

MASSACHUSETTS INSTITUTE OF TECHNOLOGY



REPORTS ON THE AUDIT OF FEDERAL FINANCIAL ASSISTANCE PROGRAMS IN ACCORDANCE WITH OMB CIRCULAR A-133

FOR THE YEAR ENDED JUNE 30, 2011

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Reports on the Audit of Federal Financial Assistance Programs in Accordance with OMB Circular A-133 For the Year Ended June 30, 2011

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SECTION I

FINANCIAL REPORTS



Report of Independent Auditors

To the Audit Committee of the
Massachusetts Institute of Technology

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of activities and cash flows present fairly, in all material respects, the financial position of the Massachusetts Institute of Technology (the "Institute") as of June 30, 2011 and 2010, and the changes in its net assets and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits 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 audits provide a reasonable basis for our opinion.

In accordance with *Government Auditing Standards*, we have also issued our report dated September 15, 2011 on our consideration of the Institute'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, 2011. 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 basic consolidated financial statements taken as a whole. The accompanying Schedule of Expenditures of Federal Awards, including the related Appendices A, B, and C, 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 Nonprofit Organizations*, and is not a required part of the basic consolidated financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic consolidated financial statements and, in our opinion, is fairly stated in all material respects, in relation to the basic consolidated financial statements taken as a whole.

PricewaterhouseCoopers LLP

September 15, 2011

Massachusetts Institute of Technology

Statements of Financial Position

at June 30, 2011 and 2010

(in thousands of dollars)

	2011	2010
Assets		
Cash	\$ 131,221	\$ 133,973
Accounts receivable, net	261,206	203,116
Pledges receivable, net, at fair value.	422,965	412,310
Contracts in progress, principally U.S. Government	68,411	68,344
Deferred charges, inventories and other assets	70,127	54,306
Student notes receivable, net	49,757	49,496
Investments, at fair value.	12,199,451	9,913,877
Minority interests	282,041	230,433
Retirement plan asset-overfunded status	113,715	18,841
Land, buildings & equipment (at cost \$3,406,169 for June 2011; \$3,208,140 for June 2010), net of accumulated depreciation.	2,451,479	2,327,810
Total assets.	<u>\$ 16,050,373</u>	<u>\$ 13,412,506</u>
Liabilities and Net Assets		
Liabilities:		
Accounts payable, accruals and other liabilities	\$ 366,161	\$ 309,098
Liabilities due under life income fund agreements, at fair value.	84,225	74,256
Minority interests	282,041	230,433
Deferred revenue and other credits	123,215	112,516
Advance payments.	389,253	362,147
Borrowings.	2,467,825	1,728,526
Government advances for student loans.	33,754	33,590
Accrued benefit liabilities	198,209	237,635
Total liabilities.	<u>3,944,683</u>	<u>3,088,201</u>
Net Assets:		
Unrestricted.	4,603,280	3,759,301
Temporarily restricted.	5,044,519	4,463,066
Permanently restricted	2,457,891	2,101,938
Total net assets	<u>12,105,690</u>	<u>10,324,305</u>
Total liabilities and net assets	<u>\$ 16,050,373</u>	<u>\$ 13,412,506</u>

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

Massachusetts Institute of Technology

Statements of Activities

for the years ended June 30, 2011 and 2010

(in thousands of dollars)

	Unrestricted		Temporarily Restricted	
	2011	2010	2011	2010
Operating Activities				
Operating Revenues:				
Tuition and similar revenues, net of discount of \$240,299 in 2011 and \$230,269 in 2010	\$ 253,478	\$ 238,301	\$ -	\$ -
Research revenues:				
Direct	1,250,388	1,172,406	-	-
Indirect	196,818	197,197	-	-
Total research revenues	1,447,206	1,369,603	-	-
Gifts and bequests for current use	111,114	108,674	-	-
Fees and services	198,971	162,300	-	-
Other programs	87,133	70,439	-	-
Investment income	117,004	99,669	-	-
Net gains on investments, distributed	379,793	459,138	-	-
Auxiliary enterprises	100,135	96,015	-	-
Net asset reclassifications and transfers	55,813	58,964	-	-
Total operating revenues	2,750,647	2,663,103	-	-
Operating Expenses:				
Salaries and wages	1,006,458	967,190	-	-
Employee benefits	223,568	181,116	-	-
Supplies and services	898,284	811,780	-	-
Subrecipient agreements	120,977	117,442	-	-
Utilities, rent, and repairs	131,539	144,201	-	-
Depreciation	116,385	103,910	-	-
Interest expense	73,936	56,927	-	-
Total operating expenses	2,571,147	2,382,566	-	-
Results of operations	179,500	280,537	-	-
Non-Operating Revenues, Gains and Losses				
Pledges	-	-	97,807	67,716
Gifts and bequests	-	-	7,401	3,507
Investment Income	-	-	1,226	2,861
Net gain on investments and other assets	573,528	359,337	898,180	419,054
Distribution of accumulated investment gains	(133,843)	(152,081)	(245,950)	(307,057)
Net change in life income funds	2,406	675	8,731	5,324
Pension-related charges other than net periodic pension benefit income (cost)	105,408	(238,137)	-	-
Transfer of net assets to The Broad Institute	-	(90,975)	-	-
Net asset reclassifications and transfers	116,980	40,020	(185,942)	(129,354)
Total non-operating activities	664,479	(81,161)	581,453	62,051
Increase in net assets	843,979	199,376	581,453	62,051
Net assets at the beginning of the year	3,759,301	3,559,925	4,463,066	4,401,015
Net assets at the end of the year	\$ 4,603,280	\$ 3,759,301	\$ 5,044,519	\$ 4,463,066

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

Massachusetts Institute of Technology

Statements of Activities

for the years ended June 30, 2011 and 2010

(in thousands of dollars)

Permanently Restricted		Total	
2011	2010	2011	2010
\$ —	\$ —	\$ 253,478	\$ 238,301
—	—	1,250,388	1,172,406
—	—	196,818	197,197
—	—	1,447,206	1,369,603
—	—	111,114	108,674
—	—	198,971	162,300
—	—	87,133	70,439
—	—	117,004	99,669
—	—	379,793	459,138
—	—	100,135	96,015
—	—	55,813	58,964
—	—	2,750,647	2,663,103
—	—	1,006,458	967,190
—	—	223,568	181,116
—	—	898,284	811,780
—	—	120,977	117,442
—	—	131,539	144,201
—	—	116,385	103,910
—	—	73,936	56,927
—	—	2,571,147	2,382,566
—	—	179,500	280,537
12,770	28,651	110,577	96,367
293,317	38,032	300,718	41,539
7,480	4,442	8,706	7,303
11,961	5,957	1,483,669	784,348
—	—	(379,793)	(459,138)
17,276	9,038	28,413	15,037
—	—	105,408	(238,137)
—	—	—	(90,975)
13,149	30,370	(55,813)	(58,964)
355,953	116,490	1,601,885	97,380
355,953	116,490	1,781,385	377,917
2,101,938	1,985,448	10,324,305	9,946,388
\$ 2,457,891	\$ 2,101,938	\$ 12,105,690	\$ 10,324,305

Operating Activities

Operating Revenues:

Tuition and similar revenues, net of discount of \$240,299 in 2011 and \$230,269 in 2010

Research revenues:

Direct

Indirect

Total research revenues

Gifts and bequests for current use

Fees and services

Other programs

Investment income

Net gains on investments, distributed

Auxiliary enterprises

Net asset reclassifications and transfers

Total operating revenues

Operating Expenses:

Salaries and wages

Employee benefits

Supplies and services

Subrecipient agreements

Utilities, rent, and repairs

Depreciation

Interest expense

Total operating expenses

Results of operations

Non-Operating Revenues, Gains and Losses

Pledges

Gifts and bequests

Investment income

Net gain on investments and other assets

Distribution of accumulated investment gains

Net change in life income funds

Pension-related charges other than net periodic pension benefit income (cost)

Transfer of net assets to The Broad Institute

Net asset reclassifications and transfers

Total non-operating activities

Increase in net assets

Net assets at the beginning of the year

Net assets at the end of the year

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

Massachusetts Institute of Technology

Statements of Cash Flows

for the years ended June 30, 2011 and 2010

(in thousands of dollars)

	2011	2010
Cash Flow from Operating Activities:		
Increase in net assets	\$ 1,781,385	\$ 377,917
Adjustments to reconcile change in net assets to net cash used in operating activities:		
Net gain on investments	(1,483,669)	(784,348)
Change in retirement plan asset, net of change in accrued benefit liability	(134,300)	209,499
Depreciation	116,385	103,910
Gifts of securities	(1,921)	(4,135)
Net gain on life income funds	(25,383)	(5,144)
Transfer of land, buildings and equipment to The Broad Institute	–	82,563
Amortization of bond premiums and discounts and other adjustments	(7,949)	(3,823)
Change in operating assets and liabilities:		
Pledges receivable	(10,655)	52,426
Accounts receivable	(58,090)	37,908
Contracts in progress	(67)	17,477
Deferred charges, inventories and other assets	(15,821)	9,246
Accounts payable, accruals and other liabilities, excluding building and equipment accruals	68,948	4,765
Liabilities due under life income fund agreements	9,969	1,650
Deferred revenue and other credits	10,699	(62,554)
Advance payments	27,106	18,851
Reclassify investment income	(8,706)	(7,303)
Reclassify contributed securities received as payment on pledges	(27,380)	(28,121)
Reclassify contributions restricted for long-term investment	(300,718)	(41,539)
Net cash used in operating activities	<u>(60,167)</u>	<u>(20,755)</u>
Cash Flow from Investing Activities:		
Purchase of land, buildings and equipment	(251,932)	(387,908)
Purchases of investments	(41,050,404)	(37,941,462)
Proceeds from sale of investments, including contributed securities	40,570,574	38,373,562
Student notes issued	(9,967)	(9,641)
Collections from student notes	9,282	8,863
Net cash (used in) provided by investing activities	<u>(732,447)</u>	<u>43,414</u>
Cash Flow from Financing Activities:		
Proceeds from contributions restricted for:		
Investment in endowment	293,317	38,032
Investment in plant and other	7,401	3,507
Less: contributed securities, gifts for endowment, plant and other	(267,356)	(7,080)
Total proceeds from contributions	33,362	34,459
Increase in investment income for restricted purposes	8,706	7,303
Proceeds from borrowings	750,000	–
Repayment of borrowings	(2,370)	(2,260)
Increase in government advances for student loans	164	249
Net cash provided by financing activities	<u>789,862</u>	<u>39,751</u>
Net (decrease) increase in cash	(2,752)	62,410
Cash at the beginning of the year	133,973	71,563
Cash at the end of the year	<u>\$ 131,221</u>	<u>\$ 133,973</u>

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

Notes to Financial Statements

A. Accounting Policies

Basis of Presentation

The accompanying financial statements have been prepared in accordance with generally accepted accounting principles (GAAP) in the United States of America. The financial statements include MIT and its wholly-owned subsidiaries.

Net assets, revenues, expenses, gains and losses are classified into three categories based on the existence or absence of donor-imposed restrictions. The categories are permanently restricted, temporarily restricted, and unrestricted net assets. Unconditional promises to give (pledges) are recorded as receivables and revenues within the appropriate net asset category.

Permanently restricted net assets include gifts, pledges, trusts and remainder interests, and income and gains that are required by donors to be permanently retained. Pledges, trusts, and remainder interests are reported at their estimated fair values.

Temporarily restricted net assets include gifts, pledges, trusts and remainder interests, and income and gains that can be expended but for which restrictions have not yet been met. Such restrictions include purpose restrictions where donors have specified the purpose for which the net assets are to be spent, or time restrictions imposed by donors or implied by the nature of the gift (capital projects, pledges to be paid in the future, life income funds), or by interpretations of law (net gains on permanently restricted gifts that have not been appropriated for spending). Gifts specified for the acquisition or construction of long-lived assets are reported as temporarily restricted net assets until the monies are expended and the buildings are put into use, at which point they are reclassified to unrestricted net assets. Net unrealized losses on permanently restricted endowment funds for which the book value exceeds market value are recorded as a reduction to unrestricted net assets.

Unrestricted net assets are all the remaining net assets of MIT. Donor-restricted gifts and unexpended restricted endowment income that are received and either spent, or the restriction is otherwise met within the same year, are reported as unrestricted revenue. Gifts of long-lived assets are reported as unrestricted revenue.

Net asset reclassifications and transfers consist primarily of payments on unrestricted pledges and use of building funds in accordance with donor restrictions for buildings put into use during the year. Expirations of temporary restrictions on net assets, release of permanent restrictions by a donor, and change of restrictions imposed by donors are also reported as reclassifications of net assets among unrestricted, temporarily and permanently restricted net assets.

MIT administers its various funds, including endowments, funds functioning as endowments, school or departmental funds, and related accumulated gains in accordance with the principles of "Fund Accounting." Gifts are recorded in fund accounts and investment income is distributed to funds annually. Income distributed to funds may be a combination of capital appreciation and yield pursuant to MIT's total return investment and spending policies. Each year, the Executive Committee of the Corporation approves the rates of distribution of investment return to the funds from MIT's investment pools. See Note K for further information on income distributed to funds.

MIT's operations include tuition, research revenues, unrestricted gifts and bequests for current use, fees and services, other programs, investment income, the portion of net investment gains distributed to funds under MIT's spending policy, auxiliary revenues, payments on pledges for unrestricted gifts, and operating expenditures. Results of operations are displayed in the Statements of Activities.

MIT is a nonprofit organization that is tax-exempt under Section 501(c)(3) of the Internal Revenue Code, originally recognized in October 1926, with the most recent affirmation letter dated July 2001.

Restricted Cash

Certain cash balances, totaling \$42.5 million and \$83.1 million at June 30, 2011 and 2010, respectively, are restricted for use under certain sponsored research agreements.

Sponsored Research

Revenue associated with contracts and grants is recognized as related costs are incurred. The capital costs of buildings and equipment are depreciated over their estimated life cycle and the sponsored research recovery allowance for depreciation is treated as indirect research revenue. MIT has recorded reimbursement of indirect costs relating to sponsored research at negotiated fixed billing rates. The income generated by the negotiated rates is adjusted each fiscal year to reflect any variance between the negotiated fixed rates and rates based on actual cost. The actual cost rate is audited by the Defense Contract Audit Agency (DCAA) and a final fixed-rate agreement is signed by the U.S. Government and MIT. The variance between the negotiated fixed rate and the final audited rate results in a carry forward (over or under-recovery). The carry forward is included in the calculation of negotiated fixed billing rates in future years. Any adjustment in the rate is charged or credited to unrestricted net assets.

A. Accounting Policies (continued)

Land, Buildings and Equipment

Land, buildings and equipment are shown at cost when purchased or fair value as of the date of a gift when received as gifts, net of accumulated depreciation. When expended, costs associated with the construction of new facilities are shown as construction in progress until such projects are completed. Depreciation is computed on a straight-line basis over the estimated useful lives of 25 to 50 years for buildings, 3 to 25 years for equipment, and 4 to 6 years for software. Fully depreciated assets were removed from the financial statements in the amount of \$37.5 million and \$98.2 million during 2011 and 2010, respectively. Land, buildings and equipment at June 30, 2011 and 2010 are shown in Table 1 below.

Table 1. Land, Buildings and Equipment

<i>(in thousands of dollars)</i>	2011	2010
Land	\$ 59,598	\$ 59,598
Land improvements	60,795	61,830
Educational buildings	2,936,816	2,425,618
Equipment	164,909	149,320
Software	29,938	36,733
Total	3,252,056	2,733,099
Less: accumulated depreciation	(954,690)	(880,330)
Construction in progress	142,788	471,514
Software projects in progress	11,325	3,527
Land, buildings and equipment	\$ 2,451,479	\$ 2,327,810

Depreciation expense was \$116.4 million in 2011 and \$103.9 million in 2010. Net interest expense of \$6.6 million and \$17.6 million was capitalized during 2011 and 2010, respectively, in relation to MIT's construction projects.

Tuition and Financial Aid

Tuition and similar revenues, shown in Table 2 below, include tuition and fees in degree programs as well as tuition and fees for executive and continuing education programs at MIT.

Table 2. Tuition and Similar Revenues

<i>(in thousands of dollars)</i>	2011	2010
Tuition revenue	\$ 457,494	\$ 432,778
Executive and continuing education revenues	36,283	35,792
Total	493,777	468,570
Less: tuition discount	(240,299)	(230,269)
Net tuition & similar revenue	\$ 253,478	\$ 238,301

Tuition support is awarded to undergraduate students by MIT based on need. Graduate students are provided with tuition support in connection with research assistance, teaching assistance, and fellowship appointments. Total financial aid granted to students was \$409.8 million and \$397.4 million in 2011 and 2010, respectively. Of that amount, \$125.8 million in 2011 and \$125.5 million in 2010 were aid from sponsors. Tuition support from MIT sources is displayed as tuition discount. Components of financial aid are detailed in Table 3 below.

Table 3. Financial Aid

<i>(in thousands of dollars)</i>	2011			2010		
	Institute sources	External sponsors	Total financial aid	Institute sources	External sponsors	Total financial aid
Tuition support	\$ 240,299	\$ 53,756	\$ 294,055	\$ 230,269	\$ 54,722	\$ 284,991
Stipends	17,680	12,755	30,435	15,850	12,254	28,104
Student salaries	26,051	59,284	85,335	25,820	58,484	84,304
Total	\$ 284,030	\$ 125,795	\$ 409,825	\$ 271,939	\$ 125,460	\$ 397,399

A. Accounting Policies (continued)

Gifts and Pledges

Gifts and pledges are recognized when received. Gifts of securities are recorded at their fair value at the date of contribution. Gifts of equipment received from manufacturers and other donors are put into use and recorded by MIT at fair value. Gifts of equipment totaled \$0.4 million and \$0.6 million in 2011 and 2010, respectively. Pledges in the amount of \$423.0 million and \$412.3 million were recorded as receivables at June 30, 2011 and 2010, respectively, with the revenue assigned to the appropriate classification of restriction. Pledges consist of unconditional written promises to contribute to MIT in the future and are recorded after discounting the future cash flows to the present value.

MIT records items of collections as gifts at nominal value. They are received for educational purposes and most are displayed throughout MIT. In general, collections are not disposed of for financial gain or otherwise encumbered in any manner.

Advance Payments

Amounts received by MIT from the U.S. Government, corporations, industrial sources, foundations, and other non-MIT sponsors under the terms of agreements that generally require the exchange of assets, rights, or privileges between MIT and the sponsor are recorded as advance payments. Revenue is recognized when MIT fulfills the terms of the agreement.

Life Income Funds

MIT's life income fund agreements with donors consist primarily of irrevocable charitable gift annuities, pooled income funds, and charitable remainder trusts for which MIT serves as trustee. Assets are invested and payments are made to donors and other beneficiaries in accordance with the respective agreements. MIT records the assets that are associated with each life income fund at fair value and records as liabilities the present value of the estimated future payments at current interest rates to be made to the donors and beneficiaries under these agreements.

A rollforward of liabilities due under life income fund agreements is presented in Table 4.

Recently Adopted Accounting Standards

On July 1, 2010, MIT adopted new guidance enhancing the *Fair Value Measurement* standard. This standard requires further disclosure of significant transfers in and out of Level 1 and Level 2 fair value measurements, including the reasons for the transfers, and requires discussions of their fair value measurement disclosures on a disaggregated basis. Refer to Note B for further details.

On July 1, 2010, MIT adopted the accounting standard, *Credit Quality*. This standard requires the disclosure about the credit quality of financing receivables and the related allowance for credit losses. The disclosures are included in Note E.

On July 1, 2009, MIT adopted the *Fair Value Measurements* standard for estimating the fair value of investments in investment companies (limited partnerships) that have a calculated value of their capital account or net asset value (NAV) in accordance with, or in a manner consistent with, US GAAP. As a practical expedient, MIT is permitted under US GAAP to estimate the fair value of an investment at the measurement date using the reported NAV without further adjustment unless the entity expects to sell the investment at a value other than NAV or the NAV is not calculated in accordance with US GAAP. MIT's investments in private equity, real estate and marketable alternatives are fair-valued based on the most current NAV.

On July 1, 2009, MIT adopted the accounting standard, *Disclosures about Derivative Instruments*. This standard requires specific tabular disclosures presenting the fair value amounts of derivative instruments for assets and liabilities and their location on the balance sheet, as well as disclosure of derivative gains and losses and their location on the income statement. The new disclosure requirements call for specific fair value and gain/loss information by the derivative instrument's primary underlying risk exposure (for example, interest rate, credit, foreign exchange rate, or overall price) on a gross basis.

Table 4. Liabilities Due Under Life Income Funds

(in thousands of dollars)

	2011	2010
Balance at beginning of year	\$ 74,256	\$ 72,606
Additions for new gifts	8,907	5,123
Terminations and payments to beneficiaries	(12,164)	(10,845)
Net investment and actuarial gain	13,226	7,372
Balance at end of year	\$ 84,225	\$ 74,256

A. Accounting Policies (continued)

On July 1, 2009, MIT adopted the accounting standard, *Disclosures about Postretirement Benefit Plan Assets*. This standard provides guidance on expanded disclosures for plan assets of a defined benefit pension or other postretirement plan. The adoption has no impact on the valuation of MIT's postretirement benefit plans. It does however require additional disclosures included in Note J.

Minority Interests

MIT is the general partner for several private equity funds and has displayed the noncontrolling interests as minority interests on the Statements of Financial Position.

Non-Cash Items

Non-cash transactions excluded from the Statements of Cash Flows include the increase in minority interest of \$51.6 million and \$62.1 million, as well as \$23.2 million and \$35.1 million of accrued liabilities related to plant and equipment purchases for 2011 and 2010, respectively.

B. Investments

Investment transactions are accounted for on the trade date. Realized gains and losses are recorded by MIT using the average cost basis. Dividend income is recorded on the ex-dividend date.

As discussed in Note A, MIT values its investments in accordance with the principles of accounting standards which establish 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 entity's 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 must maximize the use of observable inputs and minimize the use of unobservable inputs. MIT follows a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable.

The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used by MIT for financial instruments measured at fair value on a recurring basis. The three levels of inputs are as follows:

- Level 1 – Quoted prices in active markets for identical assets or liabilities. Market price data is generally obtained from relevant exchange or dealer markets.
- Level 2 – Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for

Use of Estimates

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

Reclassifications

Certain June 30, 2010 balances and amounts previously reported have been reclassified to conform to the June 30, 2011 presentation.

Subsequent Events

MIT has evaluated subsequent events through September 15, 2011, the date the financial statements were issued. There were no subsequent events that occurred after the balance sheet date that have a material impact on MIT's financial statements.

similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the same term of the assets or liabilities. Inputs are obtained from various sources including market participants, dealers, and brokers.

- Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

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. Investments may be classified as Level 2 when market information (observable net asset values) is available, yet the investment is not traded in an active market. Market information, including observable net asset values, subscription and redemption activity, if applicable, and the length of time until the investment will become redeemable are considered when determining the proper categorization of the investment's fair value measurement within the fair value hierarchy. Fund investments that have observable market inputs (published net asset values) and from which MIT has the ability to redeem within twelve months of June 30 are classified in the fair value hierarchy as Level 2.

Investment funds that have unobservable inputs or from which MIT does not have the ability to redeem within twelve months are classified in the fair value hierarchy as Level 3.

B. Investments (continued)

Table 5 below presents MIT's investments at fair value as of June 30, 2011, grouped by the valuation hierarchy as defined in this note. There were no significant transfers in and out of Level 1 and Level 2 fair value measurements in 2011.

<i>(in thousands of dollars)</i>	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant un- observable inputs (Level 3)	Total fair value
Fiscal year 2011				
Cash and cash equivalents	\$ 1,175,776	\$ –	\$ –	\$ 1,175,776
Fixed income	601,874	319,033	76,652	997,559
Long equities	1,664,111	156,424	5,229,110	7,049,645
Short equities	(628,455)	(122)	–	(628,577)
Marketable alternatives	–	470,086	1,341,920	1,812,006
Real estate	–	–	1,659,027	1,659,027
Perpetual trusts	–	–	64,040	64,040
Interest rate, credit & other derivatives	(1,752)	71,727	–	69,975
Total investments	\$ 2,811,554	\$ 1,017,148	\$ 8,370,749	\$ 12,199,451
Fiscal year 2010				
Cash and cash equivalents	\$ 788,453	\$ –	\$ –	\$ 788,453
Fixed income	582,090	126,108	73,406	781,604
Long equities	1,377,596	137,280	4,130,241	5,645,117
Short equities	(518,545)	–	–	(518,545)
Marketable alternatives	–	415,808	1,399,085	1,814,893
Real estate	–	–	1,352,644	1,352,644
Perpetual trusts	–	–	53,134	53,134
Interest rate, credit & other derivatives	(1,592)	(1,831)	–	(3,423)
Total investments	\$ 2,228,002	\$ 677,365	\$ 7,008,510	\$ 9,913,877

Cash and cash equivalents include cash, money market funds, repurchase agreements and negotiable certificates of deposit and are valued at cost, which approximates fair value. Fixed income investments include US government, agency, and other obligations. Fixed income investments are generally valued using independent pricing sources that use broker quotes or models using market observable inputs. Equity investments include public equities and private equity investment funds. Public equities are generally valued based on the closing price listed on a public securities exchange. Marketable alternatives include investments in absolute return strategies, distressed debt, and hedge funds. Private equity and marketable alternative investments generally consist of funds and limited partnerships managed by external managers. Securities held in these external

investment vehicles that do not have readily determinable fair values are determined by the external managers and are based on appraisals or other estimates that require varying degrees of judgment. If no public market exists for the investment securities, the fair value is determined by the external managers taking into consideration, among other things, the cost of the securities, prices of recent significant placements of securities of the same issuer, and subsequent developments concerning the companies to which the securities relate. Using these valuations, most of these external managers calculate MIT's capital account or net asset value (NAV) in accordance with, or in a manner consistent with, US GAAP. As a practical expedient, MIT is permitted under US GAAP to estimate the fair value of its investments with external managers using the external

B. Investments (continued)

managers' reported NAV without further adjustment unless MIT expects to sell the investment at a value other than NAV or the NAV is not calculated in accordance with US GAAP. Direct real estate holdings are valued at fair market value based on external appraisals. Perpetual trusts held by third parties are valued at the present value of the future distributions expected to be received over the term of the agreement. Over-the-counter positions such as interest rate swaps, credit default swaps, options, exchange agreements, and interest rate cap and floor agreements are valued using broker quotes or models using market observable inputs. Because the interest rate swaps and other derivative instruments have inputs that can generally be corroborated by market data, they are generally classified within Level 2.

The methods described above may produce a fair value that may not be indicative of net realizable value or reflective of future fair values. MIT has performed due diligence around its private equity and marketable alternative investments to

ensure they are recorded at fair value as of June 30, 2011 and 2010.

Furthermore, while MIT believes its valuation methods are appropriate and consistent with those of 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.

Table 6 is a rollforward of the investments classified by MIT within Level 3 of the fair value hierarchy defined on page 18 at June 30, 2011 and 2010.

All net realized and unrealized gains and losses relating to financial instruments held by MIT and shown in Table 5 are reflected in the Statements of Activities. Cumulative unrealized gains related to Level 3 investments totaled \$2,012.9 million at June 30, 2011 and \$1,260.0 million at June 30, 2010.

