELDERLY ADULTS	93.242	5 R01 MH070741-05		319,098
LITHIUM'S MOLECULAR MECHANISM OF ACTION AND THE PATHOLOGY OF BIPOLAR DISORDER	93.242	5 R01 MH090276-02		313,817
THE CROSS-NATIONAL EPIDEMIOLOGY OF TRAUMA EXPOSURE AND PTSD	93.242	5 R01 MH093612-02		313,755
NEURAL MECHANISMS OF INCREASED ANXIETY IN SEROTONIN 1A RECEPTOR-DEFICIENT MICE	93.242	5 R01 MH081968-05		310,205
INFERRING PHENOGENETIC MECHANISMS IN PSYCHIATRIC AND OTHER COMPLEX TRAITS	93.242	5 R01 MH084995-04		304,257
SCN NETWORKS AND EFFERENT SIGNALS	93.242	5 R01 MH075045-05		298,587
MECHANISMS MEDIATING LONG-TERM SYNAPTIC PLASTICITY	93.242	2 R01 MH060387-12		297,120
MINDBOGGLING SHAPE ANALYSIS AND IDENTIFICATION	93.242	5 R01 MH084029-03		296,857
THE ANTIDEPRESSANT ACTION OF KETAMINE: BRAIN CHEMISTRY AND SUSTAINING REMISSION	93.242	5 R01 MH093637-02		294,977
DEVELOPMENTAL NEUROSCIENCE AND BEHAVIOR	93.242	5 T32 MH018264-28 R1		282,237
POSTMORTEM NEUROCHEMICAL STUDIES IN SUICIDE	93.242	5 R01 MH040210-26		279,180
PRENATAL STRESS: THE EPIGENETIC BASIS OF MATERNAL AND PERINATAL EFFECTS	93.242	5 R01 MH092580-02		278,965
USING MULTIMEDIA AND DIGITAL TECHNOLOGIES IN THE DISSEMINATION OF AN HIV/STI PREVENTION INTERVENTION	93.242	5 R01 MH080659-05		278,852
PARENTAL REMISSION FROM DEPRESSION AND CHILD PSYCHOPATHOLOGY	93.242	5 R01 MH082255-03		268,746
COGNITIVE MECHANISMS OF SERIALY ORGANIZED BEHAVIOR	93.242	5 R01 MH081153-04		267,339
HIV/STI RISK AMONG MIGRANT MARKET WORKERS IN KAZAKHTAN	93.242	5 R01 MH082684-03 KAZ		265,682
ELUCIDATING THE EFFECT OF DISC1 DEFICIENCY ON NEURODEVELOPMENT AND COGNITION	93.242	5 R01 MH080234-04		260,777
BIOSIGNATURES OF TREATMENT REMISSION IN MAJOR DEPRESSION	93.242	3 U01 MH092250-02S2 SUP		252,363
ONLINE PARTNERING OF HETEROSEXUALS AND HIV RISK	93.242	5 R01 MH095325-02		242,018
NEUROPHYSIOLOGY UNDERLYING NEURAL REPRESENTATIONS OF VALUE	93.242	5 R01 MH082017-05		238,196
GENETIC ANALYSIS: PSYCHIATRIC AND OTHER COMPLEX DISEASES	93.242	5 T32 MH065213-10		207,187
DEVELOPMENT OF AGONIST PET TRACERS FOR QUANTIFYING 5HT2AR	93.242	5 R21 MH091470-02		207,124
MECHANISMS OF AXONAL PATHFINDING CONTROLLED BY NETRIN-1	93.242	5 R00 MH081058-05		200,290
BIOSIGNATURES OF TREATMENT REMISSION IN MAJOR DEPRESSION	93.242	5 U01 MH092250-02		187,061
APPROACH/AVOIDANCE ORIENTATIONS AND OPERATIONS	93.242	5R01MH039429-28		182,865
TRANSCRANIAL MAGNETIC STIMULATION FOR TREATMENT OF OBSESSIVE COMPULSIVE DISORDER	93.242	1 R21 MH091276-02		164,463
THE NEURAL BASES OF THE COGNITIVE CONTROL OF EMOTION	93.242	5 R01 MH076137-05		156,572

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1/4 OPTIMIZING TREATMENT FOR COMPLICATED GRIEF	93.242	5 R01 MH060783-08 SC1		154,136
ELUCIDATING ABERRANT DOPAMINE RELEASE IN SCHIZOPHRENIA	93.242	5 R21 MH090356-02		153,136
BUILDING TRANSLATIONAL RESEARCH IN OBSESSIVE-COMPULSIVE DISORDER	93.242	5 R24 MH080022-03		150,349
PSYCHIATRIC GENETICS AND FAMILY STUDIES: ROBUST METHODS	93.242	5 R01 MH048858-15		150,173
PRÉNATAL STRESS: THE ÉPIGENETIC BASIS OF MATERNAL AND PÉRINATAL EFFECTS	93.242	5 R01 MH092580-02 SC1		148,370
EVALUATING A MICROFINANCÉ INTERVENTION FOR HIGH RISK WOMEN IN MONGOLIA	93.242	5R34 MH093227-02		146,979
GENETIC AND ENVIRONMENTAL MODULATION OF RNA EDITING	93.242	5 R01 MH078993-04		135,402
MULTI-LEVEL DETERMINANTS OF LATE ART INITIATION IN SUB-SAHARAN AFRICA	93.242	3 R01 MH089831-01A1 S1		133,516
A STEPPED CARE MODEL OF ADOLESCENT DEPRESSION TREATMENT IN PRIMARY CARE	93.242	5 R23 MH091320-02		122,474
LONGITUDINAL IMAGING OF PATIENTS AT CLINICAL RISK FOR PSYCHOSIS	93.242	5 R01 MH093398-02		120,154
BEHAVIORAL CHANGE IN THE MOTHER-INFANT DYAD: PREVENTING POSTPARTUM DEPRESSION	93.242	5 R21 MH092665-02		110,746
NOVEL MECHANISMS UNDERLYING DEPRESSION: PET IMAGING OF THE KAPPA OPIOID	93.242	1 R21 MH091553-01A1		103,816
CHILD/ADOLESCENT ANXIETY MULTIMODAL EXTENDED LONG-TERM STUDY	93.242	5 R01 MH064092-09		94,546
DEVELOPMENT OF PET TRACERS FOR IN VIVO QUANTIFICATION OF PDE10A	93.242	1 R21 MH093936-01A1		86,230
NEURAL MECHANISMS OF LONG-TERM PLANNING	93.242	5 R03 MH091590-02		85,620
PSYCHOTIC DISORDERS IN AN AFRICAN SETTING: INCIDENCE, EARLY COURSE, AND TREATMENT PATHWAYS	93.242	1 R21 MH093296-01		85,413
USE OF SMARTPHONE APPLICATIONS FOR SEXUAL PARTNERING AMONG MSM	93.242	1 R21 MH096639-01		84,115
ELUCIDATING THE EFFECT OF DISC 1 ON NEURODEVELOPMENT AND SYNAPTIC TRANSMISSION	93.242	2 R01 MH080234-05		82,477
OCD COLLABORATIVE GENETICS ASSOCIATION STUDY	93.242	5 R01 MH079488-04		80,342
1/4 OPTIMIZING TREATMENT FOR COMPLICATED GRIEF	93.242	5 R01 MH060783-07 SC1		74,640
EXAMINING THE DEFICIT SYNDROME SUBTYPE IN AN UNTREATED AND TREATED NON-ACUTE, REPRESENTATIVE COHORT OF SCHIZOPHRENIA PAT	93.242	5 R03 MH092666-02		69,056
CHARACTERIZATION OF A NOVEL 5-HT1A RECEPTOR AGONIST PET LIGAND	93.242	5 K08 MH076258-05		68,485
USING MULTIMEDIA AND DIGITAL TECHNOLOGIES IN THE DISSEMINATION OF AN HIV/STI PREVENTION INTERVENTION	93.242	5 R01 MH080659-05 SC1		65,127
COGNITIVE MECHANISMS OF SERIALLY ORGANIZED BEHAVIOR	93.242	5 R01 MH081153-04 SUP		55,945
1/4 OPTIMIZING TREATMENT FOR COMPLICATED GRIEF	93.242	5 R01 MH060783-08		52,316
COLUMBIA CENTER FOR HOMELESSNESS PREVENTION STUDIES	93.242	5 P30 MH071430-05		41,932
GENE EXPRESSION ANALYSIS OF APLYSIA NEURAL NETWORK	93.242	5 R01 MH075026-05		41,004
HIV/STI RISK AMONG MIGRANT MARKET WORKERS IN KAZAKHSTAN	93.242	5 R01 MH082684-02 KAZ		39,183
PRÉNATAL STRESS: THE ÉPIGENETIC BASIS OF MATERNAL AND PÉRINATAL EFFECTS	93.242	5 R01 MH092580-02 SC2		37,927
COMPLICATED GRIEF TREATMENT IN ELDERLY ADULTS	93.242	5 R01 MH070741-05 PSY		37,419
PATTERN ANALYSIS OF LARGE-SCALE FUNCTIONAL CONNECTIVITY TO PREDICT IMPLICIT EMOTI	93.242	5 F31 MH088104-02		33,625
ADOLESCENT DEVELOPMENT OF EMOTION REGULATION MECHANISMS	93.242	5 F31 MH094056-02		31,783
ASSISTED REPRODUCTIVE TECHNOLOGIES AND INCREASED AUTISM RISK	93.242	1R21MH096122-01A1		30,206
SELF-REGULATORY CONTROL AND HABIT LEARNING IN ADOLESCENTS WITH BULIMIA NERVOSA	93.242	5 K01 MH077652-05		30,032
EFFICACY TRIAL OF A BRIEF HEALTH ENHANCEMENT INTERVENTION FOR NEWLY DIAGNOSED MEN	93.242	1 R01 MH097651-01		29,741
MECHANISMS MEDIATING LONG-TERM SYNAPTIC PLAST	93.242	5 R01 MH060387-11		25,615

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ATTENTIONAL CONTROL BY UNCERTAINTY AND REWARD: PARIETAL AND FRONTAL MECHANISMS	93.242	1 R01 MH098039-01		24,490
THE INFLUENCE OF AEROBIC EXERCISE ON COGNITIVE FUNCTIONING IN SCHIZOPHRENIA	93.242	1 R21 MH96132-01		21,853
POSTNATAL SSRI TREATMENT: EFFECTS ON SEROTONERGIC PROJECTIONS AND GENE EXPRESSION	93.242	5 F30 MH084531-02		21,623
POSTNATAL SSRI TREATMENT: EFFECTS ON SEROTONERGIC PROJECTIONS AND GENE EXPRESSION	93.242	5 F30 MH084531-02		18,863
A FAMILY-BASED ECONOMIC EMPOWERMENT MODEL FOR ORPHANED CHILDREN IN UGANDA	93.242	5 R34 MH081763-03		17,908
UNDERSTANDING DISCONTINUATION OF OUTPATIENT CARE AMONG HIV-POSITIVE INPATIENTS SUPP	93.242	5 R01 MH095849-02 S1		17,232
1/4 OPTIMIZING TREATMENT FOR COMPLICATED GRIEF	93.242	5 R01 MH060783-09		16,892
ADOLESCENT DEVELOPMENT OF EMOTION REGULATION MECHANISMS	93.242	5 F31 MH094056-02		16,524
IMAGING THE SEROTONIN SYSTEM IN OBSESSIVE-COMPULSIVE DISORDER	93.242	5 R01 MH073915-04		16,251
HIV/STI RISK AMONG MIGRANT MARKET WORKERS IN KAZAKHTAN	93.242	5 R01 MH082684-03 REN		15,698
TRANSLATIONAL RESEARCH TRAINING IN CHILD PSYCHIATRY	93.242	2 T32 MH016434-31		14,909
STIGMA ASSOCIATED WITH A HIGH-RISK STATE FOR PSYCHOSIS	93.242	1 R01 MH096027-01		14,045
THE ROLE OF NEURONAL INTEGRATION IN WORKING MEMORY	93.242	5 R01 MH045923-20		10,448
HIV/STI RISK AMONG MIGRANT MARKET WORKERS IN KAZAKHTAN	93.242	5 R01 MH082684-02		9,484
REJECTION SENSITIVITY AND SELF-REGULATION IN PERSONALITY DISORDERS	93.242	5 R01 MH081948-04		9,262
DEVELOPMENTAL NEUROSCIENCE AND BEHAVIOR	93.242	5 T32 MH018264-27		9,109
GENETIC ANALYSIS: PSYCHIATRIC AND OTHER COMPLEX DISEASES	93.242	5 T32 MH065213-09		9,017
COMPUTATIONAL DISCOVERY OF SYNERGISTIC MECHANISMS RESPONSIBLE FOR PSYCHIATRIC DISORDERS FROM BIOLOGICAL DATA ANALYSIS	93.242	5 R21 MH087395-02 KAR		6,713
BEHAVIORAL SCIENCES RESEARCH IN HIV INFECTION	93.242	2 T32 MH019139-21		4,639
NEUROBEHAVIORAL SCIENCES RESEARCH TRAINING PROGRAM	93.242	5 T32 MH015174-34		3,916
PATTERN ANALYSIS OF LARGE-SCALE FUNCTIONAL CONNECTIVITY IN SAD	93.242	5 F31 MH088104-03		3,852
PAROXETINE/BUPROPION IN SUICIDE ATTEMPTERS/IDEATORS WITH MAJOR DEPRESSION	93.242	5 K23 MH076049-05		2,816
2/2 A COMPARISON OF LONG-ACTING INJECTABLE MEDICATIONS FOR SCHIZOPHRENIA-ACCLAIMS	93.242	5 R01 MH081107-05 SC1		2,637
1/4 OPTIMIZING TREATMENT FOR COMPLICATED GRIEF	93.242	5 R01 MH060783-07 R1		799
BEHAVIORAL SCIENCES RESEARCH IN HIV INFECTION	93.242	5 T32 MH019139-23		601
INTRA-AXONAL SIGNALING PATHWAYS TRIGGERED BY ATTRACTIVE GUIDANCE CUES	93.242	1 R01 MH096702-01		474
1/4 OPTIMIZING TREATMENT FOR COMPLICATED GRIEF	93.242	5 R01 MH060783-07 SC SC1		13
TRANSLATIONAL RESEARCH TRAINING IN CHILD PSYCHIATRY	93.242	3 T32 MH016434-31S1		0
COLUMBIA CENTER FOR HOMELESSNESS PREVENTION STUDIES	93.242	5 P30 MH071430-03		-4,650
				\$28,433,927
Nat. Inst. on Alcohol Abuse & Alcoholism				
EPIDEMIOLOGIC STUDIES OF ALCOHOL USE DISORDERS (ONGOING)	93.271	5 K05 AA014223-09		171,522
				\$171,522
Alcohol Research Programs				
DORSAL RAPHE NUCLEUS SEROTONIN NEURONS IN ALCOHOLISM	93.273	5 R01 AA011293-12		455,359
ROLE OF THE GUT MICROBIOTA AND TLR4 IN ALCOHOLIC HEPATOCARCINOGENESIS	93.273	5 R01 AA020211-02		442,670
ECONOMICALLY DISADVANTAGED YOUTH AND ALCOHOL ABUSE PREVENTION	93.273	5 R01 AA011924-10		327,543
ALCOHOL AND DOPAMINE RELEASE: CELLULAR AND SYNAPTIC MECHANISMS	93.273	5 R01 AA019801-03		261,125

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ALCOHOL INTAKE AND HEPATIC FOR METABOLISM	93.273	5 R21 AA020561-02		200,766
ALCOHOL AND GABA IN THE THALAMUS	93.273	5 R01 AA016393-06		137,342
ALCOHOL AND DOPAMINE RELEASE: CELLULAR AND SYNAPTIC MECHANISMS	93.273	5 R01 AA019801-03 SC1		131,359
ALCOHOL IN AVIATION AND MOTOR CARRIERS	93.273	5 R01 AA009963-16		114,128
DORSAL RAPHE NUCLEUS SEROTONIN NEURONS IN ALCOHOLISM	93.273	5 R01 AA011293-12 SC1		56,922
BRIEF ALCOHOL AND HIV PREVENTION FOR HOMELESS ADOLESCENTS WHO EXITED FOSTER CARE	93.273	5 R21 AA017862-02		37,907
ALCOHOL, GILAI GENE EXPRESSION AND THE HEAT SHOCK PATHWAY	93.273	5 R21 AA018783-02		22,047
				\$2,187,168
National Institute on Drug Abuse				
DRUG ABUSE TREATMENT DEVELOPMENT AND RESEARCH MENTORING	93.277	5 K24 DA022412-05		153,562
MOLECULAR DETERMINANTS FOR THE ACTION OF PSYCHOSTIMULANTS	93.277	5 K05 DA022413-05		125,107
NEUROPSYCHOLOGICAL EFFECTS OF BINGE-SMOKED COCAINE	93.277	5 K01 DA019933-05		-8,615
				\$270,054
Drug Abuse and Addiction Research Programs				
POST EXPOSURE PROPHYLAXIS AMONG IDU SYRINGE CUSTOMERS - PHARMACY PILOT INTERVENTION	93.279	5 R01 DA030253-02		1,033,450
ASSESS THE EFFECTS OF ETS ON NEURODEVELOPMENT	93.279	5 R01 DA027100-03		662,895
MULTIMEDIA HIV/STI PREVENTION FOR DRUG-INVOLVED FEMALE OFFENDERS	93.279	5 R01 DA025878-04		656,197
AMPA RECEPTORS: COMMON ROLE IN OPIATE WITHDRAWAL AND PAIN SENSITIVITY	93.279	5 R01 DA027460-03		591,254
MOLECULAR MECHANISMS OF BACTERIAL HOMOLOGS OF NEUROTRANSMITTER SODIUM SYMPORTERS	93.279	5 R01 DA017293-08		544,103
PRESYNAPTIC MECHANISMS IN DOPAMINE NEUROTRANSMISSION	93.279	5 R01 DA007418-18		516,139
MODAFINIL AND DRD4 GENOTYPE IN A HUMAN LABORATORY MODEL OF COCAINE RELAPSE	93.279	5 R01 DA023650-04		477,398
TESTING A COMPREHENSIVE MODEL OF THE DIFFUSION OF EVIDENCE-BASED PRACTICES	93.279	5 R01 DA030459-02		467,406
A MOLECULAR ANALYSIS OF THE GATEWAY HYPOTHESIS IN MICE	93.279	5 R01 DA024001-05		459,599
PHARMACY REFERRAL INTERVENTION: IDU ACCESS TO SERVICES	93.279	7 R01 DA022144-05		450,259
HEALTH AND PSYCHOSOCIAL NEED - CHILDREN WITH DEVELOPMENTAL DISABILITIES IN TIME OF HIV	93.279	5 R01 DA023697-05		434,300
IMAGING THE NEUROCHEMISTRY OF NEGATIVE REINFORCEMENT IN COCAINE ABUSE	93.279	5 R01 DA027777-03		383,251
RESEARCH FELLOWSHIP IN SUBSTANCE ABUSE DISORDER	93.279	5 T32 DA007294-19		364,854
MULTI-SITE CONTROLLED TRIAL OF COCAINE VACCINE (6 OF 6) COLUMBIA UNIVERSITY SITE	93.279	5 R01 DA025250-02		353,351
COUPLES-BASED HIV/STI PREVENTION FOR INJECTING DRUG USERS IN KAZAKHSTAN	93.279	5 R01 DA022914-04		352,666
STAR - SEEK, TEST AND RETAIN. LINKAGES FOR BLACK HIV+, SUBSTANCE USING MSM	93.279	5 R01 DA032100-02		352,161
MECHANISMS UNDERLYING OPIATE-INDUCED NEUROPLASTICITY AT THE SYNAPSE	93.279	5 R01 DA025036-04		307,153
AMYGDALA NEURONS AND COCAINE	93.279	7 R01 DA017727-06		304,880
NICOTINE DEPENDENCE IN EARLY ADULTHOOD	93.279	5 R01 DA026305-03		252,334
BASIC NEUROSCIENCE TRAINING GRANT AT COLUMBIA UNIVERSITY	93.279	5 T32 DA016224-07		252,059
SEX DIFFERENCES IN STRESS & IMPULSIVITY IN COCAINE ABUSERS	93.279	5 R01 DA021242-04		239,565
COUPLES-BASED HIV/STI PREVENTION FOR INJECTING DRUG USERS IN KAZAKHSTAN	93.279	5 R01 DA022914-04 OFF		236,880
THE NEURAL BASES OF AFFECT REGULATION IN DRUG ABUSE	93.279	5 R01 DA022541-05		224,461
COUPLES-BASED HIV/STI PREVENTION FOR DRUG-INVOLVED, AFRICAN AMERICAN MSM	93.279	5R01DA030296-02		204,656

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GLUTAMATERGIC MODULATION OF EXPOSURE THERAPY IN CIGARETTE SMOKING	93.279	5 K23 DA025735-03		203,537
SUBSTANCE ABUSE TREATMENT DEVELOPMENT AND CLINICAL RESEARCH MENTORING	93.279	5 K24 DA029647-02		189,153
EFFECTIVENESS OF MANDATORY PRESCRIPTION DRUG MONITORING	93.279	5 R21 DA029670-02		177,558
ADOLESCENT VULNERABILITY TO PSYCHOSTIMULANTS: EFFECTS OF SEX AND FOOD RESTRICTION	93.279	5 K01 DA024115-05		161,764
AN EXPERIMENTAL MODEL OF HUMAN LANGUAGE AND COGNITION IN DRUG DEPENDENCE	93.279	5 K23 DA021850-05		155,590
A COMPUTERIZED SERVICE TOOL TO ADDRESS PARTNER ABUSE AMONG WOMEN IN DRUG COURT	93.279	5 R34 DA031325-02		153,654
TRAJECTORIES OF SUBSTANCE USE AND COMORBID MENTAL ILLNESS	93.279	5 K01 DA030449-02		153,192
A COGNITIVE MODEL OF INCENTIVE SALIENCE IN NON-HUMAN PRIMATES	93.279	5 R21 DA030095-02		148,943
SEX DIFFERENCES & IMPULSIVITY: EFFECT OF DRUG HISTORY & STIMULANT ADMINISTRATION	93.279	5 K01 DA022282-05		142,422
USING PET TO IMAGE THE NEUROCHEMISTRY OF ADDICTION	93.279	5 K02 DA026525-04		136,036
CLINICAL AND PRECLINICAL MODELS IN DRUG ABUSE: TRAINING AND DEVELOPMENT	93.279	5 K05 DA031749-02		129,568
BRIDGING EFFICACY AND EFFECTIVENESS IN DRUG ABUSE TREATMENT	93.279	5 K02 DA023200-05		129,568
CORTICAL AND STRIATAL DOPAMINE DYSFUNCTION IN ADDICTION AND SCHIZOPHRENIA	93.279	5 K02 DA026075-08		128,354
BRIEF SUBSTANCE AND HIV INTERVENTIONS FOR HOMELESS YOUNG ADULTS	93.279	1 K23 DA032323-01		112,199
EPIDEMIOLOGICAL/FAMILIAL ASPECTS OF DRUG USE	93.279	5 K05 DA000081-30		99,951
ASENZE - MINORITY SUPPLEMENT	93.279	5 R01 DA023697-05 S1		98,067
HEALTH & PSYCHOSOCIAL NEED: CHILDREN WITH DEVELOPMENTAL DISORDER IN A TIME OF HIV	93.279	5 R01 DA023697-05 S2		96,368
A WEB-BASED INTERVENTION TO PREVENT DRUG ABUSE AMONG ADOLESCENT GIRLS	93.279	1 R01DA031782-01A1		91,073
ANALGESIC MECHANISM OF ACTION OF THE ENDOGENOUS OPIOID PEPTIDES ENKEPHALINS: FOCUS ON THE SPINAL CORD AND CHRONIC PAIN	93.279	1 K99 DA031777-01		88,946
TESTING A COMPREHENSIVE MODEL OF THE DIFFUSION OF EVIDENCE-BASED PRACTICES	93.279	3 R01 DA030459-02 S1		78,492
A COMPUTERIZED SERVICE TOOL TO ADDRESS PARTNER ABUSE AMONG WOMEN IN DRUG COURT	93.279	5R34DA031325-02 SCO SCO		68,253
MULTI-SITE CONTROLLED TRIAL OF COCAINE VACCINE (6 OF 6) COLUMBIA UNIVERSITY SITE	93.279	5 R01 DA025250-02 SUP		60,469
ROLE OF INTRONIC VARIANTS AFFECTING SPLICING IN JUVENILE MYOCLONIC EPILEPSY	93.279	5 R03 DA027020-02		59,945
MULTIMEDIA HIV/STI PREVENTION FOR DRUG-INVOLVED FEMALE OFFENDERS	93.279	5 R01 DA025878-04 SCD		33,863
COUPLES-BASED HIV/STI PREVENTION FOR INJECTING DRUG USERS IN KAZAKHSTAN	93.279	5 R01 DA022914-04 SC2		26,346
DRUG ABUSE TREATMENT DEVELOPMENT AND RESEARCH MENTORING	93.279	2 K24 DA022412-06		23,960
PRESYNAPTIC MECHANISMS IN DOPAMINE NEUROTRANSMISSION	93.279	3 R01 DA007418-18S1		19,440
IMAGING DOPAMINE TRANSMISSION IN CANNABIS DEPENDENCE	93.279	5 R01 DA022455-04		12,897
ADHERENCE TO BUPRENORPHINE/NALOXONE IN OPIOID DEPENDENT INDIVIDUALS AND ITS CORRELATES: AN EXPERIMENTAL STUDY ON INDIVID	93.279	NIDA CU10-2606		8,421
ROLE OF INTRONIC VARIANTS AFFECTING SPLICING IN JUVENILE MYOCLONIC EPILEPSY	93.279	1 R03 DA027020-02 SUP		2,850
RESEARCH FELLOWSHIP IN SUBSTANCE ABUSE DISORDER	93.279	5 T32 DA007294-20		159
ANTICONVULSANT PHARMACOTHERAPY FOR SEDATIVE-HYPNOTIC USE DISORDERS	93.279	5 K23 DA021209-05		88
RESEARCH FELLOWSHIP IN SUBSTANCE ABUSE DISORDER	93.279	5 T32 DA007294-17		-4,273
IMPROVING DRUG ABUSE TREATMENT BY RESEARCH AND TRAINING	93.279	5 K05 DA014284-10		-7,289
RESEARCH FELLOWSHIP IN SUBSTANCE ABUSE DISORDER	93.279	5 T32 DA007294-18		-26,551
				\$13,074,284

Mental Health Research Career/Scientist Development Awards

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BULIMIA NERVOSA AND DOPAMINE: A LINK TO ADDICTIONS?	93.281	5 K23 MH082097-05		223,352
MODELING SCHIZOPHRENIA IN MICE BY ALTERED EXPRESSION OF NEUREGULIN 1 (NRG1)	93.281	5 K08MH090397-03		173,860
COGNITIVE NEUROSCIENCE OF ANOREXIA NERVOSA	93.281	5 K23 MH076195-05		173,601
INTRINSIC MOTIVATION AND LEARNING IN SCHIZOPHRENIA	93.281	5 K23 MH086755-02		173,534
NEUROIMAGING OF FATTY ACIDS IN MAJOR DEPRESSION	93.281	5 K08 MH079033-05		163,383
RESEARCH SCIENTIST DEVELOPMENT AWARD: PROMOTING COMMUNITY COLLABORATION IN HIV RESEARCH	93.281	5 K01 MH081787-05		161,970
PSYCHOSIS IN SCHIZOPHRENIA: MECHANISMS OF RECOVERY	93.281	5 K23 MH077653-05		159,026
HIPPOCAMPAL NEUROGENESIS: MECHANISMS OF ANTIDEPRESSANT ACTION	93.281	5 K08 MH076083-05		152,013
NOVEL INTERVENTIONS FOR ADULTS WITH OBSESSIVE-COMPULSIVE DISORDER	93.281	5 K23 MH092434-02		146,264
THE CONTRIBUTION OF ADULT-BORN TO HIPPOCAMPAL STRUCTURE AND CONNECTIVITY	93.281	5 K08 MH079088-05		137,535
EPIDEMIOLOGY OF PRENATAL FACTORS AND ADULT PSYCHOPATHOLOGY	93.281	5 K02 MH065422-10		123,284
ENHANCING PATIENT-ORIENTED RESEARCH AND TRAINING IN OCD	93.281	5 K24 MH091555-03		111,914
NEUROBIOLOGY OF MOTIVATIONAL MODULATION OF SUSTAINED ATTENTION BY SIGNED REWARD	93.281	1 K99 MH095835-01		25,497
STATISTICAL METHODS FOR PREDICTING SUICIDE ATTEMPTS	93.281	5 K25 MH074068-05		21,595
NEGATIVE SYMPTOMS OF SCHIZOPHRENIA: FROM PHENOMENOLOGY TO TARGETED TREATMENT	93.281	5 K23 MH076976-05		13,463
EXCITATORY CONTROLS OF EATING IN EATING DISORDERS	93.281	5 K23 MH071285-05		2,485
AN FMRI STUDY OF THE BRAIN CIRCUITRY OF SAD EMOTION IN BEREAVEMENT	93.281	5 K08 MH080377-03		-24,327
				\$1,938,449

Mental Health National Research Service Awards for Research Training

RESEARCH TRAINING PROGRAM IN PSYCHIATRIC EPIDEMIOLOGY	93.282	5 T32 MH013043-40		449,436
RESEARCH TRAINING IN MOOD AND ANXIETY DISORDERS: FROM ANIMAL MODELS TO PATIENTS	93.282	5 T32 MH015144-34		332,395
TRAINING IN SCHIZOPHRENIA AND PSYCHOTIC DISORDERS: FROM ANIMAL MODELS TO PATIENTS	93.282	5 T32 MH018870-24		269,301
RESEARCH TRAINING IN LATE-LIFE NEUROPSYCHIATRIC DISORDERS	93.282	5 T32 MH020004-13		227,902
TRANSLATIONAL NEUROSCIENCE TRAINING GRANT	93.282	2 T32 MH015174-35		190,860
MODULATING PLASTICITY IN ADULT-BORN NEURONS OF THE DENTATE GYRUS	93.282	1 F32 MH092101-01		47,730
ANALYSIS OF THE ROLE OF HIPPOCAMPAL ADULT-BORN NEURONS IN BEHAVIOR AND PHYSIOLOGY	93.282	5 F31 MH084529-03		45,250
DEVELOPMENTAL ROLE OF NEUREGULIN-1 IN SUBVENTRICULAR ZONE STEM CELL FATE	93.282	1 F31 MH094029-01A1		43,594
NON-INVASIVE AND COST-EFFECTIVE QUANTIFICATION OF POSITRON EMISSION TOMOGRAPHY DATA	93.282	1 F31 MH095338-01		41,364
EFFECTS OF HIV-1 MA DOMAIN ON GAG MULTIMERIZATION AND VIRAL ASSEMBLY IN MICE	93.282	5 F31 MH085612-04		36,085
SOCIAL DETERMINANTS OF HIV RISK AND VULNERABILITY AMONG BLACK MSM IN SOUTH AFRICA	93.282	5 F31 MH088943-02		28,734
NEURONAL OSCILLATION AS A TOOL FOR SELECTIVE ATTENTION	93.282	5 F32 MH093061-02		28,321
HIV RISK IN URBAN POPULATION OF BLACK MEN WHO HAVE SEX WITH MEN AND WOMEN	93.282	5 F31 MH087125-02		27,638
MIRNA REGULATION OF CPEB AND ITS ROLE IN SYNAPSE- SPECIFIC FACILITATION AND MEMORY	93.282	5 F30 MH086267-03		25,076
NETWORK DYNAMICS OF VHIP-AMYGDALA-MPFC CIRCUIT IN INNATE AND LEARNED ANXIETY	93.282	5 F32 MH088103-02		22,578
MIRNA REGULATION OF CPEB AND ITS ROLE IN SYNAPSE- SPECIFIC FACILITATION AND MEMORY	93.282	5 F30 MH086267-02		18,951
NEURONAL OSCILLATION AS A TOOL FOR SELECTIVE ATTENTION	93.282	1 F32 MH093061-01 RE		15,388
RESEARCH TRAINING IN MOOD AND ANXIETY DISORDERS: FROM ANIMAL MODELS TO PATIENTS	93.282	5 T32 MH015144-33		14,629

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RESEARCH TRAINING IN LATE-LIFE NEUROPSYCHIATRIC DISORDERS	93.282	5 T32 MH020004-12		7,682
TRAINING IN SCHIZOPHRENIA AND PSYCHOTIC DISORDERS: FROM ANIMAL MODELS TO PATIENTS	93.282	2 T32 MH018870-23		4,924
DOPAMINE D2 RECEPTORS OVEREXPRESSIONS, ADENOSINE A2A RECEPTORS, AND MOTIVATION	93.282	1 F32 MH090750-01A1		3,552
RESEARCH TRAINING IN LATE-LIFE NEUROPSYCHIATRIC DISORDERS	93.282	5 T32 MH020004-14		3,534
EFFECTS OF HIV-1 MA DOMAIN ON GAG MULTIMERIZATION AND VIRAL ASSEMBLY IN MICE	93.282	5 F31 MH085612-03		3,530
ANALYSIS OF THE ROLE OF HIPPOCAMPAL ADULT-BORN NEURONS IN BEHAVIOR AND PHYSIOLOGY	93.282	1 F31 MH084529-01A1		3,519
SOCIAL DETERMINANTS OF HIV RISK AND VULNERABILITY AMONG BLACK MSM IN SOUTH AFRICA	93.282	1 F31 MH088943-01A1		941
HIV RISK IN URBAN POPULATION OF BLACK MEN WHO HAVE SEX WITH MEN AND WOMEN	93.282	1 F31 MH087125-01A1		114
RESEARCH TRAINING: AFFECTIVE AND RELATED DISORDERS	93.282	5 T32 MH015144-26		-285
BEYOND ALLERGY: MAST CELLS MEDIATE BRAIN-BEHAVIOR-IMMUNE INTERACTIONS	93.282	5 F31 MH084384-02		-383
RESEARCH TRAINING PROGRAM IN PSYCHIATRIC EPIDEMIOLOGY	93.282	5 T32 MH013043-39		-970
NETWORK DYNAMICS OF VH1P-AMYGDALA-MPFC CIRCUIT IN INNATE AND LEARNED ANXIETY	93.282	1 F32 MH088103-01		-11,922
				\$1,879,468

Discovery and Applied Research for Technological Innovations to Improve Human Health

RADIOLOGICAL RESEARCH ACCELERATOR FACILITY (RARAF)	93.286	5 P41 EB002033-16		819,020
EARLY DETECTION AND MAPPING OF ISCHEMIA USING MYOCARDIAL ELASTOGRAPHY	93.286	5 R01 EB006042-05		407,542
OPTIMIZATION OF ULTRASOUND-FACILITATED BLOOD-BRAIN BARRIER OPENING	93.286	5 R01 EB009041-04		395,782
TRACKING STEM CELLS IN ENGINEERED TISSUE AND ORGANS IN VIVO AND IN REAL TIME	93.286	5 R01 EB009663-03		380,962
MECHANISMS OF MECHANICAL TRANSDUCTION BY CYTOSKELETONS	93.286	5 R01 EB001480-09		314,546
APTAMERIC MODULATORS OF RELAXIVITY OF MRI CONTRAST AGENTS	93.286	5 R21 EB013347-02		302,257
FUNCTIONAL REGRESSION MODELS WITH APPLICATION IN BRAIN IMAGING STUDIES	93.286	5 R01 EB009744-03		223,371
ULTRASOUND-BASED TUMOR TARGETING AND THERMAL ABLATION MONITORING SYSTEM	93.286	5 R01 EB014496-02		191,162
RADIOLOGICAL RESEARCH ACCELERATOR FACILITY (RARAF)	93.286	5 P41 EB002033-15		190,430
STEM CELL BASED SOFT TISSUE RECONSTRUCTION	93.286	5 R01 EB006261-04		170,709
EDUCATIONAL PATHWAYS TO SCIENCE AND OTHER CAREERS FOR ACADEMICALLY TALENTED WOMEN	93.286	7R01EB0101584-03		165,135
SILK HYDROGEL FOR FUNCTIONAL CARTILAGE TISSUE ENGINEERING	93.286	5 R21 EB011869-02		164,256
STEM CELL BASED SOFT TISSUE RECONSTRUCTION	93.286	5 R01 EB006261-04 SC1		84,121
MICROBUBBLE INFUSED HYDROGELS FOR CARTILAGE TISSUE ENGINEERING	93.286	1 R21 EB014382-01A1		82,406
MICROBUBBLE INFUSED HYDROGELS FOR CARTILAGE TISSUE ENGINEERING	93.286	3R21EB014382-01A1S1		56,235
OPTIMIZATION OF ULTRASOUND-FACILITATED BLOOD-BRAIN BARRIER OPENING	93.286	5 R01 EB009041-04 SMA		42,597
ISOLATION OF NARROW SUBPOPULATIONS OF CELLS USING MOLECULAR COMPUTING CASCADES	93.286	1 R21 EB014477-01A1		11,054
RADIOLOGICAL RESEARCH ACCELERATOR FACILITY (RARAF)	93.286	5 P41 EB002033-15 SC1		10,181
BMES-SPRBM CONFERENCE ON CELLULAR AND MOLECULAR BIOENGINEERING	93.286	1R13EB012902-01R1		3,550
MECHANOBIOLOGICAL MECHANISM FOR INFLAMMATORY BONE LOSS	93.286	5 R01 EB006834-04		300
MODULATION OF T CELL FUNCTION BY PATTERNING OF COSTIMULATORY LIGANDS	93.286	5 R21 EB008199-02R1		-21,516
				\$3,994,100

Minority Health and Health Disparities Research

COLUMBIA CENTER FOR THE HEALTH OF URBAN MINORITIES (CHUM)	93.307	5 P60 MD000206-10		607,656
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The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
COLUMBIA CENTER FOR THE HEALTH OF URBAN MINORITIES (CHUM)	93.307	3 P60 MD000206-10		507,989
COLUMBIA CENTER FOR THE HEALTH OF URBAN MINORITIES (CHUM)	93.307	5 P60 MD000206-10		201,628
COLUMBIA CENTER FOR THE HEALTH OF URBAN MINORITIES (CHUM)	93.307	5 P60 MD000206-10		200,196
ENVIRONMENTAL HEALTH DISPARITIES RESEARCH IN NOCEMHD	93.307	5 P60 MD000206-10		141,057
COLUMBIA CENTER FOR HEALTH OF URBAN MINORITIES (CHUM)	93.307	5 P60 MD000206-10		59,821
NORTHERN MANHATTAN INITIATIVE FOR MINORITY INVOLVEMENT IN CLINICAL TRIALS	93.307	1 U24 MD006961-01		25,931
COLUMBIA CENTER FOR HEALTH OF URBAN MINORITIES	93.307	5 P60 MD000206-08 PJ2		-80
COLUMBIA CENTER FOR HEALTH OF URBAN MINORITIES	93.307	5 P60 MD000206-08		-723
				\$1,743,475

Trans-NIH Research Support

USE OF INDUCED PLURIPOTENT STEM CELLS TO STUDY MECHANISMS OF FAMILIAL AND SPORADIC ALS	93.310	5 DP1 OD003930-06		864,801
TOWARDS A COGNITIVE FRAMEWORK FOR UNDERSTANDING CELLULAR BEHAVIOR	93.310	8 DP1 OD003787-05		778,924
NIH PIONEER'S AWARD	93.310	5 DP1 OD003635-05		732,900
EPIGENETIC MECHANISMS MEDIATING THE INHERITANCE OF REPRODUCTIVE BEHAVIOR	93.310	1 DP2 OD001674-01		596,714
INVESTIGATING THE POTENTIAL OF ENDOGENOUS RNAI IN MEDIATING ADAPTATION TO ENVIRONMENT	93.310	1 DP2 OD006412-01		466,629
REGULATION OF ADAPTIVE IMMUNE RESPONSE BY LARGE INTERGENIC NON-CODING RNA	93.310	1 DP2 OD008651-01		426,522
GENETIC VARIATION AND REGULATORY NETWORKS: MECHANISMS AND COMPLEXITY	93.310	3DP2 OD002414-01S1		416,496
IR-LAMP: OPTIGENETIC TECHNOLOGY TO SPATIALLY MANIPULATE PROTEIN FUNCTION IN VIVO	93.310	1 DP2 OD008773-01		114,153
NIH DIRECTOR'S PIONEER AWARD	93.310	5 DP1 OD000114-06		93,544
TOWARDS A COGNITIVE FRAMEWORK FOR UNDERSTANDING CELLULAR BEHAVIOR	93.310	8 DP1 OD003787-05 SC1		92,954
				\$4,583,637

Nursing Research

IMPROVING ANTIMICROBIAL PRESCRIBING PRACTICES IN THE NEONATAL INTENSIVE CARE UNIT	93.361	5 R01 NR010821-05		651,002
PREVENTION OF NOSOCOMIAL INFECTIOUS AND COST-EFFECTIVENESS REFINED (P-NICER)	93.361	5 R01 NR010107-06		629,381
IMPROVING ANTIMICROBIAL PRESCRIBING PRACTICES IN THE NEONATAL INTENSIVE CARE UNIT	93.361	5 R01 NR010821-05 SC1		447,136
MATERNAL AND CHILD OUTCOMES OF A PRISON NURSERY PROGRAM	93.361	5 R01 NR007782-08		415,292
CENTER FOR EVIDENCE-BASED PRACTICE IN THE UNDERSERVED (CEBP)	93.361	5 P30 NR010677-05		347,002
TRAINING IN INTERDISCIPLINARY RESEARCH TO REDUCE ANTIMICROBIAL RESISTANCE (TIRAR)	93.361	5 T90 NR010824-05		242,593
REDUCING HEALTH DISPARITIES THROUGH INFORMATICS	93.361	5 T32 NR007969-10		215,870
DISTRIBUTION OF THE COSTS OF ANTIMICROBIAL RESISTANT INFECTION	93.361	5 R01 NR010822-05 SC1		159,980
FROM CELL TO SOCIETY: A NEW METHOD TO CHARACTERIZE CARDIAC AUTONOMIC CONTROL	93.361	5 R21 NR010858-04		105,498
DISTRIBUTION OF THE COSTS OF ANTIMICROBIAL RESISTANT INFECTION	93.361	5 R01 NR010822-05		92,414
CENTER FOR EVIDENCE-BASED PRACTICE IN THE UNDERSERVED (CEBP)	93.361	5 P30 NR010677-05 SC2		31,016
CENTER FOR EVIDENCE-BASED PRACTICE IN THE UNDERSERVED (CEBP)	93.361	5 P30 NR010677-05 SC1		27,346
TRAINING IN INTERDISCIPLINARY RESEARCH TO REDUCE ANTIMICROBIAL RESISTANCE (TIRAR)	93.361	5 T90 NR010824-04		5,583
CENTER FOR EVIDENCE-BASED PRACTICE IN THE UND	93.361	5 P30 NR010677-04		3,300
CENTER FOR EVIDENCE-BASED PRACTICE IN THE UNDERSERVED (CEBP)	93.361	5 P30 NR010677-04 SC2		762
				\$3,374,175

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National Center for Research Resources				
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	2 UL1 RR024156-06		1,620,718
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - CRR	93.389	2 UL1 RR024156-06 CRR		1,591,549
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - BMIR	93.389	2 UL1 RR024156-06 BMI		899,361
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - TTR BIOMARKERS	93.389	2 UL1 RR024156-06 TTR		723,565
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05 SC1		633,306
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 UL1 RR024156-06S3 SUP		457,114
BECTON DICKINSON LSR II ANALYTICAL FLOW CYTOMETER	93.389	1 S10 RR027050-01A1		413,206
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - DBR	93.389	2 UL1 RR024156-06 DBR		401,794
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - CECR	93.389	2 UL1 RR024156-06 CEC		371,297
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - TFORM	93.389	2 UL1 RR024156-06 TFO		329,700
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	3 UL1 RR024156-06 SC1		303,874
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 UL1 RR024156-06S4 SUP		274,108
PLUG AND PLAY BIOREACTOR	93.389	5 R21 RR026244-02R1		178,330
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (TL1)	93.389	2 TL1 RR024158-06		177,633
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 KL2 RR024157-06 SC1		173,681
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 KL2 RR024157-06 SC4		173,066
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 KL2 RR024157-06 SC3		169,842
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 KL2 RR024157-06 SC2		168,935
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05		162,293
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - CRR	93.389	2 UL1 RR024156-06 CRR		146,464
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 KL2 RR024157-06 SC5		128,243
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	2 KL2 RR024157-06		76,006
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 KL2 RR024157-06 SC6		59,178
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	2 KL2 RR024157-06 SC7		57,455
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05 SC7		30,361
CLINICAL AND TRANSLATIONAL SCIENCE AWARD - CRR/ANC	93.389	2 UL1 RR024156-06 CRR		25,000
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05		20,588
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05 SC2		19,373
CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.389	5 TL1RR024158-07		7,932
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05		7,162
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05 SC6		4,688
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05 SC9		4,397
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05 SC1		3,639
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05 SC8		1,333
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05 SC6		1,208
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05 SC4		989

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CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05 SC2		177
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05 SC5		166
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05		-4
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-05		-185
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (UL1)	93.389	5 UL1 RR024156-05 SC4		-952
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (KL2)	93.389	5 KL2 RR024157-04		-1,062
CLINICAL AND TRANSLATIONAL SCIENCE AWARD (TL1)	93.389	5 TL1 RR024158-05		-3,517
				\$9,812,011

National Cancer Institute

NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 CO		903,573
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07		554,166
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC1		403,657
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 CCS		327,186
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC1		277,980
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC6		215,858
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		188,049
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET) (ICBP)	93.390	5 U54 CA121852-07 SP		187,817
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		147,712
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC9		132,146
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC7		95,178
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06		87,082
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC3		85,221
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC3		81,306
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC5		76,558
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC2		76,037
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC4		60,798
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC1		55,747
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC8		54,199
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC1		47,360
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC1		32,844
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC		17,476
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		15,163
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		7,304
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC5		6,967
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC2		4,176
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		4,089
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	5 U54 CA121852-07 SC7		3,632

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		2,611
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC		1,800
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC4		915
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		856
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC1		66
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.390	2 U54 CA121852-06 SC6		3
				\$4,155,532
Cancer Cause and Prevention Research				
GENES, ENVIRONMENT AND BREAST CANCER RISK: THE 15 YEAR FOLLOW-UP OF THE PROF-SC	93.393	5 R01 CA159868-02		1,603,532
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	5 P01 CA49062-20 PJ2		659,499
LEGACY: A COHORT OF YOUTH IN FAMILIES FROM THE BREAST CANCER FAMILY REGISTRY	93.393	5 R01 CA138822-02		559,313
MOLECULAR MECHANISMS OF PROSTATE CANCER INITIATION.	93.393	1 P01 CA154293-01A1		455,897
ONCOGENIC ROLE OF PIK3CA HOTSPOT MUTATIONS	93.393	5 R01 CA129432-04		385,035
MOLECULAR MECHANISMS OF PROSTATE CANCER INITIATION.	93.393	1 P01CA154293-01A1 PJ2		364,121
MOLECULAR EPIDEMIOLOGY AND LUNG CANCER: A NESTED CASE-CONTROL STUDY	93.393	5 R01 CA127532-05		363,449
MECHANISMS OF RADIORESISTANCE AND CELL CYCLE PROGRESSION	93.393	5 R01 CA130536-17		348,647
MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER - PROJECT 3	93.393	4 P01 CA097403-08 PJ3		343,644
NON- CANCER GENE ADDITION AS ANTICANCER STRATEGY	93.393	5 R01 CA153233-02		337,719
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	5 P01 CA49062-20 PJ1		327,718
FOLIC ACID AND CREATINE AS THERAPEUTIC APPROACHES FOR LOWERING BLOOD ARSENIC	93.393	5 R01 CA133595-04		324,107
MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER	93.393	4 P01 CA097403-08		322,713
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	5 P01 CA049062-20 PJ3		295,856
AIDS ASSOCIATED LYMPHOPROLIFERATIVE DISORDERS	93.393	5 R37 CA037295-28		286,510
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	5 P01 CA49062-20 TC		256,863
ROLE OF INFLAMMATION IN MOUSE MODELS OF GASTRIC CANCER	93.393	5 R01 CA093405-11		252,751
DETERMINANTS AND RISKS OF USE AND OVERUSE OF EXPENSIVE ONCOLOGY DRUGS	93.393	5 R01 CA134964-04		226,952
MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER - PROJECT 2	93.393	4 P01 CA097403-08 PJ2		215,854
CONSTRUCTION AND ANALYSIS OF RETROVIRUS MUTANTS	93.393	5 R37 CA030488-32		214,511
REGULATION OF THE DNA DAMAGE RESPONSE BY THE MRN-ATM PATHWAY	93.393	5 R01 CA092245-10		213,102
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	5 P01 CA49062-20		182,054
MOLECULAR MECHANISMS OF PROSTATE CANCER INITIATION.	93.393	1 P01 CA154293-01A1 PJ3		164,945
MOLECULAR MECHANISMS OF PROSTATE CANCER INITIATION.	93.393	1 P01CA154293-01A1 COB		154,924
NAPHTHALENE EXPOSURE, CHROMOSOMAL ABERRATIONS IN POOR URBAN SCHOOL CHILDREN	93.393	1 U01 CA159157-01		145,014
CANCER SCREENING AMONG LATINAS	93.393	5 R21 CA134247-02		125,113
MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER - CORE B	93.393	4 P01 CA097403-08 CB		122,481
STEM CELLS AND GASTRIC CANCER	93.393	5 R01 CA120979-05		107,681
MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER - CORE A	93.393	4 P01 CA097403-08 CA		103,580

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STATISTICAL METHODS FOR DNA METHYLATION DATA	93.393	5 R03 CA150140-02		69,914
MICRORNA IN BLOOD AS AN EARLY BIOMARKER OF BREAST CANCER	93.393	5 R03 CA159427-02		67,391
MOLECULAR EPIDEMIOLOGY AND LUNG CANCER: A NESTED CASE-CONTROL STUDY SUPP	93.393	5 R01 CA127532-05 S1		63,679
SERVING AS A LAY HEALTH ADVISOR: THE IMPACT ON SELF AND COMMUNITY	93.393	5 R03 CA150543-03		50,616
MOLECULAR MECHANISMS OF PROSTATE CANCER INITIATION.	93.393	1 P01 CA154293-01A1 COA		39,504
ABERRANT DNA METHYLATION OF MICRORNA GENES IN HEPATOCELLULAR CARCINOMA (HCC)	93.393	1 R03 CA156629-01A1		39,474
DIETARY FACTORS AND RISK OF PANCREATIC CENTER IN A POOLED ANALYSIS	93.393	5 U01 CA139578-03		29,141
NAPHTHALENE EXPOSURE, CHROMOSOMAL ABERRATIONS IN POOR URBAN SCHOOL CHILDREN	93.393	5 U01 CA159157-02		26,644
CONSTRUCTION AND ANALYSIS OF RETROVIRUS MUTAN	93.393	5 R37 CA030488-31S1 SUP		23,794
EARLY DETERMINANTS OF MAMMOGRAPHIC DENSITY	93.393	5 R01 CA104842-05		21,764
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	2 P01 CA049062-19 PJ3		3,483
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	2 P01 CA049062-19 TC TC		2,091
METROPOLITAN NEW YORK REGISTRY OF BREAST CANCER FAMILIES	93.393	5 U01 CA069398-17 SC1		1,087
METROPOLITAN NEW YORK REGISTRY OF BREAST CANCER FAMILIES	93.393	5 U01 CA069398-17		478
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	2 P01 CA049062-19 PJ PJ2		290
RADIATION BYSTANDER EFFECTS: MECHANISMS	93.393	2 P01 CA049062-19 PJ1		-1,927
				\$9,901,008

Cancer Detection and Diagnosis Research

IN VIVO 31P MRS STUDIES OF NON-HODGKIN'S LYMPHOMA	93.394	5 R01 CA118559-04		962,361
MAMMARY CARCINOMA AND GENOMIC METHYLATION	93.394	5 R33 CA143453-03		493,856
ENHANCED INTRAARTERIAL DELIVERY OF CHEMOTHERAPEUTIC DRUGS TO THE BRAIN	93.394	5 R01 CA127500-05		364,402
OPTICAL IMAGING OF CHEMOTHERAPY FOR BRAIN TUMOR	93.394	5 R01 CA138643-02		337,033
QUANTITATIVE VOLUME AND DENSITY RESPONSE ASSESSMENT SARCOMA AND HCC AS A MODEL	93.394	1 U01 CA140207-01		285,958
SMALL ANIMAL TOMOGRAPHY SYSTEM FOR GREEN FLUORESCENT PROTEIN IMAGING	93.394	5 R33 CA118666-05		265,563
STUDYING MEASUREMENT VARIABILITY IN TUMOR VOLUME AND VOLUME CHANGE ON MDCT	93.394	5 R01 CA149490-02		234,688
EARLY PREDICTION OF PATHOLOGICAL RESPONSE OF CHEMORADIOTHERAPY WITH FLT PET	93.394	7 R21 CA121551-03		123,396
DISSECTING THE MELANOMA GENOME	93.394	1 R21 CA158557-01A1		69,767
PREDICTING OUTCOME OF EXPERIMENTAL THERAPY IN LYMPHOMAS BY 31P & 1H MRS	93.394	5 R21 CA152858-02		66,320
OPTIMIZING MSNP FOR PROFILING DNA METHYLATION IN CANCERS AND PRECURSOR LESIONS	93.394	5 R21 CA125461-02		15,437
SYSTEMS BIOLOGY OF TUMOR PROGRESSION AND DRUG RESISTANCE	93.394	1 U01 CA168426-01 SC3		10,854
SYSTEMS BIOLOGY OF TUMOR PROGRESSION AND DRUG RESISTANCE	93.394	1 U01 CA168426-01		2,038
				\$3,231,673

Cancer Treatment Research

GVL WITHOUT GVHD ACROSS HLA BARRIERS: TRANSLATIONAL STUDIES	93.395	7 P01 CA111519-05		363,247
COLUMBIA-SOUTH AFRICA TRAINING PROGRAM FOR RESEARCH ON HIV-ASSOCIATED MALIGNANCIES	93.395	5 D43 CA153715-02		332,352
ADVANCED ANATOMIC AND FUNCTIONAL RESPONSE ASSESSMENT IN LUNG CANCER	93.395	5 R01 CA125143-05		282,399
REGULATION OF LKB1 AND AMPK SIGNALING BY BRAF IN MELANOMA	93.395	5 R00 CA133245-05		213,370
IMPLEMENTING DIETARY CHANGE AMONG HISPANIC BREAST CANCER SURVIVORS	93.395	5 R21 CA152903-02		171,780

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GVL WITHOUT GVHD ACROSS HLA BARRIERS	93.395	7 P01 CA111518-05		155,240
GVL WITHOUT GVHD ACROSS HLA BARRIERS: TRANSLATIONAL STUDIES	93.395	7 P01 CA111519-05		81,396
COLUMBIA-SOUTH AFRICA TRAINING PROGRAM FOR RESEARCH ON HIV-ASSOCIATED MALIGNANCIES	93.395	1 D43 CA153715-01		76,493
CHEMICAL GENETIC PROFILING OF ENGINEERED TUMOR CELLS	93.395	3 R01 CA097061-09S1		32,667
FEASIBILITY OF A WEIGHT LOSS INTERVENTION AMONG FEMALE CANCER SURVIVORS IN SWOG	93.395	5 R01 CA155973-02		17,773
CHEMICAL GENETIC PROFILING OF ENGINEERED TUMOR CELLS	93.395	5 R01 CA097061-09		-10,793
				\$1,715,924
Cancer Biology Research				
THE ROLE OF ID PROTEINS IN TUMOR DEVELOPMENT AND ANGIOGENESIS IN THE BRAIN	93.396	5 R01 CA101644-10		723,400
ROLES AND REGULATION OF P53	93.396	5 P01 CA087497-10		591,125
THE ROLE OF PHF6 IN T-CELL ACUTE LYMPHOBLASTIC LEUKEMIA	93.396	5 R01 CA155743-02		553,462
REGULATION OF THE P53 TUMOR SUPPRESSOR PROTEIN	93.396	5 R01 CA058316-20		519,171
THE ROLE OF ATM IN SUPPRESSION OF LYMPHOMAS	93.396	5 R01 CA158073-02		500,440
MECHANISM OF THE STROMAL RESPONSE TO SMOOTHENED INHIBITION IN PANCREATIC CANCER	93.396	5 R01 CA157980-02		488,905
PROPERTIES AND REGULATION OF P53 IN TUMOR CELLS	93.396	5R01CA077742-12		432,161
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	5 U01 CA084294-13		412,291
ROLES AND REGULATIONS OF P53	93.396	2P01CA087497-11 SCO		402,216
LEADERSHIP COMPONENT IN CHEMOPREVENTION: MOUSE MODELS OF HUMAN CANCER CONSORTIUM	93.396	5 U01 CA141535-03		393,254
THE URB-1 UBIQUITIN LIGASE IN NEURAL STEM CELLS AND CANCER	93.396	5 R01 CA131126-05		390,326
P53 ACETYLATION AND DEACETYLATION IN TUMORIGENESIS	93.396	5 R01 CA085533-10		388,235
ROLES AND REGULATIONS OF P53	93.396	2 P01 CA087497-11		366,423
THE ROLE OF AKT SIGNALING IN NOTCH1 INDUCED LEUKEMIAS	93.396	5 R01 CA129382-04		364,476
MECHANISMS AND REGULATION OF POST-TRANSLATIONAL MODIFICATIONS OF ID PROTEINS	93.396	5 R01 CA127643-05		359,815
MUTUAL REGULATION OF PTEN AND P-REX2A IN NORMAL AND CANCER CELLS	93.396	5 R01 CA155117-02		345,850
ARRA-GAB2 IN METASTATIC MELANOMA	93.396	5 R01 CA138678-04		341,052
VEGF BLOCKADE AND ALTERNATIVE ANGIOGENIC PATHWAYS IN NEUROBLASTOMA	93.396	5 R01 CA124644-05		334,867
PROFILING SIGNATURES OF SYNERGISTIC CHEMICAL PERTURBATIONS IN DIVERSE CELLULAR C	93.396	1 U01 CA164184-01		322,572
ROLE OF TGFBI GENE IN CELL PROLIFERATION AND TUMOR PROGRESSION	93.396	5 R01 CA127120-04		313,030
THE ROLE OF ARF-BP1 IN TUMORIGENESIS	93.396	5 R01 CA118561-05		264,603
MOUSE MODEL FOR HUMAN PANCREATIC DUCTAL ADENOCARCINOMA	93.396	5 R01 CA109525-08		255,337
COMPARING HTS WITH FRAGMENT-BASED DESIGN FOR B-RAF AND THE RAS-RAF INTERACTION	93.396	5R01CA161061-02		249,227
MECHANISMS OF MDM2/MDMX IN REPRESSING P53	93.396	5 R01 CA131439-04		244,391
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	5 U01 CA084294-13 SHE		225,802
INHIBITOR OF DIFFERENTIATION-2 IN CELL CYCLE REGULATION AND CANCER	93.396	5 R01 CA085628-11		206,234
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	5 U01 CA084294-13 CAL		205,008
DYNAMIC ROLES OF HAUSP IN P53/MDM2 REGULATION	93.396	5 R01 CA129627-05		172,778
NOTCH SIGNALING IN LYMPHANGIOGENESIS	93.396	5 R01 CA136673-04		166,283

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NOTCH SIGNALING IN LYMPHANGIOGENESIS	93.396	5 R01 CA136673-03 SC1		152,198
VEGF BLOCKADE AND ALTERNATIVE ANGIOGENIC PATHWAYS IN NEUROBLASTOMA	93.396	5 R01 CA124644-05 SUP		121,160
ARRA-GENES THAT INFLUENCE LIN-12/NOTCH ACTIVITY IN C. ELEGANS	93.396	5 R01 CA095389-09		118,668
THE ROLE OF NK-KB IN B-CELL DIFFERENTIATION AND LYMPHOMAGENESIS	93.396	1 R01 CA157660-01		113,510
ROLE OF ACETYLTRANSFERASE GENE INACTIVATION IN FOLLICULAR LYMPHOMA PATHOGENESIS	93.396	1 R01 CA164152-01		83,413
THE ROLE OF INFLAMMATION AND STROMA IN DIGESTIVE CANCER	93.396	5 U54 CA126513-05 PJ1		64,212
ROLES AND REGULATION OF P53 (PROJECT 1)	93.396	5 P01 CA087497-10 PRI		41,913
MECHANISMS OF T-CELL LEUKEMOGENESIS INDUCED BY NOTCH1	93.396	5 R01 CA120196-05		41,800
LEADERSHIP COMPONENT IN CHEMOPREVENTION: MOUSE MODELS OF HUMAN CANCER CONSORTIUM	93.396	5 U01 CA141535-02		39,581
THE ROLE OF INFLAMMATION AND STROMA IN DIGESTIVE CANCER	93.396	5 U54 CA126513-05 COA		38,419
THE ROLE OF INFLAMMATION AND STROMA IN DIGESTIVE CANCER	93.396	5 U54 CA126513-05 PJ2		30,085
VEGF BLOCKADE AND ALTERNATIVE ANGIOGENIC PATHWAYS IN NEUROBLASTOMA	93.396	5 R01 CA124644-04 SC2		22,793
THE ROLE OF INFLAMMATION AND STROMA IN DIGESTIVE CANCER	93.396	5 U54 CA126513-05 COB		20,055
LUNG EPITHELIAL-MESENCHYMAL INTERACTIONS IN ADENOCARCINOMA INVASION	93.396	5 R01 CA120174-05		12,330
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	5 U01 CA084294-12		10,869
THE ROLE OF INFLAMMATION AND STROMA IN DIGESTIVE CANCER	93.396	5 U54 CA126513-05 PJ4		7,345
MODELING ANDROGEN-INDEPENDENT PROSTATE CANCER IN MUTANT MICE	93.396	5 R01 CA0115717-05		6,674
ROLE OF ALPHA6BETA4 INTEGRIN IN EPIDERMAL CARCINOGENESIS	93.396	5 R01 CA114014-05		6,588
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	5 U01 CA084294-12		0
ROLES AND REGULATION OF P53 (PROJECT 4)	93.396	5 P01 CA087497-10 CR1		-98
THE TUMOR-SUPPRESSIVE ROLE OF ALK4/ACVR1B IN PANCREATIC TUMORIGENESIS	93.396	5 R21 CA127701-02		-138
ARRA-GENES THAT INFLUENCE LIN-12/NOTCH ACTIVITY IN C. ELEGANS	93.396	5 R01 CA095389-08		-170
PTEN TUMOR SUPPRESSOR AND SIGNAL TRANSDUCTION	93.396	5 R01 CA082783-10		-888
GENETIC APPROACHES TO NEXT-GENERATION BREAST CANCER THERAPY	93.396	5 R00 CA127772-04		-7,615
ARRA-GAB2 IN METASTATIC MELANOMA	93.396	5 R01 CA1138678-02		-15,818
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	5 U01 CA084294-12		-49,288
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	2 U01 CA084294-11		-73,846
ELUCIDATION OF CANCER PATHWAYS AND DRUGGABLE TARGETS USING MOUSE MODELS	93.396	5 U01 CA084294-12 SC2		-80,893
THE ROLE OF BRCA1/BARD1 IN BASAL-LIKE BREAST CANCER	93.396	5 R01 CA137023-02		-273,897
				\$10,961,696
Cancer Centers Support Grants				
CANCER CENTER SUPPORT GRANT	93.397	5 P30 CA013696-38		1,377,886
TRANSGENIC MOUSE	93.397	5 P30 CA013696-38 SC5		322,744
STEM CELLS AND THE ORIGINS OF BARRETT'S ESOPHAGUS	93.397	1 U54 CA163004-01		276,962
CLINICAL RESEARCH MANAGEMENT OFFICE	93.397	5 P30 CA013696-38 S12		254,066
BIOMEDICAL INFORMATICS	93.397	5 P30 CA013696-38 S10		237,165
MOLECULAR PATHOLOGY	93.397	5 P30 CA013696-38 SC4		226,184

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PROTOCOL REVIEW AND MONITORING	93.397	5 P30 CA013696-38 S13		202,043
MYOFIBROBLASTS IN GASTROINTERESTINAL CANCERS	93.397	1 U54 CA163111-01		182,305
BIOSTATISTICS	93.397	5 P30 CA013696-38 S11		162,214
FLOW CYTOMETRY	93.397	5 P30 CA013696-38 SC3		144,747
MYOFIBROBLASTS IN GASTROINTESTINAL CANCERS	93.397	1 U54 CA163111-01		128,315
RESEARCH RECRUITMENT AND MINORITY OUTREACH	93.397	5 P30 CA013696-38 SC9		116,413
BIOMARKERS	93.397	5 P30 CA013696-38 SC9		115,431
CALIFANO/KITA JESKI/GAUTIER PILOT PROJECT	93.397	5 P30 CA013696-38 S16		114,920
CONFOCAL MICROSCOPY	93.397	5 P30 CA013696-38 SC1		112,870
GENOMICS	93.397	5 P30 CA013696-38 SC2		94,686
FERRANDO/RABADAÑ PILOT PROJECT	93.397	5 P30 CA013696-38 S17		93,707
PROTOCOL-SPECIFIC RESEARCH	93.397	5 P30 CA013696-38 S14		89,936
NATIONAL CENTER: MULTISCALE ANALYSIS OF GENOMIC AND CELLULAR NETWORKS (MAGNET)	93.397	3 U54 CA121852-07S1 SP1		89,153
CANCER CENTER SUPPORT GRANT	93.397	5 P30 CA013696-39S2 SU2		86,365
CANCER CENTER SUPPORT GRANT - SUPPLEMENT FOR CLINICAL TRIALS REPORTING PROGRAM	93.397	5 P30 CA013696-38S1 SUP		76,301
RADIATION RESEARCH	93.397	5 P30 CA013696-38 SC8		60,025
PROTEOMICS	93.397	5 P30 CA013696-38 SC6		51,799
DATA SAFETY AND MONITORING	93.397	5 P30 CA013696-38 S15		39,442
STEM CELLS AND THE ORIGINS OF BARRETT'S ESOPHAGUS	93.397	1 U54 CA163004-01		38,187
MYOFIBROBLASTS IN GASTROINTERESTINAL CANCERS	93.397	1 U54 CA163111-01		31,514
DEVELOPMENT CORE	93.397	5 U54 CA101598-05 DEC		30,466
STEM CELLS AND THE ORIGINS OF BARRETT'S ESOPHAGUS	93.397	1 U54 CA163004-01		20,921
CHE ADMINISTRATIVE SUPPLEMENT	93.397	3 U54 CA101598-05 CHE		16,070
THE ROLE OF INFLAMMATION AND STROMA IN DIGESTIVE CANCER	93.397	5 U54 CA126513-05 SUP		10,202
PLANNING AND EVALUATION CORE	93.397	5 U54 CA101598-05 PEC		4,513
PILOT PROJECT - 3	93.397	5 U54 CA101598-05 P10		4,458
CANCERS IN OLDER MINORITY POPULATIONS - CARIBBEAN AMERICAN EMPHASIS	93.397	5 U54 CA101598-05		3,524
CANCER CENTER SUPPORT GRANT	93.397	3 P30 CA013696-37S1		384
RECRUITMENT CORE	93.397	5 U54 CA101598-05 RMC		56
CANCER CENTER SUPPORT GRANT	93.397	5 P30 CA013696-37		-240,591
				\$4,575,383

Cancer Research Manpower

CANCER EPIDEMIOLOGY, BIOSTATISTICS AND ENVIRONMENTAL SCIENCES	93.398	5 T32 CA009529-24		299,244
CANCER BIOLOGY TRAINING PROGRAM	93.398	5 T32 CA009503-25		273,004
THE ROLE OF DKK1, A WNT-INHIBITOR, IN MESENCHYMAL DIFFERENTIATION/SARCOMA GENESIS	93.398	5 K08 CA132986-04		154,239
METHYLATION AND HEPATOCYLLULAR CARCINOMA OUTCOMES	93.398	1 K23 CA149084-02		151,966
EFFECTS OF ANTIOXIDANT SUPPLEMENTATION DURING BREAST CANCER ADJUVANT THERAPY	93.398	5 K23 CA141052-03		143,234

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ROLE OF REPLICATION STRESS DURING MYCDEPENDENT LYMPHOMAGENESIS	93.398	5 K99 CA151827-02		107,243
MULTILEVEL DETERMINANTS OF BREAST CANCER: TRANSLATING RESEARCH INTO INTERVENTIONS	93.398	1 K07 CA151777-01A1		100,223
CANCER BIOLOGY TRAINING PROGRAM	93.398	5 T32 CA009503-24		83,527
CANCER EPIDEMIOLOGY, BIOSTATISTICS AND ENVIRONMENTAL SCIENCES	93.398	5 T32 CA009529-23		27,074
				\$1,339,754
Trans-NIH Recovery Act Research Support				
ARRA-NORTHEAST BIODEFENSE CENTER	93.701	3 U54 AI057158-06S1		444,837
ARRA-MUCOSAL MEMORY T CELLS AT THE VANGUARD OF HUMAN HOST DEFENSE	93.701	7 RC1 AI086164-02		298,524
ARRA-COLUMBIA COLLABORATIVE HIV/AIDS CLINICAL TRIALS UNIT	93.701	3 U01 AI069470-03S1		235,548
ARRA-MECHANISMS OF TOLERANCE IN RECIPIENTS OF COMBINED KIDNEY AND BONE MARROW TRANSPLANT	93.701	5 R01 AI084074-03		197,276
ARRA-MODELING OF S. AUREUS TRANSMISSION IN NORTHERN MANHATTAN	93.701	3 R01 AI77690-02S1		166,646
ARRA-MOLECULAR CONTROL OF PLASMACYTOID DENDRITIC CELL DEVELOPMENT AND FUNCTION	93.701	3 R01 AI072571-02S1		51,780
ARRA-NORTHEAST BIODEFENSE CENTER SCOPE	93.701	3 U54 AI057158-06 BIO		3,381
ARRA-CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY	93.701	3 U19 AI067773-05S1		0
ARRA-CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS - HARLEM	93.701	3 U01 AI069466-03 HAR		-4,047
Trans-NIH Recovery Act Research Support				
ARRA-BIOMEDICAL RESEARCH CORE CENTER ON SKIN STEM CELLS	93.701	5 P30 AR058886-02		775,503
ARRA-GENETIC MECHANISMS IN SKIN DISEASES	93.701	5 T32 AR007605-12		97,344
ARRA-GENOME WIDE ASSOCIATION STUDIES IN ALOPECIA AREATA	93.701	3 R01 AR056016-02S2		93,407
ARRA-IMPLICIT LEARNING IN OSTEOCYTE NETWORK UNDER MECHANICAL LOADING	93.701	5 RC1 AR058453-02		78,089
ARRA-SIRTUIN/FOXO SIGNALING IN THE REGULATION OF BONE MASS	93.701	3 R01 AR055931-02S1		77,197
Trans-NIH Recovery Act Research Support				
ARRA-THE NATIONAL STANDARD FOR NORMAL FETAL GROWTH - CLINICAL SITE EXPANSION (ARRA)	93.701	HHSN275200800013C		965,784
ARRA-THE NATIONAL STANDARD FOR NORMAL FETAL GROWTH - SONOLOGY LAB (ARRA)	93.701	HHSN275200800013C SC1		459,293
ARRA-PRENATAL ALCOHOL IN SUDDEN INFANT DEATH SYNDROME (SIDS) AND STILLBIRTH (PASS) NETWORK	93.701	3 U01 HD055155-04S1		347,739
ARRA-PREVENTION OF PRETERM BIRTH IN HIGH RISK NULLIPAROUS PATIENTS- ADMIN SUPPLEMENT	93.701	3 U10 HD063047-01S1		240,350
ARRA-T-BOX GENE EFFECTS ON LEFT-RIGHT BODY AXIS DETERMINATION	93.701	5 R01 HD056248-02		221,300
ARRA-PRENATAL CYTOGENETIC DIAGNOSIS BY ARRAY-BASED COPY NUMBER ANALYSIS	93.701	3 R01 HD055651-03S1		150,769
ARRA-EXPLORING PERSISTENT EPIGENETIC CHANGES AFTER PRENATAL FAMINE EXPOSURE IN HUMANS	93.701	5 RC1 HD063549-02		98,826
ARRA-RETINOID RECEPTOR ANTAGONISTS AS NOVEL MALE	93.701	3 U01 HD060479-02S1		84,153
ARRA-LIFE PROJECTS AND ANTIRETROVIRAL THERAPY: THE SOCIAL IMPACTS OF SCALE-UP	93.701	1 R01 HD057792-01A2		26,867
ARRA-EEG SYNCHRONY, PERINATAL RISK AND OUTCOME: ANALYSIS OF CHIME DATA	93.701	5 R03 HD060671-02		25,539
ARRA-MECHANISM OF ACTION OF THE LISSENCEPHALY GENE LIS1	93.701	3 R01 HD040182-10S1		11,771
Trans-NIH Recovery Act Research Support				
ARRA-REGENERATION OF CLINICALLY RELEVANT OROFACIAL TISSUES IN PRE-CLINICAL MODELS	93.701	5 RC2 DE020767-02		725,407
ARRA-WHOLE GENOME ASSOCIATION STUDY OF ORAL CANCER	93.701	1 R56 DE020093-01 R2		242,514
ARRA-CRANIOFACIAL TISSUE ENGINEERING	93.701	3 R01 DE016525-05S1		75,584
Trans-NIH Recovery Act Research Support				
ARRA-CLINICAL RESEARCH ON NONALCOHOLIC FATTY LIVER DISEASE	93.701	3 U01 DK061734-09S1		172,112

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ARRA-THE SKELETAL EFFECTS OF REDUCING INFLAMMATION IN TYPE 2 DIABETES MELLITUS	93.701	1 RC4 DK090776-01		161,710
ARRA-STRUCTURE AND MECHANISM OF THE AMP-ACTIVATED PROTEIN KINASE	93.701	5 R01 DK079953-02		122,977
ARRA-A GWAS FOR IGA NEPHROPATHY, THE MOST COMMON FORM OF GLOMERULONEPHRITIS	93.701	5 RC1 DK087445-02		120,191
ARRA-GENETIC CONTROL OF URETER AND KIDNEY DEVELOPMENT	93.701	3 R01 DK082715-01S1		60,030
ARRA-MOLECULAR EVENTS IN URINARY TRACT FORMATION	93.701	3 R01 DK061459-07S1		42,040
ARRA-DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.701	3 P30 DK063608-07 PT2		39,909
ARRA-DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.701	3 P30 DK063608-07 PT5		23,025
ARRA-DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.701	3 P30 DK063608-07 PT4		22,754
ARRA-DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.701	3 P30 DK063608-07 SC		22,109
ARRA-DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.701	3 P30 DK063608-07 PT6		15,139
ARRA-VITAMIN A STORAGE AND METABOLISM	93.701	3 R 01 DK079221-02S1		13,102
ARRA-BONE QUALITY AND MECHANICAL COMPETENCE IN CHRONIC KIDNEY DISEASE	93.701	3 K23 DK080139-02S1		11,481
ARRA-THE CENTRAL MELANOCORTIN SYSTEM AND REGULATION OF ENERGY BALANCE	93.701	3 R01 DK080003-03S1		9,826
ARRA-ADIPOSE TISSUE MACROPHAGE PHENOTYPE AND FUNCTION	93.701	3 R01 DK066525-07S1		9,151
ARRA-DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.701	3P30 DK063608-07 PT1		3,721
ARRA-ADULT TO ADULT LIVING DONOR LIVER TRANSPLANTATION COHORT STUDY	93.701	3 U01 DK062483-09S1		3,077
ARRA-GENETIC ANALYSIS OF PEA3 TRANSCRIPTION FACTORS AND KIDNEY DEVELOPMENT	93.701	3 R01 DK075578-04S3		2,359
ARRA-BARIATRIC SURGERY FOR MORBID OBESITY: CLINICAL & PATHOPHYSIOLOGIC CONSEQUENCES	93.701	3 R01 DK072526-04S1		2,235
ARRA-VITAMIN A DEPENDENT EVENTS IN URINARY TRACT FORMATION	93.701	1 R56 DK082963-01		-1
ARRA-PATHOGENIC ROLE OF ISLET CELL ABS IN AUTOIMMUNE DIABETES	93.701	3 R01 DK070999-04S1		-144
ARRA-PATHOGENIC ROLE OF ISLET CELL ABS IN AUTOIMMUNE DIABETES	93.701	3 R01 DK070999-03S1		-815
ARRA-IDENTIFICATION AND FUNCTIONAL ANALYSIS OF RENAL STEM CELLS	93.701	3 K08 DK078014-03SI		-3,251
Trans-NIH Recovery Act Research Support				
ARRA-PRENATAL ORGANOCHLORINE METABOLITES, THYROID FUNCTION AND DEVELOPMENT	93.701	5 R01 ES017024-02		209,133
ARRA-EARLY-LIFE BISPHENOL A, IMMUNE DYSREGULATION, AND INNER-CITY PEDIATRIC ASTHMA	93.701	5 RC2 ES018784-02		179,529
ARRA-PRENATAL ORGANOCHLORIDE EXPOSURE AND MALE REPRODUCTION	93.701	3 R01 ES012231-04S1		69,756
ARRA-EARLY-LIFE BISPHENOL A, IMMUNE DYSREGULATION, AND INNER-CITY PEDIATRIC ASTHMA	93.701	5 RC2 ES018784-02 S1		67,628
ARRA-ENDOCRINE DISRUPTION IN PREGNANT WOMEN: THYROID DISRUPTION AND INFANT DEVELOPMENT	93.701	5 R21 ES016610-02		49,377
ARRA-THE ROLE OF AIRBORNE PAHS AND DEP IN THE PATHOGENESIS OF CHILDHOOD ASTHMA	93.701	3 P50 ES015905-03S1		47,886
ARRA-RISK FACTORS ACCOUNTING FOR NEIGHBORHOOD DIFFERENCES IN ASTHMA PREVALENCE	93.701	3 R01 ES014400-03S1		4,801
ARRA-PHTHALATE EXPOSURE AND INNER CITY PEDIATRIC ASTHMA SUPPLEMENT	93.701	3 R01 ES014393-03S1		366
ARRA-RISK FACTORS ACCOUNTING FOR NEIGHBORHOOD DIFFERENCES IN ASTHMA PREVALENCE - LAMONT	93.701	3 R01 ES014400-03 LAM		-1,574
ARRA-CHARACTERIZATION OF THE INNATE IMMUNE RESPONSE TO CRYSTALLINE SILICA	93.701	5 R21 ES016835-02		-9,451
ARRA-ASSESS THE EFFECTS OF PRE- AND POSTNATAL EXPOSURE TO THE ORGANOPHOSPHORUS	93.701	3 R01 ES015579-01A2S		-15,892
Trans-NIH Recovery Act Research Support				
ARRA-CONNEXIN ACETYLTATION: IMPACT ON GAP JUNCTION FUNCTION AND HDAC INHIBITOR RESPONSE CONNEXIN ACETYLTATION	93.701	5 R01 GM088660-02		141,428
ARRA-MECHANISMS OF INTEGRIN-MICROTUBULE CROSS-TALK	93.701	3 R01 GM068595-07S1		90,284

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ARRA-FLUORESCENT CHEMICAL TAGS FOR SINGLE-MOLECULE IMAGING IN CELLS	93.701	5 RC1 GM091804-02		73,418
ARRA-FLUORESCENT CHEMICAL TAGS FOR SINGLE-MOLECULE IMAGING IN CELLS	93.701	5 RC1 GM091804-02 KAU		47,580
ARRA-IDENTIFICATION OF MASTER REGULATORS FOR STEM CELL PLURIPOTENCY AND SELF-RENEWAL	93.701	1 RC1 GM091240-01		36,692
ARRA-NEW APPROACH TOWARDS MAPPING OF COMPLEX HUMAN DISORDERS	93.701	3 R01 GM070789-05S1		20,563
ARRA-FUNCTION OF THE BROMODOMAIN PROTEIN BRDT IN SPERMATOGENESIS	93.701	3 R01 GM081767-02S1		10,030
ARRA-ASSEMBLY AND PLACEMENT OF THE CELL DIVISION RING	93.701	3 R01 GM056836-12S1R		4,425
ARRA-MECHANISMS OF CELL COMPETITION THAT REGULATE GROWTH DURING DEVELOPMENT	93.701	3 R01 GM078464-04S1		186
ARRA-GENETIC ANALYSIS OF NEMATODE CELL DIFFERENTIATION	93.701	3 R01 GM030997-28S1		1
ARRA-MITOCHONDRIAL MOTILITY AND INHERITANCE	93.701	3 R01 GM045735-15S1		-381
ARRA-CELLULAR AND MOLECULAR FOUNDATIONS OF BIOMEDICAL SCIENCE	93.701	3 T32 GM008798-09S1		-772
ARRA-EPIGENETIC REGULATION BY PWWP DOMAIN PROTEINS	93.701	3 R01 GM085145-02S1		-4,257
Trans-NIH Recovery Act Research Support				
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD-SUPPLEMENTAL FUNDING FOR THE ORGANIC SYNTHESIS COLLABORATIVE CENTER	93.701	3 UL1 RR024156-04S1		182,882
ARRA-DEVELOPING A NORTH AMERICAN MITOCHONDRIAL DISEASE CONSORTIUM (NAMDC)	93.701	5 RC1 NS070232-02		178,534
ARRA-IDENTIFICATION OF COMPOUNDS TO TREAT CHARCOT-MARIE-TOOTH TYPE 2E NEUROPATHY	93.701	5 RC1 NS068131-02		138,947
ARRA-INHIBITION SEPARATING TOUCH AND PAIN	93.701	5 R01 NS029797-16		136,303
ARRA-THE ROLE OF GENOME-CODED ME2 IN EPILEPSY	93.701	5 R21 NS070323-02		116,728
ARRA-NEURAL CONTROL OF GASTROINTESTINAL ACTIVITY	93.701	3 R01 NS012969-34S1		116,610
ARRA-DEVELOPING A NORTH AMERICAN MITOCHONDRIAL DISEASE CONSORTIUM (NAMDC)	93.701	5 RC1 NS070232-02		111,602
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD-ADVANCING INSTITUTIONAL EFFORTS TO SUPPORT RESEARCH MENTORING FOR CLINICAL TRAN	93.701	3 UL1 RR024156-04S3		92,897
ARRA-VALIDATING GFP RECONSTITUTION ACROSS SYNAPTIC PARTNERS (GRASP) METHODS TO DISSECT	93.701	5 RC1 NS069014-02		80,662
ARRA-PROTEIN TRAFFICKING IN NEURODEGENERATIVE DISEASES	93.701	5 R01 NS050199-07		69,706
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD-AMPLIFYING THE PACE OF COLLABORATIVE AND MULTIDISCIPLINARY PILOT RESEARCH (CAMP	93.701	3 UL1 RR024156-04S2		68,755
ARRA-BIOLOGY OF STEM CELLS IN THE ADULT MAMMALIAN BRAIN	93.701	3 R01 NS053884-03S1		57,071
ARRA-DOSE AND TREATMENT SELECTION IN CLINICAL TRIALS	93.701	5 R01 NS055809-05		46,943
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.701	3 TL1 RR024158-05S1		28,828
ARRA-NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.701	3 P50 NS049060-05S1		28,697
ARRA-NEUROTROPHIC FACTOR DEPRIVATION AND NEURAL CELL DEATH	93.701	3 R01 NS033689-15S1		25,600
ARRA-NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS-CORE A	93.701	3 P50 NS049060-05S2		9,210
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD - AMPLIFYING THE PACE OF COLLABORATIVE AND MULTIDISCIPLINARY PILOT RESEARCH (CA	93.701	3 UL1 RR024156-04S2 S5		3,657
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD - AMPLIFYING THE PACE OF COLLABORATIVE AND MULTIDISCIPLINARY PILOT RESEARCH (CA	93.701	3 UL1 RR024156-04S2 S4		3,157
ARRA-PATHOGENESIS OF NEURODEGENERATIVE DISEASES CAUSED BY MUTATIONS IN SENATAXIN	93.701	3 R01 NS064253-03S1		1,035
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD - AMPLIFYING THE PACE OF COLLABORATIVE AND MULTIDISCIPLINARY PILOT RESEARCH (CA	93.701	3 UL1 RR024156-04S2 S1		462
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD	93.701	3 UL1 RR024156-05S1		438
ARRA-CLINICAL AND TRANSLATIONAL SCIENCE AWARD - AMPLIFYING THE PACE OF COLLABORATIVE AND MULTIDISCIPLINARY PILOT RESEARCH (CA	93.701	3 UL1 RR024156-04S2 S3		154
ARRA-ROLE OF FAS DEATH RECEPTOR SIGNALING IN MOTOR NEURON DEGENERATION	93.701	3 R01 NS056422-03S2		-904
ARRA-NUCLEOCYTOPLASMIC INTERACTIONS AND DYNAMICS IN EMERY-DREIFUSS MUSCULAR DYSTROPHY	93.701	3 R01 NS059352-03S1		-1,720