Table 6. Rollforward of Level 3 Investments

<i>(in thousands of dollars)</i>	Fixed income	Equities	Marketable alternatives	Real estate	Perpetual trusts	Total investments
Fiscal year 2011						
Fair value, July 1, 2010	\$ 73,406	\$ 4,130,241	\$ 1,399,085	\$ 1,352,644	\$ 53,134	\$ 7,008,510
Realized gains (losses).	(8)	9,965	(1)	–	–	9,956
Unrealized gains	919	572,184	156,892	174,570	10,906	915,471
Net purchases, sales, and settlements	2,335	516,720	(165,830)	131,813	–	485,038
Transfer of assets between levels	–	–	(48,226)	–	–	(48,226)
Fair Value, June 30, 2011 . . .	\$ 76,652	\$ 5,229,110	\$ 1,341,920	\$ 1,659,027	\$ 64,040	\$ 8,370,749
Fiscal year 2010						
Fair value, July 1, 2009	\$ 63,833	\$ 3,979,877	\$ 2,203,965	\$ 1,256,126	\$ 47,618	\$ 7,551,419
Realized gains (losses).	–	(46)	1,868	(389)	–	1,433
Unrealized gains	9,270	282,355	203,573	76,600	5,516	577,314
Net purchases, sales, and settlements	303	(113,178)	(594,513)	20,307	–	(687,081)
Transfer of assets between levels	–	(18,767)	(415,808)	–	–	(434,575)
Fair Value, June 30, 2010 . . .	\$ 73,406	\$ 4,130,241	\$ 1,399,085	\$ 1,352,644	\$ 53,134	\$ 7,008,510

MIT enters into short sales whereby it sells securities which may or may not be owned by MIT in anticipation of a decline in the price of such securities or in order to hedge portfolio positions. On June 30, 2011 and 2010, cash collateral and certain securities owned by MIT were held at counterparty brokers to collateralize these positions and are included in investments on the Statements of Financial Position.

Certain investments in real estate, equities, and private investments may be subject to restrictions that (i) limit MIT's ability to withdraw capital after such investment and (ii) may be subject to limitations that limit the amount that may be withdrawn as of a given redemption date. Most marketable alternative investments are held in funds where withdrawal is limited to monthly, quarterly, or other periods, and may require notice periods. In addition,

B. Investments (continued)

certain of these funds are able to designate a portion of the investments as “illiquid” in “side-pockets,” and these funds may not be available for withdrawal until liquidated by the investing fund. Generally, MIT has no discretion as to withdrawal with respect to its investment in private equity and real estate funds. Distributions are made when sales of assets are made within these funds and the investment cycle for these funds can be as long as fifteen to twenty years. These restrictions may limit MIT’s ability

to respond quickly to changes in market conditions. MIT does have various sources of internal liquidity at its disposal, including cash, cash equivalents, marketable debt and equity securities, and lines of credit.

The unfunded commitments that MIT has made to various investments at June 30, 2011 and 2010 are listed in Table 7 below. MIT expects these funds to be called currently and for a period to extend up to fifteen years.

Table 7. Unfunded Commitments

<i>(in thousands of dollars)</i>	2011	2010
Equities	\$ 1,275,577	\$ 1,362,357
Marketable alternatives	66,410	111,897
Real estate	510,321	456,656
Total unfunded commitments	\$ 1,852,308	\$ 1,930,910

C. Derivative Financial Instruments

Effective July 1, 2009, MIT adopted an accounting standard which required entities to provide additional disclosures regarding derivative instruments held.

During the year ended June 30, 2011, MIT maintained two interest rate swap agreements to manage the interest cost and risk associated with its variable rate debt, further described in Note G. On June 5, 2011, one of these swap agreements expired. Under the terms of the expired agreement, MIT paid a fixed rate of 4.46% on a notional amount of \$125 million and received a payment indexed to the Securities Industry and Financial Market Association (SIFMA) municipal swap index rate. Under the remaining agreement, MIT pays a fixed rate of 4.91% and receives a payment indexed to SIFMA on a notional amount of \$125 million. At June 30, 2011, the remaining swap agreement had a total fair value of \$(32.8) million and at June 30, 2010 had a fair value of \$(35.5) million. This swap portfolio had a total net gain for 2011 of \$7.7 million and had \$4.9 million in losses for 2010. The notional amounts of these derivatives are not recorded on MIT’s Statements of Financial Position.

For its investment management, MIT uses a variety of financial instruments with off-balance sheet risk involving contractual or optional commitments for future settlement. MIT uses these instruments primarily to decrease its exposure to extreme market events and to partially offset exchange rate movements with respect to any currency exposure. These instruments include futures, credit default swaps, and interest rate cap and swaption agreements. The futures are exchange-traded and the swap, swaptions, and

cap agreements are executed over the counter.

MIT’s portfolio of interest rate caps and swaptions is designed for protection from significant increases in interest rates. An interest rate swaption is an option to enter into an interest rate swap agreement on pre-set terms at a future date. The purchaser and seller of the swaption agree on the expiration date, option type, exercise style, the terms of the underlying swap and the type of settlement. As the expiration date approaches, the swaption holder can either notify the seller of its intention to exercise or let the option expire. An interest rate cap places a ceiling on a floating rate of interest on a specified notional principal amount for a specific term. The buyer of the cap uses the cap contract to limit its maximum interest rate exposure. If the buyer’s floating rate rises above the cap strike, the cap contract provides for payments from the seller to the buyer of the cap for the difference between the floating rate and the cap strike. If the floating rate remains below the cap strike, no payments are required. The cap buyer is required to pay an upfront fee or premium for the cap. The cap premium charged by the seller depends upon the market’s assessment of the probability that rates will move through the cap strike over the time horizon of the deal. The payoff is expected to occur in extreme market conditions that would negatively impact other of MIT’s assets.

Table 8 summarizes the notional exposure and net ending fair value relative to the financial instruments with off-balance sheet risk as of June 30, 2011 and 2010 related to MIT’s investment management.

C. Derivative Financial Instruments (continued)

Table 8. Derivative Financial Instruments

<i>(in thousands of dollars)</i>	Notional exposure		Net ending fair value *	Net gain (loss)**
	Long	Short		
Fiscal year 2011				
Fixed income instruments				
Fixed income futures	\$ 2,500	\$ (19,400)	\$ (67)	\$ 459
Options on interest rate exchange agreements .	1,284,436	–	2,715	2,612
Interest rate caps and floors	2,884,777	(2,863,000)	50,947	5,413
Total fixed income instruments	4,171,713	(2,882,400)	53,595	8,484
Currency instruments				
Currency forwards	61,541	(16,884)	(126)	(830)
Total currency instruments	61,541	(16,884)	(126)	(830)
Commodity instruments				
Commodity futures	15,993	–	(110)	(379)
Equity index future	–	(29,159)	(1,449)	(1,449)
Total commodity futures	15,993	(29,159)	(1,559)	(1,828)
Credit instruments	732,533	(2,617,037)	50,873	(5,561)
2011 Total	\$ 4,981,780	\$ (5,545,480)	\$ 102,783	\$ 265
Fiscal year 2010				
Fixed income instruments				
Fixed income futures	\$ –	\$ (32,700)	\$ (526)	\$ (1,494)
Options on interest rate exchange agreements .	1,084,172	(82,198)	20,371	(17,547)
Interest rate caps and floors	2,750,000	(1,950,000)	5,287	11,638
Total fixed income instruments	3,834,172	(2,064,898)	25,132	(7,403)
Currency instruments				
Currency forwards	52,496	(53,829)	(1,333)	(1,007)
Total currency instruments	52,496	(53,829)	(1,333)	(1,007)
Commodity instruments				
Commodity futures	1,364	–	269	(3,424)
Total commodity futures	1,364	–	269	(3,424)
Credit instruments	200,607	(1,553,312)	12,969	35,390
2010 Total	\$ 4,088,639	\$ (3,672,039)	\$ 37,037	\$ 23,556

*The fair value of all derivative financial instruments is reflected in investments at fair value in the Statements of Financial Position.

**Net gain (loss) from the derivative financial instruments is located in the non-operating section as net gain on investments and other assets in the Statements of Activities.

C. Derivative Financial Instruments (continued)

Table 9 provides further details related to MIT's credit instruments. The act of entering into a credit default swap contract is often referred to as "buying protection" or "selling protection" on an underlying reference obligation. The buyer is obligated to make premium payments to the seller over the term of the contract in return for a contingent payment upon the occurrence of a credit event with respect to the underlying obligation. The seller bears the obligation to "protect" the buyer in the event of default of the underlying issuer. Upon this event, the cash payment which the buyer receives is equal to the clearing price established by an auction of credit default swap claims, which is designed to approximate the recovery value of an unsecured claim on the issuer in default. The swap will last for a predetermined amount of time, typically five years. Upon termination of the swap, the buyer is no longer obligated to make any premium payments and there is no other exchange of capital.

Financial instruments with off-balance sheet risk involve counterparty credit exposure. MIT requires collateral to the maximum extent possible under normal trading practices. Collateral is moved on a daily basis as required by fluctuations in the market. The collateral is generally in the form of debt obligations issued by the U.S. Treasury or cash. In the event of counterparty default, MIT has the right to use the collateral to offset the loss associated with the replacement of the agreements. MIT enters into arrangements only with counterparties believed to be creditworthy.

The following table summarizes the notional amounts and fair value of the purchased and written credit derivatives, classified by the expiration terms and the external credit ratings of the reference obligations at June 30, 2011 and 2010.

<i>(in thousands of dollars)</i>	Purchased protection				Written protection notional amount			
	Purchased notional amounts	Purchased fair value*	Years to maturity		Written notional amounts	Offsetting purchased credit protection**	Net written credit protection	Net written credit protection fair value
			< 5 years	5-10 years				
Fiscal year 2011								
Credit rating on underlying or index								
A- to AAA	\$ 861,248	\$ (7,213)	\$ 270,653	\$ 590,595	\$ 732,533	\$ (732,533)	\$ -	\$ 30,348
BBB- to BBB+	917,741	(7,363)	187,098	730,643	-	-	-	-
Non-investment grade	25,000	914	-	25,000	-	-	-	-
Non-rated	20,000	(180)	-	20,000	-	-	-	-
ABX - AA index	60,515	34,367	-	60,515	-	-	-	-
2011 Total	\$ 1,884,504	\$ 20,525	\$ 457,751	\$ 1,426,753	\$ 732,533	\$ (732,533)	\$ -	\$ 30,348
Fiscal year 2010								
Credit rating on underlying or index								
A- to AAA	\$ 547,155	\$ (3,897)	\$ 36,000	\$ 511,155	\$ 200,607	\$ (200,607)	\$ -	\$ 6,651
BBB- to BBB+	709,450	(6,819)	87,450	622,000	-	-	-	-
Non-investment grade	47,000	1,296	-	47,000	-	-	-	-
Non-rated	20,000	(292)	-	20,000	-	-	-	-
ABX - AA index	29,100	16,030	-	29,100	-	-	-	-
2010 Total	\$ 1,352,705	\$ 6,318	\$ 123,450	\$ 1,229,255	\$ 200,607	\$ (200,607)	\$ -	\$ 6,651

* The fair value of all credit derivative instruments is reflected in investments, at fair value in the Statements of Financial Position.
**Net gain (loss) of the credit derivative instruments is located in the non-operating section as net gain on investments and other assets in the Statements of Activities.

D. Pledges Receivable

Table 10 below shows the time periods in which pledges receivable at June 30, 2011 and 2010 are expected to be realized.

	2011	2010
In one year or less	\$ 109,181	\$ 99,057
Between one year and five years	187,608	193,666
More than five years	173,776	165,997
Less: allowance for unfulfilled pledges	(47,600)	(46,410)
Pledges receivable, net	\$ 422,965	\$ 412,310

A review of pledges is periodically made with regard to collectability. As a result, the allowance for pledges that may not be fulfilled is adjusted, and some pledges have been canceled and are no longer recorded in the financial statements. In addition, pledges are discounted in the amount of \$55.0 million and \$59.0 million in 2011 and 2010, respectively. MIT has gross conditional pledges, not recorded, for the promotion of education and research in the amount of \$26.9 million and \$44.1 million as of June 30, 2011 and 2010, respectively.

Pledges receivable are classified as Level 3 under the valuation hierarchy described in Note B.

Table 11 below is a rollforward of the pledges receivable for 2011 and 2010.

	2011	2010
Balance at beginning of year	\$ 412,310	\$ 464,736
New pledges	107,830	61,630
Pledge payments received	(99,922)	(139,549)
Decrease in pledge discount	3,937	30,494
(Increase) decrease in reserve for unfulfilled pledges	(1,190)	5,470
Transfer to The Broad Institute	-	(10,471)
Balance at end of year	\$ 422,965	\$ 412,310

E. Student Notes Receivable

Table 12 below details the components of student notes receivable at June 30, 2011 and 2010.

	2011	2010
Institute-funded student notes receivable	\$ 15,191	\$ 16,570
Perkins student notes receivable	37,566	35,926
Total student notes receivable	52,757	52,496
Less: allowance for doubtful accounts	(3,000)	(3,000)
Student notes receivable, net	\$ 49,757	\$ 49,496

E. Student Notes Receivable (continued)

Perkins student notes receivable are funded by the U.S. Government and by MIT to the extent required by the Perkins National Direct Student Loan Program. Funds advanced by the U.S. Government for this program, \$33.8 million and \$33.6 million at June 30, 2011 and 2010, respectively, are ultimately refundable to the U.S. Government and are classified as liabilities. Due to the nature and terms of the student loans, which are subject to significant restrictions, it is not feasible to determine the fair value of such loans.

Allowance for Credit Losses

Management regularly assesses the adequacy of the allowance for credit losses by performing ongoing evaluations of the student loan portfolio, including such factors as the differing economic risks associated with each loan category, the financial condition of specific borrowers, the economic environment in which the borrowers operate, the level of delinquent loans, the value of any collateral and, where applicable, the existence of any guarantees or indemnifications. MIT's Perkins receivable represents the amounts due from current and former students under the Federal Perkins Loan Program. Loans disbursed under the Federal Perkins Loan program are able to be assigned to the U.S. Government in certain non-repayment situations. In these situations the Federal portion of the loan balance is guaranteed.

Factors also considered by management when performing its assessment, in addition to general economic conditions and the other factors described above, included, but were not limited to, a detailed review of the aging of the student loan receivable detail and a review of the default rate by loan category in comparison to prior years. The level of the allowance is adjusted based on the results of management's analysis.

Loans less than 120 days delinquent are deemed to have a minimal delay in payment and are generally not written off but are reserved in accordance with the terms discussed above. Loans more than 120 days delinquent are subject to standard collection practices including litigation. Only loans that are deemed uncollectible are written off and this only occurs after several years of unsuccessful collection, including placement at more than one external collection agency.

Considering the other factors already discussed herein, management considers the allowance for credit losses at June 30, 2011 and 2010 to be prudent and reasonable. Furthermore, MIT's allowance is general in nature and is available to absorb losses from any loan category. Management believes that the allowance for credit losses at June 30, 2011 is adequate to absorb credit losses inherent in the portfolio as of that date.

Changes in the allowance for credit losses for the year ended June 30, 2011 were as shown in the following table.

Table 13. Rollforward of Allowance for Credit Losses

<i>(in thousands of dollars)</i>	Student notes receivables
Balance at beginning of year	\$ 3,000
Provision for credit losses	171
Net charge-offs	(171)
Balance at end of year	\$ 3,000

F Accounts Payable, Accruals and Other Liabilities

MIT's accounts payable, accruals and other liabilities at June 30, 2011 and 2010 are shown in Table 14 below.

	2011	2010
Accounts payable and accruals	\$ 310,476	\$ 256,213
Accrued vacation	55,685	52,885
Total	\$ 366,161	\$ 309,098

G. Borrowings

	2011	2010
EDUCATIONAL PLANT		
Massachusetts Health and Educational Facilities Authority (MHEFA)		
Series I, 4.75%–5.20%, due 2028, par value \$59,200	\$ 59,613	\$ 59,638
Series J-1, variable rate, due 2031	125,000	125,000
Series J-2, variable rate, due 2031	125,000	125,000
Series K, 5.25%–5.50%, due 2012–2032, par value \$230,000	242,242	243,041
Series L, 3.0%–5.25%, due 2004–2033, par value \$170,160.	182,072	185,394
Series M, 5.25%, due 2014–2030, par value \$131,110	143,897	144,968
Series N, 3.5%–5.0%, due 2014–2038, par value \$325,195	331,594	332,815
Series O, 4.0%–6.0%, due 2016–2036, par value \$266,460	272,218	273,368
Total MHEFA	1,481,636	1,489,224
Medium Term Notes Series A, 7.125%, due 2026	17,355	17,351
Medium Term Notes Series A, 7.25%, due 2096	45,443	45,441
Notes payable to bank, variable rate, due 2014	83,033	83,033
Taxable Bonds, Series B, 5.60%, due 2111, par value \$750,000 ¹	746,881	–
Total educational plant	2,374,348	1,635,049
OTHER		
Notes payable to bank, variable rate, due 2014	93,477	93,477
Total borrowings	\$ 2,467,825	\$ 1,728,526

¹ The proceeds of Taxable Bonds, Series B were held as liquid investments as of June 30, 2011 and have not yet been invested in physical assets.

Fair value of the outstanding debt is approximately 5.0% and 7.0% greater than the carrying value in 2011 and 2010, respectively. Carrying value is based on estimates using current interest rates available for similarly rated debt of the same remaining maturities.

G. Borrowings (continued)

The aggregate amounts of debt payments and sinking fund requirements for each of the next five fiscal years are shown in Table 16 below.

2012	\$ 2,490
2013	26,500
2014	202,509
2015	59,110
2016	9,585

MIT maintains a line of credit with a major financial institution for an aggregate commitment of \$500.0 million. As of June 30, 2011, \$323.5 million was available under this line of credit. The line of credit expires on March 28, 2014.

Cash paid for interest on long-term debt in 2011 and 2010 was \$78.7 million and \$79.4 million, respectively.

Variable interest rates at June 30, 2011 are shown in Table 17 below.

	Amount	Rate
MHEFA Series J-1	\$ 125,000	0.04%
MHEFA Series J-2	125,000	0.04%
Notes payable to bank.	176,510	1.21%

In the event that MIT receives notice of any optional tender on its Series J-1 and Series J-2 variable-rate bonds, or if these bonds become subject to mandatory tender, the purchase price of the bonds will be paid from the remarketing of such bonds. However, if the remarketing proceeds are insufficient, MIT will be obligated to purchase the bonds tendered at 100 percent of par on the tender date.

During 2011, MIT issued \$750.0 million in taxable bonds at a rate of 5.6% for a period of 100 years. This will be used to finance a comprehensive strategy for the next phase of MIT's physical plant development.

H. Commitments and Contingencies

Federal Government Funding

MIT receives funding or reimbursement from Federal agencies for sponsored research under Government grants and contracts. These grants and contracts provide for reimbursement of indirect costs based on rates negotiated with the Office of Naval Research (ONR), MIT's cognizant Federal agency. MIT's indirect cost reimbursements have been based on fixed rates with carry forward of under or over-recoveries. At June 30, 2011 and 2010, MIT recorded a net over-recovery of \$48.1 million and \$12.3 million, respectively.

The DCAA is responsible for auditing indirect charges to grants and contracts in support of ONR's negotiating responsibility. MIT has final audited rates through 2009. MIT's 2011 research revenues of \$1,447.2 million include reimbursement of indirect costs of \$196.8 million, which includes the adjustment for the variance between the indirect cost income determined by the fixed rates and actual costs for 2011. In 2010, research revenues were \$1,369.6 million, which included reimbursement of indirect costs of \$197.2 million.

Leases

At June 30, 2011, there were no capital lease obligations. MIT is committed under certain operating (rental) leases. Rent expense incurred under operating lease obligations was \$33.3 million and \$33.1 million in 2011 and 2010, respectively. Future minimum payments under operating leases are shown in Table 18 below.

2012	\$ 31,815
2013	30,599
2014	23,458
2015	10,304
2016	8,335

Investments

As of June 30, 2011, \$9.3 million of investments were pledged as collateral to various supplier and government agencies.

H. Commitments and Contingencies (continued)

Future Construction

MIT has contracted for educational plant in the amount of \$65.4 million at June 30, 2011. It is expected that the resources to satisfy these commitments will be provided from unexpended plant funds, anticipated gifts, and unrestricted funds. MIT will be committing additional resources to planned major construction projects and improvements to the current infrastructure over the next several years.

Related Entities

MIT has entered into agreements, including collaborations with third-party not-for-profit and for-profit entities, for

education, research, and technology transfers. Some of these agreements involve funding from foreign governments. These agreements subject MIT to greater financial risk than do its normal operations. In the opinion of management, the likelihood of realization of increased financial risks by MIT under these agreements is remote.

General

MIT is subject to certain other legal proceedings and claims that arise in the normal course of operations. In the opinion of management, the ultimate outcome of these actions will not have a material effect on MIT's financial position.

I. Functional Expense Classification

MIT's expenditures on a functional basis are shown in Table 19 below.

	2011	2010
General and administrative	\$ 523,676	\$ 461,186
Instruction and unsponsored research	659,839	613,345
Sponsored research	1,265,776	1,192,041
Auxiliary enterprises	110,631	104,489
Operation of Alumni Association	11,225	11,505
Total operating expense	\$ 2,571,147	\$ 2,382,566

J. Retirement Benefits

MIT offers a defined benefit plan and a defined contribution plan to its employees. The plans cover substantially all of MIT's employees.

MIT also provides retiree welfare benefits (certain health care and life insurance benefits) for retired employees. Substantially all of MIT's employees may become eligible for those benefits if they reach a qualifying retirement age while working for MIT. Retiree health plans are paid for in part by retirees, their covered dependents, and beneficiaries. Benefits are provided through various insurance companies whose charges are based either on the claims and administrative expenses paid during the year or annual insured premiums. Retiree life insurance plans are non-contributory and cover the retiree only. MIT maintains a trust to pay for retiree welfare benefits.

MIT contributes to the defined benefit plan amounts that are actuarially determined to provide the retirement plan with sufficient assets to meet future benefit requirements. There were no contributions to the defined benefit plan in 2011 or 2010.

For purposes of calculating net periodic pension cost for the defined benefit plan, plan amendments are amortized on a straight-line basis over the average future service to expected retirement of active participants at the date of the amendment. Cumulative gains and losses (including changes in assumptions) in excess of 10 percent of the greater of the projected benefit obligation or the market-related value of assets are amortized over the average future service of active participants. The annual amortization shall not be less than the total amount of unrecognized gains and losses up to \$1 million.

J. Retirement Benefits (continued)

The amount contributed and expenses recognized during 2011 and 2010 related to the defined contribution plan were \$40.8 million and \$39.2 million, respectively.

For purposes of calculating net periodic postretirement welfare benefit cost, a portion of the current obligation, related to the transition to the accounting standard *Employers' Accounting for Postretirement Benefits Other than Pensions*, is being amortized on a straight-line basis over 20 years from the date of adoption of that statement in 1994. Plan

amendments are amortized on a straight-line basis over the average future service to full eligibility of active participants at the date of amendment. Cumulative gains and losses (including changes in assumptions) in excess of 10 percent of the greater of the plan's obligation or the market-related value of assets are amortized over the average future service of active participants. The annual amortization shall not be less than the total amount of unrecognized gains and losses up to \$1 million.

Components of Net Periodic Benefit (Income) Cost

Table 20 summarizes the components of net periodic benefit (income) cost recognized in operating activity and other amounts recognized in non-operating activity in unrestricted net assets in the Statements of Activities for the years ended June 30, 2011 and 2010.

<i>(in thousands of dollars)</i>	Defined benefit plan		Postretirement welfare benefit plan	
	2011	2010	2011	2010
Components of net periodic benefit (income) cost				
Service cost	\$ 59,892	\$ 54,179	\$ 19,957	\$ 16,581
Interest cost	134,756	131,994	27,380	25,901
Expected return on plan assets	(221,135)	(222,291)	(20,142)	(20,422)
Amortization of transition amount	—	—	4,776	4,776
Amortization of net actuarial (gain) loss	(2,323)	(29,500)	10,266	4,409
Amortization of prior service cost	2,180	2,180	3,556	3,556
Net periodic benefit (income) cost recognized in operating activity	(26,630)	(63,438)	45,793	34,801
Other amounts recognized in non-operating activity in unrestricted net assets				
Current year actuarial (gain) loss	\$ (68,388)	\$ 183,119	\$ (18,565)	\$ 40,438
Amortization of actuarial gain (loss)	2,323	29,500	(10,266)	(4,409)
Amortization of prior service cost	(2,180)	(2,180)	(3,556)	(3,556)
Amortization of transition obligation	—	—	(4,776)	(4,776)
Total other amounts recognized in non-operating activity	(68,245)	210,439	(37,163)	27,697
Total recognized in Statements of Activities	\$ (94,875)	\$ 147,001	\$ 8,630	\$ 62,498

The estimated net actuarial gain and prior service cost for the defined benefit plan that will be amortized from unrestricted net assets into net periodic benefit income during the next fiscal year are \$1.0 million and \$2.0 million, respectively. The estimated net actuarial loss and transition

obligation for the postretirement welfare benefit plan that will be amortized from unrestricted net assets into net periodic benefit cost during the next fiscal year are \$11.4 million and \$4.8 million, respectively.

J. Retirement Benefits (continued)

Cumulative amounts recognized as non-operating changes in unrestricted net assets are summarized in the following table for the years ended June 30, 2011 and 2010.

<i>(in thousands of dollars)</i>	Defined benefit plan		Postretirement welfare benefit plan	
	2011	2010	2011	2010
Amounts recognized in unrestricted net assets consist of:				
Net actuarial loss	\$ 126,184	\$ 192,248	\$ 156,141	\$ 184,972
Prior service cost	6,821	9,002	–	3,556
Transition liability	–	–	9,551	14,327
Total cumulative amounts recognized in unrestricted net assets	\$ 133,005	\$ 201,250	\$ 165,692	\$ 202,855

Benefit Obligations and Fair Value of Assets

Table 22 summarizes the benefit obligations, plan assets, and amounts recognized in the Statements of Financial Position for MIT's retirement benefit plans. MIT uses a June 30 measurement date for its defined benefit pension and postretirement welfare benefit plans.

<i>(in thousands of dollars)</i>	Defined benefit plan		Postretirement welfare benefit plan	
	2011	2010	2011	2010
Change in projected benefit obligations				
Projected benefit obligations at beginning of year	\$ 2,293,877	\$ 2,118,977	\$ 472,170	\$ 409,738
Service cost	59,892	54,179	19,957	16,581
Interest cost	134,756	131,994	27,380	25,901
Retiree contributions	–	–	3,496	3,200
Net benefit payments, transfers and other expenses	(115,523)	(117,535)	(23,574)	(23,474)
Assumption changes and actuarial net loss	85,590	106,262	10,409	40,224
Projected benefit obligations at end of year	2,458,592	2,293,877	509,838	472,170
Change in plan assets				
Fair value of plan assets at beginning of year	2,312,718	2,284,819	234,535	234,601
Actual return on plan assets	375,112	145,434	49,116	20,209
Employer contributions	–	–	50,399	2,038
Retiree contributions	–	–	3,496	3,200
Net benefit payments, transfers and other expenses	(115,523)	(117,535)	(25,917)	(25,513)
Fair value of plan assets at end of year	2,572,307	2,312,718	311,629	234,535
Funded (unfunded) status at end of year	\$ 113,715	\$ 18,841	\$ (198,209)	\$ (237,635)
Amounts recognized in the Statements of Financial Position consist of:				
Benefit assets	\$ 113,715	\$ 18,841	\$ –	\$ –
Benefit liability	–	–	(198,209)	(237,635)
Total	\$ 113,715	\$ 18,841	\$ (198,209)	\$ (237,635)

J. Retirement Benefits (continued)

The accumulated benefit obligation for MIT's defined benefit pension plan was \$2,305.8 million and \$2,157.9 million at June 30, 2011 and 2010, respectively.

MIT has recognized the effect of the expected Medicare subsidy by reducing its accumulated postretirement benefit obligation by \$64.6 million and \$62.6 million as of June 30, 2011 and 2010, respectively. This initial reduction was recognized as an actuarial gain. Additionally, the service and interest cost components of postretirement benefits cost were reduced in 2011 and future periods.

Assumptions and Health Care Trend Rates

The expected long-term rate of return assumption represents the expected average rate of earnings on the funds invested or to be invested to provide for the benefits included in the benefit obligation. The long-term rate of return assumption is determined based on a number of factors, including historical market index returns, the anticipated long-term asset allocation of the plans, historical plan return data, plan expenses and the potential to outperform market index returns.