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ARRA-DOWNSTREAM REGULATORS OF BETA-AMYLOID INDUCED NEURONAL DEATH	93.701	5 R01 NS043089-06		-37,925
Trans-NIH Recovery Act Research Support				
ARRA-CENTER FOR EVIDENCE-BASED PRACTICE IN THE UNDERSERVED (CEBP)	93.701	3 P30 NR010677-03S1 SC2		30,038
ARRA-REDUCING HEALTH DISPARITIES THROUGH INFORMATICS	93.701	3 T32 NR007969-09S1		24,606
ARRA-CENTER FOR EVIDENCE-BASED PRACTICE IN THE UNDERSERVED (CEBP)	93.701	3 P30 NR010677-03S1		21,594
ARRA-CENTER FOR EVIDENCE-BASED PRACTICE IN THE UNDESERVED (CEBP)	93.701	3 P30 NR010677-03S1 SC1		14,053
Trans-NIH Recovery Act Research Support				
ARRA-RETINOID METABOLISM AND ALCOHOL INDUCED DISEASE	93.701	5 RC2 AA019413-02		37,366
ARRA-ALCOHOL IN AVIATION AND MOTOR CARRIERS	93.701	3 R01 AA009963-15S2		320
Trans-NIH Recovery Act Research Support				
ARRA-SYSTEMS BIOLOGY OF TUMOR PROGRESSION AND DRUG-RESISTANCE	93.701	5 RC2 CA148308-02		555,634
ARRA-THERONOSTIC MOLECULAR AUTOMATA FOR SPECIFIC CELL ELIMINATION	93.701	5 RC2 CA147925-02		550,738
MECHANISMS OF P53 ACTIVATION IN TUMOR SUPPRESSION	93.701	4 R01 CA098821-09		308,060
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 BEK		182,178
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 CHR		173,340
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 DAN		153,057
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 DON		140,960
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01		130,637
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 BAL		124,623
ARRA-MECHANISMS OF T-CELL LEUKEMOGENESIS INDUCED BY NOTCH1	93.701	3 R01 CA120196-03S1		90,818
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 ELI		58,390
ARRA-MOLECULAR EPIDEMIOLOGY AND LUNG CANCER: A NESTED CASE-CONTROL STUDY	93.701	3 R01 CA127532-02S1		56,189
ARRA-REGULATION OF THE DNA DAMAGE RESPONSE BY THE MRN-ATM PATHWAY	93.701	3 R01 CA092245-08S1		55,635
ARRA-MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER CORE B	93.701	5 P01 CA097403-07 COB		53,204
ARRA-MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER	93.701	5 P01 CA097403-07		44,780
ARRA-MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER CORE A	93.701	5 P01 CA097403-07 COA		34,976
ARRA-CANCER CENTER SUPPORT GRANT- ADOPT SUPPLEMENT	93.701	3 P30 CA013696-36S3		34,526
ARRA-CANCER CENTER SUPPORT GRANT	93.701	3 P30 CA013696-36S2		24,681
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 MAR		21,374
ARRA-SYSTEMS BIOLOGY OF TUMOR PROGRESSION AND DRUG-RESISTANCE	93.701	5 RC2 CA148308-02		20,176
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 MEL		18,456
ARRA-THERONOSTIC MOLECULAR AUTOMATA FOR SPECIFIC CELL ELIMINATION	93.701	5 RC2 CA147925-02 SC1		17,825
ARRA-INNOVATIVE MENTORING AND MPH EDUCATION IN RESEARCH AND SCIENTIFIC EXCELLENCE IN COMPARATIVE EFFECTIVENESS RESEARCH PROGR	93.701	1 KM1 CA156709-01 ED2		3,583
ARRA-CANCERS IN OLDER MINORITY POPULATIONS: CARIBBEAN AMERICAN EMPHASIS	93.701	3 U54 CA101598-05S1		132
ARRA-THERONOSTIC MOLECULAR AUTOMATA FOR SPECIFIC CELL ELIMINATION	93.701	1 RC2 CA147925-01		-269
ARRA-CAREGIVERS' STRENGTHS AND SKILLS IN MANAGING OLDER CANCER PATIENTS' SYMPTOMS	93.701	3 R01 CA115315-05S1		-1,553
ARRA-MOLECULAR PATHOGENESIS OF BASAL-LIKE BREAST CANCER	93.701	5 P01 CA097403-07 P2		-15,963
Trans-NIH Recovery Act Research Support				

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ARRA-MODELS OF VISUAL CORTICAL CIRCUITRY AND DEVELOPMENT	93.701	5 R01 EY011001-15		95,834
ARRA-CALORIC RESTRICTION AND AGING IN EYES	93.701	3 R01 EY015293-05S2		206
ARRA-THE NEUROPHYSIOLOGY OF VISUAL ENVIRONMENTAL MEMORY	93.701	1 R21 EY020631-01A1		-578
Trans-NIH Recovery Act Research Support				
ARRA-COMPARISON OF DEPRESSION INTERVENTION AFTER CORONARY SYNDROME (CODIACS)	93.701	5 RC2 HL101663-02		1,276,995
ARRA-IMMUNE RESPONSE TO ALLOGENEIC HESCs	93.701	1 RC1 HL100117-01		390,491
ARRA-GENOME-WIDE AND LINKAGE STUDY OF QUANTITATIVE EMPHYSEMA PHENOTYPES	93.701	5 RC1 HL100543-02		375,443
ARRA-METABOLISM IN HEART FAILURE TRANSLATIONAL RESEARCH CENTER	93.701	5 P30 HL101272-02		274,516
ARRA-INDUCIBLE MACROPHAGE SPECIFIC GENE EXPRESSION IN DISEASES	93.701	5 RC1 HL100384-02		178,322
ARRA-FAMILY CARDIAC CAREGIVER INVESTIGATION TO EVALUATE OUTCOMES (FIT-O)	93.701	5 R01 HL075101-06		137,692
ARRA-PROTEIN THERAPY FOR ACUTE LUNG INJURY	93.701	5 RC1 HL099389-02		98,976
ARRA-NOTCH FUNCTION IN VASCULAR BIOLOGY AND ANGIOGENESIS	93.701	5 R01 HL062454-11		49,616
ARRA-CLINICAL VALIDATION OF CARDIAC STRAIN MEASURES WITH REAL-TIME 4D ULTRASOUND	93.701	3 R01 HL086578-01A2S		26,887
ARRA-STRUCTURAL MECHANISM OF K CHANNEL MODULATION BY CELLULAR REDOX STATE	93.701	3 R01 HL086392-04S1		1,201
ARRA-MECHANISMS OF FATTY ACID UPTAKE BY CARDIAC MUSCLE	93.701	5 R01 HL073029-07		90
ARRA-CARDIOVASCULAR DISEASE: DEPRESSION AND TELOMERE LENGTH	93.701	3 R01 HL091099-01A1S		-3,265
Trans-NIH Recovery Act Research Support				
ARRA-INFERRING GENE REGULATORY CIRCUITRY FROM FUNCTIONAL GENOMICS DATA	93.701	3 R01 HG003008-05A1S		29,035
Trans-NIH Recovery Act Research Support				
ARRA-FACULTY RECRUITMENT ON THE NEUROBIOLOGY OF AGING	93.701	5 P30 AG036453-02		412,796
ARRA-IMAGING OF COGNITION, LEARNING AND MEMORY IN AGING	93.701	2 R56 AG026158-06A1		165,754
ARRA-FUNCTIONAL DATA ANALYSIS OF LONGITUDINALLY MEASURED GENETIC TRAITS	93.701	5 R03 AG031113-02		9,217
ARRA-CALPAIN INHIBITORS AGAINST ALZHEIMER'S DISEASE	93.701	3 U01 AG028713-03S1		1,601
Trans-NIH Recovery Act Research Support				
ARRA-BIOBEHAVIORAL ASSESSMENT OF STRESS IN ADOLESCENT PREGNANCY: PARINATAL OUTCOMES	93.701	5 R01 MH077144-02		414,621
ARRA-UNDERSTANDING THE GENOMIC RISK ARCHITECTURE OF SCHIZOPHRENIA USING GENE EXPRESSION ANALYSIS IN MODEL SYSTEMS	93.701	5 RC1 MH088263-02		412,169
ARRA-USING FMRI TO MEASURE NEGATIVE SYMPTOMS IN SCHIZOPHRENIA	93.701	5 RC1 MH089084-02		354,678
ARRA-ELUCIDATION OF PREFRONTAL-AMYGDALA NEURAL CIRCUITRY WITH OPTOGENETIC TECHNIQUES	93.701	5 RC1 MH088458-02		296,281
ARRA-NEUROIMAGING-BASED BIOMARKERS FOR TWO COMPONENTS OF PAIN	93.701	5 RC1 DA028608-02		294,032
ARRA-DEVELOPING A PET BIOMARKER TO PREDICT RESPONSE IN TREATMENT-RESISTANT DEPRESSION	93.701	5 RC1 MH088405-02		254,201
ARRA-DEVELOPMENT OF BEHAVIORAL AND SOCIAL INTERVENTIONS THAT REDUCES STIGMA AND IMPROVE QUALITY AND ACCESSIBILITY OF HEALTH CARE	93.701	5 RC1 DA028284-02		212,964
ARRA-DRONABINOL NALTREXONE TREATMENT FOR OPIOID DEPENDENCE	93.701	5 R01 DA027124-02		194,635
ARRA-DRUG ABUSE, ADOLESCENT GIRLS, AND PREVENTION: YMCA COMMUNITY	93.701	5 R21 DA024618-02		133,170
ARRA-DEVELOPMENT OF 18F-LABELED AGONIST PET PROBES FOR QUANTIFYING 5-HT1A RECEPTORS	93.701	5 R21 MH085227-02		103,614
ARRA-IPS CELL-DERIVED NEURONS CARRYING AN ALLELIC SERIES OF CNTNAP2 STRUCTURAL MUTATIONS	93.701	5 RC1 MH088702-02 SC1		83,489
ARRA-STIMULANTS AND VASCULAR EVENTS IN ADHD	93.701	5 R21 MH079905-02		75,545
ARRA-SELF-REGULATORY CONTROL AND HABIT LEARNING IN ADOLESCENTS WITH BULIMIA NERVOSA	93.701	3 K01 MH077652-04S1		62,388
ARRA-THE CONTE CENTER FOR SCHIZOPHRENIA RESEARCH	93.701	3 P50 MH086385-03S1		48,223

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ARRA-IPS CELL-DERIVED NEURONS CARRYING AN ALLELIC SERIES OF CNTNAP2 STRUCTURAL MUTATIONS	93.701	5 RC1 MH088702-02		37,313
ARRA-NETWORK DETERMINANTS OF RISK AMONG FORMERLY INCARCERATED LATINO MEN	93.701	5 RC1 MH088636-02		34,954
ARRA-IPS CELL-DERIVED NEURONS CARRYING AN ALLELIC SERIES OF CNTNAP2 STRUCTURAL MUTATIONS	93.701	5 RC1 MH088702-02	SC2	26,286
ARRA-REJECTION SENSITIVITY AND SELF-REGULATION IN PERSONALITY DISORDER	93.701	3R01MH081948-03S2		14,954
ARRA-HIPPOCAMPAL NEUROGENESIS: MECHANISMS OF ANTIDEPRESSANT ACTION	93.701	3 K08 MH076083-04S1		3,778
ARRA-THE CONTRIBUTION OF ADULT-BORN NEURONS TO HIPPOCAMPAL STRUCTURE AND CONNECTIVITY	93.701	3 K08 MH079088-03S1		-6,615
Trans-NIH Recovery Act Research Support				
ARRA-AN NLP APPROACH TO GENERATING PATIENT RECORD SUMMARIES	93.701	5 R01 LM010027-02		195,563
ARRA-INTEGRATED DISCOVERY AND HYPOTHESIS TESTING OF NEW ASSOCIATIONS IN RARE DISEASES	93.701	5 R01 LM010140-02		172,116
ARRA-PHARMACOVIGILANCE USING NATURAL LANGUAGE PROCESSING, STATISTICS, AND THE EHR	93.701	3 R01 LM010016-01S2		29,134
ARRA-NOVEL METHOD TO IDENTIFY COMPETING PROTEIN-PROTEIN BINDERS	93.701	5 R03 LM009739-02		6,402
Trans-NIH Recovery Act Research Support				
ARRA-COLUMBIA CENTER FOR THE HEALTH OF URBAN MINORITES - NOMA CERED	93.701	3 P60 MD000206-08S1		402,481
ARRA-BIO-BEHAVIORAL CHRONIC DISEASES MANAGEMENT BY FAMILIES OF YOUNG MINORITY CHILDREN	93.701	5 RC1 MD004257-02		206,810
ARRA-APPROPRIATE CARE OF URI IN CHILDREN OF LATINO IMMIGRANTS:THE ACURI PROJECT	93.701	5 RC1 MD004109-02		103,739
ARRA-BAYESIAN BIOLUMINESCENCE IMAGE RECONSTRUCTION FOR THERAPY MONITORING OF HORMONE-REFRACTORY PROSTATE CANCER	93.701	1 R21 EB011772-01A1		60,035
ARRA-A DATASET FOR THE STUDY OF THE SOCIAL DETERMINANTS OF HEALTH	93.701	5 RC2 MD004768-02		34,332
ARRA-AUTOMATED METHODS FOR THE MEDIA ANALYSIS OF HEALTH NEWS COVERAGE	93.701	5 R36 MD005006-02		-1
				\$20,269,487
Cardiovascular Diseases Research				
STRUCTURE AND FUNCTION OF A PHOSPHORYLATION COUPLED SACCHARIDE TRANSPORTER	93.837	5 R01 GM098878-02		342,870
Cardiovascular Diseases Research				
CARDIOPULMONARY STRUCTURE & FUNCTION IN THE MULTI-ETHNIC STUDY OF ATHEROSCLEROSIS	93.837	5 R01 HL077612-06		865,356
EXERCISE AND INFLAMMATION: AUTONOMIC, AFFECTIVE & CELLULAR MECHANISMS	93.837	5 R01 HL094423-04		750,606
EXTRACELLULAR REGULATION OF LIPOPROTEIN LIPASE ACTIVITY	93.837	5 R01 HL045095-22		741,521
MOLECULAR BASIS OF SUDDEN CARDIAC DEATH	93.837	5 P01 HL067849-10	COA	623,281
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-05	SC1	606,699
AUTOPHAGY IN ADVANCED ATHEROSCLEROSIS	93.837	5 R01 HL106019-02		599,375
BIVENTRICULAR PACING AFTER CARDIOPULMONARY BYPASS	93.837	R01 HL080152-05		595,193
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-05	PJ2	577,245
ABCA/ABCG1 IN MYELOID POPULATIONS AND ATHEROGENESIS	93.837	5 R01 HL107653-02		568,235
ALLOSTERIC MODULATION OF CARDIOVASCULAR ION CHANNELS	93.837	5 P01 HL081172-05		552,465
NOVEL ION CHANNEL APPROACHES TO REENTRANT ARRHYTHMIAS	93.837	5 R01 HL094410-03		550,975
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-05	PJ3	545,095
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-04		512,048
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-17		506,583
ALLOSTERIC MODULATION OF CARDIOVASCULAR ION CHANNELS	93.837	5 P01 HL081172-05	PJ3	492,350
MOLECULAR DETERMINANTS OF L-TYPE CALCIUM CHANNEL GATING	93.837	5 R01 HL069911-10		485,244

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MOLECULAR APPROACHES TO GENE IDENTIFICATION IN CONGENITAL HEART DISEASE	93.837	5 U01 HL098163-03		468,981
THE BIOLOGY OF HUMAN LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.837	5 P50 HL077096-04 PJ1		467,043
POSTDOCTORAL TRAINING IN ARTERIOSCLEROSIS	93.837	5 T32 HL007343-34		435,310
NANOMECHANICS OF THE EXTRACELLULAR MATRIX	93.837	5R01HL066030-13		435,055
CLINICAL VALIDATION OF CARDIAC STRAIN MEASURES WITH REAL-TIME 4D ULTRASOUND	93.837	5 R01 HL086578-04		434,298
RAGE-DIRECTED IMAGING IN DIABETES-INDUCED ACCELERATED ATHEROSCLEROSIS	93.837	5 R01 HL089874-04		425,412
MOLECULAR DETERMINANTS OF K ⁺ CHANNEL REGULATION IN HEART	93.837	5 R01 HL044365-20		417,725
SINGLE MOLECULE STUDIES OF TITIN ELASTICITY	93.837	5 R01 HL061228-15		398,756
GPIIb ALPHA-VWF-A1 BOND KINETICS IN HEALTH AND DISEASE	93.837	5 R01 HL103989-03		388,967
PROTEIN KINASE C-DELTA ACTIONS IN CARDIOMYOCYTES	93.837	5 R01 HL077860-08		387,909
MOLECULAR BASIS OF SUDDEN CARDIAC DEATH	93.837	5 P01 HL067849-10 PJ2		375,115
NEW TECHNIQUES FOR MICROFABRICATED VASCULARIZED 3D TISSUES	93.837	5R01HL095477-03		371,487
NOVEL THERAPEUTIC APPROACHES TO ATRIAL FIBRILLATION TARGETING INTRACELLULAR CALCIUM LEAK	93.837	5 R01 HL102040-02		369,351
MULTIDISCIPLINARY TRAINING IN TRANSLATIONAL CARDIOVASCULAR RESEARCH	93.837	5 T32 HL087745-05		369,315
FATTY ACID REGULATION OF LIVER LIPOPROTEIN PRODUCTION	93.837	5 R01 HL073030-09		366,376
ENDOTHELIAL OXIDATIVE STRESS AND INFLAMMATION:MECHANISMS AND HUMAN STUDIES	93.837	5 R01 HL092144-03		353,639
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/MORTALITY OUTCOMES	93.837	5 P01 HL088117-03		345,360
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-05 COA		344,618
A SYSTEMS APPROACH TO ELUCIDATE MECHANISMS OF DRUG ACTIVITY AND SENSITIVITY USING LINCS DATA	93.837	1 U01 HL111566-01		344,217
P66SHC SIGNALING FUNCTIONS IN CARDIOMYOCYTES	93.837	5 R01 HL093343-03		343,423
MOLECULAR BASIS OF SUDDEN CARDIAC DEATH	93.837	5 P01 HL067849-10 COB		331,148
THE UNFOLDED PROTEIN RESPONSE IN STEROL CYTOTOXICITY	93.837	5 R01 HL075662-09		328,858
PHYSICAL ACTIVITY, DEPRESSION, AND POST-ACS	93.837	5 R01 AG034189-04		326,489
A NOVEL ATHEROSCLEROSIS LOCUS ON MOUSE CHROMOSOME 4	93.837	5 R01 HL102206-03		309,785
ASSEMBLY OF MEMBRANES IN HEART AND YEAST MITOCHONDRIA	93.837	5 R01 HL022174-31		306,115
NONINVASIVE QUALITATIVE AND QUANTITATIVE ASSESSMENT OF VASCULAR DISEASE IN VIVO	93.837	5R01HL098830-03R1		291,175
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-17 SC2		289,485
POSTDOCTORAL TRAINING IN CARDIOVASCULAR DISEASE	93.837	2 T32 HL007854-16SC1 SC1		288,589
MOLECULAR BASIS OF SUDDEN CARDIAC DEATH	93.837	5 P01 HL067849-10		263,149
PROMISE TRIAL: SUBSTUDY TO ASSESS FOR EFFECTIVE DOSE OF RADIATION	93.837	5 R01 HL109711-02		259,995
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-04 SC6		252,078
LIPOPROTEIN OXIDATION AND UTILIZATION DURING EXERCISE IN CHF	93.837	5 R01 HL086845-04		247,974
COMPARATIVE EFFECTIVENESS ANALYSIS OF TREAT-TO-TARGET AND RISK-BASED BLOOD PRESSURE	93.837	1 R01 HL107475-01		247,605
ASSEMBLY AND SECRETION OF APOB CONTAINING LIPOPROTEINS	93.837	5 R01 HL055638-15		239,628
ABCG1 AND ENDOTHELIAL FUNCTION	93.837	5 R01 HL102395-02		233,551
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-04 SC5		222,175

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MOLECULAR APPROACHES TO GENE IDENTIFICATION IN CONGENITAL HEART DISEASE	93.837	5 U01 HL098163-03 PCG		219,076
NETWORK FOR CARDIOTHORACIC SURGICAL INVESTIGATIONS IN CARDIOVASCULAR MEDICINE	93.837	5 U01 HL088951-04		215,292
CARDIOVASCULAR DISEASES: DEPRESSION AND TELOMERE LENGTH	93.837	5 R01 HL091099-03		215,134
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/MORTALITY OUTCOMES	93.837	5 R01 HL088117-03 SC3		214,658
CARDIAC AND SKELETAL MUSCLE METABOLISM AND PROTEOLYSIS IN HEART FAILURE	93.837	5 K23 HL095742-04		198,154
NEW SYNTHETIC REACTIONS FOR ACTIVE PRINCIPLES	93.837	5 R01 HL025848-32		195,893
MOLECULAR PHARMACOLOGY OF AN INHERITED HEART DISEASE	93.837	5 R01 HL056810-14		195,450
ION CHANNEL FUNCTION IN ARRHYTHMOGENIC CARDIAC CELL	93.837	5 R01 HL066140-08		182,894
GENDER RACE AND ETHNIC DISPARITIES RESEARCH IN CARDIOVASCULAR DISEASE PREVENTION	93.837	5 K24 HL076346-08		181,825
MOLECULAR BASIS OF HEART FAILURE	93.837	5 R01 HL061503-13		164,124
HARMFUL EFFECTS OF TRANSFUSION OF OLDER STORED RED CELLS: IRON AND INFLAMMATION	93.837	3 R01 HL098014-04S1		161,206
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-03 SC4		157,738
USE OF WAVEFORM AND FREQUENCY ANALYSES TO DIAGNOSE ATRIAL TACHYCARDIAS AFTER ATRI	93.837	5 K23 HL105893-02		155,054
HYPERINSULINEMIA, MTOR ACTIVITY AND PLASMA LIPOPROTEINS	93.837	1 R01 HL113880-01		150,972
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-04 SC7		146,534
ADOLESCENT EXPERIENCES AND ADULT CARDIOVASCULAR HEALTH: EFFECTS OF THE SOCIAL AND PHYSICAL ENVIRONMENT	93.837	5 K01 HL103199-04		144,508
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-18		143,250
MECHANISMS OF VENTRICULAR TACHYCARDIA IN LIPOTOXIC CARDIOMYOPATHY	93.837	5 K08 HL105801-02		140,969
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-17		140,963
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-17 SC3		140,835
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-17 SC5		133,558
ROLE OF SP-A GENE POLYMORPHISM IN LUNG TRANSPLANTATION	93.837	5 R21 HL092478-02		133,134
UNCONTROLLED HYPERTENSION-THE ROLE OF MEDICATION ADHERENCE AND CLINICAL INERTIA	93.837	5 K23 HL098359-02		132,608
MIDCAREER MENTORING IN BEHAVIORAL CARDIOLOGY: DEPRESSION & CARDIOVASCULAR	93.837	2 K24 HL084034-06		130,586
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-05		126,336
NUTRITIONAL AND HORMONAL PATHWAYS FOR REDUCTION OF APOB-LIPOPROTEINS	93.837	1 R21 HL112233-01A1		125,280
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/MORTALITY OUTCOMES	93.837	5 P01 HL088117-03 SC1		123,746
MECHANISMS OF DEFECTIVE EFFEROCYTOSIS IN ATHEROSCLEROSIS	93.837	1 R01 HL107497-01A1		123,471
NOTCH3 SIGNALING IN THE PATHOGENESIS OF HEMANGIOMA	93.837	1 K08HL102068-03		120,714
POSTDOCTORAL TRAINING IN CARDIOVASCULAR DISEASE	93.837	5 T32 HL007854-16		119,087
MICRORNA DE-TARGETING: NEW THERAPY FOR CORONARY ARTERY DISEASE	93.837	5 K99 HL109133-02		116,749
PEDIATRIC HEART NETWORK: FOLLOW-UP OF THE SINGLE VENTRICLE RECONSTRUCTION TRIAL	93.837	5 U01 HL068290-10		111,549
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-04 SC4		111,450
EXPLAINING RACIAL AND ETHNIC DISPARITIES IN IDIOPATHIC PULMONARY FIBROSIS	93.837	1 K23 HL086714-04		108,191
MOLECULAR APPROACHES TO GENE IDENTIFICATION IN CONGENITAL HEART DISEASE	93.837	5 U01 HL098163-02		107,452
ENACTING THE BEHAVIORAL AND SOCIAL SCIENCES IN THE CLINICAL SETTING: INSTITUTION	93.837	5 R25 HL108014-02		100,894

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RGK GTPASES/CA2+ CHANNEL CROSS TALK	93.837	5 R01 HL084332-05		98,648
STRUCTURAL MECHANISM OF K CHANNEL MODULATION BY CELLULAR REDOX STATE	93.837	5 R01 HL086392-05		98,240
FORECASTING THE CARDIOVASCULAR DISEASE EPIDEMIC IN CHINA	93.837	5 K08HL089675-05		96,054
CREATING GLUCOSE RESPONSIVE CARDIOVASCULAR	93.837	5 U01 HL087945-05		92,820
CARDIOVASCULAR DISEASE: DEPRESSION AND TELOMERE LENGTH	93.837	5 R01 HL091099-03 SC1		75,923
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-03 SC2		72,591
BEHAVIORAL ECOLOGY OF HOSTILITY AND CARDIAC AUTONOMIC NERVOUS SYSTEM CONTROL	93.837	5 R01 HL072057-04R1		68,355
ENHANCING SURVIVAL AND FUNCTION OF ENGINEERED CARDIAC TISSUE	93.837	5R21HL108668-02		66,855
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-18		59,233
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-04 SC1		55,802
THE CONNECTION BETWEEN NOTCH SIGNALING AND VEGFR1 IN ANGIOGENESIS	93.837	5 F31 HL090032-05		42,407
THE BIOLOGY OF HUMAN LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.837	5 P50 HL077096-04 COB		41,720
ETHNICITY, STRESS, AND LV MASS	93.837	5 K23 HL079343-05		38,742
CARDIOPULMONARY STRUCTURE AND FUNCTION IN MULTI-ETHNIC STUDY OF ATHEROSCLEROSIS	93.837	5 R01 HL077612-06		38,550
CARDIOPULMONARY STRUCTURE AND FUNCTION IN MULT-ETHNIC STUDY OF ATHEROSCLEROSIS	93.837	5 R01 HL077612-07		37,407
NONINVASIVE CONDUCTION MAPPING USING ELECTROMECHANICAL WAVE IMAGING	93.837	5 R21 HL096094-02		37,195
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-17 SC4		36,111
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/MORTALITY OUTCOMES	93.837	5 P01 HL088117-03 SUP		34,213
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/	93.837	5 P01 HL088117-04 SC8		33,870
MOLECULAR APPROACHES TO GENE IDENTIFICATION IN CONGENITAL HEART DISEASE	93.837	5 U01 HL098163-03 SC2		33,580
MICROFLUIDIC BLOOD PURIFICATION	93.837	5 R21 HL088162-02		33,000
MOLECULAR AND CELLULAR PATHOGENESIS OF EMERY-DREIFUSS MUSCULA	93.837	5 F32 HL094037-02		32,823
INSULIN RESISTANCE IN CHRONIC HEART FAILURE: PATHOPHYSIOLOGY AND POTENTIAL FOR REVERSAL	93.837	1 K23 HL103795-01A1		31,399
EFFEROCYTOSIS IN CVD & INFLAMMATION	93.837	5 K99 HL097021-02		29,341
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-18		29,271
AGING AND ATRIAL FIBRILLATION: THE ROLE OF ATRIAL MYOCYTE INTRACELLULAR CA2+ DYNAMICS	93.837	1 F32 HL107029-01		27,113
THE BIOLOGY OF HUMAN LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.837	5 P50 HL077096-04 CL2		26,202
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEA	93.837	5 P01 HL047540-18		24,964
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	2 P01 HL047540-17		24,413
PSYCHOSOCIAL FACTORS AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-17 SC6		23,534
ION CHANNEL REGULATION BY MACROMOLECULAR COMPLEXES	93.837	5 R01 HL068093-08		22,806
BIOLOGICALLY INSPIRED ENGINEERING OF HIERARCHICAL VASCULAR NETWORKS	93.837	1 F30 HL112505-01		22,295
DIAGNOSTIC LABELING: EFFECT ON WHITE COAT HYPERTENSION	93.837	5 K23 HL086734-04		22,024
NONINVASIVE ARRHYTHMIA MAPPING USING ELECTROMECHANICAL WAVE IMAGING	93.837	1R01HL114358-01		21,731
RACIAL DISPARITIES IN OBESITY: ROLE OF CULTURE AND ENVIRONMENT	93.837	5 K01 HL084700-06		21,686
THE BIOLOGY OF HUMAN LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.837	5 P50 HL077096-04R1 PJ2		20,367

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MOLECULAR AND CELLULAR PATHOGENESIS OF EMERY-DREIFUSS MUSCULAR DYSTROPHY	93.837	1 F32 HL094037-03		19,925
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-04		18,434
MOLECULAR APPROACHES TO GENE IDENTIFICATION IN CONGENITAL HEART DISEASE	93.837	5 U01 HL098163-02	PCG	16,536
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/MORTALITY OUTCOMES	93.837	5 P01 HL088117-03	SC5	14,130
THE BIOLOGY OF HUMAN LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.837	5 P50 HL077096-04	CLD	11,900
POSTDOCTORAL TRAINING IN CARDIOVASCULAR DISEASE	93.837	5 T32 HL007854-14	PJ1	11,839
PATHWAYS OF FENOFIBRATE EFFECTS ON CARDIOVASCULAR OUTCOMES IN ACCORD	93.837	1 R01HL110418-01A1		11,496
REGULATION OF CARDIAC MORPHOGENESIS BY NKX GENES IN THE ZEBRAFISH EMBRYO	93.837	5 K08 HL088002-04		11,277
ROLE OF FOXO1 IN LIPID METABOLISM	93.837	1 K99 HL111206-01		10,989
NETWORK FOR CARDIOTHORACIC SURGICAL INVESTIGATIONS IN CARDIOVASCULAR MEDICINE	93.837	5 U01 HL088951-05		10,679
MOLECULAR BASIS OF SUDDEN CARDIAC DEATH	93.837	3 P01 HL067849-10S1		10,087
THE BIOLOGY OF HUMAN LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.837	5 P50 HL077096-04	CLC	8,815
ENGINEERING VASCULARIZED CARDIAC MUSCLE	93.837	5 R01 HL076485-06R		8,794
POSTDOCTORAL TRAINING IN CARDIOVASCULAR DISEASE	93.837	5 T32 HL007854-15		6,518
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/MORTALITY OUTCOMES	93.837	3 P01 HL088117-03S2		4,908
THE BIOLOGY OF HUMAN LONG-TERM MECHANICAL CIRCULATORY SUPPORT	93.837	5 P50 HL077096-04	COC	4,814
DEPRESSION, BIOBEHAVIORAL MECHANISMS, & CHD/MORTALITY OUTCOMES	93.837	3 P01 HL088117-03S1		4,265
ROLE OF HEPATIC FOXO1 IN ATHEROSCLEROSIS	93.837	1 F32 HL103103-01		3,626
ALLOSTERIC MODULATION OF CARDIOVASCULAR ION CHANNELS	93.837	5 P01 HL081172-04 PJ PJ3		3,365
POSTDOCTORAL TRAINING IN CARDIOVASCULAR DISEASE	93.837	5 T32 HL007854-13		2,842
IMPROVING MED ADHERENCE IN POST-ACS PATIENT: PHASE 1B DOSE-FINDING RCT	93.837	5 K24 HL084034-05		1,438
ENGINEERING VASCULARIZED CARDIAC MUSCLE	93.837	5 R01 HL076485-06R	SC2	973
HIGH-RESOLUTION GENOME SCANS IN CONGENITAL HEART DISEASE	93.837	5 R01 HL080146-04		845
POSTDOCTORAL TRAINING IN CARDIOVASCULAR DISEASE	93.837	5 T32 HL007854-17		801
THE CONNECTION BETWEEN NOTCH SIGNALING AND VEGFR1 IN ANGIOGENESIS	93.837	5 F31 HL090032-04		785
POSTDOCTORAL TRAINING IN ARTERIOSCLEROSIS	93.837	5 T32 HL007343-35		601
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-04		366
MOLECULAR BASIS OF SUDDEN CARDIAC DEATH	93.837	3 P01 HL067849-09S1		46
CLINICAL VALIDATION OF CARDIAC STRAIN MEASURES WITH REAL-TIME 4D ULTRASOUND	93.837	5 R01 HL086578-04	MED	0
NEW GENES AND PATHWAYS INVOLVED IN ATHEROSCLEROSIS PROJECT	93.837	5 P01 HL054591-15	PJ4	-24
MULTIDISCIPLINARY TRAINING IN TRANSLATIONAL CARDIOVASCULAR RESEARCH	93.837	5 T32 HL087745-04		-91
PSYCHOSOCIAL AND CARDIOVASCULAR DISEASE	93.837	5 P01 HL047540-18	SC2	-116
PROTEIN KINASE C-DELTA ACTIONS IN CARDIOMYOCYTES	93.837	5 R01 HL077860-05		-161
MACROPHAGE FOAM CELLS, CATHEPSINS AND CHOLESTEROL EFFLUX	93.837	5 R01 HL022682-33		-1,899
MECHANISTIC DETERMINANTS OF PACING-INDUCED CARDIAC MEMORY	93.837	5 R01 HL067101-09		-2,993
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-04		-13,235

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POSTDOCTORAL TRAINING IN ARTERIOSCLEROSIS RESEARCH	93.837	5 T32 HL007343-33		-13,527
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-04		-18,001
MECHANISMS OF ATHEROGENESIS IN INSULIN RESISTANCE	93.837	5 P01 HL087123-04		-34,510
				\$29,272,453

Lung Diseases Research

SUBCLINICAL INTERSTITIAL LUNG DISEASE IN MESA	93.838	5 R01 HL103676-02		728,314
PULMONARY VASCULAR CHANGES IN EARLY CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD)	93.838	5 R01 HL093081-04		597,671
OPTICAL IMAGING OF MESENCHYMAL STEM CELL INTERACTIONS WITH LUNG MICROVESSELS	93.838	5 R01 HL057556-07		573,589
MICROSCOPIC IMAGING IN ALVEOLAR FUNCTION	93.838	5 R01 HL064896-12		478,285
STAPHYLOCOCCUS AUREUS ACTIVATION OF TNF SIGNALING PATHWAYS	93.838	5 R01 HL079395-07		452,906
MICROPUNCTURE STUDIES OF LUNG WATER AND SOLUTE EXCHANGE	93.838	5 R01 HL036024-28		451,099
LIQUID SECRETION IN THE ALVEOLAR WALL	93.838	5 R01 HL078645-07		423,915
CALCIUM DEPENDENT SIGNALING IN AIRWAY EPITHELIAL CELLS	93.838	5 R01 HL073989-08		415,023
MITOCHONDRIAL DYSFUNCTION IN THE DEVELOPMENT OF BRONCHOPULMONARY DYSPLASIA	93.838	5 K08 HL096953-03		135,908
COLUMBIA UNIVERSITY TRAINING PROGRAM IN LUNG SCIENCE	93.838	1 T32 HL105323-01A1		120,619
RANDOMIZED TRIAL ANTENATAL LATE PRETERM STEROIDS CLINICAL COORDINATING	93.838	1 U01 HL098554-01		69,304
THE EFFECTS OF PP2A ON TNF SIGNALING AND SMOKE-INDUCED LUNG INJURY	93.838	5 R01 HL098528-02		45,627
RANDOMIZED TRIAL ANTENATAL LATE PRETERM STEROIDS CLINICAL COORDINATING	93.838	1 U01 HL098554-01		40,219
SMOKE INDUCED AIRWAY INJURY IN COPD	93.838	5 R01 HL086936-04		39,107
ALVEOLO-CAPILLARY SIGNALING IN LUNG IMMUNOLOGY	93.838	5 R01 HL069514-10		2,011
				\$4,573,597

Blood Diseases and Resources Research

ZFX, A NOVEL TRANSCRIPTIONAL REGULATOR OF HEMATOPOIESIS	93.839	5 R01 HL84353-07		416,145
HARMFUL EFFECTS OF TRANSFUSION OF OLDER STORED RED CELLS: IRON AND INFLAMMATION	93.839	5 R01 HL098014-04		410,420
MECHANISMS UNDERLYING THE HARMFUL EFFECTS OF STORED RED BLOOD CELL TRANSFUSIONS	93.839	5 K08 HL103756-03		136,606
GENETIC REGULATION OF HEMATOPOIETIC STEM CELL	93.839	7 R01 HL073760-07		115,715
SHORT-TERM TRAINING: STUDENTS IN HEALTH PROFESSIONAL SCHOOLS	93.839	5 T35 HL007616-32		104,985
MIXED CHIMERISM APPROACH TO TRANSPLANTATION	93.839	7 R01 HL049915-18		76,791
SHORT-TERM TRAINING: STUDENTS IN HEALTH PROFESSIONAL SCHOOLS	93.839	2 T35 HL007616-31A1		55,203
ROLE OF STAT1 AND STAT3 IN GRAFT V. HOST DISEASE AND GRAFT V. LEUKEMIA EFFECTS	93.839	5 R01 HL093716-05		10,605
SHORT-TERM TRAINING GRANT	93.839	5 T35 HL007616-30		-63
THE REGULATION OF LEUKEMIA-ENGRAFTING CELLS BY THE HEMATOPOIETIC STEM CELL NICHE	93.839	5 K08 HL085872-05		-22,490
				\$1,303,917

Arthritis, Musculoskeletal and Skin Diseases Research

OSTEOCALCIN AS A REGULAR OF ENERGY METABOLISM	93.846	5 R01 AR045548-13		557,892
PHYSIOLOGIC LOADING FOR CARTILAGE TISSUE ENGINEERING	93.846	5 R01 AR046568-11		480,084
SIRTUIN/FOXO SIGNALING IN THE REGULATION OF BONE MASS	93.846	5 R01 AR055931-05		443,349
INTERFACE TISSUE ENGINEERING FOR SOFT TISSUE-TO-BONE INTEGRATION	93.846	5 R01 AR055280-05		437,362

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R&D Cluster, continued

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HORMONAL CONTROL OF PERIOSTEAL EXPANSION	93.846	5 R01 AR054447-05		413,475
INTRACELLULAR CALCIUM LEAK AND MUSCLE FUNCTION	93.846	5 R01 AR060037-03		404,055
ERK SIGNALING IN INFLAMMATORY BONE LOSS	93.846	5 R01 AR056246-04		396,489
CLINICAL BONE MECHANICS USING HR-PQCT AND MRI	93.846	5 R01 AR058004-02		382,690
INFLAMMATION AND CARDIOVASCULAR DISEASE IN RA	93.846	5 R01 AR050026-08		375,125
MECHANISMS OF MECHANOSENSORY TRANSDUCTION IN MERKEL CELLS	93.846	5 R01 AR051219-09		346,362
MECHANOBIOLOGY OF 3D TRABECULAR BONE EXPLANTS	93.846	5 R01 AR052461-02		345,323
FUNCTIONAL ANALYSIS OF THE HAIRLESS PROTEIN	93.846	5 R01 AR047338-10		343,750
BIOTRIBOLOGY OF DIARTHRODIAL JOINTS	93.846	5 R01 AR043628-16		331,824
PATHOGENESIS OF EMERY-DREIFUSS MUSCULAR DYSTROPHY	93.846	5 R01 AR048997-09		330,964
GENOME WIDE ASSOCIATION STUDIES IN ALOPECIA AREATA	93.846	5 R01 AR056016-04		282,122
PSEUDO-3D CYTOSKELETON DYNAMICS AND SIGNAL ACTIVATION IN OSTEOCYTES UNDER FLOW	93.846	5 R21 AR059917-02		265,492
OPTIMIZING NUTRIENT SUPPLY IN LARGE ENGINEERED CARTILAGE TISSUE CONSTRUCTS	93.846	5 R01 AR060361-02		261,366
CLINICAL BONE MECHANICS USING HR-PQCT AND MRI	93.846	5 R01 AR058004-02	SHA	258,318
IDIOPATHIC OSTEOPOROSIS IN PREMENOPAUSAL WOMEN	93.846	5 K24AR052665-07		214,724
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER - CORE A	93.846	2 P30 AR044535-10		180,990
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER - CORE B	93.846	2 P30 AR044535-10	COB	172,642
IDENTIFICATION OF ALOPECIA AREATA BIOMARKERS IN SKIN AND BLOOD	93.846	5 R21 AR061881-02		169,886
MULTIDISCIPLINARY ENGINEERING TRAINING IN MUSCULOSKELETAL RESEARCH	93.846	1T32AR059038-01A1		147,051
OPTIMIZING NUTRIENT SUPPLY IN LARGE ENGINEERED CARTILAGE TISSUE CONSTRUCTS	93.846	5 R01 AR060361-02		131,820
BONE QUALITY IN PREMENOPAUSAL WOMEN WITH IDIOPATHIC FRAGILITY FRACTURES	93.846	5 K23 AR054127-05		130,637
AN OPTOGENETIC STRATEGY TO DETERMINE IF MERKEL CELLS ARE EXCITATORY IN THE SKIN	93.846	1 R21 AR062307-01		129,700
MICRO-MECHANICAL MODELING OF TRABECULAR BONE	93.846	5 R01 AR051376-05		116,161
ASPECTS OF BONE QUALITY AMONG CHINESE AMERICAN WOMEN	93.846	5 K23 AR053507-05		115,302
PHYSIOLOGIC LOADING FOR CARTILAGE TISSUE ENGINEERING	93.846	5 R01 AR046568-11	SUP	108,083
IDIOPATHIC OSTEOPOROSIS IN PREMENOPAUSAL WOMEN	93.846	5 R01 AR049896-05		105,607
DETERMINANTS OF BODY COMPOSITION IN RHEUMATOID ARTHRITIS	93.846	7 K23 AR054112-06		79,811
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER - CORE C	93.846	2 P30 AR044535-10	COC	73,863
PATHOGENESIS OF EMERY-DREIFUSS MUSCULAR DYSTROPHY	93.846	5 R01 AR048997-09		59,483
ERK SIGNALING IN INFLAMMATORY BONE LOSS	93.846	5 R01 AR056246-03		56,234
MECHANOTRANSUCTION IN BONE VIA OSCILLATING FLUID	93.846	7 R01 AR045989-10	RE	53,670
BONE AND HORMONAL HEALTH IN PREMENOPAUSAL WOMEN WITH EPILEPSY	93.846	5 K23 AR053113-05		51,530
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER - CORE D	93.846	2 P30 AR 044535-10	COD	47,835
PHYSIOLOGIC LOADING FOR CARTILAGE TISSUE ENGINEERING	93.846	5 R01AR046568-11	ATE	38,315
SKIN MONOCYTE DIFFERENTIATION IN P204 CONDITIONAL KNOCKOUT MICE	93.846	2 P30 AR044535-10	SC2	32,608
ULTRA-HIGH RESOLUTION PQCT AS A BIOMARKER OF BONE STRENGTH IN OSEOPOROSIS TRIALS	93.846	3 U01 AR055068-03S1		31,441

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PHYSIOLOGIC LOADING FOR CARTILAGE TISSUE ENGINEERING	93.846	5 R01AR046566-11 10S		28,927
EXPLORING THE ROLE OF DENDRITE-EPIDERMAL INTERACTIONS IN DEVELOPMENTAL PRUNING	93.846	2 P30 AR044535-10 SC3		28,880
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER	93.846	2 P30 AR044535-10 SC1		28,342
FIFTH FORUM ON OSTEOPOROSIS AND METABOLIC BONE DISEASES FOR FELLOWS IN TRAINING	93.846	1 R13 AR061970-01		18,000
ULTRA-HIGH RESOLUTION POCT AS A BIOMARKER OF BONE STRENGTH IN OSTEOPOROSIS TRIALS	93.846	5 U01 AR055068-03		12,344
PHYSIOLOGIC LOADING FOR CARTILAGE TISSUE ENGINEERING	93.846	5 R01AR046568-11		9,613
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER	93.846	5 P30 AR044535-09 RE COC		8,713
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER	93.846	5 P30 AR44535-09 PF2		6,207
ROLE OF BETA 1 CONTAINING INTEGRINS IN CUTANEOUS BASEMENT MEMBRANE ORGANIZATION	93.846	5 R03 AR054022-03		4,862
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER	93.846	5 P30 AR044535-09 PF3		2,883
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER	93.846	5 P30 AR044535-09 PF6		2,007
GENETIC MECHANISMS IN SKIN DISEASES	93.846	5 T32 AR007605-09		1,860
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER	93.846	5 P30 AR044535-09 PF5		990
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CENTER	93.846	5 P30 AR044535-09 RE COA		990
CHONDROCYTE MECHANOTRANSDUCTION USING MICROFLUIDS	93.846	5 R01 AR052871-04 172		-29
FUNCTIONAL ANALYSIS OF THE HAIRLESS PROTEIN	93.846	5 R01 AR047338-10 SU SUP		-467
COLUMBIA UNIVERSITY SKIN DISEASE RESEARCH CEN	93.846	5 P30 AR044535-09 RE		-2,190
CHONDROCYTE MECHANOTRANSDUCTION USING MICROFLUIDICS	93.846	5 R01 AR052871-04		-5,081
MOLECULAR GENETICS OF THE KERATODERMAS	93.846	5 R01 AR0449224-10		-13,053
Arthritis, Musculoskeletal and Skin Diseases Research				
TARGETS OF A CYTIDINE DEAMINASE REQUIRED FOR LEFT-RIGHT AXIS IN XENOPUS	93.846	7 R03 HD057334-03		6,669
				\$9,043,902
Diabetes, Digestive, and Kidney Diseases Extramural Research				
CLINICAL RESEARCH ON NONALCOHOLIC FATTY LIVER DISEASE	93.847	5 U01 DK061734-10		848,064
PRIMARY HYPERPARATHYROIDISM	93.847	5 R01 DK032333-27		714,725
BONE PROPERTIES IN HYPOPARATHYROIDISM: EFFECT OF PTH	93.847	5 R01 DK069350-08		612,014
MOLECULAR EVENTS IN URINARY TRACT FORMATION	93.847	5 R01 DK061459-10		546,741
VITAMIN D DEFICIENCY IN PRIMARY HYPERPARATHYROIDISM	93.847	5 R01 DK084986-03		522,210
TYPE 1 DIABETES TRIALNET: CLINICAL CENTER AT BERRIE CENTER, COLUMBIA UNIVERSITY	93.847	5 U01 DK085504-03		521,645
GENETIC CONTROL OF URETER AND KIDNEY DEVELOPMENT	93.847	5 R01 DK082715-04		513,498
ROLE OF FORKHEAD PROTEINS IN INSULIN ACTION	93.847	2 R01 DK057539-12		510,642
BRANCHING MORPHOGENESIS OF URINARY EPITHELIA: FROM GENES TO CELLULAR BEHAVIORS	93.847	5 R01 DK083289-04		509,084
POSTPRANDIAL VITAMIN A	93.847	5 R01 DK068437-07		506,601
MOLECULAR REGULATION OF ADRENAL CORTEX HOMEOSTASIS AND REMODELING	93.847	5 R01 DK081515-04		495,631
GENETIC ANALYSIS OF ETV4/ETV5 TRANSCRIPTION FACTORS AND KIDNEY DEVELOPMENT	93.847	5 R01 DK075578-07		490,259
THE FUNCTION AND REGULATION OF HISTIDINE DECARBOXYLASE IN GUT INFLAMMATION	93.847	2 R01 DK048077-17		458,657
LRP5-DEPENDENT REGULATION OF BONE MASS ACCRUAL BY GUT-DERIVED SEROTONIN	93.847	5 R01 DK067936-07		455,806

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THE DROSOPHILA MIDGUT: A MODEL OF HUMAN INTESTINAL STEM CELLS AND THEIR PROGENY	93.847	5 R01 DK082456-04		438,760
IDENTIFYING THE EARLIEST EVENTS IN HIV-1 ASSOCIATED NEPHROPATHY VIA GENOME-WIDE	93.847	5 R01 DK087626-03		435,912
MOUSE MODELS OF INSULIN RESISTANCE	93.847	5 R01 DK058282-12		401,556
LEPTIN IN HUMAN ENERGY AND NEUROENDOCRINE HOMEOSTASIS	93.847	5 R01 DK064773-08		391,166
GENETICS OF RENAL HYPODYSPLASIA	93.847	5 R01 DK080099-05		383,123
HIT FOR FACILITATING PROBLEM SOLVING IN DIABETES MANAGEMENT	93.847	1 R01 DK090372-01A1		374,579
BARIATRIC SURGERY: OUTCOMES & IMPACT ON PATHOPHYSIOLOGY	93.847	5 U01 DK066667-09		369,636
REGULATION OF PANCREATIC ISLET CELL FATE	93.847	5 R01 DK082590-04		367,857
METABOLIC AND ENDOCRINE EFFECTS OF BARIATRICS SURGERY	93.847	5 R01 DK072011-07		354,636
NEW APPROACHES TO THE EVALUATION AND TREATMENT OF ACROMEGALY	93.847	5 R01 DK064720-09		351,588
FUNCTION AND REGULATION OF PROGASTRIN RECEPTORS ON INTESTINAL PROGENITORS	93.847	5 R01 DK052778-14		351,205
RENAL PROTECTION WITH A1 ADENOSINE RECEPTORS	93.847	5 R01 DK058547-12		349,617
MECHANISMS OF BETA CELL FAILURE	93.847	5 R01 DK064819-10		348,834
THE FUNCTION AND REGULATION OF TREFOIL FACTOR FAMILY 2 (TFF2)	93.847	5 R01 DK060758-10		331,009
CLINICAL RESEARCH ON NONALCOHOLIC FATTY LIVER DISEASE	93.847	7 U01 DK061734-09		321,141
HORMONES: BIOCHEMISTRY AND MOLECULAR BIOLOG	93.847	5 T32 DK007328-32		319,278
STEM CELL THERAPY FOR ACUTE KIDNEY INJURY	93.847	5 R01 DK083411-04		314,949
INTERACTIONS BETWEEN NEURONAL NETWORKS THAT REGULATE FOOD INTAKE AND BODY WEIGHT	93.847	5 R01 DK089038-02		311,053
MOLECULAR GENETIC ANALYSIS OF HUMAN OBESITY	93.847	5 R01 DK052431-19		308,685
THE CENTRAL MELANOCORTIN SYSTEM AND REGULATION OF ENERGY BALANCE	93.847	5 R01 DK080003-05		308,671
STRUCTURE AND FUNCTION OF UREA TRANSPORTERS	93.847	5 R01 DK088057-03		308,406
STRUCTURAL BIOLOGY OF ENZYMES IN FATTY ACID METABOLISM	93.847	5 R01 DK067238-08		303,444
CLONING OF A TYPE 2 DIABETES MODIFIER IN OBESE MICE	93.847	5 R01 DK066518-08		299,156
REGULATION OF EXOCRINE PANCREAS FORMATION	93.847	5 R01 DK087711-03		293,321
EPIGENETIC EVENTS UNDERLYING TYPE I DIABETES	93.847	1 DP3 DK094400-01		290,632
TOLL-LIKE RECEPTOR SIGNALING IN HEPATIC FIBROGENESIS	93.847	5 R01 DK076920-05		282,877
VZV IN THE ENTERIC NERVOUS SYSTEM: PATHOGENESIS AND CONSEQUENCES	93.847	1 R01DK093094-01		267,097
GRADUATE TRAINING IN NUTRITION	93.847	5 T32 DK007647-22		264,264
GENERATING MOLECULAR MARKERS THAT SELECTIVELY LABEL UROTHELIAL SUB-POPULATIONS	93.847	1 U01 DK094530-01		248,091
TRAINING PROGRAM IN ENDOCRINOLOGY AND METABOLISM	93.847	5 T32 DK007271-33		244,637
HUMAN ISLET ANTIGEN DISCOVERY AND IMAGING	93.847	5 R01 DK063567-09		243,396
THE ENOCANNABINOID SYSTEM IN HEPATIC INJURY AND FIBROSIS	93.847	5 R01 DK075830-05		242,259
IRON LIPOCALIN NGAL IN KIDNEY DISEASE	93.847	2 R01 DK073462-06		236,000
REGULATION OF MUCOSAL TH17 CELL RESPONSE BY INTESTINAL BACTERIA	93.847	5 R00 DK085329-03		231,423
ADULT TO ADULT LIVING DONOR LIVER TRANSPLANATATION COHORT STUDY	93.847	5 U01 DK062483-10		222,580
EPIGENETIC EVENTS UNDERLYING TYPE I DIABETES	93.847	1 DP3 DK094400-01 SC2		219,316

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NEW APPROACHES TO THE EVALUATION AND TREATMENT	93.847	5 K24 DK073040-08		205,572
EPIGENETIC EVENTS UNDERLYING TYPE I DIABETES	93.847	1 DP3 DK094400-01 SC1		189,206
TRAINING GRANT IN PEDIATRIC ENDOCRINOLOGY, DIABETES AND METABOLISM	93.847	5 T32 DK065522-07		188,955
CSF NEUROPEPTIDE, HORMONAL AND METABOLOMIC ANALYSIS IN HUMAN ENERGY	93.847	1 R01 DK093920-02		174,535
BONE QUALITY AND MECHANICAL COMPETENCE IN CHRONIC KIDNEY DISEASE	93.847	5 K 23 DK080139-04		171,945
QUANTITATIVE GENETICS OF DEFECTIVE IGA1 GLYCOSYLATION IN 1	93.847	5 K23 DK090207-02		162,728
NEIGHBORHOOD ENVIRONMENTS AND DISPARITIES IN OBESITY RATES IN NEW YORK CITY	93.847	5 R01 DK079885-02 SC1		152,109
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	08-PDK063608B CO		150,682
MULTIDISCIPLINARY TRAINING IN TRANSLATIONAL	93.847	5 T32 DK083256-03		139,949
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09 CO		138,528
CHRONIC KIDNEY DISEASE AND PTH: EFFECTS ON THE POSTMENOPAUSAL SKELETON	93.847	5 K23 DK084337-03		136,852
EPIGENETIC EVENTS UNDERLYING TYPE I DIABETES	93.847	1 DP3 DK094400-01 SC3		133,421
IDENTIFICATION AND FUNCTIONAL ANALYSIS OF RENAL STEM CELLS	93.847	5 K08 DK078014-05		121,429
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09		120,073
ADIPOSE TISSUE MACROPHAGE PHENOTYPE AND FUNCTION	93.847	2 R56 DK066525-09		120,000
PATHOGENIC ROLE OF ISLET CELL AUTOANTIBODIES IN TYPE I DIABETES	93.847	2 R56 DK070999-06		119,980
NOTCH AND REGULATORS OF NOTCH SIGNALING IMPACT BOTH GLUCOSE AND LIPID	93.847	1 K08 DK093604-02		102,572
NEIGHBORHOOD ENVIRONMENTS AND DISPARITIES IN OBESITY RATES IN NEW YORK CITY	93.847	5 R01 DK079885-02		102,386
ADULT TO ADULT LIVING DONOR LIVER TRANSPLANTATION COHORT STUDY	93.847	5 U01 DK062483-09		96,966
ADMINISTRATIVE CORE	93.847	5 P30 DK063608-10 ACC		95,187
PET IMAGING OF HUMAN BETA CELL MASS	93.847	5 R01 DK077493-03		94,719
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09 CO		93,665
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09		90,039
TYPE 1 DIABETES TRIALNET: CLINICAL CENTER AT BERRIE CENTER, COLUMBIA UNIVERSITY	93.847	5 U01 DK085504-04		88,278
CHARACTERIZATION OF A NOVEL NICHE INVOLVED IN INTESTINAL ORGANOGENESIS	93.847	1 R56 DK090078-01		87,822
IRON DELIVERY IN THE DEVELOPING KIDNEY	93.847	1 R56 DK092684-01		80,000
NON-CLASSICAL MANIFESTATIONS OF PRIMARY HYPERPARATHYROIDISM	93.847	5 K24 DK074457-05		73,213
GENETIC ANALYSIS OF PEA3 TRANSCRIPTION FACTORS AND KIDNEY DEVELOPMENT	93.847	5 R01 DK075578-04		69,053
INTERDISCIPLINARY TRAINING IN NUTRITIONAL AND POPULATION HEALTH SCIENCES	93.847	1 T32 DK091227-01		65,394
PRIMARY HYPERPARATHYROIDISM - NON-CLASSICAL MANIFESTATIONS	93.847	5 R01 DK066329-05 R		65,330
CORE F	93.847	5 P30 DK063608-10 FER		64,588
BARIATRIC SURGERY: OUTCOMES & IMPACT ON PATHOPHYSIOLOGY	93.847	5 U01 DK066667-08		62,685
MULTIDISCIPLINARY TRAINING IN TRANSLATIONAL GASTROINTESTINAL AND LIVER RESEARCH	93.847	3 T32DK083256-03S1		61,299
TRAINING PROGRAM IN ENDOCRINOLOGY AND METABOLISM	93.847	3 T32 DK007271-33S1 SUP		60,733
NEW APPROACHES TO THE EVALUATION AND TREATMENT OF ACROMEGALY	93.847	5 R01 DK064720-09		57,729
CORE A	93.847	5 P30 DK063608-10 LEI		56,436

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CORE E	93.847	5 P30 DK063608-10 SUS		50,979
NKX2.2 IN PANCREATIC DEVELOPMENT: THE ROLE OF THE NK2-SD DOMAIN	93.847	1 F30 DK092027-01		50,936
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09		49,247
BRANCHING MORPHOGENESIS OF URINARY EPITHELIA: FROM GENES TO CELLULAR BEHAVIORS	93.847	5 R01 DK083289-04 SUP		48,133
GRADUATE TRAINING IN NUTRITION	93.847	3 T32 DK007647-22S1		43,864
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-10 DIP		43,233
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09		42,256
TRAINING MEDICAL STUDENTS IN NIDDK RESEARCH	93.847	1 T35 DK093430-01		41,580
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09		40,056
HEPATIC MYELOID CELLS REGULATED BY OBESITY	93.847	5 F30 DK084680-03		36,626
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09 CO		35,792
THE CONTRIBUTION OF ACTIVATED HEPATIC STELLATE CELLS TO HEPATOCARCINOGENESIS	93.847	1 F31 DK091980-01		34,670
GENETIC CONTROL OF URETER AND KIDNEY DEVELOPMENT	93.847	3 R01 DK082715-02S2 SCI		34,254
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09		33,542
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09		32,650
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-09 CO		32,606
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-10		31,578
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-10 MEN		29,869
TRAINING PROGRAM IN ENDOCRINOLOGY AND METABOLISM	93.847	3 T32 DK007271-33S2		28,944
HORMONES: BIOCHEMISTRY AND MOLECULAR BIOLOGY	93.847	5 T32 DK007328-32 SC1		28,916
IRON LIPCALIN IN KIDNEY DISEASE	93.847	5 R01 DK073462-05		28,760
NON-CLASSIC MANIFESTATIONS OF PRIMARY HYPERPARATHYROIDISM	93.847	2 K24 DK074457-06A1		24,642
TRAINING PROGRAM IN ENDOCRINOLOGY AND METABOLISM	93.847	3 T32 DK007271-32S2		23,272
REGULATION OF GLUCOSE METABOLISM BY BONE RESORPTION AND GAMMA-CARBOXYLATION	93.847	1 K99 DK092254-01A1		20,515
ADIPOSE TISSUE MACROPHAGE PHENOTYPE AND FUNCTION	93.847	2 R01 DK066525-09A1		17,512
VITAMIN STORAGE AND METABOLISM	93.847	5 R01 DK079221-04		15,361
INTERACTIONS BETWEEN NEURONAL NETWORKS THAT REGULATE FOOD INTAKE AND BODY WEIGHT	93.847	1 R56 DK089038-01		10,551
CORE G	93.847	5 P30 DK063608-10 CLY		10,348
HUMAN ISLET ANTIGEN DISCOVERY AND IMAGING	93.847	3 R01 DK063567-09S		9,002
THE CONTRIBUTION OF ACTIVATED HEPATIC STELLATE CELL TO HEPATOCARCINOGENESIS	93.847	1 F31 DK091980-02		8,606
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-10 DEM		8,285
TRAINING PROGRAM IN ENDOCRINOLOGY AND METABOLISM	93.847	3 T32 DK007271-33S3		8,069
CYTOKINES CONVERT EPITHELIAL PRECURSORS TO NEPHRONS	93.847	5 R01 DK058772-10		6,704
HEPATIC MYELOID CELLS REGULATED BY OBESITY	93.847	5 F30 DK084680-02		1,218
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-10 EGL		1,077
IRON DELIVERY IN THE DEVELOPING KIDNEY	93.847	1 R01 DK092684-01A1		715

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
BARIATRIC SURGERY FOR MORBID OBESITY: CLINICAL AND PATHOPHYSIOLOGIC CONSEQUENCES	93.847	5 R01 DK072526-05		436
DIABETES AND ENDOCRINOLOGY RESEARCH CENTER	93.847	5 P30 DK063608-10 PAJ		222
TRAINING PROGRAM IN ENDOCRINOLOGY AND METABOLISM	93.847	5 T32 DK007271-32		-4
MULTIDISCIPLINARY TRAINING IN TRANSLATIONAL GASTROINTESTINAL AND LIVER RESEARCH	93.847	5 T32 DK083256-02		-474
HORMONES: BIOCHEMISTRY AND MOLECULAR BIOLOGY	93.847	2 T32 DK007328-31		-571
LEPTIN AS A REGULATOR OF BONE MASS	93.847	5 R01 DK058883-10		-604
TRAINING GRANT IN PEDIATRIC ENDOCRINOLOGY, DIABETES AND METABOLISM	93.847	2 T32 DK065522-06		-1,041
PROGENITOR CELLS OF THE MOUSE PROSTATE EPITHELIUM	93.847	5 R01 DK076602-06		-11,668
ADIPOSE TISSUE MACROPHAGE PHENOTYPE AND FUNCTION	93.847	5 R01 DK066525-08		-21,278
PATHOGENIC ROLE OF ISLET CELL ABS IN AUTOIMMUNE DIABETES	93.847	5 R01 DK070999-05		-27,860
Diabetes, Digestive, and Kidney Diseases Extramural Research				
EFFECTS OF AGE ON THE COGNITIVE ERP/CARDIAC WAVE EFFECT	93.847	5 R01 AG005213-23		513,069
				\$24,444,384
Nat. Inst. of Diabetes & Digestive & Kidney Diseases				
BARIATRIC SURGERY--OUTCOMES AND IMPACT ON PATHOPHYSIOLOGY	93.848	5 U01 DK066667-04		76
FACILITATED UPTAKE OF LONG CHAIN FATTY ACIDS IN OBESITY	93.848	5 R01 DK052401-10		-442
				\$-366
Nat. Inst. of Diabetes & Digestive & Kidney Diseases				
PROGENITOR CELLS OF THE MOUSE PROSTATE EPITHELIUM	93.849	2 R01 DK076602-07		46,731
				\$46,731
Extramural Research Programs in the Neurosciences and Neurological Disorders				
GENE-ENVIRONMENT INTERACTIONS IN AN AUTISM BIRTH COHORT	93.853	2 U01 NS047537-06A1		2,971,294
WARFARIN VS. ASPIRIN IN REDUCED EJECTION FRACTION (WARCEF)	93.853	5 U01 NS043975-11		2,388,756
WARFARIN VS ASPIRIN IN REDUCED EJECTION FRACTION - STAT	93.853	5 U01 NS039143-09		1,062,027
A RANDOMIZED TRIAL OF UNRUPTURED BRAIN ARTERIOVENOUS MALFORMATIONS (ARUBA)	93.853	5 U01 NS051483-05		690,689
PATHOGENESIS OF ESSENTIAL TREMOR: CEREBELLAR METABOLISM	93.853	5 R01 NS042859-08		612,080
NEUROTROPHIC FACTOR DEPRIVATION AND NEURONAL CELL DEATH	93.853	5 R01 NS033689-18		593,428
RCT: THE EFFECTS OF A NOVEL INTERVENTION TO IMPROVE STROKE SYMPTOM RECOGNITION	93.853	5 R01 NS067443-02		590,346
ENVIRONMENTAL EPIDEMIOLOGY OF ESSENTIAL TREMOR	93.853	5 R01 NS039422-12		547,578
MOLECULAR PHYSIOLOGY OF VOLTAGE-GATED CA2+ CHANNELS	93.853	5 R01 NS053494-06		546,319
MECHANISMS OF GENETIC SEIZURE SUSCEPTIBILITY IN JUVENILE MYOCLONIC EPILEPSY	93.853	5 R01 NS061829-04		540,374
AUTOPHAGIC CLEARANCE OF ABERRANT TAU: BIOCHEMICAL AND THERAPEUTIC IMPLICATIONS	93.853	5 R01 NS074593-02		510,974
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 COA		462,355
PROTOCOLADHERIN GENE EXPRESSION AND FUNCTION	93.853	5 R01 NS043915-32		461,437
NEURAL SUBSTRATES FOR MATCHING HEARING TO UTTERANCE	93.853	5 R01 NS023684-29		454,125
PROINFLAMMATORY ENZYMES IN AMYOTROPHIC LATERAL SCLEROSIS	93.853	5 R01 NS0442269-08		445,753
GENETIC EPIDEMIOLOGY OF PARKINSON'S DISEASE	93.853	2 R56 NS036630-10		443,880
DEVELOPMENT AND FUNCTION OF AN ADULT LOCOMOTION CIRCUIT IN DROSOPHILA	93.853	5 R01 NS070644-03		430,680
APOPTOSIS IN SUBSTANTIA NIGRA	93.853	2 R56 NS026836-21		415,365

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
SPATIO TEMPORAL RELATIONSHIP OF PATHOLOGY AND FUNCTIONAL DECLINE WITH TAUOPATHY	93.853	5 R01 NS074874-02		412,014
AUTOPHAGY AND NEURODEGENERATION	93.853	5 R01 NS063973-04		409,223
SUMOYLATION AND AMYLOID-BETA ELEVATION	93.853	5 R01 NS049442-07		392,778
NEURAL CONTROL OF GASTROINTESTINAL ACTIVITY	93.853	5 R01 NS012969-37		390,630
GFP RECONSTITUTION ACROSS SYNAPTIC PARTNERS (GRASP) METHODS TO DISSECT MAMMALIAN NEURAL CIRCUITS	93.853	5 R01 NS076774-02		376,397
SMN CONTROL OF SNRNP BIOGENESIS: ROLE IN RNA SPLICING AND MOTOR NEURON SURVIVAL	93.853	5 R01 NS069601-03		375,030
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 PJ PJ3		367,240
DENDRITIC PATTERNING BY INTERACTING EXTRINSIC CUES	93.853	5 R01 NS061908-05		362,891
GENETICS OF MOUSE SEIZURE SUSCEPTIBILITY	93.853	5 R01 NS061991-05		356,473
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 PJ4		356,443
THE ROLE OF DENDRITES IN THALAMOCORTICAL TRANSMISSION	93.853	5 R01 NS069679-03		355,876
BK CHANNEL MODULATION BY BETA SUBUNITS	93.853	5 R01 NS054946-06		354,681
VALIDATING A NOVEL LIPID PHOSPHATASE TARGET IN ALZHEIMER'S DISEASE	93.853	5 R01 NS074536-02		353,239
PATHOGENESIS OF NEURODEGENERATIVE DISEASES CAUSED BY MUTATIONS IN SENATAXIN	93.853	5 R01 NS064253-05		352,401
CONTROL OF MOTOR NEURON DIFFERENTIATION	93.853	5 R37 NS033245-19		351,258
IDENTIFICATION OF SUSCEPTIBILITY GENES FOR ESSENTIAL TREMOR	93.853	5 R01 NS073872-02		350,099
GENE EXPRESSION REGULATORY CIRCUITRY AND MICRORNAS IN MIDBRAIN DOPAMINE NEURONS	93.853	5 R01 NS064433-04		347,407
CRCNs: MODELING IMPACT OF RECEPTOR ARRANGEMENT	93.853	5 R01 NS073119-02		347,107
FUS/TLS GAIN AND LOSS OF FUNCTION IN ALS: ANIMAL AND CELLULAR MODELS OF DISEASE	93.853	5 R01 NS073776-02		326,649
MOLECULAR GENETIC ANALYSIS OF LYSOSOMAL STORAGE DISORDER GENES IN PD	93.853	5 R01 NS060113-04		326,198
CORTICAL LOCALIZATION IN TEMPORAL LOBE EPILEPSY	93.853	5 R01 NS035140-13		318,543
COMPUTATIONAL ANALYSIS OF HIGH-GRADE GLIOMAS	93.853	5 R01 NS061776-03		309,463
PROSPECTIVE STUDY OF CLINICALLY NON-FUNCTIONING PITUITARY ADENOMAS	93.853	5 R01 NS070600-03		301,033
PROSPECTIVE PURIFICATION OF ADULT STEM CELL ASTROCYTES	93.853	5 R01 NS074039-02		298,113
FUNCTION AND DEVELOPMENT OF A C. ELEGANS GABAERGIC INTERNEURON	93.853	5 R01 NS039996-12		288,520
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	5 P50 NS049060-07 PJ PJ1		286,385
DECIPHERING THE GENETICS OF SYNAPSE DEVELOPMENT BY WHOLE GENOME SEQUENCING	93.853	5 R21 NS075572-02		282,533
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 PJ PJ1		280,485
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	5 P50 NS049060-07		280,228
PERIVASCULAR NICHE FOR ADULT NEURAL STEM CELL	93.853	1 R21 NS075610-01		267,584
GENE-ENVIRONMENT INTERACTIONS IN AN AUTISM BIRTH COHORT	93.853	5 U01 NS047537-07		265,336
A MULTICENTER STUDY OF IDIOPATHIC GENERALIZED EPILEPSY	93.853	5 R01 NS027941-21		260,016
STUDY OF CAROTID OCCLUSION AND NEUROCOGNITION (RECON)	93.853	5 R01 NS048212-05 R1		247,580
THE ROLE OF WHITE MATTER PROGENITORS IN GLIOMA FORMATION AND PROGRESSION	93.853	5 R01 NS066955-03		240,709
DEVELOPING OPTIMAL DYNAMIC BEHAVIORAL INTERVENTION IN COMMUNITY-BASED STUDIES	93.853	1 R01 NS072127-01A1		232,990
GENETIC ANALYSIS OF DOPAMINERGIC NEURON SPECIFICATION IN C.ELEGANS	93.853	5 R01 NS050266-09		226,936

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IN-VIVO OPTICAL IMAGING OF NEUROVASCULAR COUPLING AND CEREBRAL METABOLISM	93.853	5 R01 NS063226-05		225,714
THE CONTRIBUTING EFFECTS OF MUSCLE, NERVE AND THE NMJ TO SMA PATHOLOGY	93.853	5 R01 NS057482-04		225,704
GENERATING NEURONS THROUGH CELLULAR REPROGRAMMING	93.853	5 R21 NS076191-02		221,209
INVESTIGATION OF THE DOPAMINE SYSTEM IN FRONTOTEMPORAL DEMENTIA	93.853	5 R00 NS060766-05		218,980
REGULATION OF HCN CHANNEL TRAFFICKING AND FUNCTION IN THE BRAIN BY TRIP8B	93.853	5 R01 NS036658-13		197,238
RCT: THE EFFECTS OF A NOVEL INTERVENTION TO IMPROVE STROKE SYMPTOM RECOGNITION	93.853	1 R01 NS067443-01A1		195,848
PRE-CLINICAL TESTING OF NECROSTATIN AS A POTENTIAL SMALL MOLECULE FOR THE TREATMENT OF ALS	93.853	5 R21 NS072182-02		195,499
AUTOPHAGY AND PROTEIN DEGRADATION IN PARKINSON'S DISEASE MODELS	93.853	5 R01 NS060876-03		193,933
A FUNCTIONAL CELL-BASED SCREEN FOR POTENTIAL SMA THERAPEUTIC COMPOUNDS	93.853	5 R21 NS071092-02		193,104
CCOMPLEMENT-MEDIATED NEURONAL INJURY IN STROKE	93.853	5 R01 NS040409-09		185,197
EFFICIENT METHODS FOR GENOTYPE-SPECIFIC DISTRIBUTIONS WITH UNOBSERVED GENOTYPES	93.853	5 R01 NS073671-02		182,466
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	5 P50 NS049060-07 CO COC		182,451
COLUMBIA UNIVERSITY MEDICAL CENTER-WEILL CORNELL MEDICAL CENTER NEXT SITE	93.853	1 U10 NS077267-01		178,946
PROFILING PATHOLOGICALLY NORMAL APOE VARIANTS TO IDENTIFY PATHWAYS FOR AD	93.853	5 R21 NS071836-02		177,158
NUCLEOCYTOPLASMIC INTERACTIONS AND DYNAMICS IN EMERY-DREIFUSS MUSCULAR DYSTROPHY	93.853	5 R01 NS059352-05		174,870
EXPLORING NEURONAL AND METABOLIC UNDERPINNINGS OF BASELINE CORTICAL HEMODYNAMICS	93.853	1R01NS076628-01R1		173,692
BALANCING DEATH AND SURVIVAL FACTORS IN PD: THE ROLE OF THE STRESS-RELATED PROTEINS RTP801 AND ATF4	93.853	5 K08 NS070608-03		169,085
MECHANISMS OF CEREBRAL PALSY RECOVERY INDUCED BY BALANCING MOTOR CORTEX ACTIVITY	93.853	5 K01 NS062116-04		167,235
SMALL MOLECULE DRUGS FOR TREATMENT OF DRY AGE-RELATED MACULAR DEGENERATION	93.853	1 U01 NS074476-01		166,156
COMPUTATIONAL ANALYSIS OF HIGH-GRADE GLIOMAS	93.853	5 R01 NS061776-03		165,794
NORTH AMERICAN MITOCHONDRIAL DISEASE CONSORTIUM	93.853	1 U54 NS078059-01		164,160
ADVANCED GRADUATE TRAINING PROGRAM IN NEUROBIOLOGY AND BEHAVIOR	93.853	5 T32 NS064928-02		161,802
NEUROEPIDEMIOLOGY TRAINING PROGRAM	93.853	5 T32 NS007153-28		161,536
INTERACTION BETWEEN DA, ALPHA-SYNUCLEIN AND CHAPERONE-MEDIATED AUTOPHAGY	93.853	5 R01 NS075222-02		159,986
NORTH AMERICAN SITES	93.853	5 U01 NS043975 NAS		159,216
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS (NEUSTART II)	93.853	3 P50 NS049060-07S1 S1		155,671
MOLECULAR PROFILING OF GAMMA MOTOR NEURON DEVELOPMENT	93.853	5 R21 NS072573-02		145,822
ESSENTIAL TREMOR: GENE EXPRESSION PROFILING IN CEREBELLAR PURKINJE CELLS	93.853	5 R21 NS077094-02		143,862
NEURO-VASCULAR DISEASE AS A CAUSE OF IMPAIRED MOBILITY	93.853	5 K23 NS073104-02		140,971
MITOCHONDRIA AS A TARGET FOR PROTECTION AGAINST HYPOXIC-ISCHEMIC BRAIN INJURY	93.853	5 R21 NS071121-02		139,735
NUCLEOCYTOPLASMIC INTERACTIONS AND DYNAMICS IN EMERY-DREIFUSS MUSCULAR DYSTROPHY	93.853	5 R01 NS059352-05 GUN		138,701
NORTH AMERICAN MITOCHONDRIAL DISEASE CONSORTIUM	93.853	1 U54 NS078059-01 SC1		132,544
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 PJ3		122,434
ADVANCED GRADUATE TRAINING PROGRAM IN THEORETICAL NEUROSCIENCE	93.853	5 T32 NS064929-03		121,411
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 PJ1		116,944
NEUREXIN-NEUROLIGIN TRANS-SYNAPTIC INTERACTION: LEARNING-RELATED SYNAPTIC GROWTH	93.853	5 K08 NS053415-05		111,319

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R&D Cluster, continued

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GOALS VS. HABITS IN THE HUMAN BRAIN: COGNITIVE AND COMPUTATIONAL MECHANISMS	93.853	1R01NS078784-01		106,849
ECHO LAB	93.853	5 U01 NS043975-11 ECH		105,790
MECHANISMS OF MECHANICAL TRANSDUCTION IN THE GUIDANCE OF NEURONAL AXONS	93.853	1K99 NS075135-02		105,511
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 COE		101,242
ROLE OF FAS DEATH RECEPTOR SIGNALING IN MOTOR NEURON DEGENERATION	93.853	5 R01 NS056422-05		99,013
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	5 P50 NS049060-07 COB		98,595
MECHANISMS OF GENETIC SEIZURE SUSCEPTIBILITY IN JUVENILE MYOCLONIC EPILEPSY	93.853	5 R01 NS061829-04 S1		97,412
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 CO COD		93,570
STRUCTURAL BASIS OF TRPC CHANNEL FUNCTION AND REGULATION	93.853	5 R01 NS045383-14R1		92,109
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 COC		88,890
NONCODING RNA TARGETS OF THE SPINAL MUSCULAR ATROPHY PROTEIN	93.853	5 R21 NS067448-02		88,435
NORTH AMERICAN SITES - SCOPE #2	93.853	5 U01 NS043975 NAS2 NA2		86,768
VALIDATION OF A STANDARDIZED DIAGNOSTIC INTERVIEW FOR EPILEPSY	93.853	5 R03 NS065346-02		83,853
PSYCHOSOCIAL IMPACT OF GENETICS IN EPILEPSY	93.853	1 R01 NS078419-01		81,389
AORTIC AND CARDIOVASCULAR DISEASE AND SILENT BRAIN INFARCTS	93.853	5 R01 NS036286-10R		79,421
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	5 P50 NS049060-07 COD		78,477
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13 COB		75,196
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-13S1		72,049
BLOOD FLOW AND COGNITION IN ASYMPTOMATIC CAROTID ARTERY DISEASE	93.853	1 R01 NS076277-01		71,584
TRANSSYNAPTIC NEURODEGENERATION AFTER NERVE INJURY	93.853	7 R01 NS050408-06		69,971
NEUROTROPHIC FACTOR DEPRIVATION AND NEURONAL CELL DEATH	93.853	3 R01 NS033689-18S1		68,538
ROLE OF STASIMON DYSFUNCTION IN SPINAL MUSCULAR ATROPHY	93.853	1 R21 NS077038-01A1		68,230
GENETICS OF MOUSE SEIZURE SUSCEPTIBILITY	93.853	3 R01 NS061991-04S1		64,551
ESTABLISHMENT OF SEGMENTAL IDENTITY IN EMBRYONIC STEM CELL DERIVED MOTOR NEURONS	93.853	5 R01 NS058502-04		58,460
SEIZURE LOCATION USING SIGNAL PROCESSING TECHNIQUES	93.853	5 K08 NS048871-05 R		56,842
MECHANISMS OF CENTRAL SYNAPTIC DYSFUNCTION IN SMA	93.853	1 R01 NS078375-01		55,305
NEUROPATHOLOGY OF SEVERE MALARIA IN THAILAND: MRI STUDIES	93.853	5 R01 AI072571-05		47,368
A NOVEL CELL-BASED HIGH-THROUGHPUT ASSAY FOR ALS	93.853	5 R21 NS064191-02		47,334
BASAL GANGLIA AND DOPAMINE CONTRIBUTIONS TO FEEDBACK-BASED LEARNING	93.853	5 F32 NS063632-03		47,105
NEURAL MECHANISMS FOR SENSORY PREDICTION IN A CEREBELLUM-LIKE STRUCTURE	93.853	1 F31 NS076334-01		46,800
TRANSCRIPTIONAL CONTROL OF TARGET MUSCLE INNERVATION BY FACIAL MOTOR NEURONS	93.853	5 F32 NS060566-03		46,606
MECHANISMS UNDERLYING DEVELOPMENT AND RESISTANCE TO ALS OF SPECIFIC MOTOR POOLS	93.853	5 F30 NS065635-03		46,493
WARCEF TRIAL #58	93.853	5 U01 NS043975-11 T58		45,785
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	2 P50 NS049060-06 COB		42,229
CHARACTERIZATION OF THE MECHANISMS UNDERLYING RUBROSPINAL CONTROL OF MOVEMENT	93.853	5 F30 NS065580-03		41,352
FUNCTION OF NEOCORTICAL GABAERGIC INTERNEURONS IN LOCAL CIRCUIT ACTIVATIONS	93.853	5 F30 NS063544-04		40,634

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IDENTIFYING GENES THAT TURN SKIN CELLS INTO NEURONS	93.853	1 F31 NS074841-01		38,735
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	2 P50 NS049060-06 PJ1		36,144
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 COE		34,326
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	2 P50 NS049060-06 COC		32,524
GENETICS OF ROLANDIC EPILEPSY	93.853	5 R01 NS047530-04		30,490
ADMINISTRATIVE SUPPLEMENT - MICROSCOPE	93.853	5 R01 NS070644-02S1 SUP		30,000
GENETICS OF ROLANDIC EPILEPSY	93.853	5 R01 NS047530-04 SUP		28,008
DYSFUNCTION OF NEUROFILAMENTS IN DISEASE: AN IPS MODEL OF GIANT AXONAL NEUROPATHY	93.853	1 F31 NS077544-01A1		25,833
PLD1 IN APP TRAFFICKING AND PROCESSING	93.853	5 F31 NS073387-02 1		25,124
NIH ALS CONFERENCE: CLINICAL RESEARCH TO FIND THE PATHOGENESIS AND CAUSE OF ALS	93.853	1 R13 NS074583-01		25,000
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 PJ4		24,011
PLD1 IN APP TRAFFICKING AND PROCESSING	93.853	1 F31 NS073387-01		21,667
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 COB		20,048
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 COA		15,196
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	2 P50 NS049060-06		14,790
NEURAL MECHANISMS OF DISTRACTOR FILTERING IN THE PARIETAL CORTEX	93.853	5 F31 NS062507-03		14,487
ADVANCED GRADUATE TRAINING PROGRAM IN THEORETICAL NEUROSCIENCE	93.853	5 T32 NS064929-04		11,858
ADVANCED GRADUATE TRAINING PROGRAM IN NEUROBIOLOGY AND BEHAVIOR	93.853	5 T32 NS064928-03		11,820
BASAL GANGLIA AND DOPAMINE CONTRIBUTIONS TO FEEDBACK-BASED LEARNING	93.853	5 F32 NS063632-02		11,506
C1Q COMPLEMENT AND HYPOXIC-ISCHEMIC INJURY IN THE DEVELOPING BRAIN	93.853	5 R01 NS056146-04		10,744
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 COD		8,254
FUNCTION OF NEOCORTICAL GABAERGIC INTERNEURONS IN LOCAL CIRCUIT ACTIVATIONS	93.853	5 F30 NS063544-03		5,322
NEUROEPIDEMIOLOGY TRAINING PROGRAM	93.853	5 T32 NS007153-27		2,486
NEW YORK COLUMBIA COLLABORATIVE SPOTRIAS	93.853	2 P50 NS049060-06 COD		1,867
NEURAL MECHANISMS FOR SENSORY PREDICTION IN A CEREBELLUM-LIKE STRUCTURE	93.853	5 F31 NS076334-02		1,836
SUMMER PROGRAM FOR UNDER-REPRESENTED STUDENTS	93.853	1 R25 NS076445-01		1,620
WARFARIN VS ASPIRIN IN REDUCED EJECTION FRACTION - STAT	93.853	5 U01 NS039143-09 SC1		1,486
MECHANISMS UNDERLYING DEVELOPMENT AND RESISTANCE TO ALS OF SPECIFIC MOTOR POOLS	93.853	5 F30 NS065635-02		959
MECHANISMS OF DOPAMINE NEURON DEGENERATION	93.853	5 P50 NS038370-12 COC		939
NEUROLOGICAL SCIENCES ACADEMIC DEVELOPMENT AWARD (NSADA)	93.853	3 K12NNS001698-10S1- SCI		826
CHARACTERIZATION OF THE MECHANISMS UNDERLYING RUBROSPINAL CONTROL OF MOVEMENT	93.853	5 F30 NS065580-02		645
GENETIC MECHANISMS THAT REGULATE LEFT/RIGHT ASYMMETRIC NEURON SIZE	93.853	5 R03 NS067451-02		-55
A MULTICENTER STUDY OF IDIOPATHIC GENERALIZED EPILEPSY	93.853	5 R01 NS027941-20		-74
FUNCTIONAL ANATOMY OF VISUOMOTOR LEARNING & MOTOR MEMORY	93.853	5 R01 NS052804-04		-98
A MULTIDISCIPLINARY APPROACH TO EPILEPSY GENETICS	93.853	5 K02 NS050429-05		-749
A MULTICENTER STUDY OF IDIOPATHIC GENERALIZED EPILEPSY	93.853	5 R01 NS027941-19		-2,305