Table 23. Assumptions

	Defined benefit plan		Postretirement welfare benefit plan	
	2011	2010	2011	2010
Assumptions used to determine benefit obligation as of June 30:				
Discount rate	5.65%	5.84%	5.56%	5.71%
Rate of compensation increase ¹	4.00%	4.00%		
Assumptions used to determine net periodic benefit (income) cost for year ended June 30:				
Discount rate	5.84%	6.25%	5.71%	6.25%
Expected long-term return on plan assets	8.00%	8.00%	7.00%	7.00%
Rate of compensation increase ¹	4.00%	4.00%		
Assumed health care cost trend rates:				
Health care cost trend rate assumed for next year			7.50%	7.50%
Rate to which the cost trend rate is assumed to decline (the ultimate trend rate)			5.00%	5.00%
Year that the rate reaches the ultimate trend rate			2018	2015

¹ The average rate of salary increase is assumed to be 3% for 2012, and 4% thereafter.

As an indicator of sensitivity, a one percentage point change in the assumed health care cost trend rate would effect 2011 as shown in Table 24 below.

Table 24. Health Care Cost Trend Rate Sensitivity

<i>(in thousands of dollars)</i>	1% point increase	1% point decrease
Effect on 2011 postretirement service and interest cost	\$ 7,970	\$ (6,439)
Effect on postretirement benefit obligation as of June 30, 2011	\$ 64,215	\$ (52,361)

Plan Investments

The investment objectives for the assets of the plans are to minimize expected funding contributions and to meet or exceed the rate of return assumed for plan funding purposes over the long term. The nature and duration of benefit obligations, along with assumptions concerning asset class returns and return correlations, are considered when determining an appropriate asset allocation to achieve the investment objectives.

Investment policies and strategies governing the assets of the plans are designed to achieve investment objectives within prudent risk parameters. Risk management practices include the use of external investment managers, the maintenance of a portfolio diversified by asset class, investment approach, security holdings, and the maintenance of sufficient liquidity to meet benefit obligations as they come due.

J. Retirement Benefits (continued)

Table 25 presents investment at fair value of MIT's defined benefit plan and postretirement welfare benefit plan, which are included in plan net assets as of June 30, 2011 and 2010, grouped by the valuation hierarchy detailed in Note B. There were no significant transfers in and out of Level 1 and Level 2 fair value measurements in 2011.

<i>(in thousands of dollars)</i>	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant un- observable inputs (Level 3)	Total fair value
Table 25. Plan Investments				
Defined Benefit Plan				
Fiscal year 2011				
Cash and cash equivalents	\$ 34,644	\$ —	\$ —	\$ 34,644
Fixed income	188,705	75,077	—	263,782
Equities	220,211	192,537	893,351	1,306,099
Marketable alternatives	—	228,546	444,384	672,930
Real estate	—	—	282,404	282,404
Interest rate futures	(17)	—	—	(17)
Total plan investment	\$ 443,543	\$ 496,160	\$ 1,620,139	\$ 2,559,842
Fiscal year 2010				
Cash and cash equivalents	\$ 17,594	\$ —	\$ —	\$ 17,594
Fixed income	196,123	65,130	—	261,253
Equities	325,635	112,441	727,149	1,165,225
Marketable alternatives	—	42,150	597,032	639,182
Real estate	—	—	225,241	225,241
Interest rate futures	(196)	—	—	(196)
	\$ 539,156	\$ 219,721	\$ 1,549,422	\$ 2,308,299
Less: Amounts held in 401(h) accounts . .				(4,371)
Total plan investment				\$ 2,303,928
Postretirement Welfare Benefit Plan				
Fiscal year 2011				
Cash and cash equivalents	\$ 4,382	\$ —	\$ —	\$ 4,382
Fixed income	—	67,730	—	67,730
Equities	52,957	76,603	43,391	172,951
Marketable alternatives	—	34,183	22,134	56,317
Real estate	—	—	10,344	10,344
Total plan investment	\$ 57,339	\$ 178,516	\$ 75,869	\$ 311,724
Fiscal year 2010				
Cash and cash equivalents	\$ 4,211	\$ —	\$ —	\$ 4,211
Fixed income	—	52,857	—	52,857
Equities	21,779	73,176	29,527	124,482
Marketable alternatives	—	5,488	34,116	39,604
Real estate	—	—	7,140	7,140
Total plan investment	\$ 25,990	\$ 131,521	\$ 70,783	\$ 228,294

J. Retirement Benefits (continued)

Table 26 is a rollforward of the investments classified by MIT's defined benefit plan and postretirement welfare benefit plan within Level 3 of the fair value hierarchy defined in Note B as at June 30, 2011 and 2010.

Table 26. Rollforward of Level 3 Plan Investment

<i>(in thousands of dollars)</i>	Equities	Marketable alternatives	Real estate	Total investments
Defined Benefit Plan				
Fair value, July 1, 2010	\$ 727,149	\$ 597,032	\$ 225,241	\$ 1,549,422
Realized losses	(3,041)	–	–	(3,041)
Unrealized gains	92,678	54,558	19,074	166,310
Net purchases, sales, settlements.	97,421	(30,696)	38,089	104,814
Transfers of assets between levels	(20,856)	(176,510)	–	(197,366)
Fair value, June 30, 2011	<u>\$ 893,351</u>	<u>\$ 444,384</u>	<u>\$ 282,404</u>	<u>\$ 1,620,139</u>
Fair value, July 1, 2009	\$ 718,968	\$ 625,515	\$ 239,666	\$ 1,584,149
Realized gains (losses)	(53)	755	–	702
Unrealized gains (losses)	21,745	34,408	(38,337)	17,816
Net purchases, sales, settlements.	(4,432)	(21,496)	23,912	(2,016)
Transfers of assets between levels	(9,079)	(42,150)	–	(51,229)
Fair value, June 30, 2010	<u>\$ 727,149</u>	<u>\$ 597,032</u>	<u>\$ 225,241</u>	<u>\$ 1,549,422</u>
Postretirement Welfare Benefit Plan				
Fair value, July 1, 2010	\$ 29,527	\$ 34,116	\$ 7,140	\$ 70,783
Realized losses	(3)	–	–	(3)
Unrealized gains	5,101	3,274	1,717	10,092
Net purchases, sales, settlements.	16,910	(1,241)	1,487	17,156
Transfers of assets between levels	(8,145)	(14,014)	–	(22,159)
Fair value, June 30, 2011	<u>\$ 43,390</u>	<u>\$ 22,135</u>	<u>\$ 10,344</u>	<u>\$ 75,869</u>
Fair value, July 1, 2009	\$ 23,511	\$ 32,919	\$ 6,519	\$ 62,949
Realized gains (losses)	(5)	105	–	100
Unrealized gains (losses)	2,948	(1,365)	(108)	1,475
Net purchases, sales, settlements.	4,299	7,944	729	12,972
Transfers of assets between levels	(1,226)	(5,487)	–	(6,713)
Fair value, June 30, 2010	<u>\$ 29,527</u>	<u>\$ 34,116</u>	<u>\$ 7,140</u>	<u>\$ 70,783</u>

J. Retirement Benefits (continued)

The unfunded commitments which MIT's defined benefit plan and postretirement welfare benefit plan have made to various investments as of June 30, 2011 and 2010 are listed in Table 27 below.

<i>(in thousands of dollars)</i>	Defined benefit plan		Postretirement welfare benefit plan	
	2011	2010	2011	2010
Equities	\$ 254,057	\$ 303,601	\$ 20,253	\$ 26,662
Marketable alternatives	33,009	38,084	2,844	3,839
Real estate	191,106	183,496	16,461	11,280
Total	\$ 478,172	\$ 525,181	\$ 39,558	\$ 41,781

Target allocations and weighted-average asset allocations of the investment portfolio for the MIT defined benefit plan and postretirement welfare benefit plan at June 30, 2011 and 2010 are shown in Table 28.

	Defined benefit plan Plan assets as of June 30			Postretirement welfare benefit plan Plan assets as of June 30		
	Target Allocation	2011	2010	Target Allocation	2011	2010
Cash & cash equivalents	–	2%	1%	–	2%	2%
Fixed income	8%	10%	11%	20%	23%	22%
Equities	48%	51%	50%	50%	55%	55%
Marketable alternatives	33%	26%	28%	25%	17%	18%
Real estate	11%	11%	10%	5%	3%	3%
Total	100%	100%	100%	100%	100%	100%

J. Retirement Benefits (continued)

The following table summarizes the notional exposure and net ending fair value of derivative financial instruments held by the MIT defined benefit plan at June 30, 2011 and 2010. Refer to Note C for detailed discussion

regarding derivative financial instruments. The post-retirement welfare benefit plan did not have any outstanding derivative financial instruments at June 30, 2011 and 2010.

<i>(in thousands of dollars)</i>	Notional exposure		Net ending fair value amount	Net loss
	Long	Short		
Fiscal year 2011				
Fixed income instruments				
Fixed income futures	\$ 1,000	\$ (6,600)	\$ (17)	\$ (179)
Total fixed income instruments	1,000	(6,600)	(17)	(179)
Currency and other instruments				
Currency forwards and other instruments	—	138	—	—
Total currency instruments	—	138	—	—
2011 Total	\$ 1,000	\$ (6,462)	\$ (17)	\$ (179)
Fiscal year 2010				
Fixed income instruments				
Fixed income futures	\$ —	\$ (11,900)	\$ (196)	\$ (649)
2010 Total	\$ —	\$ (11,900)	\$ (196)	\$ (649)

Contributions

MIT does not expect to contribute to its defined benefit pension plan, and expects to contribute approximately \$34.9 million to its postretirement welfare benefit plan in 2012. These contributions have been estimated based on the same assumptions used to measure MIT's benefit obligations at June 30, 2011. MIT also contributed \$50.4 million and \$2.0 million to the postretirement welfare benefit plan in 2011 and 2010, respectively.

Expected Future Benefit Payments

Table 30 reflects total expected benefit payments for the defined benefit and postretirement welfare benefit plans, as well as expected receipt of the federal subsidy. These payments have been estimated based on the same assumptions used to measure MIT's benefit obligations at June 30, 2011.

<i>(in thousands of dollars)</i>	Pension benefits	Other benefits ¹	Federal subsidy ²
2012	\$ 124,449	\$ 30,644	\$ 2,421
2013	135,456	33,260	2,681
2014	139,877	35,680	2,954
2015	144,080	37,955	3,216
2016	148,273	40,200	3,496
2017–2021	803,934	232,511	21,544

¹Other benefits reflect the total net benefits expected to be paid from the plans (i.e., gross benefit reimbursements offset by retiree contributions).

²Federal subsidy reflects the amount MIT is expected to receive from the government and reflects MIT's expected drugs claims experience.

K. Components of Net Assets and Endowment

Table 31 below presents the three categories of net assets by purpose as of June 30, 2011. The amounts listed in the unrestricted column under endowment funds principal are those gifts and other funds received over the years that MIT designated as funds functioning as endowment and

invested with the endowment funds. A large component of temporarily restricted net assets in other invested funds is pledges, the majority of which will be reclassified to unrestricted net assets when cash is received.

Table 31. Fund Category

<i>(in thousands of dollars)</i>	2011				2010 Total
	Unrestricted	Temporarily restricted	Permanently restricted	Total	
Endowment funds principal					
General purpose	\$ 654,259	\$ 787,370	\$ 471,651	\$ 1,913,280	\$ 1,483,930
Departments and research.	420,093	697,712	415,123	1,532,928	1,349,620
Library	9,079	15,908	7,858	32,845	29,349
Professorships	405,253	1,856,041	608,366	2,869,660	2,523,743
Graduate general	55,946	93,359	81,758	231,063	202,914
Graduate departments.	75,437	220,755	187,255	483,447	414,230
Undergraduate.	165,028	775,685	320,896	1,261,609	1,115,077
Prizes	6,403	19,582	17,123	43,108	38,465
Miscellaneous.	814,555	132,339	114,252	1,061,146	906,434
Investment income held for distribution	283,542	–	–	283,542	253,559
Endowment funds before pledges.	2,889,595	4,598,751	2,224,282	9,712,628	8,317,321
Pledges.	–	–	140,946	140,946	146,137
Total endowment funds.	2,889,595	4,598,751	2,365,228	9,853,574	8,463,458
Other invested funds					
Student loan funds.	20,289	–	16,343	36,632	37,108
Building funds	47,979	48,257	–	96,236	188,769
Designated purposes:					
– Departments and research	280,162	–	–	280,162	265,207
– Other purposes	89,883	–	–	89,883	83,620
Reserve funds.	123,903	–	–	123,903	95,168
Real estate gifts held for sale.	6,261	–	–	6,261	6,275
Life income funds	6,960	46,903	76,320	130,183	108,287
Pledges.	–	282,019	–	282,019	264,945
Other funds available for current expenses	579,450	68,589	–	648,039	402,187
Funds expended for educational plant	558,798	–	–	558,798	409,281
Total other funds	1,713,685	445,768	92,663	2,252,116	1,860,847
Total net assets at fair value.	\$ 4,603,280	\$ 5,044,519	\$ 2,457,891	\$ 12,105,690	\$10,324,305

K. Components of Net Assets and Endowment (continued)

MIT's endowment consists of approximately 3,300 individual funds established for a variety of purposes and includes both donor-restricted endowment funds and funds designated by the Executive Committee of the MIT Corporation (Executive Committee) to function as endowment. As required by US GAAP, net assets associated with endowment funds, including funds designated by the Executive Committee to function as endowments, are classified and reported based on the existence or absence of donor-imposed restrictions.

The Executive Committee of MIT has interpreted the Massachusetts-enacted version of Uniform Prudent Management of Institutional Funds Act (UPMIFA) as allowing MIT to appropriate for expenditure or accumulate so much of an endowment fund as MIT determines is prudent for the uses, benefits, purposes and duration for which the endowment fund is established, subject to the intent of the donor as expressed in the gift instrument. Unless stated otherwise in the gift instrument, the assets in an endowment fund shall be donor-restricted assets until appropriated for expenditure by the Executive Committee.

As a result of this interpretation, MIT has not changed the way permanently restricted net assets are classified. See Note A for further information on net asset classification. The remaining portion of the donor-restricted endowment fund that is not classified in permanently restricted net assets is classified as temporarily restricted net assets until those amounts are appropriated for expenditure in a manner consistent with the standard of prudence prescribed by UPMIFA. In accordance with UPMIFA, the Executive Committee considers the following factors in making a determination to appropriate or accumulate endowment funds:

- i. the duration and preservation of the fund
- ii. the purposes of MIT and the endowment fund
- iii. general economic conditions
- iv. the possible effects of inflation and deflation
- v. the expected total return from income and the appreciation of investments
- vi. other resources of MIT
- vii. the investment policies of MIT

Table 32. Endowment Net Asset Composition by Type of Fund

<i>(in thousands of dollars)</i>	Unrestricted	Temporarily restricted	Permanently restricted	Total
Fiscal year 2011				
Donor-restricted endowment funds	\$ (7,071)	\$ 4,598,751	\$ 2,365,228	\$ 6,956,908
Board-designated endowment funds	2,896,666	—	—	2,896,666
Total endowment funds	<u>\$ 2,889,595</u>	<u>\$ 4,598,751</u>	<u>\$ 2,365,228</u>	<u>\$ 9,853,574</u>
Fiscal year 2010				
Donor-restricted endowment funds	\$ (29,106)	\$ 3,945,500	\$ 2,019,530	\$ 5,935,924
Board-designated endowment funds	2,527,534	—	—	2,527,534
Total endowment funds	<u>\$ 2,498,428</u>	<u>\$ 3,945,500</u>	<u>\$ 2,019,530</u>	<u>\$ 8,463,458</u>

K. Components of Net Assets and Endowment (continued)

Table 33. Changes in Endowment Net Assets

<i>(in thousands of dollars)</i>	Unrestricted	Temporarily restricted	Permanently restricted	Total
Fiscal year 2011				
Endowment net assets, June 30, 2010	\$ 2,498,428	\$ 3,945,500	\$ 2,019,530	\$ 8,463,458
Investment return:				
Investment income	24,744	47,678	17,057	89,479
Net appreciation (realized and unrealized).....	423,568	906,844	11,961	1,342,373
Total investment return.....	448,312	954,522	29,018	1,431,852
Contributions	-	-	313,644	313,644
Appropriation of endowment assets for expenditure...	(134,428)	(300,831)	(9,577)	(444,836)
Other changes:				
Underwater gain adjustment.....	22,035	(22,035)	-	-
Net asset reclassifications and transfers to create board-designated endowment funds.....	55,248	21,595	12,613	89,456
Endowment net assets, June 30, 2011	<u>\$ 2,889,595</u>	<u>\$ 4,598,751</u>	<u>\$ 2,365,228</u>	<u>\$ 9,853,574</u>
Fiscal year 2010				
Endowment net assets, June 30, 2009	\$ 2,328,856	\$ 3,807,297	\$ 1,913,952	\$ 8,050,105
Investment return:				
Investment income	20,403	42,293	8,406	71,102
Net appreciation (realized and unrealized).....	276,468	414,261	5,957	696,686
Total investment return.....	296,871	456,554	14,363	767,788
Contributions	-	-	58,815	58,815
Appropriation of endowment assets for expenditure...	(158,022)	(364,531)	(3,964)	(526,517)
Other changes:				
Underwater loss adjustment and funds held for reinvestment.....	(4,794)	4,794	630	630
Net asset reclassifications and transfers to create board-designated endowment funds.....	35,517	41,386	35,734	112,637
Endowment net assets, June 30, 2010	<u>\$ 2,498,428</u>	<u>\$ 3,945,500</u>	<u>\$ 2,019,530</u>	<u>\$ 8,463,458</u>

Underwater Endowment Funds

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the value of the initial and subsequent donor gift amounts (underwater). When underwater endowment funds exist, they are classified as a reduction of unrestricted

net assets. Total underwater endowment funds reported in unrestricted net assets were \$7.1 million and \$29.1 million as of June 30, 2011 and 2010, respectively. The underwater status of these funds resulted from unfavorable market fluctuations.

K. Components of Net Assets and Endowment (continued)

Investment and Spending Policies

MIT maintains its investments primarily in two investment pools: Pool A, principally for endowment and funds functioning as endowment, and Pool C, principally for investment of current funds of MIT's schools and departments and MIT's operating funds. Pool A operates as a mutual fund with units purchased and redeemed based on the previous month's unit market value of Pool A. The total market value of Pool A was \$10,041.1 million at June 30, 2011 and \$8,603.4 million at June 30, 2010. Pool A includes certain operating and life income funds totaling \$754.5 million at June 30, 2011 and \$454.7 million at June 30, 2010. Certain assets are also maintained in separately invested funds. Separately invested funds totaled \$424.4 million as of June 30, 2011 and \$168.6 million as of June 30, 2010.

MIT has adopted endowment investment and spending policies designed to provide a predictable stream of funding to programs supported by its endowment while maintaining the purchasing power of endowment assets. An additional investment goal is to maximize return relative to appropriate risk such that performance exceeds appropriate benchmark returns at the total pool, asset class and individual manager levels.

To achieve its long-term rate-of-return objectives, MIT relies on a total return strategy in which investment returns are realized through both capital appreciation (realized and unrealized gains) and current yield (interest and dividends). MIT targets a diversified asset allocation that places greater emphasis on equity-based investments to achieve its long-term objectives within prudent risk constraints.

The Executive Committee of the Corporation votes to distribute funds for operational support from general investments. In accordance with MIT's spending policy, these distributions are funded from both investment income and market appreciation. The distribution rates were \$56.75 and \$69.21 per Pool A unit as of June 30, 2011 and 2010, respectively. In 2011, the amount distributed for spending from Pool A and Pool C totaled \$513.6 million, compared to \$581.8 million distributed in the prior year. During 2011, distributions from separately invested funds were \$10.5 million, compared to \$4.2 million in 2010. The income earned in Pool C, or currently invested funds, was fully distributed. In addition to the aforementioned distributions, there was also a special distribution of \$10.8 million from gains in Pool C in 2011. No such distribution was made in 2010.

L. The Broad Institute

On July 1, 2009, The Broad Institute, previously a unit of MIT, became a separately incorporated entity. The Broad Institute is a research center located adjacent to the MIT campus. Before July 1, 2009, MIT administered The Broad Institute as a collaboration among MIT, Harvard University and its affiliated hospitals, and The Whitehead Institute for Biomedical Research. Following the separation, The

Broad Institute is a self-administered collaboration of MIT, Harvard University, and its affiliated hospitals.

At separation on July 1, 2009, MIT transferred assets to the separately incorporated The Broad Institute.

SECTION II

**SCHEDULE OF EXPENDITURES OF FEDERAL
AWARDS**

Massachusetts Institute of Technology
Schedule of Expenditures of Federal Awards
For the Year Ended June 30, 2011

Federal Grantor/ Pass Through Grantor/ Program Title	Federal CFDA Number	Federal Expenditures
Research and Development		
U.S. Department of Defense:		
Air Force		\$ 311,688,744
Army		75,748,927
Navy		55,685,667
Defense Advance Research Project Agency		37,028,620
Ballistic Missile Defense Organization		65,392,812
National Security Agency		8,698,101
Classified		77,299,737
Other DOD		148,454,346
Passthrough		42,888,980
Total Department of Defense		<u>\$ 822,885,934</u>
U.S. Department of Energy		79,782,403
U.S. Department of Energy - Passthrough		11,217,378
U.S. Department of Health and Human Services		155,144,132
U.S. Department of Health and Human Services - Passthrough		17,841,703
National Aeronautics & Space Administration		39,919,475
National Aeronautics & Space Administration - Passthrough		8,668,319
National Science Foundation		59,814,368
National Science Foundation - Passthrough		15,528,863
Federal Aviation Administration		40,282,185
National Oceanic & Atmospheric Administration		4,732,679
Other Federal Sponsors		17,089,397
Other Federal Sponsors - Passthrough		1,712,791
Total Research and Development, non-capital projects	Appendix A	<u>\$ 1,274,619,627</u>
Research and Development, Capital Projects - ARRA	Note 5	<u>1,056,039</u>
Total Research and Development*		<u>\$ 1,275,675,666</u>
Fellowships		
National Science Foundation Fellowships	47.076	<u>\$ 7,828,201</u>

* These programs include ARRA expenditures, which are detailed in Appendix A, B, and C.

** Includes Department of Education

The accompanying notes are an integral part of this schedule.

Federal Grantor/ Pass Through Grantor/ Program Title	Federal CFDA Number	Federal Expenditures
Student Financial Assistance Cluster Expenditures		
U.S. Department of Education Cluster:		
Grants:		
Pell	84.063	\$ 3,596,194
Federal Supplemental Educational Opportunity	84.007	1,875,059
Academic Competitiveness Grant	84.375	184,350
National SMART Grant	84.376	269,000
 Federal Work Study	 84.033	 1,635,612
 Federal Direct Stafford	 84.268	 15,095,102
 Perkins:	 84.038	
New Loans		7,616,408
Balance Outstanding From Prior Years		29,949,677
Loan Administrative Cost Allowance		448,788
 Guaranteed Loans:		
Parent Loans for Undergraduate Students (PLUS)	84.032	7,955,005
 Total Student Financial Assistance Cluster Expenditures		<u>\$ 68,625,195</u>
Other Federal Expenditures:		
Department of Defense	Appendix B	\$ 270,236
Department of Defense - Passthrough	Appendix C	4,343,528
Department of Energy	Appendix B	504,995
Department of Energy - Passthrough	Appendix C	73,440
Department of Health and Human Services	Appendix B	2,309,735
Department of Health and Human Services - Passthrough	Appendix C	154,655
National Aeronautics & Space Administration	Appendix B	1,976,705
National Aeronautics & Space Administration - Passthrough	Appendix C	463,129
National Science Foundation	Appendix B	3,969,916
National Science Foundation - Passthrough	Appendix C	681,333
Miscellaneous Federal Government**	Appendix B	1,181,260
Miscellaneous Federal Government - Passthrough	Appendix C	218,193
Total Other Federal Expenditures*		<u>\$ 16,147,125</u>
 Total Federal Expenditures		<u>\$ 1,368,276,187</u>

* These programs include ARRA expenditures, which are detailed in Appendix A, B, and C.

** Includes Department of Education

The accompanying notes are an integral part of this schedule.

Massachusetts Institute of Technology

Notes to Schedule of Expenditures of Federal Awards

June 30, 2011

1. **Basis of Presentation**

The accompanying schedule of expenditures of federal awards and appendices A, B and C (the "Schedule") summarizes the expenditures of the Massachusetts Institute of Technology (the "Institute") under programs of the federal government for the year ended June 30, 2011. Because the Schedule presents only a selected portion of the activities of the Institute, it is not intended to and does not present the financial position, changes in net assets and cash flows of the Institute. The accompanying Appendix A, B, and C provide detail on the federal awards expended by the Institute.

For purposes of the Schedule, federal awards include all grants, contracts and similar agreements entered into directly between the Institute and agencies and departments of the federal government and all subawards to the Institute by nonfederal organizations pursuant to federal grants, contracts and similar agreements. The information in this schedule is presented in accordance with the provisions of Office of Management and Budget Circular A-133, *Audits of States, Local Governments, and Nonprofit Organizations*. Therefore, certain amounts presented in the Schedule may differ from amounts presented in, or used in preparation of, the consolidated financial statements. CFDA and pass-through numbers are provided when available. Negative amounts represent adjustments to amounts reported in prior years in the normal course of business.

2. **Summary of Significant Accounting Policies for Federal Expenditures**

Expenditures for direct costs are recognized as incurred using the accrual method of accounting and the cost accounting principles contained in OMB Circular A-21, *Cost Principles for Educational Institutions*. Under those cost principles, certain types of expenditures are not allowable or are limited as to reimbursement. Moreover, expenditures include a portion of costs associated with general Institute activities (facilities and administrative costs) which are allocated to awards under negotiated formulas commonly referred to as facilities and administrative rates.

The Institute receives funding from federal government agencies for sponsored research under government grants and contracts. These grants and contracts provide for reimbursement of indirect costs based on rates negotiated with the Office of Naval Research (ONR), the Institute's cognizant federal agency. The Institute's indirect cost reimbursements are based on fixed rates with carryforward of under or over recoveries.

The Defense Contract Audit Agency (DCAA) is responsible for auditing indirect charges to grants and contracts and direct charges to Lincoln Lab grants and contracts in support of ONR's negotiating responsibility. The Institute has negotiated final fixed rates for indirect costs through the 2009 fiscal year.

3. **Federal Student Loan Programs**

The Perkins Loan Program (CFDA #84.038) is administered directly by the Institute and balances and transactions relating to this program are included in the Institute's consolidated financial statements. The amount of Perkins loan principal cancelled during the 2011 fiscal year was \$43,661 (CFDA #84.037).

Massachusetts Institute of Technology
Notes to Schedule of Expenditures of Federal Awards
June 30, 2011

The Federal Direct Stafford (CFDA #84.268) loan programs are not administered by the Institute and balances and transactions relating to these programs are not included in the Institute's consolidated financial statements.

4. Subrecipients

In the Research and Development cluster (Appendix A-1, A-2 and A-3), a total of \$111,250,792 was passed-on to subrecipients.

For other programs (Appendix B and C), a total of \$591,566 was passed-on to subrecipients, as follows:

Project Name	CFDA	Amount Passed to Subrecipients
Can/National Needs Grant: Summer Of Inno	43.000	537,031
Cdio In Aerospace Engineering Education	43.000	54,535

5. Research and Development Capital Projects

In the Research and Development Cluster, the following amount was expended related to capital projects under direct awards received:

Project Name	Department	CFDA	Federal Expenditures
ARRA – Extramural Research Facilities Improvements	NIH	93.702	\$1,052,459
ARRA – Nanostructured Materials	NSF	47.082	\$3,580

Appendix A
Massachusetts Institute of Technology
Schedule of Federal Awards - Worksheet
Federal Research Support
FY 11 Expenditures

<u>Sponsor</u>	<u>Campus Direct</u> (Appendix A-1)	<u>Lincoln Direct</u> (Appendix A-2)	<u>Lincoln Passthrough</u> (Appendix A-2)	<u>Campus Passthrough</u> (Appendix A-3)	<u>Total</u>
<u>Department of Defense:</u>					
Air Force	\$ 11,589,980	\$ 300,098,764	\$ -	\$ -	\$ 311,688,744
Army	28,062,812	47,686,115	-	-	75,748,927
Navy	21,429,165	34,256,502	-	-	55,685,667
DARPA	2,872,323	34,156,297	-	-	37,028,620
MDA	-	65,392,812	-	-	65,392,812
NSA	-	8,698,101	-	-	8,698,101
Classified	-	77,299,737	-	-	77,299,737
Other DOD	2,036,407	146,417,939	-	-	148,454,346
Passthrough	-	-	456,944	42,432,036	42,888,980
Total Department of Defense	65,990,687	714,006,267	456,944	42,432,036	822,885,934
Department of Energy	78,035,259	1,747,144	-	11,217,378	90,999,781
Department of Health & Human Services	135,756,471	19,387,661	864,319	16,977,384	172,985,835
Nat'l Aeronautics & Space Administration	19,523,949	20,395,526	112,571	8,555,748	48,587,794
National Science Foundation	59,814,368	-	66,695	15,462,168	75,343,231
FAA	-	40,282,185	-	-	40,282,185
Nat'l Oceanic & Atmospheric Administration	-	4,732,679	-	-	4,732,679
<u>Other Federal Sponsors:</u>					
Department of Agriculture	47,632	-	-	-	47,632
Department of Commerce	2,846,073	-	-	-	2,846,073
Department of Education	550,125	-	-	-	550,125
Department of Interior	675,788	-	-	-	675,788
Department of Transportation	7,642,816	-	-	-	7,642,816
Environmental Protection Agency	571,754	-	-	-	571,754
Nuclear Regulatory Commission	341,909	-	-	-	341,909
Other	1,366,260	3,047,040	-	-	4,413,300
Passthrough	-	-	-	1,712,791	1,712,791
Total Other Federal Sponsors	14,042,357	3,047,040	-	1,712,791	18,802,188
Total Federal Sponsors	\$ 373,163,091	\$ 803,598,502	\$ 1,500,529	\$ 96,357,505	\$ 1,274,619,627

Note for Appendices A-1, A-3, B and C details: Contracts without CFDA numbers were shown as ".CCC" in the CFDA# column.

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Department of Defense Air Force

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
FA70001020040	Space Engineering	12.800	207,805
Total for 12.800			207,805

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
FA7014-09-D-0011	Task Order 0002: Applying Lean to Mental Heal	12.CCC	522,316
FA7014-09-D-0011	Task Order 0002 Child: Collaborative Initiatives	12.CCC	148,923
FA7014-09-D-0011	Task Order 0004 Child: Collaborative Initiatives	12.CCC	103,500
FA7014-09-D-0011	Task 0003:FIST Implementation Roadmap	12.CCC	50,000
FA7014-09-D-0011	Enterprise Transformation IDIQ: Task 1 Program	12.CCC	40,619
FA7014-09-D-0011	Task Order 0004: Applying Lean to Mental Heal	12.CCC	535,680
FA8650-07-C-7704	Hybrid Insect - MEMS - Schmidt Child	12.CCC	-3,692
FA8650-07-C-7704	Hybrid Insect - MEMS - Supplemental Funds	12.CCC	173,675
FA8650-07-C-7704	Hybrid Insect - MEMS Univ. of Washington Suba	12.CCC	82,253
FA8650-07-C-7704	Hybrid Insect - MEMS Voldman Child	12.CCC	60,072
FA8650-07-C-7704	MEMS - Grad Student Supplemental Funds	12.CCC	33,455
FA8650-07-C-7704	Hybrid Insect - MEMS - Lang Child	12.CCC	13,155
FA8650-07-C-7704	Hybrid Insect - MEMS - Travel	12.CCC	5,241
FA8650-07-C-7704	Hybrid Insect - MEMS Arizona Subaward	12.CCC	90,502
FA8650-08-C-7835	Strained-Se/Strained-GE Heterostructure Tunnel	12.CCC	33,389
FA8650-10-C-7084	Metric of Adaptability for Cyber-Physical System:	12.CCC	213,374
Total for 12.CCC			2,102,462
Total for Air Force			2,310,267

Air Force Office of Scientific Research - AFOSR

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
FA9550-05-1-0321	Computational Models for Belief Revision, Group	12.800	467,614
FA9550-06-1-0470	SI-Laser MURI-California Institute of Tech.	12.800	28,906
FA9550-06-1-0470	SI-Laser MURI-Boston Univ.	12.800	70,633
FA9550-06-1-0470	SI-Laser MURI-Jurgen Michel	12.800	71,077
FA9550-06-1-0470	SI-Laser MURI-U of Delaware	12.800	88,537

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-06-1-0470	SI-Laser MURI-Cornell Univ	12.800	92,875
FA9550-06-1-0470	SI-Laser MURI-Kimerling	12.800	97,631
FA9550-06-1-0470	SI-Laser MURI-Lehigh University	12.800	99,715
FA9550-06-1-0470	ST-Laser MURI-University -Rochester	12.800	182,130
FA9550-06-1-0470	SI-Laser MURI-Stanford University	12.800	93,508
FA9550-08-1-0085	DoD CAP Funds # FY09 Appropriation	12.800	-3,431
FA9550-08-1-0085	DoD CAP Funds # FY10 Appropriation	12.800	52,407
FA9550-08-1-0086	DOD CAP Funds - FY10 Appropriation	12.800	108,815
FA9550-08-1-0143	DoD CAP Funds - FY09 Appropriation	12.800	3,845
FA9550-08-1-0143	DoD Cap Funds - FY10 Appropriation	12.800	50,568
FA9550-08-1-0159	DOD Cap Funds - FY10 Appropriation	12.800	81,557
FA9550-08-1-0159	DOD Cap Funds - FY11 Appropriation	12.800	22,825
FA9550-08-1-0159	DOD Cap Funds - FY08 Appropriation	12.800	-14
FA9550-08-1-0159	DOD Cap Funds - FY09 Appropriation	12.800	-16
FA9550-08-1-0180	DoDCAP Funds FY10 Appropriation-Willsky	12.800	166,031
FA9550-08-1-0304	DoDCAP Funds#FY09 Appropriation-Van Vliet	12.800	-41,964
FA9550-08-1-0304	DoD Cap Funds FY 10 - Van Vliet	12.800	200,000
FA9550-08-1-0304	DoD Cap Funds FY 11 - Van Vliet	12.800	100,817
FA9550-08-1-0321	DoDCAP: Funds FY09 Appropriation - Buehler	12.800	386
FA9550-08-1-0321	DoDCAP: Funds FY10 Appropriation - Buehler	12.800	56,352
FA9550-08-1-0350	DOD Cap Funds - FY 10 Appropriation	12.800	118,248
FA9550-08-1-0350	DOD Cap Funds - AFOSR Child: Parrilo FY10	12.800	94,924
FA9550-08-1-0369	DOD Cap Funds - FY08 Appropriation	12.800	0
FA9550-08-1-0369	DOD Cap Funds - FY10 Appropriation	12.800	144,523
FA9550-08-1-0369	DOD Cap Funds - FY09 Appropriation	12.800	-31,965
FA9550-08-1-0369	DOD Cap Funds - FY11 Appropriation	12.800	25,757
FA9550-08-1-0379	MURI DoD CAP funds FY10 Appropriation.	12.800	556,562
FA9550-08-1-0379	FY10 MURI sub to Purdue Membrane Technology	12.800	163,931
FA9550-08-1-0379	FY09 MURI Sub to Purdue Membrane Technolo	12.800	47,761
FA9550-08-1-0379	DoD CAP funds - FY10 Appropriation - MECH E	12.800	22,068
FA9550-08-1-0379	MURI DoD Cap Funds FY11 Appropriation	12.800	4,553
FA9550-08-1-0379	DoD CAP Funds - FY09 Appropriation	12.800	6,288
FA9550-08-1-0379	DoD CAP Funds - FY08 Appropriation	12.800	-107
FA9550-08-1-0409	DoD Cap - FY09 Appropriation	12.800	35,006
FA9550-08-1-0409	DoD Cap Funds - FY08 Appropriation	12.800	-33,640
FA9550-09-1-0152	FY10 DoD Capped Funds	12.800	91,237

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-09-1-0152	FY09 DoD Capped Funds	12.800	426
FA9550-09-1-0196	DoD CAP Funds FY09 Appropriation	12.800	170,440
FA9550-09-1-0212	Single-Cycle Optical Pulses and Isolated Attosec	12.800	34
FA9550-09-1-0212	FY10 DOD Cap Funds Single-Cycle Optical Puls	12.800	142,854
FA9550-09-1-0212	FY09 DoD Cap Funds Single-Cycle Optical Puls	12.800	-18,760
FA9550-09-1-0239	DoD Cap Funds - FY09 Appropriation	12.800	9,484
FA9550-09-1-0239	DoD Cap Funds - FY10 Appropriation	12.800	137,009
FA9550-09-1-0274	DOD Cap Funds - FY10 Appropriation	12.800	100,562
FA9550-09-1-0274	DOD Cap Funds - FY09 Appropriation	12.800	13,598
FA9550-09-1-0299	DoD Cap-FY10 Appropriation	12.800	8,138
FA9550-09-1-0299	DoD Cap-FY09 Appropriation	12.800	48,192
FA9550-09-1-0330	DOD Cap Funds - FY09 Appropriation	12.800	-3
FA9550-09-1-0330	DoD Cap FY 2011 Appropriation	12.800	42,000
FA9550-09-1-0330	DOD Cap Funds - FY10 Appropriation	12.800	89,141
FA9550-09-1-0363	DoD Cap - FY09 Appropriation (Option 1)	12.800	145,476
FA9550-09-1-0363	Fab Eq - Overmoded W-Band Traveling Wave T	12.800	32,833
FA9550-09-1-0364	Fabricated Equipment - DURIP: Electrospray Up	12.800	15
FA9550-09-1-0364	Fabricated Equipment - DURIP: Vacuum & Spec	12.800	40,790
FA9550-09-1-0364	DOD cap - FY09 Appropriation	12.800	1,876
FA9550-09-1-0420	DoD Cap Funds-FY09 Appropriations-Ozdaglar	12.800	-16
FA9550-09-1-0420	DoD Cap Funds-AFOSR Child: Acemoglu	12.800	-1,962
FA9550-09-1-0420	AFOSR Child: Acemoglu - DoD CAP FY10	12.800	101,952
FA9550-09-1-0420	AFOSR Child: Danleh - DoD CAP FY10	12.800	131,675
FA9550-09-1-0420	DoD Cap FY10 Appropriations - Ozdaglar	12.800	183,204
FA9550-09-1-0438	DoD Cap - FY09 Appropriation	12.800	75,310
FA9550-09-1-0522	DOD Cap Funds-FY10 Appropriations-How	12.800	97,047
FA9550-09-1-0522	DoD Cap Funds FY09 Appropriations-AFOSR Ci	12.800	60,579
FA9550-09-1-0522	DOD Cap Funds-FY09 Appropriations-How	12.800	56,737
FA9550-09-1-0522	DoD Cap Funds FY10 Appropriations-AFOSR Ci	12.800	46,770
FA9550-09-1-0522	DoD Cap Funds FY09 Appropriations-AFOSR C	12.800	35,594
FA9550-09-1-0522	DoD Cap Funds FY10 Appropriations-AFOSR C	12.800	79,478
FA9550-09-1-0606	DoD Cap - FY09 Appropriation	12.800	125,309
FA9550-09-1-0627	FY10 DoD Capped Funds	12.800	194,336
FA9550-09-1-0627	Acquiring and Exploiting Rich Casual Models for	12.800	10,346
FA9550-09-1-0627	FY09 DoD Capped Funds	12.800	9,850
FA9550-09-1-0663	Multiscale, Intermittent, Turbulent Fluctuations in	12.800	33,177

**Appendix A-1 - Detail
Massachusetts Institute of Technology
Federal Research Support - On Campus
Fiscal 2011 Expenditures**

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-09-1-0663	Multiscale, Intermittent, Turbulent Fluctuations in	12.800	67,479
FA9550-09-1-0681	Durip 09 High Resolution, Combined Confocal M	12.800	192
FA9550-09-1-0681	DOD Cap - FY09 Appropriation	12.800	11,999
FA9550-09-1-0689	DoD FY 2011 Funding- Uncapped	12.800	2,264
FA9550-09-1-0689	DoD Cap Funds - FY09 Appropriation	12.800	-929
FA9550-09-1-0689	DoD Cap Funds - FY10 Appropriation	12.800	308,224
FA9550-09-1-0700	DOD Cap Funds FY11 - Strano	12.800	33,864
FA9550-09-1-0700	DODCap Funds FY09 Appropriation - Strano	12.800	87,463
FA9550-10-1-0063	UltraFast Optics: Fujimoto Child	12.800	111,201
FA9550-10-1-0063	Ultrafast Optics: Kolodziejwski Child	12.800	44,199
FA9550-10-1-0063	UltraFast Optics: Kaertner Child	12.800	62,791
FA9550-10-1-0063	DoD Cap Funds - FY10 Appropriation	12.800	147,913
FA9550-10-1-0122	Dod Cap: Fy10 Appropriation	12.800	192,074
FA9550-10-1-0242	DoD Cap Funds - FY 10 Appropriation	12.800	95,708
FA9550-10-1-0337	Fabricated Equipment - Cold Atom Optical Lattic	12.800	61,793
FA9550-10-1-0337	DoD Cap Funds - FY 10 Appropriation	12.800	123,320
FA9550-10-1-0395	DoD Cap Funds - FY10	12.800	179,078
FA9550-10-1-0412	DoD Cap - FY10 Appropriation	12.800	103,827
FA9550-10-1-0437	DoD FY11 child - 6922649 - Jailliet	12.800	40,474
FA9550-10-1-0471	13.5 nm High Harmonic Generation Driven by a `	12.800	0
FA9550-10-1-0471	Fabricated Equipment - NOPA 515MM	12.800	50,489
FA9550-10-1-0471	DoD Cap Funds - FY10 Appropriation	12.800	90,242
FA9550-11-1-0039	Tethered Environmental Reconditioning Satellite	12.800	1,111
FA9550-11-1-0059	Advanced Nanostructures for Two-Phase Fluid a	12.800	16,088
Total for 12.800			7,370,305

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-07-1-0101	Advanced Technologies fo Structural and Functio	12.630	111,408
FA9550-09-1-0056	DoD Cap Funds - FY09 Appropriation	12.630	17,894
FA9550-09-1-0056	Fabricated Equipment: MIT Orbital Transfer Vehi	12.630	25,899
FA9550-10-1-0551	DoD Cap - FY10 Appropriation	12.630	65,306
FA9550-11-1-0011	DoD Cap Funds FY10 Appropriations	12.630	29,731
Total for 12.630			250,238
Total for Air Force Office of Scientific Research - AFOSR			7,620,543

Air Force Research Laboratory

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

<p>Contract Number FA8750-09-1-0152 FA8750-10-1-0076 FA8750-11-2-0009</p>	<p>Government Contract Title FOS: A Factored Operating System for High Ass Defining and Demonstration Capabilities for Expt Biologically Inspired Circuits for Visual Search ar</p>	<p>CFDA# 12.300 12.300 12.300</p>	<p>FY Expenses 12,538 93,136 4,223</p>
Total for 12.300			109,897
<p>Contract Number FA8650-05-2-5706 FA8650-05-2-5706 FA8750-08-1-0088</p>	<p>Government Contract Title LAI Phase V: Year 3 DMCO: Achieving Excellence in Enterprises Dynamo REA: Secure Execution or Multi-Core P</p>	<p>CFDA# 12.800 12.800 12.800</p>	<p>FY Expenses 410,833 459,664 -26,468</p>
Total for 12.800			844,029
<p>Contract Number FA8650-05-C-7262 FA8650-10-C-7083</p>	<p>Government Contract Title Child - Poggio DOD FY10 Appropriations</p>	<p>CFDA# 12.CCC 12.CCC</p>	<p>FY Expenses 148,889 212,717</p>
Total for 12.CCC			361,606
<p>Contract Number FA8750-05-2-0274 FA8750-05-2-0274 FA8750-05-2-0274 FA8750-05-2-0274 FA8750-05-2-0274 FA8750-05-2-0274 FA8750-06-2-0189 FA8750-07-2-0031 FA8750-07-2-0031</p>	<p>Government Contract Title Winston Child for Sajit Rao Add-On CHIP Child - Shrobe CHIP-Winston Comprehensive Human Intelligence Project (CHI CHIP-Bender CHIP Child - Winston Catriona Kennedy Child Collaborative Learning for Security and Repair in DHS Child End-to-End Semantic Accountability</p>	<p>CFDA# 12.910 12.910 12.910 12.910 12.910 12.910 12.910 12.910 12.910</p>	<p>FY Expenses -9,017 -509 -230 -30 200 386 63,514 29,162 -1,347 7,462</p>
Total for 12.910			89,591
Total for Air Force Research Laboratory			1,405,123
Air Force Surgeon General			
<p>Contract Number FA7014-08-C0005</p>	<p>Government Contract Title Economics Based Human Systems Integration</p>	<p>CFDA# 12.CCC</p>	<p>FY Expenses 35,511</p>

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

35,511

Total for 12.CCC

35,511

Total for Air Force Surgeon General

Army

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
W911NF-04-1-0353	Site Specific Incorporation of Amino Acid Analog	12.431	2,895
W911NF-04-1-0431	GHOST-GigaHertz Optical Sampling Technology	12.431	15,596
W911NF-09-1-0059	Athermal Photonic Circuits AphoCs	12.431	129,265
W911NF-09-1-0170	Electron Spectrometer for Time and Angle Resol	12.431	-1,360
W911NF-10-1-0059	New Treatments - Task 4 - Neuroimaging of Rev	12.431	583,084
W911NF-10-1-0059	New Treatments - Task 2 - Coimbra Subcontract	12.431	420,046
W911NF-10-1-0059	New Treatments for Stress-induced Dysregulatio	12.431	-2,414
W911NF-10-1-0059	New Treatments - Task 3 - Longitudinal Neuroim	12.431	241,236
W911NF-10-1-0059	New Treatments - Task 6 - Amygdala Recording	12.431	180,379
W911NF-10-1-0059	New Treatments - Task 7 - Stressor Interaction	12.431	115,871
W911NF-10-1-0059	New Treatments - Task 5 - Striatal Recordings	12.431	338,160
W911NF-10-1-0059	New Treatments - Task 1 - Gene Expression	12.431	344,498

Total for 12.431

2,367,256

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
CONTRACT NO. W911QY-09-C-0066	A Neuroscience Approach to Accelerated Learnii	12.CCC	405,092
W911QY-08-C-0066	A Neuroscience Approach to Accelerated Learnii	12.CCC	33,081
W911QY-10-P-0606	Research Solutions onto Electrospun Nano	12.CCC	20,500
W9124Q-09-P-0230	Prescriptive and Adaptive Testing of Framework	12.CCC	489,440
W9132V-11-P-0008	Classification and Modeling of Vegetation from U	12.CCC	6,529

Total for 12.CCC

954,642

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
W31P4Q-10-1-0005	DoD Cap - FY09 Appropriation	12.910	775,640
W31P4Q-10-1-0005	Fabricated Equipment - Mini Vacuum Chamber	12.910	9,083
W31P4Q-10-1-0005	COMPACT MECHANICAL AND ION PUMPING	12.910	10,795
W31P4Q-10-1-0005	DoD Cap - FY09 Akinwande	12.910	699,150
W911QY-05-1-0002	MGA Child Account - Administrative	12.910	-454
W911QY-05-1-0002	MGA Child Account - Schmidt	12.910	454
W911QY-05-1-0002	MGA Child Account - Akinwande	12.910	4,627

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

<u>Contract Number</u> W911QY-05-1-0002	<u>Government Contract Title</u> Sphere Vacuum System	<u>CFDA#</u> 12.910	<u>FY Expenses</u> 51,803
Total for 12.910			1,551,098

<u>Contract Number</u> W81XWH-09-1-0240	<u>Government Contract Title</u> An RNAI-Enhanced Circuit for Cancer-Specific Di	<u>CFDA#</u> 12.420	<u>FY Expenses</u> 220,558
Total for 12.420			220,558
Total for Army			5,093,554

Army Aviation and Missile Command

<u>Contract Number</u> W31P4Q-09-1-0007	<u>Government Contract Title</u> Fabricated Equipment-Analogue to a Heat Sink	<u>CFDA#</u> 12.910	<u>FY Expenses</u> 438
W31P4Q-09-1-0007	Fabricated Equipment: Two-Phase Flow Visualiz	12.910	968
W31P4Q-09-1-0007	Fabricated Equipment - High Vacuum Filling Rig	12.910	9,468
W31P4Q-09-1-0007	Dod Cap Funds - FY 10 Appropriation	12.910	268,211
W31P4Q-09-1-0007	DoD Cap Funds-FY09 Appropriation	12.910	410,748
W31P4Q-09-1-0007	Phump JHB	12.910	200,161
Total for 12.910			889,994
Total for Army Aviation and Missile Command			889,994

Army Corps of Engineers

<u>Contract Number</u> W9-12HQ-06-C-0017	<u>Government Contract Title</u> Using Passive Polyethylene Samplers to Evaluat	<u>CFDA#</u> 12.431	<u>FY Expenses</u> -594
W912HQ-09-C-0008	Passive PE Sampling of In Situ Remediation of C	12.431	193,667
W912HQ-10-C-0005	Robust Means for Estimating Black Carbon-Wate	12.431	136,905
W912HZ-11-C-0016	Sustainable Cement Hydrates under Extreme En	12.431	1,643
Total for 12.431			331,621
Total for Army Corps of Engineers			331,621

Army Research Office

<u>Contract Number</u> W911NF-05-1-0469	<u>Government Contract Title</u> Center for NMR Quantum Information Processin	<u>CFDA#</u> 12.431	<u>FY Expenses</u> 2,346
W911NF-06-1-0101	Ultrasensitive Chem-Bio-Optical Sensors on Sm	12.431	66,906

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-06-1-0291	Differential multiscale modeling of chemically cor	12.431	-323
W911NF-07-1-0035	Investigation of Tissue-Level mechanisms of Prir	12.431	445,952
W911NF-07-1-0035	Child Account	12.431	6,826
W911NF-07-1-0035	Child Account - 6914602 Aero&Astro	12.431	23,122
W911NF-07-1-0035	Johnson TBI Child	12.431	-35,158
W911NF-07-1-0139	Kinetics and Mechanisms of the Destruction of T	12.431	194,802
W911NF-07-1-0493	Quantum Emulations-CNRS	12.431	139,600
W911NF-07-1-0493	Quantum Emulations of New Materials Using Ultri	12.431	311,249
W911NF-07-1-0493	Quantum Emulations - LMU	12.431	285,845
W911NF-07-1-0493	Quantum Emulations - Toronto	12.431	239,225
W911NF-07-1-0493	Quantum Emulations-Amherst	12.431	114,747
W911NF-07-1-0493	Quantum Emulations-Innsbruck	12.431	109,688
W911NF-07-1-0493	Program-Wide Tasks	12.431	-27,093
W911NF-07-1-0493	Zwierlein Research	12.431	-13,359
W911NF-07-1-0493	Quantum Emulations-Harvard	12.431	117,185
W911NF-07-1-0493	Fabrication: Cold Atom Source	12.431	1,559
W911NF-07-1-0493	Fabricated Equipment - Strongly Interacting Fern	12.431	36,752
W911NF-07-1-0493	Fabricated Equipment - Imbalanced Fermi Mixtur	12.431	77,486
W911NF-07-1-0493	Quantum Emulations-Austin	12.431	95,463
W911NF-07-1-0496	Atom Interferometry on Atom Chips - A Novel Ap	12.431	-2,287
W911NF-07-1-0540	Self-Supervised Mobility-Based Terrain Classific	12.431	150,285
W911NF-07-1-0568	Limitations and Capabilities of Control Under Cor	12.431	25,057
W911NF-07-1-0654	Standoff Detection of Explosives Using Luminesc	12.431	227,120
W911NF-08-1-0098	DOD Cap Funds-FY09 Appropriation	12.431	164,531
W911NF-08-1-0228	Fabricated Equipment - Programmable Matter F&	12.431	15,174
W911NF-08-1-0228	DOD CAP Funds - FY08, 09, 10 Appropriations /	12.431	736,137
W911NF-08-1-0228	Programmable Matter: Creating Systems that Ca	12.431	3
W911NF-08-1-0254	Erik Demaine, Phase II Milli-Biology Research	12.431	37
W911NF-08-1-0254	DOD CAP Funds FY08 Appropriation MilliBiology	12.431	2,139
W911NF-08-1-0254	DOD CAP Funds FY10 Appropriation MilliBiology	12.431	28,968
W911NF-08-1-0254	DOD CAP Funds FY09 Appropriation MilliBiology	12.431	735,301
W911NF-08-1-0254	Erik Demaine Milli. Biology Research	12.431	24,947
W911NF-08-1-0254	Milli-Biology: Programmed Assembly of Enginee	12.431	2,319
W911NF-08-1-0337	Fabricated Equipment - Single Photon Detection	12.431	2,388
W911NF-08-1-0337	Fabricated Equipment - Cryogenic Test Apparatu	12.431	32,948
W911NF-08-1-0337	DOD Cap Funds - FY09 Appropriation	12.431	133,259

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-08-1-0337	Fabricated Equipment - Closed Cycle Cryostat U	12.431	501
W911NF-08-1-0337	DOD Cap Funds - FY08 Appropriation	12.431	-24,776
W911NF-08-1-0458	Dod Cap Funds - FY10 Appropriation	12.431	61,866
W911NF-08-1-0458	DOD Cap Funds - FY 08 Appropriation	12.431	4,242
W911NF-08-1-0458	Extremely High Resolution Spectroscopy of Oxid	12.431	-62
W911NF-08-1-0458	DOD Cap Funds - FY09 Appropriation	12.431	7,973
W911NF-09-1-0157	DoD Cap Funds-FY09 Appropriations	12.431	15,570
W911NF-09-1-0222	DoD Cap Funds	12.431	148,723
W911NF-09-1-0222	DoD Cap Funds -FY09 Appropriation	12.431	80,749
W911NF-09-1-0317	DOD Cap FUND - FY09 Appropriation	12.431	36,432
W911NF-09-1-0317	Fabricated Equipmnet-Second Generation Omni	12.431	4,322
W911NF-09-1-0334	DOD Cap - FY10 Appropriation	12.431	83,758
W911NF-09-1-0334	DOD cap- FY09 Appropriation	12.431	61,055
W911NF-09-1-0334	Design and Control of Omnidirectional Unmanne	12.431	3,598
W911NF-09-1-0340	RAM Research	12.431	81,323
W911NF-09-1-0340	Stojanovic Research	12.431	98,536
W911NF-09-1-0340	Optically Banked DRAM with Monolithic CMOS F	12.431	49,383
W911NF-09-1-0340	Fabricated Equipment - Vertically - coupled Optic	12.431	11,313
W911NF-09-1-0340	Optical Isolator Measurement Setup	12.431	1,534
W911NF-09-1-0411	Chalcogenide Glasses for Ultra-Low Loss Waveç	12.431	119,777
W911NF-09-1-0422	DOD Cap- FY09 Appropriation	12.431	-210
W911NF-09-1-0422	DOD Cap- FY10 Appropriation	12.431	90,724
W911NF-09-1-0422	DOD cap-FY08 Appropriation	12.431	-4,248
W911NF-09-1-0438	The Design of Quantum Algorithms Using Physic	12.431	148,695
W911NF-09-1-0448	DoD Cap Funds -FY10 Appropriation: Malone	12.431	33,735
W911NF-09-1-0448	DoD Cap Funds -FY09 Appropriation: Malone	12.431	107,753
W911NF-09-1-0480	DoD Cap - FY09 Appropriation	12.431	16,103
W911NF-09-1-0480	DoD Cap - FY10 Appropriation	12.431	56,060
W911NF-09-1-0542	Asynchronous Logic Automata for Large Scale C	12.431	131,861
W911NF-09-1-0556	DODCap funds FY09 Appropriation - Ozdaglar	12.431	50,571
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - Daniel FY10	12.431	81,372
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - Megretski F	12.431	59,097
W911NF-10-1-0088	DoD Cap - FY10 Appropriation	12.431	107,220
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - Sodini FY10	12.431	4,393
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - CMU FY10	12.431	119,640
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - Avniel FY10	12.431	133,750