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
DOSE AND TREATMENT SELECTION IN CLINICAL TRIALS	93.853	5 R01 NS055809-03		-7,656
SPATIOTEMPORAL ERP MODELING AND BRAIN DEVELOPMENT (K-25)	93.853	5 K25 NS052230-05		-8,016
BIOLOGY OF STEM CELLS IN THE ADULT MAMMALIAN BRAIN	93.853	5 R01 NS053884-05		-14,785
WARFARIN VS ASPIRIN IN REDUCED EJECTION FRACTION - STAT	93.853	4 U01 NS039143-08 SC1		-15,994
ROLE OF PHOSPHOLIPIDS IN MEMBRANE TRAFFIC AT THE SYNAPSE	93.853	5 R01 NS056049-05		-24,692
PROINFLAMMATORY ENZYMES IN AMYOTROPHIC LATERAL SCLEROSIS	93.853	5 R01 NS042269-07		-33,835
MOLECULAR ENGINEERING APPROACH TO STUDY LONG TERM SYNAPTIC PLASTICITY	93.853	5 R01 NS060762-04		-193,193
				\$34,671,196
Allergy, Immunology and Transplantation Research				
NORTHEAST BIODEFENSE CENTER - ADMIN CORE & SUBS	93.855	5 U54 AI057158-08		6,188,516
CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS	93.855	5 U01 AI069466-05		1,789,927
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY	93.855	5 U19 AI067773-07		1,109,065
NORTHEAST BIODEFENSE CENTER - ADMIN CORE & SUBS	93.855	5 U54 AI057158-09		978,995
MULTI-CENTER BLINDED ANALYSIS OF XMRV/MLV IN CHRONIC FATIGUE SYNDROME SUPP	93.855	5 U54 AI057158-08 XMR		812,960
ENHANCE PREVENTION IN COUPLES (EPIC)	93.855	5 R01 AI083038-03		809,378
COLUMBIA COLLABORATIVE HIV/AIDS CLINICAL TRIALS UNIT	93.855	5 U01 AI069470-05		807,070
IMPROVING MATERNAL AND NEWBORN HEALTH USING THE HIV/AIDS PROGRAM PLATFORM IN TANZANIA	93.855	1 R01 AI093182-01A1		703,327
NORTHEAST BIODEFENSE CENTER - CAREER DEV & DEV RSCH	93.855	5 U54 AI057158-08 S1		679,597
MODELING OF S. AUREUS TRANSMISSION IN NORTHERN MANHATTAN	93.855	5 R01AI077690-04		631,535
OSTEOPOROSIS IN HIV INFECTED POSTMENOPAUSAL WOMEN	93.855	5 R01 AI065200-08		628,270
PROJECT 1	93.855	5 U19 AI067773-07 SC1		588,443
NORTHEAST BIODEFENSE CENTER	93.855	5 U54 AI057158-08 S5		570,424
GARDNERELLA VAGINALIS: TOXIN PRODUCTION AND PATHOGENESIS	93.855	5 R01 AI092743-02		552,807
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY	93.855	5 U19 AI067773-06		545,161
PHARMACOLOGIC APPROACHES TO COMBATING RESISTANCE TO ANTIMALARIAL COMBINATIONS	93.855	5 R01 AI079709-04		544,871
COLUMBIA COLLABORATIVE HIV/AIDS CLINICAL TRIALS UNIT	93.855	5 U01 AI069470-06		528,964
NORTHEAST BIODEFENSE CENTER: MULTI-CENTER BLINDED ANALYSIS OF XMRV/MLV IN CHRONIC FATIGUE SYNDROME	93.855	5 U54 AI057158-08 S6		522,969
ROLE OF ANTHRAX TOXIN RECEPTORS IN ANGIOGENESIS AND ENDOTHELIUM	93.855	5 R01 AI064654-05		515,571
EXPLOITING FATTY ACID METABOLISM TO CURE MALARIA	93.855	5 R01 AI085584-03		507,320
HIV PREVENTION & TREATMENT (COLUMBIA UNIVERSITY) CRS	93.855	5 U01 AI069470-06 SC4		495,219
RISK FACTORS FOR SPREAD OF STAPHYLOCOCCUS AUREUS IN PRISONS	93.855	5 R01 AI082536-04		490,346
CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS	93.855	5 U01 AI069466-05 SC1		471,568
HIV AND THE MENOPAUSAL TRANSITION: EFFECTS ON MUSCULOSKELETAL HEALTH	93.855	5 R01 AI095089-02		459,969
PIG TO HUMAN THYMIC XENOTRANSPLANTATION	93.855	5 R01 AI084903-03		456,834
NORTHEAST BIODEFENSE CENTER	93.855	5 U54 AI057158-09 S5		448,211
UNDERSTANDING THE ROLE OF KB RAS PROTEINS IN SIGNALING AND DEVELOPMENT	93.855	5 R01 AI093985-02		444,978
MOLECULAR CONTROL OF PLASMACYTOID DENDRITIC CELL DEVELOPMENT AND FUNCTION	93.855	5 R01 AI072571-05		423,539

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R&D Cluster, continued

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ROLE OF PFCRT IN CHLOROQUINE RESISTANCE P. FALCIPARUM	93.855	5 R01AI050234-12		402,841
COMPREHENSIVE GENETIC CHARACTERIZATION OF ANTIBIOTIC RESISTANCE	93.855	5 R01 AI077562-04		390,387
RHINOVIRUS PATHOGENESIS AND HOST RANGE	93.855	5 R01 AI050754-10		372,323
HIV PREVENTION & TREATMENT CRS CORE/PIF	93.855	5 U01 AI069470-05 HPT		357,859
RISK FACTORS FOR SPREAD OF STAPHYLOCOCCUS AUREUS IN PRISONS	93.855	5 R01 AI082536-03		329,764
CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS	93.855	5 U01 AI069466-06		289,195
SPATIAL COORDINATION OF CD28 AND TCR SIGNALING	93.855	5 R01 AI088377-03		287,896
CORE C: IRRADIATION	93.855	5 U19 AI067773-07 SC3		257,483
MOLECULAR CHARACTERIZATION OF NOVEL ASTROVIRUSES	93.855	5 R21 AI090196-02		251,204
PROJECT 2	93.855	5 U19 AI067773-07 SC2		250,017
STUDY OF A NOVEL PICORNAVIRUS GENUS ASSOCIATED WITH ACUTE FLACCID PARALYSIS	93.855	5 R21 AI081132-02		249,206
IMPACT CRS	93.855	5 U01 AI069470-06 SC6		245,829
PROBING THE INNATE RESPONSE TO 3', 5'- CYCLIC DIGUANYLATE(C-DIGMP)	93.855	5 R21 AI096088-02		245,697
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY (DICENTRICS SUPPLEMENT)	93.855	5 U19 AI067773-07 DS		231,864
CONTROL OF CD8+ EFFECTOR T CELL DIFFERENTIATION	93.855	5 R01 AI061699-08		218,482
ROLE OF CD47 IN XENOGRAFT REJECTION BY MACROPHAGES	93.855	5 R01 AI064569-05		213,165
CD8+ T CELLS CONTROL AUTOMMUNITY IN EAE	93.855	5 R01 AI065609-02		181,331
IMPAACT CRS	93.855	5 U01 AI069470-05 IMP		162,288
NORTHEAST BIODEFENSE CENTER	93.855	5 U54 AI057158-08 S3		156,925
CORE D: FABRICATION	93.855	5 U19 AI067773-07 SC4		144,840
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY (GENETICS SUPPLEMENT)	93.855	5 U19 AI067773-07 GS		142,327
ASYMMETRIC CD8+ T CELL DIVISION IN THE INITIATION OF IMMUNITY	93.855	7 R01AI076458-05		142,215
GENTIC APPROACHES TO THE STUDY OF PLASMACYTOID DENDRITIC CELL FUNCTION	93.855	5 R21 AI085439-02		140,928
TRAINING IN PEDIATRIC INFECTIONS DISEASES	93.855	5 T32 AI007531-13		140,719
VIRAL ARRAYS FOR BIODEFENSE	93.855	5 U01 AI070411-05		129,925
CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS	93.855	5 U01 AI069466-06 SC1		121,841
CORE D: FABRICATION (MECH ENG)	93.855	5 U19 AI067773-07 SC5		120,897
PATHOGENESIS & EPIDEMIOLOGY OF S EPIDERMIDIS VENTRICULAR ASSIST DEVICE INFECTIONS	93.855	5 K08 AI072043-05		113,507
MECHANISMS OF S. AUREUS TRANSMISSION AND PER	93.855	5 K08AI090013-03		113,010
PLANNING FOR A PHASE 2/2B MICROBICIDE STUDY: VIVAGEL FOR HSV PREVENTION IN WOMEN	93.855	1 R34 AI090051-01		105,576
HELPER T CELL REGULATION IN MURINE LEISHMANIASIS	93.855	7 R01 AI042370-15		103,994
ROLE OF CD47 IN XENOGRAFT REJECTION BY MACROPHAGES	93.855	2 R01 AI064569-06		103,511
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY	93.855	2 U19 AI067773-06 SC2		102,578
IMMUNOLOGIC MECHANISMS IN POST-LYME DISEASE SYNDROME	93.855	1 R56 AI093763-01A1		94,760
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY	93.855	5 U19 AI067773-07 SC SC6		88,510
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIODOSIMETRY	93.855	2 U19 AI067773-06 SC1		87,622

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TRAINING IN THE EPIDEMIOLOGY OF INFECTIOUS DISEASES	93.855	5 T32 AI049821-10		87,225
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	5 U19 AI067773-07 SC7		86,267
NORTHEAST BIODEFENSE CENTER - BRIESE	93.855	5 U54 AI057158-09 S3		85,066
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	5 U19 AI067773-07 SC SC8		67,335
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	2 U19 AI067773-06		62,858
ENHANCE PREVENTION IN COUPLES (EPIC)	93.855	5 R01 AI083038-03 S1		62,188
RHINOVIRUS PATHOGENESIS AND HOST RANGE	93.855	5 R01 AI050754-10 SC1		60,357
MULTI-CENTER BLINDED ANALYSIS OF XMRV/MLV IN CHRONIC FATIGUE SYNDROME SUPP	93.855	5 U54 AI057158-09 XMR		46,225
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	5 U19 AI067773-07 SC SC7		42,431
ANTAGONISM OF INNATE IMMUNITY BY PICORNAVIRUSES	93.855	1 R01 AI102597-01		42,297
TRAINING IN PEDIATRIC INFECTIONS DISEASES	93.855	5 T32 AI007531-12		40,676
ROLE OF NCRNA SURVEILLANCE COMPLEX "RNA EXOSOME" IN CLASS SWITCH RECOMBINATION AND SOMATIC HYPERMUTATION	93.855	1 R01 AI099195-01A1		35,832
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	2 U19 AI067773-06 SC6		30,055
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	2U19AI067773-06 SC3		29,609
NORTHEAST BIODEFENSE CENTER - CAREER DEV & DEV RSCH	93.855	5 U54 AI057158-09 S1		25,852
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	2U19AI067773-06 SC5		25,343
MECHANISM OF T CELL RECEPTOR MEDIATED ACTIVATION OF NFKAPPAB	93.855	5 R01 AI068977-06		25,131
XMRV - BIOSTAT SUPP	93.855	3 U54 AI057158-08 BIO		21,289
NORTHEAST BIODEFENSE CENTER - BIOSTAT SCOPE	93.855	5 U54 AI057158-08 S7		14,281
CENTER FOR HIGH-THROUGHPUT MINIMALLY-INVASIVE RADIATION BIOSIMETRY	93.855	2U19AI07773-06 SC4		14,178
CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS (HPTN 067 SUPP)	93.855	5 UM1 AI069466-06 SUP		8,751
CHARACTERIZATION OF ANTIBODY-DEPENDENT CELLULAR CYTOTOXICITY IN HIV INFECTION	93.855	1 F31 AI098409-01		7,524
DNASE FOR PREVENTION OF REPRODUCTIVE TRACT INFECTIONS IN PREGNANCY	93.855	1 R21 AI098654-01		5,992
TARGETING OF AID MUTAGENIC ACTIVITY	93.855	1 F31 AI098411-01A1		3,672
ROLE OF PKA IN AUTOIMMUNE DIABETES THROUGH DENDRITIC CELLS (DC) AND REGULATORY T (TREG) CELLS	93.855	1 R01 AI079186-01A2		2,705
LINK4HEALTH: A COMBINATION STRATEGY FOR LINKAGE AND RETENTION, SWAZILAND	93.855	1 R01 AI100059-01		2,034
CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS	93.855	5 U01 AI069466-04 SC1		1,083
VIRAL ARRAYS FOR BIODEFENSE	93.855	5 U01 AI070411-02		0
MONONUCLEAR LEUKOCYTES IN IMMUNITY	93.855	5 R01 AI020516-25		0
NORTHEAST BIODEFENSE CENTER - ADMIN CORE & SUBS	93.855	5 U54 AI057158-07		-150
CENTERS FOR INNOVATIVE RESEARCH TO CONTROL AIDS	93.855	5 U01 AI069466-04		-2,768
REGULATION OF NF-KB AND 1KB PROTEINS	93.855	5 R37 AI033443-19		-48,242
CD8+ T CELLS CONTROL AUTOIMMUNITY IN EAE	93.855	5 R56 AI065609-02		-60,444
				\$31,621,002

Microbiology and Infectious Diseases Research

TRAINING PROGRAM IN MICROBIOLOGY FOR INFECTIOUS DISEASES	93.856	5 T32 AI007161-30 R1		73
MASS TAG PCR DETECTION OF RESPIRATORY PATHOGENS	93.856	1 UC1 AI062705-01		-4,738

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Microbiology and Infectious Diseases Research				
MYOSIN II AND GLIOMA DISPERSION	93.856	1 R01 NS066992-01A1		143,548
				\$138,883
Biomedical Research and Research Training				
MEDICAL SCIENTIST TRAINING PROGRAM	93.859	5 T32 GM007367-36		1,101,443
GENETIC ANALYSIS OF NEMATODE CELL DIFFERENTIATION	93.859	5 R01 GM030997-30		899,918
MECHANISM OF SPONTANEOUS AND DSB-INDUCED REPAIR	93.859	5 R37 GM050237-19		588,128
MECHANISMS OF HOMOLOGOUS RECOMBINATION IN YEAST	93.859	5 R01 GM041784-24		496,899
CONTROL OF TRANSCRIPTION TERMINATION IN E. COLI	93.859	5 R01 GM037219-23		471,545
DEFINING A NOVEL TRIGGER FOR APOPTOSIS	93.859	5 R01 GM085081-04		467,972
ASSEMBLY AND PLACEMENT OF THE CELL DIVISION RING	93.859	5 R01 GM056836-15		458,249
REGULATION OF MICROTUBULES BY RHO GTPASES	93.859	5 R01 GM062939-11		446,962
EPIGENETIC REGULATION BY PWWP DOMAIN PROTEINS	93.859	5R01GM085145-05		437,206
MRNA SYNTHESIS IN ANIMAL CELLS - 3' END FORMATION	93.859	5 R01 GM028983-32		434,091
EXON RECOGNITION DURING CONSTITUTIVE PRE-MRNA SPLICING	93.859	5 R01 GM072740-06		432,462
CELLULAR AND MOLECULAR FOUNDATIONS OF BIOMEDICAL SCIENCE	93.859	5 T32 GM008798-11		430,371
ASYMMETRIC SYNTHESIS OF MACROLIDE ANTIBIOTICS	93.859	5 R01 GM058133-12		430,037
MECHANISMS OF ALTERNATIVE SPLICING OF PRE-MRN	93.859	5 R01 GM048259-26		427,209
TRAINING IN CELLULAR, MOLECULAR AND BIOPHYSICAL STUDIES	93.859	5 T32 GM008224-25		410,542
PROTEIN MOTIONS IN RECOGNITION, REGULATION AND CATALYSIS	93.859	2 R01 GM059273-14		395,479
MECHANISMS OF ANESTHETIC EFFECTS ON TACHYKININ INDUCED AIRWAY TONE	93.859	5 R01 GM065281-10		392,443
TRANSCRIPTIONAL REGULATION BY PROTEIN SUMOYLATION	93.859	5 R01 GM097174-02		390,647
GENETICS OF THE FORMATION OF REPAIR & RECOMBINATION FOCI	93.859	5 R01 GM067055-10		389,384
NMR STUDIES OF STRUCTURES AND DYNAMICS OF PROTEINS	93.859	5 R01 GM050291-18		388,865
PROXIMO-DISTAL PATTERNING IN THE DROSOPHILA APPENDAGES	93.859	5 R01 GM058575-14		383,497
HEDGEHOG SIGNALING IN DROSOPHILA	93.859	5 R01 GM041815-24		380,725
THE STRUCTURAL DYNAMICS OF TRANSLATION INITIATION	93.859	5 R01 GM084288-04		372,761
STRUCTURAL ANALYSIS OF MACROMOLECULAR ASSEMBLIES	93.859	5 R01 GM029169-29		364,565
ASSEMBLY OF POLYCYSTIN COMPLEXES	93.859	5 R01 GM085234-04		360,618
PREDOCTORAL TRAINING GRANT IN GENETICS AND DEVELOPMENT	93.859	2 T32 GM0070088-37		337,956
SOMATIC STEM CELLS IN THE DROSOPHILA	93.859	5 R01 GM079351-04		325,925
MODELING CONTRACTILE RING CONSTRICTION IN FISSION YEAST	93.859	5R01GM086731-03		324,328
THE ROLE OF NOTCH IN BEHAVIORAL PLASTICITY	93.859	5 R01 GM095797-02		320,254
PEPTIDOGLYCAN SYNTHESIS IN SPORULATION	93.859	5 R01 GM081368-05		310,406
TRAINING PROGRAM IN MOLECULAR BIOPHYSICS	93.859	5 T32 GM008281-24		309,316
STRUCTURE AND FUNCTION OF 5' TO 3' EXORIBONUCLEASES	93.859	5 R01 GM090059-02		308,666
BREAK-INDUCED REPLICATION AND GENOME REARRANGEMENTS	93.859	5 R01 GM094386-03		308,598

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THE MRAD9 RADIORESISTANCE GENE	93.859	5 R01 GM079107-11		305,027
STRUCTURAL STUDIES OF METABOTROPIC GABA RECEPTORS	93.859	5 R01 GM088454-04		304,040
FUNCTION OF THE BROMODOMAIN PROTEIN BRDT IN SPERMATOGENESIS	93.859	5 R01 GM081767-04		291,688
STRUCTURAL AND FUNCTIONAL STUDIES OF CHANNELS AND PUMPS BY SOLID STATE NMR	93.859	5 R01 GM088724-03		286,464
VISUALIZING THE DYNAMICS OF CHROMATIN AND CHROMATIN REMODELING PROTEINS	93.859	5 R01 GM082848-04		285,303
SIGNALING SPECIFICITY IN DROSOPHILA SERPENTINE RECEPTORS	93.859	5 R01 GM057043-13		270,329
COMPUTER STUDIES OF PROTEIN STRUCTURE AND FUNCTION	93.859	5 R01GM030518-31		263,210
REGULATION OF DNA REPLICATION BY MCM PROTEINS	93.859	5 R01 GM077495-04		252,766
MOLECULAR MECHANISMS OF CARGO CAPTURE INTO ER-DERIVED TRANSPORT VESICLES	93.859	5 R01 GM085089-04		251,634
MICROTUBULE ORGANIZATION AND NUCLEAR POSITIONING	93.859	5 R01 GM069670-08		251,113
ROLE OF NUCLEO-CYTOSKELETON INTERACTIONS IN CELL MIGRATION	93.859	1 R01 GM099481-01		241,971
MECHANISM OF RENAL PROTECTION WITH VOLATILE ANESTHETICS	93.859	5 R01 GM067081-08		240,935
STRATEGIES FOR HEAVY METAL DETOXIFICATION	93.859	5R01GM046502-15		238,702
MITOCHONDRIAL-CYTOSKELETAL INTERACTIONS AND AGING	93.859	5 R01 GM096445-02		236,260
EXPERIMENTALLY GUIDED RIBOSOMAL RNA MODELING	93.859	5 R01 GM055440-16		224,173
TRAINING PROGRAM IN COMPUTATIONAL BIOLOGY	93.859	5 T32 GM082797-04		216,545
MECHANISMS OF CELL COMPETITION THAT REGULATE GROWTH DURING DEVELOPMENT	93.859	5 R01 GM078464-06		214,483
THE IMPACT OF PROLONGED ANESTHETIC EXPOSURE ON TAU PATHOLOGY AND FUNCTION	93.859	1 R01 GM101698-01		210,557
CONTINUED DEVELOPMENT AND MAINTENANCE OF THE 3DNA SUITE OF PROGRAMS	93.859	1 R01 GM096889-01		203,054
THE CHEMISTRY AND BIOLOGY OF RESVERATROL-BASED OLIGOMERS	93.859	5 R01 GM084994-04		200,654
FLUORESCENCE METHODS FOR HT VALIDATION AND PRODUCTION OF PROTEIN COMPLEXES	93.859	5 R01 GM097089-02		183,430
FLUORESCENCE METHODS FOR HT VALIDATION AND PRODUCTION OF PROTEIN COMPLEXES	93.859	1 R01 GM097089-02		181,468
MOLECULAR BASIS OF CADHERIN MEDIATED CELL ADHESION	93.859	5 R01 GM062270-09		180,433
TRAINING PROGRAM IN PHARMACEUTICAL SCIENCES	93.859	5 T32 GM007182-34		175,456
ANESTHESIOLOGY RESEARCH TRAINING	93.859	5 T32 GM008464-19		175,198
MODELING HYDROPHOBIC AND HYDROPHILIC INTERACTIONS	93.859	2R01GM043340-20		171,637
MECHANISTIC BASIS FOR AMINO ACID DISCRIMINATION BY THE TRANSLATIONAL MACHINERY	93.859	5R01GM090126-02		169,797
STRUCTURAL BIOLOGY OF G-PROTEIN COUPLED RECEPTORS	93.859	5 R01 GM068671-08		169,339
FORMIN MDIA FUNCTIONS IN MITOSIS	93.859	1 R01 GM089768-01		164,697
ER EXPORT AND THE QUALITY CONTROL CHECKPOINT DURING MEMBRANE PROTEIN BIOGENESIS	93.859	5 R01 GM078186-05		161,082
MOLECULAR BASIS OF CADHERIN MEDIATED CELL ADHESION	93.859	2 R01 GM062270-10		153,268
INFLUENZA OUTBREAK PREDICTION: APPLYING DATA ASSIMILATION METHODOLOGY TO MAKE SKILLFUL FORECAST OF AN INHERENTLY CHAOTIC	93.859	5 R01 GM100467-02		152,458
THEORETICAL STUDIES OF METALLOPROTEIN CHROMOPHORES	93.859	5 R01 GM040526-23		150,781
MOLECULAR GENETICS OF SEGMENT IDENTITY	93.859	5 R01 GM054510-19		145,425
DNA ASSEMBLY VIA REITERATIVE RECOMBINATION	93.859	1R01GM096064-01A1		141,560
INVESTIGATION OF THE ESTABLISHMENT OF THE PRION STATE	93.859	7 R01 GM070934-06		141,195

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MOLECULAR GENETICS OF CYTOPLASMIC DYEIN	93.859	5 R01 GM047434-19		138,502
HEME A AND CYTOCHROME OXIDASE BIOSYNTHESIS	93.859	5 R01 GM050187-16		134,722
POINT IMPACT AND SPARSITY IN FUNCTIONAL DATA ANALYSIS	93.859	5 R01 GM095722-02		130,735
THERAPEUTIC TARGETING OF THE GABAA CHANNEL ON AIRWAY SMOOTH MUSCLE	93.859	5 K08 GM093137-03		128,902
MECHANISTIC BASIS FOR AMINO ACID DISCRIMINATION BY THE TRANSLATIONAL MACHINERY	93.859	5R01GM090126-02	GON	128,226
EXON RECOGNITION DURING CONSTITUTIVE PRE-MRNA SPLICING	93.859	5R01GM072740-06	CHA	118,556
COMPREHENSIVE ANNOTATION OF SUBCELLULAR LOCALIZATION IN ENTIRE ORGANISMS	93.859	5 R01 GM079767-04		116,356
MEDICAL GENETICS TRAINING PROGRAM	93.859	5 T32 GM082771-02		106,511
EXON RECOGNITION DURING CONSTITUTIVE PRE-MRNA SPLICING	93.859	5 R01 GM072740-06	MAN	101,115
STRUCTURAL BIOLOGY OF G-PROTEIN COUPLED RECEPTORS	93.859	5 R01 GM068671-08		98,357
ER EXPORT AND THE QUALITY CONTROL CHECKPOINT DURING MEMBRANE PROTEIN BIOGENESIS	93.859	2R01GM078186-06		96,929
MEDICAL SCIENTIST TRAINING PROGRAM	93.859	2 T32 GM007367-37		91,212
MECHANISMS OF CHROMATIN REMODELING AND ROADBLOCK CLEARANCE BY DNA MOTOR PROTEINS	93.859	5 K99 GM097177-02		90,029
STRUCTURAL ANALYSIS OF MACROMOLECULAR ASSEMBLY	93.859	5 R01 GM029169-29S1	SUP	89,194
GENETIC ANALYSIS OF NEMATODE CELL DIFFERENTIATION	93.859	5 R01 GM030997-30		87,620
THE STRUCTURAL DYNAMICS OF TRANSLATION INITIATION	93.859	5R01GM084288-04	CAB	86,581
MOLECULAR GENETICS OF SEGMENT IDENTITY	93.859	2 R01 GM054510-20		84,822
GENETIC ANALYSIS OF NEMATODE CELL DIFFERENTIATION	93.859	5 R01 GM030997-30	SUP	79,663
STRUCTURAL BIOLOGY OF PRE-MRNA 3'-END PROCESSING	93.859	2R01GM077175-05A1		70,458
INITIATIVE FOR MAXIMIZING STUDENT DIVERSITY (IMSD)	93.859	2 R25 GM062454-09		68,812
STRUCTURAL BIOLOGY OF PRE-RNA 3'-END PROCESSING	93.859	3 R01 GM077175-04S1		66,817
REGULATION OF MICROTUBULES BY RHO GTPASES	93.859	3 R01 GM062939-11S1		64,666
REGULATION OF SNF1/AMPK PATHWAY IN YEAST	93.859	5 R01 GM034095-26		59,499
ELUCIDATING THE MECHANISMS OF DNA RECOMBINATION	93.859	5 R01 GM074739-05		57,053
ELUCIDATING THE MECHANISMS INVOLVED IN(DYS) REGULATION OF SODIUM CHANNELS	93.859	5 F32 GM089047-03		53,042
MECHANISTIC BASIS FOR AMINO ACID DISCRIMINATION BY THE TRANSLATIONAL MACHINERY	93.859	3R01GM090126-02S1	SUP	47,820
ASYMMETRIC SYNTHESIS OF MACROLIDE ANTIBIOTICS	93.859	5 R01 GM058133-12	SUP	47,374
THE COORDINATION CHEMISTRY OF NANOCRYSTAL SURFACES: UNDERSTANDING THE ROLE OF VAL	93.859	5 F32 GM095706-02		45,019
MODELING HYDROPHOBIC AND HYDROPHILIC INTERACTIONS	93.859	5 R01 GM043340-19		44,023
STRUCTURAL AND FUNCTIONAL STUDIES OF POTASSIUM CHANNELS BY SOLID STATE NMR	93.859	5 F32 GM087908-03		41,744
ADMINISTRATIVE SUPPLEMENT - MICROSCOPE	93.859	R01 GM054510-19S1	SUP	40,000
ADMINISTRATIVE SUPPLEMENT - MICROSCOPE	93.859	5 R01 GM058575-14S1	SUP	40,000
THE STUDY OF PHOSPHATIDIC ACID AND PHOSOPOLIPASE D IN MEMBRANE TRAFFICKING	93.859	5 F31 GM093847-02		38,906
CHARACTERIZATION OF HOX TRANSCRIPTION FACTOR COMPLEXES USING PROTEOMICS	93.859	1 F32 GM099160-01		38,605
EFFICIENT SYNTHESIS OF THE SPONGISTATIN EF RING SEGMENT AND ANALOGUE SAR STUDY	93.859	5F32GM090487-02R1		33,299
PREDOCTORAL TRAINING GRANT IN GENETICS AND DEVELOPMENT	93.859	2 T32 GM0070088-37		27,760

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MECHANISMS OF INTEGRIN-MICROTUBULE CROSS-TALK	93.859	5 R01 GM068595-08		27,227
ENTIRELY IN VIVO ENZYME EVOLUTION AND ENGINEERING OF CRE RECOMBINASE	93.859	3F32GM089031-02S1 SUP		26,521
DNA ASSEMBLY VIA REITERATIVE RECOMBINATION	93.859	3 R01 GM096064-01A1S OLA		26,485
STRUCTURE AND FUNCTION OF 5' TO 3' EXORIBONUCLEASES	93.859	5 R01 GM090059-02 MJ1		21,350
EFFICIENT SYNTHESIS OF THE SPONGISTATIN EF RING SEGMENT AND ANALOGUE SAR STUDY	93.859	5F32GM090487-03		16,137
C-H BOND FUNCTIONALIZATION IN COMPLEX ORGANIC SYNTHESIS	93.859	5 R01 GM060326-09		15,604
STRUCTURE, MECHANISM, AND INHIBITION OF ALKB HOMOLOGUES	93.859	5 R01 GM077360-04 A1		15,295
CYSZ PROTEINS - A FAMILY OF SULFATE TRANSPORTERS WITH REMARKABLE ARCHITECTURE	93.859	1 R01 GM098617-01A1		12,667
MITOCHONDRIAL MOTILITY AND INHERITANCE	93.859	5 R01 GM045735-15		7,831
MECHANISMS OF RENAL PROTECTION WITH VOLATILE ANESTHETICS	93.859	2 R01 GM067081-09		7,718
MECHANISMS OF ANESTHETIC EFFECTS ON TACHYKININ INDUCED AIRWAY TONE	93.859	3 R01 GM065281-09S1		4,130
THE STUDY OF PHOSPHATIDIC ACID AND PHOSOPOLIPASE D IN MEMBRANE TRAFFICKING	93.859	5 F31 GM093847-03		3,780
ANESTHESIOLOGY RESEARCH TRAINING	93.859	5 T32 GM008464-18		3,481
THE COORDINATION CHEMISTRY OF NANOCRYSTAL SURFACES: UNDERSTANDING THE ROLE OF VAL	93.859	1 F32 GM095706-01		3,145
MECHANISMS OF ANESTHETIC EFFECTS ON TACHYKININ INDUCED AIRWAY TONE	93.859	5 R01 GM065281-10S1 SC2		768
PREDOCTORAL TRAINING GRANT IN GENETICS AND DEVELOPMENT	93.859	5 T32 GM007088-36		103
MEDICAL SCIENTIST TRAINING PROGRAM	93.859	5 T32 GM007367-35		74
MECHANISTIC INSIGHTS INTO THE SHU COMPLEX AND SGS1 IN DNA REPAIR AND REPLICATION	93.859	5 K99 GM088413-02		-48
MECHANISMS OF ANESTHETIC EFFECTS ON TACHYKININ INDUCED AIRWAY TONE	93.859	5 R01 GM065281-08		-3,450
TRAINING IN CELLULAR, MOLECULAR AND BIOPHYSICAL STUDIES	93.859	5 T32 GM008224-24		-4,335
CELLULAR AND MOLECULAR FOUNDATIONS OF BIOMEDICAL SCIENCE	93.859	5 T32 GM008798-10		-4,754
STRUCTURE, MECHANISM, AND INHIBITION OF ALKB HOMOLOGUES	93.859	5 R01 GM077360-04		-20,508
Biomedical Research and Research Training				
MICROFLUIDIC SELECTION OF APTAMERS FOR BIOLOGICAL PURIFICATION APPLICATIONS INSTITUTION: THE TRUSTEES OF COLUMBIA UNIVER	93.859	5R21RR025816-03R1		178,868
				\$25,034,617
Nat. Inst. of Child Health & Human Dvlpt.				
DESIRE FOR PREGNANCY, CONTRACEPTION, AND HIV RISK AMONG SERODISCORDANT COUPLES	93.864	5 R01 HD058338-04		458,985
SOCIAL SCIENCE TRAINING AND RESEARCH SMS-HMU PARTNERSHIP	93.864	5 R24 HD056691-05		298,056
STEM CELLS AND CELL LINEAGE SPECIFICATION	93.864	5 T32 HD055165-05		255,436
				\$1,012,477
Child Health and Human Development Extramural Research				
PRENATAL CYTOGENETIC DIAGNOSIS BY ARRAY-BASED COPY NUMBER ANALYSIS	93.865	5 R01 HD055651-05		788,897
BRIDGES TO THE FUTURE: ECONOMIC EMPOWERMENT FOR AIDS-ORPHANED CHILDREN IN UGANDA	93.865	5 R01HD070727-02		690,006
THE DEVELOPMENT OF EMOTION REGULATION MECHANISMS IMPACTING HEALTH	93.865	5 R01 HD069178-02		635,126
A LIFECOURSE APPROACH TO EMERGING HEALTH DISPARITIES IN A US BIRTH COHORT	93.865	5 R01 HD058515-04		630,214
PRENATAL ALCOHOL IN SUDDEN INFANT DEATH SYNDROME (SIDS) AND STILLBIRTH (PASS) NETWORK	93.865	2 U01 HD55155-06		571,138
ROLE OF PIP2 METABOLISM IMBALANCE IN DOWN SYNDROME	93.865	5 R01 HD055457-05		539,664
SAFER WEANING PRACTICES FOR HIV-INFECTED WOMEN	93.865	5 R01 HD057617-05		494,653

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IDENTIFICATION OF NOVEL GENES FOR CONGENITAL DIAPHRAGMATIC HERNIA	93.865	5 R01 HD057036-05		482,428
MOLECULAR PATHOGENESIS AND TREATMENT OF MNGIE	93.865	5 R01 HD056103-03		456,331
FUNCTIONAL ANALYSIS OF CRIPTO IN MOUSE EMBRYOGENESIS	93.865	5 R01 HD042837-15		452,412
NEUROBIOLOGY AND BEHAVIOR RESEARCH TRAINING GRANT	93.865	5 T32 HD007430-15		443,214
RAKAI ADOLESCENT PROJECT (RAP)	93.865	5 R01 HD061092-04		442,645
TREATMENT OPTIONS FOR PROTEASE INHIBITOR EXPOSED CHILDREN	93.865	5 R01 HD061255-03		425,543
GENDER, POWER AND LATINO MENS HIV RISK	93.865	5 R01 HD056948-03		366,639
ROLE OF CYCLIN A'S MAMMALIAN MEIOSIS	93.865	5 R01 HD034915-13		361,004
ADOLESCENT AND PARENTAL ATTITUDES ABOUT STI PREVENTION TRIAL PARTICIPATION	93.865	1 R01 HD067287-01		326,340
MATERNAL FETAL MEDICINE UNIT NETWORK AT CUMC	93.865	2 U10 HD04085-12		292,816
ROLE OF T-BOX GENES IN MOUSE DEVELOPMENT	93.865	4 R37 HD033082-16		267,013
MOLECULAR PATHOGENESIS OF COENZYME Q10 DEFICIENCY	93.865	5 R01 HD057543-05		257,671
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION PROJECT 1	93.865	5 P01 HD032062-17 PJ1		251,675
MULTILEVEL LATENT CLASS AND SOCIAL NETWORK MODELS FOR OBSERVATIONAL AND ADOLESCENT OBESITY DATA	93.865	5 U01 HD061940-03		245,870
OSTEOCALCIN: THE HORMONAL LINK BETWEEN BONE AND REPRODUCTION	93.865	5 R01 HD065439-19		226,147
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION PROJECT 3	93.865	5 P01 HD032062-17 PJ3		212,662
THE NUCLEOCYTOSKELETON IN PROGERIA AND AGING	93.865	5 R01 HD070713-02		205,264
A NOVEL SIGNALING PATHWAY FOR TISSUE HOMEOSTASIS	93.865	5 R21 HD067918-02		204,423
MECHANISMS OF EFFECT OF IRON STATUS & INTERVENTIONS ON MALARIA & OTHER INFECTIONS	93.865	5 U01 HD064827-03		201,410
COMPUTATIONAL MODELING OF INDIVIDUAL HEALTH BEHAVIOR	93.865	5 R21 HD067570-02		190,434
UNEMPLOYMENT THE GREAT RECESSION FRAGILE FAMILIES AND CHILD DEVELOPMENT	93.865	1R01HD066054-01R1		190,416
COLUMBIA POPULATION RESEARCH CENTER	93.865	5 R24 HD058486-04		183,527
WORK-FAMILY POLICIES AND CHILD AND FAMILY WELL-BEING	93.865	5 R01 HD047215-05		179,646
THE NUCLEOCYTOSKELETON IN PROGERIA AND AGING	93.865	5 R01 HD070713-02		178,089
MALARIA AND THE SAFETY OF IRON INTERVENTIONS: ABSORPTION AND NTBI	93.865	5 U01 HD061233-03		178,004
TRAUMATIC BRAIN INJURY CLINICAL TRIALS NETWORK-DCC	93.865	3 U01 HD042823-05 S5		177,641
REDUCING HEALTH SYSTEMS COSTS THROUGH A PATIENT-ACTIVATION RCT	93.865	1 R21 HD071561-01		169,478
COLUMBIA U CTR FOR CAREER DEV. IN REPRODUCTIVE SCIENCES	93.865	5 K12 HD001275-10 R2		165,015
MOTOR PROTEINS IN BRAIN DEVELOPMENT	93.865	2 R01 HD040182-12		163,753
PRETERM BIRTH IN NULLIPAROUS WOMEN: AN UNDERSTUDIED POPULATION AT GREAT RISK (U10)	93.865	5 U10 HD063047-02		162,923
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION	93.865	5 P01 HD032062-17 PJ2		154,178
EARLY MARKERS OF NEURODEVELOPMENTAL RISK IN CHILDREN WITH CONGENITAL HEART DISEASE	93.865	5 K23 HD061601-03		145,258
RETINOID RECEPTOR ANTAGONISTS AS NOVEL MALE CONTRACEPTIVES	93.865	5 U01 HD060479-03		138,747
LINKING DYNAMIC ENVIRONMENTS WITH CHILDHOOD OBESITY	93.865	1 K01 HD067390-01A1		134,629
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION CORE B	93.865	5 P01 HD032062-17 CO COB		131,391
MOTOR IMPAIRMENTS IN HUNTINGTON'S DISEASE: MECHANISMS AND OUTCOME MEASURES	93.865	5 K01 HD060912-03		130,735

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PRENATAL ALCOHOL IN SUDDEN INFANT DEATH SYNDROME AND STILLBIRTH (PASS) NETWORK	93.865	5 U01 HD055155-05		122,805
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION PROJECT 3	93.865	5 P01 HD032062-18 PJ3		121,496
ROLE OF T-BOX GENES IN MOUSE DEVELOPMENT	93.865	5 R37 HD033082-14		118,794
TRISOMY AND OVARIAN AGE: AN EPIDEMIOLOGIC STUDY	93.865	5 R01 HD053814-03		112,366
BACTERIAL VAGINOSIS: VITAMIN D LINKS MUCOSAL IMMUNITY AND PATIENT RISK	93.865	5 K23 HD065844-02		109,741
A US-UK COMPARISON OF DISCRIMINATION & DISPARITIES IN HEALTH & HEALTH SERVICE USE	93.865	5 R01 HD061320-04		106,044
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION	93.865	5 P01 HD032062-17 COA		102,916
PRETERM BIRTH IN NULLIPAROUS WOMEN: AN UNDERSTUDIED POPULATION AT GREAT RISK (U10)	93.865	5 U10 HD063047-03		100,929
INVESTIGATING THE PATHOGENESIS OF COQ10 DEFICIENCIES	93.865	5 K23 HD065871-03		99,902
USING GOOGLE STREETVIEW TO MEASURE NEIGHBORHOOD CHARACTERISTICS	93.865	5 R21 HD062965-02		99,861
RETINOID RECEPTOR ANTAGONISTS AS NOVEL MALE CONTRACEPTIVES	93.865	5 U01 HD060479-04		93,759
BOYS TRANSITIONS THROUGH PUBERTY	93.865	5 R03 HD069193-02		68,233
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION CORE B	93.865	5 P01 HD032062-18 COB		64,578
TRAUMATIC BRAIN INJURY CLINICAL TRIALS NETWORK-DCC	93.865	5 U01 HD042823-05 S1		62,676
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION PROJECT 2	93.865	5 P01 HD032062-18 PJ2		61,322
MATERNAL FETAL MEDICINE UNIT NETWORK AT CUMC	93.865	5 U10 HD04085-13		57,404
USING GOOGLE STREETVIEW TO MEASURE NEIGHBORHOOD CHARACTERISTICS	93.865	5 R21 HD062965-02 AR		54,802
DOCTORAL RESEARCH TRAINING IN SOCIOMEDICAL SCIENCES	93.865	5 T32 HD049339-05		54,364
MOLECULAR PATHOGENESIS OF COENZYME Q10 DEFICIENCY	93.865	3 R01 HD057543-04S1		54,253
BRIDGES TO THE FUTURE: ECONOMIC EMPOWERMENT FOR AIDS-ORPHANED CHILDREN IN UGANDA	93.865	5 R01HD070727-02 SCO SCO		48,539
MECHANISMS OF EFFECT OF IRON STATUS & INTERVENTIONS ON MALARIA & OTHER INFECTIONS	93.865	5 U01 HD064827-02		45,537
THE FETAL ADRENAL GLAND AS A PREDICTOR OF SPONTANEOUS PRETERM BIRTH	93.865	1 R21 HD068809-01A1		44,785
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION PROJECT 1	93.865	5 P01 HD032062-18 PJ1		41,789
IMPROVING ADOLESCENT AND ADULT MORTALITY DATA IN DEVELOPING COUNTRIES	93.865	1 R03 HD071117-01		41,427
A LIFECOURSE APPROACH TO EMERGING HEALTH DISPARITIES IN A US BIRTH COHORT	93.865	5 R01 HD058515-04 S1		40,042
ROLE OF TBX6 IN LEFT-RIGHT DETERMINATION OF LEFT-RIGHT ASYMMETRY IN MICE	93.865	5 F31 HD065441-02		39,554
FRAGILE FAMILIES SUMMER DATA WORKSHOP 2012	93.865	1R25HD027818-01		33,847
THE CONSEQUENCES OF MIGRATION FOR CHILD DEVELOPMENT IN SENDING AREAS	93.865	5 R03 HD062691-02		32,828
DETERMINANTS OF LEUKOCYTE TELOMERE LENGTH AT BIRTH	93.865	1 R01 HD071180-01A1		31,737
MITOCHONDRIAL ENCEPHALOMYOPATHIES AND MENTAL RETARDATION	93.865	5 P01 HD032062-18 COA		29,439
MALARIA AND THE SAFETY OF IRON INTERVENTIONS: ABSORPTION AND NTBI	93.865	5 U01 HD061233-02RII		28,098
PROFESSIONAL DILEMMAS: HEALTH WORKER'S PERCEPTIONS OF POST ABORTION CARE IN SENEGAL	93.865	5 F31 HD059397-03		23,898
PREVENTION AND PLANNING LINKAGES	93.865	1 R01 HD072695-01		23,077
PROFESSIONAL DILEMMAS: HEALTH WORKER'S PERCEPTIONS OF POST ABORTION CARE IN SENEGAL	93.865	5 F31 HD059397-02		21,196
INTER-CITY STUDY OF COMMUNITY ENGAGEMENT IN PARKS, CHILDREN AND ADOLESCENT HEALTH	93.865	1 U13 HD071388-01		19,885
EEG SYNCHRONY OF PRETERM INFANTS: REGIONAL DISPARITIES AND PERINATAL RISKS	93.865	5 R03 HD057410-02		17,947

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BETA2 ADRENOCEPTOR GENOTYPE AND PRETERM LABOR INCIDENCE AND OUTCOME	93.865	5 R01 HD048805-05		17,369
COLUMBIA POPULATION RESEARCH CENTER	93.865	5 R24 HD058486-04 SC SCO		15,394
DESIRE FOR PREGNANCY, CONTRACEPTION, AND HIV RISK AMONG SERODISCORDANT COUPLES	93.865	5 R01 HD058338-03 S1		12,930
AKU GLOBAL NETWORK RESEARCH UNIT	93.865	7 U01 HD040607-12		12,130
SEXUAL BEHAVIORS, SEXUAL NETWORKS AND REPRODUCTIVE HEALTH IN MALAWI	93.865	1 R03 HD071122-01		11,874
IMMIGRANT SELECTIVITY AND DISPARITIES IN BIRTH OUTCOMES	93.865	5 R03HD058067-02R1		10,882
INVESTIGATING THE PATHOGENESIS OF COQ10 DEFICIENCIES	93.865	3 K23 HD065871-03S1		4,934
GSH TRAINING GRANT	93.865	2 T32 HD049339-06A1		3,335
DETERMINANTS OF LEUKOCYTE TELOMERE LENGTH AT BIRTH - SCOPE	93.865	1 R01 HD071180-01A1 S1		2,440
PROFESSIONAL DILEMMAS: HEALTH WORKER'S PERCEPTIONS OF POST ABORTION CARE IN SENEGAL	93.865	1 F31 HD059397-01A1		1,700
PLANNING OF PEDIATRICS ANESTHESIA AND NEURODEVELOPMENT ASSESSMENT (PANDA)	93.865	1 R34 HD060741-01A1		-465
PRETERM BIRTH IN NULLIPAROUS WOMEN: AN UNDERSTUDIED POPULATION AT GREAT RISK (U10)	93.865	1 U10 HD063047-01		-1,193
THE ROLE OF TBX6 IN THE DETERMINATION OF LEFT-RIGHT ASYMMETRY IN MICE	93.865	1 F31 HD065441-01		-3,600
MATERNAL FETAL MEDICINE NETWORK (COLUMBIA UNIVERSITY & ST. LUKE ROOSEVELT HOSPITAL & COLUMBIA PRESBYTERIAN MEDICAL)	93.865	5 U10 HD040485-11		-14,950
NICHD CONTRACEPTIVE CLINICAL TRIALS NETWORK (FEMALE CLINICAL TRIAL TOPIC AREA)	93.865	5 N01 HHSN2752004033		-17,049
MECHANISM OF ACTION OF THE LISSENCEPHALY GENE LIS-1	93.865	5 R01 HD040182-11		-129,331
				\$15,401,339

Aging Research

EPIDEMIOLOGY OF BIOMARKERS OF RISK AND PROGRESSION IN LOAD	93.866	5 R01 AG037212-03		1,722,537
GENETIC EPIDEMIOLOGY OF ALZHEIMER'S DISEASE IN AFRICAN AMERICANS	93.866	5 R01 AG028786-05		1,413,923
GENETIC EPIDEMIOLOGY OF ALZHEIMER'S DISEASE IN HISPANICS	93.866	5 R37 AG015473-14		1,041,982
EXERCISE, AGING, AND COGNITION: EFFECT AND MECHANISMS	93.866	5 R01 AG033546-02		721,985
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 CC		692,548
MULTICENTER STUDY ON EXCEPTIONAL SURVIVAL IN FAMILIES	93.866	5 U01 AG023749-07		600,431
QUESTIONABLE DEMENTIA: COURSE AND PREDICTORS OF OUTCOME	93.866	5 R01 AG017761-15		517,357
PATHOGENESIS OF PHYSICAL DISABILITY IN AGING WOMEN	93.866	5 R37 AG019905-10		470,846
IMAGING OF COGNITION, LEARNING AND MEMORY IN AGING	93.866	2 R01 AG026158-06		467,523
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL	93.866	5 P01 AG032959-02 PJ2		456,789
GENE-ENVIRONMENT INTERACTION IN COGNITION IN VENEZUELAN FAMILIES	93.866	5 R01 AG036469-02		439,887
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL	93.866	5 P01 AG032959-02 PJ1		411,821
HISTONE ACETYLATION AND COGNITIVE AGING	93.866	5 R01 AG034618-03		403,127
PREDICTORS OF SEVERITY IN ALZHEIMER'S DISEASE	93.866	2 R01 AG007370-21		397,947
MEDITERRANEAN DIET AND OTHER DIETARY PATTERNS IN ALZHEIMER'S DISEASE	93.866	5 R01 AG028506-05		390,272
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL	93.866	5 P01 AG032959-02 PJ3		374,058
PILOT TRIAL OF METFORMIN IN AMNESTIC MCI	93.866	5 R01 AG026413-03		372,639
ENDOGENOUS AMYLOID-BETA IN SYNAPTIC FUNCTION AND MEMORY	93.866	5 R01 AG034248-03		371,496
CALPAIN INHIBITORS AGAINST ALZHEIMER'S DISEASE	93.866	5 U01 AG028713-04		368,764

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
NOVEL PDE5 INHIBITORS AS A THERAPEUTIC TOOL AGAINST ALZHEIMER'S DISEASE	93.866	1 U01 AG032973-01		353,914
DECISION-MAKING OVER THE LIFESPAN: HOW MEMORY AFFECTS PREFERENCES	93.866	5 R01 AG027934-05		353,370
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 GC		352,917
EARLY AD DETECTION WITH ASL MRI AND COVARIANCE ANALYSIS	93.866	5 R01 AG026114-05		335,694
EXERCISE, AGE-RELATED MEMORY DECLINE, AND HIPPOCAMPAL FUNCTION	93.866	5 R01 AG035015-02		328,400
GENETIC CONSORTIUM FOR LATE ONSET ALZHEIMER'S DISEASE	93.866	5 U24 AG026395-05		327,742
WHITE MATTER HYPERINTENSITIES IN AGING AND DEMENTIA	93.866	5 R01 AG034189-03		316,436
ASSESSMENT OF ULTRASOUND-FACILITATED NEUROTHERAPEUTICS	93.866	5 R01AG038961-02		314,812
EPIGENOMICS OF ALZHEIMER'S DISEASE	93.866	5 R01 AG036040-03		290,974
COMBINED EXERCISE AND COGNITIVE TRAINING INTERVENTION IN NORMAL AGING	93.866	5 R01 AG034178-03		282,506
MECHANISM OF COGNITIVE DYSFUNCTION: CEA AND STENTING	93.866	5 R01 AG017604-09		278,394
PATHOPHYSIOLOGY OF HEART FAILURE WITH A NORMAL EJECTION FRACTION IN THE ELDERLY	93.866	5 R01 AG027518-04		274,618
EXPLORING COGNITIVE AGING USING REFERENCE ABILITY NEURAL NETWORKS	93.866	1 R01 AG038465-01		274,486
FMRI AND MOUSE MODELS OF ALZHEIMER'S DISEASE	93.866	5 R01 AG025161-07		274,085
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 NPC		260,995
EXERCISE, AGING, AND COGNITION: EFFECT AND MECHANISMS	93.866	5 R01 AG033546-02		231,897
PRENATAL UNDER NUTRITION AND MORTALITY THROUGH AGE 63 PROJECT	93.866	5 R01 AG028593-05		188,005
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 PJ1		176,270
PREDICTORS OF SEVERITY IN ALZHEIMER'S DISEASE	93.866	5 R01 AG007370-20		170,395
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 PJ2		166,438
EPIGENOMICS OF ALZHEIMER'S DISEASE	93.866	5 R01 AG036040-03 SCI		159,380
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 PJ3		159,183
MIDCAREER MENTORING AWARD FOR PATIENT ORIENTED RESEARCH IN GERIATRIC CARDIOLOGY	93.866	5 K24 AG036778-02		153,751
SCREENING FOR AD THERAPEUTICS BASED ON A NOVEL LIPID PHOSPHATASE TARGET	93.866	5 R21 AG033199-02		152,194
THE EFFECT OF AGE ON NEUROMORPHOLOGY AND ITS COGNITIVE	93.866	5 K23 AG029949-05		150,022
NEUROPSYCHOLOGY AND COGNITION IN AGING	93.866	5 T32 AG000261-13		148,727
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 DC DC		145,957
USE OF INTENSIVE CARE SERVICES FOR ELDERLY PATIENTS UNDERGOING HIGH RISK SURGICAL	93.866	5 K08 AG038477-02		144,586
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL PROJECT #3	93.866	1 P01 AG032959-01A1 SC2		130,605
IMPACT OF AGE-RELATED STRUCTURAL AND FUNCTIONAL NEURAL CHANGES ON COGNITIVE MEASURES	93.866	5 K01 AG035061-02		123,276
MULTICENTER STUDY ON EXCEPTIONAL SURVIVAL IN FAMILIES	93.866	2 U01 AG023749-06		118,305
TEMPORAL CHANGES IN MICRORNA FUNCTION DURING TAU TANGLE ACCUMULATION	93.866	5 R21 AG033790-02		115,196
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22		112,929
ALLELE-SPECIFIC MAPPING IN ALZHEIMER'S DISEASE	93.866	5 R01 AG035020-03		102,787
EPIDEMIOLOGY OF MENOPAUSE AND DEMENTIA IN DOWN SYNDROME	93.866	5 R01 AG014673-10		101,793
MAPPING CAUSATIVE FACTORS IN THE SORTILIN-RELATED PATHWAY IN ALZHEIMER'S DISEASE	93.866	5 K23 AG034550-03		100,531

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EPIGENOMICS OF ALZHEIMER'S DISEASE	93.866	5 R01 AG036040-03 SC2		99,720
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 EC		98,798
AWARENESS OF DEFICIT IN ALZHEIMER'S DISEASE	93.866	5 K23 AG032899-04		96,109
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL	93.866	5 P01 AG032959-02 COB		89,183
PRENATALLY INDUCED DNA METHYLATION PROFILES AND DISEASE RISK AT AGE 60	93.866	1 R01 AG042190-01		66,159
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL	93.866	5 P01 AG032959-02 COA		65,940
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 COB		63,637
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	3 P50 AG008702-22S1		60,640
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 CCH		59,462
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 PL1		48,302
ARRA-CELL POLARITY AND AGING	93.866	4 F31 AG034835-03		46,296
NOVEL PDE5 INHIBITORS AS A THERAPEUTIC TOOL AGAINST ALZHEIMER'S DISEASE	93.866	5 U01 AG032973-02		44,675
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-22 PL2		44,354
SEROTONIN AS A REGULARY OF BONE MASS ACCRUAL: BASIC AND CLINICAL - PROJECT #2	93.866	1 P01 AG032959-01A1 SC1		44,334
THE ROLE OF TRIB3 IN NEURONAL APOPTOSIS CAUSED BY NGF DEPRIVATION	93.866	5 F31 AG033477-02		41,800
MODIFIERS OF AGE OF ONSET IN ALS STUDIED USING PATIENT IPS-DERIVED MOTOR NEURONS	93.866	1 F30 AG039238-01A1		39,493
ASTROCYTES AND PHYSIOLOGICAL AMYLOID-BETA SIGNALING	93.866	5 F31 AG034753-03		37,800
MODIFIERS OF AGE OF ONSET IN ALS STUDIED USING PATIENT IPS-DERIVED MOTOR NEURONS	93.866	5 F30 AG039238-02		24,072
QUESTIONABLE DEMENTIA: COURSE AND PREDICTORS OF OUTCOME	93.866	5 R01 AG017761-15 SC1		23,578
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 COD		21,080
LOW MAGNITUDE MECHANICAL STIMULATION TO INCREASE MUSCLE STRENGTH AMONG FRAIL ADULTS	93.866	1 K23 AG040168-01A1		17,942
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL	93.866	5 P01 AG032959-02		17,383
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 PJ2		14,693
SEROTONIN AS A REGULARY OF BONE MASS ACCRUAL: BASIC AND CLINICAL - CORE B	93.866	1 P01 AG032959-01A1 SC4		13,752
NEUROPSYCHOLOGY AND COGNITION IN AGING	93.866	5 T32 AG000261-14		12,586
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 PJ1		9,975
GENETIC EPIDEMIOLOGY OF ALZHEIMERS DISEASE IN	93.866	5 R01 AG028786-05 SC1		7,643
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 COC		7,524
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 NMC		7,080
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 COE		5,676
GENETIC EPIDEMIOLOGY OF ALZHEIMER'S DISEASE IN HISPANICS	93.866	3 R37 AG05473-13S2		5,578
EPIDEMIOLOGY OF FAMILIAL LATE-ONSET ALZHEIMER'S DISEASE	93.866	1 R01 AG041797-01		5,568
GENETIC EPIDEMIOLOGY OF ALZHEIMER'S DISEASE IN HISPANICS	93.866	3 R37 AG015473-14S1		5,352
GENETIC EPIDEMIOLOGY OF ALZHEIMER'S DISEASE IN HISPANICS	93.866	5 R37 AG015473-13S1		4,978
SEROTONIN AS A REGULARY OF BONE MASS ACCRUAL: BASIC AND CLINICAL - CORE A	93.866	1 P01 AG032959-01A1 SC3		4,834
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 SUP		4,396

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ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 PJ3		4,203
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 PL2		4,169
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	2 P50 AG008702-21 PJ3		2,779
DIET, BIOMARKERS AND LUNG FUNCTION	93.866	5 K08 AG030235-03		1,820
ASTROCYTES AND PHYSIOLOGICAL AMYLOID-BETA SIGNALING	93.866	5 F31 AG034753-02		1,765
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-23 COF		322
NIH PARTNERS IN RESEARCH PROGRAM	93.866	5 R03 AG033929-02		295
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	2 P50 AG008702-21 PL1		253
ALZHEIMER'S DISEASE RESEARCH CENTER AT COLUMBIA UNIVERSITY	93.866	5 P50 AG008702-20 PL2		-1
CELLULAR COFACTORS, NEURONAL STRESS & RESCUE, AGING & ALZHEIMER DISEASE	93.866	5 P01 AG017490-09 PJ1		-82
CELLULAR COFACTORS, NEURONAL STRESS & RESCUE, AGING & ALZHEIMER DISEASE	93.866	5 P01 AG017490-09 COB		-107
CELLULAR COFACTORS, NEURONAL STRESS AND RESCUE, AGING AND ALZHEIMER'S DISEASE	93.866	5 P01 AG174490-08		-342
SEROTONIN AS A REGULATOR OF BONE MASS ACCRUAL: BASIC AND CLINICAL - PROJECT #1	93.866	1 P01 AG032959-01A1		-65,272
				\$20,517,696
Vision Research				
THERAPEUTIC APPROACHES FOR ABCA4-ASSOCIATED DISORDERS	93.867	5 R24 EY019861-02		1,006,550
GENETIC SUSCEPTIBILITY TO AGE-RELATED MACULAR DEGENERATION	93.867	5 R01 EY013435-10		877,102
COMPLETING GENETIC ANALYSIS OF THE ABCA4 LOCUS	93.867	5 R01 EY021163-02		657,058
THE ROLE OF ZIC GENES IN PATTERNING THE BINOCULAR PROJECTION	93.867	5 R01 EY015290-08		549,205
GROWTH AND GUIDANCE OF RETINAL AXONS	93.867	5 R01 EY012736-23		463,754
MEASURES OF HUMAN RECEPTOR AND POST RECEPTOR ACTIVITY	93.867	5 R01 EY009076-20		447,593
CORE SUPPORT FOR VISION RESEARCH	93.867	5 P30 EY019007-03		432,550
RETINA: THE CONTROL OF PHOTORECEPTOR CELL FATE	93.867	5 R01 EY012536-12		415,010
CORE SUPPORT FOR VISION RESEARCH	93.867	5 P30 EY019007-02 SC1		409,645
EARLY DETECTION OF KERATOCONUS	93.867	5 R01 EY019055-03		407,215
THE NEUROPHYSIOLOGY OF VISUAL SEARCH: OCULOMOTOR AND VISUAL MECHANISMS	93.867	5 R01 EY017039-05		384,800
STUDYING MODELS AND MECHANISMS OF OPTIC NERVE DISEASES	93.867	5 R01EY022115-35		381,653
ABSOLUTE FUNDUS AUTOFLUORESCENCE IN RETINAL DEGENERATIONS	93.867	5 R01 EY015520-07		379,191
THERAPEUTIC CORNEAL CROSS-LINKING USING ALIPHATIC BETA-NITROALCOHOLS	93.867	5 R01EY020495-02		362,567
ANTICIPATORY HEMODYNAMIC SIGNALS IN PRIMARY VISUAL CORTEX	93.867	5 R01 EY019500-04		355,084
THE ROLE AND MECHANISMS OF LIPFUSCIN FORMATION IN MACULAR DEGENERATION	93.867	5 R01 EY021207-02		333,734
TOWARD MECHANISM- AND GENE-BASED THERAPIES FOR RETINAL DEGENERATION	93.867	5 R01 EY018213-04		324,598
THE NEUROSPHYSIOLOGY OF SPATIAL VISION	93.867	5 R01 EY014978-09		300,530
HYPERSPECTRAL IMAGING OF THE NORMAL AND AGE-RELATED MACULAR DEGENERATION FUNDUS	93.867	1 R01 EY021470-01		282,762
VISION SCIENCES TRAINING GRANT	93.867	2 T32 EY013933-11		236,713
IMPACT OF LIPOFUSCIN IN RETINAL PIGMENT EPITHELIAL CELLS	93.867	5 R01 EY012951-11		197,574
IMAGING FUNCTIONAL CONNECTIVITY IN VISUAL CORTEX	93.867	5 R01 EY011787-12		137,870

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EARLY DETECTION OF KERATOCONUS	93.867	7 R01 EY019055-02 SC1		94,215
ELASTOGRAPHIC IMAGING OF THE RETINA/CHOROID IN AGE-RELATED MACULAR DEGENERATION	93.867	1 R01 EY021529-01		52,322
GENETIC SUSCEPTIBILITY TO AGE-RELATED MACULAR DEGENERATION	93.867	5 R01 EY013435-10 PHY		30,178
THERAPEUTIC CORNEAL CROSS-LINKING USING ALIPHATIC BETA-NITROALCOHOLS	93.867	5 R01 EY020495-02 SC SC1		23,303
VISION SCIENCES TRAINING GRANT	93.867	5 T32 EY013933-10		20,498
GENETIC SUSCEPTIBILITY TO AGE-RELATED MACULAR DEGENERATION	93.867	2 R01 EY013435-09 SC1		1,213
BIOMEDICAL IMAGE ENGINEERING OF MACULAR IMAGES	93.867	5 R01 EY015520-05		-640
CALORIC RESTRICTION AND AGING IN EYES	93.867	5 R01 EY015293-05		-3,912
				\$9,559,935

Nat. Inst. of Diabetes & Digestive & Kidney Diseases

ANALYSIS OF NGAL METABOLISM IDENTIFIES A THERAPY FOR IRON OVERLOAD	93.874	1 R21 DK091729-01		256,722
				\$256,722

Medical Library Assistance

DISCOVERING AND APPLYING KNOWLEDGE IN CLINICAL DATABASES	93.879	5 R01 LM006910-12		427,465
EHEALTH LITERACY BARRIERS AND SOLUTIONS FOR CONSUMER USE OF A HEALTH PORTAL	93.879	5 R21 LM010688-02		387,597
PHARMACOVIGILANCE USING NATURAL LANGUAGE PROCESSING, STATISTICS, AND THE EHR	93.879	5 R01 LM010016-04		354,880
DEVELOPING FLEXIBLE EHR PLUG-INS TO RE-ENGINEER CLINICAL CARE AND RESEARCH WORKFL	93.879	5 R01 LM010815-02		226,935
IMPROVE PREDICTIONS OF STRUCTURE AND FUNCTION BY PREDICTPROTEIN	93.879	7 R01 LM007329-08		191,334
BRIDGING THE SEMANTIC GAP BETWEEN RESEARCH ELIGIBILITY CRITERIA AND CLINICAL DATA	93.879	5 R01 LM009886-03		163,352
DEVELOPING FLEXIBLE EHR PLUG-INS TO RE-ENGINEER CLINICAL CARE AND RESEARCH WORKFL	93.879	5 R01 LM010815-03 SC1		131,668
GETTING AWAY WITH MURDER? A SOCIAL AND CULTURAL HISTORY OF DRUNK DRIVING	93.879	5 G13 LM009702-03		36,218
				\$1,919,449

International Research and Research Training

COLUMBIA UNIVERSITY - SOUTHERN AFRICAN AIDS INTERNATIONAL TRAINING/RESEARCH PROGRAM	93.989	5 D43 TW000231-17		693,064
COLUMBIA UNIVERSITY - SOUTHERN AFRICAN AIDS INTERNATIONAL TRAINING/RESEARCH PROGRAM	93.989	2 D43 TW000231-16		257,512
CU - SOUTHERN AFRICAN AIDS INTL TRAINING/RSCH PRGM	93.989	3 D43 TW000231-17 S2		243,844
BUILDING CAPACITY TO REDUCE ARSENICOSIS IN BANGLADESH	93.989	5 D43 TW005724-10		103,523
COLUMBIA UNIVERSITY - SOUTHERN AFRICAN AIDS INTERNATIONAL TRAINING/RESEARCH PROGRAM	93.989	5 D43 TW000231-18		42,045
DOES ARSENIC MITIGATION IN BANGLADESH RAISE EXPOSURE TO BACTERIAL AND VIRAL PATHOGENS	93.989	5 R01 TW008066-03 PR		35,676
DOES ARSENIC MITIGATION IN BANGLADESH RAISE EXPOSURE TO BACTERIAL AND VIRAL PATHOGENS	93.989	5 R01 TW008066-03 LDE		33,316
DOES ARSENIC MITIGATION IN BANGLADESH RAISE EXPOSURE TO BACTERIAL AND VIRAL PATHOGENS	93.989	5 R01 TW008066-03 CU		-306
				\$1,408,674

Fogarty International Center

CU - SOUTHERN AFRICAN AIDS INTL TRAINING/RSCH PRGM	93.999	3 D43 TW000231-16 S1		50,014
CU - SOUTHERN AFRICAN AIDS INTL TRAINING/RSCH PRGM	93.999	3 D43 TW000231-17 S1		42,228
				\$92,242

Total Direct Award Programs:

\$364,549,388

Pass-through Awards

Nat. Inst. of Allergy & Infectious Disease

UNIVERSITY OF WISCONSIN	93.	UWIS X561190	HHSN272200900052C	1,083,352
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CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO	93.	CHMCO 11-2250	HHSN272200800006C	78,053
UNIVERSITY OF WISCONSIN	93.	UWIS X561190 SC4	HHSN272200900052C	77,262
UNIVERSITY OF WISCONSIN	93.	UWIS X561190 SC1	HHSN272200900052C	67,441
UNIVERSITY OF WISCONSIN	93.	UWIS X561190 SC5	HHSN272200900052C	63,009
UNIVERSITY OF WISCONSIN	93.	UWIS 267K131	HHSN272200900052C	61,167
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.	CUCSF 107521	N01-AI-15416	32,239
UNIVERSITY OF PENNSYLVANIA	93.	UPENN 554731	5 U19 AI083022-03	26,659
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.	UCSF 108291	N01-AI-15416	22,414
UNIVERSITY OF WISCONSIN	93.	UWIS X561190 SC2 SC2	HHSN272200900052C	11,615
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.	UCSF 105891	N01 AI15416	8,344
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.	UCSF ITN10196-00SC	*NIAID N01-A1-15416	7,144
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.	CUCSD ITN10220-00SC	N01-AI-15416	5,992
UNIVERSITY OF WISCONSIN	93.	UWIS X561190 SC3	HHSN272200900052C	2,578
Nat. Inst. of Child Health & Human Dvlpt.				
MOUNT SINAI SCHOOL OF MEDICINE	93.	MSSM 0258-3621-4609	HHSN275201100002C	379,640
MOUNT SINAI SCHOOL OF MEDICINE	93.	MSSM 0258-3621	HHSN275201100002C	168,703
MOUNT SINAI SCHOOL OF MEDICINE	93.	MSSM 0258-3441-4609	NICHD-2004-07	43,293
CASE WESTERN RESERVE UNIVERSITY	93.	CCWRU CU09-1721	HHSN275200503406C	41,977
MOUNT SINAI SCHOOL OF MEDICINE	93.	MSSM 0258-3431-4609	HHSN267200700047C	27,892
DUKE UNIVERSITY	93.	CDUKE CU11-3549	HHSN 2752010000031	2,880
DUKE UNIVERSITY	93.	CDUKE CU11-3549 SC1	HHSN 2752010000031	288
CASE WESTERN RESERVE UNIVERSITY	93.	CCWRU CU09-1721 SC1	HHSN275200503406C	-3,236
Nat. Inst. of Diabetes & Digestive & Kidney Diseases				
UNIVERSITY OF SOUTH FLORIDA	93.	USF 6119-1117-00-K S1	HHSN26720070014C	591,510
UNIVERSITY OF SOUTH FLORIDA	93.	USF 6119-1117-00-K	HHSN26720070014C	149,225
UNIVERSITY OF CALIFORNIA, IRVINE	93.	UCI 2011-2614	HHSN267200700021C	107,092
Nat. Inst. on Alcohol Abuse & Alcoholism				
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.	RFMH #8690	HHSN27520090007C	98,089
National Cancer Institute				
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION	93.	SAICFI 28XS194	N01-CO-12400	1,267,555
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION	93.	SAIC 29XS192	HHSN261200800001E	687,883
UNIVERSITY OF TOLEDO HEALTH SCIENCE CAMPUS	93.	UTHSC N-2011-39	HHSN261200433000C	170,112
UNIVERSITY OF TOLEDO HEALTH SCIENCE CAMPUS	93.	UTHSC N-2011-40	HHSN261200433000C	163,126
MOUNT SINAI SCHOOL OF MEDICINE	93.	MSSM 0255-3721-4609	1 R01 CA136056-01A1	22,032
UNIVERSITY OF TEXAS M.D. ANDERSON	93.	UTMDA 25951/98025685	N01 CN 035159-06	1,549
UNIVERSITY OF TEXAS M.D. ANDERSON	93.	UTEXAS 25951	N01-CN-035159	-3,624
National Heart, Lung, & Blood Institute				
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.	WFUHS 33000	HHSN268201100027C	580,247

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MOUNT SINAI SCHOOL OF MEDICINE	93.	MSSM 0258-3921	HHSN268201000045C	249,675
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.	WUBGSM WFUHS 33000	HHSN268201100027C	74,835
ARRA - RADIOLOGICAL SOCIETY OF NORTH AMERICA RES & ED FUND	93.	RSNA HHSN26820100005	NHLBI-PB-EB-2010-159-JKS	65,129
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	93.	UNC-CH N01-HC-65233	HHSN268200625233C	63,647
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.	WFUHS 33000	HHSN268201100027C	20,074
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-032 SC2	HHSN268200900047C	19,312
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.	WFUHS 33000	HHSN268201100027C	18,099
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.	WFUHS 30012	HHSN271201000023C	17,175
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-032 SC1	HHSN268200900047C	16,419
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.	WFUHS 33000	HHSN268201100027C	15,302
ARRA - UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-032 SC1	HHSN268200900047C	9,131
ARRA - UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-032 SC2	HHSN268200900047C	8,715
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-032 SC3	HHSN268200900047C	6,804
ARRA - UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-032 SC3	HHSN268200900047C	3,308
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.	WUBGSM 31000	5 N01-HC-95178	1,736
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-027	HHSN268200900047C	656
ARRA - UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.	UAB 000336417-032 SC4	HHSN268200900047C	148
National Institute on Drug Abuse				
ARRA - NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.	RFMH 1007967-1-24812	HHSN-271--2009-00020C	323,294
THE CENTER FOR SOCIAL INNOVATION	93.	CFSI CU10-2083	HHSN 271200800027C	23,329
ARRA - NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.	SRFMH N01DA-5552	HHSN271200800007C	14,485
ARRA - NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.	RFMH 1007967-1-24812	HHSN-271--2009-00020C	4,584
National Library of Medicine				
ICF INCORPORATED	93.	ICF 11ED00025	HHSN276-2009-0356U	44,768
INSTITUTE FOR FAMILY HEALTH	93.	IFFAMH CU12-0517	HHSN287201100003C	14,069
				\$7,058,196
Environmental Health				
HENRY FORD HEALTH SYSTEM	93.113	HFHS CU08-7296	5 R01 ES11126-09	224,618
PUBLIC HEALTH INSTITUTE	93.113	PHI 1017056	5 U01 ES019741-02	93,940
LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER	93.113	LSUMC SPH-EPID12-BG-	1 U01 ES021497-01	38,827
UNIVERSITY OF CALIFORNIA, BERKELEY	93.113	UCB 00007172	3 P01 ES009605-11S1	26,640
UNIVERSITY OF MICHIGAN	93.113	UMICHG 3001266731	5 R01 ES017022-03	26,047
BOSTON UNIVERSITY	93.113	BUMC 9500300401 MSP	1R01ES020425-01	25,254
BOSTON UNIVERSITY	93.113	BUMC 9500300401	1R01ES020425-01	10,625
BOSTON UNIVERSITY	93.113	BUMC 9500300401 CUM	1R01ES020425-01	4,259
PUBLIC HEALTH INSTITUTE	93.113	PHI 1017056	5 U01 ES019471-03	3,171
				\$453,381

Oral Diseases and Disorders Research

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

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NEW YORK UNIVERSITY	93.121	NYU F6788-01	5 R21 DE021187-02	48,019
				\$48,019
NIEHS Superfund Hazardous Substances_Basic Research and Education				
HARVARD UNIVERSITY	93.143	HARVARD 23515.112096	5 P42 ES016454-02	130,364
HARVARD UNIVERSITY	93.143	HARVARD 23515.112096	5 P42 ES016454-03	1,692
				\$132,056
Human Genome Research				
MOUNT SINAI SCHOOL OF MEDICINE	93.172	MSSM 0255-4321-4609	1 U01 HG006380-01	68,003
				\$68,003
Research and Training in Complementary and Alternative Medicine				
MASSACHUSETTS GENERAL HOSPITAL	93.213	MGH CU09-3943	5 U01 AT000613	33,877
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.213	UCSF 6824SC	R21 AT004708	17,055
				\$50,932
National Center on Sleep Disorders Research				
NORTHWESTERN UNIVERSITY	93.233	NWU 60029173CUNY	R01 HL105549	38,764
NORTHWESTERN UNIVERSITY	93.233	NWU 60029173CUNY	R01 HL105549	1,536
				\$40,300
Mental Health Research Grants				
SOCIAL AND SCIENTIFIC SYSTEMS, INCORPORATED	93.242	SSS BRS-IMPCT-S-11-0	UM1 A1068632-06	143,486
SOCIAL AND SCIENTIFIC SYSTEMS, INCORPORATED	93.242	CSCLSC CU01-2838	5 U01 AI068632-03	42,035
SOCIAL AND SCIENTIFIC SYSTEMS, INCORPORATED	93.242	BRS-IMPCT-Q-06-00107	UM1 AI068632-08	26,957
SOCIAL AND SCIENTIFIC SYSTEMS, INCORPORATED	93.242	SSS BRS-IMPCT-Q-06-0	U01 AI068632	-1,532
SOCIAL AND SCIENTIFIC SYSTEMS, INCORPORATED	93.242	CSCLSC CU01-2838	5 U01 AI068632-03	-8,027
Mental Health Research Grants				
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH 25055	1 P50 MH090966-01	615,885
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH CU09-4672	5 R01 MH036197-25	451,384
SAN FRANCISCO STATE UNIVERSITY	93.242	SFSU S10-0008	5 R01 MH089276-02	285,186
DARTMOUTH COLLEGE	93.242	DARTC 666	5 P60 MH082598-04	273,840
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH #24619	R01 MH082041-03	243,799
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH CU10-2772	1 P30 MH090322-01A1	215,304
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 89613	R01 MH085150-01A1	195,986
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH 101442	1 R01 MH095576-01	189,152
NEW YORK UNIVERSITY	93.242	NYU CU11-2639	5 R21 MH091445-02	181,035
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH 25038	2 R01 MH072833-04A2	169,284
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH 25304	5 R01 MH085921-02	156,636
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH CU11-2347	5 R01 MH056390	146,129
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.242	BWH CU07-1567	5 R01 MH074679-05	139,985
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH#101438	1 R01 MH091694-01A1	135,045
EMORY UNIVERSITY	93.242	EMORYU S330261	5 P50 MH077928-05	115,283
UNIVERSITY OF CHICAGO	93.242	UCHICA CU10-3052	P50MH94267	104,972

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NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318W	5 P30 MH043520-23	104,411
EMORY UNIVERSITY	93.242	EMORYU S360625	5 R01 MH056897-13	97,445
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 25022	5 R01 MH091427-02	95,673
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH 25207	R01 MH090062-01	83,931
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318W	5 P30 MH043520-23	83,804
UNIVERSITY OF COLORADO	93.242	UCOL 1547593	7 R21 MH082308-03	81,215
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 24752	5 R01 MH79692-2	78,615
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH #25200	1 R21 MH094888-01	76,524
RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK	93.242	SUNYRF 44042	2 R01 MH064824-09	72,788
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318X	5 P30 MH043520-24	69,288
UNIVERSITY OF MASSACHUSETTS, WORCESTER	93.242	UMASS 6116829/RFS900	R34 MH085881-01A1	68,969
UNIVERSITY OF SOUTH CAROLINA	93.242	USOC 11-1853	5 R01 MH081941-02	68,947
NATIONAL DEVELOPMENT AND RESEARCH INSTITUTES, INC.	93.242	NDRI 628A	1 R34 MH093162-01A1	66,561
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH 1008564/24989	R21 MH081081-01A1	58,552
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH CU24797	5 R21 MH082331-02	55,773
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH CU09-3988	P50 MH090966	54,787
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH#101567	5 R01 MH086236-03	52,240
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318X	5 P30 MH043520-24	49,867
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.242	BWH CU08-8034	5 P30 MH082679-04	47,429
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318W	5 P30 MH043520-23	46,075
EMORY UNIVERSITY	93.242	EMORYU S602055	5 R01 MH071537-07	45,120
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH CU10-0876	1 R01 MH85969-01A2	45,085
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 25032	5 R01 MH091844-02	43,726
DUKE UNIVERSITY	93.242	DUKEU 203-1580 ZHI	7R01MH091083-02	41,866
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1711D	5 R01 MH083795-03	37,540
DUKE UNIVERSITY	93.242	DUKEU 203-1580	7R01MH091083-02	35,319
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH CU11-2560	5 R01 NG076961-04	33,447
NEW YORK UNIVERSITY MEDICAL CENTER	93.242	NYU 08-1248	5 R01 MH067229-09	33,411
NEW YORK UNIVERSITY MEDICAL CENTER	93.242	NYUMC CU12-1700	1 P30 MH090322-01	33,326
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH #24772	R01 MH086237-03	32,383
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.242	BWH CU08-8034	P50 MH082679	31,550
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1698D	1 R01 MH082052-01A1	31,062
UNIVERSITY OF MICHIGAN	93.242	UMICHG 3001392918	5 R01 MH080015-03	26,695
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH CU12-1819	1 K23 MH090563-01	24,873
NEW YORK UNIVERSITY	93.242	NYU 07-0925	5 R01 MH059114-09	24,414
NEW YORK ACADEMY OF MEDICINE	93.242	NYAMED CU11-0015	5 R01 MH085132-02	22,217

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RUTGERS UNIVERSITY	93.242	RUTGER 4099	5 R01 MH087481-02	18,689
YALE UNIVERSITY	93.242	YU A08041 (M11A10838	5 R34 MH087216-02	16,328
UNIVERSITY OF ROCHESTER MEDICAL CENTER	93.242	URMC 415292-G	1 R01 MH091452-01	14,862
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1709D	5 R01 MH083557-04	14,374
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	93.242	UNC-CH 5-31798	R01 MH093275	13,301
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH CU11-1114	5 R01 MH091844-02	13,111
NEW YORK UNIVERSITY MEDICAL CENTER	93.242	NYUMC 08-1159	1 R01 MH081881-01A2	11,266
DEPAUL UNIVERSITY	93.242	DEPAUL 500836SG088	R34 MH095571	10,549
NATHAN S. KLINE INSTITUTE FOR PSYCH RESEARCH	93.242	SRFMH 25017	P20 MH078188	10,465
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318X	5 P30 MH043520-24	9,984
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318W	5 P30 MH043520-23	5,432
UNIVERSITY OF MARYLAND	93.242	UMARY CU12-1520	R21 MH096285	5,316
UNIVERSITY OF MARYLAND	93.242	UMARY CU12-1680	R01 MH090036	4,789
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318X	5 P30 MH043520-24	4,186
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1643E	5 R01 MH071456-05	2,762
UNIVERSITY OF MARYLAND	93.242	UMARY CU12-1828	R34 MH094555-01	2,665
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH 25055	1 P50 MH090966-01	338
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	SRFMH 903-1318V	5 P30 MH043520-22	-311
EMORY UNIVERSITY	93.242	EMORYU S330261	5 P50 MH077928-04	-3,357
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.242	RFMH CU09-4659	R01 MH085921-01A2	-9,646
UNIVERSITY OF PENNSYLVANIA	93.242	UPENN 5-47107-D	1 R01 MH06068-01A1	-16,818
MEDICAL UNIVERSITY OF SOUTH CAROLINA	93.242	MUSC 07-1657	3 R01 MH069887-03S1	-40,026
JACKSON (HENRY M.) FNDN FOR THE ADVANCEMENT OF MILITARY MEDICIN	93.242	HJF 661110	U01 MH087981	-85,154
				\$5,779,857

Alcohol Research Programs

NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.273	SRFMH 89510	HHSN 275 2009 00019C	230,954
NEW YORK UNIVERSITY	93.273	NYU F6502-01	5 R01 AA017672-03	120,145
YALE UNIVERSITY	93.273	YU CU10-0193	2 P50 AA012870-11	37,848
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.273	SRFMH CU11-3405	5 R01 AA014323-05	35,959
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.273	SRFMH 903-1713D	5 U01 AA018111-04	14,420
WAYNE STATE UNIVERSITY	93.273	WSU10058	R01 AA016781-03	-491
				\$438,835

Drug Abuse and Addiction Research Programs

NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH 25063	R01 DA031022-01	416,302
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.279	CUMC 10111786-01	P01 DA012408-12	166,526
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH 1006604-5-2439	1 R01 DA020656-01A2	164,160
UNIVERSITY OF COLORADO	93.279	UCOL 1547563	7 R01-DA027794-03	157,476
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH CU10-3765	1 R01 DA030484-01	137,936

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UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION	93.279	UKRK 3048105116-09-2	1 R01 DA025100-01	126,280
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.279	CUMC 10111786-01 SC1 SC1	P01 DA012408-12	116,233
NATIONAL DEVELOPMENT AND RESEARCH INSTITUTES, INC.	93.279	NDRI 081	R01 DA01336	82,819
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.279	CUMC 09020215	5 R01 DA015170-08	77,334
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH-24388	5 R01 DA021319-04	74,944
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	RFMH CU10-2743	1 R01 DA02961801A1	73,887
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH CU09-1603	1 R01 DA024029-01A1	69,597
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.279	CUMC 12070954-01	5 P01 DA012408-13	66,567
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH 903-1431R	5 P50 DA009236-18	53,157
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	93.279	UNC-CH 5-30563	5 R01 DA025198-05	52,070
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH 903-1545I	2 U10 DA013035-09	51,444
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.279	UCSF CU11-2429	1 R01 DA029204-01	50,000
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	SRFMH 1006611-3-2439	5 R01 DA023733-03	36,887
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	RFMH CU10-3218	1 R21 DA031975-01	29,059
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.279	UCSF 555843-29279	5 P01 DA010154	27,715
UNIVERSITY OF MICHIGAN	93.279	UMICHG 3002202314	5 R01 DA022720-05	16,411
DUKE UNIVERSITY	93.279	DUKEU 203-0608	4 R33 DA027503-02	14,416
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	93.279	RFCUNY 41659-A	7 R01 DA023641-02	13,541
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.279	RFMH #1008868-9-2505	U10 DA013035-09	7,283
UNIVERSITY OF MARYLAND	93.279	UMARY CU12-1681	R34 DA032411	2,665
VANDERBILT UNIVERSITY MEDICAL CENTER	93.279	VUMC 32868	R01 DA013975	-39,592
				\$2,045,117

Mental Health Research Career/Scientist Development Awards

RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	93.281	RFCUNY 41630-00-05	K23 MH075006-03	1,158
				\$1,158

Mental Health National Research Service Awards for Research Training

BARNARD COLLEGE	93.282	BARNARD CU09-2857	R01 MH06873-01A1	214,140
				\$214,140

Discovery and Applied Research for Technological Innovations to Improve Human Health

TUFTS UNIVERSITY SCHOOL OF MEDICINE	93.286	TUSM CU08-0194	5P41EB002520-04	638,854
NEW YORK UNIVERSITY MEDICAL CENTER	93.286	NYUMC SPA #07-1045	2 R01 EB001015-13A2	48,123
RIVERSIDE RESEARCH INSTITUTE	93.286	RRI 011200	5 R01 EB008606	39,041
RIVERSIDE RESEARCH INSTITUTE	93.286	RRI CU12-0895	5R01EB006372-04	29,277
RIVERSIDE RESEARCH INSTITUTE	93.286	RRI 011422	5 R01 EB006372-03	2,130
VANDERBILT UNIVERSITY	93.286	VANDER 22094-S1	7 R21 EB007779-04	293
				\$757,718

Minority Health and Health Disparities Research

JOHN JAY COLLEGE OF CRIMINAL JUSTICE	93.307	JJCCJ 41773-A	P20 MD006118-01	109,668
				\$109,668

Trans-NIH Research Support

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MOUNT SINAI SCHOOL OF MEDICINE	93.310	MSSM 0255-3751-4609	5 R01 DK087650-03	462,138
				\$462,138
Nursing Research				
DREXEL UNIVERSITY	93.361	DREXEL 232358	5 P01 GM056550-15	139,136
DREXEL UNIVERSITY	93.361	DREXEL 232464	5 P01 GM056550-15	23,687
Nursing Research				
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.361	UCSF 6572SC	1 R01 NR012003-01	220,921
KENT STATE UNIVERSITY	93.361	KENT 443168-CU	5 R21 NR012700-02	38,996
				\$422,740
National Center for Research Resources				
BIOSCAN, INC.	93.389	BIOSCAN CU11-0090	1 R44 RR030701-01	131,578
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	93.389	UNC-CH #5-31606	3 UL 1RR025747-04S3	21,385
				\$152,963
Cancer Cause and Prevention Research				
UNIVERSITY OF CHICAGO	93.393	UCHICA 35704 S1	7 R01 CA107431-03	188,364
NEW YORK UNIVERSITY MEDICAL CENTER	93.393	NYUMC 09-0093	5 R01 CA146940-03	180,501
UNIVERSITY OF CHICAGO	93.393	UCHICA 44706-E S1	R01 CA107431	84,478
LOMA LINDA UNIVERSITY	93.393	LLU CU09-1203	1 R21 CA143642-01A1	63,764
UNIVERSITY OF SOUTHERN CALIFORNIA	93.393	USC H50431	5 U19 CA148537-02	50,284
UNIVERSITY OF CHICAGO	93.393	UCHICA 44706-E	R01 CA107431	43,252
UNIVERSITY OF CHICAGO	93.393	UCHICA 44706-E	R01 CA107431	23,468
UNIVERSITY OF TEXAS M.D. ANDERSON	93.393	UTMDA CU34134/983105	1 R01 CA139020-01	18,411
HEALTH RESEARCH INCORPORATED	93.393	SHRI 55-1001-01	1 R01 CA139426-01A2	15,335
UNIVERSITY OF CHICAGO	93.393	UCHICA 44706-E S1	R01 CA107431	8,024
MASSACHUSETTS GENERAL HOSPITAL	93.393	MGH 217153	1 U01 CA152926-01	30
BOOZ ALLEN HAMILTON INCORPORATED	93.393	BAHI 94144NB23 SC2	GS-35F-0306J	-3,931
				\$671,980
Cancer Detection and Diagnosis Research				
THE MAYO CLINIC -- JACKSONVILLE	93.394	MAORO CU09-3932	1 R01 CA152045-01A1	102,984
THE MAYO CLINIC -- JACKSONVILLE	93.394	MAOJF CU09-3932	5 R01 CA152045-02	32,488
YALE UNIVERSITY	93.394	YU A07674	1 R01 CA132931-01A2	28,769
UNIVERSITY OF MICHIGAN	93.394	UMICHG CU11-2632	2 U01 CA86400-11	24,986
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.394	BWH CU11-2375	R01 CA136918-01A2	7,841
				\$197,068
Cancer Treatment Research				
RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK	93.395	1097441-2-58638	1 R01 CA155019-01A1	644,177
GEORGETOWN UNIVERSITY	93.395	RX 4400-208-CU	1 R01 CA124924-01	65,271
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.395	SRFMH 1008207-1-2487	5 R01 CA133050-02	63,299
UNIVERSITY OF MICHIGAN	93.395	SWOG CU09-3420	U10CA32102	30,814
DANA FARBER CANCER INSTITUTE	93.395	DFCI 1154001	R21 CA134864-01	23,963

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CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 021355	U01 CA097452-10	23,073
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 020967 ATT	5 U10 CA098543-09	20,224
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 020967	5 U10 CA098543-09	12,030
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 020986	5 U10CA098543-09	10,224
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 18501	5 U10 CA098543	10,135
DUKE UNIVERSITY	93.395	DUKEU 203-9128	3 U10 CA076001-15S1	9,501
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 97452-1030	U01 CA097452-06	8,541
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF #20164	U01 CA97452-09	15
HEALTH RESEARCH INCORPORATED	93.395	SHRIRP CU08-4881	5 R01 CA106815-04	-809
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 19091	U01 CA97452-08	-920
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.395	NCCF 20349	5 U01 CA97452-09	-1,678
DANA FARBER CANCER INSTITUTE	93.395	DFCI 1057410	5 P01 CA092625-10	-28,049
				\$889,811
Cancer Biology Research				
MOUNT SINAI SCHOOL OF MEDICINE	93.396	MSSM 0254-3111-4609	2 P01 CA080058-11	235,054
UNIVERSITY OF PENNSYLVANIA	93.396	U PENN 557663	3 U01-CA-0143056-03	143,481
CASE WESTERN RESERVE UNIVERSITY	93.396	CWRU RES503641	R01 CA131341-01A1	119,370
UNIVERSITY OF PENNSYLVANIA	93.396	UPENN 555923	5 U01 CA143056-02	72,922
VANDERBILT UNIVERSITY MEDICAL CENTER	93.396	VANDER VUMC35899	5 R01 CA141307-03	65,371
UNIVERSITY OF TEXAS M.D. ANDERSON	93.396	UTMDA #30616/9802567	N01 CN 035159-07	56,236
MEMORIAL SLOAN-KETTERING CANCER CENTER	93.396	MSKCC BD513349	5 R01 CA124380-03	24,150
UNIVERSITY OF TEXAS M.D. ANDERSON	93.396	UTMDA 18645/98025671	N01 CN035159-05	-22,540
Cancer Biology Research				
STANFORD UNIVERSITY	93.396	SU 26500050-38985	5 R01 CA130826-03	6,669
				\$700,713
Cancer Centers Support Grants				
DANA FARBER CANCER INSTITUTE	93.397	DFCI 1082107	5 P50 CA090578-09	22,942
DANA FARBER CANCER INSTITUTE	93.397	DFCI 1082107	5 P50 CA090578-08	0
				\$22,942
Cancer Research Manpower				
UNIVERSITY OF MICHIGAN	93.398	CCTRFST CU80045401 S SHIP	NCI SWOG9921	61,541
UNIVERSITY OF MICHIGAN	93.398	CMICH CU01-2860	NCI SWOG9921	7,900
				\$69,441
Cancer Control				
UNIVERSITY OF TEXAS HEALTH SCIENCE CNTR AT SAN ANTONIO	93.399	UTHSCSA 130642/13062	7 P01 CA108964-06	40,369
UNIVERSITY OF MICHIGAN	93.399	UMICHG F021097	5 U10 CA037429-27	30,494
CURESEARCH NATIONAL CHILDHOOD CANCER FOUNDATION	93.399	NCCF 20104	U10 CA95861-10	8,816
UNIVERSITY OF TEXAS HEALTH SCIENCE CNTR AT SAN ANTONIO	93.399	CUTHSCSA CU01-2766	5 U01 CA37429	6,203
				\$85,882
Trans-NIH Recovery Act Research Support				

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ARRA -TULANE UNIVERSITY	93.701	TULANE TUL-HSC-281-1	5 U01 AI082053-02	138,145
ARRA -UNIVERSITY OF PENNSYLVANIA	93.701	UPENN 555023	3 U19 AI-083022-02S1	37,381
ARRA -UNIVERSITY OF PENNSYLVANIA	93.701	UPENN CU10-3279	3 U19 AI083022-02S2	8,964
ARRA -WASHINGTON UNIVERSITY, ST. LOUIS	93.701	WU-11-121	3 U01 AI077810-02S1	1,637
Trans-NIH Recovery Act Research Support				
ARRA -INDIANA UNIVERSITY	93.701	IUSM IUPUI4683118CU	1 RC1 AR058767-01	607
Trans-NIH Recovery Act Research Support				
ARRA -EMORY UNIVERSITY	93.701	EMORYU S330256	1 RC2 HD064525-01	241,726
ARRA -TULANE UNIVERSITY	93.701	TULANE TUL-HSC-237-1	3 U01 HD052104-06S1	145,342
ARRA -GRADUATE CENTER CITY UNIVERSITY OF NEW YORK	93.701	RFCUNY NO.41739A	1 R15 HD065653-01	33,879
ARRA -UNIVERSITY OF SOUTH FLORIDA	93.701	USF 6119-1211-00-G	3 U01 HD051997-04S1	10,560
ARRA -UNIVERSITY OF ROCHESTER MEDICAL CENTER	93.701	URMC 100003-D	R01 HD057793	9,382
ARRA -MOUNT SINAI SCHOOL OF MEDICINE	93.701	MSSM 0256-6671-4609	5 R21 HD065276-02	1,929
ARRA -UNIVERSITY OF MIAMI	93.701	UMIAMI CU09-2629	1 R01 HD060325-01	-11,330
Trans-NIH Recovery Act Research Support				
ARRA -HARVARD MEDICAL SCHOOL	93.701	HMS 158196.0202	1 RC2 DE020759-01	23,698
Trans-NIH Recovery Act Research Support				
ARRA -VANDERBILT UNIVERSITY MEDICAL CENTER	93.701	VANDER VUMC35937	1 R01 DK080095-01A1	96,404
ARRA -GEORGIA HEALTH SCIENCES UNIVERSITY	93.701	GHSU 24958-4	3 U24 DK076169-05	67,471
ARRA -YALE UNIVERSITY	93.701	YU M10A10657	1 RC1 DK086800-01	13,264
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.701	UCSF CU11-3513	5 U34 DK083031	8,062
ARRA -UNIVERSITY OF WASHINGTON	93.701	UWASH 696723Z	1 R56 DK089036-01	-12
Trans-NIH Recovery Act Research Support				
ARRA -REGENTS OF THE UNIVERSITY OF MINNESOTA	93.701	UMINN N001354901	1 R01 ES017384-01	34,303
ARRA -NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.701	SRFMH 903-1737B	1 R01 ES019004-01	3,751
Trans-NIH Recovery Act Research Support				
ARRA -BOSTON UNIVERSITY	93.701	BU GC208195NGC	5 RC2 GM092602-02	45,430
ARRA -HEALTH RESEARCH INCORPORATED	93.701	HRI 3731-01	3 R01 GM04484-20S1	2,414
Trans-NIH Recovery Act Research Support				
ARRA -JOHNS HOPKINS UNIVERSITY	93.701	JH 2000829673	5 RC2 NS069395-02	303,700
ARRA -JOHNS HOPKINS UNIVERSITY	93.701	JH 2000818531	5 RC2 NS069395-02	165,744
ARRA -MCLEAN HOSPITAL	93.701	MCLEANH CU09-2976	1 RC2 NS070276-01	159,120
ARRA -DUKE UNIVERSITY	93.701	DUMC 203-0454	5 RC2 NS070344-01	74,730
ARRA -MCLEAN HOSPITAL	93.701	MCLEANH CU09-4155	1 RC2 NS070276-01	58,238
ARRA -ALASKA NATIVE TRIBAL HEALTH CONSORTIUM	93.701	ANTHC CU10-0917	5 U01NS048069-04	44,758
ARRA -ALASKA NATIVE TRIBAL HEALTH CONSORTIUM	93.701	ANTHC CU10-0917	5 U01NS048069-04	42,616
ARRA -UNIVERSITY OF CALIFORNIA, DAVIS	93.701	UCD SUB0900209-1	3 U24 RR018144-07S2	29,341
ARRA -ALBERT EINSTEIN COLLEGE OF MEDICINE	93.701	AECM 9-526-3742	3 UL1 RR025750-02S4	21,526
ARRA -UNIVERSITY OF CINCINNATI	93.701	UCINCI 006467 SC1	R01 NS039512-07	8,684

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ARRA -UNIVERSITY OF CINCINNATI	93.701	UCINCI 006467	R01 NS039512-07	7,628
ARRA -RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	93.701	RFCUNY CU 11-0257	3 G12 RR003037-25S	6,209
ARRA -JOHNS HOPKINS UNIVERSITY	93.701	JH 2000818531 SC1	5 RC2 NS069395-02	1,129
Trans-NIH Recovery Act Research Support				
ARRA -UNIVERSITY OF MASSACHUSETTS, WORCESTER	93.701	UMASS 6114667/RFS900	RC1 NR011612-01	13,162
Trans-NIH Recovery Act Research Support				
ARRA -JOHNS HOPKINS UNIVERSITY	93.701	CJHPKN #2000878472 SC1	1 RC2 CA148346-01	150,406
ARRA -JOHNS HOPKINS UNIVERSITY	93.701	CJHPKN #2000878472	1 RC2 CA148346-01	42,918
ARRA -JOHN WAYNE CANCER INSTITUTE	93.701	JWCI CU11-2012	P01 CA029605	22,860
ARRA -BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.701	BWH 105113	1 RC1 CA145229-01	20,025
ARRA -REGENTS OF THE UNIVERSITY OF MINNESOTA	93.701	UMINN A001026901	1RC1CA145044-01	16,096
Trans-NIH Recovery Act Research Support				
ARRA -UNIVERSITY OF MASSACHUSETTS, WORCESTER	93.701	UMASS 6114403/RFS900	1 RC1 HL099759-01	91,200
ARRA -MAHARISHI UNIVERSITY OF MANAGEMENT	93.701	MUHAR CU10-1745	RC1 HL100386	84,136
ARRA -EMORY UNIVERSITY	93.701	EMORYU 5323093	1 RC1 HL100951-01	41,301
ARRA -UNIVERSITY OF PITTSBURGH	93.701	CUPITT 116763	1 RC1 HL102429-01	800
Trans-NIH Recovery Act Research Support				
ARRA -UNIVERSITY OF MICHIGAN	93.701	UMICHG 3001747410	RC4 AG039029	59,271
ARRA -UNIVERSITY OF PENNSYLVANIA	93.701	UPENN 553067	2 R01 AG-015116-11A2	43,721
ARRA -UNIVERSITY OF MICHIGAN	93.701	UMICHG 3001648829	5 RC2 AG036495-02	38,199
ARRA -UNIVERSITY OF CALIFORNIA, SAN DIEGO	93.701	CUCSD 10-CPMC ADNI-G	1 RC2 AG036535-01	2,258
ARRA -UNIVERSITY OF CALIFORNIA, LOS ANGELES	93.701	UCLA 1558 G MA303	1 R01 AG032271	-2,541
Trans-NIH Recovery Act Research Support				
ARRA -UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	93.701	UNC-CH 5-30772	3 R01 MH80403-03S1	429,270
HARVARD UNIVERSITY	93.701	HARVARD 114813-50504	5 R01 MH078928-04	425,609
ARRA -NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.701	SRFMH CU09-3133	1 R01 MH089582-01	282,230
ARRA -NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.701	RFMH 1007886-1-24791	1 R01 DA023091-01A2	80,322
ARRA -UNIVERSITY OF ARKANSAS	93.701	UARK #034748	R01 MH089466-02	23,406
ARRA -BRAIN PLASTICITY INSTITUTE	93.701	BRPI CU11-1189	1 RC3 MH090833	20,184
ARRA -HARVARD UNIVERSITY	93.701	HARVARD 23600-114881	1 RC4 MH092707-01	12,496
ARRA -HARVARD UNIVERSITY	93.701	HARVARD 23600-114881	1 RC4 MH092707-01	-40
ARRA -NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.701	SRFMH 88975	3 R01 DA023733-02S1	-32,260
Trans-NIH Recovery Act Research Support				
ARRA -TUFTS UNIVERSITY SCHOOL OF MEDICINE	93.701	TUFTS CU09-2752	3 P41 EB002520-06A1S1	9,720
				\$3,711,179
Cardiovascular Diseases Research				
MASSACHUSETTS GENERAL HOSPITAL	93.837	MGH 213753	5 P01 HL018646	476,500
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.837	BWH 105963	1 R01 HL098433-01	318,293
UNIVERSITY OF MICHIGAN	93.837	UMICHG 3001509884	R01 HL101161-01	198,682

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NEW YORK UNIVERSITY MEDICAL CENTER	93.837	NYU CU10-2837	1 R01 HL105983-01A1	187,129
UMDNJ ROBERT WOOD JOHNSON MEDICAL SCHOOL	93.837	RWJMS CU01-2796	1 R01 HL083056-01A2	185,122
UNIVERSITY OF VIRGINIA	93.837	UV GC11707-133834	5 R01 H2085160-2	160,310
UNIVERSITY OF MICHIGAN	93.837	UMICHG CU09-4639	R01 HL101161-01	148,485
NEW YORK UNIVERSITY MEDICAL CENTER	93.837	NYU 10-02465	5 R01 HL105983-02	104,558
NEW ENGLAND RESEARCH INSTITUTES	93.837	NERI CU11-2689	U10 HL068270	96,947
NEW ENGLAND RESEARCH INSTITUTES	93.837	NERI CU01-2786	5 U01 HL68270	84,597
NEW ENGLAND RESEARCH INSTITUTES	93.837	NERI CU11-1621 SC1	U01 HL098188	81,249
UNIVERSITY OF MARYLAND	93.837	UMARY SR00001540	1 R01 HL104193-01A1	74,693
BETH ISRAEL DEACONESS MEDICAL CENTER	93.837	BIDMC CU09-2370	5 R01 HL102361-02	69,354
VANDERBILT UNIVERSITY MEDICAL CENTER	93.837	VU 33812	5 R01 HL068880-10	65,742
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.837	UCSF CU10-3033	01 R01 HL108821-01	58,459
RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK	93.837	SUNYRF 61199	7 R01 HL094410-04	49,640
NORTHWESTERN UNIVERSITY	93.837	NWU CU09-2874	1 R01 HL104047	46,796
MOUNT SINAI SCHOOL OF MEDICINE	93.837	MSSM CU01-2760 SC2 SC2	5 U01 HL088942-05	44,339
NEW YORK UNIVERSITY MEDICAL CENTER	93.837	NYUMC SPA#07-0929	1 R01 HL092439-01	41,760
REGENTS OF THE UNIVERSITY OF MINNESOTA	93.837	UMINN P001435601	5 R01 HL098382-02	37,558
REGENTS OF THE UNIVERSITY OF MINNESOTA	93.837	UMINN P663658701	5 R01 HL084064-05	37,253
MOUNT SINAI SCHOOL OF MEDICINE	93.837	MSSM CU01-2760 SEV	5 U01 HL088942-05	35,428
REGENTS OF THE UNIVERSITY OF MINNESOTA	93.837	UMINN P663658701	5 R01 HL084064-04	33,093
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.837	SLRIHS CU12-0119	5 R01 HL091352-04	30,977
MOUNT SINAI SCHOOL OF MEDICINE	93.837	MSSM CU01-2760 SC3	5 U01 HL088942-05	28,812
UNIVERSITY OF CONNECTICUT	93.837	UCONN CU11-0203	1 R01 HL104080-01	21,295
MOUNT SINAI SCHOOL OF MEDICINE	93.837	MSSM CU01-2760	5 U01 HL088942-05	19,230
UNIVERSITY OF MICHIGAN	93.837	UMICHG 3001599228	U01 HL094345	18,868
KENT STATE UNIVERSITY	93.837	KENT 443159-CU	R01 HL089311-03RE	16,645
YALE UNIVERSITY	93.837	YU A06950 (M10A10400	5 R01 HL084438-03	14,674
WAKEFOREST UNIVERSITY, BOWMAN GRAY SCHOOL OF MEDICINE	93.837	WUBGSM 14061	1 R01 HL101250	9,759
NEW ENGLAND RESEARCH INSTITUTES	93.837	NERI CU01-2830 FFS FFS	U01 HL68270	5,799
NORTHWESTERN UNIVERSITY	93.837	NWU 620-534600-60022	5 R01 HL091069-03	4,800
KENT STATE UNIVERSITY	93.837	KENT 443159-CU	5 R01 HL089311-04	3,101
MOUNT SINAI SCHOOL OF MEDICINE	93.837	MSSM CU12-0997	5 U01 HL088942-05	2,723
VANDERBILT UNIVERSITY MEDICAL CENTER	93.837	VU 33812	5 R01 HL068880-09	1,322
NEW ENGLAND RESEARCH INSTITUTES	93.837	NERI CU10-3112	U01 HL68270	220
NEW ENGLAND RESEARCH INSTITUTES	93.837	NERI 01-2830 SII SII	U01 HL68270	143
WASHINGTON UNIVERSITY, ST. LOUIS	93.837	WASHU WU-08-124	5 P50 HL077113-04	-3
				\$2,814,352

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Lung Diseases Research				
ALASKA NATIVE TRIBAL HEALTH CONSORTIUM	93.838	ANTHC 11-U-37614	5 U01 NS048069-4	60,581
Lung Diseases Research				
NATIONAL JEWISH HEALTH	93.838	NJMRCES CU-08-7792	5 U01 HL089897-05	161,871
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.838	BWH 103848	5 R01 HL093076	103,913
UNIVERSITY OF PENNSYLVANIA	93.838	UPENN 548849	5 R01 HL087115-05	77,777
UNIVERSITY OF PENNSYLVANIA	93.838	UPENN CU08-5343	5 R01 HL-081619-05	54,213
NEW YORK UNIVERSITY MEDICAL CENTER	93.838	NYUMC CU08-0274	5 R01 HL089493-02	27,706
NATIONAL JEWISH HEALTH	93.838	NJMRCES CU08-7792	5 U01 HL089897-05	7,755
UNIVERSITY OF PENNSYLVANIA	93.838	UPENN 548849	1 R01 HL0871150-A1	419
UNIVERSITY OF PENNSYLVANIA	93.838	UPENN 548849	1 R01 HL0871150-A1	1
UNIVERSITY OF PENNSYLVANIA	93.838	UPENN 548849	5 R01 HL087115-02	-1,825
				\$492,411
Blood Diseases and Resources Research				
CORNELL UNIVERSITY	93.839	CU #58266-9225	R01 HL097971	208,448
BAYLOR COLLEGE OF MEDICINE-HOUSTON	93.839	BCMH CU12-0292	7 R01 HL095647-03	42,525
ARRA - MOUNT SINAI SCHOOL OF MEDICINE	93.839	MSSM S372657	5 RC1 HL100951-02	22,508
				\$273,481
Arthritis, Musculoskeletal and Skin Diseases Research				
TUFTS UNIVERSITY COLLEGE OF ARTS AND SCIENCES	93.846	TUFTS HS1988	1R01AR061988	130,223
UNIVERSITY OF PENNSYLVANIA	93.846	UPENN 549028	1 R01 AR055647	125,561
HOSPITAL FOR SPECIAL SURGERY - CORNELL MEDICAL CENTER	93.846	HSS CU10-1062	5 R01 AR049772-08	11,077
				\$266,861
Diabetes, Digestive, and Kidney Diseases Extramural Research				
GEORGE WASHINGTON UNIVERSITY	93.847	GWU 23438-9-CCLS2057	U01 DK061230	357,101
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.847	UAB 000328755-001	5 R01 DK082753-02	318,892
VANDERBILT UNIVERSITY MEDICAL CENTER	93.847	VUMC 38114	2 U01 DK072473-06	236,796
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRHC CU10-2119	2 P30 DK26687-31	232,048
INFOSCITEX CORPORATION	93.847	INFOSCITEX 1483-S001	2R42DK072646-02A1	229,121
VANDERBILT UNIVERSITY MEDICAL CENTER	93.847	VUMC 37460	1 U01 DK089523-01	211,838
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRHC CU10-2118	3 P30 DK26687-31	148,811
GEORGE WASHINGTON UNIVERSITY	93.847	GWU 23438-9-CCLS2057	U01 DK061230	139,337
UNIVERSITY OF SOUTH FLORIDA	93.847	UFLRDA CU09-4618	NIDDK	130,551
UNIVERSITY OF FLORIDA	93.847	UF 10086	4 R37 DK049108-16	117,611
BAYLOR COLLEGE OF MEDICINE-HOUSTON	93.847	BCMH 5600650039	7 P01 DK056492-12	97,527
MOUNT SINAI SCHOOL OF MEDICINE	93.847	MSSM 0255-3792-4609	5 U01 DK085688-03	65,873
NORTHWESTERN UNIVERSITY	93.847	NWU 60029589CUNY	1 R01 DK090129-01A1	63,131
VANDERBILT UNIVERSITY MEDICAL CENTER	93.847	VUMC 37460	U01 DK089523-01	57,811
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRHC CU09-0697	5 U01 DK048404-18	44,780

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
NORTHWESTERN UNIVERSITY	93.847	NWU CU10-0911	R56 DK090129	43,715
UNIVERSITY OF PENNSYLVANIA	93.847	UPENN 555640	5 U01 DK089540-02	41,193
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.847	UAB 000328755-001	5 R01 DK082753-04	40,059
MOUNT SINAI SCHOOL OF MEDICINE	93.847	MSSM 0255-3421-4609	5 R01 DK067555-08	30,814
BAYLOR COLLEGE OF MEDICINE-HOUSTON	93.847	BCMh 101440535	7 P01 DK056492-12	30,018
INDIANA UNIVERSITY SCHOOL OF MEDICINE	93.847	IN4685546CU	1 U34 DK090953-01A1	20,119
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRIHS CU12-1576	5 P30 DK026687-32	12,352
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRIHS CU09-4233	5 R01 DK067561-04	12,156
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRIHS CU12-1575	1 U01 DK094463-01	10,293
MOUNT SINAI SCHOOL OF MEDICINE	93.847	MSSM 0255-3792-4609	5 U01 DK085688	10,043
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRIHS CU12-1576	2 P30 DK026687-31	8,235
MOUNT SINAI SCHOOL OF MEDICINE	93.847	MSSM 0254-1051-4609	5 K23 DK082617-03	8,103
MASSACHUSETTS GENERAL HOSPITAL	93.847	MGH CU12-1572	5 R01 DK083352-02	7,098
JOSLIN DIABETES CENTER	93.847	JDBCTR CU01-2805	5 U01 DK074556-03	6,458
NORTH SHORE - LONG ISLAND JEWISH HEALTH SYSTEM	93.847	NSLIJHS CU11-2534	5 R33 DK070341-05	5,675
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.847	UAB 000328755-001	1 R01 DK082753-01	2,518
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRIHC CU09-1697	5 U01 DK048404-19	1,400
CASE WESTERN RESERVE UNIVERSITY	93.847	CWRU CU10-2034	5 R01 DK070863-07	1,204
GEORGE WASHINGTON UNIVERSITY	93.847	GWU 23438-8-CCLS2048 STP	U01 DK061230	531
UNIVERSITY OF MICHIGAN	93.847	MICHG 3001819806	U54 DK083912	520
UNIVERSITY OF PENNSYLVANIA	93.847	UPENN 555640	1 U01 DK089540-01	93
MOUNT SINAI SCHOOL OF MEDICINE	93.847	MSSM 0255-3421-4609	2 R01 DK067555-06	-1,226
GEORGE WASHINGTON UNIVERSITY	93.847	GWU 23438-8-CCLS2048 STP	5 U01 DK061230-08	-28,200
UNIVERSITY OF MICHIGAN	93.847	*CMICH 02X1	U01-DK-57577	-36,630
GEORGE WASHINGTON UNIVERSITY	93.847	GWU 06-M33	5 U01 DK061055-06	-38,288
Diabetes, Digestive, and Kidney Diseases Extramural Research				
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRHC CU10-2118	5P30DK26687-32	15,271
ST. LUKE'S-ROOSEVELT INSTITUTE FOR HEALTH SCIENCES	93.847	SLRHC CU10-2119	5 P30DK26687-32	1,272
				\$2,656,024
Nat. Inst. of Diabetes & Digestive & Kidney Diseases				
JOHNS HOPKINS UNIVERSITY	93.848	JH P02001016002	5 U01 DK062431-08	415
JOHNS HOPKINS UNIVERSITY	93.848	CJHPKN PO#2000010317	5 U01 DK067767-05	-536
				\$-121
Nat. Inst. of Diabetes & Digestive & Kidney Diseases				
MONTEFIORE MEDICAL CENTER	93.849	MMC CU01-2779	5 U01 DK63549-02	-89,120
				\$-89,120
Extramural Research Programs in the Neurosciences and Neurological Disorders				
UNIVERSITY OF MIAMI	93.853	UMIAMI 66674A	5 R37 NS029993-18	954,765
UNIVERSITY OF WISCONSIN	93.853	UWIS 362K040	P01 NS042803	305,414

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
UNIVERSITY OF MIAMI	93.853	UMIAM 66674N	R37NS029993-20	286,280
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.853	UCSF 5776SC	R01 NS062820	204,254
MONTEFIORE MEDICAL CENTER	93.853	MMC CU08-4400	5 R01 NS043209-09	178,880
UNIVERSITY OF CINCINNATI	93.853	UCINCM CU09-2753	5 U01 NS069763-02	161,274
JOHNS HOPKINS UNIVERSITY	93.853	JH 2001246584	7 R01 NS052804-05	102,452
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.853	UCSF 4799SC	U01 NS053998	88,146
JOHNS HOPKINS UNIVERSITY	93.853	JHU 2000743955	U01 NS062851-01A1	77,771
MEDICAL UNIVERSITY OF SOUTH CAROLINA	93.853	MUSC08-066	1 U01 NS058728-02	72,011
CHILDREN'S MEMORIAL HOSPITAL	93.853	CMH 901460	4 R37 NS031146-19	67,041
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.853	CUMC 09081041	5 R01 NS062055-03	59,751
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.853	UCSF CU11-2610	1 U01 NS058634-01	50,714
PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.853	NYPH CU08-8065	5 U10 NS059062-05	44,484
UNIVERSITY OF BRITISH COLUMBIA (CANADA)	93.853	UBC F09-04884	U01 NS038529	43,316
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.853	UCSF 6867SC	1 U01 NS077276-01	38,776
UNIVERSITY OF PITTSBURGH	93.853	UPITT 0005174	5 R01NS050256-02	38,463
BECKMAN RESEARCH INSTITUTE OF THE CITY OF HOPE CANCER CENTER	93.853	BRICHCC CU11-0393	1 R21 NS075608-01	38,333
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	93.853	RFCUNY 41589-00-02 B	1 R01 NS054864-01A	33,754
PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.853	PH CU01-2870 SC1	U10 NS05906201	32,625
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.853	UCSF 5776SC	R01 NS062820-01	31,649
UNIVERSITY OF ILLINOIS, BOARD OF TRUSTEES	93.853	UIL 2007-06602	R01 NS059745	31,329
GEORGETOWN UNIVERSITY	93.853	GU RX 4265-074-CU	U54 NS057405-04	29,517
MASSACHUSETTS GENERAL HOSPITAL	93.853	MGH CU01-2934	5 R01 NS052592-03	27,501
CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO	93.853	CHMCO CU12-0371	5 U01 NS045911-07	26,502
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.853	CUMC CU01-2901	U01 NS50324	26,059
UNIVERSITY OF IOWA	93.853	UIO CU08-4421	2 R01 NS40068-08	23,586
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	93.853	CUNCCH CU01-2895	5 U01 NS042167	19,317
UNIVERSITY OF ROCHESTER	93.853	CUR PO#414257-G	5 U01 NS050095-05	18,625
GEORGETOWN UNIVERSITY	93.853	GU RX 4265-083-CU	U54 NS057405-05	14,686
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.853	UCSF -CU11-2610 SC1	1 U01 NS058634-01	13,426
PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.853	PH CU01-2870 SC2	U10 NS05906201	11,204
REGENTS OF THE UNIVERSITY OF MINNESOTA	93.853	UMINN N000936904	U01 NS062091-01A2	11,138
MASSACHUSETTS GENERAL HOSPITAL	93.853	MGH CU09-3945	5 U01 NS049640-05	10,019
UNIVERSITY OF CINCINNATI	93.853	UCINCM CU09-2753	1 U01 NS069763-01	8,989
MONTEFIORE MEDICAL CENTER	93.853	MMC CU08-4400	5 R01 NS043209-10	8,943
UNIVERSITY OF MELBOURNE	93.853	UNVMEL CU11-1212	1 U01 NS077367-01	8,638
UNIVERSITY OF MEDICINE AND DENTISTRY OF NEW JERSEY	93.853	UMDNJ-99-705	3 R01 NS038384-05S1	7,690

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PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.853	NYPH CU08-8065	5 U10 NS059062	7,183
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	93.853	MIT 5710002928	5 P01 NS055923	7,108
EMORY UNIVERSITY	93.853	EMORYU S359538	7 R01 NS038455	5,559
PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.853	PH CU01-2870 SC3	U10 NS05906201	4,900
UNIVERSITY OF ROCHESTER	93.853	ROCHSTR PO#415045-G	5 R01 NS045686-05	2,635
MONTEFIORE MEDICAL CENTER	93.853	MMC CU08-4400	5 R01 NS043209-08	1,035
NORTHWESTERN UNIVERSITY	93.853	NWU 60027791 CU	P50 NS047085	478
UNIVERSITY OF TEXAS HEALTH SCIENCE CNTR AT SAN ANTONIO	93.853	UTHSCSA 126155-24	2 U01 NS0385239-09A1	109
UNIVERSITY OF WISCONSIN	93.853	UWIS 238K276	5 P01 NS042603	89
UNIVERSITY OF CALIFORNIA, LOS ANGELES	93.853	UCLA #1580 GFJ638-04	P50 NS044378	27
UNIVERSITY OF MIAMI	93.853	UMIAM 66674A	5 R37 NS029993-18	-7,832
				\$3,228,613

Allergy, Immunology and Transplantation Research

FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 205648	U01 AI068614	609,886
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000678534	U01 AI068614-04	376,488
UNIVERSITY OF PENNSYLVANIA	93.855	UPENN 554731	7 U19 AI083022-02	308,339
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000719043	U01 AI068614	242,827
ECOEALTH ALLIANCE	93.855	WILDLIFE LIPKIN 003	R01 AI079231	228,875
MASSACHUSETTS GENERAL HOSPITAL	93.855	MGH 218549	2 P01 AI045897-11A1	197,284
MASSACHUSETTS GENERAL HOSPITAL	93.855	MGH 218553	2 P01 AI045897-11A1	155,580
BIOPEPTIDES CORP	93.855	BIOCORP 11-0025	1 R43 AI09655-01	141,047
JOHNS HOPKINS UNIVERSITY	93.855	JH 2001003650	5 U01 AI083238-02	136,760
UNIVERSITY OF KWAZULU-NATAL	93.855	UKZN CU08-4879	5 U01 AI069469-05	118,988
MAGEE-WOMENS RESEARCH INSTITUTE	93.855	MWRI 4392	5 U01 AI068633-06	84,802
MAGEE-WOMENS RESEARCH INSTITUTE	93.855	MWRI 4341	5 U01 AI068633-06	84,148
THE UNIVERSITY OF ARIZONA	93.855	UA Y503198	R01 AI079030	66,870
UNIVERSITY OF PENNSYLVANIA	93.855	UPENN 554731	5 U19 AI083022-03	50,827
INDIANA UNIVERSITY	93.855	INDU IN-4685211-CU	2 U01 AI069911-06	48,056
FAMILY HEALTH INTERNATIONAL	93.855	FHI 860	5 U01 AI46749-08	45,628
NEW YORK UNIVERSITY MEDICAL CENTER	93.855	NYUMC 09-0726	5 R01 AI055037-07	39,998
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000674466	5 U01 AI068614-05	38,889
UNIVERSITY OF PENNSYLVANIA	93.855	UPENN 5550995	U01 AI063589-05	32,812
UNIVERSITY OF PENNSYLVANIA	93.855	UOENN 554731	7 U19 AI083022-02	28,247
WILDLIFE TRUST (AKA ECOEALTH ALLIANCE)	93.855	WILDLIFE CU09-0740	R01 AI079231	27,655
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000678534	UM1 AI068614	27,288
UNIVERSITY OF TEXAS HEALTH SCIENCE CNTR AT SAN ANTONIO	93.855	UTHSCSA 131739-13047	5 K23 AI081538	25,000
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.855	UCSF 3855SC	U01 AI052748	16,646

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MASSACHUSETTS GENERAL HOSPITAL	93.855	MGH 215106	5 R01 AI067653-05	15,351
IMMUNE TOLERANCE NETWORK	93.855	ITN10220-00SC	N01-AI-15416	10,033
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000678532	5 UM1 AI068614	6,720
JOHNS HOPKINS UNIVERSITY	93.855	JH 2001003650	1 U01 AI083238-01A1	5,529
DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER, WA	93.855	DVAMC CU00-0110	U01 AI068641	2,074
STARPHARMA PTY LTD	93.855	SPL CU09-4775	U19 AI060598	1,823
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000674466	UM1 AI068614	1,599
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000719043	UM1 AI068614	338
UNIVERSITY OF PENNSYLVANIA	93.855	UPENN 554731	7 U19 AI083022-02	73
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000694520	U01 AI068614	57
UNIVERSITY OF BERNE	93.855	UNVBRN CU00-0085	1 U01 AI0699-24-02	-11
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.855	UCSF 3855SC	U01 AI052748	-163
FRED HUTCHINSON CANCER RESEARCH CENTER	93.855	FHCRC 0000654720	5 U01 AI1068614-04	-1,628
Allergy, Immunology and Transplantation Research				
UNIVERSITY OF PITTSBURGH	93.855	UPITT 0013076	5 U01 AI077867-04	66,719
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.855	BWH CU12-0301	5 U01 AI063623-07	2,898
				\$3,244,352
Microbiology and Infectious Diseases Research				
SANARIA INC	93.856	SANINC CU10-3109	5 R44 AI069631-04	166,868
SANARIA INC	93.856	SANINC CU10-3328	1 R43 AI091208-01	42,440
CHILDREN'S HOSPITAL MEDICAL CENTER, OHIO	93.856	CHMCO 104395	R01 AI073713-02	30,656
HEALTH RESEARCH INCORPORATED	93.856	SHRI 2179-05	2 U54 AI057158-05	-1
HEALTH RESEARCH INCORPORATED	93.856	SHRI 2191-05	5 U54 AI057158-05	-1
				\$239,962
Biomedical Research and Research Training				
RUTGERS UNIVERSITY	93.859	RUTGER 4136 SC3	U54 GM074958	1,203,569
RUTGERS UNIVERSITY	93.859	RUTGER 4136 SC5	U54 GM074958	233,617
RUTGERS UNIVERSITY	93.859	RUTGER 4136 SC1	U54 GM074958	217,800
NEW YORK STRUCTURAL BIOLOGY CENTER	93.859	NYSBC CU10-0056 SC1	U54 GM095315-02	209,786
RUTGERS UNIVERSITY	93.859	RUTGER 4136 SC4	U54 GM074958	200,049
NEW YORK STRUCTURAL BIOLOGY CENTER	93.859	NYSBC CU10-0056 SC5	U54 GM095315-02	174,609
UNIVERSITY OF CALIFORNIA, SAN DIEGO	93.859	UCSD CU09-4536	7 R01 GM090187-02	154,446
NEW YORK STRUCTURAL BIOLOGY CENTER	93.859	NYSBC CU10-0056 SC3	U54 GM095315-02	149,697
NEW YORK STRUCTURAL BIOLOGY CENTER	93.859	NYSBC CU10-0056 SC4	U54 GM095315-02	149,689
UNIVERSITY OF CALIFORNIA, IRVINE	93.859	UCI 2011-2634	2 R01 GM070676-05	147,287
HARVARD UNIVERSITY	93.859	HARVARD 23570-114041	5 U54 GM088558-03	144,495
UNIVERSITY OF FLORIDA	93.859	UFLRDA UF11169	1 R01 GM097502-01	143,672
UNIVERSITY OF CHICAGO	93.859	43359-5-31486-8602	U54 GM087519	132,597

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UNIVERSITY OF UTAH	93.859	WEISS 100008254-001	1 R01 GM083925-01A01	117,691
NEW YORK STRUCTURAL BIOLOGY CENTER	93.859	NYSBC CU10-0056 SC2	U54 GM095315-02	114,784
HARVARD UNIVERSITY	93.859	HARVARD 23570-114041	5 U54 GM088558-02	92,595
UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL	93.859	UNC-CH-5-30759	4 R37 GM047845-20	91,465
UNIVERSITY OF CHICAGO	93.859	UCHICA 43359-5-31486	U54 GM087519	88,083
SCRIPPS RESEARCH INSTITUTE	93.859	SCRIPPS CU08-9480	5 R01 GM085659-04	80,110
CHILDREN'S RESEARCH INSTITUTE AT CHILDREN'S NATIONAL MEDICAL CE	93.859	CNMC 0948-11-01	1 R01 GM087600-01	74,293
UNIVERSITY OF ILLINOIS, BOARD OF TRUSTEES	93.859	UILCHI 2008-00992-01	1 R01GM081030-01A1	39,907
CALIFORNIA INSTITUTE OF TECHNOLOGY	93.859	CALTECH CU08-4505	5 R01 GM079771-05	19,706
RUTGERS UNIVERSITY	93.859	RUTGER 4136	U54 GM074958	142
ARRA - DREXEL UNIVERSITY	93.859	DREXEL 232437	3 P01 GM056550-14S2	136
NEW YORK STRUCTURAL BIOLOGY CENTER	93.859	NYSBC CU10-0056 SC3	GM095315-02	-19
SCRIPPS RESEARCH INSTITUTE	93.859	SCRIPPS CU08-9480	5 R01 GM085659-03	-24
RUTGERS UNIVERSITY	93.859	RUTGER 4136	U54 GM074958	-142
UNIVERSITY OF CHICAGO	93.859	UCHICA 43359-5-31486	1 U54 GM087519	-8,552
RUTGERS UNIVERSITY	93.859	RUTGER CU09-4413 SC3	U54 GM074958	-80,307
				\$3,891,181
Nat. Inst. of Child Health & Human Dvlpt.				
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.864	USCF 4873SC	U54 HD0557642	53,451
NEW YORK BLOOD CENTER	93.864	NYBC CU11-3185	1R01HD059729-01A2	43,850
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.864	USCF 4873SC	U54 HD055764	-8,123
				\$89,178
Child Health and Human Development Extramural Research				
RESEARCH TRIANGLE INSTITUTE	93.865	RTI 9-312-0210070	1 U01 GM070698-01	-13,785
Child Health and Human Development Extramural Research				
RESEARCH TRIANGLE INSTITUTE	93.865	RTI CU10-3538	5 U01 HD063047-02	997,915
GEORGE WASHINGTON UNIVERSITY	93.865	GWU P.#21050	U10 HD040485-09	944,590
UNIVERSITY OF PITTSBURGH	93.865	UPITT CU10-0951	U01 HD042444-11	366,328
KENNEDY KRIEGER INSTITUTE	93.865	KKINS CU09-3216	5 P01 HD035897-23	246,778
KENNEDY KRIEGER INSTITUTE	93.865	KKINS CU10-2531	5 P01 HD035897-23	239,322
PRINCETON UNIVERSITY	93.865	PU 00001273	5 R01 HD036916-10	216,140
UNIVERSITY OF TEXAS, SOUTHWESTERN MEDICAL CENTER	93.865	UTSWMC 120207	3 U01 HD042652-05S2	201,274
RESEARCH TRIANGLE INSTITUTE	93.865	RTI 2-312-0208944	U01 HD45954	139,437
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.865	UAB 000388010-023	2 U01 HD040533-11	122,333
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.865	RFMH 903-1428//MPPS6	5 R37 HD032774-11	104,986
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.865	CUMC 12010021-02	5 R01 HD051912-04	90,897
UNIVERSITY OF CALIFORNIA, DAVIS	93.865	UCD 09-000148-06	R01 HD062417-01	66,121
WAYNE STATE UNIVERSITY	93.865	WSU11045	R01 HD062477	54,936

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TULANE UNIVERSITY	93.865	TUL-HSC-3222-10/11	5 U01 HD052104-07	33,719
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.865	UAB 000388010-023	5 U01 HD040533-12	32,899
MOUNT SINAI SCHOOL OF MEDICINE	93.865	MSSM 0258-3251-4609 MAN	NICHD/HHSN27500503411C	31,016
DUKE UNIVERSITY	93.865	DUKEU CU 09-4467	R01 HD057956-01	25,732
RESEARCH TRIANGLE INSTITUTE	93.865	RTI 2-312-0212512	5 U10 HD063036-02	25,250
INDIANA UNIVERSITY	93.865	INDU IN-4685519-CU	5 U01 AI069911-05	23,387
UNIVERSITY OF UTAH	93.865	UUTAH 2408131-1	U01 HD050080	22,591
KENNEDY KRIEGER INSTITUTE	93.865	KKINS 231.234E	3 P01 HD035897-22A2	22,565
MOUNT SINAI SCHOOL OF MEDICINE	93.865	MSSM 0254-6000-4609 NAS	NICHD/HHSN27500503411C	22,474
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.865	UCSF CU10-0464	K12 HD000849	21,371
NEW YORK UNIVERSITY	93.865	NYU 09-1253	5 R21 HD060524-02	20,031
FHI DEVELOPMENT 360 LLC	93.865	FHID 4350-02-S-01	6 R01 HD061630-02	14,592
OHIO STATE UNIVERSITY	93.865	OSU 60020655	1 R01 HD060586-01A1	13,191
RESEARCH TRIANGLE INSTITUTE	93.865	RTI 2-312-0212512	U10 HD063036	11,359
SWEDISH MEDICAL CENTER	93.865	SWEDMC CU11-2536	5 R01 HD059827-02	11,160
KENNEDY KRIEGER INSTITUTE	93.865	KKINS CU10-2531 SC1	5 P01 HD035897-23	9,698
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.865	CUMC CU10-1442	5 R01 HD051912-02	8,816
TULANE UNIVERSITY	93.865	TUL-HSC-3222-10/11	U01 HD052104-06	4,450
MOUNT SINAI SCHOOL OF MEDICINE	93.865	MSSM 0258-3251-4609	NICHD/HHSN27500503411C	3,831
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.865	CUMC 12010021-02	5 R01 HD051912-03	3,527
TULANE UNIVERSITY	93.865	TULANE CU08-4476	5 U01 HD052104-03	1,554
ACADEMY FOR EDUCATIONAL DEVELOPMENT	93.865	AED 4350-01-S-01	1 R01 HD061630-01A1	161
KENNEDY KRIEGER INSTITUTE	93.865	KKINS CU10-2531	3P01HD035897-22A2	3
KENNEDY KRIEGER INSTITUTE	93.865	KKINS CU10-2531	3P01HD035897-22A2	-12
UNIVERSITY OF ALABAMA AT BIRMINGHAM	93.865	UAB 000249533-065	5 U01 HD040533-10	-29
KENNEDY KRIEGER INSTITUTE	93.865	KKINS CU09-3216	3 P01 HD035897-22A2	-964
INDIANA UNIVERSITY	93.865	INDU IUUI-4687916-C	5 U01 AI069911-04	-1,165
CHILDREN'S HOSPITAL OF PITTSBURGH	93.865	CHPITT 0015374	5 U01 HD042444	-15,628
				\$4,122,851
Aging Research				
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	93.866	MIT 5710002928 SC1	5 P01 NS055923	313,952
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	93.866	MIT 5710002928 SC2	5 P01 NS055923	54,271
Aging Research				
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.866	RFMH #25237	R01 AG040093-01	149,043
NATIONAL BUREAU OF ECONOMIC RESEARCH	93.866	NABER 33-4124	R01 AG032758	118,642
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.866	SRFMH CU08-7756	5 R01 AG016381-08	113,615
CYBERLOGIC, INC.	93.866	CYBER CU10-3342	9 R44 AG036879-04	98,473

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
UNIVERSITY OF KANSAS CENTER FOR RESEARCH, INC	93.866	KUCR FY2012-005	7 P01 AG017490-11	78,177
UNIVERSITY OF WISCONSIN	93.866	UWS X281816	5 R01 AG029624-03	70,911
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.866	CUMC CU12-1602	3 P30 AG022845-08S1	68,003
UNIVERSITY OF CALIFORNIA, SAN DIEGO	93.866	UCSD CU08-3926	U01 AG010483-21	66,240
UNIVERSITY OF KANSAS CENTER FOR RESEARCH, INC	93.866	KUCR FY2012-004	7 P01 AG017490-11	45,575
WASHINGTON UNIVERSITY, ST. LOUIS	93.866	WASHU WU-10-110	5 U01 AG032438-02	38,237
UNIVERSITY OF WASHINGTON	93.866	UWASH 721760	5 U01 AG016976-13	32,389
UNIVERSITY OF CALIFORNIA, SAN DIEGO	93.866	UCSD ADNI-02401	U01 AG024904	23,166
BOSTON UNIVERSITY	93.866	BU 9500234634	5 P01 AG032984-03	20,002
UNIVERSITY OF PENNSYLVANIA	93.866	UPENN 556636	5 U01 AG032984-03	15,606
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.866	CUMC 10122150-03	5 P30 AG022845-07	14,150
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.866	CUMC 11122185-01	5 P30 AG022845-08	13,603
MOUNT SINAI SCHOOL OF MEDICINE	93.866	MSSM CU11-2552	5 P30 AG028741-02	6,000
UNIVERSITY OF ILLINOIS, BOARD OF TRUSTEES	93.866	UIACHI CU08-9499	5 U01 AG031294-03	3,900
UNIVERSITY OF CALIFORNIA, SAN DIEGO	93.866	CUCSD ADC 031 - IGIV IGV	5 U01 AG10483	3,730
UNIVERSITY OF MICHIGAN	93.866	UMICHG 3000818901	1 R01 AG029550-02	2,631
UNIVERSITY OF CALIFORNIA, SAN DIEGO	93.866	UCSD ADNI-02401	U01 AG024904	2,493
UNIVERSITY OF CALIFORNIA, SAN FRANCISCO	93.866	UCSF 4972SC	1 R01 AG027986-02	1,917
WEILL (JOAN & SANFORD I.) MEDICAL COLLEGE OF CORNELL UNIVERSITY	93.866	CUMC 11122185-01	5 P30 AG022845-08	1,317
UNIVERSITY OF PENNSYLVANIA	93.866	UPENN 554369	5 U01 AG032984-04	852
JOHNS HOPKINS UNIVERSITY	93.866	JH 2000499372	5 P01 AG027735-05	55
UNIVERSITY OF WASHINGTON	93.866	UWASH 696998	5 U01 AG016976-12	51
UNIVERSITY OF CALIFORNIA, SAN DIEGO	93.866	USSD CU08-3926	5 U01 AG10483	-4,077
YALE UNIVERSITY	93.866	YU NO. A06505	1 P01 AG028054-01	-117,302
				\$1,235,622
Vision Research				
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 HN2	5 PN2 EY016588-08	328,384
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 KM2	5 PN2 EY016588-08	319,459
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 WD2	5 PN2 EY016588-08	299,662
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737	5 PN2 EY016588-08	289,072
UNIVERSITY OF UTAH	93.867	UU CU10-0656	7 R24 EY017404-04	164,530
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 KM1	2 PN2 EY016586-07	127,764
EMMES CORPORATION	93.867	EMMES CU08-7911 SC1	HHS-N-260-2007-00001 C	110,813
UNIVERSITY OF ROCHESTER	93.867	ROCHSTR 414588-G	2 R01 EY004367-24	109,907
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 WD1	2 PN2 EY016586-07	89,297
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 WG2	5 PN2 EY016588-08	68,665
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 WG1	2 PN2 EY016586-07	42,145

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737	2 PN2 EY016586-07	36,530
NEW YORK UNIVERSITY MEDICAL CENTER	93.867	NYUMC 10-01737 HN1	2 PN2 EY016586-07	30,346
UNIVERSITY OF UTAH	93.867	UUTAH 10015453-04	7 R24 EY017404-04	26,754
EMMES CORPORATION	93.867	EMMES CU08-7911	HHS-N-260-2007-00001 C	22,641
Vision Research				
THE SALK INSTITUTE FOR BIOLOGICAL STUDIES	93.867	SALK PO #611377	1 R01 EY018003	103,216
				\$2,169,185
Nat. Inst. of General Medical Sciences				
RUTGERS UNIVERSITY	93.869	RUTGER 4136 SC1	U54 GM074958	21,967
				\$21,967
Medical Library Assistance				
INSTITUTE FOR FAMILY HEALTH	93.879	IFFAMH CU12-0518	1 G98 LM011056-01	9,582
				\$9,582
National Institutes of Health Acquired Immunodeficiency Syndrome Research Loan Repayment Program				
FAMILY HEALTH INTERNATIONAL	93.936	FHI 822/0080.0067	U01 AI068619	101,933
FAMILY HEALTH INTERNATIONAL	93.936	FHI 0080-0025	U01 AI068619	37,842
FAMILY HEALTH INTERNATIONAL	93.936	FHI 882/0080.0039	U01 AI068619	19,188
FAMILY HEALTH INTERNATIONAL	93.936	FHI 0080.0163/961	UM1 AI068619	10,860
				\$169,823
International Research and Research Training				
UKZN INNOVATION COMPANY (PTY) LTD	93.989	UKZNIC MEPI CU02	1 R24 TW0088663-02	99,541
VANDERBILT UNIVERSITY MEDICAL CENTER	93.989	VU 35587	5 R24 TW007988-04	32,983
UKZN INNOVATION COMPANY (PTY) LTD	93.989	UKZNIC MEPI CU 01	1 R24 TW0088663-01	25,980
VANDERBILT UNIVERSITY MEDICAL CENTER	93.989	VANDER VUMC 38305	5 R24 TW007988-05	22,040
VANDERBILT UNIVERSITY MEDICAL CENTER	93.989	VU VUMC 35587	5 R24 TW007988-05	21,303
UNIVERSITY OF CHICAGO	93.989	UCHICA 32299	5 R01 D43 TW06221	839
				\$202,686
Total Pass-through Programs:				\$49,623,127
Total: National Institute of Health				\$414,172,515

National Science Foundation
Direct Awards

Engineering Grants

ULTRAFAST NONLINEARITIES IN CHIP-SCALE PHOTONIC CRYSTALS	47.041	ECCS-1102257		370,512
COLLABORATIVE RESEARCH: CDI-TYPE II: CYBER-ENABLED DESIGN OF FUNCTIONAL NANOMATERIALS	47.041	CBET-1028299		271,898
GOALI: CHIP-SCALE SINGLE-MOLECULE OPTOFLUIDIC SENSING AND MANIPULATION	47.041	ECCS-1102163		242,448
COLLABORATIVE RESEARCH: ULTRASONIC WIRELESS DATA FOR EXTREMELY LOW-POWER WAKE-UP RECEIVERS	47.041	ECCS-0925813		235,643
GENERAL PURPOSE DESIGN SYSTEM FOR COMPOSITE MATERIALS AND STRUCTURES	47.041	CMMI-1127810		209,858
CAREER: MOLECULAR MECHANISMS AND METABOLIC MODELING OF N2O AND NO EMISSION FLUXES FROM BIOLOGICAL NITROGEN REMOVAL REACT	47.041	CBET-0846650		164,388
CO2 MINERAL SEQUESTRATION INTEGRATED WITH TAILORED SYNTHESIS OF CARBON-NEUTRAL FILLER MATERIALS	47.041	CBET-0933627		159,040
INTERACTIVE UBIQUITOUS VISUALIZATION OF CONSTRUCTION PROGRESS MONITORING WITH D4AR (4DIMENSIONAL AUGMENTED REALITY) MODE	47.041	CMMI-1063559		149,702

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CAREER: EFFICIENT MONTE CARLO METHODS IN ENGINEERING AND SCIENCE: FROM COARSE ANALYSIS TO REFINED ES	47.041	CMMI-0846816		148,561
INTEGRATED SELECTION OF THERMALLY RESPONSIVE APTAMERS FOR SPECIFIC PURIFICATION AND ENRICHMENT OF BIOMOLECULES	47.041	CBET-0854030		133,882
EAGER: TRANSMISSION WELDING AND SINGLE-STEP CHANNELING OF TRANSPARENT MATERIALS BY ULTRAFAST LASER	47.041	CMMI-0936171		122,648
CAREER: ENVIRONMENTALLY SIGNIFICANT REFORMING REACTIONS STUDIED USING A NOVEL CATALYTIC SHOCK TUBE	47.041	CBET-0846330		112,636
CDI-TYPE II: COMPUTING WITH BIOMOLECULES: FROM NETWORK MOTIFS TO COMPLEX AND ADAPTIVE SYSTEMS	47.041	ECES-1026591		106,467
QUANTITATIVELY MODELING THE SYNTHESIS OF NANODOTS	47.041	CBET-0931717		102,650
BRIGE: MECHANICS OF DNA MOTORS FOR MOVING POLARITY	47.041	CMMI-1125760		98,229
COLLABORATIVE RESEARCH: JOINT UFL/CU I/UCR CENTER FOR PARTICULATE AND SURFACTANT SYSTEMS	47.041	IIP-0749461	SPT	98,148
CAREER: ELECTRONIC AND MECHANICAL PROPERTIES OF SINGLE METAL-MOLECULE-METAL JUNCTIONS	47.041	CHE 07-44185		97,995
NEAR-FIELD THERMAL RADIATIVE TRANSFER BETWEEN SPHERICAL OBJECTS	47.041	CBET-0853723		94,143
CAREER: ENERGY IN SUSTAINABLE INFRASTRUCTURE-MULTI-SCALE/PHYSICAL APPROACH TO A NOVEL HYBRID SOLAR ROOFING PANEL	47.041	CMMI 0954717		93,278
BRIGE: CHARACTERIZING THE TIME-DEPENDENT AND ANISOTROPIC MECHANICAL PROPERTIES OF THE UTERINE CERVIX WITH MICRO AND NANO	47.041	CMMI-1125670		92,113
BIOMECHANICAL CHARACTERIZATION OF SUBSTRATE-FREE CONSTRUCTS	47.041	CMMI-1130376		90,404
LASER MODIFICATION OF SURFACE CRYSTALLINITY OF BIODEGRADABLE POLYMERS	47.041	CMMI-1030536		77,738
CAREER: INTERVENTIONAL MICROSCOPY FOR IN-VIVO INVESTIGATIONS OF BRAIN FUNCTION	47.041	CBET-0954796		74,792
DATA FUSION OF HETEROGENEOUS SENSOR MEASUREMENTS FOR ENHANCED STRUCTURAL MODELING	47.041	CMMI-1100321		74,154
ACCELERATED DEGRADATION OF ACTIVE NANOSYSTEMS BY BIOMOLECULAR MOTORS	47.041	CMMI-0926790		73,683
CAREER: ULTRASOUND-INDUCED DRUG DELIVERY THROUGH THE BLOOD-BRAIN BARRIER	47.041	CBET-06-44713		71,321
SENSING IN LIVING CELLS: EXPRESSABLE RNA-BASE FRET PROBES	47.041	NSF CBET-033288		71,047
AF: SMALL: EFFECTIVE RESOURCE ALLOCATION MECHANISMS: FAIRNESS AND INCENTIVES	47.041	CMMI-0916453		69,019
CAREER: THE SCIENCE UNDERPINNING MECHANICAL SELF-ASSEMBLY	47.041	CMMI-06-43726		68,954
BRIGE: PREDICTING ALLOSTERIC REGULATION PATHWAYS FROM LOCAL ELASTIC MODULI CALCULATIONS	47.041	CMMI-1125698		64,836
GOALI: STRATEGIES FOR DESIGN, STARTUP AND CONTROL OF FIELD-SCALE ANAMMOX REACTORS	47.041	CBET-1066860		64,562
MULTI-SERVER QUEUES WITH TIME-VARYING ARRIVAL RATES	47.041	CMMI 1066372		58,985
CDI-TYPE I: COLLABORATIVE RESEARCH: SUPERVISED LEARNING IN MOLECULAR CLASSIFIERS	47.041	CBET-1026592		58,944
EFFICIENT MONTE CARLO METHODS FOR GAUSSIAN RANDOM FIELDS	47.041	CMMI-1069064		55,130
GOALI: DISSIMILAR METAL JOINING FOR MICRO-SCALE MEDICAL DEVICES	47.041	CMMI-1130564		54,958
EFFICIENT MONTE CARLO METHODS FOR GAUSSIAN RANDOM FIELDS	47.041	CMMI-1069064	BLA	51,532
MOLECULAR ELECTRONIC DEVICES WITH CARBON-BASED ELECTRODES ON ACTIVE SUBSTRATES	47.041	ECES-0707748	SC2	50,925
UNDERSTANDING CHEMICAL COMPLEXITY AND DIVERSITY THROUGH COLLABORATION	47.041	CHE-07-17518		49,378
CAREER: DESIGN AND ANALYSIS OF DIFFERENTIATED SERVICES	47.041	CMMI-0447652		49,161
MONOATOMICALLY THIN FILMS: NONLINEAR MECHANICAL RESPONSE AND MECHANICAL-ELECTRICAL COUPLING	47.041	CMMI-0927891	MAR	47,592
EAGER: MATHEMATICAL MODELS FOR LARGE-SCALE SERVICE SYSTEMS	47.041	CMMI-0948190		38,828
NANOTECHNOLOGY INFRASTRUCTURE WORKSHOP	47.041	ECES-1233158		38,581
EVALUATION OF BIOSURFACTANTS PRODUCED BY ANAEROBES AND THEIR PERFORMANCE IN CLEANSING AND ENVIRONMENTAL REMEDIATION	47.041	IIP-0942962		37,618
COLLABORATIVE RESEARCH: EXPERIMENTAL AND COMPUTATIONAL FOUNDATIONS FOR NONLINEAR PATTERN FORMATION IN THE DEPOSITION OF	47.041	CMMI-1129917		37,358

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RANKING LARGE INFORMATION SETS	47.041	CMMI-1131053		35,556
VISUALIZING SPIN TORQUE IN NANOSCALE MAGNETIC DEVICES USING ULTRAFAST X-RAY MICROSCOPY	47.041	ECCS-0925829		32,313
RANKING LARGE INFORMATION SETS	47.041	CMMI-1131053	SCO	28,793
INTERCULTURAL KNOWLEDGE SYSTEM DYNAMICS IN COMPLEX SERVICES OUTSOURCING	47.041	SES-07-29253		28,558
RAPID ATTACHMENT OF CRUDE OIL AND WASHABILITY OF SAND BEACHES AND MARSH LANDS: EFFECTS OF BERMS AND DISPERSANTS	47.041	CBET-1052697		28,449
MONOATOMICALLY THIN FILMS: NONLINEAR MECHANICAL RESPONSE AND MECHANICAL-ELECTRICAL COUPLING	47.041	CMMI-0927891	HON	28,431
NANOTECHNOLOGY INFRASTRUCTURE WORKSHOP	47.041	ECCS-1233158	PST	28,252
SOFT 3D MEMS: ADVANCED BIOMATERIALS DEVICES	47.041	ECCS-0747747		27,282
CAREER: MOLECULAR MECHANISMS AND METABOLIC MODELING OF N2O AND NO EMISSION FLUXES FROM BIOLOGICAL NITROGEN REMOVAL REACT	47.041	CBET-0846650	GRA PAR	25,852
P-ADIC AUTOMORPHIC REPRESENTATIONS P-ADIC L-FUNCTIONS AND BLOCH-KATO CONJECTURES	47.041	DMS-0701279		24,459
VISUALIZING SPIN TORQUE IN NANOSCALE MAGNETIC DEVICES USING ULTRAFAST X-RAY MICROSCOPY	47.041	ECCS-0925829	OFF	24,410
TRAVEL SUPPORT FOR 2ND ANNUAL AMA-IEEE EMBS CONFERENCE, OCTOBER 16-18, 2011, BOSTON, MA	47.041	CBET-1145239		23,920
AND APPLICATIONS	47.041	ECCS-07-47787		22,696
NEW METHODOLOGIES FOR DYNAMIC OPTIMIZATION	47.041	CMMI-1201116		22,536
INTEGRATED CONFLICT, CLAIM, AND DISPUTE AVOIDANCE, MITIGATION AND RESOLUTION METHODOLOGY FOR LARGE-SCALE DESIGN AND CONS	47.041	CMMI-1047534		22,210
A RESEARCH AND EDUCATION PROGRAM FOR THE MULTIPHASE ANALYSIS OF THIRD-BODY CONTAMINANTS IN CYCLICAL ROLLING-SLIDING CONT	47.041	EEC-0927304		21,791
COLLABORATIVE RESEARCH: ITERATIVE DOWNCONVERSION FOR BROADBAND SIGNAL DIGITIZATION	47.041	ECCS-1002064		20,617
NUE: TRANSFORMING NANOSCALE SCIENCE AND ENGINEERING UNDERGRADUATE EDUCATION	47.041	EEC-1138237		19,588
DYNAMIC SCHEDULING AND RESOURCE CONTROL IN STOCHASTIC PROCESSING NETWORKS: BEYOND PRIORITY RULES	47.041	CMMI-0969328		15,741
SOFT 3D MEMS -- ADVANCED BIOMATERIALS DEVICES	47.041	ECCS-0747747	EQU	14,832
NIRT: MOLECULAR ELECTRONIC DEVICES WITH CARBON-BASED ELECTRODES ON ACTIVE SUBSTRATES	47.041	ECCS-07-07748	SC4	13,625
CAREER: NONLINEAR AND NONCLASSICAL OPTICS IN ULTRAHIGH-Q/V MESOSCOPIC CAVITIES: SCIENCE, EDUCATION A	47.041	ECCS-07-47787	PAR	13,332
COLLABORATIVE RESEARCH: BLAST RESISTANCE OF POLYUREA-STEEL COMPOSITE STRUCTURES FOR INFRASTRUCTURE PROTECTION	47.041	CMMI-0856161		11,976
FORMING, ADVANCING, AND SUSTAINING TEACHER-ENGINEER RELATIONSHIPS (FASTER)	47.041	EEC-1201060		9,658
ON-CHIP MAGNETICS FOR POWER MANAGEMENT AND DELIVERY	47.041	ECCS-0903466	REU	9,125
MONOATOMICALLY THIN FILMS: NONLINEAR MECHANICAL RESPONSE AND MECHANICAL-ELECTRICAL COUPLING	47.041	CMMI-0927891		8,707
SELF-ASSEMBLY OF NANOPARTICLES FROM EVAPORATING DROPS AND LIQUID FILMS: SCIENCE, ENGINEERING AND APPLICATIONS	47.041	CBET-1034349	EAR	6,263
CAREER: ADVANCED DEVICES AND TESTING USING ORGANIC FIELD EFFECT TRANSISTORS	47.041	ECCS-0644656		5,502
OPTIMIZATION, DESIGN AND CONTROL OF ROBUST POWER GRIDS	47.041	DMI-05-21741		5,276
EXPERIMENTAL AND COMPUTATIONAL INVESTIGATION OF THE ROLE OF PROTEIN CONFORMATIONAL DYNAMICS IN ENZYMATIC ACTIVITY	47.041	NSF CU10-3149		5,224
ICROPS: A NEW APPROACH TO SILICON/COMPOUND SEMICONDUCTOR INTEGRATION	47.041	IIP-1217019		5,158
SOFT 3D MEMS: ADVANCED BIOMATERIALS DEVICES	47.041	ECCS-0747747	REU	5,000
CAREER: COMPUTATIONAL NANOENGINEERING OF FEW-LAYER SYSTEM VIA STRAIN	47.041	CMMI-1150795		4,379
BRIGE: ONLINE MEASUREMENT OF SUBMICRON AEROSOL COMPOSITION USING AC-CIMS	47.041	EEC-0823847		4,132
DATA FUSION OF HETEROGENEOUS SENSOR MEASUREMENTS FOR ENHANCED STRUCTURAL MODELING	47.041	CMMI-1100321	SCO	3,000
FORMING, ADVANCING, AND SUSTAINING TEACHER-ENGINEER RELATIONSHIPS (FASTER)	47.041	EEC-1201060	SC1	1,844

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SOFT 3D MEMS: ADVANCED BIOMATERIALS DEVICES	47.041	ECCS-0747747	RET	990
MOLECULAR ELECTRONICS DEVICES WITH CARBON-BASED ELECTRODES ON ACTIVE SUBSTRATES	47.041	ECCS-0707748	SC3	984
CAREER: SOFT 3D MEMS -- ADVANCED BIOMATERIALS DEVICES	47.041	ECCS-0747747		692
EAGER:FEASIBILITY STUDY OF MICRO-LEVEL SENSING AND PROCESS CONTROL OF NITRIFICATION	47.041	CEBT-1025685	CHA	628
EAGER: FEASIBILITY STUDY OF MICRO-LEVEL SENSING AND PROCESS CONTROL OF NITRIFICATION	47.041	CBET-1025685		322
SELF-ASSEMBLY OF NANOPARTICLES FROM EVAPORATING DROPS AND LIQUID FILMSL SCIENCEM ENGINEERING AND APP	47.041	CBET-1034349	ELE	-167
CAREER: MULTIREOLUTION FOUNDATIONS FOR PHYSICS-BASED COMPUTER ANIMATION AND INTERACTIVE ENGINEERING	47.041	CCF-06-43268	REU	-234
COLLABORATIVE RESEARCH: ULTRASONIC WIRELESS DATA FOR EXTREMELY LOW-POWER WAKE-UP RECEIVERS	47.041	ECCS-0925813	REU	-575
MULTI-TERABIT TRANSPARENT PHOTONIC NETWORKS THROUGH INTEGRATED SILICON PHOTONICS	47.041	ECCS-07-25707 BER		-1,978
CAREER: ADVANCED DEVICES AND TESTING USING ORGANIC FIELD EFFECT TRANSISTORS	47.041	ECCS-06-44656	SPL	-23,223
				\$5,119,665

Mathematical and Physical Sciences

U.S. ATLAS OPERATIONS: EMPOWERING U.S. UNIVERSITIES FOR DISCOVERIES AT THE ENERGY FRONTIER	47.049	PHY-06-12811	PRI	7,455,760
US ATLAS OPERATIONS PROGRAM: EMPOWERING US UNIVERSITIES FOR DISCOVERIES AT THE ENERGY FRONTIER	47.049	PHY-1119200		1,122,960
U.S. ATLAS OPERATIONS: EMPOWERING U.S. UNIVERSITIES FOR DISCOVERIES AT THE ENERGY FRONTIER: UPGRADE	47.049	PHY-06-12811	CN2	873,655
A RESEARCH-INTENSIVE PREPARATION FOR THE TRANSITION TO GRADUATE SCHOOL: COLUMBIA UNIVERSITY'S BRIDGE TO THE PH.D. IN THE	47.049	AST-1015491		493,512
EMSW21-RTG: NEW TECHNIQUES IN LOW-DIMENSIONAL TOPOLOGY AND GEOMETRY	47.049	DMS-0739392		343,036
COLLABORATIVE PROPOSAL: THE XENON DARK MATTER PROJECT: CONSTRUCTION AND OPERATION OF A 100 KG DETECTOR	47.049	PHY-0705337	CON	280,543
APPLICATIONS OF PHOTOCHEMISTRY AND SPIN CHEMISTRY TO CHALLENGES IN MAGNETIC RESONANCE, CHEMISTRY BIOLOGY AND MATERIAL SCI	47.049	CHE-1111392		280,366
SUM FREQUENCY STUDIES OF LIQUID INTERFACES	47.049	CHE-1057483		254,784
CELLULASE DISCOVERY VIA CHEMICAL OMPLEMENTATION	47.049	CHE-09-57569		247,767
MRI INSTRUMENT DEVELOPMENT FOR LIQUID XENON DARK MATTER SEARCHES: AN ATOM TRAP TRACE ANALYSIS SYSTEM TO MEASURE ULTRA-LO	47.049	PHY-0923274		246,577
MOLECULAR DYNAMICS AND MONTE CARLO SIMULATIONS OF CLASSICAL AND QUANTUM SYSTEMS	47.049	CHE-0910943		230,615
MATERIALS WORLD NETWORK: III-NITRIDE NANOMATERIALS GROWTH AND CONTROL FOR SOLID-STATE CAVITY QUANTUM ELECTRODYNAMICS	47.049	DMR-1108176		222,195
REACTIONS OF FUNCTIONAL POLYMERS AT ORGANIC INTERFACES	47.049	DMR-0704054		220,013
BARNARD SUBCONTRACT NSERC: COLUMBIA CENTER FOR ELECTRONIC ...	47.049	CHE-06-41523	22	219,789
PARTIAL DIFFERENTIAL EQUATIONS WITH RANDOM COEFFICIENTS AND INVERSE PROBLEMS	47.049	DMS-0804696		199,877
BIOMIMETIC AND POLYMERIC CATALYSIS IN WATER	47.049	CHE-0948318		174,338
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594		172,406
NEUTRINOS FERMILAB/DOUBLECHOOZ @ FRANCE--OFF CAMPUS	47.049	PHY-0758118	#2	164,783
CCNY SUBCONTRACT NSERC: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT	47.049	CHE-06-41523	20	160,347
COMPUTATIONAL METHODS IN RISK MANAGEMENT AND FINANCIAL ENGINEERING	47.049	DMS-0914539		151,641
GAS ACCRETION AND THE DISK-HALO INTERFACE	47.049	AST-1008134		148,695
COLLABORATIVE RESEARCH: EMSW21-RTG: JOINT COLUMBIA-CUNY-NYU RESEARCH TRAINING GROUP IN NUMBER THEORY	47.049	DMS-0739400		147,663
PROBLEM IN COMPLEX ANALYSIS, COMPLEX GEOMETRY, AND MATHEMATICAL PHYSICS	47.049	DMS 0757372		140,341
LINK HOMOMLOGY AND CATEGORIFICATION OF QUANTUM GROUPS	47.049	DMS-1005750		139,141
TOWARD A COMPLETE UNDERSTANDING OF YOUNG NEUTRON STARS	47.049	AST-0908386		133,488

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COLLABORATIVE RES: A GENERAL FRAMEWORK FOR HIGH THROUGHPUT BIOLOGICAL LEARNING: THEORY DEVELOPMENT AND APPLICATIONS	47.049	DMS-07-14669		129,910
TASK 1: LIQUID ARGON CALORIMETER DISCOVERIES AT THE ENERGY FRONTIER	47.049	PHY-06-12811 CN1		127,889
TAILORING POLYMER NANOCOMPOSITE PROPERTIES BY NANOPARTICLE ASSEMBLY	47.049	DMR-1106180		123,765
MAIN GROUP ELEMENT COMPLEXES SUPPORTED BY MULTIDENTATE LIGANDS: ALKYL, HYDRIDE AND SUBVALENT COMPOUNDS AND THEIR APPLICA	47.049	CHE-1058987		123,378
COLLABORATIVE RESEARCH: THE ORIGIN OF RESISTANCE IN NANOTUBES: SEMI-CLASSICAL TO QUANTUM TRANSPORT IN ONE-DIMENSION	47.049	DMR-1006533		120,852
TRACTABILITY OF HIGH DIMENSIONAL PROBLEMS FOR QUANTUM AND CLASSICAL COMPUTERS	47.049	DMS-0914345		120,556
STOCHASTIC PROCESS RESEARCH INSPIRED BY PROBLEMS FROM MATHEMATICAL FINANCE	47.049	DMS-1138756		117,876
DYNAMICS OF GAS PHASE ORGANIC REACTIONS	47.049	CHE-0910876		117,174
EQUIPMENT NSEC: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT ...	47.049	CHE-06-41523 24		116,706
CAREER: MULTIMESSENGER ASTRONOMY THROUGH GRAVITATIONAL-WAVES: A STUDENT CENTERED APPROACH	47.049	PHY-0847182		116,042
TOPICS IN ARITHMETIC ALGEBRAIC GEOMETRY	47.049	DMS-0970100		114,443
DWARF GALAXIES, ABUNDANCE DISTRIBUTIONS AND THE PHYSICS OF GALAXY FORMATION	47.049	AST-08-06558		113,839
TRACING GASEOUS GALAXY EVOLUTION AND GALAXIES AS A TEACHING TOOL FOR MIDDLE SCHOOL AND COLLEGE STUDENTS	47.049	AST-0904059		113,208
CAREER: VISUALIZING THE FORMATION OF THE CHARGE DENSITY WAVE PHASE AT THE ATOMIC SCALE	47.049	DMR-1056527		113,016
MUSR STUDIES OF EXOTIC SPIN AND CHARGE BEHAVIORS IN NOVEL SUPERCONDUCTING, METALS, AND SEMICONDUCTORS	47.049	DMR-1105961 OFF		109,764
US ATLAS-LIQUID ARGON	47.049	PHY-119200 LA LA		108,633
NANOSCALE SENSING OF THE CHEMICAL AND PHYSICAL PROPERTIES OF TWO-DIMENSIONAL MATERIALS AND INTERFACES USING SCANNING PRO	47.049	CHE-1012058		106,490
STOCHASTIC CONTROLS, GAMES AND PORTFOLIOS	47.049	DMS-0905754		100,313
EXPERIMENTAL PHYSICS RESEARCH PROGRAM AT COLUMBIA UNIVERSITY/NEVIS LABORATORIES	47.049	PHY-0758118		98,419
R&D OF LXE DETECTOR TECHNOLOGY FOR DARK MATTER EXPERIMENTS	47.049	PHY-1047794		97,885
SYNTHETIC, STRUCTURAL AND MECHANISTIC STUDIES OF MAIN GROUP ELEMENT COMPLEXES: ATOM TRANSFER REACTIO	47.049	CHE-07-49674		97,727
INTERNATIONAL COLLABORATION IN CHEMISTRY OF PHOTOCHEMISTRY & REDOX-PROPERTIES OF CHLOROPHYLL-CATABOLITES	47.049	CHE-1025508		96,523
COLLABORATIVE RESEARCH:APPLIED PROBABILITY AND TIME SERIES MODELING	47.049	DMS-1107031		96,462
TRACTABILITY OF HIGH DIMENSIONAL PROBLEMS FOR QUANTUM AND CLASSICAL COMPUTERS	47.049	DMS-0914345 OFF		95,488
MAPPING THE PAST IN THE FUTURE: SCIENCE ENABLED BY HIGH-RESOLUTION SPECTROSCOPIC STELLAR SURVEYS	47.049	AST-1107373		94,104
WAVE PROPAGATION AND RESONANCE IN COMPLEX MEDIA	47.049	DMS-07-07850		90,535
CATALYTIC REACTIONS FOR ORGANIC SYNTHESIS: NOVEL STRATEGIES FOR CYCLOPROPANJE SYNTHESIS AND OXIDATIVE CARBONYLATION	47.049	CHE-0953259		89,439
A UNIFIED STATISTICAL FRAMEWORK FOR THE IDENTIFICATION OF RARE VARIANTS IMPLICATED IN COMPLEX DISEAS	47.049	DMS-1100279		88,752
US ATLAS-UPGRADE	47.049	PHY-119200 UPG UPG		81,650
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594 NUC		81,556
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523 5		80,761
CLEAN ROOM NSEC: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT ...	47.049	CHE-06-41523 25		76,927
COLORING AND STRUCTURE	47.049	DMS-1001091		74,744
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523 6		74,646
CAREER: PARTICLE-BY-PARTICLE STUDIES OF HETEROGENEOUS DYNAMICS IN MOLECULAR AND COLLOIDAL GLASSES	47.049	CHE-07-44322		73,845
FAST FIRST-ORDER METHODS FOR LARGE-SCALE STRUCTURED AND SPARSE OPTIMIZATION	47.049	DMS-1016571		70,114

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NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	10	65,975
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURE	47.049	CHE-06-41523	13	64,589
DUSEL R&D PROPOSAL: R&D PROGRAM TO DEVELOP NOVEL CRYOGENIC TRACKING DETECTORS FOR UNDERGROUND EXPERIMENTS	47.049	PHY-06-53541	OFF	63,464
COMPUTATIONAL METHODS IN RISK MANAGEMENT AND FINANCIAL ENGINEERING	47.049	DMS-0914539	#1	63,110
ROWAN SUBCONTRACT NSEC: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT	47.049	CHE-06-41523	21	62,997
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594	HON	62,981
COLLABORATIVE RESEARCH: AUTOMORPHIC FORMS, REPRESENTATIONS AND L-FUNCTIONS	47.049	DMS-1001036		62,611
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594	ABH	62,509
MECHANISM OF GRB EMISSION	47.049	AST-1008334		60,725
NONLINEAR ELLIPTIC PARABOLIC PROBLEMS IN ANALYSIS AND GEOMETRY	47.049	DMS-1001116		59,589
SPECTROSCOPY OF ELECTRON LIQUIDS IN QUANTUM STRUCTURES	47.049	DMR-0803691		59,570
IMPROVING DATA FOR MOLECULAR CLOUD AND PLANETARY ATMOSPHERE MODELS: DISSOCIATIVE RECOMBINATION MEASUREMENTS FOR MOLECULA	47.049	AST-1107036		59,245
FROM CLUSTERS TO VOIDS: GAS AND GALAXY EVOLUTION	47.049	AST-1009476		58,122
DYNAMICS OF HUMAN BEHAVIOR: DECENTRALIZATION AND LOCAL PUBLIC GOODS: HOW DOES ALLOCATION OF DECISION-MAKING...	47.049	SES-06-24256		57,071
REGULARITY OF SOLUTIONS TO NONLINEAR ELLIPTIC PDES	47.049	DMS-0701037		57,058
ATLAS AND NEUTRINO CONSTRUCTION PROJECTS	47.049	PHY-0758118	CON	55,792
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574	PRI	54,967
CAREER: SEMICONDUCTOR CLUSTERS: CHEMISTRY AT THE INTERFACE OF SMALL MOLECULES AND QUANTUM DOTS	47.049	CHE-1151172		54,269
PERIODIC PHENOMENA IN CATAclysmic BINARIES	47.049	AST-0908363		53,732
REU/RET NSEC: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT	47.049	CHE-06-41523	27	53,104
PARTIAL DIFFERENTIAL EQUATIONS ON COMPLEX AND SYMPLECTIC MANIFOLDS	47.049	DMS-1005457		52,919
PROBLEMS IN GENERAL RELATIVITY AND GEOMETRIC FLOWS	47.049	DMS-1105483		49,121
GOALI: TAILORING THE ELECTRONIC STRUCTURE OF FEW-LAYER GRAPHENE FOR ELECTRONIC AND OPTOELECTRONIC APPLICATIONS	47.049	DMR-1106225		48,874
SILANE REAGENTS AND CATALYSTS FOR ASYMMETRIC SYNTHESIS OF CARBINAMINES	47.049	CHE-1152949		48,208
ALGEBRAIC STACKS	47.049	DMS-0970108		48,159
EQUATIONS WITH RANDOM COEFFICIENTS AND INVERS	47.049	DMS-1108608		46,509
CAREER: CREATING MATERIALS VIA ACTIVE SELF-ASSEMBLY DRIVEN BY BIOMOLECULAR MOTORS	47.049	DMR-1015486		46,417
PROG DISCRETIONARY NSEC: COLUMBIA CENTER FOR ELECTRONIC	47.049	CHE-06-41523	19	46,000
STOCHASTIC MODELING OF RISK AVERSION AND ITS IMPLICATIONS FOR DERIVATIVE PRICING AND RISK MANAGEMENT	47.049	DMS-1156888		44,037
COLLABORATIVE: VISCOELASTICITY OF NANOPARTICLE DISPERSED POLYMER MELTS: EXPERIMENT AND SIMULATION	47.049	DMR-1006514		43,476
CRITICAL PLANAR SYSTEMS AND CONFORMAL INVARIANCE	47.049	DMS-1005749		42,880
CAREER: SIMULATING COSMOLOGICAL GALAXY FORMATION WITH ADAPTIVE-MESH REFINEMENT	47.049	AST-0547823		42,365
CATEGORIFICATION AND 3-MANIFOLD INVARIANTS IN ALGEBRAIC GEOMETRY	47.049	DMS-1101439		42,226
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	4	42,130
CONFORMALLY INVARIANT STATISTICAL MECHANICS M	47.049	DMS-1106588		41,309
GEOMETRIC PROBLEMS IN GENERAL RELATIVITY	47.049	DMS-1005560		40,056

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FRG:COLLABORATIVE RESEARCH:PERIODS OF AUTOMORPHIC FORMS AND APPLICATION TO L-FUNCTION	47.049	DMS-1065839		38,989
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	16	37,981
NEB: NOVEL QUANTUM SWITCHES USING HETEROGENEOUS ATOMICALLY LAYERED NANOSTRUCTURES	47.049	DMR-1124894	HON	37,889
RICCI CURVATURE AND THE STRUCTURE OF MANIFOLDS	47.049	DMS-1005484		37,776
COLLABORATIVE PROPOSAL: XENON100 DARK MATTER SEARCH AT THE GRAN SASSO UNDERGROUND LABORATORY	47.049	PHY-1104740	CON	37,604
P-ADIC AUTOMORPHIC FORMS, P-ADIC L-FUNCTIONS AND GALOIS REPRESENTATIONS	47.049	DMS-1101229		34,929
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574	FAC	34,882
ATLAS PROJECT AT CERN-OFF CAMPUS	47.049	PHY-0758118	#1	34,507
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCT	47.049	CHE-06-41523	31	34,411
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-0641523	33	33,247
EAGER: NONLINEAR SPECTROSCOPIC METHOD TO MEASURE BIOMOLECULE AFFINITY CONSTANTS	47.049	CHE-1041980		31,966
IMPROVING DATA FOR MOLECULAR CLOUD AND PLANETARY ATMOSPHERE MODELS: DISSOCIATIVE RECOMBINATION MEASUREMENTS FOR MOLECULA	47.049	AST-1107036	OFF	31,352
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	8	31,252
OUTREACH & EDU NSEC: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT	47.049	CHE-06-41523	28	29,516
US ATLAS-NEVIS BASED RESEARCH	47.049	PHY-119200 NBR	NBR	28,918
MAPPING THE PAST IN THE FUTURE: SCIENCE ENABLED BY HIGH-RESOLUTION SPECTROSCOPIC STELLAR SURVEYS	47.049	AST-1107373	SCO	26,697
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	2	25,059
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594	KIM	24,947
ADMINISTRATIVE NSEC: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT	47.049	CHE-06-41523	23	24,238
WORKSHOP ON PROBABILITY, CONTROL AND FINANCE	47.049	DMS-1204036		24,132
NSF/NRI GRADUATE STUDENT & POST-DOC FELLOW SUPPLEMENTS	47.049	CHE-0641523	GRA	22,087
FRG:COLLABORATIVE RESEARCH:PERIODS OF AUTOMORPHIC FORMS AND APPLICATION TO L-FUNCTION	47.049	DMS-1065839	PAR	21,964
2010 NSF NANOSCALE SCIENCE AND ENGINEERING GRANTEES CONFERENCE	47.049	CHE-0641523	35	21,807
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-0641523	32	21,392
MUSR STUDIES OF EXOTIC SPIN AND CHARGE BEHAVIORS IN NOVEL SUPERCONDUCTING, METALS, AND SEMICONDUCTORS	47.049	DMR-1105961		21,238
U.S. ATLAS OPERATIONS: EMPOWERING U.S. UNIVERSITIES FOR DISCOVERIES AT THE ENERGY FRONTIER	47.049	PHY-06-12811	OFF	21,204
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	ELO	20,872
COLLABORATIVE PROPOSAL:THE XENON DARK MATTER PROJECT:CONSTRUCTION AND OPERATION OF A 100 KG DETECTOR	47.049	PHY-0705337		20,542
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594	PAR	20,219
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	3	19,778
COLLABORATIVE PROPOSAL: XENON100 DARK MATTER SEARCH AT THE GRAN SASSO UNDERGROUND LABORATORY	47.049	PHY-1104740	OFF	18,680
MATERIALS WORLD NETWORK: NONLINEAR OPTICAL METAMATERIALS - FABRICATION, CHARACTERIZATION, THEORY	47.049	DMR-0806682		17,165
ANALYSIS OF SURVIVAL DATA USING COPULA MODELS	47.049	DMS-1106608		15,323
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	JUN	14,953
D-ZERO PROJECT AT FERMILAB-OFF CAMPUS	47.049	PHY-0758118	#3	13,479
NEB: NOVEL QUANTUM SWITCHES USING HETEROGENEOUS ATOMICALLY LAYERED NANOSTRUCTURES	47.049	DMR-1124894	ABH	12,564