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Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - Dawson FY1	12.431	291,616
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - Stojanovic F	12.431	141,153
W911NF-10-1-0088	Asymmetric Multilevel Outphasing - Admin FY10	12.431	20,527
W911NF-10-1-0119	Dod Cap - FY10 Appropriation	12.431	114,838
W911NF-10-1-0119	Fabrication: Magneto-Optical Trap Setup	12.431	80,157
W911NF-10-1-0119	Nanoscale Plasmonic Structures for Trapping an	12.431	0
W911NF-10-1-0127	DoD FY10 Appropriation - Buehler	12.431	63,180
W911NF-10-1-0412	Memory System with Monolithic CMOS Photonic	12.431	82,236
W911NF-10-1-0412	Stojanovic Project	12.431	86,145
W911NF-10-1-0412	University of Colorado	12.431	93,254
W911NF-10-1-0412	Ram Project	12.431	122,216
W911NF-10-1-0412	Smith Project	12.431	56,114
W911NF-10-1-0412	Fabricated Equipment: Imaging System	12.431	32,767
W911NF-10-1-0412	Chandrakasan Project	12.431	27,504
W911NF-10-1-0412	Watts Project	12.431	73,797
W911NF-10-1-0412	International Computer Science Institute	12.431	56,760
W911NF-10-1-0430	DoD Cap FY 10 Appropriation	12.431	145,760
W911NF-10-1-0430	Fab Equip: Two Nondegenerate Optical Parame	12.431	12,571
W911NF-10-1-0442	DoD FY11 UNCAPPED: Enhancing Sub-Bandgap	12.431	15,405
W911NF-10-1-0442	Enhancing Sub-Bandgap Quantum Efficiency in |	12.431	83,257
W911NF-10-1-0467	DOD FY10 Appropriations	12.431	37,459
W911NF-10-2-0049	Bilayer Graphene: Growth, Characterization and	12.431	1,713
W911NF-10-2-0049	ARL - Dresselhaus	12.431	18,080
W911NF-10-2-0049	ARL - Palacios	12.431	37,511
W911NF-10-2-0049	ARL - Kong	12.431	61,231
W911NF-10-2-0065	ARL - Jarillo-Herrero	12.431	39,011
W911NF-10-2-0065	The Mind of the Mind's Eye	12.431	98,469
W911NF-11-1-0096	DOD Cap - FY 11 Appropriation	12.431	113,862
W911QX-09-P-0009	Optimizing Nanocrystalline Metals: Alloying Perm	12.431	54,467
Total for 12.431			8,514,539
Total for Army Research Office			8,514,539

ARO-ISN UARC

Contract Number	Government Contract Title	CFDA#	FY Expenses
DAAD19-02-D-0002	FY 2007 Technology Transition for the ISN	12.CCC	709
DAAD19-02-D-0002	Technology Transition for the ISN	12.CCC	500

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Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-07-D-0004	Outreach for the ISN	12.CCC	250,777
W911NF-07-D-0004	ISN 6.2-SMM Fibers for Multianalyte Explosive	12.CCC	29,425
W911NF-07-D-0004	ISN 6.2-Thin Profile Imager: V. Bulvoic	12.CCC	5,970
W911NF-07-D-0004	ISN 6.2-Thin Profile Imager: M. Bawendi	12.CCC	0
W911NF-07-D-0004	ISN 6.2-Low Skin Depth Transparent Conductive	12.CCC	-17,552
W911NF-07-D-0004	FY2009: ISN Technology 6.2	12.CCC	417,603
W911NF-07-D-0004	ISN Management (no F&A)	12.CCC	331,399
W911NF-07-D-0004, T.O. 1	ISN Management & Outreach Task Order 1	12.CCC	79,690
W911NF-07-D-0004, T.O. 3	ISN 1.2.1 - Integrated Microfluidic Synthesis of N	12.CCC	278,101
W911NF-07-D-0004, T.O. 3	ISN 1.2.3 - Smart Quantum Dot Sensors	12.CCC	322,473
W911NF-07-D-0004, T.O. 3	ISN 1.5.1 - Functional and Responsive Elastome	12.CCC	171,408
W911NF-07-D-0004, T.O. 3	ISN 1.3.1 Engineering Carbon Nanotubes for Tr	12.CCC	218,771
W911NF-07-D-0004, T.O. 3	ISN 1.4.1 - Active Multimaterial Fibers	12.CCC	270,046
W911NF-07-D-0004, T.O. 3	ISN 1.2.2 - Quantum Dot Photodetectors	12.CCC	302,769
W911NF-07-D-0004, T.O. 3	ISN 1.1.1 - Surface Active Multifunctional Fabrics	12.CCC	259,956
W911NF-07-D-0004, T.O. 4	ISN 2.2.1 - New Controlled Release Films and Fi	12.CCC	235,964
W911NF-07-D-0004, T.O. 4	ISN 2.3.4 - Low-power, Portable Electro-microflu	12.CCC	0
W911NF-07-D-0004, T.O. 4	ISN 2.3.2 - Non-invasive Delivery and Sensing	12.CCC	25,771
W911NF-07-D-0004, T.O. 4	ISN 2.3.1 - MEMS Based Device for the Preventi	12.CCC	172,241
W911NF-07-D-0004, T.O. 4	ISN 2.2.2 - Environment-Sensitive Micellar Nano	12.CCC	175,597
W911NF-07-D-0004, T.O. 4	ISN 2.3.3 - Integrated Amplifying Fluorescent Po	12.CCC	210,713
W911NF-07-D-0004, T.O. 4	ISN 2.1.1 - Nanostructured Actuators: First Princ	12.CCC	147,861
W911NF-07-D-0004, T.O. 5	ISN 3.1.2 - Ultra Light Weight Micro Trusses and	12.CCC	435,362
W911NF-07-D-0004, T.O. 5	ISN 3.1.1 - Molecular Approaches to Mechanical	12.CCC	200,441
W911NF-07-D-0004, T.O. 5	ISN 3.2.1 - Materials and Structures for Blast Dai	12.CCC	677,490
W911NF-07-D-0004, T.O. 5	ISN 3.3.1 - Light Nanocrystalline Alloy Fibers for	12.CCC	333,471
W911NF-07-D-0004, T.O. 5	ISN 3.1.3 - Nanomechanical Heterogeneity As A	12.CCC	246,693
W911NF-07-D-0004, T.O. 5	ISN 3.1.5 - Nanoscale Superelastic Alloys for Int	12.CCC	163,045
W911NF-07-D-0004, T.O. 5	ISN 3.1.4 - Top Down Placement and Assembly	12.CCC	298,115
W911NF-07-D-0004, T.O. 5	ISN 3.2.2 - Nanoscale Chemomechanics of Soft	12.CCC	127,309
W911NF-07-D-0004, T.O. 6	ISN 4.1.1 - Chemically Vapor Deposited (CVD) F	12.CCC	268,904
W911NF-07-D-0004, T.O. 6	ISN 4.1.3 - Virucidal Coatings	12.CCC	252,115
W911NF-07-D-0004, T.O. 6	ISN 4.3.1 - Nanostructured Origami	12.CCC	204,609
W911NF-07-D-0004, T.O. 6	ISN 4.2.1 - Fluorescence Microscopy at Sub 5-nr	12.CCC	92,575
W911NF-07-D-0004, T.O. 6	ISN 4.1.2 - Switchable Surfaces and Novel Elast	12.CCC	157,018
W911NF-07-D-0004, T.O. 7	ISN 5.2.1 - Fabric Systems That See	12.CCC	54,402

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Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-07-D-0004, T.O. 7	ISN 5.3.1 - Nanophotonics for the Enhancement	12.CCC	153,924
W911NF-07-D-0004, T.O. 7	ISN 5.1.2 Graphene Devices for Future MultiFun	12.CCC	45,058
W911NF-07-D-0004, T.O. 7	ISN 5.1.1 - Nanoelectronics	12.CCC	197,798
W911NF-07-D-0004, T.O. 7	ISN 5.4.1 - Nanophotonics for Enhancement of N	12.CCC	386,399
W911NF-07-D-0004, T.O. 7	ISN 5.1.2 Graphene Devices for Future Multifunc	12.CCC	138,296
W911NF-07-D-0004, T.O. 8	Biometric Living Cell Systems for Detection	12.CCC	16,640
W911NF-07-D-0004, T.O. 8	Testing of Novel ISN Sensing Devices by the EC	12.CCC	3,678
W911NF-07-D-0004, T.O. 8	Tuning the Optical Properties of Multi-Layered Ni	12.CCC	48,154
W911NF-07-D-0004, T.O. 8	High Performance Polymer Nanofibers for Ballist	12.CCC	43,532
W911NF-07-D-0004, T.O. 8	Development of Superoleophobic Coated Mater	12.CCC	64,536
W911NF-07-D-0004, T.O. 8	3D Hydrogel Scaffolding for Cell and Tissue Sup	12.CCC	57,328
W911NF-07-D-0004, T.O. 8	SOCOM Project : SOF Photonic Bandgap Fiber *	12.CCC	-4,159
W911NF-07-D-0004, T.O. 9	Low Skin Depth Transparent Conductive Electro	12.CCC	155,913
W911NF-07-D-0004, T.O. 9	FY 2010: ISN Technology 6.2	12.CCC	1,340,797
W911NF-07-D-0004, T.O. 9	(SIMM) Fibers for Multianalyte Explosives Sensir	12.CCC	169,808
W911NF07-D-0004, T.O. 2	ISN Research Enrichment Task Order 2	12.CCC	1,617,310
W911NF07-D-0004, T.O. 2	Fabrication: Fiber Draw Tower	12.CCC	-71
W911NF07-D0004, T.O. 2	Experimental Capabilities to Enable the Bio-Inspi	12.CCC	114,273
	Total for 12.CCC		11,950,955
	Total for ARO-ISN UARC		11,950,955

Asian Office of Aerospace Research and Development

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA2386-10-1-4069	DOD FY10 Appropriations	12.800	66,083
FA2386-10-1-4135	DOD FY10 Appropriations	12.800	152,453
	Total for 12.800		218,536
	Total for Asian Office of Aerospace Research and Development		218,536

Defense Advanced Research Projects Agency

Contract Number	Government Contract Title	CFDA#	FY Expenses
HR-0011-09-1-0046	High Amperage Storage Device	12.431	-49,596
	Total for 12.431		-49,596

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Contract Number	Government Contract Title	CFDA#	FY Expenses
HR0011-05-C-0155	Kolodziejki/lppen - DARPA Supplemental Fundi	12.CCC	16,492
HR0011-05-C-0155	Kaertner/lppen DARPA Supplemental Funding C	12.CCC	42,643
HR0011-05-C-0155	Ultrahigh Resolution Sensing and Imaging With /	12.CCC	39,323
HR0011-05-C-0155	InPlane Subcontract	12.CCC	28,134
HR0011-05-C-0155	lppen/lppen DARPA Supplemental Funding Child	12.CCC	46,872
HR0011-05-C-0155	U.C. Davis Subcontract	12.CCC	446,646
HR0011-05-C-0155	Kaertner Child	12.CCC	-8,480
HR0011-05-C-0155	Fabrication: Ultra-High Fundamental Repetition F	12.CCC	859
HR0011-09-C-0012	Microfluidic Integrated Transduction Realnose	12.CCC	-1,885
HR0011-09-C-0012	Child - Rich	12.CCC	-5,144
HR0011-09-C-0012	Child-Manu Prakash	12.CCC	-33,064
HR0011-09-C-0131	Future Optical Network Study - Task II - Integrat	12.CCC	146,408
HR0011-10-9-0009	Angstrom: Main Core	12.CCC	54,539
HR0011-10-9-0009	Angstrom: MPC Child	12.CCC	118,703
HR0011-10-9-0009	Angstrom: Zetabrieiks / Learning	12.CCC	116,241
HR0011-10-9-0009	Angstrom: MTL Child	12.CCC	80,739
HR0011-10-9-0009	Angstrom: Coherence	12.CCC	60,803
HR0011-10-9-0009	Angstrom: Adaptive Net	12.CCC	59,586
HR0011-10-9-0009	Angstrom: SEFOS, ATAC, PEP, Graphite Sim	12.CCC	55,393
HR0011-10-9-0009	Angstrom: DMC / Data Tagging	12.CCC	210
HR0011-10-9-0009	Angstrom: Management	12.CCC	50,116
HR0011-10-9-0009	Angstrom: Goal Programming	12.CCC	38,474
HR0011-10-9-0009	Angstrom: RLE Child - Optical / EE Links	12.CCC	38,341
HR0011-10-9-0009	Angstrom: Network Links	12.CCC	31,398
HR0011-10-9-0009	The Angstrom Project: Universal Technologies fo	12.CCC	2,788
HR0011-10-9-0009	Angstrom: Subcontracts	12.CCC	346,428
HR0011-10-C-0028	Sensor System Design and Autonomy for Long-T	12.CCC	-4,208
HR0011-10-C-0028	Fabricated Equipment - Data Collection Robotic I	12.CCC	-122
Total for 12.CCC			1,768,233

Contract Number	Government Contract Title	CFDA#	FY Expenses
HR0011-07-1-0006	Integrally Packaged 3D Microbatteries	12.910	301,365
HR0011-07-1-0006	Draper Lab Subcontract - 6914864	12.910	379,824
HR0011-08-1-0079	Real-World Interaction: Moving Beyond the Mous	12.910	-3,115
HR0011-08-1-0079	Glass-Child	12.910	1,855
HR0011-09-1-0048	Absolute Algebraic Geometry, Arithmetic Cohom	12.910	139,835

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Massachusetts Institute of Technology
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<u>Contract Number</u> N10AP20038 W91CRB-10-C-0135	<u>Government Contract Title</u> Perceptual Priming for Language Learning Hydrostatic Bearings for Support of Large Robot	<u>CFDA#</u> 12.910 12.910	<u>FY Expenses</u> 237,524 85,907
	Total for 12.910		1,143,195

<u>Contract Number</u> HR0011-10-9-0009	<u>Government Contract Title</u> Angstrom: Locality	<u>CFDA#</u> 12.CCC	<u>FY Expenses</u> 10,490
	Total for 12.CCC		10,490
	Total for Defense Advanced Research Projects Agency		2,872,322

Defense Threat Reduction Agency

<u>Contract Number</u> HDTRA1-07-1-0004 HDTRA1-09-01-0012 HDTRA1-09-01-0012 HDTRA1-09-1-0012 HDTRA1-09-1-0042 HDTRA1-09-1-0042 HDTRA1-10-1-0001 HDTRA1-10-1-0032 HDTRA1-10-1-0032	<u>Government Contract Title</u> Robust Architectures for Networks under Attack University of Michigan Subcontract Hatton Child Account Iterative Experimental and Computational Appro: Fab Eq - High Intensity Ion Source Tested Stand Frontier Studies of Single Stage Superconducting DoD Cap Funds - FY 10 Appropriation DoD Cap Funds-FY10 Appropriations - Theoretic DoD Cap Funds-FY11 Appropriations	<u>CFDA#</u> 12.351 12.351 12.351 12.351 12.351 12.351 12.351 12.351 12.351	<u>FY Expenses</u> 100,105 112,430 256,167 220,879 6,844 310,500 233,394 27,130 223,424
	Total for 12.351		1,490,873

<u>Contract Number</u> HDTRA1-07-1-0015	<u>Government Contract Title</u> Composite-Nanoparticle Thermal History Sensor	<u>CFDA#</u> 12.000	<u>FY Expenses</u> 13,290
	Total for 12.000		13,290
	Total for Defense Threat Reduction Agency		1,504,163

National Geospatial Intelligence Agency

<u>Contract Number</u> HM1582-05-C-0011	<u>Government Contract Title</u> Exploiting Statistical Regularities to Interpret the v	<u>CFDA#</u> 12.CCC	<u>FY Expenses</u> 30,983
	Total for 12.CCC		30,983
			30,983

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Total for National Geospatial Intelligence Agency

National Reconnaissance Office

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NRD000-10-C-0080	High delta-V Ion Electro Spray Propulsion system	12.CCC	148,477
NRO 000-08-C-0167	Responsive Systems Method for Performance at	12.CCC	111,094
NRO000-09-C-0349	Molecular Dynamics Simulations for Microelectro	12.CCC	241,691
Total for 12.CCC			501,262
Total for National Reconnaissance Office			501,262

Naval Postgraduate School

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
N00244-09-1-0064	DOD Cap Funds - FY09 Appropriation	12.300	478,321
N00244-09-1-0064	DOD Cap Funds - FY10 Appropriation	12.300	178,961
N00244-10-1-0023	Application of Prediction Markets to Cost Estimat	12.300	20,788
N00244-10-1-0070	TRL-Based Modeling for Cost and Schedule Unc	12.300	43,503
Total for 12.300			721,573
Total for Naval Postgraduate School			721,573

Navy - ONR

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
MURI N00014-07-1-0749	MURI: Stanford Subaward	12.300	22,149
MURI N00014-07-1-0749	MURI: Cynthia Breazeal Child Account: Cognitivi	12.300	206,801
MURI N00014-07-1-0749	MURI: UMass Subaward	12.300	119,483
MURI N00014-07-1-0749	MURI: U Washington Subaward	12.300	103,522
MURI N00014-07-1-0749	MURI: Vanderbilt Subaward	12.300	87,517
MURI N00014-07-1-0749	MURI: Jonathan How Child Account: Cognitively	12.300	81,667
MURI N00014-07-1-0749	MURI: Nick Roy Child Account: Cognitively Comj	12.300	78,611
MURI N00014-07-1-0749	MURI: Deb Roy Child Account: Cognitively Comj	12.300	16,708
MURI N00014-07-1-0749	Breazeal Fab Equipment: MDS Robot	12.300	15,192
N00014-02-1-0862	Free Surface Hydrodynamics of High-Speed Ves	12.300	10,279
N00014-05-1-0148	Combinatorial Optimization Under Uncertainty	12.300	37,168
N00014-05-1-0244	Feature-Based Target Reacquisition Using Low-t	12.300	148,607
N00014-06-1-0027	A Direct Simulation-Based Study of Radiance in	12.300	30,759

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-06-1-0043	DOD Cap - FY10 Appropriation	12.300	159,211
N00014-06-1-0043	FY 2009 DoD Cap Appropriation Funds	12.300	66,185
N00014-06-1-0043	Ship Hull Inspection with Frame-and-Feature Bas	12.300	111,284
N00014-06-1-0043	Integrated Feature-Relative Navigation and Cont	12.300	548
N00014-06-1-0043	Quadropter	12.300	360
N00014-06-1-0459	Response of Energetic Materials to Dynamic St	12.300	841,464
N00014-06-1-0516	DURIP: Mobile, Dextrous, Social Robots to Supp	12.300	-2,936
N00014-07-1-0202	Orthogonal Frequency-Division Multiplexing for F	12.300	26,642
N00014-07-1-0230	DOD Cap Funds - FY10 Appropriation	12.300	170,312
N00014-07-1-0230	Human Supervisory Control Models for Coman a	12.300	-200
N00014-07-1-0326	DoD Cap - FY09 Appropriation	12.300	60,472
N00014-07-1-0326	Dod Cap- FY10 Appropriation	12.300	233,714
N00014-07-1-0326	FY11 UNCAPPED Allocation: Oceanographic Ve	12.300	755
N00014-07-1-0326	Oceanographic Variability and the Performance c	12.300	168,349
N00014-07-1-0397	Recruiting the Next Generation of Naval Architec	12.300	-198
N00014-07-1-0473	Interdisciplinary Modeling and Dynamics of Archi	12.300	51,672
N00014-07-1-0614	Lengthscale Issues in the Mechanical Behavior e	12.300	26,690
N00014-07-1-0821	Development of a New Concept of Blast and Fra	12.300	4,884
N00014-07-1-1102	Cooperative Navigation and Autonomy for Unma	12.300	157,901
N00014-08-1-0011	DoD Cap - FY10 Appropriation	12.300	467,379
N00014-08-1-0011	FY11 UNCAPPED Allocation: Shallow Water Mir	12.300	29,061
N00014-08-1-0013	DOD Cap Funds - FY09 Appropriation	12.300	-4,782
N00014-08-1-0013	DOD Cap Funds - FY10 Appropriations	12.300	28,032
N00014-08-1-0029	Stochastic Optimization, Submodular Functions,	12.300	59,777
N00014-08-1-0169	DOD CAP Funds - FY09 Appropriation	12.300	-7,722
N00014-08-1-0219	EWall Electronic Card Well Computational Suppc	12.300	125,488
N00014-08-1-0261	DOD Cap Funds - FY10 Appropriation	12.300	113,964
N00014-08-1-0261	DOD Cap Funds - FY09 Appropriation	12.300	58,197
N00014-08-1-0261	DOD Cap Funds - FY08 Appropriation	12.300	0
N00014-08-1-0298	DOD CAP Funds - FY10 Appropriation	12.300	271,806
N00014-08-1-0298	DOD CAP Funds - FY09 Appropriation	12.300	-1,646
N00014-08-1-0312	DOD CAP Funds - FY10	12.300	82,247
N00014-08-1-0510	DOD Cap Funds - FY11 Appropriation	12.300	-10,649
N00014-08-1-0510	DOD Cap Funds - FY10 Appropriation	12.300	120,000
N00014-08-1-0510	DOD Cap Funds - FY09 Appropriation	12.300	10,752
N00014-08-1-0533	DOD Cap Funds - FY10 Appropriation	12.300	65,733

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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-08-1-0586	DoD Cap Funds - FY09 Appropriation	12.300	6,331
N00014-08-1-0586	DOD CAP Funds - FY10 Appropriation	12.300	88,610
N00014-08-1-0610	DOD Cap Funds - FY10 Appropriation	12.300	110,195
N00014-08-1-0680	PLUS-SEAS; Persistent Littoral Undersea Survei	12.300	113,127
N00014-08-1-0715	DOD Capped Funds - FY09 Appropriation	12.300	76,874
N00014-08-1-0715	DoD Cap Funds - FY 10 Appropriation	12.300	54,035
N00014-08-1-0826	DURIP: A Distributed System for Robust and Acc	12.300	22,290
N00014-08-1-0844	DOD Cap Funds - FY10 Appropriation	12.300	52,209
N00014-08-1-0844	DoD FY2011 Funding - Uncapped	12.300	43,299
N00014-08-1-0844	Hierarchical Nanomechanics of Amyloid Protein I	12.300	623
N00014-08-1-0844	DOD Cap Funds - FY09 Appropriation	12.300	771
N00014-08-1-0844	DOD Cap Funds - FY08 Appropriation	12.300	-1
N00014-08-1-0898	DOD Capped Funds - FY08 Appropriation	12.300	-3,441
N00014-08-1-0898	Architectures for Future Networks; Security, Avai	12.300	-302
N00014-08-1-0898	DOD Capped Funds - FY09 Appropriation	12.300	3,881
N00014-08-1-0898	DOD non-Capped Funds - FY 11 Appropriation	12.300	121,778
N00014-08-1-0898	DOD Capped Funds - FY10 Appropriation	12.300	137,215
N00014-08-1-0941	DoD Cap Fund - FY10 Appropriation	12.300	11,223
N00014-08-1-0941	DOD Cap Funds - FY08 Appropriation	12.300	-12,338
N00014-08-1-0941	Reduction of Parasitic Delays in Nitride-based Tr	12.300	-91
N00014-08-1-1097	DOD Cap Funds - FY09 Appropriation	12.300	-774
N00014-08-1-1097	DOD CAP Funds - FY10 Appropriation	12.300	264,259
N00014-08-1-1247	DOD Cap Funds - FY09 Appropriation	12.300	62,741
N00014-08-1-1247	DOD CAP Funds - FY11	12.300	308,987
N00014-08-1-1247	DoD Cap Funds - FY09 Appropriation	12.300	29,913
N00014-08-1-1247	Fab Equipment: Trapered Amplifier	12.300	3,023
N00014-08-1-1247	DoD Cap Funds - FY08 Appropriation	12.300	-204
N00014-08-1-1247	DOD CAP Funds - FY10 Appropriation	12.300	78,910
N00014-09-1-0112	DOD Cap: Funds FY11 Appropriation	12.300	59,841
N00014-09-1-0112	DOD Cap: Funds FY09 Appropriation	12.300	-7,971
N00014-09-1-0112	DOD Cap: Funds FY10 Appropriation	12.300	196,658
N00014-09-1-0124	DoD Cap FY11 Appropriation	12.300	108,932
N00014-09-1-0124	A Framework for Core Cognition	12.300	-57,331
N00014-09-1-0160	Sea-Basing: T-Craft Dynamic Analysis	12.300	-195,738
N00014-09-1-0160	DOD Capped Funds - FY09 Appropriation	12.300	196,089
N00014-09-1-0160	DOD Capped Funds - FY10 Appropriation	12.300	290,107

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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-09-1-0177	Child Account for PUF/FACE Cost Sharing unde	12.300	41,431
N00014-09-1-0183	DOD Cap Funds - FY08 Appropriation-C. Ross C	12.300	44,695
N00014-09-1-0183	DOD Cap Funds - FY08 Appropriation	12.300	109,596
N00014-09-1-0187	DOD Cap: Funds FY09 Appropriation	12.300	56,149
N00014-09-1-0187	DOD Cap: Funds FY11	12.300	30,859
N00014-09-1-0187	DOD Cap: Funds FY10	12.300	119,820
N00014-09-1-0282	DoD Cap Funds - FY09 Appropriation	12.300	113,264
N00014-09-1-0282	FY11 UNCAPPED Allocation: Lab. Modeling of It	12.300	25,278
N00014-09-1-0282	Grenoble France Experiment	12.300	32,572
N00014-09-1-0326	DOD Cap: Funds FY10 Appropriation	12.300	44,515
N00014-09-1-0326	DOD Cap: Funds FY11 Appropriation	12.300	78,698
N00014-09-1-0374	DOD Cap Funds-FY09 Appropriation	12.300	1,411
N00014-09-1-0374	DOD Cap Funds-FY10 Appropriation	12.300	33,613
N00014-09-1-0435	Synchronization of Bursty Ultra-Wide Bandwidth Tr	12.300	76,167
N00014-09-1-0458	DoD Capped Funds - FY10 Appropriation	12.300	173,840
N00014-09-1-0458	DOD Capped Funds - FY09 Appropriation	12.300	28,008
N00014-09-1-0591	DoD Cap - FY10 Appropriation	12.300	40,376
N00014-09-1-0591	DOD Cap Funds-FY09 Appropriations	12.300	3,123
N00014-09-1-0597	Political Science - FY10 Expenses	12.300	997,513
N00014-09-1-0597	Political Science FY09 Expenses	12.300	244,746
N00014-09-1-0597	CSAIL Winston FY2009	12.300	2,938
N00014-09-1-0597	CSAIL Micali FY2009	12.300	-28,023
N00014-09-1-0597	CSAIL Winston FY10	12.300	317,520
N00014-09-1-0597	CSAIL SubParent FY10	12.300	5,807
N00014-09-1-0597	CSAIL Subparent FY2009	12.300	21,437
N00014-09-1-0597	CSAIL Clark FY2009	12.300	75,060
N00014-09-1-0597	CSAIL Micali - FY10	12.300	200,477
N00014-09-1-0597	CSAIL SClark FY10	12.300	317,704
N00014-09-1-0625	Child-Frazzoli	12.300	80,747
N00014-09-1-0625	Integrating Global and Local Situational Awarene	12.300	125,759
N00014-09-1-0625	Child-Roy	12.300	70,015
N00014-09-1-0625	Child-Davis	12.300	135,741
N00014-09-1-0625	Child - Cummings	12.300	83,010
N00014-09-1-0625	Child-How	12.300	96,523
N00014-09-1-0641	DoD Cap Funds - FY09 Appropriation	12.300	23,158
N00014-09-1-0641	FY11 Dod Capped funds	12.300	86,064

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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-09-1-0641	FY10 Dod Capped funds	12.300	137,081
N00014-09-1-0676	DoD Cap Funds-FY09 Appropriations	12.300	3,619
N00014-09-1-0676	Autonomous Marine Intelligent Swarming System	12.300	17,712
N00014-09-1-0676	DOD CAP Funds - FY10 Appropriation	12.300	155,536
N00014-09-1-0679	DOD Cap Funds - FY10 Appropriations	12.300	36,622
N00014-09-1-0679	DoD Cap Funds - FY09 Appropriation	12.300	10,222
N00014-09-1-0715	Remote Micropower Generators	12.300	32,090
N00014-09-1-0845	DOD Cap - FY09 Appropriation	12.300	77,736
N00014-09-1-0845	DOD Cap - FY10 Appropriation	12.300	80,554
N00014-09-1-0863	DoD Cap Funds-FY09 Appropriation	12.300	71,383
N00014-09-1-0864	DoD cap - FY10 Appropriation	12.300	146,897
N00014-09-1-0902	DOD CAP - FY09 Appropriation	12.300	107,977
N00014-09-1-0902	DoD FY11 Uncapped	12.300	23,142
N00014-09-1-0952	DoD Cap Funds-FY09 Appropriation	12.300	63,271
N00014-09-1-1000	Fabricated Equipment - TRF Microscopy System	12.300	4,215
N00014-09-1-1000	DoD Cap-FY09 Appropriation	12.300	13,035
N00014-09-1-1000	DoD Cap Funds - FY 10 Appropriation	12.300	92,699
N00014-09-1-1015	Fabricated Equipment - Ultra-Low Power Cochle	12.300	25,004
N00014-09-1-1015	An Electronic System for Ultra Low Power Hearir	12.300	624,952
N00014-09-1-1051	Cummings Child	12.300	72,707
N00014-09-1-1051	FY11 DoD Capped Funds	12.300	96,442
N00014-09-1-1051	SMART Adaptive Reliable Teams for Persusent S	12.300	29
N00014-09-1-1051	Lozano-Perez Child	12.300	99,854
N00014-09-1-1051	FY10 Dod Capped Funds	12.300	972,555
N00014-09-1-1051	Kaelbling Child	12.300	89,178
N00014-09-1-1063	Graphene Approaches to Terahertz Electronics (	12.300	-1,151
N00014-09-1-1063	DoD Cap Funds FY09 - Kong	12.300	-67
N00014-09-1-1063	DoD Cap Funds-FY09-Strano	12.300	-7,705
N00014-09-1-1063	DoD Cap Funds FY09 - Palacios	12.300	-23,260
N00014-09-1-1063	DoD Cap Funds - FY09 - Dresselhaus	12.300	0
N00014-09-1-1063	DoD Cap Funds FY11 - Strano	12.300	144,741
N00014-09-1-1063	Harvard Subaward 6920025	12.300	30,219
N00014-09-1-1063	DoD Cap Funds-FY10-Strano	12.300	75,849
N00014-09-1-1063	Subcontract - Harvard - 6923044	12.300	96,618
N00014-09-1-1063	Harvard Subaward 6921406	12.300	99,387
N00014-09-1-1063	DoD Cap Funds FY10 - Palacios	12.300	83,542

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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-09-1-1063	DoD Cap Funds FY11 - Jarillo	12.300	162,438
N00014-09-1-1063	DoD Cap Funds FY11-Palacios	12.300	81,158
N00014-09-1-1063	DoD Cap Funds - FY10 - Dresselhaus	12.300	79,813
N00014-09-1-1063	DoD Cap Funds FY11-Kong	12.300	55,311
N00014-09-1-1063	BU Subaward 6921406	12.300	50,698
N00014-09-1-1063	DoD Cap Funds FY10 - Jarillo	12.300	50,010
N00014-09-1-1063	DoD Cap Funds FY10 - Kong	12.300	58,963
N00014-09-1-1063	DoD Cap Funds FY11-Dresselhaus	12.300	33,274
N00014-09-1-1063	Subcontract - BU - 6923044	12.300	43,148
N00014-09-1-1103	DoD Cap - FY10 Appropriation	12.300	47,630
N00014-09-1-1103	Fabricated Equipment - High Power Terahertz R:	12.300	14,699
N00014-09-1-1103	DoD Cap Fund-FY09 Appropriation	12.300	-5,444
N00014-09-1-1103	Fabricated equipment - Ultrabroadband THZ Sc	12.300	4,187
N00014-09-1-1103	DoD Cap Fund-FY11 Appropriation	12.300	270,126
N00014-09-1-1103	Fabricated Equipment - Data Acquisition System	12.300	2,269
N00014-09-1-1149	DOD Cap Funds - FY09 Appropriation	12.300	54,509
N00014-09-1-1167	Fabricated Equipment - 3D Camera Array	12.300	15,244
N00014-09-1-1167	DoD Cap - FY09 Appropriation	12.300	-9,142
N00014-09-1051	FY09 DoD Capped Funds	12.300	172,571
N00014-10-1-0122	DOD Cap Funds - FY11 Appropriation	12.300	111,443
N00014-10-1-0122	Programmed Pathogen Sense and Destroy Circ	12.300	-4,000
N00014-10-1-0122	DoD Capped Funds - FY10 Appropriation	12.300	88,894
N00014-10-1-0166	DOD Cap funds - FY10 Appropriation	12.300	43,914
N00014-10-1-0166	Superconducting MgB2 tunneling devices: Mater	12.300	0
N00014-10-1-0342	DoD Cap Funds - FY 10 Appropriation	12.300	55,054
N00014-10-1-0485	DoD Cap Funds - FY10 Appropriation	12.300	56,875
N00014-10-1-0562	DOD Cap Funds - FY10 Appropriation	12.300	116,265
N00014-10-1-0562	DoD FY2011 Funding - Uncapped	12.300	5,732
N00014-10-1-0630	DoD cap - FY10 Appropriation	12.300	128,971
N00014-10-1-0630	Multiphase Turbulence Modeling for Computer	12.300	1,268
N00014-10-1-0693	Fabricated Equipment - Small Wave Tank	12.300	9,881
N00014-10-1-0693	DoD Cap - FY 10 Appropriation	12.300	254,430
N00014-10-1-0699	DoD Cap - FY10 Appropriation	12.300	68,265
N00014-10-1-0724	DoD Capped Funds - FY10 Appropriation	12.300	374,584
N00014-10-1-0758	Dod UNCapped Funds - FY11 Appropriation	12.300	15,445
N00014-10-1-0758	DoD Capped Funds - FY10 Appropriation	12.300	119,975

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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-10-1-0759	DoD Capped Funds - FY10 Appropriation	12.300	116,871
N00014-10-1-0759	Fabricated Equipment - Didemnum Cruiser AUV	12.300	23,271
N00014-10-1-0829	Event Representation in Humans and Machines	12.300	74,063
N00014-10-1-0841	DoD Cap - FY10 Appropriation	12.300	132,890
N00014-10-1-0843	Strongly Interacting Fermi Gases in Two Dimens	12.300	1,160
N00014-10-1-0843	Dod Cap Funds - FY 10 Appropriation	12.300	166,611
N00014-10-1-0843	Fabricated Equipment - Two-Dimensional Fermi	12.300	53,703
N00014-10-1-0877	DoD Cap - FY10 Appropriation	12.300	115,739
N00014-10-1-0877	Fabricated Equipment - BEC 4	12.300	69,377
N00014-10-1-0951	DoD Cap Funds - FY 10 Appropriation	12.300	298,503
N00014-10-1-0951	Fabricated Equipment - Set of Five Unmanned A	12.300	9,251
N00014-10-1-0957	TAWG participation and electron beam diagnosti	12.300	30,781
N00014-11-1-0053	DoD Cap - FY11 Appropriation	12.300	89,898
N00014-11-1-0064	DoD Cap Funds - FY11 Appropriation	12.300	61,379
N00014-11-1-0091	DOD Cap Funds	12.300	24,879
N00014-11-1-0097	GOATS '11: Adaptive and Collaborative Exploita	12.300	3,481
N00014-11-1-0119	DOD Cap Funds - FY11 Appropriation	12.300	131,148
N00014-11-1-0212	New Technologies through Computational Mater	12.300	3,762
N00014-11-1-0337	Active Transfer Learning For Ocean Modeling	12.300	4,963
N00014-11-1-0397	Network Localization and Navigation in GPS-Chi	12.300	12,792
N00014-11-1-0486	MOOS-IvP Autonomous Decision Making Using	12.300	26,802
N00014-11-1-0545	Investigation of droplet size distribution generate	12.300	2,901
N00014-11-1-0657	A New Environmentally Sound Technology for M	12.300	37,162
N00014-11-1-0687	Engineering Multifunctional and Multiscale Nano	12.300	13,113
N00014/09-1-0177	DOD Cap Funds - FY09 Appropriation	12.300	-117
N00014/09-1-0177	DoD Cap Funds - FY10 / FY11 Appropriation	12.300	52,451
N0014-09-1-1051	Child Account - Lozano-Perez	12.300	30,286
N0014-09-1-1051	Child Account - Cummings	12.300	-9
N0014-09-1-1051	Child Account - Kaelbling	12.300	27,851
W11NF-11C-0101	Threat-Based Semi-Autonomous Operator Assis	12.300	46,872
Total for 12.300			18,359,527

Contract Number	Government Contract Title	CFDA#	FY Expenses
W11NF-11C-0201	Culpepper child: Maximum Mobility	12.CCC	10,203
W11NF-11C-0201	Iagnemma child: Maximum Mobility	12.CCC	18,429
W11NF-11C-0201	Enabling Novel Minimally-Actuated Robotic Cap	12.CCC	23,037
Total for 12.300			51,669

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Total for 12.CCC
Total for Navy - ONR

51,669
18,411,196

Navy Non-Pool

Contract Number	Government Contract Title	CFDA#	FY Expenses
N00189-08-C-Z104	Engineering Support for the Interagency Mark IV	12.CCC	234,470
N00189-09-C-Z099	USNO Signal Chain	12.CCC	21,565
N00189-10-C-Z079	Next Generation Geodetic-VLBI Signal Processir	12.CCC	4,866
	Total for 12.CCC		260,901
	Total for Navy Non-Pool		260,901

Space and Naval Warfare Systems Center

Contract Number	Government Contract Title	CFDA#	FY Expenses
N66001-09-1-2028	DOD Cap Funds - FY08 Appropriation	12.910	4,808
N66001-09-1-2028	Task B OPs	12.910	252,051
N66001-09-1-2028	Task A OPs	12.910	227,809
N66001-09-1-2028	Task B Fabrication: RF Spectrum Analyzer	12.910	43,630
N66001-09-1-2028	Fabricated Equipment - Transfer Cavity	12.910	34,773
N66001-09-1-2028	Task C OPs	12.910	67,787
N66001-09-1-2028	Task A OPS	12.910	21,856
N66001-09-1-2028	Fabricated Equipment - Cryogenic Apparatus for	12.910	6,977
N66001-09-1-2028	Task A Equipment	12.910	148
N66001-09-1-2028	Fabricated Equipment - Master-Slave laser syste	12.910	-290
N66001-09-1-2028	Task B Fabrication: Electronic Biasing	12.910	-2,680
N66001-09-1-2028	Task A Fabrication: SR+ Cavity to Comb Locking	12.910	17,913
N66001-09-1-2087	Dod Capped Funds - FY09	12.910	97,282
N66001-09-1-2096	DOD Capped Funds - FY10	12.910	136,038
N66001-09-1-2096	DOD Capped Funds - FY09	12.910	87,809
N66001-10-1-4041	DOD Cap Funds - FY10 Appropriation	12.910	120,915
N66001-10-1-4046	DoD Cap Funds - FY10 Appropriation	12.910	21,303
N66001-10-1-4047	DoD Cap Funds - FY10 Appropriation	12.910	76,307
N66001-10-1-4047	DARPA Young Faculty Award: Nanoengineered	12.910	3,804
N66001-10-1-4050	Dod Cap Funds - FY 10 Appropriation	12.910	161,721
N66001-10-1-4050	Fabricated Equipment - Cold atom Optical Lattic	12.910	110,920
N66001-10-1-4062	Subcontract - Fleming Institute - 6922712	12.910	190,757

**Appendix A-1 - Detail
Massachusetts Institute of Technology
Federal Research Support - On Campus
Fiscal 2011 Expenditures**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
N66001-10-1-4062	DoD Capped Funds FY11	12.910	148,812
N66001-10-1-4062	Gershenfield Child	12.910	5,858
N66001-10-1-4063	DOD Cap Funds FY 10 Appropriation: Quantum	12.910	62,965
N66001-10-1-4063	DOD Cap Funds FY 11 Appropriation: Quantum	12.910	54,851
N66001-10-2-4089	CANDOR: Clean-Slate System Integrity using Se	12.910	81,371
	Total for 12.910		2,035,495
	Total for Space and Naval Warfare Systems Center		2,035,495

U.S. Army Medical Research and Material Command

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
W81XWH-09-1-0088	Studying Protein Synthesis-Dependent Synaptic	12.420	104,971
W81XWH-09-2-0143	Prosthetic knee-ankle-foot system with biomechanic	12.420	322,706
W81XWH-10-1-0290	T-Pharmocytes for Prostate Cancer Immunother;	12.420	166,335
W81XWH-10-1-0291	T-Pharmocytes for Prostate Cancer Immunother;	12.420	136,736
W81XWH-10-1-0292	T-Pharmocytes for Prostate Cancer Immunother;	12.420	134,355
W81XWH-10-1-0370	Dev of a High-Content Neuronal Assay to Scree	12.420	252,557
W81XWH-10-1-1013	Escape from Tumor Cell Dormancy	12.420	95,343
W81XWH-11-1-0252	Role of Altered mGluR activity in Cognitive Impai	12.420	69,146
	Total for 12.420		1,282,149
	Total for U.S. Army Medical Research and Material Command		1,282,149
	Total for Department of Defense		65,990,687

**Department of Energy
Argonne National Laboratory**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
9F-32142	Polymer Electrolyte Fuel Cell Lifetime Limitations	81.CCC	30,496
OF-34642	Technologies and Concepts to Reduce the US D	81.CCC	32,270
	Total for 81.CCC		62,766
	Total for Argonne National Laboratory		62,766

DOE - Chicago

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-01ER54648	Center for Simulation of Wave Plasma Interactio	81.049	173,083
DE-FC02-06ER41444	National Computational Infrastructure for Lattice	81.049	186,793
DE-FC02-06ER54855	SWIM: Extended - MHD Closure Models in the P	81.049	49,804
DE-FC02-06ER54855	SWIM: Incorporating TORIC in the IPS	81.049	86,692
DE-FC02-08ER54966	Center for the Study of Microturbulence	81.049	165,878
DE-FC02-08ER54969	Center for Extended Magnetohydrodynamics Mo	81.049	54,413
DE-FC02-93ER54186	Operations (6769700)	81.049	143,224
DE-FC02-93ER54186	Equipment (6769800)	81.049	3,660
DE-FC02-93ER54186	Design Activities for Steady State Tokamah with	81.049	26,807
DE-FC02-93ER54186	Personnel (6770100)	81.049	473,429
DE-FC02-93ER54186	FAB-Temkin (6395800)	81.049	12,034
DE-FC02-93ER54186	Porkolab N.I. (6395200)	81.049	-554
DE-FC02-93ER54186	FY07-FY12-Minervini	81.049	-5,115
DE-FC02-93ER54186	Temkin Task 02 (6394300)	81.049	481,643
DE-FC02-93ER54186	Fab. Eq. HTS Joint Test Apparatus	81.049	215
DE-FC02-93ER54186	Bromberg Task 03 (6394500)	81.049	5,433
DE-FC02-93ER54186	HTS Tape Test Device-Fab E	81.049	1,755
DE-FC02-93ER54209	ECH Technology Development	81.049	6,867
DE-FC02-94ER40818	Milner Support Off	81.049	261,930
DE-FC02-94ER40818	LNS Research NTR	81.049	12,036
DE-FC02-94ER40818	Bates Accelerator Physics	81.049	8,085
DE-FC02-94ER40818	LNS Research HIR	81.049	7,371
DE-FC02-94ER40818	GEM	81.049	1,900
DE-FC02-94ER40818	Bates R&E Lab-Administration	81.049	1,702
DE-FC02-94ER40818	Heavy Ion Phobos Management	81.049	606
DE-FC02-94ER40818	OJI Stewart	81.049	203
DE-FC02-94ER40818	BLAST Physics	81.049	142
DE-FC02-94ER40818	Fabrication: Mode-Locked Laser	81.049	6
DE-FC02-94ER40818	HEP Gaseous Detector	81.049	0
DE-FC02-94ER40818	Electrical Engineering	81.049	447,979
DE-FC02-94ER40818	Nuclear Theory	81.049	930,788
DE-FC02-94ER40818	Heavy Ion High Level Trigger	81.049	919,115
DE-FC02-94ER40818	Mechanical Engineering	81.049	881,380
DE-FC02-94ER40818	Star Upgrade	81.049	14,058
DE-FC02-94ER40818	Olympus Project at BATES	81.049	858,986
DE-FC02-94ER40818	Heavy Ion Off	81.049	633,791

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-94ER40818	Bertozzi Support OFF	81.049	535,327
DE-FC02-94ER40818	Redwine Support Off-Site Research	81.049	470,141
DE-FC02-94ER40818	Surrow Support-Off-site - ON	81.049	661,662
DE-FC02-94ER40818	Bernstein Support Off	81.049	17,186
DE-FC02-94ER40818	Bates R&E Lab-Safety	81.049	20,001
DE-FC02-94ER40818	LNS Research MEBR Off	81.049	22,639
DE-FC02-94ER40818	Donnelly Support Off-Site Research	81.049	147,944
DE-FC02-94ER40818	Fabricated Equipment - OLYMPUS Scattering Ci	81.049	170,938
DE-FC02-94ER40818	Polarized Source	81.049	173,950
DE-FC02-94ER40818	Logistic Support HPG	81.049	139,361
DE-FC02-94ER40818	Accelerator Physics	81.049	191,392
DE-FC02-94ER40818	Computer	81.049	234,472
DE-FC02-94ER40818	Heavy Ion	81.049	240,520
DE-FC02-94ER40818	Surrow Support-Off-site - OFF	81.049	253,132
DE-FC02-94ER40818	Heavy Ion CMS-OFF	81.049	231,028
DE-FC02-94ER40818	Lattice Hadron Physics Initiative	81.049	265,897
DE-FC02-94ER40818	Mathews Support Off	81.049	123,303
DE-FC02-94ER40818	NIG Group Off-Site Research	81.049	88,015
DE-FC02-94ER40818	Mathews Support Off-Site Research	81.049	31,803
DE-FC02-94ER40818	Kowalski Support Off-Site Research	81.049	39,316
DE-FC02-94ER40818	Redwine Support Off	81.049	45,344
DE-FC02-94ER40818	Kowalski Support Off	81.049	89,798
DE-FC02-94ER40818	Logistical Support	81.049	46,097
DE-FC02-94ER40818	Heavy Ion Phobos Off	81.049	55,895
DE-FC02-94ER40818	Task K DarkLight Experiment	81.049	67,472
DE-FC02-94ER40818	Milner Support Off-Site Research	81.049	313,720
DE-FC02-94ER40818	Nuclear Theory Off	81.049	52,119
DE-FC02-94ER40818	Bernstein Support Off-Site Research	81.049	73,954
DE-FC02-99ER54512	Fab: DNB Upgrade	81.049	-11,993
DE-FC02-99ER54512	Alcator C-Mod Operations	81.049	1,847,039
DE-FC02-99ER54512	Fabricated: Two-Color Interferometer Upgrade	81.049	2,722
DE-FC02-99ER54512	Fab: 4-Strap ICRF Antenna Fabrication	81.049	3,325
DE-FC02-99ER54512	Alcator CMOD Stockroom Expense	81.049	3,631
DE-FC02-99ER54512	Fabricated: Control Systems Upgrade	81.049	4,226
DE-FC02-99ER54512	Alcator C-Mod Personnel	81.049	16,386,807
DE-FC02-99ER54512	Alcator CMOD - Project Engineering	81.049	4,857

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-99ER54512	Alcator C-Mod	81.049	4,884
DE-FC02-99ER54512	Fabricated: Core Thomson Scattering Upgrade	81.049	6,313
DE-FC02-99ER54512	Fab. Equip. - Energetic Ion Loss Dector Array	81.049	6,339
DE-FC02-99ER54512	Fab Eq - Divertor Spectroscopy Phase II	81.049	6,397
DE-FC02-99ER54512	Fab Equip: Scanning Probe Modifications & Upg	81.049	15,638
DE-FC02-99ER54512	Fab Eq - MSE Shutter upgrade	81.049	2,450
DE-FC02-99ER54512	Fab: Divertor Probe Data Acquisition	81.049	2,235
DE-FC02-99ER54512	Fab Eq - Educational Plasma Demo Upgrade	81.049	1,936
DE-FC02-99ER54512	Fab: Divertor Heat Flux	81.049	1,734
DE-FC02-99ER54512	Fabricated: 2-D Bolometry	81.049	-7
DE-FC02-99ER54512	Fabricated: ICRF Antennas	81.049	15
DE-FC02-99ER54512	Fabricated: High-Bandwidth Probe Electronics	81.049	18
DE-FC02-99ER54512	FAB: Spatially Resolving High Resolution X-Ray	81.049	89
DE-FC02-99ER54512	FAB: Laser Blow-Off System (Impurity Injector)	81.049	329
DE-FC02-99ER54512	Fab: Alternator Systems Upgrade	81.049	18,038
DE-FC02-99ER54512	New Initiatives Alcator-Whyte	81.049	347
DE-FC02-99ER54512	Fabricated: CMOD Diag X-Ray Tomography Lab	81.049	608
DE-FC02-99ER54512	ARRA - TAS::89 0227: :TAS RECOVERY ACT A	81.049	175,192
DE-FC02-99ER54512	Fab: 99 Channel Fast Optical Fluctuation Fabric	81.049	1,076
DE-FC02-99ER54512	Fabricated Equipment: ICRF Breakdown Fabrica	81.049	1,194
DE-FC02-99ER54512	Fabricated: PCB Capacitator Clean Up	81.049	1,301
DE-FC02-99ER54512	Fabricated: Surface Analysis Station	81.049	544
DE-FC02-99ER54512	Fab Eq - EUV Spectrometer	81.049	22,287
DE-FC02-99ER54512	Fab: Plasma Potential Diagnostic	81.049	4,274
DE-FC02-99ER54512	K Star	81.049	24,026
DE-FC02-99ER54512	Fabricated: ICRF Transmitter	81.049	90,645
DE-FC02-99ER54512	Alcator C-Mod Diagnostics	81.049	95,687
DE-FC02-99ER54512	MDSplus Development	81.049	101,868
DE-FC02-99ER54512	Alcator CMOD Electronics Computer	81.049	112,048
DE-FC02-99ER54512	Fabricated: C-Mod Polarimeter Diagnostic	81.049	81,649
DE-FC02-99ER54512	Alcator C-Mod Research	81.049	146,366
DE-FC02-99ER54512	Fab Eq - Outer Divertor Upgrade Phase 2	81.049	22,932
DE-FC02-99ER54512	Alcator C-Mod Subcontracts	81.049	522,840
DE-FC02-99ER54512	Fabricated: Equip Alcator C-Mod	81.049	217,347
DE-FC02-99ER54512	Alcator C-Mod Travel	81.049	373,169
DE-FC02-99ER54512	Alcator CMOD Vacuum Shop	81.049	177,793

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-99ER54512	Alcator C-MOD Alternator House	81.049	76,388
DE-FC02-99ER54512	Alcator C-Mod New Initiative	81.049	215,601
DE-FC02-99ER54512	Alcator OPS/Equipment	81.049	68,983
DE-FC02-99ER54512	Alcator C-MOD-Radiology/Safety	81.049	24,931
DE-FC02-99ER54512	Fabricated: Machine Upgrade	81.049	26,289
DE-FC02-99ER54512	Alcator C-Mod Administration	81.049	76,202
DE-FC02-99ER54512	Fab Eq - 4/6 GHz Reflectometer	81.049	34,264
DE-FC02-99ER54512	Alcator C-Mod Radio Frequency	81.049	43,074
DE-FC02-99ER54512	Alcator C-Mod Computers	81.049	242,691
DE-FC02-99ER54512	Jet	81.049	57,389
DE-FC02-99ER54512	Divertor OPS account	81.049	45,956
DE-FC02-99ER54512	Fab Eq - QuasiCoherentMode AntennaSystem	81.049	51,901
DE-FC02-99ER54512	Fabricated: First Wall Modifications	81.049	58,084
DE-FC02-99ER54512	Fab: ICRF Edge Reflectometer	81.049	48,355
DE-FC02-99ER54512	Lower Hybrid Materials and Services	81.049	46,373
DE-FC02-99ER54512 @2005300	ARRA - ICRF Final Power Amplifiers	81.049	217,518
DE-FC02-99ER54512 @2005300	ARRA - Fab Eq - Fourth Cart and Control Upgrac	81.049	117,245
DE-FC02-99ER54512 @2005300	ARRA - Fab Eq - Advanced 4-Strap ICRF Antenn	81.049	292,993
DE-FC02-99ER54512 @2005300	ARRA - Fab Eq - ICRF Power/Match Upgrade/FF	81.049	507,414
DE-FC02-99ER54512 @2005300	ARRA - Fab Eq - Divertor Spectroscopy Phase I	81.049	112,803
DE-FC02-99ER54512 @2005300	ARRA - Fab Eq - Polarimeter Upgrade	81.049	135,337
DE-FC02-99ER54512 @2005300	ARRA - Add 4 New Klystrons	81.049	1,017,853
DE-FC02-99ER54512 @2005300	ARRA - Fab Eq - Second 4 Strap Antenna	81.049	73,342
DE-FG02-00ER15087	Ultrafast Coherent Soft X-Rays: A Novel Tool fo	81.049	74,467
DE-FG02-01ER63257	Mechanistically Based Diagnostics & Parameteri	81.049	25,889
DE-FG02-02ER45977	Heat Conduction in Nanowire Structures	81.049	172,085
DE-FG02-02ER45977	FabEq-AFM CantlvrBasedInfraredSpectrSys	81.049	915
DE-FG02-02ER45977	FabEq-AFM Cantilever Derived SpectrSys	81.049	123
DE-FG02-03-ER54700	Physics of High Energy Plasmas	81.049	450,385
DE-FG02-03ER46076	Strongly Correlated Electronic Systems: Local M	81.049	179,031
DE-FG02-04ER46134	Establishing a United Effort to Crystal Growth, N	81.049	214,127
DE-FG02-04ER46149	Self-Assembling Biological Springs Force Transc	81.049	255,407
DE-FG02-04ER54802	Center for Extended MagnetoHydrodynamic Mod	81.049	83,555
DE-FG02-05ER15665	Scattering Chamber Upgrade	81.049	-105
DE-FG02-05ER15665	An Exploration of Catalytic Chemistry on Autni (ii	81.049	105
DE-FG02-05ER15728	Instability of Noble Metal Catalysts in Proton Exc	81.049	183,660