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GEOMETRIC ANALYSIS PROBLEMS RELATED TO SURFACES IN MATHEMATICAL PHYSICS	47.049	DMS-0904281		12,285
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594	VEN	12,274
NEB: NOVEL QUANTUM SWITCHES USING HETEROGENEOUS ATOMICALLY LAYERED NANOSTRUCTURES	47.049	DMR-1124894	HEI	11,074
MATERIALS WORLD NETWORK: NONLINEAR OPTICAL METAMATERIALS - FABRICATION, CHARACTERIZATION, THEORY	47.049	DMR-0806682	TRA	11,003
FRG: COLLABORATIVE RESEARCH: GEOMETRY OF MODULI SPACES OF RATIONAL CURVES WITH APPLICATIONS TO DIOPHANTINE PROBLEMS...	47.049	DMS-05-54442		10,336
COLLABORATIVE RESEARCH: MASSIVE SURVEYS FOR PULSARS AND RADIO TRANSIENTS USING THE ARECIBO L-BAND FE	47.049	AST-0806942		10,046
MATERIALS WORLD NETWORK: NONLINEAR OPTICAL METAMATERIALS - FABRICATION, CHARACTERIZATION, THEORY	47.049	DMR-0806682	PAR	9,235
US ATLAS- TRAVEL	47.049	PHY-119200	TRL	8,874
STRUCTURE AND DYNAMICS OF METASTABLE MATERIALS	47.049	CHE-07-19089		8,819
CAREER: MULTIMESSENGER ASTRONOMY THROUGH GRAVITATIONAL WAVES: A STUDENT CENTERED APPROACH	47.049	PHY-0847182	PAR	8,637
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	15	8,448
MIRT: BUILDING FUNCTIONAL NANOARCHITECTURES IN VAN DER WAALS MATERIALS	47.049	DMR-1122594	HEI	8,398
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	30	8,354
STRESS-INDUCED NANOPATTERNING OF SURFACE REACTIONS ON METAL OXIDE SURFACES	47.049	DMR-1206768		8,303
SPARSE PREDICTORS IN FUNCTIONAL DATA ANALYSIS	47.049	DMS-0806088		7,903
COLLABORATIVE RESEARCH: MAPPING THE GALACTIC ARECIBO SKY IN THE 21-CM LINE	47.049	AST-0917810		6,992
NEB: NOVEL QUANTUM SWITCHES USING HETEROGENEOUS ATOMICALLY LAYERED NANOSTRUCTURES	47.049	DMR-1124894	KIM	6,221
MATERIALS WORLD NETWORK: STUDIES OF QUANTUM PHASE TRANSITIONS BY MUSR IN AMBIENT AND APPLIED PRESSURE	47.049	DMR 0806846	OFF	5,148
AMERICAN CHEMICAL SOCIETY SYMPOSIUM: DYNAMICS AND JAMMING IN COMPLEX ENVIRONMENTS	47.049	DMR-1237968		5,000
MATERIALS WORLD NETWORK: III-NITRIDE NANOMATERIALS GROWTH AND CONTROL FOR SOLID-STATE CAVITY QUANTUM ELECTRODYNAMICS	47.049	DMR-1108176	PAR	4,959
NEB: NOVEL QUANTUM SWITCHES USING HETEROGENEOUS ATOMICALLY LAYERED NANOSTRUCTURES	47.049	DMR-1124894		4,925
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCT	47.049	CHE-06-41523	NAR	4,621
MOLYBDENUM DISULFIDE MONOLAYER SYNTHESIS AND CHARACTERIZATION	47.049	DMR-1106172		4,199
DYNAMICS OF LINEAR AND NONLINEAR AND NONLINEAR WAVES IN COMPLEX MEDIA	47.049	DMS-1008855		4,178
IMPROVED UNDERSTANDING OF MOLECULAR CLOUDS AND EMISSION LINE OBJECTS WITH LABORATORY ASTROPHYSICS ST	47.049	AST-0807436		3,472
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	7	3,458
NSF ASTRONOMY & ASTROPHYSICS POSTDOCTORAL FELLOWSHIP FOR BRITT REICHBORN-KJENNERUD: PROBING THE EARLY UNIVERSE WITH COSM	47.049	AST-1102774		2,900
CONFERENCE ON IMAGING, COMMUNICATION AND FINANCE: STOCHASTIC MODELING OF REAL-WORLD PROBLEMS	47.049	DMS-1129626		2,594
COLUMBIA UNIVERSITY RESEARCH EXPERIENCES FOR UNDERGRADUATES	47.049	CHE-07-54919		2,522
THE VERSATILITY OF INTERGRABILITY	47.049	DMS-1111152		2,503
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523		2,057
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	17	1,953
FRG: COLLABORATIVE RESEARCH: AUTOMORPHIC FORMS, GALOIS REPRESENTATIONS, AND SPECIAL VALUES OF L-FUNCTIONS	47.049	DMS-04-56298		1,462
COLLABORATIVE PROPOSAL: XENON100 DARK MATTER SEARCH AT THE GRAN SASSO UNDERGROUND LABORATORY	47.049	PHY-1104740		1,241
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574	UMR	1,063
AMC-SS: COLLABORATIVE RESEARCH: STOCHASTIC PROCESSES AND TIME SERIES MODELS: ALGORITHMS, ASYMPTOTICS AND PHASE TRANSITIO	47.049	DMS-0902075		815

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NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	14	797
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574	DIS	493
MRI INSTRUMENT DEVELOPMENT FOR LIQUID XENON DARK MATTER SEARCHES: AN ATOM TRAP TRACE ANALYSIS SYSTEM TO MEASURE ULTRA-LO	47.049	PHY-0923274	EQI	461
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574	FAC	453
CRYSTAL SIZE EFFECTS ON THE LATTICE PARAMETER OF NANO-SCALED OXIDES	47.049	DMR-1206764		369
NANOSCIENCE AND ENGINEERING CENTER: COLUMBIA CENTER FOR ELECTRONIC TRANSPORT IN MOLECULAR NANOSTRUCTURES	47.049	CHE-06-41523	11	276
MATERIALS WORLD NETWORK: STUDIES OF QUANTUM PHASE TRANSITIONS BY MUSR IN AMBIENT AND APPLIED PRESSURE	47.049	DMR-0806846		211
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574		180
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574	ADM	70
A MULTI-WAVELENGTH CALIBRATION OF GALAXY CLUSTERS AS COSMOLOGICAL PROBES	47.049	AST-0507161		67
K-STABILITY IN ALGEBRAIC GEOMETRY	47.049	DMS-0700419		-1
ENUMERATIVE GEOMETRY AND TOPOLOGY OF MODULI SPACES	47.049	DMS-0401128		-3
FRG: COLLABORATIVE RESEARCH: COMBINATORIAL REPRESENTATION THEORY, MULTIPLE DIRICHLET SERIES AND MOMENTS OF L-FUNCTIONS	47.049	DMS-0652554		-54
SUM FREQUENCY STUDIES OF LIQUID INTERFACES	47.049	CHE-07-14606		-1,613
MATERIALS RESEARCH SCIENCE AND ENGINEERING CENTER: CENTER FOR NANOSTRUCTURED MATERIALS	47.049	DMR-0213574	RT2	-2,000
CAREER: PHYSICS OF NON-NEUTRAL AND ELECTRON-POSITRON PLASMAS CONFINED IN THE CNT STELLARATOR	47.049	PHY-04-49813	SUP	-3,114
CAREER: CONFINEMENT OF NON-NEUTRAL AND ELECTRON-POSITRON PLASMAS ON MAGNETIC SURFACES	47.049	PHY-04-49813	REU	-11,729
				\$20,938,583

Geosciences

SHIP OPERATIONS AWARD 2008-2011-R/V MARCUS LANGSETH	47.050	OCE-0813737		6,980,799
OCEANOGRAPHIC TECHNICAL SERVICES 2009-2011, R/V LANGSETH	47.050	OCE-0921736		3,680,347
SHIP OPERATIONS-2010 MOSA	47.050	OCE-0813737	MOS	2,904,239
ATLAS PROJECT @ LHC, CERN-SWITZERLAND: OFF CAMPUS	47.050	PHY 10-67934	EP1	1,228,288
GEOINFORMATICS FACILITIES SUPPORT: INTEGRATED DATA COLLECTIONS FOR THE EARTH & OCEAN SCIENCES: THE MARIEN GEOSCIENCE DAT	47.050	OCE-0950477		1,200,758
COLLABORATIVE RESEARCH: ACQUISITION OF NEW INSTRUMENTATION FOR GEOCHEMICAL STUDIES IN THE EARTH AND ENVIRONMENTAL SCIENCE	47.050	EAR-0746273		1,062,376
COLLABORATIVE RESEARCH: GLOBAL OCEAN REPEAT HYDROGRAPHY, CARBON AND TRACER MEASUREMENTS 2009-2014	47.050	OCE-0752980		829,582
GEOINFORMATICS FACILITIES SUPPORT: INTEGRATED DATA COLLECTIONS FOR THE EARTH & OCEAN SCIENCES: THE MARIEN GEOSCIENCE DAT	47.050	OCE-0950477		697,129
MITIGATION OF IMPACTS OF OCEAN SCIENCES RESEARCH OF MARINE MAMMALS 2009-2011	47.050	OCE-0924111		686,900
SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT 2011	47.050	OCE-1115537		458,614
MICROBOONE EXPERIMENT @ FERMILAB, ILLINOIS: OFF CAMPUS	47.050	PHY 10-67934	EP3	351,306
DOUBLE CHOOZ EXPERIMENT @ REACTOR- FRANCE: OFF CAMPUS	47.050	PHY 10-67934	EP2	335,428
MEGATHRUST SEISMIC HAZARD BY REFLECTION	47.050	OCE-0926614		298,480
COLLABORATIVE RESEARCH: GLOBAL OCEAN REPEAT HYDROGRAPHY, CARBON AND TRACER MEASUREMENTS 2009-2014	47.050	OCE-0752980	SME	237,190
COLLABORATIVE RESEARCH: ROLLING DECK TO REPOSITORY (R2R): TRANSFORMING THE ACADEMIC FLEET INTO AN INTEGRATED GLOBAL OBSE	47.050	OCE-0947877		229,644
A DEPTH TRANSECT OF SEDIMENTARY 231PA/230TH IN THE WESTERN ATLANTIC SINCE THE LAST ICE AGE	47.050	OCE-0902985		217,686
TESTING THE REALIABILITY OF PALEO VENTILATION ESTIMATES	47.050	OCE-1029936		193,633
COLLAB RESCH: HOW IS RIFTING EXHUMING THE YOUNGEST HIGH-PRESSURE & ULTRAHIGH-PRESSURE ROCKS THE EARTH	47.050	EAR-0814236		190,086

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DEEP-SEA REPOSITORY AND THE CURATING AND MAINTENANCE OF THE SEDIMENT LIBRARY AND DREDGE COLLECTION	47.050	OCE-0962010		190,010
PALÉOCLIMATE SHOCKS: ENVIRONMENTAL VARIABILITY, HUMAN VULNERABILITY, AND SOCIÉTAL ADAPTATION DURING THE LAST MILLENNIUM	47.050	GEO-0908971		179,564
COLLABORATIVE RESEARCH: UNDERSTANDING MADDEN-JULIAN OSCILLATION (MJO) INITIATION WITH DYNAMICS OF THE MADDEN JULIAN OSCI	47.050	AGS-1062206		173,308
COLLABORATIVE RESEARCH: HOW IS RIFTING EXHUMING THE YOUNGESTHP/UHP ROCKS ON EARTH?	47.050	EAR-0708445		171,342
MULTI-SCALE CLIMATE INFORMATION FOR AGRICULTURAL PLANNING IN SOUTHEASTERN SOUTH AMERICA FOR COMING DECADES	47.050	AGS-1049066		162,176
HIGH AND LOW-LATITUDE CONTROLS ON THE MEAN POSITION OF THE ATLANTIC ITCZ (0-150 KA BP)	47.050	OCE-0927247		151,272
A MODEL-BASED INVESTIGATION OF CLIMATE VARIABILITY AND CLIMATE CHANGE: FOCUS ON THE WEST AFRICAN MON	47.050	AGS-1000874		151,120
RAPID: US CONTRIBUTION TO ICDP DEAD SEA DEEP DRILL CORE PROJECT (DSDDP)	47.050	EAR-1115312		150,000
IDEALIZED MODELLING OF STRATOSPHERIC IMPACTS ON WEATHER AND CLIMATE	47.050	ATM-0839843		149,296
FESD TYPE 1: PILOCENE MAXIMUM SEA LEVEL (PLIOMAX): DYNAMIC ICE SHEET-EARTH RESPONSE IN A WARMER WORLD	47.050	OCE-1202632		145,382
CONSTRAINING THE PAST AND FUTURE OCEAN SINK OF ANTHROPOGENIC CARBON WITH OBSERVATIONS	47.050	OCE-1060804		144,386
COLLABORATIVE RESEARCH: ETBC: AMAZON INFLUENCE ON THE ATLANTIC CARBON EXPORTS FROM NITROGEN FIXATION BY DIATOM SYMBIOSES	47.050	OCE-1133277		141,808
EARTH'S CLIMATE HISTORY, ICE SHEETS, AND SEA LEVEL OVER LAST FOUR MILLION YEARS	47.050	OCE-1238405		138,457
CAREER: THE ATMOSPHERIC CHEMISTRY OF ICE AND SNOW	47.050	ATM-0845043		134,651
COLLABORATIVE RESEARCH: STRAIN ACCUMULATION AND RELEASE AT THE KURIL SUBDUCTION ZONE FROM POSTSEISMIC OBSERVATIONS ON TH	47.050	EAR-1141792		128,660
OCEAN ACIDIFICATION- CATEGORY 1 CLIMATOLOGICAL MEAN DISTRIBUTION OF PH IN SURFACE WATERS IN THE UNITED PH SCALE AND MEAN	47.050	OCE-1038891		122,267
REU SITE: RESEARCH EXPERIENCÉ FOR UNDERGRADUATES: ANALYZING GLOBAL DATABASES	47.050	OCE-1003931		122,095
COLLABORATIVE RESEARCH: FAST SPIN UP OF OCEAN GENERAL CIRCULATION MODELS USING NEWTON-KRYLOV METHODS	47.050	OCE-0824635		120,372
GEOINFORMATICS FACILITIES SUPPORT: INTEGRATED DATA COLLECTIONS FOR THE EARTH & OCEAN SCIENCES: THE MARIEN GEOSCIENCE DAT	47.050	OCE-0950477	IED	119,437
FACILITY SUPPORT: THE GLOBAL CMT PROJECT	47.050	EAR-0824694		117,266
THE ROLE OF FAULT STRANDS AND ROUGHNESS IN FAULT AND EARTHQUAKE MECHANICS	47.050	EAR-0943939		116,051
SUPPORT FOR THE U.S. GEOTRACES PROJECT OFFICE	47.050	OCE-0850963	PAR	113,945
COLLABORATIVE RESEARCH: ADVANCED MODELS OF MAGMA MIGRATION AT CONVERGENT MARGINS	47.050	OCE-0841079		111,900
COLLABORATIVE RESEARCH: ANALYSIS OF THE INSTANT OBSERVATIONS OF THE INDONESIAN THROUGHFLOW	47.050	OCE-07-25935		110,588
SUPPORT FOR THE U.S. GEOTRACES PROJECT OFFICE	47.050	OCE-0850963		108,099
SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT 2012	47.050	NSF CU12-0027		105,762
SOUTH CHINA SEA- INDONESIA SEAS TRANSPORTATION /EXCHANGE (SITE)	47.050	OCE-07-51927		103,540
COLLABORATIVE RESEARCH: U.S. GEOTRACES NORTH ATLANTIC SECTION: ANALYSIS OF 230TH, 232TH AND 231PA	47.050	OCE-0927064		101,205
PATAGONIA GLACIATION, GEOCHEMICAL TRACERS OF ATLANTIC MERIDIONAL OVERTURNING CIRCULATION, AND IRON F	47.050	OCE-0823507		99,391
COLLABORATIVE RESEARCH: EVOLUTION AND HYDRATION OF THE JUAN DE FUCA CRUST AND UPPERMOST MANTLE: A PLATE-SCALE SEISMIC	47.050	OCE-1029411		99,311
MODELING THE TROPICAL ATMOSPHERE-OCEAN SYSTEM: DETERMINING THE CAUSES OF NEAR FUTURE SUBTROPICAL DRY	47.050	AGS-0804107		95,377
IDEALIZED MODELS FOR TROPICAL CLIMATE DYNAMICS	47.050	AGS-1008847		94,324
COLLABORATIVE RESEARCH: THE EL NINO-SOUTHERN OSCILLATION (ENSO) MEDITERRANEAN TELECONNECTION: OBSERVA	47.050	AGS-1205043		92,849
U-SERIES DISWQILIBRIUM IN WEDDELL SEA SEDIMENTS: RATES OF ICEBERG DISCHARGE AND IMPACT ON GLOBAL OCEANS	47.050	EAR-0958276		92,670
LATE QUATERNARY VARIABILITY OF THE AGULHAS THERMOHALINE VALVE FROM ND ISOTOPES IN PLANKTONIC FORAMINFERA	47.050	OCE-1031198		92,364
SHINE: OBSERVATIONALLY CONSTRAINING THE PHYSICAL PROCESSES THAT GENERATE THE SOLAR WIND	47.050	AGS-1060094		91,903

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COLLABORATIVE RESEARCH: STRUCTURE AND COMPOSITION OF OCEANIC LITHOSPHERE AND THE LITHOSPHERE/ASTHENOSPHERE BOUNDARY	47.050	OCE-0928270		91,880
COLLABORATIVE RESEARCH: SEISMIC REFLECTION DATA SYSTEM FOR MARINE GEOSCIENCES II	47.050	OCE-0824630		91,374
COLLABORATIVE RESEARCH: THE PULSE OF HOLOCENE GLACIATIONS IN NEW ZEALAND'S SOUTHERN ALPS	47.050	EAR-0823521		88,893
COLLABORATIVE RESEARCH: US GEOTRACES NORTH ATLANTIC SECTION - ND ISOTOPE DISTRIBUTION: SOURCES, SINKS AND INTERNAL CYCLI	47.050	OCE-0928409		85,871
CSEDI COLLABORATIVE RESEARCH: INTEGRATING SEISMOLOGICAL, RHEOLOGICAL AND PETROLOGICAL STUDIES OF MELT PRODUCTION AND TRA	47.050	EAR-1067974		85,443
COLLABORATIVE RESEARCH: AN ABYSSAL CIRCULATION TYPE SECTION FOR THE NORTH ATLANTIC	47.050	ATM-0936496		80,870
COLLABORATIVE RESEARCH: A FIELD, LABORATORY AND THEORETICAL STUDY OF MIXED BEDROCK-ALLUVIAL MEANDERING RIVERS	47.050	EAR-1124114		78,251
THE RESPONSE OF THE SUBARCTIC NORTH PACIFIC TO ABRUPT CLIMATE CHANGE: RECONSTRUCTING DUST FLUX AND BIOLOGICAL PRODUCTIVI	47.050	OCE-1060907		77,531
COLLABORATIVE RESEARCH: LOCALLY-CONSTRAINED CLIMATE FIELD RECONSTRUCTIONS OF THE LAST MILLENNIUM: METHODS AND APPLICATIO	47.050	AGS-0902436		77,347
COLLABORATIVE RESEARCH: CRUSTAL ACCRETION AND MANTLE PROCESSES ALONG THE SUBDUCTION-INFLUENCED EASTERN LAU SPREADING CEN	47.050	OCE-0426369		76,899
COLLABORATIVE RESEARCH: VOLATILE LOSS DURING MAGMA ASCENT AND COOLING	47.050	EAR-0948533		76,520
SURFACE-WAVE PROPAGATION ACROSS NORTH AMERICA: NEW METHODS, OBSERVATIONS AND MODELS	47.050	EAR-0952285		75,907
COLLABORATIVE RESEARCH: DEVELOPMENT AND SUPPORT OF THE MB-SYSTEM SOFTWARE PACKAGE FOR PROCESSING AND DISPLAY OF ...	47.050	OCE-06-23584		74,866
ACCOMPLISHMENT BASED RENEWAL: TEMPORAL EVOLUTION OF HYDROTHERMAL AND VOLCANIC PROCESSES AT THE EAST PACIFIC RISE FROM MI	47.050	OCE-0961594		74,431
STUDIES OF UNUSUAL EARTHQUAKES: VOLCANOS AND LANDSLIDES	47.050	EAR-0944055		72,728
A SYNTHESIS OF INDIAN AND U.S. GEOPHYSICAL DATA TO INVESTIGATE THE STRUCTURE AND TECTONICS OF THE ANDAMAN SEA	47.050	OCE-0927024		71,642
FIRST COMPREHENSIVE SAMPLING OF THE SHONA AND DISCOVERY SEAMOUNT CHAIN, SOUTH ATLANTIC-PLUME VERSUS	47.050	OCE-0738437		71,092
CORAL-BASED RECONSTRUCTION OF SALINITY AND TEMPERATURE VARIABILITY IN THE SOUTHERN MAKASSAR STRAIT AND ITS INFLUENCE ON	47.050	OCE-1211110		70,836
PROFESSIONAL DEVELOPMENT TO IMPROVE THE SPATIAL THINKING OF EARTH SCIENCE TEACHERS AND STUDENTS	47.050	GEO-1034994		70,708
OCEANOGRAPHIC INSTRUMENTATION 2011	47.050	OCE-1119776		69,450
FUTURE CHANGES IN THE SEASONAL CYCLE: MECHANISMS AND IMPLICATIONS	47.050	AGS-0946849		66,281
COLLABORATIVE PROPOSAL: MOORED OBSERVATIONS OF TURBULENT KINETIC ENERGY DISSIPATION IN AND BELOW THE MIXED LAYER DURING	47.050	OCE-07-45442		64,322
TESTING THE PROCESS OF MELT DIFFERENTIATION IN THE MEXICAN VOLCANIC BELT	47.050	EAR-07-38707		63,398
PALEOCLIMATE SHOCKS: ENVIRONMENTAL VARIABILITY, HUMAN VULNERABILITY, AND SOCIETAL ADAPTATION DURING THE LAST MILLENNIUM	47.050	GEO-0908971	OFF	63,041
RAPID: RAPID ASSESSMENT OF EXTENT AND PHOTOPHYSIOLOGICAL	47.050	OCE-1048482		61,067
OCEAN ACIDIFICATION- CATEGORY 1 CALIBRATION AND APPLICATION OF THE BORON ISOTOPE SEAWATER - PH INDICATOR IN DEEP-WATER C	47.050	OCE-1041133		59,483
COLLAB RES: VARIATIONS & TRENDS IN FALL PRECIPITATION OVER THE CENTRAL UNITED STATES: ISSUES OF PHYSICAL MECHANISMS, CIR	47.050	ATM-0739983		58,132
SCHOOL-BASED ECOLOGY AND ENVIRONMENTAL DISCOVERIES (SEEDS)	47.050	GEO-1035037		57,212
ESTABLISHING A LONG-TERM GEODETIC NETWORK AT THE EAST PACIFIC RISE RIDGE 2000 INTEGRATED STUDIES SITE	47.050	OCE-06-47840		56,465
COLLABORATIVE RESEARCH: HAWAIIAN AND SUBPLINI	47.050	EAR-1145177		55,230
THE SR-ND-PB-HF ISOTOPE EVOLUTION OF THE MARIANA ISLAND ARC	47.050	EAR-0840808		54,364
COLLABORATIVE RESEARCH: TIMING AND STRUCTURE OF THE LAST GLACIAL MAXIMUM AND TERMINATION IN SOUTHERN PERU: IMPLICATIONS	47.050	EAR-1003427		52,985
RAPID - COLLABORATIVE RESEARCH - OFFSHORE IMPACTS OF THE TOHOKU-OKI EARTHQUAKE ON SEAFLOOR DEFORMATION, SEDIMENTATION, E	47.050	OCE-1139036		52,772
COLLABORATIVE RESEARCH: DYNAMICS OF CRUST-MANTLE COUPLING THROUGH COMBINED ANALYSIS AND MODELING OF EARTHSOPE SEISMIC,	47.050	EAR-1053292		51,966
COLLABORATIVE RESEARCH: PLATE TECTONIC AND GEOCHEMICAL EVOLUTION OF YOUNG WALVIS RIDGE AND IMPLICATIONS FOR AFRICAN PLAT	47.050	OCE-0961450		51,235
COLLABORATIVE RESEARCH ON QUANTIFYING THE IMPACTS OF ATMOSPHERIC AND LAND SURFACE HETEROGENEITY AND SCALE ON SOIL MOISTU	47.050	AGS-1035843		50,758

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COLLAB RSCH: EARTHCHEM - ADVANCING DATA MANAGEMENT IN SOLID EARTH GEOCHEMISTRY	47.050	EAR-05-22195		50,377
COLLABORATIVE RESEARCH: EVALUATING THE ROLES OF MELT MIGRATION AND MANTLE FLOW IN LITHOSPHERIC EVOLUTION: THE COLORADO P	47.050	EAR-0952202		49,126
COLLABORATIVE RESEARCH: DEVELOPING NEW INSTRUMENTATION OT ACCURATELY MEASURE HEAT AND MASS FLUX OF HYDROTHERMAL FLUIDS	47.050	OCE-1131455		48,763
COLLAB RES: UPLIFT & FAULTING AT THE TRANSITION FROM SUBDUCTION TO COLLISION A FIELD & MODELING	47.050	EAR-0607687		47,715
FUTURE CHANGES IN THE SEASONAL CYCLE: MECHANISMS AND IMPLICATIONS	47.050	AGS-0946849		47,533
EXPERIMENTAL PHYSICS RESEARCH PROGRAM AT COLUMBIA UNIVERSITY/NEVIS LABORATORIES	47.050	PHY 10-67934		47,273
GEOMAPAPP MINI-LESSONS AND THE K-12 CLASSROOM: TRANSFORMATIVE RESSOURCES FOR THE 21ST CENTURY EDUCATOR	47.050	GEO-1035036		46,634
COLLABORATIVE RESEARCH: P2C2 - RECONSTRUCTING NORTH PACIFIC CLIMATE VARIABILITY USING A MULTI-MILLENNIAL TREE RING RESOU	47.050	ATM-0902749		45,024
OCEANOGRAPHIC INSTRUMENTATION 2008	47.050	OCE-0827872		44,912
DYNAMICS OF TROPICALLY FORCED ZONALLY SYMMETRIC CLIMATE VARIABILITY	47.050	AGS-0543256		44,097
COLLABORATIVE RES.: 3-D/4D SEISMIC REFLECTION IMAGING THE MAGMATIC-HYDROTHERMAL SYSTEM AT THE EAST	47.050	OCE-0327872		43,856
CONNECTING LAVA RHEOLOGY AND FLOW DYNAMICS USING NOVEL FIELD AND MODELING TECHNIQUES	47.050	EAR-1118943		42,699
SHIP OPERATIONS-2010	47.050	OCE-0813737	NEW	41,790
CAREER: CHARACTERIZING THE UNCERTAINTY IN PROJECTION OF CLIMATE CHANGE IN THE SEMI-ARID TROPICS BASED ON THE MOIST STATI	47.050	AGS-0955372		41,418
MULTI-SCALE CLIMATE INFORMATION FOR AGRICULTURAL PLANNING IN SOUTHEASTERN SOUTH AMERICA FOR COMING D	47.050	AGS-1049066	CCS	40,656
COLLAB RSCH: SEISMIC MEASUREMENTS OF MAGMA FLUX, ARC COMPOSITION, & LOWER-PLATE SERPENTINIZATION IN THE CENTRAL AMER...	47.050	OCE-05-20378		40,191
MANTLE DYNAMICS AND MAGMATISM ACROSS THE BASIN AND RANGE	47.050	EAR-07-45797		39,448
EARTHSOPE INTEGRATED INVESTIGATION OF CASCADIA SUBDUCTION ZONE TREMOR, STRUCTURE AND PROCESS	47.050	EAR-08-14237		37,766
COLLABORATIVE RESEARCH: TROPICAL CYCLONES IN A WARMING CLIMATE: LESSONS FROM MODEL SIMULATIONS OF THE LAST GLACIAL MAXIM	47.050	AGS-1064081		37,346
MECHANISMS OF 20TH CENTURY MEDITERRANEAN DRYING: THE ROLE OF EXTERNAL FORCING VERSUS NATURAL VARIABILITY	47.050	AGS-1128172		36,334
RAPID: DEPLOYING VENTCAM AS A DATA COLLECTION BASE STATION FOR THE AXIAL SEAMOUNT SENSORBOT ARRAY	47.050	OCE-1147104		36,170
COLLABORATIVE RESEARCH: QUANTIFYING FEEDBACKS AFFECTING HIGH ALTITUDE CLIMATE CHANGE	47.050	AGS-1064281		35,803
QUANTIFYING SUBGLACIAL EROSION RATES AND EXPLORING PRO-GLACIAL BEDROCK AS CLIMATE ARCHIVE BY IN-SITU COSMOGENIC C14 AND	47.050	EAR-0922165		34,567
COLLABORATIVE RESEARCH: AN INVERSE AND FORWARD MODELING SYNTHESIS OF NOBLE GASES TO BETTER QUANTIFY BIOGEOCHEMICAL CYCLE	47.050	OCE-1129973		33,987
COLLABORATIVE RESEARCH: MICROSTRUCTURAL AND MODELING CONSTRAINTS ON STRAIN LOCALIZATION, LPO DEVELOP	47.050	EAR-07-39010		33,928
SHIPBOARD SCIENTIFIC SUPPORT EQUIPMENT 2010	47.050	OCE-1019663		33,386
PROBING THE ROOTS OF ACTIVE VOLCANIC SYSTEMS WITH SPECTRAL AMBIENT NOISE TOMOGRAPHY AND RECEIVER FUNCTIONS	47.050	EAR-1015016		31,960
BOUNDARY SOURCES AND SINKS OF 230TH, 232TH AND 231PA IN THE NW PACIFIC	47.050	OCE-1029211		31,139
COLLABORATIVE RESEARCH: EXTRACTING MULTI-CENTURY LOW-LATITUDE SEA SURFACE TEMPERATURES FROM CORAL SKELETONS USING REPLIC	47.050	OCE-1211106		30,913
PETROLOGIC STUDY OF PERIDOTITE CARBONATION IN OMAN:TEMPETURE TIMING AND FLUID COMPOSITION	47.050	EAR-1049905		30,894
COLLABORATIVE RESEARCH: FAULTING PROCESSES DURING EARLY-STAGE RIFTING: ANALYSIS OF AN UNUSUAL EARTHQUAKE SEQUENCE IN NOR	47.050	OCE-1049620		30,792
COLLABORATIVE RESEARCH: VARIATIONS IN UPPER-MANTLE TEMPERATURE, DEFORMATION, AND MELTING INFERRED FROM THE SEISMIC STRUC	47.050	EAR-0838225		30,379
GEOINFORMATICS FACILITIES SUPPORT: INTEGRATED DATA COLLECTIONS FOR THE EARTH & OCEAN SCIENCES: THE MARIEN GEOSCIENCE DAT	47.050	OCE-0950477	PAR	30,319
MULTI-SCALE CLIMATE INFORMATION FOR AGRICULTURAL PLANNING IN SOUTHEASTERN SOUTH AMERICA FOR COMING D	47.050	AGS-1049066	LDE	30,318
COLLABORATIVE RESEARCH: A PROPOSAL FOR THE COSMIC-RAY PRODUCED NUCLIDE SYSTEMATICS ON EARTH (CRONUS-EARTH) PROJECT	47.050	EAR-0345835		28,786
COLLABORATIVE RESEARCH: INVESTIGATING THE DYNAMICS IN DEEP VALLEYS ON THE SEAFLOOR WITH NUMERICAL EXPERIMENTS AND DATA A	47.050	OCE-0751967		28,566

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CAREER: VERY BROADBAND RHEOLOGY AND THE INTERNAL DYNAMICS OF PLATE BOUNDARIED ON EARTH	47.050	EAR-1056332		28,517
TROPICAL CYCLONES AND CLIMATE - A MODEL INTERCOMPARISON PROJECT	47.050	AGS-1143959		28,435
COLLABORATIVE RESEARCH: DEVELOPMENT OF 40AR/39AR INTERCALIBRATION PIPETTES	47.050	EAR-1057610		27,919
A STUDY OF CONTINENTAL MARGINS AMPHIBIOUS SEISMOMETRY	47.050	OCE-1154795		27,851
COLLABORATIVE RESEARCH: CONSTRAINING ARC PROCESS THROUGH COMPREHENSIVE GEOCHEMICAL STUDY OF THE CHILEAN SOUTHERN VOLCANI	47.050	EAR-0948466		27,424
MAPPING SAHARAN DUST FLUXES THROUGH THE ONSET AND TERMINATION OF THE AFRICAN HUMID PERIOD IN A TRANSECT OF AFRICAN MARGI	47.050	OCE-1030784		27,269
COLLABORATIVE RESEARCH: GEOMAGNETIC VARIABILITY, PALEONVIRONMENTAL, CHANGE, AND A TUNED GEOLOGIC TIMESCALE FROM PACIFIC	47.050	OCE-0961464		27,113
MARGINS OFFICE SUPPORT	47.050	OCE-0840879		26,248
COLLABORATIVE RESEARCH: P2C2-WESTERN EQUATORIAL PACIFIC RAINFALL DURING THE HOLOCENE-NEW INTERANNUAL RECORDS FROM HIGH R	47.050	AGS-1103466		25,494
COLLABORATIVE RESEARCH: RECONSTRUCTING ENSO WITH INDIVIDUAL FORAMINIFERA	47.050	OCE-07-27428		25,363
COLLABORATIVE RESEARCH: MECHANISMS OF TRANSIENT DEFORMATION FOLLOWING GREAT 2006-2007 KURIL EARTHQUAKES: FRICTIONAL AFTE	47.050	EAR-1014679		24,846
COLLABORATIVE RESEARCH: INTEGRATED STUDIES OF EARLY STAGES OF CONTINENTAL EXTENSION: FROM INCIPIENT (OKAVANGO) TO YOUNG	47.050	EAR-1009839		23,194
OCEANOGRAPHIC INSTRUMENTATION 2011	47.050	OCE-1113045		22,230
EAGER: CATASTROPHIC LANDSLIDE DYNAMICS FROM SEISMIC WAVE INVERSION AND SATELLITE REMOTE SENSING	47.050	EAR-1150072		21,390
RAPID: ANTHROPOGENIC RADIONUCLIDES IN THE ATLANTIC OCEAN 4 DECADES AFTER GEOSECS	47.050	OCE-1012154		19,586
USING NUMERICAL MODELS OF POROELASTIC FLUID FLOW TO CONSTRAIN THE PERMEABILITY STRUCTURE OF YOUNG OCEANIC CRUST	47.050	OCE-0928181		19,475
COLLABORATIVE RESEARCH: THE GENESIS OF PRIMITIVE LAVAS FROM THE WESTERN ALEUTIONS	47.050	OCE-07-27013		19,242
TESTING PREDICTIONS FROM THE CASCADE AND PRE-SEISMIC SLIP MODELS FOR FORESHOCK OCCURRENCE WITH THE HIGH PRECISION CATALO	47.050	EAR-0943771		19,149
COLLABORATIVE RESEARCH: A NEW METHOD FOR UNDERSTANDING MECHANISMS OF ICE SHEET DEMISE USING MARRIED GENERAL CIRCULATION	47.050	ATM-0753868		18,911
CMG RESEARCH: ANALYSIS AND APPLICATION OF XFEM TO DYNAMIC RUPTURE PROCESSES IN EARTHQUAKE	47.050	EAR-0934736		17,018
RAPID COLLABORATIVE RESEARCH: OFF-SHORE COSEISMIC EFFECTS OF THE PORT AU PRINCE	47.050	OCE-1028045		16,833
COLLABORATIVE RESEARCH: CSEDI-ORIGIN AND EVOLUTION OF HIGHLY SIDEROPHILE ELEMENTS IN EARTH'S MANTLE	47.050	EAR-0757853		15,861
PALEOCLIMATE SHOCKS: ENVIRONMENTAL VARIABILITY, HUMAN VULNERABILITY, AND SOCIETAL ADAPTATION DURING THE LAST MILLENNIUM	47.050	GEO-0908971	PAR	15,020
COLLABORATIVE RESEARCH: DIAPYCNAL MIXING ON THE EAST PACIFICRISE	47.050	OCE-0728766		14,362
COLLABORATIVE RESEARCH: TECTONIC AND MAGMATIC PROCESSES DURING EARLY-STAGE RIFTING: AN INTEGRATED STUDY OF NORTHERN LAKE	47.050	EAR-1110921		14,247
ANALYSIS OF 9050"N EAST PACIFIC RISE SEISMICITY: INSIGHT INTO HYDROTHERMAL AND MAGMATIC PROCESSES	47.050	OCE-0732569		14,240
COLLABORATIVE RESEARCH: DUST INTERACTION WITH CLIMATE IN THE AFRICAN HUMID PERIOD	47.050	AGS-1003505		14,177
COLLABORATIVE RESEARCH: P2C2-RECONSTRUCTING TROPICAL PACIFIC CLIMATE VARIABILITY AND MONSOON SYSTEM	47.050	ATM-0823617		13,975
COLLABORATIVE RESEARCH: CORING THE LINE ISLANDS RIDGE FOR PALEOCEANOGRAPHIC RESEARCH	47.050	OCE-1158886		13,720
COLLABORATIVE RESEARCH: MONITORING INFLATION AT AXIAL SEAMOUNT	47.050	OCE-07-26093		13,389
COLLABORATIVE RESEARCH: THE NORTH ANATOLIAN FAULT IN THE MARMARA SEA, TURKEY: THE GROWTH OF CONTINENTAL TRANSFORM	47.050	OCE-0928447		13,070
COLLABORATIVE RESEARCH: HYDROLOGICAL VARIABILITY DURING THE LAST MILLENIUM FROM HIGH RESOLUTION PROXIES	47.050	AGS-1003417		13,046
COLLABORATIVE RESEARCH: QUANTIFYING THE OCEAN'S RESPONSE TO SOLAR FORCING: MULTIDECADEAL TO CENTURY-SCALE VARIABILITY OF	47.050	OCE-1103519		12,973
OCEANOGRAPHIC INSTRUMENTATION 2010	47.050	OCE-1016187		12,688
COLLABORATIVE RESEARCH: INTEGRATED DATA MANAGEMENT FOR HYDROTHERMAL SPRING GEOCHEMISTRY	47.050	OCE-0819368		12,464
COLLABORATIVE RESEARCH: AUTOMATED CONTINUOUS MEASUREMENT OF CFC AND SF6 SATURATIONS IN SURFACE WATERS	47.050	OCE-1035311		11,903

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REU SITE: RESEARCH EXPERIENCE FOR UNDERGRADUATES: ANALYZING GLOBAL DATABASES	47.050	OCE-1003931		11,383
COLLABORATIVE RESEARCH: A SOUTHERN MID-LATITUDE PERSPECTIVE ON THE LAST ICE AGE BASED ON BE-10 MORaine CHRONOLOGIES	47.050	EAR-0745781		11,361
CMG RESEARCH: ANALYSIS AND APPLICATION OF XFEM TO DYNAMIC RUPTURE PROCESSES IN EARTHQUAKE PHYSICS	47.050	EAR-0934736	SHA	11,192
PROFESSIONAL DEVELOPMENT TO IMPROVE THE SPATIAL THINKING OF EARTH SCIENCE TEACHERS AND STUDENTS	47.050	GEO-1034994	PAR	10,642
ELEMENT RECYCLING FROM UHP METASEDIMENTS: EVIDENCE AND CONSEQUENCES	47.050	OCE-07-42368		10,443
CONSTRAINTS ON THE COMPOSITION OF THE SUBDUCTING OCEANIC CRUST IN THE NORTHWEST PACIFIC OCEAN BASIN	47.050	OCE-0961359		9,713
SCHOOL-BASED ECOLOGY AND ENVIRONMENTAL DISCOVERIES (SEEDS)	47.050	GEO-1035037		9,666
MRI: RAPID: OIL SPILL INSTRUMENT ACQUISITION FOR FLUOROMETRIC DETECTION OF UNDERWATER OIL AND SOLUBLE VOC'S	47.050	OCE-1058233		9,621
COLLABORATIVE RES: ADVANCED LASER FLUOROMETER (ALF) FOR IN VIVO CHARACTERIZATION OF PHYTOPLANKTON PIGMENTS, ...	47.050	OCE-07-24561		9,269
COLLABORATIVE RESEARCH: FLUID TRANSPORT AND FLUID-ROCK INTERACTIONS PRESERVED IN TWO SERPENTINITE MELANGES IN THE GUATEM	47.050	EAR-1119456		9,158
COLLABORATIVE RESEARCH: FAULTING PROCESSES DURING EARLY-STAGE RIFTING: ANALYSIS OF AN UNUSUAL EARTHQUAKE SEQUENCE IN NOR	47.050	OCE-1049620	PAR	8,400
25 MILLION YEARS OF MANTLE UPWELLING BELOW THE MID ATLANTIC RIDGE: THE VEMA LITHOSPHERIC SECTION REVISITED	47.050	OCE-0551288		8,223
NEW DIAGNOSTICS OF WATER-MASS VENTILATION ESTIMATED FROM TRACER DATA	47.050	OCE-07-27229	162	8,050
CAREER: THE ATMOSPHERIC CHEMISTRY OF ICE AND SNOW.	47.050	ATM-0845043	PAR	7,500
COLLABORATIVE RESEARCH: GRAZING AND IRON CONTROLS OF DIATOM BLOOMS IN THE ARABIAN SEA	47.050	OCE-1121039		7,209
A MODEL-BASED INVESTIGATION OF CLIMATE VARIABILITY AND CLIMATE CHANGE: FOCUS O THE WEST AFRICAN MONS	47.050	AGS-1000874	SUP	5,999
COMPREHENSIVE HIGH-PRECISION RELOCATION OF GLOBAL SEISMICITY	47.050	EAR-1141986		5,814
COLLABORATIVE RESEARCH: IMAGING THE CASCADIA SUBDUCTION ZONE: A SHIP-TO-SHORE OPPORTUNITY	47.050	EAR-1147622		5,780
TESTING MODELS OF MAGMA MOVEMENT ALONG THE EAST PACIFIC RISE USING COMBINED GEODITIC AND NUMERICAL EXPERIMENTS	47.050	OCE-0426575	PR	5,679
COLLABORATIVE RESEARCH: TECTONIC AND MAGMATIC PROCESSES DURING EARLY-STAGE RIFTING: AN INTEGRATED STUDY OF NORTHERN LAKE	47.050	EAR-1110921	SC1	5,032
SHINE OBSERVATIONALLY CONSTRAINING THE PHYSICAL PROCESS THAT GENERATE THE SOLAR WIND	47.050	AGS-1060194	JD	5,000
VALIDATION OF THE B/CA PROXY FOR SURFACE SEAWATER PH AND APPLICATION TO MEASURE ANTHROPOGENIC OCEAN	47.050	OCE-07-51764		4,361
SUPPORT FOR THE U.S. GEOTRACES PROJECT OFFICE	47.050	OCE-1129603	PAR	3,860
COLLABORATIVE RESEARCH: OPTIMIZING MULTIBEAM DATA ACQUISITION OPERATIONS AND QUALITY FOR THE U.S. ACADEMIC RESEARCH FLEE	47.050	OCE-1150520		3,390
SEDDb, THE ONLINE INFORMATION SYSTEM FOR SEDIMENT GEOCHEMISTRY CONTINUED OPERATION AND DEVELOPMENT	47.050	OCE-0826197		3,276
COLLABORATIVE RESEARCH: DEEP STRUCTURE OF THREE CONTINENTAL SUTURES IN EASTERN NORTH AMERICA	47.050	EAR-1147742		3,111
COLLABORATIVE RESEARCH: ABSOLUTE-DATED RECORDS OF LATE QUATERNARY PALEOHYDROLOGY IN THE BONNEVILLE BASIN, WESTERN U.S. F	47.050	EAR-1103379		3,100
RAPID: CONTINUATION OF U.S. GEOTRACES NORTH ATLANTIC SECTION: CFC AND SF6 MEASUREMENTS	47.050	OCE-1132545		2,951
EAGER: THE 170-EXCESS OF DISSOLVED O2 IN THE DEEP SEA: A POSSIBLE TRACER OF LITTLE ICE AGE OCEANOGRAPHY	47.050	OCE-1143745		2,864
COLLABORATIVE RESEARCH: COMBINED SEISMOLOGICAL AND GEODETIC CONSTRAINTS ON A 3-D MANTLE STRUCTURE	47.050	EAR-1112216		2,824
COLLABORATIVE RESEARCH: P2C2-PAST AND FUTURE DROUGHT VARIABILITY IN THE MEDITERRANEAN BASIN	47.050	AGS-1103450		2,431
THE IMPACT OF DOWNWARD WAVE COUPLING ON THE TROPOSPHERIC CIRCULATION	47.050	AGS-1129519		2,102
WORKSHOP PROPOSAL: RECOVERING UNCOMPROMISED SAMPLES OF AQUIFER SANDS WITH IN-SITU GROUNDWATER FROM UP TO 300-M DEPTH IN	47.050	EAR-1105148		1,434
RAPID COLLABORATIVE RESEARCH: OFF-SHORE COSEISMIC EFFECTS OF THE PORT AU PRINCE	47.050	OCE-1028045	PAR	1,388
COLLABORATIVE RESEARCH: QUANTITATIVE IMPORTANCE AND TROPHIC ROLE OF NOCTILUCA BLOOMS IN THE ARABIAN SEA	47.050	OCE-1121022		1,089
COLLABORATIVE RESEARCH: ROLLING DECK TO REPOSITORY (R2R): TRANSFORMING THE ACADEMIC FLEET INTO AN INTEGRATED GLOBAL OBSE	47.050	OCE-0947877	PAR	1,018

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INVESTIGATING THE THERMAL MATURITY OF ORGANIC MATTER IN FAULT ZONES WITH LABORATORY EXPERIMENTS	47.050	EAR-1219488		931
COLLABORATIVE RESEARCH: GEOMORPHIC TRANSPORT LAWS, LANDSCAPE EVOLUTION, AND FRACTIONAL CALCULUS	47.050	EAR-0823953		921
GEOINFORMATICS FACILITIES SUPPORT: INTEGRATED DATA COLLECTIONS FOR THE EARTH & OCEAN SCIENCES: THE MARIEN GEOSCIENCE DAT	47.050	OCE-0950477	002	794
RAPID: IMPACT OF GULF OIL SURFACE FILMS ON ATMOSPHERE-OCEAN EXCHANGE	47.050	AGS-1049323		723
COLLISION OF THE BURMA ARC ACCRETIONARY PRISM AND FOLDBELT WITH THE GANGES-BRAHMAPUTRA DELTA IN BANGLADESH	47.050	EAR-06-36037		559
ASSESSING THE FIDELITY OF FORAMINIFERAL MG/CA: D18O TO ESTIMATE SEAWATER D18OR: A MULTISPECIES CALIB	47.050	OCE-07-52649		429
SOUTH CHINA SEA- INDONESIA SEAS TRANSPORTATION /EXCHANGE (SITE)	47.050	OCE-07-51927	PAR	260
COLLABORATIVE RESEARCH: GEOCHEMISTRY AND TECTONICS OF CRETACEOUS GATEWAY CLOSURE IN THE CENTRAL AMERICAN ISTHMUS	47.050	EAR-1019327		23
ADVANCE INSTITUTIONAL TRANSFORMATION AWARD: EARTH INSTITUTE OF COLUMBIA UNIVERSITY	47.050	SBE-02-45014	A	-3
NEW DIAGNOSTICS OF WATER-MASS VENTILATION ESTIMATED FROM TRACER DATA	47.050	OCE-07-27229	670 670	-19
				\$31,108,341

Computer and Information Science and Engineering

IPY/ASEP COLLABORATIVE INTERNATIONAL RESEARCH: AMUNDSEN SEA INFLUENCE ON WEST ANTARTIC ICE SHEET STABILITY AND SEA...	47.070	ANT-0632282		341,210
HCC: MEDIUM: COLLABORATIVE RESEARCH: GENERATING EFFECTIVE DYNAMIC EXPLANATIONS IN AUGMENTED REALITY	47.070	IIS-0905569		235,553
OPTICAL RECONSTRUCTION OF CORTICAL CONNECTIVITY	47.070	IIS-0904353		208,533
SMALL: AN INFORMATION ACCOUNTABILITY ARCHITECTURE FOR DISTRIBUTED ENTERPRISE SYSTEMS	47.070	CNS-09-14312		179,495
SHF: MEDIUM: POWER-ADAPTIVE, EVENT-DRIVEN DATA CONVERSION AND SIGNAL PROCESSING USING ASYNCHRONOUS DIGITAL TECHNIQUES	47.070	CCF-0964606		175,977
CGV: SMALL: DISCRETE VARIATIONAL CONTACT, IMPACT, AND DISSIPATIVE DYNAMICS	47.070	IIS-1117257		155,518
DC: SMALL: EEGMINE: A DISTRIBUTED FRAMEWORK FOR LEARNING ON EEG DATA OBTAINED FROM EPILEPSY PATIENTS	47.070	IIS-0916186		153,509
III: SMALL: AVOIDING CONTENTION ON MULTICORE MACHINES	47.070	IIS-0915956		151,250
EAGER: SOCIAL INFORMATION DISSEMINATION: A MARKET BASED APPROACH	47.070	CCF-1139915		141,651
ALGORITHMIC FOUNDATION: SMALL: COLLABORATIVE RESEARCH: THE POLYNOMIAL METHOD FOR LEARNING	47.070	CCF-0915929		140,914
CIF: MEDIUM PROJECTS: EVENTS- TRIGGERED SAMPLING: APPLICATION TO DECENTRALIZED DETECTION AND ESTIMATION	47.070	CCF-1064575		128,417
RI: MEDIUM: COLLABORATIVE RESEARCH: RECOGNITION OF MATERIALS	47.070	IIS-0964429		128,065
COLLABORATIVE RESEARCH: FIND: NETSERV-ARCHITECTURE OF A SERVICE-VIRTUALIZED INTERNET	47.070	CNS-0831912		126,906
CSR: MEDIUM: GUANYIN: A THOUSAND HANDS WITH A THOUSAND EYES FOR DISTRIBUTED SOFTWARE CHECKING	47.070	CNS-0905246		126,880
ALGORITHMIC FOUNDATIONS: THE BOUNDARY OF LEARNABILITY FOR MONOTONE MOOLEAN FUNCTIONS.	47.070	CCF-1115703		125,177
PA-DA-T: DESIGN AND TOOLS FOR EASY-TO-PROGRAM MASSIVELY PARALLEL ON-CHIP SYSTEMS; DERIVING SCALABILITY THROUGH ASYNCHRON	47.070	CCF-0811504		118,152
CPS: SMALL: THE ROLES OF COMMUNICATION IN LANE MERGING SYSTEMS	47.070	CNS-1035178		108,566
NETSE: MEDIUM: ENERGY HARVESTING ACTIVE NETWORKED TAGS	47.070	CCF-0964497		106,652
ADIABATIC QUANTUM OPTIMIZATION, NP-COMPLETENESS AND ANDERSON LOCALIZATION	47.070	CCF-1017244		102,601
NETSE: MEDIUM: ENERGY HARVESTING ACTIVE NETWORKED TAGS - ENHANT	47.070	CCF-0964497	KYM	100,457
CSR: SMALL: FLUID COMMUNICATION FOR PARALLEL PROGRAMS	47.070	CNS-1117135		99,984
CSR: MEDIUM: GUANYIN: A THOUSAND HANDS WITH A THOUSAND EYES FOR DISTRIBUTED SOFTWARE CHECKING	47.070	CNS-0905246	KAI	97,744
SHF: MEDIUM: POWER-ADAPTIVE, EVENT-DRIVEN DATA CONVERSION AND SIGNAL PROCESSING USING ASYNCHRONOUS D	47.070	CCF-0964606	NOW	94,802
III-COR-SMALL: BEYOND KEYWORD SEARCH: ENABLING DIVERSE STRUCTURED QUERY PARADIGMS OVER TEXT DATAB	47.070	IIS-0811038		92,908
RAPID UPDATES AND SNAPSHOT-BASED QUERIES USING MULTIPLE PROCESSORS	47.070	IIS-1049898		91,839

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MEASURING THE SECURITY POSTURE OF LARGE FINANCIAL ENTERPRISES: AN EAGER PROPOSAL TO NSF CCF	47.070	CCF-0950373		89,854
EMT: COMPUTATIONAL METHODS FO MAPPING GENEALOGY OF UNRELATED INDIVIDUALS FROM HIGH THROUGHPUT GENETI	47.070	CCF-0829882		83,920
ADVANCED SIGNAL PROCESSING FOR HIGH-SPEED OPTICAL FIBER SYSTEMS	47.070	CCF-07-26480		82,696
AF: SMALL: RESEARCH ON EQUILIBRIA, FIXED POINTS, ADN APPROXIMATION	47.070	CCF 1017955		82,602
HCC: SMALL: COLLABORATIVE RESEARCH: ASYNCHRONY AND PERSISTENCE FOR COMPLEX CONTACT SIMULATIONS	47.070	IIS-0916129		80,788
AF: SMALL: COLLABORATIVE RESEARCH: ONLINE SCHEDULING ALGORITHMS FOR NETWORKED SYSTEMS AND APPLICATIONS	47.070	CCF-0915425		79,902
CAREER: MULTIREOLUTION FOUNDATIONS FOR PHYSICS-BASED COMPUTER ANIMATION AND INTERACTIVE ENGINEERING DESIGN	47.070	IIS-0643268	SUP	79,560
CIF: SMALL: REMOVING INHERENT INSTABILITIES IN COMMUNICATION NETWORKS	47.070	CCF-0915784		73,638
NETSE: MEDIUM: ENERGY HARVESTING ACTIVE NETWORKED TAGS - ENHANT	47.070	CCF-0964497	ZUS	71,269
CPA-CSA: PHOTONIC INTERCONNECTION NETWORKS FOR CHIP-MULTIPROCESSOR COMPUTING SYSTEMS	47.070	CCF-0811012		70,225
AF: SMALL: HOW TO LET AN ADVERSARY COMPUTE FOR YOU	47.070	CCF-1116702		69,301
SHF: MEDIUM: TYPE-SPECIFIC INSTRUCTION PROCESSING	47.070	CCF-1065338		68,890
SHF: SMALL: INTEGRATED INFRASTRUCTURES FOR ON-CHIP COMMUNICATION AND POWER MANAGEMENT IN MESSAGE-PASSING MULTICORE PROCE	47.070	CCF-1018236		68,589
COLLABORATIVE RESEARCH: TRANSLATING PROSODY IN AN ENGLISH/ CHINESE LANGUAGE TUTORING SYSTEM	47.070	IIS-05-34568		67,156
PROMOTING SECONDARY SPECTRUM MARKETS VIA PROFITABILITY-DRIVEN METHODS AND ALGORITHMS	47.070	CCF-0964170		61,614
RI: LARGE: COLLABORATIVE RESEARCH: RICHER REPRESENTATIONS FOR MACHINE TRANSLATION	47.070	IIS-0910778		56,585
RI: SMALL: AN ADVANCED LEARNING PARADIGM: LEARNING USING HIDDEN INFORMATION	47.070	IIS-0916200		55,156
RI: SMALL: LEARNING AND INFERENCE WITH PERFECT GRAPHS	47.070	IIS-1117631	MC1	54,727
GOALI: COLLABORATIVE RESEARCH: CPS: MEDIUM: METHODS FOR NETWORK-ENABLED EMBEDDED MONITORING AND CONTROL FOR HIGH-PERFORM	47.070	CNS-0931870		50,031
RI: SMALL: LEARNING AND INFERENCE WITH PERFECT GRAPHS	47.070	IIS-1117631		49,779
NETSE: SMALL COLLABORATIVE RESEARCH: INTEGRATING REAL TIME TRAFFIC SIGNAL CONTROL WITH NETWORKING CONTROL STRATEGIES TO	47.070	CNS-0915026		49,517
NSF CAREER: TRUSTWORTHY HARDWARE FROM UNTRUSTWORTHY COMPONENTS	47.070	CCF-1054884		48,598
CSR: LARGE COLLABORATIVE RESEARCH: IM PROVING SOFTWARE RELIABILITY THROUGH SEMANTIC SIMILARITY BUG SEARCH	47.070	CNS-1012633		48,254
RI-MEDIUM: COLLABORATIVE: CORPUS-BASED STUDIES OF LEXICAL, ACOUSTIC-PROSODIC, AND DISCOURSE ENTRAINMENT IN SPOKEN DIALOG	47.070	IIS-0803148		45,646
COLLABORATIVE RESEARCH: EMT/MISC: MAKING MOLECULAR COMPUTATION PRACTICAL FOR BIODETECTION APPLICATIONS	47.070	CCF-0829793		45,462
SOCIAL INFORMATION DISSEMINATION: A MARKET BASED APPROACH	47.070	CCF-1139915	CHE	41,832
RI: SMALL: COLLABORATIVE RESEARCH: VISUAL ATTRIBUTES FOR IDENTIFICATION AND SEARCH IN IMAGES	47.070	IIS-1117170		40,857
NETS: SMALL: TOWARD ALL VIDEOS ON DEMAND	47.070	CNS-1017934		40,700
CRI:IAD- A PRESSING NEED FOR OBSERVATION, FACILITATION AND COMPUTER SUPPORT OF GROUP INTERACTION FOR ADVANCING UNITED ST	47.070	CNS-1037598		38,635
TC: SMALL: EXPLOITING SOFTWARE ELASTICITY FOR AUTOMATIC SOFTWARE SELF-HEALING	47.070	CNS-0914845	KER	38,621
CSR: MEDIUM: GUANYIN: A THOUSAND HANDS WITH A THOUSAND EYES FOR DISTRIBUTED SOFTWARE CHECKING	47.070	CNS-0905246	NIE	37,570
NETSE: MEDIUM: ENERGY HARVESTING ACTIVE NETWORKED TAGS - ENHANT	47.070	CCF-0964497	KIN	36,828
CSR: LARGE COLLABORATIVE RESEARCH: IM PROVING SOFTWARE RELIABILITY THROUGH SEMANTIC SIMILARITY BUG SEARCH	47.070	CNS-1012633	GRA	36,156
CSR: SMALL: LOOM: A LANGUAGE AND SYSTEM FOR BYPASSING AND DIAGNOSING CONCURRENCY ERRORS	47.070	CNS-1117805		34,048
NETSE: MEDIUM: ENERGY HARVESTING ACTIVE NETWORKED TAGS - ENHANT	47.070	CCF-0964497	XIA	33,369
RI: EMAIL, SOCIAL NETWORKS, AND ORGANIZATIONS: INVESTIGATING HOW WE USE LANGUAGE TO CREATE AND NAVIGATE SOCIAL AND ORGAN	47.070	IIS-07-13548		33,217

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R&D Cluster, continued

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CYBERGRID NETWORKS - CYBER-ENABLED GLOBAL RESEARCH INFRASTRUCTURE FOR DESIGN NETWORKS	47.070	IIS-0943069		30,712
INCREMENTAL WIZARD ABLATION: A NOVEL WOZ PARADIGM FOR LEARNING, TESTING AND EVALUATING HUMAN-MACHINE DIALOG...	47.070	IIS-0745369		27,432
EAGER: COLLABORATIVE RESEARCH: HETEROGENEOUS CORES, MEMORY- HIERARCHY AND COMMUNICATION ARCHITECTURES FOR FUTURE CMPS	47.070	CCF-1147406		27,091
TC: SMALL: COLLABORATIVE RESEARCH: PROTECTING NETWORKS FROM LARGE-SCALE PHYSICAL ATTACKS AND DISASTERS	47.070	CNS-1018379		26,514
COLLABORATIVE RESEARCH: EMT/MISC: MAKING MOLECULAR COMPUTATION PRACTICAL FOR BIODETECTION APPLICATION	47.070	CCF-0829793		23,746
ANALYSIS AND DISPLAY OF SEMANTICS OF STRUCTURED AND UNSTRUCTURED VIDEOS	47.070	IIS-07-13064		20,174
WORKSHOP: UIST 2011 DOCTORAL SYMPOSIUM	47.070	IIS-1137247		20,000
TC: SMALL: EXPLOITING SOFTWARE ELASTICITY FOR AUTOMATIC SOFTWARE SELF-HEALING	47.070	CNS-0914845		18,810
CRI: CRD: COLLABORATIVE RESEARCH: LARGE ANALYTICS LIBRARY AND SCALABLE CONCEPT ONTOLOGY FOR MULTIMED	47.070	CNS-07-51078		18,682
WORKSHOP ON INTERACTIVE SYSTEMS IN HEALTHCARE (WISH) 2011	47.070	IIS-1152556	PAR	15,784
CI-P: COLLABORATIVE RESEARCH: SUMMARIZING OPINION AND SPEAKER ATTITUDE IN SPEECH	47.070	CNS-1059260		15,650
NETS: SMALL: TOWARD ALL VIDEOS ON DEMAND	47.070	CNS-1017934	PAR	15,177
CSR: SMALL: FLUID COMMUNICATION FOR PARALLEL PROGRAMS	47.070	CNS-1117135	PST	15,000
CAREER: MULTIREOLUTION FOUNDATIONS FOR PHYSICS-BASED COMPUTER ANIMATION AND INTERACTIVE ENGINEERING DESIGN	47.070	CCF-0643268		14,250
COLLABORATIVE RESEARCH: A MULTIREPRESENTATIONAL & MULTILAYERED TREEBANK FOR HINDI/URDU	47.070	CNS-0751089		13,377
CROSS-LEVERAGING LEARNING THEORY WITH CRYPTOGRAPHY	47.070	CNS-07-16245	SER	12,414
CAREER: MAKING THREATS MORE DETERMINISTIC BY MEMOIZING SCHEDULES	47.070	CNS-1054906		12,061
SOCIAL INFORMATION DISSEMINATION: A MARKET BASED APPROACH	47.070	CCF-1139915	AUG	11,686
COLLABORATIVE RESEARCH: EMT/MISC: MAKING MOLECULAR COMPUTATION PRACTICAL FOR BIODETECTION APPLICATIONS	47.070	CCF-0829793		10,886
SHF: SMALL: INTEGRATED INFRASTRUCTURES FOR ON-CHIP COMMUNICATION AND POWER MANAGEMENT IN MESSAGE-PASSING MULTICORE PROCE	47.070	CCF-1137788	SUP SUP	10,550
STUDENT TRAVEL SUPPORT FOR THE 2011 USENIX ANNUAL TECHNICAL CONFERENCE	47.070	CNS-1137962		10,000
RI-MEDIUM: COLLABORATIVE: CORPUS-BASED STUDIES OF LEXICAL, ACOUSTIC-PROSODIC, AND DISCOURSE ENTRAINMENT ACOUSTIC-PROSODI	47.070	IIS-0803148	PST	9,622
CPA-CSA: PHOTONIC INTERCONNECTION NETWORKS FOR CHIP-MULTIPROCESSOR COMPUTING SYSTEMS	47.070	CCF-0811012	BER	9,196
TRUSTWORTHY MEDIA-BLIND PASSIVE MEDIA FORENSICS FOR CONTENT INTEGRITY VERIFICATION	47.070	CNS-07-16203		8,032
COLLABORATIVE PROPOSAL: EMT/MISC: BEHAVIOR-BASED MOLECULAR ROBOTICS	47.070	CCF-0829744		8,000
RI: EMAIL, SOCIAL NETWORKS, AND ORGANIZATIONS: INVESTIGATING HOW WE USE LANGUAGE TO CREATE AND NAVIGATE SOCIAL AND ORGAN	47.070	IIS-1138548	SUP	8,000
III: SMALL: COLLABORATIVE RESEARCH: DETECTION AND PRESENTATION OF COMMUNITY AND GLOBAL EVENT CONTENT FROM SOCIAL MEDIA S	47.070	IIS-1017389		7,713
EFFICIENT ALGORITHMS FOR PROBLEMS IN THE NEXT GENERATION OF COMPUTING	47.070	CCF-0728733		5,877
RUI: CRI: CI-ADDO-EN: COLLABORATIVE RESEARCH: MASC: A COMMUNITY RESOURCE FOR AND BY THE PEOPLE	47.070	CNS-1059246		5,868
TRAVEL SUPPORT FOR ACM SIGMETRICS CONFERENCE 2011; SAN JOSE, CA JUNE 7-11	47.070	CNS-1136204		5,756
SMALL AUTOMATIC LYRIC TRANSCRIPTION FOR MUSIC AUDIO	47.070	IIS-1117015		5,533
TC: SMALL: COLLABORATIVE RESEARCH: PROTECTING NETWORKS FROM LARGE-SCALE PHYSICAL ATTACKS AND DISASTERS	47.070	CNS-1018379	REU	5,420
SHF: MEDIUM: TYPE-SPECIFIC INSTRUCTION PROCESSING	47.070	CCF-1065338	STE	5,290
CT-T: ENABLING COLLABORATIVE SELF-HEALING SOFTWARE SYSTEMS	47.070	CNS-06-27473	002	4,534
EAGER: USING SOCIAL MEDIA AND CROWDSOURCING TO CREATE A NEW AFFECT DICTIONARY	47.070	IIS-1145505		4,532
COLLABORATIVE PROPOSAL: EMT/MISC: BEHAVIOR-BASED MOLECULAR ROBOTICS	47.070	NSF CCF-0829744		4,422

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ACM MULTIMEDIA 2010 STUDENT TRAVEL SUPPORT	47.070	IIS-1042524		3,500
ENHANCING INTERDISCIPLINARY RESEARCH IN SECURITY AND COMPUTER ARCHITECTURE VIA TUTORIAL AT FCRC	47.070	CNS-1137656		3,395
CT-ISG: COLLABORATIVE RESEARCH: TAMPER PROOFING CRYPTOGRAPHIC OPERATIONS	47.070	CNS-0831094		2,818
HRI: COLLABORATIVE PROPOSAL: INCREMENTAL WIZARD ABLATION: A NOVEL WOZ PARADIGM FOR LEARNING, TESTING AND EVALUATING HUMA	47.070	IIS-0745369	PAR	2,450
NSF WORKSHOP ON HYBRID NEURO-COMPUTER VISION SYSTEMS	47.070	IIS-0958402		2,333
BUILDING DISTRIBUTED COMPUTATIONAL PLATFORMS ON TOP OF A NETWORK OF MULTIPLE CABLE SET-TOP DEVICES	47.070	CNS-06-44202		2,210
NETSE: MEDIUM: ENERGY HARVESTING ACTIVE NETWORKED TAGS - (ENHANTS)	47.070	CCF-0964497	PAR	1,522
SMALL: AN INFORMATION ACCOUNTABILITY ARCHITECTURE FOR DISTRIBUTED ENTERPRISE SYSTEMS	47.070	CNS-1139808	PAR	1,235
SHF: MEDIUM: COMPILING PARALLEL ALGORITHMS TO MEMORY SYSTEMS	47.070	CCF-1162124		1,128
COLLAB RES: CSR-AES: INTERACTIVE PARALLEL PLATFORMS FOR MULTI-EXPERIMENT COMPUTATIONAL STUDIES	47.070	CNS-06-14770		1,046
WORKSHOP ON INTERACTIVE SYSTEMS IN HEALTHCARE (WISH) 2011	47.070	IIS-1152556		786
CI-P: CREATION OF AN ANNOTATED REPOSITORY OF MULTILINGUAL AND MULTIGENRE CODE SWITCHED DATA FOR SEVERAL LANGUAGE PAIRS	47.070	CNS-0958440		644
CORPUS-BASED NARRATIVE SEMANTICS	47.070	IIS-0935360		391
CROSS-LEVERAGING LEARNING THEORY WITH CRYPTOGRAPHY	47.070	CNS-07-16245		161
COLLABORATIVE RESEARCH: CRI: IAD: A TESTBED FOR RESEARCH AND DEVELOPMENT OF NEXT GENERATION 9-1-1	47.070	CNS-07-51094		149
CYBERGRID NETWORKS - CYBER-ENABLED GLOBAL RESEARCH INFRASTRUCTURE FOR DESIGN NETWORKS	47.070	IIS-0943069	PAR	-215
CT-ISG: PACKETSPREAD: PRACTICAL NETWORK CAPABILITIES	47.070	CNS-0714277		-551
CT-T: ENABLING COLLABORATIVE SELF-HEALING SOFTWARE SYSTEMS	47.070	CNS-06-27473		-853
INTEGRATED TECHNOLOGY RESEARCH FOR NATIONAL PRIORITIES: SECURE REMOTE COMPUTING SERVICES	47.070	CNS-04-26623	A02	-2,022
INTEGRATED TECHNOLOGY RESEARCH FOR NATIONAL PRIORITIES: SECURE REMOTE COMPUTING SERVICES	47.070	CNS-04-26623	A03	-3,015
TC: SMALL: IMPROVING SYSTEM SECURITY THROUGH VIRTUAL LAYERED FILE SYSTEMS	47.070	CNS-1018355		-20,192
				\$6,043,063

Biological Sciences

CNH: FIRES IN WESTERN AMAZONIA: UNDERSTANDING AND MODELING THE ROLES OF CLIMATIC, SOCIAL, DEMOGRAPHIC, AND LAND USE CHAN	47.074	DEB-0909475		449,975
THE MOLECULAR BASIS OF CADHERIN-MEDIATED CELL ADHESION	47.074	MCB-0918535		208,262
COLLABORATIVE RESEARCH: KIN STRUCTURE, CONFLICT AND CASTE FORMATION: THE EVOLUTION OF SOCIALITY IN SYNALPHEUS	47.074	IOS-1121435		142,291
MECHANISMS FOR SENSORY PREDICTION IN A CEREBELLUM-LIKE CIRCUIT	47.074	IOS-1025849		132,868
COLLABORATIVE RESEARCH-BIOCHEMICALLY-CONSTRAINED GENOMIC SIGNAL PROCESSING (BIOGSP): A MULTI SCALE APPROACH TO REGULATOR	47.074	DBI-0850030		132,565
RCN: TRAITNET-COORDINATING TRAIT-BASED ECOLOGICAL AND EVOLUTIONARY RESEARCH	47.074	IOS-0639161		103,981
ASSIGNMENT AND STRUCTURAL CHARACTERIZATION OF UNIFORMLY LABELED PROTEINS BY SOLID STATE NMR	47.074	MCB-07-49381		98,531
CAREER: THE ROLE OF RIBOSOME CONFORMATIONAL DYNAMICS ON THE MECHANISM OF PROTEIN SYNTHESIS	47.074	MCB-06-44262		90,031
CAREER: USING ADVANCED STATISTICAL TECHNIQUES TO DECIPHER THE NEURAL CODE	47.074	IOS-06-41912		80,052
ULTRA-EX: EXPLORING LINKAGES BETWEEN ECOSYSTEM SERVICES, PUBLIC HEALTH AND THE GREEN AREA FACTOR IN NEW YORK CITY	47.074	DEB-0949387	UDL	72,414
CAREER: USING HIGH-THROUGHPUT SINGLE-MOLECULE ANALYSIS TO REVEAL THE MECHANISMS OF TARGET SITE LOCATION BY DNA REPAIR PR	47.074	MCB-0544638		61,951
SYNTHESIS OF THREE DECADES OF RESEARCH ON TREE GROWTH IN NORTHERN FORESTS IN RELATION TO GLOBAL CLIMATIC CHANGE	47.074	DEB-0948827		56,198
COLLABORATIVE RESEARCH: FIRE, CLIMATE, AND FOREST HISTORY IN MONGOLIA	47.074	DEB-1049714		55,683
ULTRA-EX: EXPLORING LINKAGES BETWEEN ECOSYSTEM SERVICES, PUBLIC HEALTH AND THE GREEN AREA FACTOR IN NEW YORK CITY	47.074	DEB-0949387		52,005

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ULTRA-EX: EXPLORING LINKAGES BETWEEN ECOSYSTEM SERVICES, PUBLIC HEALTH AND THE GREEN AREA FACTOR IN NEW YORK CITY	47.074	DEB-0949387	CRE	40,329
MODELING SUCCESSIONAL VEGETATION DYNAMICS IN WET TROPICAL FOREST AT MULTIPLE SPATIAL AND TEMPORAL SCALES: INTEGRATING NE	47.074	DEB-1050957		38,427
COLLABORATIVE RESEARCH: CLIMATE CHANGE IMPACT	47.074	EF-1137239		37,650
IPY: AUTOTROPHIC RESPIRATION IN A CHANGING ARCTIC CLIMATE: MECHANISTIC RESPONSES AND ECOSYSTEM CONSE	47.074	EF-0732664		33,998
INTERACTIONS BETWEEN CHANGING CLIMATE AND TECHNOLOGICAL INNOVATIONS IN AGRICULTURAL DECISION-MAKING: IMPLICATIONS	47.074	EF-07-09701		33,040
MINIATURIZED CALORIMETRIC INSTRUMENTS FOR PROBING BIOMOLECULAR ENERGETICS	47.074	DBI-06-50020		27,442
EPIGENETIC REGULATION BY EGGLESS, A HISTONE METHYLTRANSFERASE, IN OÖGENESIS AND DEVELOPMENT	47.074	IOS-0744814		24,852
COLLABORATIVE RESEARCH: MECHANISMS INFLUENCING SEEDING RECRUITMENT AND ESTABLISHMENT IN A FRAGMENTED	47.074	DEB-0614339		6,547
COLLABORATIVE RESEARCH: THE IMPACT OF ECONOMIC GLOBALIZATION ON HUMAN DEMOGRAPHY, LAND USE AND NATURAL SYSTEMS IN LATIN	47.074	EF-07-09606		6,234
COLLABORATIVE RES: TESTING BIODIVERSITY-ECOSYSTEM FUNCTIONING RELATIONSHIPS IN AN ECOLOGICAL STOICHIOMETRY FRAMEWORK....	47.074	DEB-0618186		5,966
USING DNA CURTAINS TO REVEAL THE MECHANISMS OF TARGET SITE LOCATION BY DNA BINDING PROTEINS	47.074	MCB-1154511		4,856
COLLABORATIVE RESEARCH: CHARACTERIZATION OF LIPO-PEPTIDES FOR USE AS A BIO-DISPERSANTS TO CLEAN-UP OIL SPILLS	47.074	MCB-1059170		764
				\$1,996,912
Social, Behavioral, and Economic Sciences				
UNDERSTANDING AND IMPROVING ENVIRONMENTAL DECISIONS	47.075	SES-0951516		991,412
UNDERSTANDING PUBLIC OPINION AND POLICYMAKING USING MULTILEVEL REGRESSION AND POSTSTRATIFICATION	47.075	SES-1023189		208,893
CAREER: INTEGRATING NEUROIMAGING AND PATIENT STUDIES OF LEARNING DECISION MAKING	47.075	BCS-0955494		200,726
TEMPORAL DISCOUNTING OF SOCIAL GOALS	47.075	SES-0820496		189,430
AN INVESTIGATION INTO THE ACHILLES' HEEL OF CURRENCY PEGS	47.075	SES-1061711		115,166
COLLABORATIVE RESEARCH: IDENTIFICATION, ESTIMATION AND INFERENCE OF DSGE MODELS	47.075	SES-0962431		107,480
PRICES IN SPACE AND TIME	47.075	SES-11227493		106,640
TPÉ 1-L02170337: COLLABORATIVE RESEARCH: USE OF CLIMATE INFORMATION IN INTERNATIONAL NEGOTIATION FOR ADAPTATION RESOURCE	47.075	SES-1048946		95,815
BENEFITS AND DRAWBACKS OF INDIVIDUAL AND GROUP DECISIONS: INSIGHTS FOR ENVIRONMENTAL DECISION MAKING	47.075	SES-07-20452		92,973
EARTH INSTITUTE: INDIVIDUAL AND GROUP DECISION MAKING UNDER CLIMATE UNCERTAINTY	47.075	SES-03-45840 EIS	EIS	92,905
GOVERNMENT RESPONSES TO NETWORK FAILURES: THE CASE OF THE MANUFACTURING EXTENSION PARTNERSHIPS	47.075	SBE-0965187		88,981
NATURE-BASED TOURISM IN URBANIZING ECONOMIES: THE CASE OF INDIA'S PROTECTED AREAS	47.075	BCS-1029219	LDE	88,229
DEVELOPMENT OF DYNAMIC RISKY DECISION MAKING: BEHAVIORAL PHENOMENA AND NEURAL UNDERPINNINGS	47.075	SES-0922743		86,342
COLLABORATIVE RESEARCH: CLIMATOLOGICAL VEGETATIONAL AND ANTHROPOGENIC CONTROLS ON CHANNELIZATION AND SHALLOW LANDSLIDING	47.075	BCS-1063231		82,990
IMPROVED SEMI-NONPARAMETRIC ESTIMATION AND TESTING BY MODIFIED LIKELIHOOD	47.075	SES-0961596		73,074
GAINING KNOWLEDGE FROM OTHER PATIENTS: STRUCTURING AND SEARCHING THE CONTENT OF HEALTH-RELATED WEB POSTS	47.075	BCS-1027886		72,378
COLLABORATIVE RESEARCH: USE OF CLIMATE INFORMATION IN INTERNATIONAL NEGOTIATION FOR ADAPTATION RESOURCES	47.075	SES-1048946	GER	68,609
UNDERSTANDING THE DETERMINANTS OF HOUSEHOLD DEFAULT DECISIONS IN THE MORTGAGE CRISIS	47.075	SES-1124188		68,483
COLLABORATIVE RESEARCH: PREDATORY LENDING, PREDATORY BORROWING, AND THE MORTGAGE CRISIS: EVIDENCE FROM LOAN-LEVEL DATA F	47.075	SES-0851428		68,196
HSD: COLLABORATIVE RESEARCH: HUMAN-RELATED FACTORS AFFECTING EMERGING INFECTIOUS DISEASES	47.075	BCS-0826840		68,041
NATURE-BASED TOURISM IN URBANIZING ECONOMIES: THE CASE OF INDIA'S PROTECTED AREAS	47.075	BCS-1029219		61,384
TOPICS IN DYNAMIC PANEL DATA ANALYSIS, TIME-VARYING INDIVIDUAL HETEROGENEITIES, AND CROSS-SECTIONAL DEPENDENCE	47.075	SES-0962410		57,678
TWO PROJECTS ON MARKET DESIGN	47.075	SES-1023818		57,471

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THE WELL-BEING OF MIGRANT CHILDREN AND CHILDREN LEFT BEHIND	47.075	SES-1027048		54,091
DMUU: INDIVIDUAL AND GROUP DECISION MAKING UNDER CLIMATE UNCERTAINTY	47.075	SES-03-45840 EIS	EIS	53,988
HETEROGENEITY INDIVIDUAL DECISION MAKING AND MATCHING EQUILIBRIA UNDER UNCERTAINTY	47.075	SES-1124277		53,320
HOW NETWORK STRUCTURES EXPLAIN CREATIVITY	47.075	SES-1123807		48,236
BENEFITS AND DRAWBACKS OF INDIVIDUAL AND GROUP DECISIONS: INSIGHTS FOR ENVIRONMENTAL DECISION MAKING	47.075	SES-07-20452	REU	47,797
COLLABORATIVE RESEARCH: SES 98-1320: INNOVATION PERSONNEL AND THEIR ECOSYSTEM: CAREER CHOICES AND TRAJECTORIES OF SCIENT	47.075	SMA-1025226		46,454
THE CONSEQUENCES OF MIGRATION FOR CHILD WELL-BEING IN SENDING AREAS: A LONGITUDINAL ANALYSIS IN MEXICO AND INDONESIA	47.075	SES-0921090		42,329
MARKET DESIGN WITH FINANCIALLY CONSTRAINED AGENTS	47.075	SES-0721053		38,677
STRATEGIES OF VIOLENCE AND CHANGES IN WAR TERMINATION	47.075	BCS-0904791		35,588
COLLABORATIVE RESEARCH: MULTICENTURY DROUGHT RECONSTRUCTIONS FROM GUATEMALA AND THE CONTEXT FOR PAST AND FUTURE HYDROCLI	47.075	BCS-0852652		34,624
UNDERSTANDING AND IMPROVING ENVIRONMENTAL DECISIONS	47.075	SES-0951516	PAR	31,919
UNDERSTANDING AND IMPROVING ENVIRONMENTAL DECISIONS	47.075	SES-0951516	LAM	26,256
GROUP SIZE AND REPRODUCTIVE SUCCESS OF FEMAL AND MALE BLUE MONKEYS	47.075	BCS-1028471	OFF	25,164
POSTDOCTORAL FELLOWSHIP: DESENSITIZING TRAUMA SUFFERS	47.075	SES-1027431		20,125
COLLABORATIVE RESEARCH: A MULTI-METHOD APPROACH TO STIGMA AND STATUS	47.075	BCS-0819436		19,863
INTEGRATING MICRO AND MACRO EVIDENCE ON PRICE DYNAMICS	47.075	SES-1056107		16,827
COLLABORATIVE RESEARCH: GEOGRAPHY, TRADE, AND PRICES	47.075	SES-0820462		16,507
COLLABORATIVE RESEARCH: TRANSFORMATIONS IN POLITICAL PARTY ORGANIZATIONS AND THE RISE CANDIDATE-CEN	47.075	SES-0959200		16,264
KNOWLEDGE TRANSFER AND THERAPEUTICS OF THE SELF IN MOROCCO	47.075	BCS-1123214		9,762
EDUCATION PRODUCTION AND PEER NETWORKS AMONG OUT-OF-SCHOOL CHILDREN INDIA	47.075	SES-0551333		9,657
NETWORK DYNAMICS IN AN EMERGING DEMOCRACY	47.075	SES-06-16802		9,016
DDIG: THE EFFECTS OF WASTE MANAGEMENT ON PERCEPTIONS OF GOVERNANCE AND ON CIVIC ENGAGEMENT IN TWO WEST BANK MUNICIPALITI	47.075	BCS-0921333		8,845
DOCTORAL DISSERTATION RESEARCH IN DRMS: DISCOUNTING FUTURE LOSSES	47.075	SES-1024599		8,441
USING COMPUTATIONAL TOOLS TO FACILITATE CORPUS COLLECTION AND LANGUAGE USE IN ARRERNT	47.075	BCS-1160700		7,133
DOCTORAL DISSERTATION RESEARCH: EARTHQUAKE ANTICIPATION IN ISTANBUL	47.075	BCS-1123983		6,692
COLLABORATIVE RESEARCH: UNDERSTANDING DYNAMIC RESPONSE TO HURRICANE WARNINGS- IMPLICATIONS FOR COMMUNICATION AND RESEARC	47.075	SES-1238317		5,894
ENHANCING THE METHODOLOGICAL REPERTOIRE OF HISTORICAL RESEARCH IN THE SOCIAL SCIENCES	47.075	SES-0818938		5,023
UNDERSTANDING AND IMPROVING ENVIRONMENTAL DECISIONS - HUMAN SUBJECT SCOPE	47.075	SES-0951516	HUM	4,525
STATISTICAL ANALYSIS FOR COGNITIVE ASSESSMENT	47.075	SES-1123698		3,792
CENTER FOR THE STUDY OF INDIVIDUAL AND GROUP DECISION MAKING UNDER CLIMATE UNCERTA	47.075	SES-03-45840		2,905
ADVANCE INSTITUTIONAL TRANSFORMATION AWARD: EARTH INSTITUTE OF COLUMBIA UNIVERSITY	47.075	SBE-02-45014	APS	2,561
NETWORK DYNAMICS IN AN EMERGING DEMOCRACY	47.075	SES-06-16802	DCS	1,777
APPLICATION OF MARKOV CHAIN THEORY TO IDENTIFY HEALTH DISPARITIES	47.075	NSF SES-1059573		1,500
LATENT SPACE MODELS FOR AGGREGATED RELATIONAL DATA IN SOCIAL SCIENCES	47.075	SES-1023176		960
DOCTORAL DISSERTATION IMPROVEMENT GRANT: CROSS-CULTURAL RESEARCH ON PSYCHIATRY, GENDER AND CHILDHOOD	47.075	BCS-0962441		899
DOCTORAL DISSERTATION RESEARCH IN POLITICAL SCIENCE: WHAT DRIVES CIVIC INTERGRATION? ANALYZING IMMIGRANT-MINORITY IDENTI	47.075	SES-1065792		819

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DOCTORAL DISSERTATION IMPROVEMENT GRANT: HEALING HEARTS AND TRAINING MINDS IN EL SALVADOR: PEDIATRIC HEART SURGERY MISSI	47.075	SES-1026733		330
ADMINISTRATIVE JUSTICE IN PUBLIC WELFARE BUREAUCRACIES	47.075	SES-0849193		157
GROUP SIZE AND REPRODUCTIVE SUCCESS OF FEMALE AND MALE BLUE MONKEYS	47.075	BCS-1028471		39
DOCTORAL DISSERTATION RESEARCH: HIV PROGRAM SCALE-UP AND POLITICAL WORLDS IN LESOTHO	47.075	SES-1024097		-233
THE QUANDARY OF ENVIRONMENTAL RESEARCH: A HISTORY OF LEAD, CHILDREN AND SCIENTIFIC INVESTIGATION 1970-2000	47.075	SES-0750673		-6,396
				\$3,855,423

Education and Human Resources

GRADUATE RESEARCH FELLOWSHIP PROGRAM (GRFP)	47.076	DGE-1144155		3,500,834
IGERT: SOLVING URBANIZATION CHALLENGES BY DESIGN - A NEW PHD PROGRAM BETWEEN ARCHITECTURE AND ENGINE	47.076	DGE-0903597	PAR	346,423
IGERT: OPTICAL TECHNIQUES FOR ACTUATION, SENSING AND IMAGING OF BIOLOGICAL SYSTEMS	47.076	DGE-0801530	PAR	266,760
REDUCING THE RACIAL ACHIEVEMENT GAP IN STEM: A SOCIAL-NEUROLOGICAL INVESTIGATION AND VALUES-AFFIRMATION INTERVENTION	47.076	DRL-1109548		259,311
TECHNOLOGY, RESEARCH AND ECOLOGY EXCHANGE STUDIES	47.076	DRL-0929796		225,268
IGERT: SOLVING URBANIZATION CHALLENGES BY DESIGN - A NEW PHD PROGRAM BETWEEN ARCHITECTURE AND ENGINEERING	47.076	DGE-0903597	PAR	130,374
IGERT: OPTICAL TECHNIQUES FOR ACTUATION, SENSING AND IMAGING OF BIOLOGICAL SYSTEMS	47.076	DGE-0801530		126,817
TECHNOLOGY, RESEARCH AND ECOLOGY EXCHANGE STUDIES	47.076	DRL-0929796	PAR	119,751
CRPA: SHRINKING GLACIERS: A CHRONOLOGY OF CLIMATE CHANGE	47.076	DRL-1103833		103,674
COLLABORATIVE RESEARCH: FIRE: MAKING MEANING FROM GEOSCIENCE DATA: A CHALLENGE AT THE INTERSECTION OF GEOSCIENCES AND CO	47.076	DRL-1138616		93,436
COLLABORATIVE RESEARCH: BRIDGING BETWEEN TABLETOP MODELS AND THE EARTH SYSTEM	47.076	DRL-0909982		79,196
IGERT: ENGINEERING PHOTONS FOR A SUSTAINABLE FUTURE	47.076	DGE-1069240		78,533
IGERT: ENGINEERING PHOTONS FOR A SUSTAINABLE FUTURE	47.076	DGE-1069240	PAR	69,837
IGERT: SOLVING URBANIZATION CHALLENGES BY DESIGN - A NEW PHD PROGRAM BETWEEN ARCHITECTURE AND ENGINE	47.076	DGE-0903597		48,842
COLLABORATIVE RESEARCH: BRIDGING BETWEEN TABLETOP MODELS AND THE EARTH SYSTEM	47.076	DRL-0909982	PAR	3,286
NSF PRESIDENTIAL AWARD FOR EXCELLENCE IN SCIENCE, MATHEMATICS AND ENGINEERING MENTORING (GERARD PARKIN) (PAESMEM)	47.076	DUE-0933971		62
YEAR 2: COLLABORATIVE RESEARCH: CONSTRUCTING MENTAL IMAGES OF GEOLOGIC STRUCTURES FROM FIELD OBSERVATIONS	47.076	DRL-0411823		-2
				\$5,452,402