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FG02-05ER15728	Fabricated Equipment - Photoelectrochemistry IV	81.049	1,737
DE-FG02-05ER15745	Hangman Catalysis for Phot- and Photoelectro- (	81.049	223,796
DE-FG02-05ER25681	Scientific Discovery with the Blue Gene/L	81.049	96,244
DE-FG02-05ER41360	Fabrication: AMS Thermal Control System	81.049	103,022
DE-FG02-05ER41360	ARRA - LQS ARRA Equipment	81.049	63,234
DE-FG02-05ER41360	EMI Operations	81.049	3,402,179
DE-FG02-05ER41360	ARRA - PPC ARRA Equipment	81.049	62,000
DE-FG02-05ER41360	ARRA - Particle Theory ARRA Equipment	81.049	48,178
DE-FG02-05ER41360	LNS Research Fund ON	81.049	22,698
DE-FG02-05ER41360	OJI-Hong Liu	81.049	103,225
DE-FG02-05ER41360	PPC-General	81.049	116,698
DE-FG02-05ER41360	Fabrication: AMS-02 Detector Electronic Equipm	81.049	148,395
DE-FG02-05ER41360	Particle Theory On	81.049	1,399,056
DE-FG02-05ER41360	LQS Detector R&D	81.049	161,564
DE-FG02-05ER41360	Lepton Quark Studies-Task F	81.049	178,371
DE-FG02-05ER41360	EMI A&C	81.049	211,898
DE-FG02-05ER41360	Particle Theory Off	81.049	224,142
DE-FG02-05ER41360	Fabrication: AMS-02 Cryomagnet Avionics Syste	81.049	226,515
DE-FG02-05ER41360	Fabrication: AMS-02 Detector and Integration	81.049	736,002
DE-FG02-05ER41360	PPC-CDF	81.049	1,202,640
DE-FG02-05ER41360	Lepton Quark	81.049	380,739
DE-FG02-05ER41360	Fabrication: AMS-02 Gas Systems	81.049	2,466
DE-FG02-05ER46253	UCLA Subcontract - 6898635	81.049	163,247
DE-FG02-05ER46253	Child Marzari - 6898635	81.049	65,811
DE-FG02-05ER46253	Thermodynamics and Kinetics of Phase Transfor	81.049	85,581
DE-FG02-05ER54836	Exploration of Plasma Jets Approach to High Enr	81.049	142,810
DE-FG02-06ER41420	OJI - Probing the Absolute Mass Scale	81.049	76,946
DE-FG02-06ER41420	off-campus OJI-Probing the Absolute Mass Scal	81.049	146,423
DE-FG02-07ER15839	Rheological Properties of Earth's Upper Mantle a	81.049	48,050
DE-FG02-07ER46454	Probing nanocrystal electronic structure and dyn	81.049	198,007
DE-FG02-07ER46454	Fabricated Equipment - High Collection Efficienc	81.049	15,337
DE-FG02-07ER46454	Fabricated Equipment - Confocal Optical Microsc	81.049	5,006
DE-FG02-07ER46474	High Efficiency Biomimetic Organic Solar Cells	81.049	214,655
DE-FG02-07ER46474	T. Van Voorhis: High Efficiency Biomimetic Orga	81.049	54,864
DE-FG02-07ER64465	Collaborative Research: The Influence of Cloud I	81.049	64,978
DE-FG02-08ER25858	Large-Scale Optimization for Bayesian Inference	81.049	90,750

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FG02-08ER46488	Self Assembly & Self-Repair of Novel Photosynth	81.049	110,668
DE-FG02-08ER46488	Fab Eq - HD Tandem Numerical Modeling Comp	81.049	6,342
DE-FG02-08ER46514	Novel Temperature Limited Tunneling Spectrosc	81.049	140,859
DE-FG02-08ER46515	Measurement of Single Electronic Charging of Si	81.049	93,674
DE-FG02-08ER46516	Fabricated Equipment: AFM Cantilever Infrared S	81.049	6,532
DE-FG02-08ER46516	Thermoelectric Nanocomposites at Intermediate S	81.049	391,597
DE-FG02-08ER46516	Fabricated Equipment: AFM Cantilever Derived S	81.049	2,601
DE-FG02-08ER46521	Fab Equipment	81.049	426
DE-FG02-08ER46521	Ultrafast Electronic and Structural Dynamics in Co	81.049	330,852
DE-FG02-08ER64516	Genomic Structure, Metagenomics, Horizontal G	81.049	168,599
DE-FG02-08ER64516	Genomic Structure, Metagenomics, Horizontal G	81.049	91,202
DE-FG02-08ER64516	Genomic Structure, Metagenomics, Horizontal G	81.049	74,220
DE-FG02-08ER64592	Collaborative Research: Abrupt Climate Change	81.049	46,093
DE-FG02-08ER64597	Quantifying Climate Feedbacks from Abrupt Cha	81.049	85,163
DE-FG02-09ER46556	Optics for Advanced Neutron Imaging	81.049	203,803
DE-FG02-09ER46556	Fab Eq - Opto-Mechanical Setup for Testing Nov	81.049	485
DE-FG02-86ER13564	Catalysts for the Living Polymerizations of Olefin	81.049	195,492
DE-FG02-87ER13671	Spectroscopic and Dynamical Studies of Highly I	81.049	91,218
DE-FG02-87ER13671	Fab E Account / 6920424	81.049	42,873
DE-FG02-90ER45429	Neutron and X-Ray Scattering Studies of Kinetic	81.049	342,530
DE-FG02-91ER40648	Task A High Gradient Acceleration	81.049	245,660
DE-FG02-91ER40648	ARRA - TAS::89 0227::TAS Recovery Act - 17 G	81.049	104,251
DE-FG02-91ER40648	RF Gun	81.049	18,143
DE-FG02-91ER40648	Electron Spectrometer	81.049	15,420
DE-FG02-91ER40648	Vacuum System	81.049	3,214
DE-FG02-91ER54109	Plasma Turbulence Transport	81.049	52,073
DE-FG02-91ER54109	Fusion Theory	81.049	1,297,089
DE-FG02-93ER61677	Coupled Atmosphere - Ocean Models	81.049	92,050
DE-FG02-94ER54235	Phase - Contract Imaging Diagnostic (C-Mod)	81.049	212
DE-FG02-94ER54235	Interferometer Diagnostics	81.049	65
DE-FG02-94ER54235	Millimeter/Submillimeter Diagnostic	81.049	29,751
DE-FG02-94ER54235	Development of an Accelerator-Based Diagnosti	81.049	213,131
DE-FG02-94ER54235	Off Campus: CODA	81.049	258,626
DE-FG02-94ER54235	Fabricated Equipment	81.049	47,913
DE-FG02-94ER61937	An Integrated Framework for Climate Change A	81.049	1,509,621
DE-FG02-95ER40919	Focused Intense Charged Particle Beams	81.049	120,451

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FG02-95ER40919@2005160	ARRA - TAS::89 0227:Recovery Act - Theoretica	81.049	54,119
DE-FG02-96ER45571	First Principles Determination of Structure, Therm	81.049	151,944
DE-FG02-97ER14760	Evolution of Pore Structure and Permeability of F	81.049	414,888
DE-FG02-98ER14914	Computer-Aided Construction of Chemical Kineti	81.049	103,126
DE-FG02-98ER54458	ARRA - TAS::89 0227:Recovery Act - Levitated	81.049	125,891
DE-FG02-98ER54458	Levitated Dipole Experiment-Parent	81.049	151,663
DE-FG02-98ER54458	Levitated Dipole Experiment-Operations	81.049	44,974
DE-FG02-98ER54458	Levitated Dipole Experiment	81.049	5,341
DE-FG02-98ER54458	ARRA - Fab Eq - LDX Transmitter	81.049	27,549
DE-FG02-98ER54458	Levitated Dipole Experiment-Personnel	81.049	137,307
DE-FG02-99ER14988	Structural Dynamics in Complex Liquids Studied	81.049	563,582
DE-FG02-99ER14988	Water Spectroscopy	81.049	3,254
DE-FG02-99ER15004	Physics of Channelization: Theory, Experiment, &	81.049	160,013
DE-FG02-99ER54525	Full Wave Studies of High harmonic Heating in N	81.049	80,549
DE-FG02-99ER54563	Fast Particle-wave Interaction and Alfvén Eigenr	81.049	102,128
DE-SC0001088	ARRA - Excitonics Van Voorhis	81.049	3,035
DE-SC0001088	ARRA - Excitonics Baldo	81.049	107,172
DE-SC0001088	ARRA - Recovery Act - Harvard Subaward	81.049	536,087
DE-SC0001088	ARRA - Seed Funding	81.049	209,136
DE-SC0001088	ARRA - Brookhaven	81.049	136,008
DE-SC0001088	ARRA - DINCA M&S and Travel	81.049	13,229
DE-SC0001088	ARRA - MOODERA M&S and Travel	81.049	15,733
DE-SC0001088	ARRA - Excitonics Bawendi	81.049	100,288
DE-SC0001088	ARRA - Fabricated Equipment - Microscope Inse	81.049	20,978
DE-SC0001088	ARRA - Excitonics Admin Travel	81.049	44,176
DE-SC0001088	ARRA - Excitonics Gradecak	81.049	47,249
DE-SC0001088	ARRA - Excitonics Pl's	81.049	83,254
DE-SC0001088	ARRA - Excitonics Berggren	81.049	81,053
DE-SC0001088	ARRA - Excitonics Nelson	81.049	75,875
DE-SC0001088	ARRA - Excitonics Swager	81.049	67,061
DE-SC0001088	ARRA - Excitonics Postdocs and Research Staff	81.049	739,168
DE-SC0001088	ARRA - Excitonics Research Assistants	81.049	1,208,752
DE-SC0001088	ARRA - Fabricated Equipment: Mode-Locked La	81.049	1,852
DE-SC0001088	ARRA - Fabricated Equipment - Multi-Dimension	81.049	3,954
DE-SC0001088	ARRA - Excitonics Travel	81.049	1,960
DE-SC0001088	ARRA - Excitonics Core Activities	81.049	3,187

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-SC0001088	ARRA - Excitonics Kong	81.049	7,688
DE-SC0001088	ARRA - Excitonics Bulovic	81.049	64,636
DE-SC0001088	ARRA - Fabricated Equipment - Mid-Infrared Opt	81.049	12,807
DE-SC0001299	Boston College Sub-Award-EFRC-S3TEC Cente	81.049	554,938
DE-SC0001299/ DE-FG02-09ER46577	Fabricated Equipment - Optical setup (photonic c	81.049	27,936
DE-SC0001299/ DE-FG02-09ER46577	Fabricated Equipment - UVISS Pump/Probe	81.049	385
DE-SC0001299/ DE-FG02-09ER46577	Solid-State Solar-Thermal Energy Conversion Ce	81.049	466,169
DE-SC0001299/ DE-FG02-09ER46577	EFRC-S3TEC Center-Research	81.049	2,297,685
DE-SC0001299/ DE-FG02-09ER46577	MPC-EFRC Research Center S3Tec - Seed Fun	81.049	75,061
DE-SC0001299/ DE-FG02-09ER46577	RPI subaward (seed funding)	81.049	56,184
DE-SC0001299/ DE-FG02-09ER46577	Temperature/Pressure/Humidity Controlled Vacu	81.049	684
DE-SC0001299/ DE-FG02-09ER46577	Fabricated Equipment - Solar Thermoelectric Boi	81.049	13,471
DE-SC0001299/ DE-FG02-09ER46577	Fabricated Equipment - Polisher	81.049	9,300
DE-SC0001682	Plasma Simulation Program	81.049	100,458
DE-SC0002060	ARRA - Fab Eq - DIONISOS Experiment Upgrad	81.049	16,365
DE-SC0002060	ARRA - TAS:89 0227::TAS RECOVERY ACT - I	81.049	497,004
DE-SC0002060	ARRA - Fab Eq - RF Charge Exchange Ion Sour	81.049	53,295
DE-SC0002517	Large-Scale Optimization for Bayesian Inference	81.049	53,724
DE-SC0002626	Electrochemically-Driven Phase Transitions in Bi	81.049	70,042
DE-SC0002626	Child - Carter [6920590]	81.049	37,343
DE-SC0002629	New Approach for 2D Readout of GEM Detector	81.049	123,397
DE-SC0002633	SISGR: Chemomechanics of Far-From Equilibriu	81.049	669,752
DE-SC0003564	ARRA - TAS:89 0227::TAS Recovery Act - Anal	81.049	76,672
DE-SC0003906	ARRA - TAS:89 0227::TAS Recovery Act - Methi	81.049	114,667
DE-SC0003907	ARRA - TAS:89 0227::TAS Recovery Act - None	81.049	77,714
DE-SC0003908	ARRA - TAS:89 0227::TAS Recovery Act - Predi	81.049	133,711
DE-SC0005262	Key Laser Technologies for X-ray FELs	81.049	1,013,416
DE-SC0005262	Fabrication: Sub-Femtosecond Timing Distributic	81.049	193,743
DE-SC0005288	ZettaBricks: A Language Compiler and Runtime	81.049	344,872
DE-SC0005372	Software Synthesis for High Productivity Exascal	81.049	134,355
DE-SC0005807	High Intensity Polarized Gun	81.049	254,540
Total for 81.049			67,457,122

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-04ER54786	MIT Participation in the Center for Multiscale Pla	81.CCC	342
DE-FC02-06ER54859	SciDAC - Center for Plasma Edge Simulation	81.CCC	61,711

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Total for 81.CCC

62,053

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DE-FG02-06ER54891	Interactions of a Flowing Plasma with a Collectin	81.000	31,340
DE-FG02-07ER64506	Microbial Gene Expression in Ocean: Community	81.000	270,409
DE-FG02-08ER46488	UIUC Subaward - 6916988	81.000	150,725

Total for 81.000

452,474

Total for DOE - Chicago

67,971,649

DOE - Chicago - Equipment

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DE-FC02-99ER54512	Fabricated: High Resolution X-Ray Spectrometer	81.049	24
DE-FC02-99ER54512	Fabricated: Reflectometer	81.049	49
DE-FC02-99ER54512	Fabricated: ECE Grating Polychromator	81.049	681
DE-FC02-99ER54512	Fabricated: ICRF Tunable Transmitter	81.049	1,247
DE-FC02-99ER54512	Fab Equip/Divertor Cryopump	81.049	1,282
DE-FC02-99ER54512	Fab Equipment/Lower Hybrid Coupler Protection	81.049	1,709
DE-FC02-99ER54512	Fab Equip/RF Instrumentation & Control	81.049	2,811
DE-FC02-99ER54512	Fabricated: Diborine System	81.049	3,557
DE-FC02-99ER54512	Fab Equipment/Lower Hybrid 4th Cart	81.049	3,971
DE-FC02-99ER54512	Fab Equipment/Lower Hybrid 2nd Launcher	81.049	31,439

Total for 81.049

46,770

Total for DOE - Chicago - Equipment

46,770

DOE - Idaho Falls

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DE-FG07-02ID14420	Innovations in Nuclear Infrastructure and Educati	81.114	-163
Total for 81.114			-163
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DE-FC07-06ID14742	NERI: The Development and Production of Func	81.121	49,451
DE-FG07-07ID14888	NERI: Risk-Informed Balancing of Safety, Nonpr	81.121	653,487
DE-NE0000144	NEUP	81.121	67,176
DE-NE0000308	Infrastructure Upgrade to the MITR Research Re	81.121	100,745

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Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-NE0000322	General Scientific Infrastructure Support	81.121	21,968
Total for 81.121			892,827
Total for DOE - Idaho Falls			892,664

DOE - Office of ARPA-E

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-AR0000047	ARRA - Electroville: High-Amperage Energy Stor	81.135	2,241,795
DE-AR0000047	ARRA - Fabricated Equipment - Medium Cell Te	81.135	27,609
DE-AR0000047	ARRA - Fabricated Equipment - Small Cell Test	81.135	52,171
DE-AR0000056	ARRA - Engineering Ralstonia eutropha for Prod	81.135	355,789
DE-AR0000059	ARRA - Fabricated Equipment - Pressure-Gas B	81.135	20,810
DE-AR0000059	ARRA - Bioprocess and Microbe Engineering Fo	81.135	758,509
DE-AR0000059	ARRA - Subcontract - Harvard - 6922110	81.135	122,376
DE-AR0000059	ARRA - Subcontract - U Delaware - 6922110	81.135	149,569
DE-AR0000065	ARRA - Child - Hammond - 6922361	81.135	126,425
DE-AR0000065	ARRA - Child - Carter - 6922361	81.135	202,070
DE-AR0000065	ARRA - Subcontract: Rutgers 6922361	81.135	226,100
DE-AR0000065	ARRA - Semi-Solid Rechargeable Power Source	81.135	258,518
DE-AR0000065	ARRA - Child - Belcher - 6922361	81.135	102,053
DE-AR0000083	ARRA - Electrochemically mediated separation f	81.135	363,039
DE-AR0000123	ARRA - ARPA-E Georgia Tech Sub	81.135	122,218
DE-AR0000123	ARRA - ARPA-E Dartmouth Sub	81.135	103,585
DE-AR0000123	ARRA - ARPA-E U Penn Sub	81.135	91,895
DE-AR0000123	ARRA - Advanced Technologies for Integrated P	81.135	65,790
DE-AR0000123	ARRA - ARPA-E Other Personnel	81.135	50,397
DE-AR0000123	ARRA - ARPA-E Palacios	81.135	38,649
DE-AR0000123	ARRA - Fabrication: Power Device Measuremen	81.135	34,033
DE-AR0000123	ARRA - ARPA-E Perreault Child	81.135	14,382
DE-AR0000123	ARRA - ARPA-E RA's	81.135	164,911
DE-AR0000123	ARRA - ARPA-E del Alamo Child	81.135	11,245
Total for 81.135			5,703,938
Total for DOE - Office of ARPA-E			5,703,938

DOE-Golden Colorado

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-EE0002743	ARRA - Recovery Act: Decision Analysis for Enh	81.087	119,331
DE-FG36-08GO18007	All-Inorganic, Efficient Photovoltaic Solid State D	81.087	263,429
DE-FG36-08GO18008	Thin, High Lifetime Silicon Wafers with No Sawin	81.087	228,588
DE-FG36-08GO18190	Detection and Characterization of Natural and In	81.087	281,661
DE-FG36-08GO18197	Monitoring and Modeling Fluid Flowdown in Dev	81.087	122,922
DE-FG36-09GO19001	Fabricated Equipment: Cryostat Pump and Mour	81.087	9,837
DE-FG36-09GO19001	Fabricated Equipment - High Temperature MSA	81.087	10,940
DE-FG36-09GO19001	Fabricated Equipment: Infrared Spectroscopy Pr	81.087	38,514
DE-FG36-09GO19001	Defect Engineering, Cell Processing, and Modeli	81.087	342,016
	Total for 81.087		1,417,238
	Total for DOE-Golden Colorado		1,417,238

DOE-NETL

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FE0002041	ARRA - Recovery Act: Modeling and Risk Asses:	81.133	86,885
DE-FE0002128	ARRA - Recovery Act: Monitoring Accounting an	81.133	109,557
	Total for 81.133		196,442
	Total for DOE-NETL		

DOE/NNSA/ALB

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-AC52-08NA28539	A Unified Approach to Joint Regional and Telese	81.113	86,711
DE-FG52-09NA29032	Monoenergetic Proton and Alpha Radiography o	81.113	86,715
	Total for 81.113		173,426
	Total for DOE-NETL		

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FG52-09NA29553	Fabricated Equipment Particle Accelerator	81.112	106,044
DE-FG52-09NA29553	Studying Fields and Matter in Head Plasmas	81.112	855,152

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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DE-NA0000877	Stipends for OLUG 2011	81.112	44,295
DE-NA0000877	Charged-particle probing of inertial-confinement	81.112	126,123
	Total for 81.112		1,131,614
	Total for DOE/NNSA/ALB		1,305,040

Fermilab

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
PO 599122	Professional Services of Arati Prakash for work	81.CCC	18,390
PO-580079	Coordination of Data Re-Processing in the Data	81.CCC	75,052
	Total for 81.CCC		93,442
	Total for Fermilab		93,442

78,035,259

Total for Department of Energy

Dept. of Health and Human Services NIH

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-R01-GM081336-01A1	UPitt Subaward - 6918665	93.859	115,884
1-R01-GM085323-01A1	Subcontract - Tufts - 6919490	93.859	84,623
1-R01-GM085323-01A1	Subcontract - SUNY Buffalo - 6919490	93.859	176,275
1-R01-GM085457-01	High Throughput Monitoring of Mass, Density an	93.859	7,272
1-R01-GM095843-01	Radicals and Polyradicals for Dynamic Nuclear F	93.859	93,880
1-T32-GM087237-01	Graduate Training in Computational and System	93.859	9,160
2 R37 GM057073-13	Structure-Function Relationship of Glycosaminoç	93.859	260,710
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - H.	93.859	795,870
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Pr	93.859	36,661
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Cc	93.859	33,600
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Pr	93.859	72,024
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Ac	93.859	26,053
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Pr	93.859	-2,045
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Pr	93.859	27,418
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Hc	93.859	811

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Cc	93.859	11,891
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Pr	93.859	-689
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - N	93.859	22,650
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Cc	93.859	24,591
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Pr	93.859	19,856
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Hc	93.859	93,273
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Hl	93.859	994,641
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - La	93.859	323,628
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Ya	93.859	114,715
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Ml	93.859	109,376
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Ml	93.859	104,151
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Ml	93.859	68,974
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Ke	93.859	58,387
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Gr	93.859	48,718
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Nl	93.859	28,050
2-P50-GM068762-08	Fabricated Equipment - SMR Readout and Fluidi	93.859	8,477
2-P50-GM068762-08	Systems Biology of Cell Decision Processes - Ml	93.859	50,541
2-R01-GM017151-38A1	Structure and Function of Transfer Ribonucleic A	93.859	435,568
2-R01-GM029595-32	Ribonucleotide Reductase: Structure and Functi	93.859	442,177
2-R01-GM031030-29	Molecular Genetics of Rhizobium Nodulation Pla	93.859	383,329
2-R01-GM032134-29	Nonheme Diiron Centers and the Biological Oxid	93.859	364,132
2-R01-GM046059-19	Catalytic Methods for Organic Synthesis	93.859	754,096
2-R01-GM049171-13	Polyhydroxyalkanoates: A Paradigm for Non-Ter	93.859	174
2-R01-GM058160-13	Late Transition Metal Catalysts for Organic Synt	93.859	486,213
2-R01-GM063857-09	ELECTROPORATION MECHANISM, MICRODC	93.859	260,836
2-R01-GM074825-06	Synthesis and Study of Complex Natural Product	93.859	353,683
2-R01-GM34277-26	Regulation of mRNA Processing	93.859	524,082
2-R37-GM062871-10	Metal-Catalyzed Coupling Reactions	93.859	589,063
2-R56-GM017151-38	Structure and Function of Transfer Ribonucleic A	93.859	169,169
2-T32-GM007287-36	Pre-Doctoral Grant in the Biological Sciences	93.859	1,786,143
2-T32-GM08334-20	Interdepartmental Biotechnology Training Progra	93.859	-13
2-T32-GM08334-21	Interdepartmental Biotechnology Training Progra	93.859	7,653
2-T32-GM08334-22	Interdepartmental Biotechnology Training Progra	93.859	692,237
3-R01-GM046941-18S1	Supplement for Roymarie Ballester: Molecular G	93.859	83,707
4-R00-GM089826-02	Investigating the Molecular and mechanical Regi	93.859	69,508
5-K99-GM092970-02	Developing fluorescent probes for the endogenoi	93.859	84,379

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R00-GM081399-04	Mechanisms and Regulation of Yeast Internal Ribosome Exit	93.859	235,203
5-R00-GM085279-03	Cooperating and Conflict in Microbial Systems: Cooperation and Competition	93.859	91,019
5-R01-GM017980-40	Folding, Misfolding and Aggregation of Beta-Sheet Proteins	93.859	252,672
5-R01-GM024663-34	Genetic Analysis of Nematode Egg Laying	93.859	479,795
5-R01-GM028273-29	Pericyclic Reactions for Organic Synthesis	93.859	289,722
5-R01-GM029595-31	Ribonucleotide Reductases: Structure and Function	93.859	51,451
5-R01-GM031030-28	Molecular Genetics of Rhizobium Nodulation	93.859	142,357
5-R01-GM031978-27	Controlled Catalytic Reduction of Dinitrogen at a Single Site	93.859	137,909
5-R01-GM032134-28	Nonheme Diiron Centers and the Biological Oxidation of Small Molecules	93.859	84,951
5-R01-GM046941-20	Molecular Genetics of Intracellular Protein Translocation	93.859	464,637
5-R01-GM047274-19	Proton Coupled Electron Transfer in Biomimetic Catalysis	93.859	451,392
5-R01-GM049039-16	Vascular Drug Delivery	93.859	295,514
5-R01-GM049171-16	Polyhydroxyalkanoates: A paradigm for non-templated polymer synthesis	93.859	35,407
5-R01-GM049224-17	Protein Architecture and Remodeling in DNA Transcription	93.859	-669
5-R01-GM049224-19	Protein Recognition and Remodeling and Degradation of Proteins	93.859	270,842
5-R01-GM050895-16	Cell-Cell Signaling, Gene Expression, and Horizontal Gene Transfer	93.859	308,343
5-R01-GM052339-16	Initiation of DNA Replication of Yeast Chromosomes	93.859	168,539
5-R01-GM056800-16	Regulation of MITOSIS by Proteolysis in Yeast	93.859	300,804
5-R01-GM056933-12	Molecular Genetics of Regulated Protein Delivery	93.859	208,912
5-R01-GM057034-14	Asymmetric Nucleophilic Catalysis	93.859	453,970
5-R01-GM057073-11	Enzymatic Degradation of Glycosaminoglycans	93.859	24,861
5-R01-GM057073-12	Enzymatic Degradation of Glycosaminoglycans	93.859	46,531
5-R01-GM058160-12	Late Transition Metal Catalysts for Organic Synthesis	93.859	92,070
5-R01-GM058801-12	Cellular and Developmental Function of Mena	93.859	603,480
5-R01-GM059281-14	Neutrophil Priming in Trauma and Sepsis	93.859	382,685
5-R01-GM059426-12	Catalytic Enantioselective Olefin Metathesis Reaction	93.859	539,558
5-R01-GM062207-10	Regulation of the meiotic cell cycle	93.859	280,748
5-R01-GM063755-08S1	Convergent Synthesis via Asymmetric Catalysis	93.859	34,725
5-R01-GM063755-09	Convergent Synthesis via Asymmetric Catalysis	93.859	284,541
5-R01-GM063857-08	Molecular Microdosimetry for Electric Fields and Radiation	93.859	61,020
5-R01-GM065418-07	Packing and Electrostatic Effects on Folding and Protein Stability	93.859	245,889
5-R01-GM065519-10	Investigation of Zinc Neurochemistry by Fluorescence Resonance Energy Transfer	93.859	364,477
5-R01-GM067681-08	Analysis and Design of Coiled Coil Partnering	93.859	328,866
5-R01-GM068678-07	Cytoskeletal Regulation During Growth Cone Motility	93.859	281,189
5-R01-GM068957-08	MAPK Signaling in Single Yeast Cells: Dynamics and Regulation	93.859	499,258
5-R01-GM069857-07	Complex Metallocluster Structure and Assembly	93.859	397,651