Polar Programs

CONTINUED DEVELOPMENT OF THE AMBS AS AN INTEGRATED ONLINE RESOURCE FOR MARINE AND GEOPHYSICAL DATA FROM THE ANTARCTIC RE	47.078	ANT-0739330		356,112
CCEP-I: POLAR LEARNING AND RESPONDING (POLAR) CLIMATE PARTNERSHIP	47.078	ANT-1043271		353,685
COLLABORATIVE RESEARCH: IPY GAMBIT: GAMBURSTEV GAMBURSTEV AEROGEOPHYSICAL MAPPING	47.078	ANT-0632292		320,878
COLLABORATIVE RES: A MODULAR APPROACH TO BUILDING AN ARCTIC OBSERVING SYSTEM FOR IPY AND BEYOND IN THE SWITCHYARD REGION	47.078	ARC-06-33878		319,900
LONG-TERM OBSERVATIONS IN THE SWITCHYARD REGION OF THE ARCTIC OCEAN AS PART OF THE ARCTIC OBSERVING NETWORK (AON)	47.078	ARC-1023529		308,799
COLLABORATIVE RESEARCH: SINKING RATES AND NUTRITIONAL QUALITY OF ORGANIC MATTER EXPORTED FROM SEA ICE; THE IMPORTANCE OF	47.078	ARC-1023348		180,786
COLLAB RES: GAS TRANSFER THROUGH POLAR SEA ICE (GAPS)-MECHANISMS OF TURBULENCE PRODUCTION IN THE SEASONAL ICE ZONE AND I	47.078	ANT-0944643		163,460
LONG-TERM OBSERVATIONS IN THE SWITCHYARD REGION OF THE ARCTIC OCEAN AS PART OF THE ARCTIC OBSERVING NETWORK (AON)	47.078	ARC-1023529	ENG	148,127
SUBGLACIAL LAKES AND THE ONSET OF ICE STREAMING: RECOVERY LAKES	47.078	ANT-0636883		147,312
COLLABORATIVE RESEARCH: SAMPLING THE OCEAN - SEA ICE INTERACTION IN THE PACIFIC CENTER OF THE ANTARCTIC	47.078	ANT-0739509		134,309
COLLABORATIVE RESEARCH: EAST ANTARCTIC OUTLET GLACIER CONTRIBUTIONS TO THE ROSS SEA FROM CHRONOLOGY OF DETRITAL GRAINS	47.078	ANT-1043619		126,330
COLLABORATIVE RESEARCH: THE IMPACT OF STRATOSPHERIC OZONE DEPLETION/RECOVERY ON ANTARCTIC CLIMATE	47.078	ANT-0944063		118,370

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

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R&D Cluster, continued

Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
DYNAMIC AND GEOCHEMICAL EVOLUTION OF THE LITHOSPHERIC MANTLE BENEATH THE WESTERN ROSS SEA AREA, ANTARCTICA	47.078	ANT-1043540		112,933
COLLABORATIVE RESEARCH: SAM'S CONTRIBUTION TO INCREASED OCEAN HEAT CONTENT ON THE CONTINENTAL SHELF OF THE WESTERN ANTAR	47.078	ANT-0944211		101,312
CCÉP-I: POLAR LEARNING AND RESPONDING (POLAR) CLIMATE PARTNERSHIP	47.078	ANT-1043271	LDE	98,523
HISTORY OF THE EAST ANTARCTIC ICE SHEET SINCE THE MID-MIOCENE: NEW EVIDENCE FROM PROVENANCE OF ICE RAFTED DEBRIS	47.078	ANT-0944489		95,239
ARCTIC OCEAN VISUALIZATION AND OUTREACH	47.078	ARC-1022544		94,772
COLLABORATIVE RESEARCH IN IPY: ABRUPT ENVIRONMENTAL CHANGE IN THE LARSEN ICE SHELF SYSTEM, A MULTI-DISCIPLINARY...	47.078	ANT-07-32651		90,574
COLLABORATIVE RESEARCH: EFFECTS OF WARMING INDUCED INCREASES IN SHRUB ABUNDANCE AND CHANGING SEASONALITY ON MIGRATORY SO	47.078	ARC-0908444		88,195
COLLABORATIVE RESEARCH: ATMOSPHERE-OCEAN-ICE INTERACTION IN A COASTAL POLYNA	47.078	ANT-0739519		86,497
COLLABORATIVE RESEARCH: PLEISTOCENE EAST ANTARCTIC ICE SHEET HISTORY AS RECORDED IN SEDIMENT PROVENANCE AND CHRONOLOGY OF H	47.078	ANT-0944475		71,200
US/CHINESE COLLABORATIVE STUDY: INVESTIGATION OF BOTTOM WATER FORMATION IN PRYDZ BAY, ANTARCTICA	47.078	ANT-1043669		69,356
CCÉP-I: POLAR LEARNING AND RESPONDING: POLAR CLIMATE PARTNERSHIP (SUPPLEMENTAL)	47.078	ANT-1043271	SUP	65,169
SUBGLACIAL DRAINAGE AND SLIP MODELING IN ANTARCTICA: RELATING LAKES TO ICE DISCHARGE	47.078	ANT-1043481		56,260
A STUDY OF ATMOSPHERIC DUST IN THE WAIS DIVIDE ICE CORE BASED ON SR-ND-PB-HE ISOTOPES	47.078	ANT-1043471		55,460
COLLABORATIVE RESEARCH: SURFACE PCO2 AND THE EFFECTS OF WINTER TIME OVERTURNING IN THE DRAKE PASSAGE	47.078	ANT-0636879		43,006
CCÉP-I: POLAR LEARNING AND RESPONDING (POLAR) CLIMATE PARTNERSHIP	47.078	ANT-1043271	PAR	38,167
COLLABORATIVE RESEARCH: HIGH-RESOLUTION STUDIES OF GLACIERS DYNAMICS AT TWO MAJOR OUTLET GLACIERS IN EAST GREENLAND	47.078	ARC-07-13970		34,480
THE FATE OF THE ARCTIC (PERENNIAL) SEA ICE COVER: DECLINE AND RECOVER MECHANISMS	47.078	ARC-05-20496		34,366
COLLABORATIVE RESEARCH: MULTI-NUCLIDE APPROACH TO SYSTEMATICALLY EVALUATE THE SCATTER IN SURFACE EXPOSURE AGES IN ANTAR	47.078	ANT-1043589		31,405
CAPE ADARÉ LONG-TERM MOORING (CALM)	47.078	ANT-0538148		27,060
COLLAB RES: GAS TRANSFER THROUGH POLAR SEA ICE (GAPS)-MECHANISMS OF TURBULENCE PRODUCTION IN THE SEASONAL ICE ZONE AND I	47.078	ANT-0944643	ZAP ZAP	26,483
COLLAB RSCH: DECIPHERING THE DEEP ICE & THE ICE WATER INTERFACE OVER LAKE VOSTOK USING EXISTING RADAR DATA	47.078	ANT-0537752		23,303
CCÉP-I: POLAR LEARNING AND RESPONDING (POLAR) CLIMATE PARTNERSHIP	47.078	ANT-1043271	036	20,014
ESTIMATING THE SALINITY OF SUBLACIAL LAKES FROM EXISTING AEROGEOPHYSICAL DATA	47.078	ANT-06-36584		16,913
COLLABORATIVE RESEARCH: RESOLVING CENTENNIAL-TO-MILLENNIAL-SCALE TRENDS IN GLACIER EXTENT AND LAKE SEDIMENTATION IN THE	47.078	ARC-1107885		16,908
BIO-PHYSICAL VARIABILITY IN REGIONS OF THE SOUTHERN OCEAN WITH CONTRASTING CLIMATIC RESPONSE - TH	47.078	ANT-0836137		13,036
COLLABORATIVE RESEARCH: EFFECTS OF WARMING INDUCED INCREASES IN SHRUB ABUNDANCE AND CHANGING SEASONALITY ON MIGRATORY SO	47.078	ARC-0908444	SUP	12,034
LONG-TERM CARBON STORAGE SHIFTS IN HIGH-LATITUDE PEATLANDS WITH PALEOCLIMATE CHANGE: LINKING PEATLAND MODELING WITH PALE	47.078	ARC-1022979		10,230
TRACING GLACIAL-INTERGLACIAL CHANGES IN THE DUST SOURCE TO ANTARCTICA USING HELIUM ISOTOPES	47.078	ANT-06-36898		6,380
COLLABORATIVE RESEARCH: SINKING RATES AND NUTRITIONAL QUALITY OF ORGANIC MATER EXPORTED FROM SEA ICE; THE IMPORTANCE OF	47.078	ARC-1023348	PAR	2,169
COLLABORATIVE RESEARCH: IPY GAMBIT: GAMBURSTEV GAMBURSTEV AE REGEOPHYSICAL MAPPING	47.078	ANT-0632292	PAR	1,696
BIO-PHYSICAL VARIABILITY IN REGIONS OF THE SOUTHERN OCEAN WITH CONTRASTING CLIMATIC RESPONSE-THE EASTERN AMUNDSEN & ROSS	47.078	ANT 0836137	ON1	1,647
COLLABORATIVE RESEARCH: HIGH-RESOLUTION STUDIES OF GLACIER DYNAMICS AT TWO MAJOR OUTLET GLACIERS IN EAST GREENLAND	47.078	ARC-1110322		871
WORKSHOP SUPPORT FOR US ARCTIC GEOTRACES PLANNING AND INTERNATIONAL	47.078	ARC-1049400		-1
COLLAB RES: BEST-NITROGEN SUPPLY FOR NEW PRODUCTION & ITS RELATION TO CLIMATIC CONDITIONS ON THE EASTERN BERING SEA...	47.078	ARC-06-12427		-932
COLLABORATIVE RESEARCH: NYC INTERNATIONAL POLAR WEEKEND 2008-2009	47.078	ARC-08-06509		-1,237
				\$4,121,556

International Science and Engineering (OISE)

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R&D Cluster, continued

Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
LIFE ON A TECTONICALLY ACTIVE DELTA0CONVERGENCE OF EARTH SCIENCE AND GEOHAZARD RESEARCH IN BANGLADESH WITH EDUCATION AND	47.079	OISE-0968354		759,739
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT A - GENE	47.079	OISE-0968226		184,078
NON FERMII LIQUID PHYSICS AND QUANTUM CRITICAL PHENOMENA	47.079	DMR-1006282		181,959
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT E - SUBC	47.079	OISE-0968226	SUB	180,363
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT A - GENE	47.079	OISE-0968226	AOF	139,258
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT C	47.079	OISE-0968226	C	80,355
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT B - ON C	47.079	OISE-0968226	BON	64,853
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT D	47.079	OISE-0968226	D	61,273
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT B - OFF	47.079	OISE-0968226	OFF	10,880
LIFE ON A TECTONICALLY ACTIVE DELTA0CONVERGENCE OF EARTH SCIENCE AND GEOHAZARD RESEARCH IN BANGLADESH WITH EDUCATION AND	47.079	OISE-0968354	PAR	7,401
TRAVEL SUPPORT FOR THE PARTICIPANTS OF US-KOREA-TAIWAN COLLABORATIVE INTERNATIONAL WINTER SCHOOL: BEYOND MOORE'S LAW	47.079	OISE 1012057	PAR	7,171
PIRE: INTERNATIONAL CONSORTIUM FOR PROBING NOVEL SUPERCONDUCTORS WITH NEUTRONS, MUONS, PHOTONS AND STM: ACCOUNT A - GENE	47.079	OISE-0968226	PAR	6,923
ARITHMETRIC GROSS-PRASAD CONJECTURE FOR UNITARY SHIMURA VARITIES	47.079	DMS-1204365		1,637
DOCTORAL DISSERTATION ENHANCEMENT PROJECTS: MEASUREMENT OF SURFACE STABILITY OF GRAPHENE AT ELETTRA	47.079	OISE-0937683		861
				\$1,686,751
Office of Cyberinfrastructure				
EAGER: POLICY DESIGN FOR REPRODUCIBILITY AND DATE SHARING IN COMPUTATIONAL SCIENCE	47.080	OCI-1153384		43,898
				\$43,898
Trans-NSF Recovery Act Reasearch Support				
OPERATION AND MANAGEMENT OF THE LDEO INSTRUMENT CENTER OF THE NATIONAL OCEAN BOTTOM SEISMETER POOL	47.082	OCE-05-51596		1,806,231
ARRA-MRI-R2: DEVELOPING AN ICE IMAGING SYSTEM FOR MONITORING CHANGING ICE SHEETS MOUNTED ON THE NYANG LC-130	47.082	ANT-0958658	EQI	800,288
ARRA-OPERATION AND MANAGEMENT OF THE LDEO INSTRUMENT CENTER OF THE NATIONAL OCEAN SEISMOMETER POOL	47.082	OCE-05-51596	GAH	746,158
ARRA-MRI-R2: DEVELOPING AN ICE IMAGING SYSTEM FOR MONITORING CHANGING ICE SHEETS MOUNTED ON THE NYANG LC-130	47.082	ANT-0958658		719,276
ARRA-MRI-R2: ACQUISITION OF STABLE ISOTOPE INSTRUMENTATION FOR HIGH PRECISION PALEOCLIMATIC AND ENVIRONMENTAL RESEARCH AT THE	47.082	AGS-0959148		704,709
ARRA-COLLABORATIVE PROPOSAL: CONTINUATION OF THE XENON DARK MATTER PROJECT: CONSTRUCTION AND UNDERGROUND OPERATION OF AN UPGR	47.082	PHY-0904220	EQI	483,856
ARRA-DEVELOPMENT OF A NOVEL INSTRUMENT TO STUDY THE COSMIC ORIGINS OF ORGANIC CHEMISTRY AND THE COSMO-CHEMICAL PATHWAYAY TOWAR	47.082	AST-0905832	EQI	372,998
ARRA-GRADUATE RESEARCH FELLOWSHIP PROGRAM	47.082	DGE-0946826		351,000
ARRA-COLLABORATIVE PROPOSAL: CONTINUATION OF THE XENON DARK MATTER PROJECT: CONSTRUCTION AND UNDERGROUND OPERATION OF AN UPGR	47.082	PHY-0904220		241,277
ARRA-CAREER: THE CHEMISTRY AND BIOLOGY OF HALOGENATED NATURAL PRODUCTS	47.082	CHE-0844593		205,109
ARRA-RI: MEDIUM: COLLABORATIVE RESEARCH: ROBOTIC HANDS: UNDERSTANDING & IMPLEMENTING ADAPTIVE GRASPING	47.082	IIS-0904514		194,912
ARRA-CO-EVOLUTION OF AUDITORY CODING AND VOCAL BEHAVIOR	47.082	IOS-0920081		170,852
ARRA-COLLOABORATIVE PROPOSAL: SECURITRY SERVICES IN OPEN TELECOMMUNICATIONS NETWORKS	47.082	CNS-0905406		158,966
ARRA-COLLABORATIVE RESEARCH: ENHANCING THE SUSTAINABILITY OF GROUNDWATER PUMPING FROM LOW-ARSENIC AQUIFERS IN SOUTHERN ASIA -	47.082	EAR-0911557		155,047
ARRA-P2C2: NORTH AMERICAN MEGADROUGHT: ATMOSPHERE-OCEAN FORCING AND LANDSCAPE RESPONSE FROM THE MEDIEVAL PERIOD TO THE NEAR-T	47.082	ATM-0902716		142,863
ARRA-COLLABORATIVE PROPOSAL: CONTINUATION OF THE XENON DARK MATTER PROJECT: CONSTRUCTION AND UNDERGROUND OPERATION OF AN UPGR	47.082	PHY-0904220	OFF	140,816
ARRA-RELIABILITY AND SAFETY OF SUSPENSION BRIDGE CABLES USING CONTINUOUS HEALTH MONITORING DATA	47.082	CMMI-0928129		133,373
ARRA-DEVELOPMENT OF A NOVEL INSTRUMENT TO STUDY THE COSMIC ORIGINS OF ORGANIC CHEMISTRY AND THE COSMO-CHEMICAL PATHWAYAY TOWAR	47.082	AST-0905832		133,116
ARRA-TC: MEDIUM: USER-CONTROLLABLE POLICY LEARNING	47.082	CNS-0905403		126,121

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ARRA-RI: MEDIUM: COLLABORATIVE RESEARCH: FROM TEXT TO PICTURES	47.082	IIS-0904361		125,727
ARRA-FLUX DISTRIBUTIONS AND PATH DENSITIES: A NEW LOOK AT STRATOSPHERE-TROPOSPHERE EXCHANGE (STE)	47.082	ATM-0854711		113,674
ARRA-CMG RESEARCH: RECONSTRUCTING CLIMATE FROM TREE RING DATA	47.082	ATM-0934516		111,544
ARRA-COLLABORATIVE RESEARCH: SHIFTING SEASONALITY OF NORTHERN FOREST RESPONSE TO ARCTIC ENVIRONMENTAL CHA	47.082	ARC-0902051		107,129
ARRA-NETS: SMALL: COLLABORATIVE RESEARCH: EFFECTIVE CONTROL OF WIRELESS NETWORKS VIA TOPOLOGY ADAPTATION AND RANDOMIZATION	47.082	CNS-0916263		105,904
ARRA-COLLABORATIVE RESEARCH: GEOPHYSICAL CONSTRAINTS ON MECHANISMS OF OCEAN PLATEAU FORMATION FROM SHATSKY RISE, NORTHWEST PA	47.082	OCE-0926611		99,164
ARRA-COLLABORATIVE RESEARCH: UNCERTAINTY QUANTIFICATION FOR PETASCALE SIMULATION OF CARBON SEQUESTRATION THROUGH FAST ULTRA-S	47.082	OCI-0904746		95,287
ARRA-U.S. GEOTRACES NORTH ATLANTIC SECTION: CFC AND SF6 MEASUREMENTS	47.082	OCE-0928612		86,098
ARRA-CAREER: SELF-ASSEMBLY IN TWO AND THREE DIMENSIONS: FROM CRYSTAL TO SURFACE DESIGN AND BACK	47.082	DMR-0846426		81,720
ARRA-EVALUATION OF FINESTRUCTURE MIXING PARAMETERIZATIONS BASED ON LADCP SHEAR	47.082	OCE-1030309		81,308
ARRA-INVESTIGATIONS OF RAM PRESSURE STRIPPING IN REALISTIC CLUSTER ENVIRONMENTS WITH A MULTIPHASE ISM	47.082	AST-0908390		78,047
ARRA-OCEANOGRAPHIC INSTRUMENTATION 2009	47.082	OCE-0918138		76,390
ARRA-STRUCTURE OF LOW-DIMENSIONAL FLOER HOMOLOGIES	47.082	DMS-0905796		68,635
ARRA-PRICE ADJUSTMENT, EXCHANGE RATE POLICY AND MONETARY MODELS	47.082	SES-0922011		67,707
ARRA-HEALTH DETERMINANTS AND RESEARCH DESIGN	47.082	SES-0847329		65,586
ARRA-NANOPHOTONIC INTERCONNECT CAD: AUTOMATED DESIGN FOR NANOPHOTONIC ENABLED INTERCONNECT IN MULTICORE ARCHITECTURES	47.082	ECCS-0903406		64,280
ARRA-THREE-DIMENSIONAL MODELS OF FAULTING DURING OBLIQUE CONTINENTAL EXTENSION	47.082	EAR-0911565		57,031
ARRA-RI: MEDIUM: COLLABORATIVE RESEARCH: FROM TEXT TO PICTURES	47.082	IIS-0904361	RAM	55,207
ARRA-DIRECTED EVOLUTION OF SPECIFIC CELL PENETRATING PEPTIDES	47.082	CBET-0853946		55,105
ARRA-FRG: COLLABORATIVE RESEARCH: AUTOMORPHIC FORMS, GALOIS REPRESENTATIONS, PERIODS AND P-ADIC L-FUNCTIO	47.082	DMS-0854964		55,062
ARRA-CMG RESEARCH: RECONSTRUCTING CLIMATE FROM TREE RING DATA	47.082	ATM-0934516	REC	53,736
ARRA-OPERATION AND MANAGEMENT OF THE LDEO INSTRUMENT CENTER OF THE NATIONAL OCEAN SEISMOMETER POOL	47.082	AWARD OCE-0551596		49,409
ARRA-ICE SHEET DYNAMICS AND PROCESSES ALONG THE WEST ANTARCTIC CONTINENTAL SHELF	47.082	ANT-0838735		49,225
ARRA-PRICE ADJUSTMENT, EXCHANGE RATE POLICY AND MONETARY MODELS	47.082	SES-0922011	CBS	49,224
ARRA-COLLABORATIVE RESEARCH: INVESTIGATING THE LIMITS OF RAY-BASED GLOBAL SURFACE-WAVE TOMOGRAPHY	47.082	EAR-0910775		47,531
ARRA-CAREER: SUSTAINABLE ENERGY CONVERSION OF SOLID WASTES WITH INTEGRATED IN-SITU CARBON SEQUESTRATION	47.082	CBET-0846846		41,243
ARRA-QUANTILE REGRESSION WITH MISMEASURED OR MISSING COVARIATES	47.082	DMS-0906568		40,760
ARRA-QUANTIFYING THE FUNDAMENTAL BEHAVIOR OF GREEN ROOFS IN AN URBAN ENVIRONMENT	47.082	CMMI-0928604		39,941
ARRA-INVESTIGATING THE PRESENCE OF PRESEISMIC VELOCITY CHANGES	47.082	EAR-0910535		35,151
ARRA-CAREER: COMPUTATIONAL INFRASTRUCTURE FOR FULL-SEQUENCE ASSOCIATION STUDIES WITH POOLED INDIVIDUALS	47.082	IIS-0845677		35,102
ARRA-COLLABORATIVE RESEARCH: A SOUTHERN HEMISPHERIC PERSPECTIVE ON HOLOCENE CLIMATE VARIABILITY BASED ON MOUNTAIN GLACIAL CHR	47.082	EAR-0902363		33,151
ARRA-CATEGORIFICATION OF QUANTUM GROUPS	47.082	DMS-0855713		31,157
ARRA-CANONICAL METRICS IN COMPLEX GEOMETRY	47.082	DMS-0904223		30,522
ARRA-MULTIMESSENGER ASTRONOMY THROUGH GRAVITATIONAL-WAVES	47.082	PHY-0856691	GRA	29,735
ARRA-ELECTRICAL DETECTION OF PROTEIN BINDING AT DNA MODIFIED CARBON NANOTUBE FIELD EFFECT TRANSISTORS	47.082	CHE-0936923		29,539
ARRA-MULTIMESSENGER ASTRONOMY THROUGH GRAVITATIONAL-WAVES	47.082	PHY-0856691		28,478

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ARRA-A NEW APPROACH TO SILICON/COMPOUND SEMICONDUCTOR INTEGRATION	47.082	ECCS-0901297		27,796
ARRA-EXPERIMENTAL STUDIES OF BASIC PHYSICS OF PLASMA TRANSPORT	47.082	PHY-0902930		23,371
ARRA-COMMUNITY-PARTNERED REPATRIATION OF INUPIAT MUSIC	47.082	ARC-0939905		17,776
ARRA-COLLABORATIVE RESEARCH: STUDIES OF THE STRUCTURE OF THE EARTH'S INTERIOR	47.082	EAR-0838093		14,094
ARRA-RI: MEDIUM: COLLABORATIVE RESEARCH: FROM TEXT TO PICTURES	47.082	IIS-0904361	PAR	9,605
ARRA-RI: MEDIUM: COLLABORATIVE RESEARCH: ROBOTIC HANDS: UNDERSTANDING & IMPLEMENTING ADAPTIVE GRASPING ("SUBPROJECT")	47.082	IIS-0904514	PAR	9,421
ARRA-HOW DEEP DO RUPTURES PENETRATE IN LARGE EARTHQUAKES?	47.082	EAR-0911221		5,704
ARRA-FITNESS COST OF NEST PARASITISM BY TAPERAEV	47.082	DBI-0905805		5,000
ARRA-DYNAMIC MEASURES OF INFLATION	47.082	SES-0921147		3,220
ARRA-CAREER: THE CHEMISTRY AND BIOLOGY OF HALOGENATED NATURAL PRODUCTS	47.082	CHE-0844593	PAR	3,000
ARRA-FRG: COLLABORATIVE RESEARCH: AUTOMORPHIC FORMS, GALOIS REPRESENTATIONS, PERIODS AND P-ADIC L-FUNCTIONS	47.082	DMS-0854964	PAR	1,164
ARRA-2009 SHIPBOARD SCIENTIFIC EQUIPMENT	47.082	OCE-0943827		912
ARRA-COLLABORATIVE RESEARCH: MELTING OF CARBONATE-BEARING SEDIMENTS IN SUBDUCTION ZONES	47.082	OCE-0841051		448
ARRA-HYDROGRAPHIC AND SEDIMENT-TRAP MONITORING OF ANOXIC SOLEDAD BASIN OFF BAJA CALIFORNIA FOR ENHANCED CLIMATE RECONSTRUCTIO	47.082	OCE-0927822		121
ARRA-BOOTSTRAP AND THRESHOLD MODELS IN NON-STANDARD PROBLEMS	47.082	DMS-0906597		2
OPERATION AND MANAGEMENT OF THE LDEO INSTRUMENT CENTER OF THE NATIONAL OCEAN BOTTOM SEISMETER POOL	47.082	OCE-0551596	SUP	-1,859

\$10,181,252

Total Direct Award Programs:

\$90,547,846

Pass-through Awards

National Science Foundation

JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	PLS	OCE-03-52500	2,634,066
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	LS	OCE-03-52500	1,688,786
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	ENG	OCE-03-52500	551,050
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	PDM	OCE-03-52500	437,843
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03 PMA	PMA	OCE-03-52500	434,349
CH2M HILL CONSTRUCTORS, INC	47.	HILLCON 812787		NSF	389,924
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	PSS	OCE-03-52500	367,551
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	SDM	OCE-03-52500	209,236
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	DM	OCE-03-52500	203,987
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	MA	OCE-03-52500	185,860
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	ENG	OCE-03-52500	144,725
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	ENG	OCE-03-52500	136,268
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	JAM	OCE-03-52500	129,028
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	SSS	OCE-03-52500	128,459
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	MMM	OCE-03-52500	122,687
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	SS	OCE-03-52500	106,976
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	ENG	OCE-03-52500	94,886

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>		<u>Pass-through Contract No.</u>	<u>Expenditures</u>
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	DM	OCE-03-52500	80,590
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	SMA	OCE-03-52500	77,744
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	SS	OCE-03-52500	76,567
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	PIP	OCE-03-52500	45,757
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	MA	OCE-03-52500	18,848
CONSORTIUM FOR OCEAN LEADERSHIP	47.	COCEANL T322A34	SC1	OCE-0652315	8,973
CH2M HILL CONSTRUCTORS, INC	47.	HILLCON 812787	EQI	NSF	5,187
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.	JSC 4-03	ITU	OCE-03-52500	4,612
					\$8,283,959

Engineering Grants

THE UNIVERSITY OF ARIZONA	47.041	UA Y503160		EEC-0812072	220,344
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	47.041	MIT 5710002873		DBET-039511	110,781
THE UNIVERSITY OF ARIZONA	47.041	UA Y503160	ZUS	EEC-0812072	39,233
IOWA STATE UNIVERSITY	47.041	IOWA 420-60-91A		CBET-1211187	32,509
THE UNIVERSITY OF ARIZONA	47.041	UA Y503160		EEC-0812072	27,360
					\$430,227

Mathematical and Physical Sciences

UNIVERSITY OF TEXAS AT AUSTIN	47.049	UTA09-000882		CHE-0943957	210,525
CALIFORNIA INSTITUTE OF TECHNOLOGY	47.049	CALTECH #75ADV-10873	EQI	PHY-0823459	160,497
NEW YORK UNIVERSITY	47.049	NYU F6373-01	PAR	DMS-06-02235	145,813
MICHIGAN STATE UNIVERSITY	47.049	RC062443CU		DMR-0703940	140,782
PRINCETON UNIVERSITY	47.049	PU 00001733	EQI	PHY-0919363	139,235
PRINCETON UNIVERSITY	47.049	PU 00001733		PHY-0919363	107,291
UNIVERSITY OF MARYLAND	47.049	UMARY Z477901		CHE-0628178	76,750
CALIFORNIA INSTITUTE OF TECHNOLOGY	47.049	CALTECH #75ADV-10873		PHY-0823459	42,528
CORNELL UNIVERSITY	47.049	63016-9679		DMR-110296	31,187
RENSSELAER POLYTECHNIC INSTITUTE	47.049	RPI A12024		DMR-0642573	28,321
METROPOLITAN MUSEUM OF ART	47.049	MMA CU10-3060		CHE-1041839	16,916
NATIONAL RADIO ASTRONOMY OBSERVATORY	47.049	NARO SOSP12A-010		AST-0956545	8,800
CALIFORNIA INSTITUTE OF TECHNOLOGY	47.049	CALTECH 75ADV-109048		PHY-0823459	5,249
JRRA -JOHNS HOPKINS UNIVERSITY	47.049	JH 2000897852	SCO	AST-0959349	4,024
UNIVERSITY OF CHICAGO	47.049	UCHICA 30193-B		AST-05-06648	3,034
UNIVERSITY OF CHICAGO	47.049	UCHICA 30193-B	AM4	AST-05-06648	2,514
CALIFORNIA INSTITUTE OF TECHNOLOGY	47.049	CALTECH 7E-1085447		DMR0520457	-20,191
					\$1,103,275

Geosciences

WOODS HOLE OCEANOGRAPHIC INSTITUTION	47.050	WHOI A100634		OCE-0726720	103,032
MARINE BIOLOGICAL LABORATORY	47.050	MBL 35559		ANT-0823101	93,196

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
WOODS HOLE OCEANOGRAPHIC INSTITUTION	47.050	WHOI A100723	OCE-0926848	86,087
WOODS HOLE OCEANOGRAPHIC INSTITUTION	47.050	WHOI A100708	SA-10-06	66,765
BARNARD COLLEGE	47.050	BARNARD CU10-1681	PHY-0855627	58,011
UNIVERSITY OF OREGON	47.050	208991F	OCE-1139701	44,851
UNIVERSITY OF SOUTHERN CALIFORNIA	47.050	USC 149727	OCE-0939564	22,164
UNIVERSITY OF SOUTHERN CALIFORNIA	47.050	USC PO #119511 DEP	EAR-05-29922	20,000
VIRGINIA POLYTECHNICAL INSTITUTE AND STATE UNIVERSITY	47.050	VPTISU 478672-19020	EAR-1201903	19,506
UNIVERSITY OF CALIFORNIA, SAN DIEGO	47.050	UCSD 10300702	OCE07-52970	18,332
INCORPORATED RESEARCH INSTITUTION FOR SEISMOLOGY	47.050	IRIS 39-GSN	EAR-1063471	18,113
CONSORTIUM FOR OCEAN LEADERSHIP	47.050	COCEANL T324B34	OCE-0652315	15,573
UNIVERSITY OF SOUTHERN CALIFORNIA	47.050	USC PO #119511 MAP	EAR-05-29922	15,572
FRANKLIN INSTITUTE	47.050	FRANKLIN CU10-1623	NSF 10-542	12,325
CONSORTIUM FOR OCEAN LEADERSHIP	47.050	COCEANL T313A34	OCE-0652315	11,631
UNIVERSITY OF TEXAS AT AUSTIN	47.050	UTEXASUS UTA09-00048	NSF	9,739
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.050	JOI T321A31	OCE-0652315	9,610
CONSORTIUM FOR OCEAN LEADERSHIP	47.050	COCEANL T320A34	OCE-0652315	9,317
IODP MANAGEMENT INTERNATIONAL, INC	47.050	IODP MI-10-06	OCE-0432224	7,320
UNIVERSITY OF SOUTHERN CALIFORNIA	47.050	USC PO #119511 SIM	EAR-05-29922	7,071
CONSORTIUM FOR OCEAN LEADERSHIP	47.050	COCEANL T324A34	OCE-0652315	6,908
CONSORTIUM FOR OCEAN LEADERSHIP	47.050	OCEANL T317A34	OCE-0652315	3,079
INCORPORATED RESEARCH INSTITUTION FOR SEISMOLOGY	47.050	IRIS 06-GSN	NSF-EAR-0552316	3,033
UNIVERSITY OF SOUTHERN CALIFORNIA	47.050	USC PO #119511 STE	EAR-05-29922	1,653
JOINT OCEANOGRAPHIC INSTITUTIONS, INCORPORATED	47.050	JOI T320B34	OCE-0652315	1,613
CONSORTIUM FOR OCEAN LEADERSHIP	47.050	COCEANL CU12-1233	NSF CU12-1233	1,157
UNIVERSITY OF SOUTHERN CALIFORNIA	47.050	USC PO #119511	EAR-05-29922	168
				\$665,826

Computer and Information Science and Engineering

COMPUTING RESEARCH ASSOCIATION	47.070	CIF-D-004	1136996	113,206
COMPUTING RESEARCH ASSOCIATION	47.070	CRA CIF-C-22	NSF 1019343	108,361
COMPUTING RESEARCH ASSOCIATION	47.070	CIF-B-22	NSF 1019343	31,016
COMPUTING RESEARCH ASSOCIATION	47.070	CRA CIF-A-471	NSF 0937060	23,976
COMPUTING RESEARCH ASSOCIATION	47.070	CRA CIF-B-87-1	CISE-1019343	21,903
VASSAR COLLEGE	47.070	VASSAR CU08-7825 STI	CNS-0708952	11,938
BBN SYSTEMS AND TECHNOLOGIES	47.070	BBN CU08-9244	CNS-0714770	10,793
OREGON HEALTH SCIENCES UNIVERSITY	47.070	ORHSUN 9002526_CU	NSF IIS-0827722	6,075
VASSAR COLLEGE	47.070	VASSAR CU08-7825	CNS-0708952	2,415
NATIONAL SCIENCE FOUNDATION	47.070	IIS-03-25399		-6,163

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
				\$323,520
Biological Sciences				
UNIVERSITY OF CALIFORNIA, SANTA BARBARA	47.074	UCSB KK9157	EF-0830117	193,000
BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH	47.074	BOYCE 09-03	IOS-0820405	77,835
UNIVERSITY OF MARYLAND	47.074	UMARY Z365301	DEB1128370	47,770
UNIVERSITY OF PUERTO RICO	47.074	UPR CU09-3006	DEB-0620910	13,968
				\$332,573
Social, Behavioral, and Economic Sciences				
NATIONAL BUREAU OF ECONOMIC RESEARCH	47.075	BER 26-3523-00-0-79-	SES-0962261	86,994
NATIONAL BUREAU OF ECONOMIC RESEARCH	47.075	NBER 263441007914877	SES-06-17934	41,895
NATIONAL BUREAU OF ECONOMIC RESEARCH	47.075	NBER2733990007971777	SES-0452460	4,254
THE UNIVERSITY OF ARIZONA	47.075	UA P383101	SES-0752662	1,626
				\$134,769
Education and Human Resources				
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	47.076	RFCUNY 40485-0001C	DGE-03-33415	29,521
NEW YORK HALL OF SCIENCE	47.076	NYSCI 1	IIS-1123832	24,553
AMERICAN EDUCATIONAL RESEARCH ASSOCIATION	47.076	AERA CU12-1559	DRL-0941014	3,862
CARLETON COLLEGE	47.076	CARLE CU11-0520	DUE-1125331	3,135
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	47.076	RFCUNY 40A66C	DGE-0966166	441
				\$61,512
International Science and Engineering (OISE)				
OREGON STATE UNIVERSITY	47.079	OREGSU S1315A-D	OISE-0968391	64,489
BROWN UNIVERSITY	47.079	BROWNU 00000359	OISE-0968211	41,525
				\$106,014
Office of Cyberinfrastructure				
REGENTS OF THE UNIVERSITY OF MINNESOTA	47.080	H002341901	OCI-0940818	53,761
				\$53,761
Trans-NSF Recovery Act Research Support				
ARRA - NORTH CAROLINA STATE UNIVERSITY	47.082	NCSU 2010-0724-02	CNS-0940805	55,765
ARRA - CALIFORNIA STATE UNIVERSITY, FRESNO	47.082	CSUFRESNO SC360025-1	ARRA-NSF-0959141	23,387
ARRA - BBN SYSTEMS AND TECHNOLOGIES	47.082	BBN NO.1770	CNS-0944089	14,536
				\$93,688
Total Pass-through Programs:				\$11,589,124
Total: National Science Foundation				\$102,136,970

National Aeronautics & Space Administration
Direct Awards

National Aeronautics & Space Administration

CONTINUED OPERATION OF THE EARTH OBSERVING SYSTEM DATA AND INFORMATION SYSTEM (EOSDIS) SOCIOECONOMIC DATA AND APPLICATIO	43.	NNG08HZ11C		4,366,244
				\$4,366,244

Science

INTERDISCIPLINARY RESEARCH ON CLIMATE SCIENCE & THE IMPACTS OF CLIMATE CHANGE	43.001	NNX10AU63A		1,780,641
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The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
NRA/RESEARCH OPPORTUNITIES IN SPACE AND EARTH SCIENCES-2009	43.001	NNX10AT69G		1,567,743
INTERDISCIPLINARY GLOBAL RESEARCH	43.001	NNX11AR63A		1,509,167
INTERDISCIPLINARY RESEARCH ON CLIMATE SCIENCE & IMPACTS OF CLIMATE CHANGE	43.001	NNX10AU63A	NEW	666,546
THE GENERAL ANTIPARTICLE SPECTROMETER EXPERIMENT (GAPS): A SEARCH FOR ANTIDEUTERON-GENERATED DARK MATTER	43.001	NNX09AC16G	EQI	494,219
GISS/SOBEI COÖPERATIVE AGREEMENT (TEAM CAIRNS)	43.001	NNX12AB87A	GLO	464,651
GISS/SOBEI COÖPERATIVE AGREEMENT (INSTITUTIONAL)	43.001	NNX12AB87A		367,786
HZE-INDUCED MAMMARY CANCER DEVELOPMENT PROCESSES IN MURINE AND	43.001	NASA NNX09AE95G		310,330
MODELING AND OBSERVATIONS OF ATMOSPHERIC CIRCULATION AND CLOUD PROCESSES	43.001	NNX12AB01A		303,306
DEVELOPMENT OF A SELF-CONSISTENT MODEL FOR SPATIAL AND TEMPORAL VARIATION OF SEA LEVEL INTEGRATING D	43.001	NNX11AC14G		294,571
CLIMATE DECISION SUPPORT IN THE GULF STATES: ASSESSING THE IMPACTS OF KEY UNCERTAINTIES IN END-TO-EN	43.001	NNX10AO10G		249,490
NRA: RESEARCH OPPORTUNITIES IN SPACE AND EARTH SCIENCE (ROSES-2009)	43.001	NNX11AD37G		220,475
CHARACTERIZATION OF LARGE AND UNUSUAL NOCTILUCA BLOOMS IN THE NORTHERN ARABIAN SEA AND THEIR ROLE IN CARBON CYCLING DURI	43.001	NNX11AE22G		212,727
NRA/RESEARCH OPPORTUNITIES IN SPACE AND EARTH SCIENCES-2007	43.001	NNX09AF74G		193,530
GISS/SOBEI COÖPERATIVE AGREEMENT (TEAM DELGENIO/CLOUDS)	43.001	NNX12AB87A	CLO	171,757
SPATIAL AND TEMPORAL CHARACTERISTICS OF SEA SURFACE SALINITY FLUCTUATIONS AND LINKS TO THE MARINE HYDROLOGICAL CYCLE	43.001	NNX09AU68G		170,667
ANALYSIS OF ENSO DYNAMICS AND THERMODYNAMICS IN THE WESTERN PACIFIC WARM POOL - AN APPLICATION OF MULTI-SENSOR SATELLITE	43.001	NNX09AF55G		170,448
INTRASEASONAL VARIABILITY AND TROPICAL CYCLONES IN THE NASA GISS GENERAL CIRCULATION MODEL	43.001	NNX09AK34G		170,273
EQUIVALENCE PRINCIPLE IMPLICATIONS OF MODIFIED GRAVITY MODELS	43.001	NNX10AH14G		158,910
MID-LATITUDE OCEAN UNDERESTIMATE IN GCM CLOUD COVER: ASSESSMENT BASED ON TERRA AND AQUA MEASUREMENT	43.001	NNX11AH22G		145,401
ERROR AND VARIABILITY IN SATELLITE SST DATA AND GLOBAL HIGH-RESOLUTION ANALYSES	43.001	NNX09AF44G		144,859
THE SURFACE-BULK PARTITIONING OF AEROSOL ORGANIC MATERIAL	43.001	NNX09AF26G		143,269
THE GENERAL ANTIPARTICLE SPECTROMETER EXPERIMENT (GAPS): A SEARCH FOR ANTIDEUTERON-GENERATED DARK MATTER	43.001	NNX09AC16G		140,657
MEASUREMENTS OF DIELECTRONIC RECOMBINATION AND ELECTRON IMPACT IONIZATION	43.001	NNX09AB25G		124,746
EDGCM: A REALISTIC GLOBAL CLIMATE MODELING EXPERIENCE FOR EDUCATIONAL INSTITUTIONS	43.001	NNX10AT85A		120,384
INVESTIGATIONS OF GLACIAL ISOSTASY AND SECULAR MASS VARIATIONS USING GRACE	43.001	NNX11AB97G		114,835
MODELING GRAVITY FIELD AND EARTH DEFORMATION FROM MONSOONAL FLOODING IN BANGLADESH USING HYDROGRAPHIC, GRACE AND GPS DAT	43.001	NNX08AF13G		113,183
THE RESPONSE OF CIRCUMBINARY DISK TO A BLACK HOLE MERGER	43.001	NNX11AE05G		113,051
OPERATION ICE BRIDGE SCIENCE TEAM	43.001	NNX11AC22G		100,653
OPTIMIZED TIMING SEARCHES FOR GAMMA-RAY PULSARS USING NEW TECHNOLOGY	43.001	NNX11AO36G		99,973
GLOBAL CONSTRAINTS ON RADIATIVE PROPERTIES OF ICE CLOUDS USING MODIS AND POLDER MEASUREMENTS	43.001	NNX11AG81G		98,499
IMPROVING DECISION-MAKING ACTIVITIES FOR MALARIA AND MENINGITIS RISK MAPPING-INTEGRATION OF NASA PRODUCTS/PLATFORMS (SERV	43.001	NNX11AF68G		95,002
DYNAMIC MAGNETOSPHERES OF NEUTRON STARS	43.001	NNX10AI72G		93,506
ANTI-MAGNETARS: REVEALING THE PULSAR PROPERTIES OF CENTRAL COMPACT OBJECTS IN SUPERNOVA REMNANTS	43.001	NNX11AD19G		88,939
ATMOSPHERIC CIRCULATION OF HOT EXOPLANETS	43.001	NNX11AD65G		82,531
NRA: RESEARCH OPPORTUNITIES IN SPACE AND SCIENCES - ROSES 2009	43.001	NNX11AH98G		76,040
INTEGRATION OF OCEAN AND EARTH DYNAMICS OF MEASUREMENT AND PREDICTION OF SEA-LEVEL CHANGE	43.001	NNX11AK11G		74,199

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
SPATIAL AND TEMPORAL VARIABILITY IN CHLOROPHYLL, PRIMARY PRODUCTION AND CARBON EXPORT IN THE BERING SEA LINKED TO CLIMAT	43.001	NNX11AP28G		65,950
MODELING AND OBSERVATIONS OF ATMOSPHERIC CIRCULATION AND CLOUD PROCESSES	43.001	NNX08AF15A		62,299
DEVELOPMENT AND USE OF HUMAN 3-DIMENSIONAL TISSUE CULTURE MODELS FOR THE STUDY OF SPACE RADIATION EFFECTS ON THE DEGENER	43.001	NNX10AB38G		59,253
RADIO TIMING OF KEY FERMI PULSARS	43.001	NNX10AP81G		55,674
GISS/SOBEL COÖPERATIVE AGREEMENT (HALL GRADUATE SUPPORT)	43.001	NNX12AB87A	HAL	55,489
SCIENCE AND CALIBRATION SUPPORT FOR THE REFLECTION GRATING SPECTROMETER ON THE XMM-NEWTON OBSERVATORY	43.001	NNX07AN59G		51,767
MIRNA PROFILING OF RADIATION RESPONSE	43.001	NASA NNX07AT41G		46,162
MULTISENSOR MAPPING OF SPATIAL AND TEMPORAL VARIABILITY OF LARGE RIVER PLUMES	43.001	NNX10AT99G		39,653
GISS/SOBEL COÖPERATIVE AGREEMENT (TEAM DELGENIO/MILLER)	43.001	NNX12AB87A	MIL	38,275
HUMAN ENDOTHELIAL CELLS IN 2-D AND 3-D SYSTEMS NON-CANCER EFFECTS AND SPACE-RELATED RADIATIONS	43.001	NASA NNJ05H137G		37,162
POLARIZED 3D RADIATIVE TRANSFER WITH APPLICATION TO REMOTE SENSING	43.001	NNX10AN85H		31,432
RESEARCH OPPORTUNITIES IN SPACE AND EARTH SCIENCES 2010 (ROSES-2010)	43.001	NNX12AF33G		30,592
HIGH ENERGY STUDIES OF ASTROPHYSICAL DUST	43.001	NNX11AQ09H		28,086
A NOVEL PHOTON-COUNTING DETECTOR FOR ULTRAVIOLET ASTRONOMY AND BEYOND.	43.001	NNX11AQ07H		27,000
NRA / NASA EARTH AND SPACE SCIENCE FELLOWSHIP (NESSF) PROGRAM - 2011	43.001	NNX11AL15H		27,000
INTRASEASONAL VARIABILITY AND TROPICAL CYCLONES IN THE NASA GISS GENERAL CIRCULATION MODEL	43.001	NNX09AK34G	APA	26,733
GROWING UP FRAGMENTED: USING HYPERSPECTRAL IMAGERY TO IMPROVE ESTIMATES OF ECOSYSTEM SERVICES FROM T	43.001	NNX10AP49H		26,521
COLLISIONAL MECHANISM FOR GRB EMISSION	43.001	NNX10AO58G		24,509
INTERDISCIPLINARY GLOBAL CHANGE RESEARCH	43.001	NNX08AJ75A		24,504
MODELING OF OCEAN CIRCULATION & ATMOSPHERIC CHEMICAL SYSTEMS	43.001	NNX07AP74A		21,739
GLORY MISSION	43.001	NNX07AP74A	CAI	21,411
BRIGHTNESS VARIATIONS FROM THE ACCRETION DISK IN CH CYGNI	43.001	NNX11AB78G		21,327
SHIFTING SEASONAL CYCLE, CHANGING MONSOONS, AND THE ROLE OF SEA (JOHN DWYER)	43.001	NNX11AL88H		20,982
PHASE EQUILIBRIUM IN THE LOW-TEMPERATURE PORTION OF THE CO2-H2O SYSTEM WITH APPLICATION OF MARTIAN VOLATILE HISTORY	43.001	NNG05GL91G		17,413
DYNAMICS OF THE HYDROLOGIC CYCLE IN A CHANGING CLIMATE: INTERACTIONS OF LOW FREQUENCY CLIMATE MECHANISMS AND HYDROLOGIC	43.001	NNX09AN91H		17,138
X-RAY AND RADIO MONITORING OF THE TRANSIENT AXP/SGR 1E 1547.0-548 (#7100100)	43.001	NNX12AE87G		14,916
MECHANISMS OF OCULAR CATARACTS	43.001	NASA NNJ05H138G		14,529
NUCLEAR SHELL BURNING IN SYMBIOTIC BINARIES	43.001	NNX11AD77G		14,158
UNDERSTANDING THE PHYSICS AND EVOLUTION OF CENTRAL COMPACT OBJECTS	43.001	NNX12AE24G		13,752
CHANGES IN STORM TRACK INTENSITY AND LOCATION AND THEIR IMPACTS IN A WARMER CLIMATE	43.001	NNX08AU80H		13,304
ASSESSING AND IMPROVING 25-YEARS OF GLOBAL AND REGIONAL SRB VARIABILITY FROM CLOUD AND AEROSOL PROCE	43.001	NNX08AZ08G		11,236
THE STAR FORMATION HISTORY OF VOID GALAXIES	43.001	NNX10AH99G		10,166
CLIMATE AND CHEMISTRY CHANGES FROM 1975 TO 2000 AS OBSERVED AND MODELED IN THE COUPLED CHEMISTRY-AEROSOL-CLIMATE GISS MO	43.001	NNX09AK32G		9,553
GENERATING HOMOCIRALITY IN AMINO ACIDS AND SUGARS AND NUCLEOSIDES UNDER CREDIBLE PREBIOTIC CONDITIONS	43.001	NNX12AD89G		9,527
SOLAR RADIATION	43.001	NNX07AP74A	CAR	8,181
X-RAY AND GAMMA-RAY TIMING AND SPECTRAL STUDIES OF FIVE RADIO QUIET PULSARS (AO3)	43.001	NNX11AE46G		8,073

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VARIABILITY OF AN AVERAGE SYMBIOTIC BINARY - STHA169	43.001	NNX11AB80G		7,294
FIREBALL 2: A PATH TO FLIGHT FOR MAPPING IGM EMISSION	43.001	NNX12AF29G	SCO	6,315
FIREBALL 2: A PATH TO FLIGHT FOR MAPPING IGM EMISSION	43.001	NNX12AF29G		5,548
CLOUDS	43.001	NNX07AP74A	DEL	5,115
MEASUREMENTS OF DIELECTRONIC RECOMBINATION AND ELECTRON IMPACT IONIZATION	43.001	NNX09AB25G	OFF	5,000
CONFRONTING SIMULATIONS OF DWARF GALAXY FORMATION WITH OBSERVATIONS OF RESOLVED STELLAR POPULATIONS	43.001	NNX12AH41G		4,199
MEASURING THE SPIN-DOWN AND DIPOLE MAGNETIC FIELD OF THE CCO PULSAR 1E 1207.4-5209	43.001	NNX12AD41G		4,199
ADDRESSING LARGE-SCALE DYNAMICS AND CLIMATE QUESTIONS USING TRMM DATA	43.001	NNX07AD21G		3,751
GISS/SÖBEL COÖPERATIVE AGREEMENT (SÖBEL GRADUATE SUPPORT)	43.001	NNX12AB87A	GRA	3,270
THE COOLEST X-RAY EMITTING WHITE DWARFS	43.001	NNX09AP43G		1,860
TROPICAL DEFORESTATION AND THE LAND-WATER INTERFACE: LINKING LAND USE, STREAM CONNECTIVITY, AND THE HEALTH OF FRESHWATER	43.001	NNX08AX08H		1,776
FIREBALL: FAINT INTERGALACTIC MEDIUM REDSHIFTED EMISSION BALLOON (CO-I INSTITUTION PROPOSAL)	43.001	NNX08A070G		500
X-RAY AND RADIO MONITORING OF THE TRANSIENT AXP/SGR 1E 1547.0-5408	43.001	NNX10AK90G		494
GRAVITATIONAL-WAVE ASTRONOMY WITH LISA: PROBING THE POPULATION OF DISTANT SUPERMASSIVE BLACK HOLES	43.001	NNX08AH35G		220
RIGOROUS COMBINATION OF GRACE AND OTHER DATA TYPES FOR SIMULTANEOUS ESTIMATION OF TEMPORARILY AND SPATIALLY VARIABLE MEL	43.001	NNX12AF34G		129
A SNAPSHOT SPECTROSCOPIC SURVEY OF THE HIGHEST LUMINOSITY QSOs: WINDS, REIONIZATION AND THE GALEX LEGACY	43.001	NNX09AF80G		-376
FIREBALL: FAINT INTERGALACTIC MEDIUM REDSHIFTED EMISSION BALLOON (CO-I INSTITUTION PROPOSAL)	43.001	NNX08A070G	GRA	-500
				\$12,501,224
Exploration				
EFFECTS OF SPACE RADIATION ON THE FUNCTION OF HUMAN BRAIN CAPILLARIES AND THE BLOOD-BRAIN-BARRIER: IMPLICATIONS FOR NEUR	43.003	NASA NNX11AR03G		173,691
				\$173,691
Education				
CLARA ORBE GRADUATE STUDENT RESEARCH PROGRAM	43.008	NNX11AO01H		23,471
				\$23,471
Total Direct Award Programs:				\$17,064,630

Pass-through Awards

National Aeronautics & Space Administration

CALIFORNIA INSTITUTE OF TECHNOLOGY	43.	CALTECH 44A-1085100 CON	NNG08FD60C	75,916
SPACE TELESCOPE SCIENCE INSTITUTE	43.	HST-HF-51295.01-A	SCO NAS5-26555	75,125
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.	CALTECH 44A-1085100 CAL	NNG08FD60C	72,720
SPACE TELESCOPE SCIENCE INSTITUTE	43.	HST-HF-51284.01A	SCO NAS5-26555	65,282
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.	JPLCIT 1362354	NM0710769	63,570
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.	GO1-12071X	NAS8-03060	29,306
SPACE TELESCOPE SCIENCE INSTITUTE	43.	STSCI HST-GO-12603.0	NAS5-26555	29,148
SPACE TELESCOPE SCIENCE INSTITUTE	43.	HST-HF-51284.01A	NAS5-26555	16,417
SPACE TELESCOPE SCIENCE INSTITUTE	43.	HST-HF-51295.01-A	NAS5-26555	15,253
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.	SAO GO1-12019X	NAS8-03060	9,453
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.	JPL 1446325	NASA CU11-3367	4,971
SPACE TELESCOPE SCIENCE INSTITUTE	43.	HST-GO-12448.01-A	NAS5-26555	1,925

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R&D Cluster, continued

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JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.	JPLCIT 1452786	NAS7-03001	1,216
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.	JPL 1452779	NM0710968	432
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.	CALTECH 44A-1085100	NNG08FD60C	-93,204
				\$367,530
Science				
UNIVERSITY OF CALIFORNIA, IRVINE	43.001	UCI #2008-1969	NNX08AF64G	176,476
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	43.001	RCUNY 49663-00-01 A	NNX07AT10G	146,505
UNIVERSITY OF WISCONSIN	43.001	UWIS 257K935	NNX10AP10G	123,101
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	JPLCIT 1365013	NM0711043	105,117
UNIVERSITY OF ILLINOIS, BOARD OF TRUSTEES	43.001	UIL 2008-06014-02	NNX09AK66G	91,505
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO G01-12041A	NAS8-03060	71,816
CALIFORNIA STATE UNIVERSITY, MONTEREY BAY	43.001	5019703A-091212-S-A	NNA07CN16A	68,098
REGENTS OF THE UNIVERSITY OF MINNESOTA	43.001	UMINN X5336565101 SC1	NNX08AG40G	67,028
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-11698.01-A	NAS5-26555	65,691
UNIVERSITY OF MICHIGAN	43.001	UMICHG 3001568909	NNX10AM20G	65,092
INSTITUTE FOR THE APPLICATION OF GEOSPATIAL TECHNOLOGY, INC	43.001	LAGT CU10-1492	NNX10AT46A	57,318
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	JPLCIT 1428009	NASA 711043	53,936
UNIVERSITY OF CALIFORNIA, IRVINE	43.001	UCI 2011-2653	NNX11AF96G	49,662
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO AR2-13002X	NAS8-03060	48,475
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	JPLCIT 1369759	NM0711043	36,709
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	JPLCIT 1203235 NIC	NAS 7-1260	35,998
REGENTS OF THE UNIVERSITY OF MINNESOTA	43.001	UMINN A000239302 SCO	NNX12AD50G	34,663
CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	CALTECH #44G-1064646	NAS5-98034	33,212
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO G02-13051X	NAS8-03060	23,787
REGENTS OF THE UNIVERSITY OF MINNESOTA	43.001	UMINN A000239302	NNX12AD50G	22,000
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO G02-13025A	NAS8-03060	18,866
CORNELL UNIVERSITY	43.001	CU 61420-9284	NNX10AI94H	18,557
REGENTS OF THE UNIVERSITY OF MINNESOTA	43.001	UMINN X5336565101	NNX08AG40G	15,459
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-11621.03 A	NAS5-26555	15,007
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-HF-51277.01A	NAS5-26555	13,691
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-AR-12632.01-A	NAS5-26555	13,131
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-HF-51277.01A STI	NAS5-26555	10,417
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO G01-12004X	NASA NAS8-03060	10,083
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO G01-12086X	NAS8-03060	6,501
JET PROPULSION LAB, CALIFORNIA INSTITUTE OF TECHNOLOGY	43.001	JPLCIT 1344460	NM0710076	6,392
SPACE TELESCOPE SCIENCE INSTITUTE	43.001	HST-GO-11646.01-A	NAS5-26555	5,189
DICKINSON COLLEGE	43.001	DCKCOL NASA/LEARY-1	NNX10AB47A	4,832

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SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO G09-0080X	NAS8-03060	2,919
SMITHSONIAN ASTROPHYSICAL OBSERVATORY	43.001	SAO G00-11085X	NAS8-03060	2,131
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	43.001	RFCUNY 49662-00-01 A	F21500	-16,849
				\$1,502,515
Aeronautics				
UNIVERSITY OF COLORADO	43.002	UCOL 154-6102	NASA NNX09AN77G	87,476
UNIVERSITY OF COLORADO	43.002	1548570	NNX11AN57G	62,798
BAYLOR COLLEGE OF MEDICINE-HOUSTON	43.002	BCMH NCC 9-58-265	NCC 9-58	29,572
				\$179,846
Total Pass-through Programs:				\$2,049,891
Total: National Aeronautics & Space Administration				\$19,114,521

Department of Energy
Direct Awards

Office of Science Financial Assistance Program

THEORETICAL HIGH ENERGY PHYSICS	81.049	DE-FG02-92ER40699 01		1,340,613
HIGH BETA TOKAMAK RESEARCH	81.049	DE-FG02-86ER53222 A07		639,471
PROBING THE QUARK-GLUON PLASMA WITH JETS AND HEAVY QUARKS	81.049	DE-FG02-86ER40281		565,672
MAGNETOHYDRODYNAMICS MODE CONTROL RESEARCH IN DIII-D	81.049	DE-FG02-04ER54761		418,007
HIGH BETA TOKAMAK RESEARCH	81.049	DE-FG02-86ER53222 END		410,249
CATALYTIC GROWTH OF MOLECULAR-SCALE WIRING	81.049	DE-FG02-01ER15264		407,428
MAGNETO HYDRODYNAM STABILITY ACTIVE MODE CONTROL- OFF CAMPUS THE NATIONAL SPHERICAL TORUS EXPERIMENT	81.049	DE-FG02-99ER54524 A04		384,851
GENETIC CONTROL OF THE TRIGGER FOR THE G2/M CHECKPOINT	81.049	DE-SC0001634		315,628
CONTINUES EVALUATION OF FAST PROCESSES IN CLIME MODELS USING AM MEASUREMENTS	81.049	DE SC0002125		303,847
DATA MOVEMENT DOMINATES: ADVANCED MEMORY TECHNOLOGY TO ADDRESS THE REAL EXASCALE POWER PROBLEM	81.049	DE-SC0005114		289,111
PETASCALE HIERARCHICAL MODELING VIA PARALLEL EXECUTION	81.049	DE-SC0002099		282,242
THEORETICAL STUDIES OF PHOTOACTIVE MOLECULAR SYSTEMS: ELECTRON TRANSFER, ENERGY TRANSPORT, AND OPTICAL SPECTROSCOPY	81.049	DE-FG02-90ER14162		281,417
MODELING THE FRACTURE OF ICE SHEETS ON PARALLEL COMPUTERS	81.049	DE-SC0002137		278,448
INVESTIGATION OF THE QUANTUM LIMIT TRANSPORT PHENOMENA IN GRAPHENE	81.049	DE-FG02-05ER46215 SCO		255,110
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (EQUIPMENT)	81.049	DE-SC0001085 EQU		244,857
FUNDAMENTAL STUDIES OF METAL CENTERED TRANSFORMATIONS RELEVANT TO CATALYSIS	81.049	DE-FG02-93ER14339		233,187
ALGORITHMS FOR MATHEMATICAL PROGRAMMING WITH EMPHASIS ON BI-LEVEL MODELS	81.049	DE-FG02-08ER25856		231,636
PRESENT AND FUTURE MODES OF LOW FREQUENCY CLIMATE VARIABILITY	81.049	DE-SC0005108		230,912
SCANNING TUNNELING MICROSCOPY STUDIES OF THE STRUCTURE AND CHEMISTRY OF POLYCYCLIC AROMATIC HYDROCARBONS ON GRAPHITIC	81.049	DE-FG02-88ER13937		229,533
THEORY OF ULTRA-DENSE MATTER & THE DYNAMICS OF HIGH ENERGY INTERACTIONS INVOLVING NUCLEI	81.049	DE-FG02-93ER40764 PR		220,567
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (POST DOC - A&S)	81.049	DE-SC0001085 06		208,411
MEASURING THE IMPORTANCE OF VALENCE TO CHEMISTRY OF NANOCRYSTAL SURFACES	81.049	DE-SC0006410		191,595
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (SUBCONTRACT - PURDUE)	81.049	DE-SC0001085 PUR		188,241

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HIGH BETA TOKAMAK RESEARCH	81.049	DE-FG02-86ER53222 A08		181,825
GRAPHENE CHARGE TRANSFER AND CHEMICAL REACTIONS	81.049	DE-SC0006521		177,943
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL EFRC	81.049	DE-SC0001085 NUC		177,012
NONLINEAR DYNAMICS OF STRONG INTERCHANGE INSTABILITIES IN A ROTATING DIPOLE-CONFIRMED PLASMA	81.049	DE-FG02-00ER54585 SCO		174,062
INVESTIGATION OF THE QUANTUM LIMIT TRANSPORT PHENOMENA IN GRAPHENE	81.049	DE-FG02-05ER46215 REN		169,408
MECHANISTIC AND QUANTITATIVE STUDIES OF BYSTANDER RESPONSES IN 3-D TISSUES FOR LOW-DOSE RADIATIONS R	81.049	DOE DE-FG02-07ER6433		159,753
THEORY OF SURFACE AND INTERFACE PHYSICS OF CORRELATED ELECTRON MATERIALS	81.049	DE-FG02-04ER46169		152,729
THEORETICAL HIGH ENERGY PHYSICS	81.049	DE-FG02-92ER40699 02		150,070
IMPACT OF RISING GREENHOUSE GASES ON MID-LATITUDE STORM TRACKS AND ASSOCIATED HYDROCLIMATE VARIABILITY AND CHANGE	81.049	DE-SC0005107		147,091
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 KYM		146,827
IMPROVING THE REPRESENTATION OF SOLUBLE IRON IN CLIMATE MODELS	81.049	DE-SC0006713		140,388
CMCSN: "MANY-BODY METHODS FROM CHEMISTRY TO PHYSICS: A COMPUTATIONAL MATERIALS AND CHEMICAL SCIENCES	81.049	DE-SC0006613		138,981
PHOTOCHEMISTRY AT INTERFACES	81.049	DE-FG02-91ER14226		131,083
QUANTUM FIELD THEORIES FOR COSMOLOGY	81.049	DE-SC0006395		122,041
ARRA-RECONFIGURATION POWER SYSTEM TO MINIMIZE CASCADING FAILURES: MODELS AND ALGORITHMS	81.049	DE-SC0002676		120,657
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (POST DOC - SEAS)	81.049	DE-SC0001085 05		120,617
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (SUBCONTRACT - ARKANSAS)	81.049	DE-SC0001085 NAR		119,758
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 HER		119,201
CENTER FOR PLASMA EDGE SIMULATION	81.049	DE-FC02-06ER54862 REN		118,857
STUDIES OF STRUCTURE AND DYNAMICS OF LIGHT HARVESTING COMPLEX 1 OF R. SPHAEROIDES BY SOLID STATE NMR	81.049	DE-SC0002386		118,605
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 HEI		113,219
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 SHE		112,665
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (SUBCONTRACT - TEXAS)	81.049	DE-SC0001085 TEX		112,325
HIGH BETA TOKAMAK RESEARCH	81.049	DE-FG02-86ER53222 A3		108,901
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 HON		108,830
MAGNETO HYDRODYNAMIC STABILITY AND ACTIVE MODE CONTROL IN THE NATIONAL SPHERICAL TORUS EXPERIMENT	81.049	DE-FG02-99ER54524 A05		103,096
LEVITATED DIPOLE EXPERIMENT - OFF CAMPUS	81.049	DE-FG02-98ER54459 A04		99,782
ARRA-RECOVERY ACT - REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 OSG		98,545
OPTIMIZING IMMOBILIZED ENZYME PERFORMANCE IN CELL-FREE ENVIRONMENTS TO PRODUCE LIQUID FUELS	81.049	DE-SC0007019		95,588
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 FLY		94,779
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 STE		90,982
LASER DYNAMIC STUDIES OF PHOTOREACTIONS OF SINGLE-CRYSTAL AND NANOSTRUCTURED SURFACES	81.049	DE-FG02-90ER14104		90,047
THEORETICAL HIGH ENERGY PHYSICS (GREENE SCOPE)	81.049	DE-FG02-92ER40699 GRE		89,257
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (SUBCONTRACT - ARKANSAS)	81.049	DE-SC0001085 OWE		89,065
TYPE 1 COLLABORATIVE RESEARCH: DECADEAL PREDICTION AND STOCHASTIC SIMULATION OF HYDROCLIMATE OVER MONSOONAL ASIA	81.049	DE-SC0006616 LDE		85,060
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 BRU		83,000

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ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 REI		82,834
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 VEN		82,270
MAPPING THE ELECTRON RESPONSE OF NANOMATERIALS	81.049	DE-FG02-04ER46157		79,892
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 WON		79,206
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - OUTREACH AND COMMUNITY - A&S	81.049	DE-SC0001085 08		77,243
THEORETICAL HIGH ENERGY PHYSICS (NICOLIS/HUI)	81.049	DE-FG02-92ER40699 HUI		75,054
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 WIN		67,603
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 KIM		65,414
MAPPING THE ELECTRON RESPONSE OF NANOMATERIALS	81.049	DE-FG02-04ER46157 GRA		65,219
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - OUTREACH AND COMMUNITY - SEAS	81.049	DE-SC0001085 07		61,535
CATALYTIC APPLICATIONS OF H ATOM TRANSFER FROM TRANSITION-METAL HYDRIDE COMPLEXES	81.049	DE-FG02-97ER14807		60,424
DEVELOPMENT OF ENABLING SCIENTIFIC TOOLS TO CHARACTERIZE THE GEOLOGIC SUBSURFACES AT HANFORD	81.049	DE-SC0004625		59,133
BASIC PHYSICS OF TOKAMAK TRANSPORT AND ITS CONTROL	81.049	DE FG02-98ER54464		58,525
RESISTIVE WALL MODES & ERROR FIELD AMPLIFICATION	81.049	DE-FG02-03ER54696 OFF		49,635
TYPE 1 COLLABORATIVE RESEARCH: DECADAL PREDICTION AND STOCHASTIC SIMULATION OF HYDROCLIMATE OVER MONSOONAL ASIA	81.049	DE-SC0006616		49,313
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 DIR		48,805
MAPPING THE ELECTRON RESPONSE OF NANOMATERIALS	81.049	DE-FG02-04ER46157 MIL		48,742
THEORY OF ULTRA-DENSE MATTER & THE DYNAMICS OF HIGH ENERGY INTERACTIONS INVOLVING NUCLEI	81.049	DE-FG02-93ER10764 OFF		47,450
ADVANCING CLOUD LIFECYCLE REPRESENTATIONIN NUMERICAL MODELS USING INNOVATIVE ANALYSIS METHODS THAT BRIDGE ARM OBSERVATIO	81.049	DE-SC0006712		45,517
THEORETICAL HIGH ENERGY PHYSICS HIGH ENERGY PHYSICS	81.049	DE-FG02-92ER40699 PR		44,448
LOW DOSE RADIATION CATARACT	81.049	DE-FG02-07ER64334		39,159
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC	81.049	DE-SC0001085 BIL		37,400
MONTE CARLO AND DETERMINISTIC 3D RADIATIVE TRANSFER WORKING TOGETHER FOR ENHANCED DETECTION AND MONI	81.049	DE-FG52-08NA28779		34,982
STELLARATORY THEORY	81.049	DE-FG02-95ER54333 A04		30,180
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC (RES - A&S)	81.049	DE-SC0001085 04		23,783
LASER DYNAMIC STUDIES OF PHOTOREACTIONS OF SINGLE-CRYSTAL AND NANOSTRUCTURED SURFACES	81.049	DE-FG02-90ER14104 OFF		23,174
CENTER FOR SIMULATION OF WAVE INTERACTIONS WITH MAGNETOHYDRODYNAMICS	81.049	DE-FC02-06ER54863 REN		22,387
COLLABORATIVE PROPOSAL ON SEPARATING FORCED AND UNFORCED DECADAL PREDICTABILITY IN MODELS AND OBSERVATIONS	81.049	DE-SC0005109		17,944
THEORETICAL HIGH ENERGY PHYSICS	81.049	DE-FG02-92ER40699 C		14,189
CENTER FOR PLASMA EDGE SIMULATION	81.049	DE-FC02-06ER54862 A03		12,327
LEVIATED DIPOLE EXPERIMENT - ON CAMPUS	81.049	DE-FG02-98ER54459 A03		9,206
CENTER FOR SIMULATION OF WAVE INTERACTIONS WITH MAGNETOHYDRODYNAMICSATION	81.049	DE-FC02-06ER54863		5,599
RESISTIVE WALL MODES AND ERROR FIELD AMPLIFICATION	81.049	DE-FG02-03ER54696 ON		4,428
ARRA-RECOVERY ACT: REDEFINING PHOTOVOLTAIC EFFICIENCY THROUGH MOLECULE-SCALE CONTROL - EFRC - SEED POOL	81.049	DE-SC0001085 SP		4,177
CENTER FOR PLASMA EDGE SIMULATION	81.049	DE-FC02-06ER54862 OFF		3,745
INVESTIGATION OF THE QUANTUM LIMIT TRANSPORT PHENOMENA IN GRAPHENE	81.049	DE-FG02-05ER46215 A00		1,488

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
NONLINEAR DYNAMICS OF STRONG INTERCHANGE INSTABILITIES IN A ROTATING DIPOLE-CONFINED PLASMA	81.049	DE-FG02-00ER54585 A01		877
THÉORÉTIQUE HIGH ENERGY PHYSICS	81.049	DE-FG02-92ER40699 B		819
STELLARATORY THEORY DESIGN	81.049	DE-FG02-95ER54333 A03		759
LASER DYNAMIC STUDIES OF PHOTOREACTIONS OF SINGLE-CRYSTAL AND NANOSTRUCTURED SURFACES	81.049	DE-FG02-90ER14104		-283
REGIONAL CLIMATE-CHANGE PROJECTIONS THROUGH NEXT-GENERATION EMPIRICAL AND DYNAMICAL MODELS	81.049	DE-FG02-02ER63413		-496
TOWARDS OPTIMAL PETASCALE SIMULATIONS	81.049	DE-FC02-06ER25783		-5,178
				\$14,142,010

Conservation Research and Development

ARRA-RECOVERY ACT: INTEGRATED DC-DC CONVERSION FOR ENERGY-EFFICIENT MULTICORE MICROPROCESSORS	81.086	DE-EE0002892		1,209,861
ARRA-RECOVERY ACT: INTEGRATED DC-DC CONVERSION FOR ENERGY-EFFICIENT MULTICORE MICROPROCESSORS	81.086	DE-EE0002892 BB		154,273
				\$1,364,134

Fossil Energy Research and Development

TAGGING CARBON DIOXIDE TO ENABLE QUANTITATIVE INVENTORIES OF GEOLOGICAL CARBON STORAGE	81.089	DE-FE0001535		536,877
RADIOCARBON AS A REACTIVE TRACER FOR TRACKING PERMANENT CO2 STORAGE IN BASALTIC ROCKS	81.089	DE-FE0004847 LAM		144,538
TAGGING CARBON DIOXIDE TO ENABLE QUANTITATIVE INVENTORIES OF GEOLOGICAL CARBON STORAGE	81.089	DE-FE0001535 LDE		82,186
RADIOCARBON AS A REACTIVE TRACER FOR TRACKING PERMANENT CO2 STORAGE IN BASALTIC ROCKS	81.089	DE-FE0004847		14,772
				\$778,373

Geologic Sequestration Training and Research Grant Program

ARRA-MICROBIAL AND CHEMICAL ENHANCEMENT OF INSITU CARBON MINERALIZATION IN GEOLOGICAL FORMATIONS	81.133	DE-FE0002389		106,170
ARRA-GEO-CHEMO-MECHANICAL STUDIES FOR PERMANENT CO2 STORAGE IN GEOLOGIC RESERVOIRS	81.133	DE-FE0002386		69,414
				\$175,584

Advanced Research and Projects Agency Energy Financial Assistance Program

ARRA-CHEMICAL AND BIOLOGICAL CATALYTIC ENHANCEMENT OF WEATHERING OF SILICATE MINERALS AS NOVEL CARBON CAPTURE AND STORAGE TEC	81.135	DE-AR0000100		525,886
ARRA-BIOFUELS FROM CO2 USING AMMONIA-OXIDIZING BACTERIA IN A REVERSE MICROBIAL FUEL CELL	81.135	DE-AR0000060		438,106
ARRA-CHEMICAL AND BIOLOGICAL CATALYTIC ENHANCEMENT OF WEATHERING OF SILICATE MINERALS AS NOVEL CARBON CAPTURE AND STORAGE TEC	81.135	DE-AR0000100		61,485
				\$1,025,477

Total Direct Award Programs:

\$17,485,578

Pass-through Awards

Department of Energy

BROOKHAVEN NATIONAL LABORATORY	81.	BNL 0000192571	DE -AC02-98CH10886	500,000
PRINCETON PLASMA PHYSICS LABORATORY	81.	PPPL S011266-F	DE-AC02-09CH11466	227,226
BROOKHAVEN NATIONAL LABORATORY	81.	BNL CU08-9027	DE-AC02-98CH10886	157,660
SANDIA NATIONAL LABORATORIES	81.	SANDIA 1076890	DE-AC0494AL-8500	103,811
LAWRENCE BERKELEY NATIONAL LABORATORY	81.	LBNL 6995308	DE-AC02-05CH11231	99,930
ARGONNE NATIONAL LABS	81.	ARGNTL #9F-31603	DE-AC02-06CH11357	87,781
SANDIA NATIONAL LABORATORIES	81.	SANDIA 0964214	DE-ACO4-94AL-85000	77,209
BROOKHAVEN NATIONAL LABORATORY	81.	BNL 189607	DE-AC02-98CH10886	77,208
BROOKHAVEN NATIONAL LABORATORY	81.	BNL 186258	DE-AC02-98CH10886	74,067
PRINCETON PLASMA PHYSICS LABORATORY	81.	PPPL S010115-R	DE-AC02-09CH11466	53,893
LAWRENCE BERKELEY NATIONAL LABORATORY	81.	LBNL 6943081	DE-AC02-05CH11231	48,301

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
BROOKHAVEN NATIONAL LABORATORY	81.	BNL CU08-9027	DE-AC02-98CH10886	43,591
BROOKHAVEN NATIONAL LABORATORY	81.	BNL #188884	DE-AC0298CH10886	37,753
PRINCETON PLASMA PHYSICS LABORATORY	81.	PPPL S011266-F SUM	DE-AC02-09CH11466	30,180
LAWRENCE LIVERMORE NATIONAL LABORATORY	81.	LLNL CU08-8354	DE-AC52-07NA27344	29,046
LAWRENCE LIVERMORE NATIONAL LABORATORY	81.	LLNL B595720 YR4	DE-AC52-07NA27344	27,987
BROOKHAVEN NATIONAL LABORATORY	81.	BNL 189607 SCO	DE-AC02-98CH10886	18,174
LAWRENCE BERKELEY NATIONAL LABORATORY	81.	LBNL NO.6924501	DE-AC02-95CH11231	16,416
LOS ALAMOS NATIONAL LABORATORY	81.	LANL 139445	DE-AC52-06NA25396	8,178
ARGONNE NATIONAL LABS	81.	ARGNTL CU10-0978	DE-AC02-06CH11357	-29
				\$1,718,382

Office of Science Financial Assistance Program

ARRA -SANDIA TECHNOLOGIES LLC	81.049	SANDIA 1510-TB-2011	FE-0002352	173,603
BROOKHAVEN NATIONAL LABORATORY	81.049	BNL #89592	DE-AC02-98CH10886	101,874
ARRA -SANDIA TECHNOLOGIES LLC	81.049	SANDIA 1510-TB-2011 CAL	FE-0002352	94,381
BROOKHAVEN NATIONAL LABORATORY	81.049	BNL CU09-1814	DE-AC02-98CH10886	75,399
ARRA -SANDIA TECHNOLOGIES LLC	81.049	SANDIA 1510-TB-2011 CAL	FE-0002352	68,943
UNIVERSITY OF WISCONSIN	81.049	UWIS 378K921	DE-SC0006415	68,602
ARRA -UNIVERSITY OF COLORADO	81.049	UCOL 1547442	DE-PS02-09ER0902	65,945
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	81.049	RFCUNY 47829A	DE-SC0003739	46,046
RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	81.049	RFCUNY 47829A SCO	DE-SC0003739	41,390
ARRA -UNITED TECHNOLOGIES CORPORATION	81.049	UTHECHC NO.1162214	DE-AR0000023	41,342
TUFTS UNIVERSITY COLLEGE OF ARTS AND SCIENCES	81.049	TUFTS #DOE170 A05	DE-FG02-05ER15730	40,940
ARRA -CON EDISON OF NEW YORK	81.049	CON ED NO. SA-SG003	DE-DE0000197	25,807
TUFTS UNIVERSITY COLLEGE OF ARTS AND SCIENCES	81.049	TUFTS #DOE170 A03	DE-FG02-05ER15730	22,442
TUFTS UNIVERSITY COLLEGE OF ARTS AND SCIENCES	81.049	TUFTS #DOE170	DE-FG02-05ER15730	9,548
UNIVERSITY OF CENTRAL FLORIDA	81.049	UCFL 24086040-01	DE-FG02-07ER15842	6,324
TUFTS UNIVERSITY COLLEGE OF ARTS AND SCIENCES	81.049	TUFTS #DOE170 A04 A04	DE-FG02-05ER15730	1,610
HOFSTRA UNIVERSITY	81.049	HOFSTRA CU10-2003	DE-SC0001985	474
UNIVERSITY OF MARYLAND	81.049	UMARY Z705501	DE-PS02-07ER07-24	-18,301
				\$866,369

Fossil Energy Research and Development

UNIVERSITY OF CALIFORNIA, SAN DIEGO	81.089	UCSD #10296230	DE_FE0000100	30,738
MONTANA STATE UNIVERSITY	81.089	G132-12-W3521	DE-FC26-05NT42587	22,958
				\$53,696

Nuclear Energy Research, Development and Demonstration

RENSSELAER POLYTECHNIC INSTITUTE	81.121	RPI A11896	DE-FG07-07ID14889	81,570
				\$81,570

Electricity Delivery and Energy Reliability, Research, Development and Analysis

ARRA -CON EDISON OF NEW YORK	81.122	CONED SA-SG009	OE-OE0000197	619,215
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
				\$619,215
Advanced Research and Projects Agency Energy Financial Assistance Program				
ARRA -RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	81.135	RFCUNY 47832 A	DE-AR0000114	150,251
NORTHEASTERN UNIVERSITY	81.135	NU 503020-78053	DE-AR0000186	94,327
ARRA -RESEARCH FOUNDATION OF THE CITY UNIVERSITY OF NEW YORK	81.135	RFCUNY 47832 A KIN	DE-AR0000114	44,072
				\$288,650
Total Pass-through Programs:				\$3,627,882
Total: Department of Energy				\$21,113,460

Department of Defense
Direct Awards

Department of the Army

RAPID IDENTIFICATION OF UNKNOWN PATHOGENS	12.	W911SR-11-C-0077		2,903,087
PREDICTING POWER, INFLUENCE AND RIFTS IN SOCIAL GROUPS THROUGH LINGUISTIC ANALYSIS: A STUDY OF ENGLISH AND ARABIC ELECTR	12.	DA W911NF-09-C-0141 RAM		329,169
PREDICTING POWER, INFLUENCE AND RIFTS IN SOCIAL GROUPS THROUGH LINGUISTIC ANALYSIS: A STUDY OF ENGLISH AND ARABIC ELECTR	12.	W911NF-09-C-0141		248,346

Department of the Navy

NANOTECHNOLOGY METAL MESH FILTERS AND RICHROICS FOR THE ASTRONOMICAL COMMUNITY (P.O. N00173-10-9-1574)	12.	N00173-10-P-1574 SC4		420
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Other DOD

INTERACTION OF SYNNUCLEIN AND INFLAMMATION IN DOPAMINERGIC NEURODEGERATION	12.	W81XWH-08-1-0465		451,901
CORTICALLY-COUPLED COMPUTER VISION: C3-VISION	12.	DARPA N10PC20050		449,814
ALLOSTERIC EFFECTORS OF CHOLINESTERASE	12.	HDTRA1-11-C-006		449,244
TARGETING CLASS I PI3KS IN THE TREATMENT OF T-CELL ACUTE LYMPHOBLASTIC LEUKEMIA	12.	W81XWH-10-1-0595		314,760
MEERKATS: MAINTAINING ENTERPRISE RESILIENCY VIA KALEIDOSCOPIIC ADAPTATION AND TRANSFORMATION OF SOFTWARE SERVICES	12.	FA8650-11-C-7190 SET		140,964
MEERKATS: MAINTAINING ENTERPRISE RESILIENCY VIA KALEIDOSCOPIIC ADAPTATION AND TRANSFORMATION OF SOFTWARE SERVICES	12.	FA8650-11-C-7190 STO		136,359
MEERKATS: MAINTAINING ENTERPRISE RESILIENCY VIA KALEIDOSCOPIIC ADAPTATION AND TRANSFORMATION OF SOFTWARE SERVICES	12.	FA8650-11-C-7190		134,011
MEERKATS: MAINTAINING ENTERPRISE RESILIENCY VIA KALEIDOSCOPIIC ADAPTATION AND TRANSFORMATION OF SOFTWARE SERVICES	12.	FA8650-11-C-7190 GEA		126,007
MEERKATS: MAINTAINING ENTERPRISE RESILIENCY VIA KALEIDOSCOPIIC ADAPTATION AND TRANSFORMATION OF SOFTWARE SERVICES	12.	FA8650-11-C-7190 YAN		79,714
CORTICALLY-COUPLED COMPUTER VISION: C3-VISION	12.	DARPA N10PC20050 CHA		38,210
STUDENT WORK AT NPS	12.	N00244-10-P-1303		2,273
				\$5,804,279

Basic and Applied Scientific Research

ACQUISITION OF A HIGH THROUGHPUT ELECTRON BEAM LITHOGRAPHY SYSTEM	12.300	N00014-10-1-0986		631,295
SYMBIOTIC, POLYMORPHIC, AUTOTOMIC, RESILIENT, CLEAN-SLATE, HOST SECURITY (SPARCHS)	12.300	FA8750-10-2-0253		575,236
NEXT GENERATION OF ADVANCED LASER FLUORESCENCE TECHNOLOGY FOR CHARACTERIZATION OF NATURAL AQUATIC ENVIRONMENTS	12.300	N00014-10-1-0205		463,762
INTEGRATED MOLECULAR-SCALE ELECTRONIC DEVICES VIA DNA NANOSTRUCTURE ASSEMBLY	12.300	N00014-09-1-1117 P2A		335,307
GRAPH-BASED SEMI-SUPERVISED LEARNING FOR STRUCTURE DISCOVERY AND SEMANTIC INFORMATION INFERENCING	12.300	N00014-10-1-0242		316,103
NMR SPECTROMETER IN SUPPORT OF DRUG DISCOVERY EFFORT	12.300	N00014-11-1-0900		246,600
OCEAN SURFACE TEMPERATURE TO ATMOSPHERE-OCEAN INTERACTION OF THE MJO	12.300	N00014-11-1-0853		234,507
INTEGRATED MOLECULAR-SCALE ELECTRONIC DEVICES VIA DNA NANOSTRUCTURE ASSEMBLY	12.300	N00014-09-1-1117 P2B		193,996
PASSIVE VISUAL INTRUSION DETECTION	12.300	N00014-11-1-0285		186,248

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R&D Cluster, continued

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SYMBIOTIC, POLYMORPHIC, AUTOTOMIC, RESILIENT, CLEAN-SLATE, HOST SECURITY (SPARCHS)	12.300	FA8750-10-2-0253 JUN		175,651
SYMBIOTIC, POLYMORPHIC, AUTOTOMIC, RESILIENT, CLEAN-SLATE, HOST SECURITY (SPARCHS)	12.300	FA8750-10-2-0253 SAL		172,316
METHODS FOR SYSTEM-LEVEL DESIGN AND PROGRAMMING OF HETEROGENEOUS EMBEDDED MULTI-CORE PLATFORMS	12.300	N00014-10-1-0739		147,204
CONTINENTAL SHELF EMBAYMENTS OF THE EASTERN MARGIN OF THE PHILIPPINES: LAMON BAY STRATIFICATION & CIRCULATION	12.300	N00014-10-1-0426		128,206
SYMBIOTIC, POLYMORPHIC, AUTOTOMIC, RESILIENT, CLEAN-SLATE, HOST SECURITY (SPARCHS)	12.300	FA8750-10-2-0253 KER		119,228
VALIDATION OF BIOGEOCHEMICAL MEASUREMENTS IN THE ARCTIC OCEAN FROM VIRGINIA AND SEA WOLF CLASS SUBMARINES	12.300	N00014-11-1-0517		105,408
INTEGRATED MOLECULAR-SCALE ELECTRONIC DEVICES VIA DNA NANOSTRUCTURE ASSEMBLY	12.300	N00014-09-1-1117 P2E		99,415
REGIONAL STRATIFICATION AND SHEAR OF THE VARIOUS STREAMS FEEDING THE PHILIPPINE STRAITS	12.300	N00014-09-1-0582		98,679
MODIFICATION OF THE STRATIFICATION AND VELOCITY PROFILE WITHIN THE STRAITS AND SEAS OF THE INDONESIAN ARCHIPELAGO	12.300	N00014-10-1-0317		97,527
THE ROLE OF DISPERSION ON ENERGY ABSORPTION IN METAL-HIGH DENSITY POLYETHYLENE PLATES	12.300	N00014-11-1-0951		91,586
REMOTE MONITORING OF SUBSURFACE FLOW CONDITIONS IN RIVERS	12.300	N00014-11-1-0922		91,223
INTEGRATED MOLECULAR-SCALE ELECTRONIC DEVICES VIA DNA NANOSTRUCTURE ASSEMBLY	12.300	N00014-09-1-1117 P2C		87,964
CARDINALITY BOUNDED MATHEMATICAL PROGRAMS: NEW TECHNIQUES, MODELS AND COMPUTATION	12.300	N00014-09-1-0327		75,613
EXTREMELY LOW RATE SAMPLING FOR DISTRIBUTED DETECTION, ESTIMATION AND TRACKING	12.300	N00014-12-1-0043		59,282
OCEAN SURFACE WAVE OPTICAL ROUGHNESS: ANALYSIS OF INNOVATIVE MEASUREMENTS	12.300	N00014-11-1-0168		44,077
SHIFTING THE PARADIGM IN SYSTEMS NEUROSCIENCE	12.300	DN ONR N00014-12-1-0		43,042
LITHOGRAPHICALLY DIRECTED BIOMOLECULAR ASSEMBLY OF ELECTRONICALLY FUNCTIONAL NANOSTRUCTURES FOR SUB-10 NM ELECTRONIC DEV	12.300	N00014-09-1-0250 SHE		39,869
OPTIMIZING ENERGY ABSORPTION IN HYBRID METAL-POLYMER-COMPOSITE-CERAMICS (MPC2) PLATES	12.300	N00014-12-1-0558		30,097
INITIAL OBSERVATION OF HIGH RESOLUTION VELOCITY PROFILE AND STRATIFICATION IN THE SUNDA STRAIT	12.300	N00014-08-01-0618		28,707
COMPRESSED SENSING: RECOVERY ALGORITHMS AND ANALYSIS	12.300	N00014-08-1-1118		20,440
VALIDATION OF BIOGEOCHEMICAL MEASUREMENTS IN THE ARCTIC OCEAN FROM VIRGINIA AND SEA WOLF CLASS SUBMARINES	12.300	N00014-11-1-0517 SCO		18,446
ATMOSPHERE-OCEAN INTERACTION OF THE MJO FROM UNMANNED AIRBORNE VEHICLES	12.300	N00014-10-1-0545		16,536
INTERGRATED MOLECULAR-SCALE ELECTRONIC DEVICES VIA DNA NANOSTRUCTURE ASSEMBLY	12.300	N00014-09-1-1117 WIN		15,732
ADVANCED MONTE CARLO SIGNAL PROCESSING AND NETWORK CODING WITH APPLICATIONS IN SENSOR NETWORKS AND	12.300	N00014-08-1-0318		14,884
A LAGRANGIAN APPROACH TO EMERGING DYNAMICS IN THE MARGINAL ICE ZONE	12.300	N00014-11-1-0977 RNW		10,285
INTEGRATED MOLECULAR-SCALE ELECTRONIC DEVICES VIA DNA NANOSTRUCTURE ASSEMBLY	12.300	N00014-09-1-1117		7,827
LITHOGRAPHICALLY DIRECTED BIOMOLECULAR ASSEMBLY OF ELECTRONICALLY FUNCTIONAL NANOSTRUCTURES FOR SUB-10 NM ELECTRONIC DEV	12.300	N00014-09-1-0250		-35,392
				\$4,986,906

Basic Scientific Research - Combating Weapons of Mass Destruction

INVESTIGATION OF DATA-INTENSIVE DISCOVERY METHODS FOR IMPROVED SEISMIC MONITORING	12.351	HDTRA1-11-1-0027		262,028
INTERFACIAL NONLINEAR SPECTROSCOPIES AS ANALYTICAL METHODS FOR DETECTION	12.351	HDTRA1-11-1-0002		163,794
PHYSICS OF RADIATION EXPOSURE AND CHARACTERIZATION FOR FUTURE ELECTRONIC MATERIALS	12.351	HDTRA1-11-1-0022		139,848
PHYSICS OF RADIATION EXPOSURE AND CHARACTERIZATION FOR FUTURE ELECTRONIC MATERIALS	12.351	HDTRA1-11-1-0022 SC2		136,581
METANOLOMICS-BASED RAPID BIODOSIMETRY FOR PARTIAL-BODY EXPOSURES	12.351	HDTRA1-07-1-0025		101,376
RESILIENCE OF NETWORKS TO GEOGRAPHICALLY CORRECTED FAILURES	12.351	DTRA HDTRA10910057		79,585
PHYSICS OF RADIATION EXPOSURE AND CHARACTERIZATION FOR FUTURE ELECTRONIC MATERIALS	12.351	HDTRA1-11-1-0022 SC1		75,343
IMPROVING SENSING WITH TETHERED CAPTURE AND SURFACE DIFFUSION	12.351	HDTRA 1-12-1-0037		4,225

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				\$962,780
Military Medical Research and Development				
"SPINAL MUSCULAR ATROPHY (SMA): DISEASE PHENOTYPE AND MECHANISMS"	12.420	W81XWH-09-1-0245		686,244
"COLUMBIA SMA PROJECT: ROLE OF MMP-9 IN MOTOR NEURON SUSCEPTIBILITY TO "SMA"	12.420	W81XWH-10-1-0878		364,292
THE LOSS OF PROPRIOCEPTION AS A MECHANISM UNDERLYING THE SMA PHENOTYPE	12.420	W81XWH-11-1-0689		354,096
COLUMBIA SMA PROJECT: IDENTIFICATION OF GENETIC MODIFIERS OF SMN EXPRESSION AND FUNCTION	12.420	W81XWH-10-1-0126		315,079
"SPINAL MUSCULAR ATROPHY (SMA): DISEASE PHENOTYPE AND MECHANISMS"	12.420	W81XWH-09-1-0245		303,048
TARGETING CLASS I PI3KS IN THE TREATMENT OF T-CELL ACUTE LYMPHOBLASTIC LEUKEMIA	12.420	W81XWH-10-1-0596		282,578
TARGETING KINASE IN PROSTATE CANCER	12.420	W81XWH-11-1-0177		254,491
PRE-CLINICAL TESTING OF NEW HYDROXYBUTYRATE ANALOGUES	12.420	W81XWH-10-1-0539		247,770
COLUMBIA SMA PROJECT: A RANDOMIZED, CONTROL TRIAL OF THE EFFECTS OF EXERCISE ON MOTOR FUNCTION AND STRENGTH IN PATIENTS	12.420	W81XWH-10-1-0127		235,549
PREVENTING VISUAL HANDICAP IN CHILDREN WITH TUBEROUS SCLEROSIS COMPLEX	12.420	W81XWH-09-1-0575		223,676
INVESTIGATION OF P-REX2A AND PTEN FUNCTIONAL INTERACTIONS IN BREAST CANCER	12.420	W81XWH-10-1-0568		190,780
THERAPEUTIC TARGETING OF NOTCH IN OVARIAN CANCER	12.420	W81XWH-09-1-0408		137,574
USING MOUSE MODELS TO STUDY THE ROLE OF PIK3CA MUTATIONS IN MAMMARY TUMORIGENESIS.	12.420	W81XWH-09-1-0485		128,859
EVALUATING INTERSTRAND CROSSLINK (ICL) REPAIR IN TRIPLE NEGATIVE BREAST CANCERS TO GUIDE CHEMOTHERAPY	12.420	W81XWH-11-1-0265		118,337
MYC-DEPENDENT DNA REPLICATION STRESS AND BREAST CANCER	12.420	W81XWH-09-1-0504		116,517
COLUMBIA SMA PROJECT: 4-AP AS A POTENTIAL SMA THERAPEUTIC AGENT AND BIOLOGICAL MECHANISMS OF ACTION	12.420	W81XWH-11-1-0753		112,979
ACTIVATION OF A NOVEL DEATH PATHWAY, TARGETED NECROSIS, BY P53 PEPTIDES, TO CIRCUMVENT APOPTOTIC RESISTANCE IN PROSTATE	12.420	W81XWG-09-1-0733		94,904
COLUMBIA SMA PROJECT: 4-AP AS A POTENTIAL SMA THERAPEUTIC AGENT AND BIOLOGICAL MECHANISMS OF ACTION	12.420	W81XWH-11-1-0753	SC1	85,983
LINEAGE ANALYSIS OF CELLS OF ORIGIN FOR PROSTATE CANCER	12.420	W81XWH-11-1-0485		63,391
FUNCTIONAL ANALYSIS OF ANDROGEN RECEPTOR IN PROSTATE EPITHELIAL STEM CELLS	12.420	W81XWH-11-1-0463		62,486
PTSD TRAJECTORY, COMORBIDITY, AND UTILIZATION OF MENTAL HEALTH SERVICES AMONG RESERVES	12.420	W81XWH-08-2-0204		59,920
COLUMBIA SMA PROJECT: 4-AP AS A POTENTIAL SMA THERAPEUTIC AGENT AND BIOLOGICAL MECHANISMS OF ACTION	12.420	W81XWH-11-1-0753	SC3	58,886
NOTCH IN PATHOLOGICAL ANGIOGENESIS AND LYMPHANGIO GENESIS	12.420	W81XWH-10-1-0304		49,108
DISCOVERY OF AKT-REGULATED TRANSCRIPTIONAL MODULES ASSOCIATED WITH MALIGNANT PHENOTYPES IN BREAST CANCER	12.420	W81XWH-12-1-0022		39,943
SYSTEMATIC CHARACTERIZATION OF THE IMMUNE RESPONSE TO GLUTEN AND CASEIN IN AUTISM SPECTRUM DISORDERS	12.420	W81XWH-10-1-0887		35,155
ACTIVATION OF MTOR SIGNALING BY GENE TRANSDUCTION TO INDUCE AXON REGENERATION IN THE CENTRAL NERVOUS SYSTEM FOLLOWING NE	12.420	W81XWH-12-1-0051		28,981
FUNCTIONAL ANALYSIS OF E-CADHERIN IN PROSTATE CANCER PROGRESSION	12.420	W81XWH-12-1-0073		23,299
COLUMBIA SMA PROJECT: 4-AP AS A POTENTIAL SMA THERAPEUTIC AGENT AND BIOLOGICAL MECHANISMS OF ACTION	12.420	W81XWH-11-1-0753	SC2	17,568
A TELECONFERENCE SEMINAR SERIES IN FUNCTIONAL MAGNETIC RESONANCE IMAGING RESEARCH METHODS AT COLUMBI	12.420	TARDEC W56HZV-04-P-L		16,073
CREATION OF PHYSIOLOGICAL MODELS FOR TUMORIGENESIS OF BASAL MAMMARY EPITHELIAL CELLS	12.420	W81XWH-09-1-0045		13,500
THE ROLE OF CTIP IN BRCA1-MEDIATED TUMOR SUPPRESSION	12.420	W81XWH-09-1-0046		13,500
NORTHEAST BIODEFENSE CENTER	12.420	W81XWH-07-1-0357		2,181
PRECLINICAL STUDIES OF SIGNALING PATHWAY IN A MUTANT MOUSE MODEL OF HORMONE-REFRACTORY PROSTATE CANC	12.420	W81XWH-08-1-0087		-2,405
Military Medical Research and Development				
RACIAL DISPARITIES IN THE INITIATION AND INTENSITY OF ADJUVANT THERAPY FOR BREAST CANCER	12.420	DDEF W81XWH-0510399		879,522

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
READY-TO-USE TISSUE CONSTRUCT FOR MILTARY BONE AND CARTIAGE TRAUMA	12.420	W81XWH-10-1-0933		283,173
READY-TO-USE TISSUE CONSTRUCT FOR MILTARY BONE AND CARTIAGE TRAUMA	12.420	W81XWH-10-1-0933	MAO	174,546
NEXT-GENERATION MOUSE MODELS FOR STUDYING PROSTATE CANCER INITIATION AND PROGRESSION	12.420	W81XWH-09-1-0377		161,857
NEUROPROTECTIVE SMALL MOLECULES FOR THE TREATMENT OF AMYOTROPHIC LATERAL SCLEROSIS	12.420	W81XWH-08-1-0522		159,032
RACIAL DISPARITIES IN PALLIATIVE CARE FOR PROSTATE CANCER	12.420	W81XWH-10-1-0802		130,733
NEUROPROTECTIVE SMALL MOLECULES FOR THE TREATMENT OF AMYOTROPHIC LATERAL SCLEROSIS	12.420	W81XWH-08-1-0522	SC1	16,981
COLUMBIA UNIVERSITY SPINAL MUSCULAR ATROPHY (SMA) RESEARCH PROGRAM	12.420	W81XWH-08-1-0009	SC1	3,848
QUALITY-OF-CARE INDICATORS FOR EARLY-STAGE PROSTATE CANCER	12.420	DDEF W81XWH-05-1-017		1,680
				\$6,545,714

Basic Scientific Research

ADAMS ADVANCED BEHAVIORAL SENSORS	12.431	W911NF-11-1-0140		352,542
ULTRACOLD MOLECULES IN OPTICAL LATTICES: EFFICIENT PRODUCTION AND APPLICATION TO MOLECULAR CLOCKS	12.431	DA W911NF-09-1-0504		225,775
DATASETS, 3D ALIGNMENT, AND A HIERARCHY OF VISUAL ATTRIBUTES FOR FACE VERIFICATION IN UNCONTROLLED SETTINGS WITH NON-COO	12.431	DA W911NF-10-2-0011		196,201
ELECTRONIC STRUCTURE AT OXIDE INTERFACES	12.431	W911NF-09-1-0345		115,878
SELF-ASSEMBLY AND SELF-ORGANIZATION IN NANOOMPOSITES DIRECTED BY BLOCK COPOLYMER LIGANDS	12.431	W911NF-10-1-0184		101,821
ADAMS ADVANCED BEHAVIORAL SENSORS	12.431	W911NF-11-1-0140	SCO SCO	87,569
CORTICAL NETWORKS UNDERLYING RAPID DECISION MAKING	12.431	W911NF-11-1-0219		59,491
MODULAR ASSEMBLY OF HIERARCHICALLY STRUCTURED POLYMERS BY SOLID PHASE SYNTHESIS	12.431	W911NF-11-1-0372		39,496
PROTEIN-BASED BIOELECTRODES FOR MICROFLUIDIC SENSOR SYSTEMS	12.431	DA W9132T-07-2-0008		24,462
WORKSHOP ON INTERACTIVE VIDEO SEARCH	12.431	W911NF-10-1-0389		6,451
HIGHLY ORDERED SEMICONDUCTING POLYMERS FOR SENSING APPLICATIONS	12.431	W911NF-12-1-0252		2,075
SATURATED PARTICLE TRANSPORT IN POROUS MEDIA: AN INVESTIGATION INTO THE INFLUENCE OF FLOW DIRECTION	12.431	W911NF-10-1-0123		1,899
Basic Scientific Research				
COLLABORATIVE RESEARCH: ULTRA-DENSE QUANTUM COMMUNICATION USING INTEGRATED PHOTONIC ARCHITECTURE	12.431	W911NF-10-1-0416		740,013
IMAGING USING SHARED OPTICS AND ABERRATION EXPLOITATION	12.431	W911NF-10-1-0214		240,018
COLLABORATIVE RESEARCH: ULTRA-DENSE QUANTUM COMMUNICATION USING INTEGRATED PHOTONIC ARCHITECTURE	12.431	W911NF-10-1-0416		27,203
EFFECT OF SLEEP DEPRIVATION OF FMRI-MEASURED COGNITIVE NETWORKS	12.431	DAAD19-02-1-0047	SC1	-11,638
				\$2,209,256

Basic, Applied, and Advanced Research in Science and Engineering

BETA-ROLL PEPTIDE STRUCTURES FOR ALLOSTERICALLY CONTROLLED BIOMOLECULAR RECOGNITION AND DECONTAMINATION	12.630	DA W9132T-08-2-0012		32,739
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Basic, Applied, and Advanced Research in Science and Engineering

MULTI-PHOTON FOCK STATE MIRCOSCOPY AT THE DE BROGLIE WAVELENGTH	12.630	NGA HM1582-09-1-0018		112,910
JOINT AUDIO-VISUAL SIGNATURES FOR WEB VIDEO ANALYSIS AND FORENSICS	12.630	NGA HM1582-09-1-0036	CHA	18,160
JOINT AUDIO-VISUAL SIGNATURES FOR WEB VIDEO ANALYSIS AND FORENSIC	12.630	NGA HM1582-09-1-0036		-70,657
				\$93,152

Air Force Defense Research Sciences Program

NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES	12.800	FA9550-09-1-0705		543,601
PLASTICITY IN HIGH TEMPERATURE MATERIALS: TANTALUM AND MONAZITE	12.800	DAF FA9550-09-1-0048		252,347
DURIP: ISOTHERMAL TITRATION CALORIMETER FOR RESEARCH AND EDUCATION	12.800	AFOSR FA9550-10-1-03		250,000

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R&D Cluster, continued

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NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES	12.800	FA9550-09-1-0705 SHE		212,081
OPTIMAL STATISTICAL DECISIONS WITH CATASTROPHIC RISKS	12.800	DAFOSR FA95500910467		156,183
NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES	12.800	FA9550-09-1-0705 OSG		145,993
ATTENTION AND SENSORIMOTOR INTERGRATION	12.800	1		137,662
NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES	12.800	FA9550-09-1-0705 HON		120,698
THE GEOMETRY OF SWITCHING ARCHITECTURES FOR TIME ENCODING	12.800	DAF FA95500910350		104,942
NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES (STM-A)	12.800	FA9550-09-1-0705 OS1		101,506
IDENTIFYING DECEPTIVE SPEECH ACROSS CULTURES	12.800	FA9550-11-1-0120		95,456
NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES	12.800	FA9550-09-1-0705 KIM		90,993
QUANTUM OPTICS IN DIAMOND NANOPHOTONIC CHIPS	12.800	FA9550-11-1-0014		88,184
NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES (STM-B)	12.800	FA9550-09-1-0705 OS2		68,777
FUNDAMENTAL MECHANISMS OF NEUROINFORMATION PROCESSING: INVERSE PROBLEMS AND SPIKE PROCESSING	12.800	FA9550-12-1-0232		67,966
QUANTUM OPTICS IN DIAMOND NANOPHOTONIC CHIPS	12.800	FA9550-12-1-0045		67,781
OPTIMAL STATISTICAL DECISIONS WITH CATASTROPHIC RISKS	12.800	DAFOSR FA95500910467		67,684
3-D ENZYMATIC NANOMATERIAL ARCHITECTURES FOR ENERGY HARVESTING	12.800	AFOSR FA950-12-10112		45,749
PECASE: MICROSCOPIC ELECTRONIC AND MECHANICAL PROPERTIES OF ULTRA-THIN LAYERED MATERIALS	12.800	FA9550-11-1-0010		44,336
NEW MATERIALS APPROACHES FOR FUTURE GRAPHENE-BASED DEVICES	12.800	FA9550-09-1-0705 HEI		43,739
				\$2,705,678

Mathematical Sciences Grants Program

WEAKLY INFORMATIVE PRIORS	12.901	H98230-10-1-0184		296
				\$296

Research and Technology Development

MIDAS: MID IR DATA ACQUISITION-TRANSMISSION IN SILICONBASED SYSTEMS	12.910	HR0011-10-10080		1,077,048
ACTIVE WAVEGUIDES ON SILICON FOR TERAHERTZ ELECTRONICS	12.910	N66001-11-1-4146		100,053
STRAIN SENSOR FOR LARGE AREA MECHANICS AND ACOUSTICS	12.910	DARPA N10AP20025		-4,491
ACTIVE MATRIX POLYMER ELECTROSTRICTOR FOR LARGE AREA POLYMER MEMS	12.910	DARPA N10AP20041		-21,669
				\$1,150,941

Total Direct Award Programs:

\$24,459,002

Pass-through Awards

Department of the Air Force

STANFORD RESEARCH INTERNATIONAL	12.	SRI 27-001381	FA8750-09-C-0181	121,127
NANOHMICS INC.	12.	NANO H N0925	FA8650-10-C5404	80,209
ARRAY INFORMATION TECHNOLOGY	12.	AIT A002-2011	FA8718-10-C-0004	34,773
CHROMATION PARTNERS, LLC	12.	FA-9101-11-M-0007-1	FA9101-11-M-0007	30,000
PORTAGE BAY PHOTONICS, INC.	12.	PBPI CU11-1800	AFOSR STTR	23,818
UNIVERSAL TECHNOLOGY CORPORATION	12.	UTCD 11-S587-037-01-	FA8650-07-D-5800	17,164

Department of the Army

COGNITION AND NEUROERGONOMICS CONSORTIUM	12.	APX02-N004	W911-NF-10-2-0022	67,345
INFOSCITEX CORPORATION	12.	INFOSCITEX B1423-S00	W81XWH-11-C-005	7,948

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R&D Cluster, continued

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Department of the Navy				
ACXION	12.	ACXION CU11-2609	N41756-12-C-4713	176,999
Other DOD				
BBN SYSTEMS AND TECHNOLOGIES	12.	BBN 14076	HR0011-12-C-0014	602,662
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.	IBM W0853813 PH2	FA8650-08-C-7838	460,070
DANA FARBER CANCER INSTITUTE	12.	DFCI 3075401	W911NF-10-1-0266	242,043
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	12.	MIT 7000135026	FA8721-05-C-0002	137,058
SCIENCE APPLICATIONS INTERNATIONAL CORPORATION	12.	SAIC P010068909	DARPA HR0011-10-C-0110	115,131
HRL LABORATORIES, LLC	12.	10088-101225-BS	DARPA-BAA-10-82	87,549
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.	4911025837.0	W911NF-11-1-0059	86,032
KITWARE, INC.	12.	KITWARE K000135-S10	DARPA HR0011-10-CH-C0011	85,990
JOHNS HOPKINS UNIVERSITY	12.	JH 2000378590 8.1	H98230-07-C-0365/0000	75,344
BBN SYSTEMS AND TECHNOLOGIES	12.	BBN 13482	HR0011-08-C-0004	68,113
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.	IBM W0853813 PHY	FA8650-08-C-7838	62,797
GEORGIA INSTITUTE OF TECHNOLOGY	12.	GIT R6790-S1	NSA H98230-09-C-0336	56,281
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.	IBM W0853813 MEE	FA8650-08-C-7838	53,422
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.	IBM 4912038357	W911NF-12-C-0028	52,053
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	12.	MIT 7000135026 CAR	FA8721-05-C-0002	41,942
WESTON GEOPHYSICAL CORP.	12.	WPGC CU11-1523	HDTRA1-08-10-BRCWMD-BA	41,813
JOHNS HOPKINS UNIVERSITY	12.	JH 2000378590 812	H98230-07-C-0365/0000	16,534
INTELLIGENT OPTICAL SYSTEMS, INC.	12.	IOSYS 3218	W81XWH-12-C-0077	16,490
NORTHROP GRUMMAN CORPORATION	12.	NGC 8140000623	W31P4Q-09-C-0528	11,451
				\$2,872,158
Basic and Applied Scientific Research				
UNIVERSITY OF PENNSYLVANIA	12.300	UPENN 548359	N00014-07-1-0907	316,443
UNIVERSITY OF MARYLAND	12.300	UMARY Z894102	N00014-09-1-1064	238,464
UNIVERSITY OF MARYLAND	12.300	UMARY Z894102 PIN	N00014-09-1-1064	215,222
UNIVERSITY OF MARYLAND	12.300	UMARY Z894102 HEI	N00014-09-1-1064	192,463
UNIVERSITY OF MARYLAND	12.300	UMARY Z887101 NAY	N00014-08-1-0638	186,519
UNIVERSITY OF MARYLAND	12.300	UMARY Z88101	N00014-08-1-0638	166,249
UNIVERSITY OF CONNECTICUT	12.300	UCONN 6966	N00014-10-1-0944	114,937
VANDERBILT UNIVERSITY	12.300	VU 22539-S1	N00014-11-1-0683	101,636
VANDERBILT UNIVERSITY	12.300	VU 22539-S1 ISC	N00014-11-1-0683	47,748
				\$1,579,681
Basic Scientific Research - Combating Weapons of Mass Destruction				
ARIZONA STATE UNIVERSITY	12.351	ASU 11-624	HDTRA1-11-1-0010	156,313
				\$156,313
Military Medical Research and Development				
JACKSON (HENRY M.) FNDN FOR THE ADVANCEMENT OF MILITARY MEDICIN	12.420	HJFAMM 681181	W81XWH-09-2-0129	243,636

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R&D Cluster, continued

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UNIVERSITY HOSPITALS OF CLEVELAND	12.420	UHOC CU09-4682	W81XWH-07-1-0409	116,204
JACKSON (HENRY M.) FNDN FOR THE ADVANCEMENT OF MILITARY MEDICIN	12.420	HMJF 709627	W81XWH-08-2-0650	107,459
UNIVERSITY HOSPITALS OF CLEVELAND	12.420	UHOC CU11-3012	W81XWH-10-1-0579	55,435
VANDERBILT UNIVERSITY MEDICAL CENTER	12.420	VU VUMC34539-R	W81XWH-05-1-0239	5,634
RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK	12.420	SUNYOPT 580-41135	W81XWH-06-1-0676	-43,657
				\$484,711
Basic Scientific Research				
UNIVERSITY OF PENNSYLVANIA	12.431	UPENN 555860	DA ARO W911NF-10-1-0526	395,384
DCS CORPORATION	12.431	DCS CU11-2577	W911NF-10-D-0002	57,923
DCS CORPORATION	12.431	DCS CU11-2577 CHA	W911NF-10-D-0002	57,287
CORNELL UNIVERSITY	12.431	CU 54696-8648	W911NF-08-1-0058	-17,001
				\$493,593
Basic, Applied, and Advanced Research in Science and Engineering				
UNIVERSITY OF NEW MEXICO	12.630	UNMEX 18200487B5	FA9550-06-1-0264	-100
				\$-100
Air Force Defense Research Sciences Program				
JACKSON (HENRY M.) FNDN FOR THE ADVANCEMENT OF MILITARY MEDICIN	12.800	HJFAMM 718246	FA8650-10-2-6A02	379,990
STANFORD UNIVERSITY	12.800	25915490-47766-A	FA9550-10-1-0194	255,060
GEORGE MASON UNIVERSITY	12.800	GMU 107151A NIE	FA9550-07-0527	226,327
GEORGE MASON UNIVERSITY	12.800	GMU 107151A	FA9550-07-0527	107,617
GEORGE MASON UNIVERSITY	12.800	GMU 107151A STO	FA9550-07-0527	99,624
JACKSON (HENRY M.) FNDN FOR THE ADVANCEMENT OF MILITARY MEDICIN	12.800	HJFAMM 718246 SC1	FA8650-10-2-6A02	84,274
GEORGIA INSTITUTE OF TECHNOLOGY	12.800	GIT RC413-G	FA-9550-12-1-0025	8,792
				\$1,161,684
Mathematical Sciences Grants Program				
STANFORD RESEARCH INTERNATIONAL	12.901	SRI 27-001365 P1A	DARPA W91CRB-10-C-0128	93,265
STANFORD RESEARCH INTERNATIONAL	12.901	SRI 27-001365	DARPA W91CRB-10-C-0128	-6,688
				\$86,577
Research and Technology Development				
BOISE STATE UNIVERSITY	12.910	BOISE 129G106001-A	FA9453-08-0252	-254
Research and Technology Development				
STANFORD RESEARCH INTERNATIONAL	12.910	SRI 09-000204	DARPA-BAA-11-40	443,349
INTERNATIONAL BUSINESS MACHINES CORPORATION	12.910	IBM A0854199	DARPA HR0011-09-0002	322,643
CARNEGIE-MELLON UNIVERSITY	12.910	CMU NO.1041388-23798	DARPA HR0011-07-3-0002	193,320
GEORGIA INSTITUTE OF TECHNOLOGY	12.910	GIT RA306-S8	HR0011-04-3-0002	155,037
YALE UNIVERSITY	12.910	YU C11L10831	FA9550-10-1-0297	149,016
UNIVERSITY OF SOUTHERN CALIFORNIA	12.910	USC 146301	FA8650-10-1-7042	135,955
UNIVERSITY OF TEXAS AT AUSTIN	12.910	UTA11-001025 KIN	FA8650-11-1-7159	116,657
BBN SYSTEMS AND TECHNOLOGIES	12.910	BBN PO#9500009242 PH4	HR0011-08-C-0004	114,145
UNIVERSITY OF CALIFORNIA, LOS ANGELES	12.910	UCLA 0160 S MB 899	2009-NT-2048	110,483

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R&D Cluster, continued

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NEW YORK UNIVERSITY	12.910	NYU F7003-02	N66001-11-1-4205	90,951
STANFORD RESEARCH INTERNATIONAL	12.910	SRI 09-000204 SCO	DARPA-BAA-11-40	78,283
UNIVERSITY OF TEXAS AT AUSTIN	12.910	UTA11-001025	FA8650-11-1-7159	76,128
MASSACHUSETTS INSTITUTE OF TECHNOLOGY	12.910	MIT 5710002701	DARPA HR0011-07-3-0002	70,133
UNIVERSITY OF CALIFORNIA, LOS ANGELES	12.910	UCLA 0160 S MB 959	2009-NT-2048	36,947
BBN SYSTEMS AND TECHNOLOGIES	12.910	BBN PO# 9500009242 PH3	HR0011-08-C-0004	16,786
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.910	IBM W0853748 PAR	HR0011-08-C-0110	14,077
BBN SYSTEMS AND TECHNOLOGIES	12.910	BBN 13251	DARPA HR0011-06-C-0022	8,932
KITWARE, INC.	12.910	KITWARE HR001108C013	HR0011-08-C-0135-S7	8,614
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.910	IBM W0853748 RAM	HR0011-08-C-0110	7,135
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.910	IBM W0853748 STS	HR0011-08-C-0110	5,914
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.910	IBM W0853748 MCK	HR0011-08-C-0110	2,664
INTERNATIONAL BUSINESS MACHINES, CORPORATION	12.910	IBM W0853748 HIR	HR0011-08-C-0110	-5,258
				\$2,151,657
Total Pass-through Programs:				\$8,986,274
Total: Department of Defense				\$33,445,276

Department of Commerce
Direct Awards

Department of Commerce

METADATA TEMPLATES FOR GEOLOGIC SAMPLE INFORMATION	11.	RA133E10SE2556	2,149
			\$2,149

NOAA Mission-Related Education Awards

SUMMER RESEARCH PROGRAM FOR SCIENCE TEACHERS	11.008	NA10SEC0080034	54,955
			\$54,955

Climate and Atmospheric Research

THE CONTINUATION OF THE INTERNATIONAL RESEARCH INSTITUTE FOR CLIMATE AND SOCIETY 2010-2012	11.431	NA10OAR4310210	4,325,119
CONSORTIUM FOR CLIMATE RISK IN THE URBAN NORTHEAST	11.431	NA10OAR4310212	773,022
GLOBAL DECADEAL HYDROCLIMATE VARIABILITY, PREDICTABILITY AND CHANGE: A DATA-ENRICHED MODELING STUDY	11.431	NA10OAR4310137	440,997
ATLANTIC MULTIDECADEAL VARIABILITY: MECHANISMS, IMPACT AND PREDICTABILITY: A STUDY USING OBSERVATIONS AND IPCC AR4 MODEL S	11.431	NA08OAR4320912 A6S	209,659
MECHANISMS AND PREDICTABILITY OF THE GLOBAL CLIMATE IMPACTS OF ATLANTIC MULTIDECADEAL VARIABILITY	11.431	NA08OAR4320912 A6U	183,868
SENSITIVITY OF CLIMATE VARIABILITY TO ANTHROPOGENIC AND NATURAL DRIVERS DURING THE LAST MILLENNIUM	11.431	NA10OAR4310126	137,000
DIAGNOSING DECADEAL-SCALE CLIMATE VARIABILITY IN CURRENT GENERATION COUPLED MODELS FOR INFORMING NEAR-TERM CLIMATE CHANGE	11.431	NA08OAR4320912 A6T	128,644
CICAR CVP: PREDICTING NORTH-AMERICAN HYDRO-CLIMATE CHANGE AND VARIABILITY ON THE INTERANNUAL TO MULTIDECADEAL TIMESCALE	11.431	NA08OAR4320912 A6V	125,379
CLIMATE PREDICTABILITY OF EXTREME FLOODS IN THE UNITED STATES	11.431	NA10OAR4310159	98,253
TOWARDS NEAR-GLOBAL RECONSTRUCTION AND UNDERSTANDING OF HYDROCLIMATE VARIABILITY AND CHANGE OVER THE PAST SEVERAL CENTUR	11.431	NA10OAR4310123	97,239
RECALIBRATING AND COMBINING ENSEMBLE PREDICTIONS	11.431	NA08OAR4320912 A6Q	92,314
COLLABORATIVE RESEARCH: TROPICAL CYCLONE TRACKS IN PRESENT AND FUTURE CLIMATES	11.431	NA11OAR4310093	91,934
INFRASTRUCTURE	11.431	NA08OAR4320912 A6N	89,849

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
UNDERSTANDING AND ATTRIBUTING TROPICAL CYCLONE INTENSITY AND FREQUENCY CHANGES IN THE 20TH AND 21ST CENTURIES	11.431	NA100AR4310124		85,619
ASSESSING UNSTOPPABLE CHANGE: OCEAN HEAT STORAGE AND ANTARTIC GLACIAL ICE MELT	11.431	NA100AR4310138		77,704
ABRUPT CLIMATE CHANGE IN A WARMING WORLD: SYNTHESIS OF TRACER DATA	11.431	NA080AR4320912	A6B	63,674
CONSORTIUM FOR CLIMATE RISK IN THE URBAN NORTHEAST	11.431	NA100AR4310212	SEA	46,827
CONSORTIUM FOR CLIMATE RISK IN THE URBAN NORTHEAST EHS	11.431	NA100AR4310212	EHS	40,502
HOLOCENE VARIABILITY OF THE DEEP LIMB OF MERIDIONAL OVERTUNING CIRCULATION	11.431	NA080AR4320912	A6G	39,267
CLIMATOLOGY AND VARIABILITY OF TROPICAL RAINFALL IN THE 20TH CENTURY REANALYSIS	11.431	NA110AR4310090		38,879
MERIDIONAL HYDROLOGY VARIABILITY AND SYNTHESIS OF OCEAN CIRCULATION	11.431	NA080AR4320912	A6H	38,681
THE AMERICAN MIDSUMMER DROUGHT: CASUAL MECHANISMS AND SEASONAL-TO-INTERANNUAL PREDICTABILITY	11.431	NA100AR4310252		34,265
CONSORTIUM FOR CLIMATE RISK IN THE URBAN NORTHEAST	11.431	NA100AR4310212	IRI	34,031
THE MADDEN-JULIAN OSCILLATION: MODEL DEVELOPMENT AND DIAGNOSIS OF MECHANISMS	11.431	NA080AR4320912	A6R	31,783
CONSORTIUM FOR CLIMATE RISK IN THE URBAN NORTHEAST	11.431	NA100AR4310212	LDE	31,471
THE MECHANISMS AND PREDICTABILITY OF MULTI-BASIN INFLUENCES ON NORTH AMERICAN DROUGHT	11.431	NA080AR4320912	A1	30,066
CONSORTIUM FOR CLIMATE RISK IN THE URBAN NORTHEAST	11.431	NA100AR4310212	CIS	28,765
THE PATEOCLIMATE RECONSTRUCTION (PR) CHALLENGE: A COMMUNITY PROGRAM TO BENCHMARK METHODS USED IN RECONSTRUCT THE CLIMATE	11.431	NA080AR4320912	A3	26,052
THE COOPERATIVE INSTITUTE FOR CLIMATE APPLICATIONS AND RESEARCH (CICAR CONTINUATION) SHADOW AWARD	11.431	NA080AR4320912	A6K	24,898
NEW TOOLS FOR NORTH AMERICAN DROUGHT PREDICTION	11.431	NA080AR4310622		21,543
INCORPORATING SCALE AND PREDICTABILITY INFORMATION IN MULTI-MODEL ENSEMBLE CLIMATE PREDICTIONS	11.431	NA100AR4310249		17,944
TOWARDS A BETTER UNDERSTANDING OF THE RELATIONSHIP BETWEEN CLIMATE CHANGE AND TROPICAL CYCLONE	11.431	NA080AR4320912	A4	15,914
SOUTHERN OCEAN-ICE SHEET INTERACTIONS	11.431	NA080AR4320912	A6D	11,906
SPECTRAL CHARACTERISTICS OF CLIMATE PROXIES AND THEIR EXPRESSION IN CLIMATE FIELD RECONSTRUCTIONS.	11.431	NA070AR4310060		11,383
HOLOCENE VARIABILITY OF ATLANTIC SURFACE PROPERTIES AND WEST AFRICAN ARIDITY	11.431	NA080AR4320912	A6J	11,174
GENERATION AND EVALUATION LONG-TERM RETROSPECTIVE FORECAST WITH NCEP CLIMATE FORECAST SYSTEM: PREDICTABILITY ENSO AND DR	11.431	NA080AR4320912	A2	10,750
AUTONOMOUS MULTI-PARAMETER MEASUREMENTS FROM A DRIFTING BUOY DURING THE SOUTHERN OCEAN GAS EXCHANGE	11.431	NA070AR4310094	SC1	10,519
EARTH INSTITUTE CLIMATE CENTER	11.431	NA080AR4320912	A6O	1,859
ABRUPT CLIMATE CHANGE: MODERN INSTRUMENTAL RECORDS - CFCS	11.431	NA080AR4320912	A6F	1,015
ARCHES-ABRUPT CLIMATE CHANGE IN A WARMING WORLD: LESSONS FROM HOLOCENE PALEO AND MODERN INSTRUMENTAL RECORD AND MODEL SI	11.431	NA080AR4320912	A6I	323
NOAA ARCHES 2008-2010 SCHAEFER MOUNTAIN GLACIERS	11.431	NA080AR4320912	A6M	304
FLUCTUATIONS IN OCEAN HEAT AND FREASHWATER INVENTORY AND OF INTEROCEAN EXCHANGE	11.431	NA080AR4320912	A6C	130
THE INTERNATIONAL RESEARCH INSTITUTE FOR CLIMATE RESEARCH PREDICTION: 2005 - 2010	11.431	NA050AR4311004		74
RADIOGENIC ISOTOPE TRACER PALEO-PROXY SCOPE	11.431	NA080AR4320912	A6L	-386
				\$7,580,213

National Oceanic and Atmospheric Administration (NOAA) Cooperative Institutes

UNDERWAY CO2 MEASUREMENTS ABOARD THE RVIB PALMER AND DATA MANAGEMENT OF THE GLOBAL VOS PROGRAM	11.432	NA080AR4320754	P04	373,666
MONITORING THE INDONESIA THROUGHFLOW IN MAKASSAR STRAIT	11.432	NA080AR4320754	PO5	323,659
WEDDELL SEA MOORINGS	11.432	NA080AR4320754	P03	177,248
IDENTIFY, SHARING, AND SHOWCASING DECISION SUPPORT PRODUCTS AND INFORMATION FROM THE CLIMATE AND SO	11.432	NA080AR4320754	P08	112,804

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The Trustees of Columbia University in the City of New York
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
COOPERATIVE INSTITUTE FOR CLIMATE APPLICATIONS AND RESEARCH (CICAR)	11.432	NA08OAR4320754		85,108
BOUNDARY LAYER EXPERIMENTS OF CORAL REEF CALCIFICATION AND NET O2 PRODUCTION	11.432	NA08OAR4320754	P07	30,739
GLOBAL OCEANIC 3HE DATA SET: CALIBRATION TOOLS FOR MODELS OF THE UPWARD BRANCH OF THE DEEP OCEAN GLOBAL CONVEYOR	11.432	NA08OAR4320754	P09	25,026
ERROR MODELS FOR REMOTELY-SENSED SEA SURFACE HEIGHTS AND TEMPERATURES IN OCEAN DATA ASSIMILATION	11.432	NAO80AR4320912	A5	20,823
THE ROLE OF GREENHOUSE GASES IN THE FORCING OF 20TH CENTURY PRECIPITATION CHANGES IN THE AFRICAN SAHAL	11.432	NA08OAR4320754	024	19,994
UNDERWAY CO2 MEASUREMENTS ABOARD THE RVIB PALMER AND DATA MANAGEMENT OF THE GLOBAL VOS PROGRAM	11.432	NA08OAR4320754	MAR	7,626
IMPROVING ECONOMIC DEVELOPMENT THROUGH PREDICTION AND MANAGEMENT OF HYDROCLIMATE VARIABILITY	11.432	NAO80AR4320754	P02	1,723
ERROR MODELS FOR REMOTELY SENSED SEA SURFACE HEIGHTS	11.432	NAO30AR4320179	P30	1,270
CICAR: PREDICTIONS AND PREDICTABILITY OF EL NINO EVENTS: EPOCHS AND BIASES	11.432	NAO30AR4320179	P28	340
				\$1,180,026
Environmental Sciences, Applications, Data, and Education				
DEVELOPMENT OF 3-HOURLY, GLOBAL LONG-TERM, MULTISATELLITE-BASED TOA-TO-SURFACE RADIATIVE FLUX PROFILE DATE PRODUCT WITH	11.440	NA11NES4400002		186,012
				\$186,012
Measurement and Engineering Research and Standards				
INTRA AND INTER BUILDING CONTROL ALGORITHMS AND SMARTGRID COMMUNICATION LINKS TO FACILITATE ELECTRICTY STORAGE IN BUILDI	11.609	60NANB11D192		60,812
2011 NIST SUMMER UNDERGRADUATE RESEARCH FELLOWSHIP (SURF) (GAITHERSBURG, MD)	11.609	NIST 70NANB11H081		5,000
				\$65,812
Total Direct Award Programs:				\$9,069,167
Pass-through Awards				
Geodetic Surveys and Services (Geodesy and Applications of the National Geodetic Reference System)				
UNIVERSITY OF ALASKA AT FAIRBANKS	11.400	UALASKA FP01306	NA09NOS4000262	75,844
				\$75,844
Climate and Atmospheric Research				
UNIVERSITY CORPORATION FOR ATMOSPHERIC RESEARCH	11.431	UCAR Z12-95512	SPH NA06OAR4310119	54,556
				\$54,556
Total Pass-through Programs:				\$130,400
Total: Department of Commerce				\$9,199,567

Department of Education
Direct Awards

National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program a

FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE P015B100026		323,849
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP	84.015	DE P015B100153		305,000
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE-P015B100110-11		262,450
EAST EUROPEAN AND RUSSIAN FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE-P015B100136		245,053
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND STUDENTS FELLOSHIPS PROGRAMS	84.015	DE P015A100078		216,784
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE P015B100078		193,861
MIDDLE EAST INSTITUTE NRC/FLAS	84.015	DE P015A100110		129,237
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE-P015B100054		126,710
NATIONAL RESOURCE AND FOREIGN LANGUAGE AND STUDIES FELLOWSHIPS PROGRAMS-INTERNATIONAL COMPREHENSIVE NRC	84.015	DE-P015A100054		126,553
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP	84.015	DE-P015A100153		119,210

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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE P015B100078		93,685
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES (EALAC-IN)	84.015	DE P15A100026	EAL	83,499
MIDDLE EAST INSTITUTE NRC/FLAS	84.015	DE P015A100110	INS	44,295
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES (OUTREACH)	84.015	DE P15A100026	OU3	32,600
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE-P015B100110		29,332
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES (OUTREACH)	84.015	DE P15A10026	STA	24,650
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE-P015B100054		23,500
MIDDLE EAST INSTITUTE NRC/FLAS	84.015	DE P015A100110	LIB	18,767
WORLD LEADERS FORUM	84.015	DE-P015A100054	WLF	17,884
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES	84.015	DE-P015A100026		17,829
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE P015B100026		13,290
PERFORMANCE ART SERIES	84.015	DE-P015A100054 TC1 TC1		10,791
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND STUDENTS FELLOWSHIPS PROGRAMS	84.015	DE P015A100078	LIB	10,259
FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP	84.015	DE P015B100153		9,800
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP.	84.015	DE P015A100153	SYP	9,673
EAST EUROPEAN AND RUSSIAN FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIPS	84.015	DE-P15B100136		9,515
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES (EALAC-IN)	84.015	DE P15A100026	EAL	8,297
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES	84.015	DE-P015A100026		6,338
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP.	84.015	DE P015A100153	INS	5,778
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND STUDENTS FELLOWSHIPS PROGRAMS	84.015	DE P015A100078	INS	5,399
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP.	84.015	DE P015A100153	OUT	4,102
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES (EALAC-IN)	84.015	DE P15A100026	EA2	3,552
NATIONAL RESOURCE AND FOREIGN LANGUAGE AND STUDIES FELLOWSHIPS PROGRAMS-INTERNATIONAL COMPREHENSIVE	84.015	DE-P015A100054 CAC CAC		2,813
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES (EALAC-IN)	84.015	DE P15A100026	EA3	2,700
NATIONAL RESOURCE CENTERS AND FOREIGN LANGUAGE AND AREA STUDIES FELLOWSHIP.	84.015	DE P015A100153	LIB	1,023
NATIONAL RESOURCE CENTER AND FOREIGN LANGUAGE AREA STUDIES (OUTREACH)	84.015	DE P15A10026	STA	53
				\$2,538,131
Overseas Programs - Doctoral Dissertation Research Abroad				
2010-2011 US DEPARTMENT OF EDUCATION FULBRIGHT-HAYS DOCTORAL DISSERTATION RESEARCH ABROAD (DDRA) PROGRAM	84.022	DE P022A100031		76,817
				\$76,817
Javits Fellowships				
JACOB K. JAVITS FELLOWS	84.170	P170B110004		433,219
				\$433,219
Centers for International Business Education				
CENTERS FOR INTERNATIONAL BUSINESS (CIBE) PROGRAM	84.220	DE P220A100023		47,165
CENTERS FOR INTERNATIONAL BUSINESS (CIBE) PROGRAM	84.220	DE P220A100023	BSC	35,598
CENTERS FOR INTERNATIONAL BUSINESS (CIBE) PROGRAM	84.220	DE P22A100023	CIB	34,071
CENTERS FOR INTERNATIONAL BUSINESS (CIBE) PROGRAM	84.220	DE P22A100023	BSC	32,771

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R&D Cluster, continued

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CENTERS FOR INTERNATIONAL BUSINESS (CIBE) PROGRAM	84.220	DE P22A100023 SIP		29,326
CENTERS FOR INTERNATIONAL BUSINESS (CIBE) PROGRAM	84.220	DE P220A100023 SIP		2,309
				\$181,240
Education Research, Development and Dissemination				
PRACTICAL TOOLS FOR MULTILEVEL/HIERARCHICAL MODELING IN EDUCATION RESEARCH	84.305	DE R305D100017		356,014
PRACTICAL SOLUTIONS FOR MISSING DATA AND IMPUTATION	84.305	DE R305D090006		273,302
THE EFFECTS OF NO CHILD LEFT BEHIND ON SCHOOL SERVICES AND STUDENT OUTCOMES	84.305	DE R305A090032-10A		175,697
				\$805,013
Total Direct Award Programs:				\$4,034,420
Pass-through Awards				
National Institute on Disability and Rehabilitation Research				
JOHN F. KENNEDY JOHNSON REHABILITATION INSTITUTE	84.133	JFKMC 090102-001	DOE H133A070030	10,080
CAROLINAS REHABILITATION	84.133	CAREHAB CU09-1188	H133A080035	9,928
JOHN F. KENNEDY JOHNSON REHABILITATION INSTITUTE	84.133	JFKMC 090102-001 SC1	DE H133A020518	6,260
JOHN F. KENNEDY JOHNSON REHABILITATION INSTITUTE	84.133	JFKMC 090102-001	DE H133A020518	53
JOHN F. KENNEDY JOHNSON REHABILITATION INSTITUTE	84.133	JFKJRI CU08-7619	H133A031713	-56
				\$26,265
Mathematics and Science Partnerships				
TEACHERS COLLEGE	84.366	TC 511232	U336S090039	51,765
				\$51,765
Total Pass-through Programs:				\$78,030
Total: Department of Education				\$4,112,450

Department of Agriculture
Direct Awards

Department of Agriculture

USE OF LONG TERM EXPERIMENTAL FORREST PROVENANCE TRIALS FOR SELECTION OF FUTURE FORRESTS: TOOLS TO P	10.	SFES 10-JV-11242306-		7,259
				\$7,259

Agricultural Research_Basic and Applied Research

THE AGRICULTURAL MODEL INTERCOMPARISON AND IMPROVEMENT PROJECT (AGMIP)	10.001	USDA 59-3625-1-745		773,521
THE AGRICULTURAL MODEL INTERCOMPARISON AND INTERCOMPARISON AND IMPROVEMENT PROJECT(AGMIP)	10.001	USDA 59-3625-1-745 PAR		313,677
EVALUATION OF THE IMPACT OF CHANGING CLIMATE ON FOOD SECURITY THROUGH GLOBAL AGRICULTURE MODELS	10.001	USDA NO. 58-3625-0-6		810
				\$1,088,008

Urban and Community Forestry Program

THE URBAN FOREST CHILDHOOD ASTHMA AND COMMUNITY AIR QUALITY	10.675	SFES 10-DG-11420004-		78,193
				\$78,193
Total Direct Award Programs:				\$1,173,460

Pass-through Awards

Department of Agriculture

UNIVERSITY OF KENTUCKY RESEARCH FOUNDATION	10.	3048107834-12-325	AG-3198-B-10-0028	123,869
				\$123,869

Grants for Agricultural Research_Competitive Research Grants

DARTMOUTH COLLEGE	10.206	DARTC 669	USDA 2007-35107-18364	10,673
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
				\$10,673
Agriculture and Food Research Initiative (AFRI)				
CORNELL UNIVERSITY	10.310	CU CU10-1897	USDA	173,329
PENNSYLVANIA STATE UNIVERSITY	10.310	PSU 4399CUUSDA0057	USDA 2011-68004-30057	73,344
				\$246,673
Total Pass-through Programs:				\$381,215
Total: Department of Agriculture				\$1,554,675

Department of Interior
Direct Awards

Department of Interior

USGS NATIONAL ACQUISITION SHIP OPERATIONS	15.	G11PC00041		2,293,929
USGS NATIONAL ACQUISITION SHIP OPERATIONS	15.	G11PC00041	ATS	868,969
USGS NATIONAL ACQUISITION SHIP OPERATIONS	15.	G11PC00041	AMM	140,655
IMPROVING METHODS OF MEASURING SURFACE WATER FLOW PATTERNS AND VELOCITIES	15.	NPKS #H5284080029		91,644
HOW CAN THE CONTRIBUTION OF CLIMATE VARIABILITY, WATER RELEASE PATTERNS AND HYDROLOGIC PERFORMANCE I	15.	NPKS H528408003		67,913
				\$3,463,110

Endangered Species Conservation Recovery Implementation Funds

POPULATION ECOLOGY STUDIES OF RHYNCHOSPORA KNIESKERNIL	15.657	DI FWS 52421-A-J033		2,532
				\$2,532

Earthquake Hazards Reduction Program

THE LAMONT COOPERATIVE SEISMOGRAPHIC NETWORK AND THE ADVANCED NATIONAL SEISMIC SYSTEM: EARTHQUAKE HAZARD STUDIES IN THE	15.807	USGS G10AC00094		307,723
ARRA-UPGRADING THE LAMONT COOPERATIVE SEISMOGRAPHIC NETWORK AND MODERNIZATION OF THE ADVANCED NATIONAL SEISMIC SYSTEM-NORTHEA	15.807	USGS G09AC00491		98,257
ARRA-IMPLEMENTATION OF A REAL-TIME DOUBLE-DIFFERENCE EARTHQUAKE LOCATION SYSTEM AT THE CISN AND MAINTENANCE OF A CONTINUOUS DD	15.807	USGS G10AC00040		40,568
NEAR-REAL-TIME MONITORING, ANALYSIS AND FORECAST OF REPEATING EARTHQUAKE IN NORTHERN CALIFORNIA...	15.807	USGS G11AP20037		33,713
TOWARD NEAR REAL-TIME DOUBLE DIFFERENCE EVENT RELOCATION AT THE NEIC	15.807	USGS G09AP00132		1,938
				\$482,199

U.S. Geological Survey_ Research and Data Collection

MEASUREMENT OF TRITIUM/HELIUM, NEON AND 3HE/4HE GROUNDWATER SAMPLES	15.808	USGS #05HQCNO029		74,000
NBII NORTHEAST INFORMATION NODE	15.808	USGS G10AC00696		3,047
				\$77,047

Total Direct Award Programs:

\$4,024,888

Pass-through Awards

WaterSMART (Sustaining and Manage America's Resources for Tomorrow)

UTAH STATE UNIVERSITY	15.507	11055301	R11AP40011	23,223
				\$23,223

Total Pass-through Programs:

\$23,223

Total: Department of Interior

\$4,048,111

Department of Justice
Direct Awards

National Institute of Justice Research, Evaluation, and Development Project Grants

DEVELOPMENT OF A SCIENCE BASE AND OPEN SOURCE SOFTWARE FOR BLOODSTAIN PATTERN ANALYSIS	16.560	DJ 2010-DN-BX-K203		40,858
DEVELOPMENT OF A SCIENCE BASE AND OPEN SOURCE SOFTWARE FOR BLOODSTAIN PATTERN ANALYSIS	16.560	DJ 2010-DN-BX-K203		-442

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R&D Cluster, continued

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				\$40,416
Total Direct Award Programs:				\$40,416
Pass-through Awards				
National Institute of Justice Research, Evaluation, and Development Project Grants				
NEW YORK UNIVERSITY	16.560	NYU F6862-01	2010-1J-CX-0225	66,024
				\$66,024
Total Pass-through Programs:				\$66,024
Total: Department of Justice				\$106,440

Department of State
Direct Awards

Department of State

WEATHER AND CLIMATE INFORMATION FOR CLIMATE-RESILIENT DEVELOPMENT

	19.	AID-OAA-A-11-00011		1,227,241
NOVEL FRONTLINE DIAGNOSTIC SERVICE FOR ANTENATAL CARE	19.	AID-OAA-A-12-00007		234,561
NGO CAPACITY IN DARFUR WITH DARFUR DEVELOPMENT ADVISORY GROUP	19.	S-LMAQM-10-GR-037		11,805
				\$1,473,607

Professional and Cultural Exchange Programs - Citizen Exchanges

TIBET EVALUATION MARKETING PROJECT

	19.415	S-ECAPE-11-GR-199(MJ		21,922
TIBET EVALUATION MARKETING PROJECT	19.415	S-ECAPE-11-GR-199(MJ SCO		19,223
				\$41,145

Total Direct Award Programs:

\$1,514,752

Pass-through Awards

Department of State

ECOHEALTH ALLIANCE

	19.	ECOA PREDICT Y2 201	AID GHNA 0009 0001 000	373,510
INTERNATIONAL RESOURCES GROUP	19.	45000.5010-ICQ-IRI CS5	EPP-I-00-04-00024-00	222,703
UNIVERSITY RESEARCH, CO.	19.	URC FY11-G02-6990	AID GHS-A-00-09-00015-00	222,300
TETRA TECH ARD	19.	TETRAARD 1842-001	EPPI00060000800	152,421
ECOHEALTH ALLIANCE	19.	ECOA PREDICT Y3 201	AID GHNA 0009 0001 000	118,010
INTERNATIONAL COUNCIL FOR RESEARCH IN AGROFORESTRY	19.	ICRAF CU09-1541	AID-492-G-11-00003	49,814
ABT (CLARK) ASSOCIATES, INCORPORATED	19.	ABTAI 30631	AID CU12-0978	37,458
INTERNATIONAL RESOURCES GROUP	19.	45000.5010-ICQ-IR1 GD2	EPP-I-00-04-00024-00	32,433
INTERNATIONAL RESOURCES GROUP	19.	45000.5010-ICQ-IRI	EPP-I-00-04-00024-00	31,646
FAMILY HEALTH INTERNATIONAL	19.	FHI CU12-1303	AID CU12-1301	31,270
NATIONAL DEMOCRATIC INSTITUTE	19.	11-11067-UGA.0-922	S-LMAQM-11-GR-503	12,063
NATIONAL DEMOCRATIC INSTITUTE	19.	NDI 12-12013-UGA.0-1	S-LMAQM-12-GR-1014	8,966
INTERNATIONAL RESOURCES GROUP	19.	45000.5010-ICQ-IR1 AP7	EPP-I-00-04-00024-00	3,771
INSTITUTE OF INTERNATIONAL EDUCATION	19.	IIE CU10-2111	DS CU10-2111	1
ECOHEALTH ALLIANCE	19.	ECOA PREDICT Y1 201	AID GHNA 0009 0001 000	-29
				\$1,296,337

Academic Exchange Programs - Graduate Students

INSTITUTE OF INTERNATIONAL EDUCATION

	19.400	IIE CU11-1071	DS	59,904
INSTITUTE OF INTERNATIONAL EDUCATION	19.400	IIE CU12-0976	DS SECAE-12-CA007	1,389

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
				\$61,293
USAID Development Partnerships for University Cooperation and Development				
WILDLIFE CONSERVATION SOCIETY	98.012	WCS CU00-1344 NEW	USAID EPP-A-00-060001400	20,621
				\$20,621
Total Pass-through Programs:				\$1,378,251
Total: Department of State				\$2,893,003

Department of Transportation
Direct Awards

Department of Transportation

CRITICAL STUDIES TO ADVANCE BRAIN INJURY BIOMECHANICS THROUGH SIMON	20.	DTNH22-08-C-00088		226,311
CORROSION MONITORING RESEARCH STUDY OF NEW YORK CITY BRIDGES	20.	FHADTFH61-04-C-00040		97,109
APPLICATION OF THE NASA GISS GLOBAL COMPOSITION-CLIMATE MODELING SYSTEM TO QUANTIFY THE EFFECTS OF AVIATION EMISSIONS ON	20.	DTRT57-10-C-10013 S1		71,417
				\$394,837
Total Direct Award Programs:				\$394,837

Pass-through Awards

Department of Transportation

ZETA-TECH	20.	ZETA CU11-1792	DTFR53-11-C-00024	25,974
				\$25,974

University Transportation Centers Program

Research Foundation of City University of New York	20.701	RFCUNY 55658-03-03		35,000
UNIVERSITY TRANSPORTATION RESEARCH CENTER	20.701	49111-08-23	DTRT07-G-0002	4,977
UNIVERSITY TRANSPORTATION RESEARCH CENTER	20.701	RFCUNY 49111-27-21	DTRT07-G-0002	4,591
				\$44,568
Total Pass-through Programs:				\$70,542
Total: Department of Transportation				\$465,379

Department of Veterans Affairs
Direct Awards

Department of Veterans Affairs

IARPA STONESOUP - MINESTRONE	64.	FA8650-10-C-7024		1,498,552
DISCOVERING AND EXPLAINING TECHNICAL EMERGENCE THROUGH ANALYSIS OF THE LANGUAGE AND STRUCTURE OF SCIENTIFIC PUBLICATIONS	64.	D11PC20153		1,032,321
DISCOVERING AND EXPLAINING TECHNICAL EMERGENCE THROUGH ANALYSIS OF THE LANGUAGE AND STRUCTURE OF SCIENTIFIC PUBLICATIONS	64.	D11PC20153 RAM		243,491
PRACTICAL AND SECURE DATABASE ACCESS USING ENCRYPTED BLOOM FILTERS	64.	D11PC20194		179,839
IARPA STONESOUP - MINESTRONE	64.	FA8650-10-C-7024 SAL		164,362
PRACTICAL AND SECURE DATABASE ACCESS USING ENCRYPTED BLOOM FILTERS	64.	D11PC20194 BEL		157,905
DISCOVERING AND EXPLAINING TECHNICAL EMERGENCE THROUGH ANALYSIS OF THE LANGUAGE AND STRUCTURE OF SCIENTIFIC PUBLICATIONS	64.	D11PC20153 GRA		152,893
DISCOVERING AND EXPLAINING TECHNICAL EMERGENCE THROUGH ANALYSIS OF THE LANGUAGE AND STRUCTURE OF SCIENTIFIC PUBLICATIONS	64.	D11PC20153 COL		68,818
PRACTICAL AND SECURE DATABASE ACCESS USING ENCRYPTED BLOOM FILTERS	64.	D11PC20194 ANG		63,111
IARPA STONESOUP - MINESTRONE	64.	FA8650-10-C-7024 YAN		59,871
				\$3,621,163
Total Direct Award Programs:				\$3,621,163

Pass-through Awards

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
Department of Veterans Affairs				
BBN SYSTEMS AND TECHNOLOGIES	64.	BBN 13981	D11PC20071	412,621
INTERNATIONAL BUSINESS MACHINES, CORPORATION	64.	IBM 4911010105	IARPA D11PC20070	281,794
INTERNATIONAL BUSINESS MACHINES, CORPORATION	64.	IBM #4911010105 CC CC	IARPA D11PC20070	234,923
INTERNATIONAL BUSINESS MACHINES, CORPORATION	64.	IBM #4911010105 EE EE	IARPA D11PC20070	201,207
TELCORDIA (AKA APPLIED COMMUNICATION SCIENCES)	64.	TELCORDIA 20016028	FA8650-11-C-7161	154,752
INTERNATIONAL BUSINESS MACHINES, CORPORATION	64.	IBM CU11-1934	IARPA BAA-11-02	14,084
INTERNATIONAL BUSINESS MACHINES, CORPORATION	64.	IBM CU11-1934	IARPA BAA-11-02	4,028
				\$1,303,409
Total Pass-through Programs:				\$1,303,409
Total: Department of Veterans Affairs				\$4,924,572

Dept. of Housing & Urban Development
Direct Awards

Doctoral Dissertation Research Grants

PROCESSES OF INSTITUTIONAL CHANGE IN URBAN ENVIRONMENTAL POLICY	14.516	HUD H-21604SG		10,564
GENTRIFICATION AND HEALTHY HABITATS IN NEW YORK CITY: 1990 TO PRESENT	14.516	HUD H-21598SG		-917
				\$9,647

Healthy Homes Technical Studies Grants

HEALTHY HOME HEALTHY SENIORS	14.906	NYLHH0198-09		378,863
NEIGHBORHOOD ASSOCIATED DOMESTIC RISK FACTORS ACCOUNTING FOR ASTHMA PERSISTENCE	14.906	NYHHU0003-11		135,653
				\$514,516
Total Direct Award Programs:				\$524,163

Pass-through Awards

Housing Opportunities for Persons with AIDS

ICF INCORPORATED	14.241	ICFI 29PS00181	HUD VAMV-001-07	13,231
				\$13,231
Total Pass-through Programs:				\$13,231
Total: Dept. of Housing & Urban Development				\$537,394

Environmental Protection Agency
Direct Awards

Science To Achieve Results (STAR) Research Program

PRJT 2 - NEURODEVELOPMENT	66.509	EPA RD-83450901-0	PJ2	231,573
PRJT 1 - OBESITY	66.509	EPA RD-83450901-0	PJ1	197,206
DIAGNOSTIC MONITORING OF BIO-GEOCHEMICAL INTERACTIONS OF A SHALLOW AQUIFER IN RESPONSE TO A CO2 LEAK	66.509	EPA RD-83450301-0	JUR	190,820
COLUMBIA CENTER FOR CHILDREN ENVIRONMENTAL HEALTH - ADMIN CORE	66.509	EPA RD-83450901-0		105,996
DSM CORE SCOPE	66.509	EPA RD-83450901-0	DSM	80,021
COTC CORE SCOPE - CCCEH	66.509	EPA RD-83450901-0	COT	78,420
DIAGNOSTIC MONITORING OF BIO-GEOCHEMICAL INTERACTIONS OF A SHALLOW AQUIFER IN RESPONSE TO A CO2 LEAK	66.509	EPA RD-83450301-0		73,564
PRJT 3 - MECHANISTIC (MEDICINE)	66.509	EPA RD-83450901-0	M3	73,291
PRJT 3 - MECHANISTIC (PSYCHOLOGY)	66.509	EPA RD-83450901-0	PS3	48,390

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
DIAGNOSTIC MONITORING OF BIO-GEOCHEMICAL INTERACTIONS OF A SHALLOW AQUIFER IN RESPONSE TO A CO2 LEAK	66.509	EPA RD-83450301-0 EQU		10,652
PRJT 3 - MECHANISTIC PRIMARY SCOPE (CCCEH)	66.509	EPA RD-83450901-0 PJ3		7,691
CCCEH - COTAC	66.509	EPA RD-83214101 S3		-114
COMPARATIVE LIFE CYCLE ANALYSIS OF NANO AND BULK MATERIALS IN PHOTOVOLTAIC ENERGY ANALYSIS	66.509	EPA RD-83333401		-220
				\$1,097,290
Science To Achieve Results (STAR) Fellowship Program				
EPA FELLOWSHIP EXPOSURE TO PHTHALATES MIXTURES AND INNER-CITY PEDIATRIC ASTHMA	66.514	EPA FP-91712001-1		4,504
				\$4,504
P3 Award: National Student Design Competition for Sustainability				
DEVELOPMENT OF SOURCE-SEPARATION LATRINE TECHNOLOGY FOR SUSTAINABLE HUMAN WASTE MANAGEMENT IN RURAL GHANA	66.516	EPA SU-83470801		5,609
MULTIFUNCTION ENERGY PLATFORM PILOT	66.516	EPA SU-83430201-0		4,206
				\$9,815
Regional Applied Research Efforts (RARE)				
GREEN ROOF RESEARCH	66.517	AE-83484601-0		60,199
				\$60,199
Total Direct Award Programs:				\$1,171,808
Pass-through Awards				
Water Pollution Control State, Interstate, and Tribal Program Support				
ARRA -INTERSTATE ENVIRONMENTAL COMMISSION	66.419	IEC C304269	USEPA	1,084
				\$1,084
Science To Achieve Results (STAR) Research Program				
UNIVERSITY OF WASHINGTON	66.509	UWASH 429111	EPA RD-8316901	310,696
NEW YORK UNIVERSITY MEDICAL CENTER	66.509	NYU RD-83374201-0	EPA	18,279
				\$328,975
Hazardous Waste Management Grant Program for Tribes				
WATER ENVIRONMENT RESEARCH FOUNDATION	66.812	WERF U4R07	EPA	98,128
				\$98,128
Total Pass-through Programs:				\$428,187
Total: Environmental Protection Agency				\$1,599,995
Nat. Endowment for the Arts & Humanities				
Direct Awards				
Promotion of the Arts_Grants to Organizations and Individuals				
NATIONAL ENDOWMENT FOR THE ARTS: ART WORKS (MUSIC)	45.024	NEA 12-3100-7069		25,000
				\$25,000
Promotion of the Humanities_Challenge Grants				
NEH CHALLENGE GRANT: JUNIOR FACULTY ENDOWED CHAIR	45.130	NEH CH-50718-10 JF		375,000
NEH CHALLENGE GRANT: GRADUATE STUDENT STIPENDS	45.130	NEH CH-50718-10 GS		135,641
NEH CHALLENGE GRANT: SEMINAR SERIES	45.130	NEH CH-50718-10 SS		25,000
DIRECT OPERATION COST/BRIDGE FUND	45.130	NEH CH-50718-10		22,880
				\$558,521
Promotion of the Humanities_Division of Preservation and Access				
ADVANCED PAPYROLOGICAL INFORMATION SYSTEM PHASE 6	45.149	NEH PW-50049-08		23,544
ENCYCLOPAEDIA IRANICA PROJECT	45.149	NEH PW-50882-11		11,879

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
				\$35,423
Promotion of the Humanities_Research				
THE GUHYASAMAJA TANTRA: A FOUNDATION BUDDHIST TANTRA IN THE CONTEXT OF THE PRADIPODDYOTANA	45.161	RQ-50600-11		73,297
THE UNFINISHED: INDIAN STONE CARVERS AT WORK	45.161	NEH RZ-50997-09		-1,972
				\$71,325
Promotion of the Humanities_Professional Development				
NEH SUMMER SEMINAR: THE LIFE, AFTERLIFE AND REENVISIONING OF EURASIAN STUDIES IN AMERICA	45.163	EH-50232-10	LIB	46,303
AMERICA ENGAGES EURASIA. 19TH-CENTURY PRESENT: STUDIES, TEACHING AND RESOURCES IN THEIR HISTORICAL GEOPOLITICAL FRAMES	45.163	EH-50234-10		27,714
				\$74,017
Promotion of the Humanities_Office of Digital Humanities				
LEVERAGING "THE WISDOM OF THE CROWDS" FOR EFFICIENT TAGGING AND RETRIEVAL OF DOCUMENTS FROM THE HIST	45.169	NEH HD-51153-10		31,149
				\$31,149
National Leadership Grants				
BUILT WORKS REGISTRY	45.312	LG-05-10-0104-10		300,918
				\$300,918
Total Direct Award Programs:				\$1,096,353
Pass-through Awards				
Nat. Endowment for the Arts & Humanities				
INTERFAITH CENTER OF NEW YORK	45.	ICNY CU11-2160	NEH ES-50384-11	8,483
				\$8,483
Total Pass-through Programs:				\$8,483
Total: Nat. Endowment for the Arts & Humanities				\$1,104,836
Other Agencies / Gov't				
Direct Awards				
Copyright Service				
DEVELOPMENT AND MANAGEMENT OF A WEB PORTAL ON GEOSPATIAL DATA PRESERVATION	42.002	AMERTEH CU10-0787		29,278
				\$29,278
National Historical Publications and Records Grants				
THE SELECTED PAPERS OF JOHN JAY (YEAR 2 OF 3)	89.003	NAR11-PC-50029-11		162,276
THE SELECTED PAPERS OF JOHN JAY, PHASE III	89.003	NAR10-PC 50005-10		0
				\$162,276
Japan-U.S. Friendship Commission Grants				
2011-2012 JAPAN-U.S. FRIENDSHIP COMMISSION PRIZE FOR THE TRANSLATION OF JAPANESE LITERATURE	90.300	JAPUS 11-17		22,057
				\$22,057
Annual Grant Competition				
MAKING AND COMMITTING TO PEACE: POLITICAL VULNERABILITY AND CIVIL WAR RESOLUTIONS	91.001	USIP #052-07F		22,187
				\$22,187
Department of Homeland Security				
INTEGRATED INVESTIGATION OF POLYUREA COATINGS FOR INFRASTRUCTURE PROTECTION	97.	HSQDC-10-C-00080		295,419
				\$295,419
USAID Foreign Assistance for Programs Overseas				
IMPROVING REEF BIODIVERSITY & SUSTAINABLE FISHING IN THE MUNICIPALITY OF MICHES, DOMINICAN REPUBLIC	98.001	517-A-00-10-0010300		345,899
SUPPORTING UNIVERSITIES TO PARTNER ACROSS THE PACIFIC	98.001	AID-497-A-12-00009		41,717
				\$387,616

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The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
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R&D Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
Total Direct Award Programs:				\$918,833
Pass-through Awards				
Central Intelligence Agency				
SCITOR CORPORATION	13.	SCITOR G1073-006 SC1	CIA CU09-2936	93,123
SCITOR CORPORATION	13.	SCITOR G1073-006 SC2	CIA CU09-2936	86,831
SCITOR CORPORATION	13.	SCITOR G1073-006 SCO	CIA CU09-2936	26,030
				\$205,984
General Services Administration				
ARUP	39.	ARUP CU11-0686	GS00110AAC0273	6,627
				\$6,627
Social Innovation Fund				
AMIDA CARE	94.019	AMIDA CU11-3186	CORPNCS 10SIHDC0001	12,134
				\$12,134
Department of Homeland Security				
CIVIONICS, LLC	97.	CIVIONICS CU10-2870	GS-10F-0358K	7,728
CIVIONICS, LLC	97.	CIVIONICS CU10-2870	GS-10F-0358K	-2,359
				\$5,369
Assistance to Firefighters Grant				
ISABELLA GERIATRIC CENTER	97.044	IGC CU09-3856	EMW-2008-FP-02414	-164
				\$-164
Centers for Homeland Security				
KANSAS STATE UNIVERSITY	97.061	KSUNI S11045.01	2010-ST-061-AG0001	239,675
				\$239,675
Homeland Security Grant Program				
BAE SYSTEMS NATIONAL SECURITY SOLUTIONS, INC	97.067	BAESNSS 080043	H66001-09-C-0080	130,732
				\$130,732
USAID Foreign Assistance for Programs Overseas				
UNIVERSITY OF CALIFORNIA, DAVIS	98.001	UCD 200910804-01	GHN-A-00-09-00010-00	293,300
FAMILY HEALTH INTERNATIONAL	98.001	FHI 132120	GPO-A-00-05-00022-00	167,606
FHI DEVELOPMENT 360 LLC	98.001	FHID 360 805275	AID GHO-A-00-09-00016-00	141,257
WILDLIFE TRUST (AKA ECOHEALTH ALLIANCE)	98.001	WILDLIFE CU10-1005	USAID	90,939
				\$693,102
Total Pass-through Programs:				\$1,293,459
Total: Other Agencies / Gov't				\$2,212,292
Total: RESEARCH & DEVELOPMENT CLUSTER				\$643,459,837

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
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Student Financial Assistance Cluster

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
STUDENT FINANCIAL ASSISTANCE CLUSTER				
Department of Health & Human Services				
Direct Awards				
Nurse Faculty Loan Program (NFLP)				
NURSE FACULTY LOAN PROGRAM (NFLP)	93.264	2 E01HP12941-02-00		167,986
NURSE FACULTY LOAN PROGRAM	93.264	2 E01 HP12941-02-00		-39
				\$167,947
Health Professions Student Loans, Including Primary Care Loans/Loans for Disadvantaged Students				
HRSA HEALTH PROFESSIONS STUDENT LOANS FOR DENTISTRY	93.342	6 E11HP19072-01-01		17,550
HRSA LOANS TO DISADVANTAGED STUDENTS FOR DENTISTRY	93.342	6 E31HP19096-01-01		13,751
				\$31,301
Nursing Student Loans				
(NSL) - BACCALAUREATE NURSING	93.364	2 E4CHP14927-02-00		-4,001
				\$-4,001
ARRA - Scholarships for Disadvantaged Students				
ARRA- SCHOLARSHIPS FOR DISADVANTAGED STUDENTS	93.407	1 T0AHP18478-01-00		8,736
				\$8,736
Scholarships for Health Professions Students from Disadvantaged Backgrounds				
SCHOLARSHIPS FOR DISADVANTAGED STUDENTS - CODE 10 (P&S)	93.925	1 T08HP22300-01-00 P&S		110,669
SCHOLARSHIPS FOR DISADVANTAGED STUDENTS - CODE 30 (CDM)	93.925	1 T08HP22300-01-00 CDM		89,919
SCHOLARSHIP FOR DISADVANTAGED STUDENTS	93.925	1 T08HP22464-01-00		36,598
SCHOLARSHIPS FOR DISADVANTAGED STUDENTS - CODE 78 (MSPH)	93.925	1 T08HP22300-01-00 MSP		34,584
SCHOLARSHIPS FOR DISADVANTAGED STUDENTS - CODE 93 (OT)	93.925	1 T08HP22300-01-00 OT		6,052
SCHOLARSHIPS FOR DISADVANTAGED STUDENTS	93.925	1 T08HP18777-01-00		-8,736
				\$269,086
Total Direct Award Programs:				\$473,069
Total: Department of Health & Human Services (Excluding NIH)				\$473,069
Department of Education				
Direct Awards				
Department of Education				
ART HISTORY & ARCHAEOLOGY	84.003	DE-438-002707 009		103,383
				\$103,383
Federal Supplemental Educational Opportunity Grants				
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT PR	84.007	DE-SEOG 11/12		939,183
SEOG 11/12 (ENGINEERING)	84.007	DE-SEOG 11/12 ENG ENG		772,256
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT PROGRAM 2010-2011(SEOG)-ENGINEERING	84.007	DE-SEOG 10/11 ENG		4,153
SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT PROGRAM 2010-2011-GENERAL STUDIES	84.007	DE-SEOG 10/11 SGS		-532,597
				\$1,182,995
Department of Education				
SOCIOLOGY	84.008	DE-438-002707 008		23,351
				\$23,351

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The Trustees of Columbia University in the City of New York
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Student Financial Assistance Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
Federal Work-Study Program				
UNIVERSITY DEPARTMENT	84.033	DE-438-002707 001		3,547,464
FÉDÉRAL WORK STUDY 2011-2012 (FWS)COLUMBIA COLLEGE	84.033	DE-438-002707 CC		1,124,492
FWS	84.033	DE-438-002707 GS GS		400,609
ENGLISH & COMPARATIVE LITERATURE	84.033	DE-438-002707 011		203,147
HISTORY	84.033	DE-438-002707 006		93,735
POLITICAL SCIENCE	84.033	DE-438-002707 007		61,893
CHEMISTRY	84.033	DE-438-002707 025		60,771
COLLEGE WORK STUDY 2009-2010	84.033	DE-438-002707		56,747
RELIGION	84.033	DE-438-002707 020		54,474
FRENCH & ROMANCE PHILOLOGY	84.033	DE-438-002707 012		39,554
MUSIC	84.033	DE-438-002707 018		38,921
ANTHROPOLOGY	84.033	DE-438-002707 003		38,919
MIDDLE EAST LANGUAGES & CULTURES	84.033	DE-438-002707 017		38,919
EAST ASIAN LANGUAGES & CULTURES	84.033	DE-438-002707 010		31,136
ECONOMICS	84.033	DE-438-002707 004		31,134
PHYSICS	84.033	DE-438-002707 029		31,133
DCAS/PUBLIC SERVICE CORPORATION	84.033	DE-438-002707 002		24,574
ITALIAN	84.033	DE-438-002707 015		23,684
SPANISH & PORTUGUESE	84.033	DE-438-002707 022		23,351
COMMUNITY IMPACT/VIRTUAL Y/AMERICA READS PROGRAM	84.033	DE-438-002707 062		19,438
SCHOOL OF DENTAL & ORAL SURGERY	84.033	DE-438-002707 036		16,996
GERMANIC LANGUAGES	84.033	DE-438-002707 013		15,568
STATISTICS	84.033	DE-438-002707 027		15,568
PSYCHOLOGY	84.033	DE-438-002707 030		15,568
GEOLOGICAL SCIENCES	84.033	DE-438-002707 026		15,566
FÉDÉRAL WORK STUDY 2011-2012 (FWS)	84.033	DE-438-002707		15,563
JUMPSTART/AMERICA READS	84.033	DE-438-002707 063		14,905
METROPOLITAN MUSEUM OF ART	84.033	DE-438-002707 065		14,735
P.S. 1 CONTEMPORARY ART CENTER	84.033	DE-438-002707 125		9,478
SLAVIC LANGUAGES	84.033	DE-438-002707 021		8,116
ECONOMY, EVOLUTION AND ENVIORMENTAL BIOLOGY	84.033	DE-438-002707 005		7,784
PHILOSOPHY	84.033	DE-438-002707 019		7,784
ASTRONOMY	84.033	DE-438-002707 023		7,784
ACADEMY OF AMERICAN POETS	84.033	DE-438-002707 053		7,704
RIVERSIDE LANGUAGE PROGRAM	84.033	DE-438-022707 131		4,466
THE 92ND STREET Y	84.033	DE-438-002707 060		3,978

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Student Financial Assistance Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
SPECTATOR	84.033	DE-438-002707	121	2,981
NORTHSIDE HOUSING	84.033	DE-438-002707	141	1,872
RIVERSIDE SYMPHONY	84.033	DE-438-002707	051	1,731
ST JOHN'S UNIVERSITY PSYCHOLOGY DEPT	84.033	DE-438-002707	152	1,656
GOVERNMENT & COMMUNITY AFFAIRS AMERICA READS PROGRAM	84.033	DE-438-002707	064	1,580
NY PRESERVATION ARCHIVE	84.033	DE-438-002707	080	1,436
ENVIRONMENTAL GRANTMAKERS ASSOCIATION	84.033	DE-438-002707	153	960
BROOKLYN MUSEUM	84.033	DE-438-002707	150	572
USABP JOURNAL	84.033	DE-438-002707	147	406
AFRICAN AMERICAN POLICY FORUM	84.033	DE-438-002707	139	213
ECOLOGY, EVOLUTION, AND ENVIRONMENTAL BIOLOGY (E3B)	84.033	DE-438-002707	016	53
SCHOOL OF SOCIAL WORK GRADUATE TRANSFER	84.033	DE-438-002707	137	6
ACADEMY OF AMERICAN POETS	84.033	DE-438-002707	053	-20
BARNARD MINOR LATHAM THEATER	84.033	DE-438-002707	043	-27
AFRICAN AMERICAN POLICY FORUM	84.033	DE-438-002707	139	-46
THE FOUNDATION FOR CULTURAL REVIEW / NEW CRITERION	84.033	DE-438-002707	056	-65
NY PRESERVATION ARCHIVE	84.033	DE-438-002707	080	-81
RIVERSIDE SYMPHONY	84.033	DE-438-002707	051	-108
BARNARD DANCE DEPT.	84.033	DE-438-002707	100	-161
THE 92ND STREET Y	84.033	DE-438-002707	060	-222
CENTER FOR WORK-LIFE POLICY	84.033	DE-438-002707	143	-223
RIVERSIDE LANGUAGE PROGRAM	84.033	DE-438-002707	131	-252
THE 92ND STREET Y MUSIC PROGRAM	84.033	DE-438-002707	061	-287
SPECTATOR	84.033	DE-438-002707	121	-324
POETS HOUSE	84.033	DE-438-002707	054	-338
METROPOLITAN MUSEUM OF ART	84.033	DE-438-002707	065	-477
P.S.1 CONTEMPORARY ART CENTER	84.033	DE-438-002707	125	-716
LANDMARK WEST	84.033	DE-438-002707	142	-744
UNIVERSITY DEPARTMENT	84.033	DE-438-002707	001	-1,082
FEDERAL WORK STUDY 2010-2011 (FWS)	84.033	DE-438-00270	CC	-2,000
FEDERAL WORK STUDY 2010-2011 (FWS)	84.033	DE-438-002707		-72,310
				\$6,059,641
Federal Pell Grant Program				
PELL GRANT 2011-2012 CC	84.063	DE-PELL 11/12	CC	7,485,939
PELL GRANT 2010-2011	84.063	DE-PELL 10/11		252,989
				\$7,738,928
Federal Direct Student Loans				
FEDERAL DIRECT LOAN (2011-2012)	84.268	DE-P268K121840	SPE	287,475,389

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York

Supplemental Schedule of Expenditures of Federal Awards

For year ended June 30, 2012

Student Financial Assistance Cluster, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
FEDERAL DIRECT LOAN PROGRAM 2012-2013	84.268	DE-P268K131840		13,347,614
FEDERAL DIRECT LOAN PROGRAM	84.268	DE-P268K111840	SPE	-91,170
				\$300,731,833
Department of Education				
FEDERAL ACADEMIC COMPETITIVE GRANT 2010-2011 COLUMBIA COLLEGE (ACG)	84.375	DE-ACG 10/11	C10	-6,475
				\$-6,475
Department of Education				
SMART GRANT PROGRAM 2010-2011-COLUMBIA COLLEGE	84.376	DE-SMART 10/11	101	-50,000
				\$-50,000
Total Direct Award Programs:				\$315,783,656
Total: Department of Education				\$315,783,656
Total: STUDENT FINANCIAL ASSISTANCE CLUSTER				316,256,725

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Trio Cluster

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
TRIO CLUSTER				
Department of Education				
Direct Awards				
TALENT SEARCH PROGRAM	84.044	DE-P044A111023		286,892
TALENT SEARCH PROGRAM	84.044	DE P044A060143-10		48,256
				\$335,148
UPWARD BOUND PROGRAM	84.047	DE P047A080458		737,806
UPWARD BOUUND PROGRAM	84.047	DE P047A121775		2,673
				\$740,479
RONALD E. MCNAIR POSTBACCALAUREATE ACHIEVEMENT PROGRAM	84.217	DE P217A070257-11		200,553
				\$200,553
Total Direct Award Programs:				\$1,276,180
Total: Department of Education - Trio Cluster				\$1,276,180

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Headstart Cluster

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
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HEAD START CLUSTER

Department of Health & Human Services
Direct Awards

EARLY HEAD START	93.600	02CH9933/09		2,048,539
EARLY HEAD START	93.600	02CH9933/08		652,544
EARLY HEAD START SUPP	93.600	02CH9933/09	S1	159,580
				\$2,860,663

Total Direct Award Programs:

\$2,860,663

Pass-through Awards

NEW YORK CITY HUMAN RESOURCES ADMINISTRATION	93.600	NYCHRA 660TCOL	DHHS ACF CU09-4030	684,959
NEW YORK CITY HUMAN RESOURCES ADMINISTRATION	93.600	NYCHRA 660TCOL	DHHS CU09-4030	274,747
NEW YORK CITY HUMAN RESOURCES ADMINISTRATION	93.600	NYCHRA 660TCOL	DHHS CU09-4030	11,934
NEW YORK CITY HUMAN RESOURCES ADMINISTRATION	93.600	NYCHRA 660TCOL	DHHS CU09-0533	-27,869
				\$943,771

Total Pass-through Programs:

\$943,771

Total: Department of Health & Human Services - Head Start Cluster

\$3,804,434

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

				Medicaid Cluster
Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
MEDICAID CLUSTER				
Department of Health & Human Services				
Pass-through Awards				
NEW YORK STATE DEPARTMENT OF HEALTH	93.778	SDH C-027009	CMS 05-1105-NY5-ADM	165,548
NEW YORK STATE DEPARTMENT OF HEALTH	93.778	SDH C-027009	CMS 05-1105-NY5-ADM	143,877
NEW YORK STATE DEPARTMENT OF HEALTH	93.778	SDH C-027009	CMS 05-1105-NY5-ADM	5,606
NEW YORK STATE DEPARTMENT OF HEALTH	93.778	SDH C-027009	CMS 05-1105-NY5-ADM	5,196
				\$320,227
Total Pass-through Programs:				\$320,227
Total: Department of Health & Human Services - Medicaid Cluster				\$320,227

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

				Foreign Food Donation-USAID Cluster
Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
FOREIGN FOOD DONATION CLUSTER-USAID				
Department of State				
Direct Awards				
COLUMBIA UNIVERSITY AND INSTITUT PERTANIAN BOGOR PARTNERSHIP TO BUILD CAPACITY FOR ADAPTATION CLIMATE RISKS IN INDONESIA	98.007	AID-497-A-11-00011		61,832
COLUMBIA UNIVERSITY AND INSTITUT PERTANIAN BOGOR PARTNERSHIP TO BUILD CAPACITY FOR ADAPTATION CLIMATE RISKS IN INDONESIA	98.007	AID-497-A-11-00011	SCO	31,055
				\$92,887
Total Direct Award Programs:				\$92,887
Total: Department of State - Foreign Food Donation Cluster				\$92,887

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

	Other Programs			
Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
OTHER PROGRAMS				
Department of Health & Human Services				
Direct Awards				
Center for Disease Control				
ESIS TO2: EVALUATION OF ADVERSE EVENTS FOLLOWING MALE CIRCUMCISION	93.	CDC 200-2011-37935/0		461,619
ESIS TO3: OVERCOMING BARRIERS TO OCCUPATIONAL BLOODBORNE PATHOGEN EXPOSURE REPORTING AND CASE MANAGEMENT	93.	CDC 200-2011-37935/0		235,207
ESIS TO1: EXTERNAL QUALITY ASSURANCE ASSESSMENT OF MALE CIRCUMCISION SITES FUNDED BY THE PRESIDENT'S EMERGENCY PLAN FOR	93.	CDC 200-2011-37935/0		60,046
ESIS TO4: EVALUATION OF INTEGRATED COMMUNITY-BASED AND CLINICAL HIV/AIDS INTERVENTIONS IN SINAZONGWE, ZAMBIA	93.	CDC 200-2011-37935/0		23,250
SUPPORT FOR HIGH-QUALITY HIV CARE TREATMENT ACTIVITIES IN EASTERN KENYA	93.	CDC 200-2007-23654		-437
SUPPORT FOR HIGH-QUALITY HIV CARE TREATMENT ACTIVITIES IN EASTERN KENYA - OFF SITE	93.	CDC 200-2007-23654 SC2		-11,151
				\$768,534
Global AIDS				
KENYA NYANZA 1314 - COUNTRY COSTS	93.067	5 U2G PS001314-04 S1		6,056,700
TANZANIA ENDELEZA 1998 (OFF)	93.067	3 U2G PS001998-02 S2		5,545,504
ETHIOPIA TECHNICAL ASSISTANCE 0204 (COUNTRY)	93.067	3 U2G GH000204-01 S1		3,207,207
SWAZILAND RAPID SCALE UP 2005 (OFF)	93.067	5 U2G PS002005-03 S2		3,038,920
RAPID SCALE UP ON HIV/AIDS CARE AND TREATMENT SERVICES IN THE KINGDOM OF SWAZILAND UNDER PEPFAR - OFFSITE	93.067	5 U2G PS002005-02 S2		3,001,395
SWAZILAND RAPID SCALE UP 2005 (ON)	93.067	5 U2G PS002005-03 S1 S1		2,858,183
PROVIDING QUALITY COMPREHENSIVE HIV/AIDS PREVENTION, CARE AND TREATMENT SERVICES IN THE FEDERAL REPUBLIC OF NIGERIA, UND	93.067	1 U2G PS003089-01 S2		2,186,170
IMPLEMENTATION OF PRGMS FOR THE PREV, CARE AND TRMNT OF HIV/AIDS IN NIGERIA UNDER PEPFAR - OFFSITE	93.067	3 U2G PS001060-04 S1		2,113,946
EASTERN KENYA 1987 (OFF)	93.067	5 U2G PS001987-02 S2		2,014,631
UTAP 2 CONGO: OFFSITE	93.067	5 U2G PS001526-02 SC2		2,008,784
TANZANIA ENDELEZA 1998 (ON)	93.067	5 U2G PS001998-02 S1		1,953,951
BUILDING MOZAMBITAN CAPACITY - OFF	93.067	5 U2G PS002756-02 S2		1,928,814
SUPPORTING HIV PREVENTION, CARE AND TREATMENT IN KENYA (OFFSITE)	93.067	5 U2G PS001314-03 S1		1,900,490
RAPID SCALE UP ON HIV/AIDS CARE AND TREATMENT SERVICES IN THE KINGDOM OF SWAZILAND UNDER PEPFAR - ONSITE	93.067	5 U2G PS002005-02 S1		1,855,347
EASTERN KENYA 1987 (ON)	93.067	5 U2G PS001987-02		1,490,032
IMPLEMENTATION OF PROGRAMS FOR THE PREVENTION, CARE AND TREATMENT OF HIV/AIDS IN THE UNITED REPUBLIC OF TANZANIA UNDER P	93.067	3 U2G PS001998-01 S2		1,361,443
BUILDING MOZAMBITAN CAPACITY - ON	93.067	5 U2G PS002756-02 S1		1,269,252
SUPPORTING HIV PREVENTION, CARE AND TREATMENT IN KENYA (ONSITE)	93.067	5 U2G PS001314-03 S2		1,230,187
SUPPORTING THE IMPLEMENTATION AND EXPANSION OF HIGH QUALITY HIV PREVENTION, CARE AND TREATMENT ACTIVITIES AT FACILITY AN	93.067	1 U2G PS001987-01 S2		1,191,826
STRENGTHENING TB/HIV COLLABORATION IN THE KINGDOM OF LESOTHO UNDER PEPFAR - OFFSITE	93.067	5 U2G PS002011-03 S2		1,170,442
UTAP 2 CONGO: ONSITE	93.067	5 U2G PS001526-02 SC1		1,165,824
SUPPORTING THE IMPLEMENTATION AND EXPANSION OF HIGH QUALITY HIV PREVENTION, CARE AND TREATMENT ACTIVITIES AT FACILITY AN	93.067	1 U2G PS001987-01		896,838
MZ TECHNICAL ASSISTANCE 0424 (COUNTRY)	93.067	1 U2G GH000424-01 S1		878,125
CI CARE & TREATMENT 0119 (COUNTRY)	93.067	1 U2G GH000119-01 S1		860,982
TANZANIA ENDELEZA 1998 (NY)	93.067	3 U2G PS001998-02S1		844,796

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Other Programs, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
STRENGTHENING TB/HIV COLLABORATION IN THE KINGDOM OF LESOTHO UNDER PEPFAR - OFFSITE	93.067	3 U2G PS002011-02 S2		804,396
TECHNICAL ASSISTANCE, PRGM IMPLEMENTATION AND CAPACITY UNDER PEPFAR - ZAMBIA	93.067	5 U2G PS001423-03		728,713
RWANDA SCMOH 1161 (OFFSITE)	93.067	3 U2G PS001161-04 S1		661,001
STRENGTHENING TB/HIV COLLABORATION IN THE KINGDOM OF LESOTHO UNDER PEPFAR - ONSITE	93.067	5 U2G PS002011-03 S1		648,731
CENTRAL ASIA CARE & TREATMENT - KAZAKHSTAN OFF	93.067	5 U2G PS003074-02 KA2		577,209
SUPPORTING HIV PREVENTION, CARE AND TREATMENT IN KENYA - ONSITE UNLIQUIDATED BALANCES	93.067	5 U2G PS001314-03 UNL		566,619
STRENGTHENING THE CAPACITY OF THE RWANDAN MOH (OFFSITE)	93.067	5 U2G PS001161-03 S1		562,651
RWANDA SCMOH 1161 (ONSITE)	93.067	3 U2G PS001161-04 S2		526,333
KENYA NYANZA 1314 - NEW YORK	93.067	5 U2G PS001314-04		522,626
UTAP 2: HQ (NY)	93.067	5 U2G PS001537-03		487,090
PROVIDING QUALITY COMPREHENSIVE HIV/AIDS PREVENTION, CARE AND TREATMENT SERVICES IN THE FEDERAL REPUBLIC OF NIGERIA, UND	93.067	1 U2G PS003089-01 S1		447,253
ETHIOPIA TECHNICAL ASSISTANCE 0204 (NY)	93.067	3 U2G GH000204-01S1		437,592
SWAZILAND RAPID SCALE UP 2005 (NY)	93.067	5 U2G PS002005-03		401,128
SOUTH AFRICA MSM 0249 (COUNTRY)	93.067	1 U2G GH000249-01 S1		400,532
CENTRAL ASIA STRATEGIC INFO - KAZAKHSTAN OFF	93.067	5 U2G PS003031-02 KA2		385,462
BUILDING MOZAMBIKAN CAPACITY - NY	93.067	5 U2G PS002756-02		379,221
TECHNICAL ASSISTANCE IN SUPPORT OF HIV PREVENTION, CARE AND TREATMENT PRGMS IN SUPPORT OF THE PEPFAR (OFFSITE)	93.067	5 U2G PS001521-03 S1		361,889
IMPLEMENTATION OF PROGRAMS FOR THE PREVENTION, CARE AND TREATMENT OF HIV/AIDS IN THE UNITED REPUBLIC OF TANZANIA UNDER P	93.067	5 U2G PS001998-01 S1		350,576
UTAP 2 CONGO: NY	93.067	5 U2G PS001526-02		345,969
TECHNICAL ASSISTANCE FOR STRATEGIC INFO ACTVS IN THE REPUBLIC OF MOZAM UNDER PEPFAR - OFF	93.067	3 U2G PS002828-02 S2		293,892
PROVIDING QUALITY COMPREHENSIVE HIV/AIDS PREVENTION, CARE AND TREATMENT SERVICES IN THE FEDERAL REPUBLIC OF NIGERIA UNDE	93.067	1 U2G PS003089-01		284,309
UTAP 2 CONGO: OFFSITE	93.067	5 U2G PS001526-03 SC2		280,547
STRENGTHENING TB/HIV COLLABORATION IN THE KINGDOM OF LESOTHO UNDER PEPFAR - NY	93.067	5 U2G PS002011-03		273,109
STRATEGIC INFORMATION ACTIVITIES - CENTRAL ASIA (SSW OFF)	93.067	1 U2G PS003031-01 SS2		268,657
KENYA NYANZA 1314 (UNLIQ BAL FRM YR 3 TO YR 4)	93.067	5 U2G PS001314-04 UNL		267,832
EASTERN KENYA 1987 - UNLIQ BALS INTO YR 2	93.067	5 U2G PS001987-02 UNL		255,775
EASTERN KENYA 1987 (NY)	93.067	5 U2G PS001987-02 S1		252,291
TANZANIA ENDELEZA 1998 - UNLIQ BALS INTO YR 2	93.067	5 U2G PS001998-02 UNL		234,989
IMPLEMENTATION OF PRGMS FOR THE PREV, CARE AND TRMNT OF HIV/AIDS IN NIGERIA - NEW YORK	93.067	3 U2G PS001060-04 S2		215,891
STRENGTHENING TB/HIV COLLABORATION IN THE KINGDOM OF LESOTHO UNDER PEPFAR - ONSITE	93.067	3 U2G PS002011-02 S1		203,703
UTAP 2 SWAZILAND: OFFSITE	93.067	5 U2G PS001534-03 SC2		201,080
MALI STRATEGIC INFO 0398	93.067	1 U2G GH000398-01		187,274
UTAP 2 - CÔTE D'IVOIRE (OFFSITE)	93.067	5 U2G PS001539-03 S2		179,027
UTAP 2: HQ (NY)	93.067	5 U2G PS001537-04		166,178
IMPLEMENTATION OF CARE AND TREATMENT PROGRAMS - CENTRAL ASIA (SSW OFFSITE)	93.067	3 U2G PS003074-01 SOF		164,325
RAPID SCALE UP ON HIV/AIDS CARE AND TREATMENT SERVICES IN THE KINGDOM OF SWAZILAND UNDER PEPFAR - NY	93.067	5 U2G PS002005-02		160,614

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
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Other Programs, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
SWAZILAND RAPID SCALE UP 2005 (UNLIQ BAL FRM YR 2 TO YR 3)	93.067	5 U2G PS002005-03 UNL		153,626
CENTRAL ASIA STRATEGIC INFO - TAJIKISTAN OFF	93.067	5 U2G PS003031-02 TAJ		151,669
CENTRAL ASIA CARE & TREATMENT - TAJIKISTAN ON	93.067	5 U2G PS003074-02		149,612
MZ TECHNICAL ASSISTANCE 0424 (NY)	93.067	1 U2G GH000424-01		140,721
UTAP 2: HQ (OFFSITE)	93.067	5 U2G PS001537-03 S1		140,102
SOUTH AFRICA TRAINING CENTER 0388 (COUNTRY)	93.067	1 U2G GH000388-01 S1		133,554
TECHNICAL ASSISTANCE, PRGM IMPLEMENTATION AND CAPACITY UNDER PEPFAR: ZAMBIA - UNLIQ BALS	93.067	5 U2G PS001423-03 UNL		130,942
STRENGTHENING THE CAPACITY OF THE RWANDAN MOH (ONSITE)	93.067	5 U2G PS001161-03 S2		130,756
RWANDA SCMOH 1161 (NY)	93.067	3 U2G PS001161-04S1		130,639
TECHNICAL ASSISTANCE FOR STRATEGIC INFO ACTVS IN THE REPUBLIC OF MOZAM UNDER PEPFAR - ON	93.067	3 U2G PS002828-02 S1		123,133
SOUTH AFRICA MSM 0249 (NY)	93.067	1 U2G GH000249-01		113,453
BUILDING MOZAMBIKAN CAPACITY TO IMPLEMENT QUALITY HIV/AIDS PREVENTION, CARE, AND TREATMENT PROGRAMS IN THE REPUBLIC OF M	93.067	1 U2G PS002756-01 S2		111,805
TANZANIA PEDS TB/HIV 0193 (NY)	93.067	3 U2G GH000193-01S1		110,995
SUPPORTING HIV PREVENTION, CARE AND TREATMENT IN KENYA (NY)	93.067	5 U2G PS001314-03		106,765
IMPLEMENTATION OF PROGRAMS FOR THE PREVENTION, CARE AND TREATMENT OF HIV/AIDS IN THE FEDERAL REPUBLIC OF NIGERIA - OFFSI	93.067	5 U2G PS001060-03 S1		106,268
STRENGTHENING TB/HIV COLLABORATION IN THE KINGDOM OF LESOTHO UNDER PEPFAR - NY	93.067	3 U2G PS002011-02S1		102,624
IMPLEMENTATION OF PRGMS FOR THE PREV, CARE AND TRMNT OF HIV/AIDS IN NIGERIA UNDER PEPFAR - ONSITE	93.067	3 U2G PS001060-04S1		97,717
CENTRAL ASIA CARE & TREATMENT - TAJIKISTAN OFF	93.067	5 U2G PS003074-02 TAJ		92,540
RAPID SCALE UP - ONSITE UNLIQUIDATED BALANCES	93.067	5 U2G PS002005-02 UNL		92,309
UTAP 2: CÔTE D'IVOIRE (OFFSITE)	93.067	5 U2G PS001539-04 S2		89,378
CI CARE & TREATMENT 0119 (NY)	93.067	1 U2G GH000119-01		86,539
CENTRAL ASIA STRATEGIC INFO - TAJIKISTAN ON	93.067	5 U2G PS003031-02		86,486
UTAP 2 CONGO: NY	93.067	5 U2G PS001526-03		81,029
RWANDA SCMOH 1161 (UNLIQ BAL FRM YR 3 TO YR 4)	93.067	5 U2G PS001161-04 UNL		78,052
TECHNICAL ASSISTANCE IN SUPPORT OF HIV PREVENTION, CARE AND TREATMENT PRGMS IN SUPPORT OF THE PEPFAR (ONSITE)	93.067	5 U2G PS001521-03		74,832
CENTRAL ASIA CARE & TREATMENT - KYRGYZSTAN OFF	93.067	5 U2G PS003074-02 KY2		72,207
LESOTHO SC 2011 (UNLIQ BAL FRM YR 2 TO YR 3)	93.067	5 U2G PS002011-03 UNL		67,749
RWANDAN MOH - ONSITE UNLIQ BALS	93.067	5 U2G PS001161-03 UNL		66,748
TECHNICAL ASSISTANCE FOR STRATEGIC INFORMATION ACTIVITIES IN THE REPUBLIC OF MOZAMBIQUE UNDER PEPFAR - OFF	93.067	1 U2G PS002828-01 S2		63,630
CENTRAL ASIA STRATEGIC INFO - KYRGYZSTAN OFF	93.067	5 U2G PS003031-02 KY2		60,295
SUPPORTING HIV PREVENTION, CARE AND TREATMENT IN KENYA - YR 1 IN YR 2 TO YR 3 COMMITS	93.067	5 U2G PS001314-03 YR1		59,913
CENTRAL ASIA CARE & TREATMENT - KAZAKHSTAN ON	93.067	5 U2G PS003074-02 KA1		59,822
TANZANIA PEDS TB/HIV 0193 (COUNTRY)	93.067	3 U2G GH000193-01 S1		57,753
UTAP 2: HQ (OFFSITE)	93.067	5 U2G PS001537-04 S1		52,161
SUPPORTING THE IMPLEMENTATION AND EXPANSION OF HIGH QUALITY HIV PREVENTION, CARE AND TREATMENT ACTIVITIES AT FACILITY AN	93.067	1 U2G PS001987-01 S1		48,363
UTAP 2 CONGO: ONSITE	93.067	5 U2G PS001526-03 SC1		44,461

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	Other Programs, continued			
Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
UTAP 2: COTE D'IVOIRE - ONSITE UNLIQ BALS	93.067	5 U2G PS001539-03 UNL		42,250
UTAP 2 SWAZILAND: ONSITE	93.067	5 U2G PS001534-03 SC1		35,660
IMPLEMENTATION OF CARE AND TREATMENT PROGRAMS - CENTRAL ASIA (ONSITE)	93.067	3 U2G PS003074-01W1		34,156
TECHNICAL ASSISTANCE FOR STRATEGIC INFO ACTVS IN THE REPUBLIC OF MOZAM UNDER PEPFAR - NY	93.067	3 U2G PS002828-02W1		29,825
SOUTH AFRICA TRAINING CENTER 0388 (NY)	93.067	1 U2G GH000388-01		29,791
STRENGTHENING THE CAPACITY OF THE RWANDAN MOH (NY)	93.067	5 U2G PS001161-03		28,527
CENTRAL ASIA STRATEGIC INFO - KAZAKHSTAN ON	93.067	5 U2G PS003031-02 KA1		27,884
IMPLEMENTATION OF PROGRAMS FOR THE PREVENTION, CARE AND TREATMENT OF HIV/AIDS IN THE UNITED REPUBLIC OF TANZANIA UNDER P	93.067	3 U2G PS001998-01S1		26,708
UTAP 2 SWAZILAND: NY	93.067	5 U2G PS001534-03		23,749
UTAP 2: HQ UNLIQ BALS	93.067	5 U2G PS001537-03 UNL		11,884
UTAP 2 - CÔTE D'IVOIRE (NY)	93.067	5 U2G PS001539-03		10,526
UTAP 2 SWAZILAND: OFFSITE	93.067	5 U2G PS001534-04 SC2		9,851
STRATEGIC INFORMATION ACTIVITIES - CENTRAL ASIA (SSW ON)	93.067	3 U2G PS003031-01 SS1		9,721
UTAP 2: CÔTE D'IVOIRE (NY)	93.067	5 U2G PS001539-04		8,729
IMPLEMENTATION OF CARE AND TREATMENT PROGRAMS - CENTRAL ASIA (SSW ONSITE)	93.067	3 U2G PS003074-01 SON		8,579
TECHNICAL ASSISTANCE FOR STRATEGIC INFORMATION ACTIVITIES IN THE REPUBLIC OF MOZAMBIQUE UNDER PEPFAR - NY	93.067	1 U2G PS002828-01		8,390
UTAP 2 - CÔTE D'IVOIRE (ONSITE)	93.067	5 U2G PS001539-03 S1		8,243
SUPPORT THE IMPLEMENTATION AND EXPANSION OF HIGH QUALITY HIV CARE, PREVENTION AND TREATMENT ACTIVITIES IN NYANZA PROVINC	93.067	5 U2G PS001314-02 S2		7,437
UTAP 2 SWAZILAND: NY	93.067	5 U2G PS001534-04		6,097
IMPLEMENTATION OF PROGRAMS FOR THE PREVENTION, CARE AND TREATMENT OF HIV/AIDS IN THE FEDERAL REPUBLIC OF NIGERIA - NEW	93.067	5 U2G PS001060-03 S2		5,058
TECHNICAL ASSISTANCE FOR STRATEGIC INFORMATION ACTIVITIES IN THE REPUBLIC OF MOZAMBIQUE UNDER PEPFAR - ON	93.067	1 U2G PS002828-01 S1		4,168
UTAP 2: TANZANIA (NY)	93.067	5 U2G PS001521-04		3,538
BUILDING MOZAMBIKAN CAPACITY TO IMPLEMENT QUALITY HIV/AIDS PREVENTION, CARE, AND TREATMENT PROGRAMS IN THE REPUBLIC OF M	93.067	1 U2G PS002756-01		2,932
BUILDING MOZAMBIKAN CAPACITY TO IMPLEMENT QUALITY HIV/AIDS PREVENTION, CARE, AND TREATMENT PROGRAMS IN THE REPUBLIC OF M	93.067	1 U2G PS002756-01 S1		993
UTAP 2: HQ (NY)	93.067	1 U2G PS001537-01		-685
TECHNICAL ASSISTANCE IN SUPPORT OF HIV PREVENTION, CARE AND TREATMENT PROGRAMS IN SUPPORT OF PEPFAR - (COTE D'IVOIRE) ON	93.067	1 U2G PS001539-01 S1		-1,000
TECHNICAL ASSISTANCE IN SUPPORT OF HIV PREVENTION, CARE AND TREATMENT PROGRAMS IN SUPPORT OF THE PEPFAR	93.067	5 U2G PS001521-02		-1,860
UTAP 2: HQ (NY)	93.067	5 U2G PS001537-02		-6,896
STRATEGIC INFORMATION ACTIVITIES - CENTRAL ASIA (ICAP ON)	93.067	1 U2G PS003031-01		-16,019
				\$69,341,157

Maternal and Child Health Federal Consolidated Programs

LEADERSHIP TRAINING IN PEDIATRIC DENTISTRY	93.110	5 T17 MC06359-07-00		175,174
HEALTHY TOMORROWS PARTNERSHIP FOR CHILDREN PROGRAM	93.110	5 H17MC07865-05-00		45,670
LEADERSHIP TRAINING IN PEDIATRIC DENTISTRY - EVENT	93.110	6 T17 MC06359-07-01		17,670
GENETIC SERVICES PROJECT - SICKLE CELL MEDICAL HOMES FOR HARLEM & NORTHERN MANHATTAN	93.110	6 H46 MC09227-03-02		16,484
LEADERSHIP TRAINING IN PEDIATRIC DENTISTRY	93.110	5 T17 MC06359-06-00		7,099
TRAINING CEDI/COR PEDIATRIC AND CHILD PSYCHIATRY - COLLABORATIVE OFFICE ROUNDS IN PEDIATRIC AMBULATORY CARE NETWORK	93.110	T20MC07470-05-00		1,987

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
GENETIC SERVICES PROJECT - SICKLE CELL MEDICAL HOMES FOR HARLEM & NORTHERN MANHATTAN	93.110	6 H46MC09227-02-02		-111
GENETIC SERVICES PROJECT - SICKLE CELL MEDICAL HOMES FOR HARLEM & NORTHERN MANHATTAN	93.110	1 H46 MC09227-01		-129
				\$263,844
Nurse Anesthetist Traineeships				
ARRA-NURSE ANESTHETIST TRAINEESHIP	93.124	2 A22HP00047-12-00		24,070
				\$24,070
AIDS Education and Training Centers				
NEW YORK/NEW JERSEY AIDS EDUCATION AND TRAINING CENTER	93.145	5 H4AHA00071-10-03		2,988,739
NEPI - LESOTHO	93.145	6 U92 HA12772-03-04 S7		1,688,595
NEPI - MALAWI	93.145	6 U92 HA12772-03-04 S9		1,191,562
NEW YORK/NEW JERSEY AIDS EDUCATION AND TRAINING CENTER	93.145	6 H4AHA00071-09-02		1,121,424
INCI SOUTH AFRICA (COP)	93.145	6 U92 HA12772-03-06 S3		827,538
NEPI - NEW YORK	93.145	6 U92 HA12772-03-04 NE		689,753
INCI ETHIOPIA (COP)	93.145	6 U92 HA12772-03-04 S5		328,679
NEPI - ZAMBIA	93.145	6 U92 HA12772-03-04 S8		253,242
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: NY CORE	93.145	6 U92 HA12772-03-04		218,521
NEPI - SOUTH AFRICA	93.145	6 U92 HA12772-03-04 S6		180,488
INCI SWAZILAND (COP)	93.145	6 U92 HA12772-03-06 S4		108,292
INCI RWANDA (COP)	93.145	6 U92 HA12772-03-06 RW		87,589
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: UNLIQ BALS FRM YR 2 TO YR 3	93.145	6 U92 HA12772-03-04 UNL		71,073
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: LESOTHO CORE	93.145	6 U92 HA12772-03-04 LS		68,602
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: RWANDA CORE	93.145	6 U92 HA12772-03-04 S1		49,928
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: KENYA CORE	93.145	6 U92 HA12772-03-04 KY		49,716
INCI NEW YORK (COP)	93.145	6 U92 HA12772-03-04 S2		36,723
NEPI - DRC	93.145	6 U92 HA12772-03-04 N1		15,012
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: ETHIOPIA CORE	93.145	6 U92 HA12772-03-04 ET		13,004
GLOBAL HIV/AIDS NURSING INITIATIVE: SA CORE	93.145	6 U92 HA12772-03-04 SA		56
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: NY CORE	93.145	6 U92 HA12772-02-03		-2,413
GLOBAL HIV/AIDS NURSING CAPACITY INITIATIVE: SWAZILAND CORE	93.145	6 U92 HA12772-01-04 SW		-9,608
GLOBAL HIV/AIDS NURSING INITIATIVE: SA CORE	93.145	6 U92 HA12772-01-04 SA		-32,628
				\$9,943,887
Advanced Nursing Education Grant Program				
TRAINING NURSE SCIENTISTS IN INTERDISCIPLINARY & TRANSLATIONAL RESEARCH IN THE UNDERSERVED (TRANSIT)	93.247	5 D09 HP14667-03-01		254,455
				\$254,455
Public Health Training Centers Program				
PUBLIC HEALTH TRAINING CENTERS	93.249	6 D20 HP00016-10-03		159,512
				\$159,512
Occupational Safety and Health Program				
OCCUPATIONAL HEALTH IN HOME HEALTH CARE CONFERENCE	93.262	1 R13 OH009828-01		4,993
				\$4,993

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<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
Complex Humanitarian Emergency and War-Related Injury Public Health Activities				
DEVELOPING AND ESTABLISHING TECHNIQUES TO MONITOR THE GRAVE VIOLATIONS OF THE RIGHTS OF CHILDREN AND WOMEN	93.269	5 UE2 EH000540-03		150,437
DEVELOPING AND ESTABLISHING TECHNIQUES TO MONITOR THE GRAVE VIOLATIONS OF THE RIGHTS OF CHILDREN AND WOMEN	93.269	5 UE2 EH000540-02		107,424
				\$257,861
The Affordable Care Act: Centers for Disease Control and Prevention Investigations and Technical Assistance				
A PUBLIC HEALTH WORKPLACE EXPERIENCE TO INCREASE MINORITY STUDENT INTEREST IN PUBLIC HEALTH	93.283	1 U50 MN000018-01		433,370
				\$433,370
Advanced Education Nursing Traineeships				
ADVANCED EDUCATION NURSING TRAINEESHIPS	93.358	2 A10 HP00142-11-00		992
				\$992
Nurse Education, Practice Quality and Retention Grants				
NURSE EDUCATION PRACTICE AND RETENTION	93.359	5 D11HP07346-06-00		200,440
				\$200,440
ARRA - Public Health Traineeship Program				
ARRA - PUBLIC HEALTH TRAINEESHIP PROGRAM	93.405	1 A0AHP16425-01-00		64,947
				\$64,947
Affordable Care Act - Preparedness and Emergency Response Learning Centers				
NCDP PREPAREDNESS AND EMERGENCY RESPONSE LEARNING CENTER	93.606	5 U90 TP000419-02		428,223
NCDP PREPAREDNESS AND EMERGENCY RESPONSE LEARNING CENTER	93.606	1 U90 TP000419-01		201,118
				\$629,341
ARRA - Health Information Technology Professionals in Health Care				
ARRA-TIMELY TRAINING OF WORKERS COMPETENT TO SUPPORT EHR DEPLOYMENT AND MEANINGFUL USE	93.721	1 T15 OC000060-01		1,145,059
				\$1,145,059
Grants for Primary Care Training and Enhancement				
FACULTY DEVELOPMENT IN PRIME CARE	93.884	4 D55 HP05154-05-04		21,990
FACULTY DEVELOPMENT IN PRIME CARE	93.884	2 D55 HP05154-06-00		2,254
				\$24,244
Ryan White HIV/AIDS Dental Reimbursement and Community Based Dental Partnership Grants				
COMMUNITY BASED DENTAL PARTNERSHIP	93.924	5 H65HA00014-10-00		282,532
COMMUNITY BASED DENTAL PARTNERSHIP	93.924	5 H65 HA00014-09-00		131,847
RYAN WHITE HIV DENTAL REIMBURSEMENT PROGRAM	93.924	1 T22 HA22927-01-00		35,426
				\$449,805
Healthy Start Initiative				
ELIMINATING DISPARITIES IN PERINATAL HEALTH: DOWNSTATE NEW YORK HEALTHY START	93.926	5 H49 MC00133-11-00		1,074,701
ELIMINATING DISPARITIES IN PERINATAL HEALTH: DOWNSTATE NEW YORK HEALTHY START	93.926	5 H49 MC00133-12-00		193,412
ELIMINATING DISPARITIES IN PERINATAL HEALTH: DOWNSTATE NEW YORK HEALTHY START	93.926	6 H49 MC00133-10-01		54,282
				\$1,322,395
HIV Demonstration, Research, Public and Professional Education Projects				
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - MOZAMBIQUE OFF	93.941	5 U62 PS223540-08 SC3		10,085,563
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - ETHIOPIA OFF	93.941	5 U62 PS223540-08 SC6		7,511,338
MCAP YR 7 MOZAMBIQUE (ON)	93.941	5 U62 PS223540-08 MZ7		7,255,904
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA OFF	93.941	5 U62 PS223540-08 SC8		6,994,579
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - SOUTH AFRICA OFF	93.941	5 U62 PS223540-08 SC4		5,709,375

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PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - TANZANIA OFF	93.941	5 U62 PS223540-08 SC7		4,408,615
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - SOUTH AFRICA ON	93.941	5 U62 PS223540-08 S4 S4		4,260,440
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NEW YORK	93.941	5 U62 PS223540-08 SC1		4,168,478
MCAP YR 7 ETHIOPIA (ON)	93.941	5 U62 PS223540-08 ET7		3,610,364
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - MOZAMBIQUE ON	93.941	5 U62 PS223540-08 S3		3,463,776
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - TANZANIA ON	93.941	5 U62 PS223540-08 S7		2,854,687
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - CÔTE D'IVOIRE OFF	93.941	5 U62 PS223540-08 S9		2,646,162
MCAP YR 7 TANZANIA	93.941	5 U62 PS223540-08 TZ7		2,644,692
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - RWANDA OFF	93.941	5 U62 PS223540-08		2,551,941
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA ON	93.941	5 U62 PS223540-08 S2		2,334,037
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA ON	93.941	5 U62 PS223540-08 S8		2,174,144
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - ETHIOPIA ON	93.941	5 U62 PS223540-08 S6		2,105,452
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA OFF	93.941	5 U62 PS223540-08 SC2		1,785,533
MCAP YR 7 RWANDA	93.941	5 U62 PS223540-08 RW7		1,774,079
MCAP YR 7 NIGERIA (ON)	93.941	5 U62 PS223540-08 NG7		1,734,501
MCAP YR 7 NIGERIA (OFF)	93.941	5 U62 PS223540-08 NO7		1,027,549
MCAP YR 7 ETHIOPIA (OFF)	93.941	5 U62 PS223540-08 EO7		911,166
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - RWANDA ON	93.941	5 U62 PS223540-08 S1		855,185
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - CÔTE D'IVOIRE ON	93.941	5 U62 PS223540-08 SC9		793,151
MCAP YR 5 KENYA	93.941	5 U62 PS223540-08 KY5		521,286
MCAP YR 7 MOZAMBIQUE (OFF)	93.941	5 U62 PS223540-08 MO7		472,745
MCAP YR 6 ETHIOPIA	93.941	5 U62 PS223540-08 ET6		406,476
MCAP YR 7 SOUTH AFRICA	93.941	5 U62 PS223540-08 SA7		368,638
MCAP YR 6 MOZAMBIQUE	93.941	5 U62 PS223540-08 MZ6		349,982
MCAP YR 5 ETHIOPIA (ONSITE)	93.941	5 U62 PS223540-08 ET5		286,156
MCAP YR 6 NIGERIA	93.941	5 U62 PS223540-08 NG6		263,364
MCAP YR 5 ETHIOPIA (OFFSITE)	93.941	5 U62 PS223540-08 EO5		230,652
MCAP YR 7 KENYA	93.941	5 U62 PS223540-08 KY7		222,282
MCAP YR 5 MOZAMBIQUE	93.941	5 U62 PS223540-08 MZ5		191,942
MCAP YR 6 KENYA	93.941	5 U62 PS223540-08 KY6		187,674
MCAP YR 5 TANZANIA	93.941	5 U62 PS223540-08 TZ5		166,758
MCAP YR 7 CÔTE D'IVOIRE (ON)	93.941	5 U62 PS223540-08 CD7		164,400
MCAP YR 6 TANZANIA	93.941	5 U62 PS223540-08 TZ6		142,886
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA	93.941	5 U62 PS223540-07 S8		125,148
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA	93.941	5 U62 PS223540-06 SC8		116,398
MCAP YR 6 CÔTE D'IVOIRE	93.941	5 U62 PS223540-08 CD6		109,182

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MCAP YR 5 NIGERIA	93.941	5 U62 PS223540-08 NG5		102,650
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - CIESIN	93.941	5 U62 PS223540-08 CIE		55,065
MCAP YR 5 CÔTÉ D'IVOIRE	93.941	5 U62 PS223540-08 CD5		50,182
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - ÉTHIOPIA	93.941	5 U62 PS223540-07 SC6		38,929
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - MOZAMBIQUE	93.941	5 U62 CCU223540-04 SC3		38,010
MCAP YR 7 CÔTÉ D'IVOIRE (OFF)	93.941	5 U62 PS223540-08 CO7		27,718
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - MOZAMBIQUE	93.941	5 U62 CCU223540-04 S3		17,804
MCAP YR 6 RWANDA	93.941	5 U62 PS223540-08 RW6		15,723
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA	93.941	5 U62 PS223540-06 S8		14,555
MCAP YR 6 SOUTH AFRICA	93.941	5 U62 PS223540-08 SA6		9,553
MCAP YR 5 KENYA	93.941	5 U62 PS223540-07 KY5		9,111
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - MOZAMBIQUE	93.941	5 U62 PS223540-07 S3		8,230
MCAP YR 5 RWANDA	93.941	5 U62 PS223540-08 RW5		8,101
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - MOZAMBIQUE	93.941	5 U62 PS223540-05 S3		6,874
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA	93.941	5 U62 PS223540-06 S2		6,568
MCAP YR 5 NIGERIA	93.941	5 U62 PS223540-07 NG5		4,407
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA	93.941	5 U62 CCU223540-04 SC8		3,516
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA	93.941	5 U62 CCU223540-03 S8		1,773
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA	93.941	5 U62 CCU223540-04 SC2		1,524
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - ÉTHIOPIA	93.941	5 U62 CCU223540-04 SC6		1,384
MCAP YR 6 KENYA	93.941	5 U62 PS223540-07 KY6		1,113
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - CÔTÉ D'IVOIRE	93.941	5 U62 PS223540-06 SC9		1,000
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - TANZANIA	93.941	5 U62 PS223540-06 S7		191
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - TANZANIA	93.941	5 U62 CCU223540-04 S7		1
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - RWANDA	93.941	5 U62 CCU223540-04 S1		0
MCAP YR 6 RWANDA	93.941	5 U62 PS223540-07 RW6		-13
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - TANZANIA	93.941	5 U62 PS223540-05 S7		-263
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - RWANDA	93.941	5 U62 PS223540-07 S1		-340
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - SOUTH AFRICA	93.941	5 U62 CCU223540-03 S4		-742
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NEW YORK	93.941	3 U62 PS223540-05 SC1		-2,018
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - TANZANIA	93.941	5 U62 CCU223540-04 SC7		-2,363
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA	93.941	5 U62 PS223540-05 SC2		-2,979
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - ÉTHIOPIA	93.941	5 U62 CCU223540-04 S6		-4,356
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA	93.941	5 U62 PS223540-05 S2		-6,512
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - SOUTH AFRICA	93.941	5 U62 CCU223540-04 SC4		-6,723
PRÉSIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA	93.941	5 U62 CCU223540-04 S2		-7,602

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PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - KENYA	93.941	5 U62 PS223540-06 SC2		-9,609
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - TANZANIA	93.941	5 U62 PS223540-07 S7		-12,876
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NY	93.941	5 U62 CCU223540-04 SC1		-13,626
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA	93.941	5 U62 PS223540-05 SC8		-26,828
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - RWANDA	93.941	5 U62 CCU223540-04		-72,722
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - MOZAMBIQUE	93.941	5 U62 PS223540-07 SC3		-75,060
PRESIDENTIAL EXPANSION PROJECT FOR AIDS RELIEF - NIGERIA	93.941	5 U62 PS223540-05 S8		-89,490
MCAP YR 6 CÔTE D'IVOIRE	93.941	5 U62 PS223540-07 CD6		-93,436
				\$87,983,104

Epidemiologic Research Studies of Acquired Immunodeficiency Syndrome (AIDS) and Human Immunodeficiency Virus (HIV) Infection

COLUMBIA HIV/AIDS RESPONSE TEAM - RWANDA	93.943	5 U62 PS222407-05 RW1		869
COLUMBIA HIV/AIDS RESPONSE TEAM - TANZANIA	93.943	5 U62 PS222407-05 TA1		118
COLUMBIA HIV/AIDS RESPONSE TEAM - MOZAMBIQUE	93.943	5 U62 PS222407-05 MOZ		-129
COLUMBIA HIV/AIDS RESPONSE TEAM - NEW YORK	93.943	5 U62 PS222407-05		-1,594
COLUMBIA HIV/AIDS RESPONSE TEAM - TANZANIA	93.943	5 U62 PS222407-05 TAN		-2,000
				\$-2,736

Prevention and Public Health Fund (PPHF) Public Health Traineeships

PUBLIC HEALTH TRAINEESHIP	93.964	5 A03 HP01173-16-00		78,361
				\$78,361

Maternal and Child Health Services Block Grant to the States

NYSDOH PREVENTIVE DENTAL SERVICES PROGRAM	93.994	SDH-C027547		48,237
NYS GENETIC SERVICE PROGRAM (2009)	93.994	SDH C023846	HRSA	27,883
				\$76,120

Total Direct Award Programs: **\$173,423,755**

Pass-through Awards

Center for Disease Control

RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 SS3	CDC 200-2010-35772	65,453
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 SS3	CDC 200-2010-35772	55,184
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750	CDC 200-2010-35772	18,093
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 SS1	CDC 200-2010-35772	7,077
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 SS1	CDC 200-2010-35772	7,077
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750	CDC 200-2010-35772	4,034
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 SS2	CDC 200-2010-35772	2,637
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 TAJ	CDC 200-2010-35772	2,201
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 TAJ	CDC 200-2010-35772	2,130
RESEARCH TRIANGLE INSTITUTE	93.	RTI 11-312-0212750 SS2	CDC 200-2010-35772	2,116

Other DHHS (Non-NIH)

COUNCIL OF GRADUATE SCHOOLS	93.	CGS PO #100	ORI CU09-0904	1,192
				\$167,194

Global AIDS

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Other Programs, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
CENTRE FOR HEALTH SOLUTIONS	93.067	CFHS 802 S1	1 U2G GH000097-01	86,241
JOHNS HOPKINS PROG FOR INTRNL EDUCA. IN GYN/OB	93.067	JHPIEGO 10-AWD-003 OFF	1 U2G PS001463-01	59,714
CENTRE FOR HEALTH SOLUTIONS	93.067	CFHS 802	1 U2G GH000097-01	18,916
NETWORK OF NETWORKS OF HIV POSITIVES IN ETHIOPIA	93.067	NEP+ CU10-1544	1 U2G PS002950-01	15,802
JOHNS HOPKINS PROG FOR INTRNL EDUCA. IN GYN/OB	93.067	JHPIEGO 10-AWD-003	1 U2G PS001463-01	2,747
				\$183,420
Substance Abuse and Mental Health Services_Projects of Regional and National Significance				
FUND FOR PUBLIC HEALTH IN NEW YORK	93.243	FPHNY 71TRUCO001	5 H79 SM060274-02	79,524
FUND FOR PUBLIC HEALTH IN NEW YORK	93.243	FPHNY 57TRUCO-001	1 H79 SM060274-01	57,598
				\$137,122
The Affordable Care Act: Centers for Disease Control and Prevention_Investigations and Technical Assistance				
NEW YORK CITY POLICE FOUNDATION	93.283	NYCPFDN CU08-4283	1 U01 OH009173-01	152,982
MOUNT SINAI SCHOOL OF MEDICINE	93.283	MSSM CU11-0161	5 U58 DP001010-04	14,661
				\$167,643
Health Careers Opportunity Program				
MOUNT SINAI SCHOOL OF MEDICINE	93.822	MSSM 0523-6293-4609	2 D18 HP10627-04-00	129,923
MOUNT SINAI SCHOOL OF MEDICINE	93.822	MSSM 0523-6293-4609	5 D18 HP10627-03-00	100,662
				\$230,585
Lung Diseases Research				
BRIGHAM AND WOMEN'S HOSPITAL, INCORPORATED	93.838	BWH CU11-4149		20,962
				\$20,962
National Bioterrorism Hospital Preparedness Program				
HEALTH RESEARCH INCORPORATED	93.889	SHRI 4245-01	DHHS 15-0451-02	41,163
				\$41,163
HIV Emergency Relief Project Grants				
PUBLIC HEALTH SOLUTIONS	93.914	PUBHS 93-EVL-4645-21	NYCDOHMH CU11-0215	528,129
Public Health Solutions	93.914	PUBHS 93-EVL-4645-22	DHHS CU12-0329	219,519
				\$747,648
HIV Care Formula Grants				
HEALTH RESEARCH INCORPORATED	93.917	SHRI 3603-03	2XO7HA0002520	-15,907
				\$-15,907
Special Projects of National Significance				
PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.928	PH CU08-9072	5 H97HA08483-03	27,823
PRESBYTERIAN HOSPITAL IN THE CITY OF NEW YORK	93.928	PH CU08-9916	5 H97HA08483-03	16,351
				\$44,174
Block Grants for Community Mental Health Services				
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.958	RFMH CU09-3305	SAMSA #33430-9S-1385	61,698
NEW YORK STATE RESEARCH FOUNDATION FOR MENTAL HYGIENE	93.958	RFMH CU09-3305	MACRO #33430-9S-1385	56,084
				\$117,782
Maternal and Child Health Services Block Grant to the States				
NEW YORK STATE DEPARTMENT OF HEALTH	93.994	SDH C023846	HRSA	49,993
				\$49,993
Total Pass-through Programs:				\$1,891,779

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Other Programs, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
Total: Department of Health & Human Services (Excluding NIH)				\$175,315,534
National Institute of Health				
Direct Awards				
Mental Health Research Grants				
HIV INTERVENTION SCIENCE TRAINING PROGRAM FOR MINORITYNEW INVESTIGATORS	93.242	5 R25 MH080665-03		87,084
GENETIC AND NEURAL COMPLEXITY IN PSYCHIATRY	93.242	5 R13 MH091947-03		29,767
TREATING CHILDREN WITH TRAUMA: AN EVIDENCE BASED CURRICULUM	93.242	5 R25 MH084786-04		3,996
				\$120,847
Discovery and Applied Research for Technological Innovations to Improve Human Health				
ADVANCES IN OPTICS FOR BIOTECHNOLOGY, MEDICINE AND SURGERY CONFERENCE XII	93.286	1 R13 EB012903-01R1		20,000
				\$20,000
Cancer Cause and Prevention Research				
HUMAN BEHAVIOR AND EXPERIENCE IN HEALTH AND ILLNESS A 4 YEAR CURRICULUM AT COLUMBIA	93.393	5 K07 HL082628-05		965
HUMAN BEHAVIOR AND EXPERIENCE IN HEALTH AND ILLNESS	93.393	3 K07 HL08268-05S1		-40,755
				\$-39,790
Cancer Research Manpower				
TRAINING PROGRAM IN CANCER-RELATED POPULATION SCIENCES	93.398	5 R25 CA094061-10		364,936
ASSESSMENT OF INHERITED COLON CANCER PREDICTION MODELS IN DIVERSE POPULATIONS	93.398	5 K07 CA151769-02		175,249
RISK FACTORS FOR SITE-SPECIFIC METASTASIS IN ESOPHAGEAL CANCER	93.398	5 K07 CA132892-04		133,689
A PILOT STUDY OF STATIN THERAPY AND RISK OF MALIGNANT GLIOMA	93.398	5 K07 CA127468-04		92,679
TRAINING PROGRAM IN CANCER-RELATED POPULATION SCIENCES	93.398	5 R25 CA094061-10 S1		68,515
TRAINING PROGRAM IN CANCER-RELATED POPULATION SCIENCES	93.398	5 R25 CA094061-09		34,555
TRAINING PROGRAM IN CANCER-RELATED POPULATION SCIENCES SUPP	93.398	3 R25 CA094061-09 S1		13,579
				\$883,202
Trans-NIH Recovery Act Research Support				
ARRA-CORE RESEARCH COMPUTING FACILITY	93.701	1 G20 RR030893-01		559,310
Trans-NIH Recovery Act Research Support				
ARRA-RISK FACTORS FOR SITE-SPECIFIC METASTASIS IN ESOPHAGEAL CANCER	93.701	3 K07 CA132892-02SI		20,570
ARRA-A PILOT STUDY OF STATIN THERAPY AND RISK OF MALIGNANT GLIOMA	93.701	3 K07 CA127468-02S1		1,225
				\$581,105
Cardiovascular Diseases Research				
FIRST IN CER DIVERSITY PROGRAM	93.837	5 R25 HL105401-02		167,860
BEST-DP: BIOSTATISTICS ENRICHMENT SUMMER TRAINING DIVERSITY PROGRAM	93.837	5 R25 HL096260-04		105,138
FIRST IN CER (FACILITATING INDEPENDENCE IN RESEARCH THROUGH SUMMER TRAINING IN COMPARATIVE EFFECTIVENESS RESEARCH) DIVER	93.837	1 R25 HL105401-01		78,559
				\$351,557
Extramural Research Programs in the Neurosciences and Neurological Disorders				
R25 NEUROLOGY RESEARCH EDUCATION AND MENTORSHIP PROGRAM	93.853	5 R25 NS070697-03		96,866
				\$96,866
Allergy, Immunology and Transplantation Research				
SUMMER IMMUNOLOGY RESEARCH PROGRAM FOR HIGH SCHOOL SCIENCE TEACHERS	93.855	5 R25 AI080566-04		115,828
				\$115,828
Biomedical Research and Research Training				

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

				Other Programs, continued
Federal Grantor / Pass-through Grantor	CFDA	Project No.	Pass-through Contract No.	Expenditures
IMSD AT COLUMBIA'S MAILMAN SCHOOL OF PUBLIC HEALTH	93.859	5 R25 GM062454-08		309,115
				\$309,115
Medical Library Assistance				
TRAINING IN BIOMEDICAL INFORMATICS AT COLUMBIA UNIVERSITY	93.879	5 T15 LM007079-20		1,017,070
TRAINING IN BIOMEDICAL INFORMATICS AT COLUMBIA UNIVERSITY	93.879	2 T15 LM007079-21		39,612
TRAINING IN BIOMEDICAL INFORMATICS AT COLUMBIA UNIVERSITY	93.879	5 T15 LM007079-19		1,242
TRAINING IN BIOMEDICAL INFORMATICS AT COLUMBIA UNIVERSITY	93.879	3 T15 LM007079-19 S1		139
				\$1,058,063
Total Direct Award Programs:				\$3,496,793
Pass-through Awards				
Diabetes, Digestive, and Kidney Diseases Extramural Research				
NEW YORK UNIVERSITY	93.847	NYU 12-00881	5 R33 DK070341-05	260
				\$260
Allergy, Immunology and Transplantation Research				
DEPARTMENT OF VETERANS AFFAIRS MEDICAL CENTER, WA	93.855	DVAMC CU00-0110	U01 AI068641	1,171
				\$1,171
Total Pass-through Programs:				\$1,431
Total: National Institute of Health				\$3,498,224
National Science Foundation				
Direct Awards				
Engineering Grants				
CONFERENCE: ADVANCES IN OPTICS FOR BIOTECHNOLOGY, MEDICINE AND SURGERY XII, JUNE 5-8, 2011, NAPLES, FLORIDA	47.041	CBET-1105324		15,000
				\$15,000
Mathematical and Physical Sciences				
REU SITE AT NEVIS LABS, COLUMBIA UNIVERSITY	47.049	PHY-1062183	PAR	70,796
REU SITE AT NEVIS LABS, COLUMBIA UNIVERSITY	47.049	PHY-1062183		2,851
				\$73,647
Education and Human Resources				
NEW, GK-12 COLUMBIA UNIVERSITY LEARNING FROM EARTH AND ECOLOGICAL FIELD STUDIES (LEEFS) GRADUATE FELLOWSHIP PROGRAM	47.076	DGE-0742450	SC2	410,214
COLUMBIA UNIVERSITY LEARNING FROM EARTH AND ECOLOGICAL FIELD STUDIES (LEEFS) GRADUATE FELLOWSHIP PRO	47.076	DGE-07-42450		144,105
NEW, GK-12 COLUMBIA UNIVERSITY LEARNING FROM EARTH AND ECOLOGICAL FIELD STUDIES (LEEFS) GRADUATE	47.076	DGE-07-42450	PHY	17,202
IGERT: FROM DATA TO SOLUTIONS: A NEW PHD PROGRAM IN TRANSFORMATIONAL DATA & INFORMATION	47.076	DGE-1144854		1,592
GRADUATE RESEARCH FELLOWSHIP PROGRAM	47.076	DGE-07-07425		-232,018
				\$341,095
Office of Cyberinfrastructure				
RCN-SEES: NETWORK FOR UTILIZATION OF SOCIAL SCIENCE RESEARCH ON SUSTAINABILITY AND ENERGY	47.080	OCI-1140174		11,711
				\$11,711
Trans-NSF Recovery Act Reasearch Support				
ARRA-LAMONT CENTER FOR BIOGEOCHEMISTRY: RENOVATION OF THE BIOLOGY AND PALEO ENVIRONMENT LABORATORIES	47.082	OIA-0963217		1,248,297
				\$1,248,297
Total Direct Award Programs:				\$1,689,750
Pass-through Awards				
Computer and Information Science and Engineering				

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Other Programs, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
COMPUTING RESEARCH ASSOCIATION	47.070	CIF-C-161	1019343	105,190
COMPUTING RESEARCH ASSOCIATION	47.070	CIF-B-161	1019343	30,687
				\$135,877
Total Pass-through Programs:				\$135,877
Total: National Science Foundation				\$1,825,627

National Aeronautics & Space Administration
Pass-through Awards

National Aeronautics & Space Administration

CITY SCHOOL DISTRICT OF NEW ROCHELLE	43.	CSDNR CU10-2873	NNX10AU94A	38,295
				\$38,295

Science

SCIENCE MUSEUM OF MINNESOTA	43.001	SDRF CU10-0230	NNH08ZNE006N	24,621
SOUTHERN UNIVERSITY AND A&M COLLEGE	43.001	SUAMC P0010607	NNX11AL98A	1,536
UNIVERSITY OF CALIFORNIA RIVERSIDE	43.001	UCR 5-000546	NNX10AT45A	818
				\$26,975
Total Pass-through Programs:				\$65,270
Total: National Aeronautics & Space Administration				\$65,270

Department of Energy
Pass-through Awards

State Energy Program

ARRA -NEW YORK STATE ENERGY RESEARCH & DEVELOPMENT AUTHORITY	81.041	NYSERDA CU11-1381	DE-FOA-0000052	669,600
				\$669,600

Office of Science Financial Assistance Program

BROOKHAVEN NATIONAL LABORATORY	81.049	BNL #122048	SCO	DE-AC02-98CH10886	12,074
INSTITUTE OF INTERNATIONAL EDUCATION	81.049	IIE G66007155		DE F047114	5,331
					\$17,405
Total Pass-through Programs:					\$687,005
Total: Department of Energy					\$687,005

Department of Defense
Direct Awards

Basic and Applied Scientific Research

HOSTOS SUBCONTRACT ONR GLOBAL COHORT 9	12.300	N00014-10-1-0855	HOS		113,976
GS FINANCIAL AID ONR SERRANO COHORT 6	12.300	N00014-06-1-1097	GFA		93,087
GS FINANCIAL AID ONR SERRANO COHORT 5	12.300	N00014-05-1-0858	GFA		61,667
GS FINANCIAL AID ONR SERRANO COHORT 8	12.300	N00014-08-1-1127	GFA		48,305
GS FINANCIAL AID ONR SERRANO COHORT 7	12.300	N00014-08-1-0214	GFA		34,657
GS FINANCIAL AID ONR GLOBAL COHORT 9	12.300	N00014-10-1-0855	GFA		30,030
SIPA STUDENT SERVICES ONR GLOBAL COHORT 9	12.300	N00014-10-1-0855	SSS		4,826
					\$386,548

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Other Programs, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
Total Direct Award Programs:				\$386,548
Total: Department of Defense				\$386,548

Department of Commerce
Direct Awards

National Institute of Standards and Technology Construction Grant Program

ARRA-THE ULTRACLEAN GEOCHEMISTRY LABORATORY AT LAMONT-DOHERTY EARTH OBSERVATORY (LDEO), COLUMBIA UNIVERSITY	11.618	NIST 60NANB10D037		413,370
				\$413,370
Total Direct Award Programs:				\$413,370
Total: Department of Commerce				\$413,370

Department of Education
Direct Awards

National Resource Centers Program for Foreign Language and Area Studies or Foreign Language and International Studies Program a

MIDDLE EAST INSTITUTE NATIONAL RESOURCE CENTERS, COLUMBIA UNIVERSITY	84.015	DE-P015A060101-09 INS		-151
				\$-151

Javits Fellowships

JACOB JAVITS FELLOWSHIP 2011/2012	84.170	P170B100003-11		307,825
JACOB JAVITS FELLOWSHIP 2011/2012	84.170	P170B090002-11		292,329
JACOB JAVITS FELLOWSHIP 2011/2012	84.170	DE P170B080002-11		187,911
JACOB JAVITS FELLOWSHIP 2007/2008	84.170	DE P170B070032-10		41,035
JACOB JAVITS FELLOWSHIP 2008/2009	84.170	DE P170B080002-10		-43,552
				\$785,548
Total Direct Award Programs:				\$785,397
Total: Department of Education				\$785,397

Department of State
Direct Awards

Department of State

GS FINANCIAL AID DOS GLOBAL COHORT 10	19.	DS S-LMAQM-10-GR-076 GFA		224,845
HOSTOS SUBCONTRACT DOS GLOBAL COHORT 9	19.	DS S-LMAQM-09-GR-069		162,737
GS FINANCIAL AID DOS GLOBAL COHORT 9	19.	DS S-LMAQM-09-GR-069 GFA		123,972
GS FINANCIAL AID DOS SERRANO COHORT 8	19.	DS S-LMAQM-08-GR-092 GFA		118,683
GS HOSTOS SUBCONTRACT DOS GLOBAL COHORT 10	19.	DS S-LMAQM-10-GR-076 GIT		66,178
ADAPTING AND IMPLEMENTING THE CURRICULUM FOSTERING SOCIAL HARMONY AMONG UNIVERSITY STUDENTS IN SRI...	19.	DS S-CE200-12-GR-019		36,040
CLEVELAND GOVERNMENT ASSIGNMENT	19.	DS CU09-4436 EXT EXT		34,188
GS FINANCIAL AID DOS SERRANO COHORT 7	19.	DS SLMAQM07GR200 GFA		28,000
GS STUDENT SERVICES DOS GLOBAL COHORT 10	19.	DS SLMAQM10GR076 GSS		13,087
GS FINANCIAL AID DOS SERRANO COHORT 5	19.	DS SLMAQM-05-GR-104 GFA		-47,130
				\$760,600

Professional and Cultural Exchange Programs - Citizen Exchanges

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

Other Programs, continued

<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
TIBETAN ECOTOURISM ACCREDITATION PROJECT	19.415	S-EACPE-10-GR-240		133,378
				\$133,378
Total Direct Award Programs:				\$893,978
Pass-through Awards				
Department of State				
JOHNS HOPKINS PROG FOR INTRN'L EDUCA. IN GYN/OB	19.	JHPIEGO CU10-2068 S2	AID CU10-2068	25,542
				\$25,542
Total Pass-through Programs:				\$25,542
Total: Department of State				\$919,520

Environmental Protection Agency
Direct Awards

National Clean Diesel Emissions Reduction Program

ARRA-AMERICAN RECOVERY AND REINVESTMENT ACT FUNDING FOR THE NATIONAL CLEAN DIESEL FUNDING ASSISTANCE PROGRAM	66.039	EPA NO. 2A97232601		541,106
				\$541,106
Total Direct Award Programs:				\$541,106
Total: Environmental Protection Agency				\$541,106

Nat. Endowment for the Arts & Humanities
Direct Awards

Promotion of the Arts_Grants to Organizations and Individuals

PUBLIC HOUSING IN THE PUBLIC SPHERE: A FORUM	45.024	11-4200-7048		15,734
				\$15,734

Promotion of the Humanities_Federal/State Partnership

GUANTANAMO PUBLIC MEMORY PROJECT	45.129	NYCH 6683		1,501
				\$1,501

Promotion of the Humanities_Public Programs

MANIFOLD GREATNESS: THE CREATION AND AFTERLIFE OF THE KING JAMES BIBLE	45.164	LJ-50021-11		2,501
				\$2,501
Total Direct Award Programs:				\$19,736
Total: Nat. Endowment for the Arts & Humanities				\$19,736

Other Agencies / Gov't
Direct Awards

Department of Homeland Security

COMMUNITY TABLETOP EXERCISES: A FEASIBILITY STUDY	97.	FEDEMA HSFE02-11-P-0		45,212
				\$45,212

USAID Foreign Assistance for Programs Overseas

MALARIA LABORATORY DIAGNOSIS AND MONITORING PROJECT - OFFSITE	98.001	AID 663-A-00-08-0043 SC2		1,549,223
CARE AND PROTECTION OF CHILDREN IN EMERGENCIES - A GOOD PRACTICE - POLICY CHANGE INITIATIVE	98.001	DFD-A-00-05-00252-00 S1		334,300
MALARIA LABORATORY DIAGNOSIS AND MONITORING PROJECT - ONSITE	98.001	AID 663-A-00-08-0043		251,357
MALARIA LABORATORY DIAGNOSIS AND MONITORING PROJECT - NY	98.001	AID 663-A-00-08-0043 SC1		249,186
CARE AND PROTECTION OF CHILDREN IN EMERGENCIES - A GOOD PRACTICE - POLICY CHANGE INITIATIVE	98.001	DFD-A-00-05-00252-00		242,925
CENTER ON CHILD PROTECTION AT THE UNIVERSITY OF INDONESIA	98.001	AID 497-A-00-10-0000		229,486
MTCT - A PROPOSAL TO THE US AGENCY FOR INTL DEVELOP/NIGERIA UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT	98.001	AID GP0-A-00-03-0000 SC2		19,851

The accompanying footnotes are an integral part of the Supplemental Schedule of Expenditures of Federal Awards

The Trustees of Columbia University in the City of New York
Supplemental Schedule of Expenditures of Federal Awards
For year ended June 30, 2012

				Other Programs, continued
<u>Federal Grantor / Pass-through Grantor</u>	<u>CFDA</u>	<u>Project No.</u>	<u>Pass-through Contract No.</u>	<u>Expenditures</u>
MTCT - A PROPOSAL TO THE US AGENCY FOR INTL DEVELOP/NEW YORK UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT	98.001	AID GP0-A-00-03-0000 SC1		1,600
MTCT - A PROPOSAL TO THE US AGENCY FOR INTL DEVELOP/NIGERIA	98.001	AID GP0-A-00-03-0000 SC5		-1,257
MTCT - A PROPOSAL TO THE US AGENCY FOR INTL DEVELOP/S. AFRICA	98.001	AID GP0-A-00-03-0000 SC6		-1,600
MTCT - A PROPOSAL TO THE US AGENCY FOR INTERNATIONAL DEVELOPMENT	98.001	AID GP0-A-00-03-0000		-16,737
MTCT - A PROPOSAL TO THE US AGENCY FOR INTL DEVELOP/LESOTHO	98.001	AID GP0-A-00-03-0000 SC4		-19,204
				\$2,839,130
Total Direct Award Programs:				\$2,884,342
Pass-through Awards				
Small Business Development Centers				
RESEARCH FOUNDATION OF THE STATE UNIVERSITY OF NEW YORK	59.037	SUNYRF 55733	SBA1-603001-Z-0033-26	132,661
				\$132,661
USAID Foreign Assistance for Programs Overseas				
JOHNS HOPKINS PROG FOR INTRN'L EDUCA. IN GYN/OB	98.001	JHPIEGO CU10-2068 S1 S1	AID CU10-2068	1,274,109
EAST WEST MANAGEMENT INSTITUTE	98.001	EWMI 494-10-100-3016	AID-114-A-10-00005	352,361
JOHNS HOPKINS PROG FOR INTRN'L EDUCA. IN GYN/OB	98.001	JHPIEGO CU10-2068	AID CU10-2068	60,524
				\$1,686,994
Total Pass-through Programs:				\$1,819,655
Total: Other Agencies / Gov't				\$4,703,997
Total: OTHER PROGRAMS				\$189,161,334
Total Federal Award Expenditures:				\$1,154,371,624

The Trustees of Columbia University in the City of New York
Notes to Supplemental Schedule of Expenditures of Federal Awards
Year ended June 30, 2012 (expenditures in thousands)

1. Basis of Presentation

The accompanying Supplemental Schedule of Expenditures of Federal Awards (the "Schedule") has been prepared in accordance with OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations. The purpose of the Schedule is to present a summary of those activities of The Trustees of Columbia University in the City of New York (the "University") for the year ended June 30, 2012, which have been financed by the U.S. Government ("Federal awards"). For purposes of the Schedule, Federal awards include all Federal assistance entered into directly between the University and the Federal government and also between the University and other primary recipients of Federal government funds (pass-through), recorded on the accrual basis of accounting. Negative amounts listed on the Schedule represent adjustments, in the normal course of business, to amounts included on the prior year's Schedule. The project number and pass-through contract number on the Schedule represent the Federal identification number assigned to the applicable program. Certain project numbers contain alpha numeric internal identifiers as a suffix used by the University to manage sponsored project spending. CFDA numbers and pass-through numbers are provided when applicable.

2. Subrecipients

During fiscal year 2012, the University provided \$136,788 to subrecipients in the following programs:

Program or Cluster	CFDA No.	A m o u n t
Research and development	Various	\$ 85,099
HIV Demonstration, Research, Public and Professional Education Projects	93.941	28,247
	93.067	15,851
	93.000	57
Other	93.145	4,025
	93.926	902
	93.989	896
	93.721	298
	84.015	229
	19.202	229
	93.924	190
	93.395	115
	12.300	114
	93.389	99
	93.999	81
	98.000	78
	93.855	72
	93.516	68
	93.249	52
	93.837	43
	93.398	18
	93.242	10
	93.411	6
	47.080	5
	93.226	4
		<u>\$ 136,788</u>

The Trustees of Columbia University in the City of New York
Notes to Supplemental Schedule of Expenditures of Federal Awards
Year ended June 30, 2012 (expenditures in thousands)

3. Facility and Administrative Costs

The University's negotiated predetermined cost rates for the year ended June 30, 2012 were as follows:

	Rate
All campuses, excluding Lamont-Doherty Earth Observatory	
On-campus	60.0 %
Off-campus	26.0 %
Off-campus modified	29.4 %
Lamont-Doherty Earth Observatory	
On-campus	53.0 %
Off-campus	26.0 %
Off-campus modified	29.4 %
Other sponsored activity	
On-campus	31.0 %
Off-campus	26.0 %

4. Guaranteed Student Loan Programs

With respect to the Federal Direct Lending Program, the University is only responsible for the performance of certain administrative duties; therefore, the transactions and the balances of loans outstanding related to this program are not included in the University's consolidated financial statements. The Schedule includes the amounts loaned to students during the year ended June 30, 2012. It is not practical to estimate the outstanding balance of loans under this program.

5. Student Loan Programs

The University administers the following loan programs:

Federal Agency	Loan Program	Federal CFDA No.	Loans Issued for the year ended June 30, 2012	Outstanding Principal Balance at June 30, 2012
Education	Federal Subsidized Stafford Loan Program	84.038	\$ 11,335	\$ 60,217
Education	Federal Unsubsidized Stafford Loan Program	84.038	(397)	N/A
DHHS	Federal Plus Loan Program	93.342	722	7,171
DHHS	Federal Graduate Plus Loan	93.364	139	985
Total			<u>\$ 11,799</u>	<u>\$ 68,373</u>

The University is responsible for the oversight and management of the Federal Perkins Loan Fund and the Health Professional and Nursing Student Loan Funds funded by the U.S. Department of Education and the Department of Health and Human Services, respectively. The federally approved administrative cost allowed under the Title IV program for Federal Work study, Federal Perkins and Federal SEOG for the fiscal year ending June 30, 2012 was \$741. This expense was charged to one program, the Federal Perkins Loan program. The administrative cost allowance is determined as a percentage of the total program expenditures. The formula permits administrative cost charge at 4.5% of the first \$5.5 expended and 3% on expenditures over \$5.5.



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

To The Trustees of Columbia University in the City of New York:

We have audited the consolidated financial statements of The Trustees of Columbia University in the City of New York (the "University") as of and for the year ended June 30, 2012 and have issued our report thereon dated October 16, 2012. 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.

Internal Control Over Financial Reporting

In planning and performing our audit, we considered the University's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the University's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the University's internal control over financial reporting.

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.

Our consideration of internal control over financial reporting 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 financial reporting that might be deficiencies, significant deficiencies, or material weaknesses. We did not identify any deficiencies in internal control over financial reporting that we consider to be material weaknesses, as defined above.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether The University's financial statements are free of 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.

We noted certain matters that we reported to management of the University in a separate letter dated October 3, 2012.



This report is intended solely for the information and use of the University's audit committee, management, others within the entity, federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

PricewaterhouseCoopers LLP

October 16, 2012



**Report of Independent Auditors on Compliance with Requirements
That Could Have a Direct and Material Effect on Each Major Program and on Internal
Control Over Compliance in Accordance with OMB Circular A-133**

To The Trustees of Columbia University in the City of New York:

Compliance

We have audited the compliance of The Trustees of Columbia University in the City of New York (the "University") with the types of compliance requirements described in the OMB Circular A-133 Compliance Supplement that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2012, except as described in the second paragraph of this report. The University's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. Compliance with the requirements of laws, regulations, contracts, and grants applicable to each of its major federal programs is the responsibility of the University's management. Our responsibility is to express an opinion on the University's compliance based on our audit.

We did not audit the University's compliance with the functions of billing, collection, processing deferments and due diligence compliance requirements specified by the Federal Perkins Loan Program ("Perkins Loan") and described in the OMB Circular A-133 Compliance Supplement. Compliance with these requirements was audited by other auditors whose report thereon has been furnished to us, and our opinion expressed herein, insofar as it relates to the University's compliance with those requirements, is based solely on the report of the other auditors.

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 OMB Circular A-133, Audits of States, Local Governments, and Non-Profit Organizations. Those standards and OMB Circular A-133 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. Our audit does not provide a legal determination on the University's compliance with those requirements.

In our opinion, based on our audit and the report of other auditors, the University complied, in all material respects, with the 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, 2012. However, the results of our auditing procedures disclosed instances of noncompliance with those requirements, which are required to be reported in accordance with OMB Circular A-133 and which are described in the accompanying schedule of findings and questioned costs as items 2012-1 through 2012-3.



Internal Control Over Compliance

Management of the University is responsible for establishing and maintaining effective internal control over compliance with the requirements of laws, regulations, contracts, and grants applicable to federal programs. In planning and performing our audit, except as noted in the following paragraph, we considered the University's internal control over compliance with the requirements that could have a direct and material effect on a major federal program in order to determine the auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with OMB Circular A-133, 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.

We did not consider internal control over compliance with the functions of billing, collection, processing deferments and due diligence compliance requirements specified by the Perkins Loan program and described in the OMB Circular A-133 Compliance Supplement. Internal control over these compliance requirements was considered by the other auditors referred to above; and our report, insofar as it relates to the University's internal control over those compliance requirements, is based solely upon the report of the other auditors.

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

Our consideration and the other auditors' consideration of the 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 deficiencies, significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. Also, the report of the other auditors did not identify any deficiencies in internal control over compliance that they consider to be material weaknesses, as defined above.

The University's responses to the findings identified in our audit are described in the accompanying schedule of findings and questioned costs. We did not audit the University's responses and, accordingly, we express no opinion on the responses.

This report is intended solely for the information and use of the University's audit committee, management, federal awarding agencies and pass-through entities and is not intended to be and should not be used by anyone other than these specified parties.

PricewaterhouseCoopers LLP

March 26, 2013

The Trustees of Columbia University in the City of New York

Summary of Independent Auditors' Results

For the year ended June 30, 2012

Section I—Summary of Independent Auditors' Results

Financial Statements

Type of independent auditors' report issued: Unqualified

Internal control over financial reporting:
 Material weakness(es) identified? _____ yes X no

Significant deficiencies(s) identified that are not considered to be material weaknesses? _____ yes X none reported

Noncompliance material to financial statements noted? _____ yes X no

Federal Awards

Internal Control over major programs:
 Material weakness(es) identified? _____ yes X no

Significant deficiencies(s) identified that are not considered to be material weaknesses _____ yes X none reported

Type of independent auditors' report issued on compliance for major programs: Unqualified

Any audit findings disclosed that are required to be reported in accordance with Circular A-133 (Section .510(a))? X yes _____ no

Identification of major programs:

<u>CFDA Number(s)</u>	<u>Name of Federal Program or Cluster</u>
Various	Research and Development Cluster
Various	Student Financial Assistance Cluster
93.067	Global Aids
93.145	Aids Education and Training Centers
93.600	Head Start Cluster
93.941	HIV Demonstration, Research, Public and Professional Education Project
98.001	USAID Foreign Assistance for Programs Overseas

Dollar threshold used to distinguish between Type A and Type B programs: \$3,463,115

Auditee qualified as low-risk auditee? X yes _____ no

The Trustees of Columbia University in the City of New York

Schedule of Findings and Questioned Costs

For the year ended June 30, 2012

Section II—Financial Statement Findings

None noted.

Section III—Federal Award Findings and Questioned Costs Section

(1) 2012-1 Title IV Funds

Applies to CFDA No. 84.268 (2012 FDL) and 84.063 (2012 Pell) within the Student Financial Aid Cluster.

Condition

From a total population of 231 Title IV aid recipients who withdrew in the fiscal year 2012, 25 withdrawals were tested and the following exceptions were noted:

- (1) The return of funds for 2 students was made after the required 45 day period. In one instance the return of funds was 37 days late and in the other instance it was 200 days late.
- (2) The status change of 2 of the 25 students tested for the Return of Title IV funds who had withdrawn was not submitted timely to the National Student Loan Data System (NSLDS). The status change for the 2 students was reported 27 days late in one instance and 28 days late in the second instance.

The exceptions noted above occurred prior to the University implementing additional control procedures in May 2012 to enable the identification of student withdrawals earlier and ensure timely return of funds and student status change reporting. Additional testing was performed, following the implementation of the additional controls, for 14 student withdrawals between the period July 1, 2012 through August 24, 2012, with no exceptions noted.

Criteria

In accordance with 34 CFR 668.173 (b), balances on account are required to be refunded within 45 days after the student withdraws from the institution.

Under FFEL and Direct Loan programs, schools must complete and return within 30 days of receipt the Roster File sent by the NSLDS (OMB No. 1845-0035). The institution must update the Roster File for changes in student status within 30 days, unless the school expects to complete its next Roster File within 60 days. The school must notify NSLDS within 30 days, if it discovers that a student who received a loan either did not enroll or ceased to be enrolled on at least a half time basis (FFEL, 34 CFR section 682.610).

Cause

During fiscal year 2012, the University undertook a project to enhance school-level compliance and coordination with respect to withdrawals with a planned completion of control enhancements by May 15, 2012. As noted above, the exceptions identified occurred prior to the implementation of additional controls put in place by the University in May 2012.

Effect

In the instances cited above, the University did not comply with the administrative requirements of this program in that certain student withdrawals were not refunded timely and certain enrollment reporting data was not submitted to NSLDS in a timely manner. However, with respect to the additional testing performed post-implementation of additional controls, no exceptions were noted.

Recommendation

The University should continue to enforce policies and procedures in place to ensure that student withdrawals are appropriately determined, Title IV funds are returned within the required time frame and student status changes are reported timely.

The Trustees of Columbia University in the City of New York

Schedule of Findings and Questioned Costs

For the year ended June 30, 2012

The University has a Letter of Credit posted under the Department of Education regulation 34 CFR 668.173 (d)(2) and (3) (i). We recommend the University discuss with the Department of Education the Letter of Credit requirements relating to the current year findings in this area.

Management's View and Corrective Action Plan

Management's view and corrective action plan are included within this report.

(2)2012-2 Procurement, suspension and debarment

Applies to CFDA 93.600 (2009 Early Head Start / Project No: DHHS ACF 33/09).

Condition

Of the 60 selections tested for Allowable Costs/Cost Principles: Other Direct Costs, three Facilities maintenance transactions (ranging from \$6,380-\$6,950) were executed without a purchase order, and not in accordance with University policy. The University's Facilities procurement policy states that all Facilities work must have a contract, insurance certificate and purchase order, and competitively bid, except for Task Order vendors, under \$5,000, employed by the Facilities department. Additionally, in one instance, a contract for on-site training services in the amount of \$5,794 was executed without a purchase order, and not in accordance with University procurement policy requiring a purchase order.

Criteria

In accordance with 2 CFR 215.44 (a-c) All recipients shall establish written procurement procedures and the type of procuring instruments used(e.g., fixed price contracts, cost reimbursable contracts, purchase orders, and incentive contracts) shall be determined by the recipient but shall be appropriate for the particular procurement and for promoting the best interest of the program or project involved.

Cause

University procurement policy and procedure was not clearly understood and followed in the cases noted above.

Effect

The transactions were not executed and approved in accordance with University stated policy.

Recommendation

We recommend that the University continue its communication, training and enforcement of policies and procedures to ensure transactions are executed in accordance with the University's policies and procedures.

Management's View and Corrective Action Plan

Management's view and corrective action plan are included within this report.

(3)2012-3 Indirect Costs

Applies to CFDA 93.859 (NYSBC Structural Genomics of Membrane Proteins/ Project No: NYSBC CU10-0056) within the Research and Development cluster and 98.001 (Mother to Child Transmission Plus Program/ Project No: DFD-A-00-05-00252-00).

Condition

Of the 28 awards selected for testing, the application of indirect cost rates for two of the awards selected were entered incorrectly into the system resulting in an overcharge of indirect costs of \$583 in one instance and \$961 in the second instance.

The Trustees of Columbia University in the City of New York

Schedule of Findings and Questioned Costs

For the year ended June 30, 2012

Criteria

In accordance with OMB Circular A-21 section G.7(a) Federal agencies shall use the negotiated rates for F&A costs in effect at the time of the initial award throughout the life of the sponsored agreement.

Cause

In the instances noted above errors were made by staff entering the indirect cost rate for these grants into the system and not detected in the review process, resulting in the application of an incorrect rate for the grant.

Effect

In the instances noted above the grants were overcharged by the amounts noted as a result of applying an incorrect indirect cost rate.

Recommendation

We recommend that the University refund the agencies overcharged for indirect costs and implement enhanced review procedures to ensure that all grant related information, including the indirect cost rate, is reviewed at point of entry by someone other than the person entering the grant information before the grant account goes live.

Management's View and Corrective Action Plan

Management's view and corrective action plan are included within this report.

The Trustees of Columbia University in the City of New York

Status of Prior Year's Findings

For the year ended June 30, 2012

Status of Prior Year's Findings

2011-1 Title IV Funds

Condition: From a total population of 236 Title IV aid recipients who withdrew in the fiscal year 2011, 60 withdrawals were tested and the following exceptions were noted:

Federal aid recipient

- (1) Eight return of funds were made after the required 45 day period. For seven of the instances noted, the late returns range from 1-91 days late, and in one instance the return was 319 days late.
- (2) In two instances aid was disbursed to a student that was not eligible for aid and the funds were subsequently returned within 45 days of the day of determination. In one instance aid was disbursed to a student that was not eligible and the return of funds was 12 days after the 45 day requirement.

In addition, it was noted that the Federal Direct Loan Financial and Student Data Reconciliation was not performed on a monthly basis.

The Compliance Office performed a self audit of all students with Title IV aid who withdrew during the year to ensure all were processed appropriately and, where necessary, corrective action was taken.

Status - Completed: During FY12 the University completed projects to enhance controls in the Office of the Registrar and rolled out a new student withdrawal and leave of absence process. The University has satisfied all obligations and Letter of Credit requirements in accordance with Department of Education instructions.

2011-2 Timely Filing of Quarterly Financial Reports

Condition: The University filed approximately 1,750 financial reports during fiscal year 2011, of which approximately 590 were annual financial reports, 1,100 were ARRA quarterly reports, and 60 (approximately 3%) were for all other periods including non-ARRA quarterly reports. Testing of the financial reports noted no exceptions on annual financial reports and ARRA quarterly reports, but certain exceptions were noted on non-ARRA quarterly reports as indicated below:

Of the 23 financial reports tested in the Research and Development cluster it was noted that two non-ARRA quarterly financial reports were submitted after the required reporting period with no extension obtained from the Federal awarding agency. These reports were submitted 2 and 5 days late.

Of the 12 financial reports tested within CFDA 98.000 it was noted that five non-ARRA quarterly financial reports were submitted after the required reporting period. Three of these reports were submitted between 25 and 90 days late. In two instances, the non-ARRA quarterly reports for the quarters ending June 30, 2010 and September 30, 2010 were not submitted; however, a final annual report as of September 30, 2010 was submitted timely and timely quarterly financial accrual reports were submitted in response to sponsor guidance.

Of the 5 financial reports tested within CFDA 11.618 it was noted that three of the non-ARRA quarterly financial reports, which were due 10 days after the quarter end, were submitted between 1 and 25 days beyond the required reporting period. It was noted, however, that substantially similar information was conveyed via the ARRA quarterly financial reporting obligations under this ARRA funded award and all such reports were timely.

The Trustees of Columbia University in the City of New York
Status of Prior Year's Findings
For the year ended June 30, 2012

Status - Completed: Management implemented a new database, enhanced controls for capturing due dates for non-standard and non-ARRA quarterly financial reports on deadline.

2011-3 Identification of Unallowable Cost

Condition: Of the 60 selections tested for Allowable Costs/Cost Principles: Other Direct Costs, one transaction totaling \$8,441 included a \$76 dollar charge related to the purchase of alcohol, which is unallowable.

Status - Completed: Management has reinforced the training to the Accounts Payable Audit and Review staff on detection and correction of this compliance item.

COLUMBIA UNIVERSITY

IN THE CITY OF NEW YORK

EXECUTIVE VICE PRESIDENT FOR FINANCE

ANNI SULLIVAN

Management's Response and Corrective Action Plan Regarding OMB Circular A-133 Audit Findings for the Year Ended June 30, 2012

2012-1 Title IV Funds

The late returns reflected two errors by the School of General Studies. In one case, the Office of Student Affairs did not inform the Registrar's Office of the withdrawal until after the 45 day period. In the second case, the school's Financial Aid Office did not complete the required Return of Funds calculation for a withdrawn student because they believed that the student had attended 60% of the term and therefore, had earned all their federal aid. However, the student had been enrolled for only 59% of the term, in which case, requiring the University to return 41% of the student's federal funds.

The delay in change of status reporting was due, in one case, to the school's delay in notification of the student's withdrawal (same student cited in the category above) and, in the second case, due to incorrect withdrawal coding which caused the student's withdrawal record to not be picked up by the Clearinghouse.

The Registrar and the VP of Student Financial Services met with the appropriate Deans regarding these findings to educate them on the errors and the corrective actions required.

Since September 2012, the Registrar has held a weekly meeting to monitor all withdrawal activity. This has materially reduced the possibility of errors related to the withdrawal process and timely enrollment reporting. Participants include student advising and/or financial aid representatives from the schools with withdrawals, as well as representatives from University Financial Aid and Student Financial Services.

The University will discuss with the Department of Education the Letter of Credit requirements relating to the current year findings in this area. We do not anticipate a change in our existing Letter of Credit.

2012-2 Procurement, suspension and debarment

Management agrees that continued enforcement of procurement policies is a critical control. All of the instances cited occurred within one program, and were initiated by an administrator who did not follow prescribed policy which required better coordination with CUMC Facilities staff. In two of the three maintenance transactions, Facilities should have pre-empted the department's actions and initiated a PO. All parties agree that had correct processes been followed, the CUMC Facilities team would have been primary initiators of the maintenance transactions and should have completed the procurement process within guidelines. The administrator for the program in question also did not follow prescribed policy for the procurement of on-site training services.

There are written policies in place to address these issues and helpful online tools such as the procurement mechanism guide which provides a snapshot view of all possible commodities and detailed guidance on rules of purchasing. At the department level, management has created a monthly seminar series to review and reinforce University administrative policies with department administrators and all other project business or finance managers. Departmental management will ensure that processes requiring coordination with CUMC Facilities receive special attention for review and reinforcement.

Separately, CUMC Facilities will conduct outreach to ensure that all outside Task Order Vendors (University preferred vendors for maintenance work) direct their correspondence and invoices to CUMC Facilities staff, rather than with the department ultimately requesting the work.

Lastly, each of the instances where a PO was required should have been caught at the point of payment by Accounts Payable Audit & Review staff. Accounts Payable management will conduct refresher training

with the Audit & Review staff, reinforcing the purchase order requirements for certain payment types, including dollar thresholds and services provided on-campus.

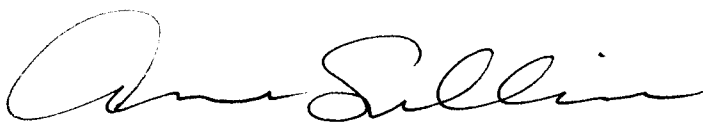
2012-3 Indirect Costs

Management has implemented enhanced review procedures to address these issues. Two enhancements were made to identify errors at both the initial point of entry and when revisions are made: We fully implemented Data Center functionality and introduced a Comparison Report.

- Data Center functionality is an enhancement within InfoEd, the system used for account setup, and it is designed to validate the logical relationship between attributes that drive financial operations. For example, it flags the use of mismatched IC rates and bases, particularly when that information does not match up with the program type and location for federal funding. It thus provides enhanced control over the accuracy of all grant related information, including indirect cost rate attributes. This enhancement was only partially implemented during FY12, but was made fully operational on 7/9/12 for all federal awards.
- The Comparison Report flags changes between InfoEd and ARC on a daily transactional basis and presents them to management in the appropriate SPA office. This control point entails a manager level review of all grant related information that drive financial operations, including the indirect cost rate. It thus highlights any changes to existing attributes so that the change is confirmed by the next level of management. The Comparison Report was made operational on 7/9/12.

In addition to these enhanced control points within SPA before the grant account goes live, Sponsored Projects Finance (SPF) reviews all new setups and revisions to existing setups for accuracy after they are made live. On 9/30/12, SPF enhanced its review process to include automated alerts that remain visible to management until the grant related information is confirmed by staff.

Responsible person Contact Name: Carl Sparano, Research Policy & Indirect Cost
Contact Number: (212) 851-1049



Anne R. Sullivan
Executive Vice President for Finance
The Trustees of Columbia University in the City of New York