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-GM070757-06	Functional LnFe-Nx Models of Biological N2 Fixa	93.859	-755
5-R01-GM072566-07	Synthetic strategies based on epoxide-coupling r	93.859	302,363
5-R01-GM072670-07	Site-specific protein labeling in cells with enginee	93.859	241,903
5-R01-GM074820-05	Early Steps of Alkaloid Biosynthesis	93.859	70,801
5-R01-GM074825-05	Synthesis and Study of Complex Natural Product	93.859	2,558
5-R01-GM077537-05	High Resolution Assembly Structure of the Nucle	93.859	357,868
5-R01-GM081336-03	Computational Modeling of Cell Migration in 3D I	93.859	225,917
5-R01-GM081393-04	Ribonucleotide Reductase Regulation: Diferric Y-	93.859	463,609
5-R01-GM081871-04	Structure-Based Prediction of the Interactome	93.859	342,922
5-R01-GM082209-03	Computational Design of Inhibitor Specificity	93.859	278,336
5-R01-GM082899-04	Cell Cycle Regulation in Caulobacter Crescentis	93.859	271,090
5-R01-GM084181-04	Analysis and Design of Interaction Specifically in	93.859	257,535
5-R01-GM084477-04	Molecular Genetics of Innate Immunity in C. eleg	93.859	293,687
5-R01-GM085319-04	Identification and Function of Sequence-Specific	93.859	296,138
5-R01-GM085323-03	Metabolic Engineering for Microbial Taxol Biosyn	93.859	292,887
5-R01-GM085457-02	High Throughput Monitoring of Mass, Density an	93.859	1,526
5-R01-GM085457-03	High Throughput Monitoring of Mass, Density an	93.859	164,985
5-R01-GM086214-03	Single-molecule imaging with super-resolution	93.859	679,121
5-R01-GM089732-02	Synthesis and Study of Dimeric Diketopiperazine	93.859	434,160
5-R01-GM089903-02	A Systems Biology Approach to Reveal Huntingt	93.859	767,634
5-R01-GM090194-02	Cell-Based Sensors for Measuring Impact of Mic	93.859	345,423
5-R37-GM041934-20	Cell Cycle and Sporulation in Bacillus Subtilis	93.859	715,706
5-R37-GM46059-18	Catalytic Methods for Organic Synthesis	93.859	66,948
5-R56-GM50315-13	An Evolutionary Link Between Telomeres and Tr	93.859	37,150
5-T32-GM007287-35	Pre-doctoral Grant in the Biological Sciences	93.859	-104,441
5-T32-GM007484-33	Integrative Neuronal Systems-Year 33	93.859	4,878
5-T32-GM007484-34	Integrative Neuronal Systems-Year 34	93.859	458,058
5-T32-GM081081-02	Chemistry/Biology Interface Training Program	93.859	-3,126
5-T32-GM081081-03	Chemistry/Biology Interface Training Program	93.859	210,689
5-T32-GM087237-02	Graduate Training in Computational and System:	93.859	114,907
Total for 93.859			28,086,358

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-P30-CA147882-01	ARRA - Koch Institute Faculty Recruitment for ar	93.701	729,565
1-R01-EB006422-01A2	ARRA - Compact, Neon/Cryocooled NMR Magn	93.701	387,211
1-R01-EB006422-01A2	ARRA - Fabricated Equipment: NMR-Class Annu	93.701	11,472

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-EB008082-01A2	ARRA - Dendritic Block Copolymer Micelles as N	93.701	435,351
1-R01-EY019152-01A2	ARRA - Molecular and functional mechanisms ur	93.701	302,748
1-R01-EY019262-01	ARRA - Mechanisms for the Perception of Surfac	93.701	251,927
1-R01-EY019262-01	ARRA - Fabricated Equipment Macro/Micro Phot	93.701	3,947
1-R01-HL086521-01A2	ARRA - Rational Design of a Cardiac Tissue Enç	93.701	292,313
1-R01-HL086521-01A2	ARRA - Rational Design of a Cardiac Tissue Enç	93.701	100,224
1-R01-HL086521-01A2	ARRA - Rational Design of a Cardiac Tissue Enç	93.701	144,805
1-R01-HL090856-01A1	ARRA - The Role of Glycocalyx in Mechanotrans	93.701	512,767
1-R21-DK081783-01A1	ARRA - Intravesical Drug Delivery Device	93.701	250,008
1-R21-NS063185-01A2	ARRA - Structure-Based Ligand Design of Inhibit	93.701	190,268
1-RC1-AG035711-01	ARRA - HDAC1 Activating Compounds as Thera	93.701	448,232
1-RC1-AI086152-01	ARRA - Subcontract - Yale U. - 6920566	93.701	42,074
1-RC1-AI086152-01	ARRA - Subcontract - DFCI - 6920566	93.701	78,079
1-RC1-AI086152-01	ARRA - Analytical microtools for discovering aut	93.701	238,740
1-RC1-AI086152-01	ARRA - Subcontract - BWH - 6920566	93.701	65,754
1-RC1-DE020761-01	ARRA - Subcontract - Whitehead - 6921554	93.701	86,013
1-RC1-DE020761-01	ARRA - Human Pluripotent Stem Cell Differential	93.701	386,122
1-RC1-DE020761-01	ARRA - Child - Langer - 6921554	93.701	5,161
1-RC1-EB011187-01	ARRA - Fab Eq - Microfluidic Microinjector	93.701	11,071
1-RC1-EB011187-01	ARRA - High throughput cell reprogramming by r	93.701	436,207
1-RC1-EB011187-01	ARRA - Child - Langer - 6920608	93.701	141,960
1-RC1-HG005334-01	ARRA - Integrative analysis of genomic and epig	93.701	276,437
1-RC1-MH088182-01	ARRA - Optogenetic control of attention through	93.701	341,908
1-RC1-MH088182-01	ARRA - Optogenetic control of attention through	93.701	251,111
1-RC1-MH088316-01	ARRA - The Functional Circuitry of Category Lea	93.701	312,093
1-RC1-MH088912-01	ARRA - Ubiquitous Games for Biology-Developin	93.701	529,616
1-RC1-NS068103-01	ARRA - Applying a Multidimensional Algorithm fo	93.701	245,732
1-RC1-NS068103-01	ARRA - Applying a Multidimensional Algorithm fo	93.701	185,434
1-RC1-RR028241-01	ARRA - Entrainment-based mechanical ventilati	93.701	133,937
1-RC1-RR028241-01	ARRA - Entrainment-based mechanical ventilati	93.701	98,030
1-RC1-RR028241-01	ARRA - Entrainment-based mechanical ventilati	93.701	31,027
1-RC1-RR028302-01	ARRA - Integrating and Evaluating the Modeling	93.701	215,662
1-RC2-DE020919-01	ARRA - Modulating Cortical and Sub-Cortical Br	93.701	45,859
1-RC2-DE020919-01	ARRA - Modulating Cortical and Sub-Cortical Br	93.701	146,797
1-RC2-DE020919-01	ARRA - Modulating Cortical and Sub-Cortical Br	93.701	-12,086
1-RC2-HG005624-01	ARRA - Deep Sequencing Analysis of mRNA Iso	93.701	1,297,919

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Contract Number	Government Contract Title	CFDA#	FY Expenses
1-RC2-HG005624-01	ARRA - Year 2 Housman - Deep Sequencing An	93.701	154,893
1-RC2-HG005639-01	ARRA - A Data Analysis Center for integration of	93.701	420,074
1-RC2-HG005639-01	ARRA - A Data Analysis Center for integration of	93.701	383,984
1-RC2-HG005639-01	ARRA - A Data Analysis Center for integration of	93.701	469,049
1-RC2-HL101721-01	ARRA - Characterization of Anticoagulant Hepari	93.701	119,096
1-RC2-HL101721-01	ARRA - Characterization of Anticoagulant Hepari	93.701	43,217
1-RC2-HL101721-01	ARRA - Characterization of Anticoagulant Hepari	93.701	103,931
1-S10-RR026606-01	ARRA - Upgrade of Tecan Robotic Liquid-Handli	93.701	204,406
1-S10-RR029193-01	ARRA - An In Vivo/In Vitro 2-Photon Uncaging/In	93.701	1,415,803
1-U01-AI082204-01	ARRA - Development of a Therapy for Smallpox,	93.701	1,202,822
2-R01-EB002804-21A1	ARRA - Fab E: 700 MHz DNP Apparatus	93.701	13,651
2-R01-EB002804-21A1	ARRA - High Field DNP in Biological Systems	93.701	569,313
2-R01-EB002804-21A1	ARRA - Pulsed EPR at 140 GHz	93.701	46,605
2-R01-EB002804-21A1	ARRA - Fab E: 250 GHz Gyrotron Rebuild	93.701	36,326
2-R01-EB002804-21A1	ARRA - Fab E: 500 DNP Instrument	93.701	6,160
2-R01-EY016674-04A1	ARRA - Recovery Act - MEEI Subaward	93.701	251,736
2-R01-EY016674-04A1	ARRA - Advanced Engineering Development of	93.701	277,375
2-R01-EY016674-04A1	ARRA - Fabricated equipment: Retinal Prosthesi	93.701	328,892
2-R01-EY016674-04A1	ARRA - Recovery Act - University of Alabama Ht	93.701	90,379
2-R01-EY016674-04A1	ARRA - Recovery Act - Florida International Univ	93.701	110,247
2-R01-GM039334-23A1	ARRA - N-Linked Protein Glycosylation: Pathway	93.701	306,133
2-R01-HL067966-05A2	ARRA - Pontomedullary Integration of Respirator	93.701	185,950
3-P01-CA042063-24S1	ARRA - Characterization of Pathways Controllinç	93.701	95,475
3-P41-RR002594-24S1	ARRA - MIT Laser Biomedical Research Center	93.701	162,712
3-P41-RR002594-24S1	ARRA - Fabricated Equipment - Tissue Scanner	93.701	6,258
3-P50-GM068762-07S2	ARRA - Systems Biology of Cell Decision Proces	93.701	157,347
3-R00-GM081399-03S1	ARRA - Mechanism and Regulation of Yeast Inte	93.701	88,779
3-R01-CA101830-04S1	ARRA - Foundations of Pretargeted Radiomun	93.701	4,436
3-R01-CA124427-04S1	ARRA - Engineering Multifunctional Nanoparticle	93.701	299,761
3-R01-DC007152-04S1	ARRA - Aids for the Deaf: Models of Speech Inte	93.701	66,138
3-R01-EB001659-07S1	ARRA - Integrating Data, Models, and Reasoninç	93.701	76,052
3-R01-EB001659-07S1	ARRA - Integrating Data, Models, and Reasoninç	93.701	73,848
3-R01-ES015818-03S1	ARRA - Mechanism of Eukaryotic Environmental	93.701	120,262
3-R01-ES016313-03S1	ARRA - The Environment as a Variable to Calibr;	93.701	69,551
3-R01-EY014970-05S1	ARRA - Visual Object Processing in the Inferoter	93.701	10,093
3-R01-EY016159-04S1	ARRA - Reorganization of Visual Cortex in Macu	93.701	59,499

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Contract Number	Government Contract Title	CFDA#	FY Expenses
3-R01-GM031030-27S1	ARRA - Molecular Genetics of Rhizobium Nodule	93.701	146,770
3-R01-GM032134-28S1	ARRA - Nonheme Diiron Centers and the Biology	93.701	-103
3-R01-GM049039-14S1	ARRA - Vascular Drug Delivery	93.701	134,172
3-R01-GM050895-14S1	ARRA - Cell-cell signaling, gene expression, and	93.701	44,505
3-R01-GM056800-14S1	ARRA - Regulation of mitosis by proteolysis in ye	93.701	78,449
3-R01-GM057034-13S1	ARRA - Asymmetric Nucleophilic Catalysis	93.701	401,925
3-R01-GM057034-13S1	ARRA - Fab E - Vacuum & Inert Gas Systems fo	93.701	17,913
3-R01-GM057073-12S1	ARRA - Enzymatic Degradation of Glycosaminoç	93.701	17,637
3-R01-GM059281-12S1	ARRA - Neutrophil Priming in Trauma and Sepsis	93.701	123,365
3-R01-GM067681-07S1	ARRA - Analysis and Design of Coiled Coil Partn	93.701	123,615
3-R01-GM068957-07S1	ARRA - MAPK Signaling in Single Yeast Cells: D	93.701	387,653
3-R01-GM074820-03S1	ARRA - Early Steps in Alkaloid Biosynthesis	93.701	-3
3-R01-GM074825-05S1	ARRA - Synthesis and Study of Complex Natural	93.701	-4,075
3-R01-GM081393-02S1	ARRA - Ribonucleotide Reductase Regulation: C	93.701	55,923
3-R01-GM081871-02S1	ARRA - Structure-Based Prediction of the Interac	93.701	200,527
3-R01-GM084181-02S1	ARRA - Analysis and design of interaction specif	93.701	60,684
3-R01-GM085323-02S1	ARRA - Metabolic Engineering for Microbial Taxc	93.701	131,094
3-R01-HG002439-08S1	ARRA - Computational and Experimental Analys	93.701	241,673
3-R01-HG002439-09S1	ARRA - Computational and Experimental Analys	93.701	442,199
3-R01-HG004037-03S1	ARRA - Regulatory Morif Discovery in the Humar	93.701	104,234
3-R01-HL079503-04S1	ARRA - Nonlinear Analysis of Heart Rate Variabi	93.701	21,288
3-R01-MH065252-08S1	ARRA - Neural Basis of Categories	93.701	123,051
3-R01-NS035145-13S1	ARRA - Integrative Functions of the Prefrontal Ct	93.701	112,555
3-R21-DK078442-02S1	ARRA - HRI/eIF2aP Signaling Pathway as Poten	93.701	18,352
3-R21-DK078442-02S2	ARRA - HRI/eIF2aP Signaling Pathway as Poten	93.701	9,701
3-T32-GM081081-02S1	ARRA - Chemistry-Biology Interface Training Prc	93.701	82,702
3-T32-GM087237-01S1	ARRA - Graduate Training in Computational and	93.701	38,882
3-U54-CA119349-05S1	ARRA - The MIT-Harvard Center of Cancer Nanc	93.701	191,387
7-RC1-MH088434-02	ARRA - OptoGenetic Mice for Cell Type-Specific	93.701	529,634
Total for 93.701			21,517,457

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R90-DK071503-03	Graduate Training in Computational Systems Bic	93.847	-32,772
1-T90-DK070114-02	Graduate Training in Computational Systems Bic	93.847	620
1-T90-DK070114-03	Graduate Training in Computational Systems Bic	93.847	-810
5-R01-DK087984-02	HRI-eIF2a Phosphorylation Signaling in Oxidativ	93.847	223,036

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R90-DK071503-04	Graduate Training in Computational Systems Bic	93.847	-17,127
5-R90-DK071503-05	Graduate Training in Computational Systems Bic	93.847	-3,672
5-T90-DK070069-04	MIT Training Program in Computational Biology	93.847	-6,920
	Total for 93.847		162,355
Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R03-EB008673-01	Dissemination of Cross-Platform Software for Art	93.286	1,208
1-R21-EB0008156-02	Using Nanoparticle-DNA to Enhance Antisense C	93.286	58,603
1-R21-EB009180-02	Nanofluidic system for analysis of single biologics	93.286	97,225
2-R01-EB000351-17A1	Child - Blankschein - 6921819	93.286	31,091
2-R01-EB002887-04A2	Fabricated Equip: MgB2 Whole-Body MRI Magn	93.286	17,851
2-R01-EB004866-05A1	High Frequency Gyrotron for DNP/NMR Researc	93.286	276,888
2-R01-EB004866-05A1	Fabricated Equip: High Frequency Gyrotron	93.286	1,384
2-R01-EB006365-06A2	Child -Cima - 6915916	93.286	449,557
2-R01-EB006365-06A2	Subcontract Johns Hopkins - 6915916	93.286	157,551
2-R01-EB006365-06A2	Subcontract Case Western - 6915916	93.286	63,415
2-T32-EB001680-06A2	Neuroimaging Training Program	93.286	124,677
3-R01-EB003805-03	Minority Suppl - Vickerman - 6898360	93.286	231
5-P41-EB002026-34	Child Account: Advisory Board Meeting Restrict	93.286	5,858
5-P41-EB002026-36	Harvard/MIT Center for Magnetic Resonance	93.286	723,996
5-R01-EB000351-18	Expanding the Clinical Utility of Ultrasound-Assis	93.286	375,348
5-R01-EB001659-07	Peter Szolovits - 6918054	93.286	256,909
5-R01-EB001659-07	George Verghese - 6918054	93.286	185,753
5-R01-EB001659-08	Integrating Data, Models, and Reasoning in Critic	93.286	685,243
5-R01-EB001960-33A2	800 MHz Magnet	93.286	144,400
5-R01-EB001960-34	Solid State NMR Studies of Membrane Proteins	93.286	338,946
5-R01-EB001965-07	Fabricated Equipment: A Gyrotron Amplifier Tubr	93.286	17,791
5-R01-EB001965-09	High Power Millimeter Wave/Terahertz Sources f	93.286	723,085
5-R01-EB002887-05	MgB2 0.5-T/800-mm Whole-Body MRI Magnet: F	93.286	380,163
5-R01-EB003151-32	Fab E: 400 MHz Deuterium NMR Apparatus	93.286	17,960
5-R01-EB003151-34	Solid State NMR Studies of Peptides and Proteir	93.286	543,550
5-R01-EB003805-03	Child Zhang - 6898360	93.286	149,618
5-R01-EB003805-03	Child Grodzinsky - 6898360	93.286	274,198
5-R01-EB003805-03	Child Griffith - 6898360	93.286	20,725
5-R01-EB003805-03	Child Kamm - 6898360	93.286	-3,036
5-R01-EB003805-05	Self-Assembling Peptides for Tissue Engineering	93.286	259,837

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-EB004866-04	Tunable 330 GHz Gyration for DNP/NMR	93.286	43,384
5-R01-EB005743-04	Nanofluidic Tools for Proteomic Sample Preparation	93.286	-29,329
5-R01-EB006365-09	Microchip Drug Delivery System	93.286	630,244
5-R01-EB007278-04	Microscale Control of Stem Cell Signaling Using	93.286	248,719
5-R01-EB007942-04	Spiral Spectroscopic Human Neuroimaging	93.286	174,532
5-R21-EB008177-02	Continuous-flow, Ampholyte-free pl-based Sortin	93.286	220,271
5-R21-EB008217-02	Mass Flow Cytometry	93.286	32,945
5-R21-EB008550-02	Microfluidic-Based High-Efficiency Cell Fusion fo	93.286	-4,979
5-R21-EB008814-02	Barcoded Hydrogel Microparticles and Scanner f	93.286	118,049
5-R21-EB008844-02	A new experimental platform to study biofilms: M	93.286	150,491
5-R37-EB000244-30	Controlled Release of Macromolecules	93.286	134,305
5-R37-EB000244-31	Controlled Release of Macromolecules	93.286	305,534
5-T32-EB006348-04	Molecular, Cell and Tissue Biomechanics Trainin	93.286	11,648
5-T32-EB006348-05	Molecular, Cell and Tissue Biomechanics Trainin	93.286	276,959

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Total for 93.286

8,692,798

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R21-ES019498-01	CometChip: Enabling Translation of DNA Damag	93.113	4,004
2-P30-ES002109-31A1	Animal Models Fac Core - YR 31	93.113	29,726
2-P30-ES002109-31A1	Bioanalytical Fac Core - YR 31	93.113	80,535
2-P30-ES002109-31A1	Genomics Fac Core - YR 31	93.113	70,070
2-P30-ES002109-31A1	Admin Core - YR 31	93.113	57,388
2-P30-ES002109-31A1	Pilot Project: Ribbeck	93.113	32,896
2-P30-ES002109-31A1	COEC-YR 31	93.113	26,584
2-P30-ES002109-31A1	Pilot Project: Bathe	93.113	6,828
2-P30-ES002109-31A1	YR 31 Pilot Project: Gore	93.113	4,216
2-P30-ES002109-31A1	YR 31 Pilot Project: Maheshri	93.113	1,474
2-T32-ES007020-36	Training Grant in Environmental Toxicology	93.113	516,106
3-U01-ES016045-04S1	Comet-Chip: A High-Throughput DNA Damage S	93.113	53,649
5-P30-ES002109-30	COEC - NCE	93.113	80,996
5-P30-ES002109-30	CF2-Admin Core	93.113	68,897
5-P30-ES002109-30	COEC - YR 30	93.113	-6,118
5-P30-ES002109-30	Carryforward - Admin Core	93.113	-1,557
5-P30-ES002109-30	Startup Funds K Ribbeck	93.113	714
5-P30-ES002109-30	Animal Models Facilities Core - Yr 30	93.113	13,852
5-P30-ES002109-30	Carryforward - Genomic Facilities Core	93.113	25,093

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-P30-ES002109-30	Bioanalytical Facilities Core - Yr. 30	93.113	-19,532
5-P30-ES002109-30	Genomics Facilities Core - Yr 30	93.113	27,281
5-P30-ES002109-30	Year 30	93.113	32,914
5-P30-ES002109-30	CEHS Pilot: Interrogating The Intersection of DN	93.113	40,680
5-P30-ES002109-30	Carryforward Director's Fund	93.113	65,176
5-P30-ES002109-30	Bioanalytical Core - NCE	93.113	170,081
5-P30-ES002109-30	CF2-Facilities Cores	93.113	133,663
5-P30-ES002109-30	Admin Core - Yr. 30	93.113	107,116
5-P30-ES002109-30S1	Bridge - Admin Core	93.113	48,289
5-P30-ES002109-30S1	Bridge - Facilities Core	93.113	5,155
5-P30-ES002109-30S1	CEHS Pilot: Zebrafish - A Model To Study The Li	93.113	7,816
5-P30-ES002109-30S1	CEHS Pilot: Single-cell Analysis of Transcription:	93.113	16,731
5-R01-ES015339-05	Protein Kinase Signaling and Cell Cycle Control	93.113	386,190
5-R01-ES015818-04	Mechanism of Eukaryotic Environmental Multitage	93.113	298,952
5-R01-ES016313-04	The Environment as a Variable to Calibrate Mou:	93.113	235,090
5-R01-ES016313-04	The Environment as a Variable to Calibrate Mou:	93.113	154,611
5-R01-ES016313-04	The Environment as a Variable to Calibrate Mou:	93.113	130,726
5-R01-ES016450-12	DNA Oxidation Products and Endogeneous DNA	93.113	299,123
5-T32-ES007020-35	Training Grant in Environmental Toxicology	93.113	5,978
5-U01-ES016045-04	Comet-Chip: A High-Throughput DNA Damage :	93.113	180,260
5-U01-ES016045-04	CF 6919727 / 6921345	93.113	79,357
Total for 93.113			3,471,010

Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-AG015339-12	Function of Mammalian SIRT1 in Aging	93.866	494,488
5-R01-AG021150-09	Molecular Study of sir-2 Genes and Aging in C. €	93.866	248,400
5-R01-AG029601-03	HMS Subcontract - 6914977	93.866	7,766
5-R01-AG029601-03	Research Supplement to Promote Diversity in H€	93.866	55,482
5-R01-AG029601-05	Nanoscale Electrostatic Assemblies for Multi-Ag€	93.866	137,800
5-R21-AG030770-02	Neuroimaging the impact of aging on economic c	93.866	-19,486
5-R37-AG011119-19	Cell Senescence in Saccharomyces Cerevisiae	93.866	435,016
Total for 93.866			1,359,466

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R56-DC010849-01	Neuroanatomical and Behavioral Anomalies in P	93.173	126,208

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-DC000117-32	Hearing Aid Research	93.173	227,920
5-R01-DC000238-26	Experimental-Theoretical Studies of Cochlear Microphonic	93.173	202,540
5-R01-DC003007-15	Effects of Hearing Status on Audit Speech Production	93.173	668,132
5-R01-DC007152-05	Aids for the Deaf: Models of Speech Intelligibility	93.173	256,663
5-R01-DC008870-04	Diversity in the Integration of Granule Neurons in the Auditory Brainstem	93.173	-18,485
5-R01-DC009183-04	Neuronal Mechanisms of Motor Exploration in the Auditory Brainstem	93.173	363,342
5-T32-DC00038-18	Training for Speech and Hearing Sciences	93.173	20,973
5-T32-DC00038-19	Training for Speech and Hearing Sciences	93.173	876,723

Total for 93.173

2,724,016

Contract Number	Government Contract Title	CFDA#	FY Expenses
2-R01-CA021615-34	Mutagenesis and Repair of DNA	93.393	51,664
5-P01-CA026731-31	No PPG Project 3 Wogan	93.393	218,322
5-P01-CA026731-31	No PPG - Project 1 - Deen	93.393	176,593
5-P01-CA026731-31	No PPG - Core 2 - Fox	93.393	147,022
5-P01-CA026731-31	No PPG Project 4 Parent	93.393	-9,282
5-P01-CA026731-31	NO PPG Project 4A - Fox	93.393	122,294
5-P01-CA026731-31	No PPG Project 3 Essigmann	93.393	118,524
5-P01-CA026731-31	NO PPG Core 1 Wogan	93.393	34,705
5-P01-CA026731-31	NO PPG Project 4B - Engelward	93.393	125,654
5-P01-CA026731-31	No PPG Project 2 Dedon	93.393	134,280
5-P01-CA42063-24	Pathways Controlling Cancer - Core	93.393	112,101
5-P01-CA42063-24	Pathways Controlling Cancer - J. Lees Lab	93.393	436,954
5-P01-CA42063-24	Pathways Controlling Cancer - Tyler Jacks	93.393	423,869
5-P01-CA42063-25	Characterization of Pathways Controlling Cancer	93.393	290,907
5-PO1-CA026731-32	Endogenous Nitrite Carcinogenesis in Man	93.393	784,091
5-R01-CA021615-33	Mutagenesis and Repair of DNA	93.393	192,064
5-R01-CA055042-20	Eukaryotic DNA Alkylation Repair	93.393	287,367
5-R01-CA067529-14	Helicobacter Induced Hepatitis and Tumorigenesis	93.393	118,835
5-R01-CA075576-14	In Vivo Role of DNA Alkylation Repair	93.393	469,254
5-R01-CA079827-09	Mechanisms of Damage-Induced Homologous Recombination	93.393	192,642
5-R01-CA103146-09	Chemistry and Biology of Deoxyribose Oxidation	93.393	517,660
5-R01-CA108854-04	Role of I/O and TGFBI in Colon Cancer	93.393	-371
5-R01-CA108854-06	Role of I/O and TGFBI in Colon Cancer	93.393	325,973
5-R01-CA110261-05	Basis for Sequence Selective Guanine Oxidation	93.393	11,259
5-R01-CA116318-05	Genetic Toxicology of Purine Metabolism	93.393	245,272

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
5-R01-CA133404-04	Stress and Proliferation States Impact MicroRNA	93.393	383,477
5-R01-CA149261-02	The influence of DNA repair on inflammation ass	93.393	456,158
5-R37-CA080024-14	Intra and Extra-Chromosomal Probes for Mutagn	93.393	314,420
	Total for 93.393		6,681,708
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
5-T32-MH074249-03	Training Program in Neurobiology of Learning an	93.282	-8,408
5-T32-MH074249-04	Training Program in Neurobiology of Learning an	93.282	163,894
5-T32-MH082718-02	Developmental Cognitive Neuroscience	93.282	158,099
	Total for 93.282		313,585
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-R01-CA155320-01	MicroRNA Expression Profiling Circuits for Detec	93.395	179,932
2-P30-CA14051-38	Transgenic Animal Core Facility	93.395	-2,583
2-P30-CA14051-38	Histology Core Facility	93.395	991
2-P30-CA14051-39	Developmental Pilot Project - Pilot Project Vande	93.395	126,739
2-P30-CA14051-39	Developmental Pilot Project (Langer)	93.395	48,565
2-P30-CA14051-39	ES Cell & Transgenics Core Facility	93.395	316,274
2-P30-CA14051-39	Developmental Pilot Project (Irvine)	93.395	51,732
2-P30-CA14051-39	PLANNING & EVALUATION	93.395	84,000
2-P30-CA14051-39	Administration	93.395	212,328
2-P30-CA14051-39	Developmental Pilot Project - Pilot Project F. Wh	93.395	125,800
2-P30-CA14051-39	Biopolymers & Proteomics Core Facility	93.395	332,684
2-P30-CA14051-39	Developmental Pilot Project (Jacks)	93.395	55,760
2-P30-CA14051-39	Flow Cytometry Facility	93.395	222,695
2-P30-CA14051-39	Bioinformatics and Computing	93.395	494,568
2-P30-CA14051-39	Glassware Preparation Facility	93.395	156,027
2-P30-CA14051-39	Histology Core Facility	93.395	217,231
2-P30-CA14051-39	Senior Leadership	93.395	5,061
2-P30-CA14051-39	Shared Research Resources	93.395	190,147
2-P30-CA14051-39	Applied Therapeutics & Whole Animal Imaging	93.395	101,900
2-P30-CA14051-39	Developmental Pilot Project (Hopkins)	93.395	648
2-P30-CA14051-39	Developmental Pilot Project (Langer/Anderson)	93.395	16,084
2-P30-CA14051-39	Microscopy Core Facility	93.395	136,465
2-P30-CA14051-39	Virus Production Core Facility	93.395	18,112

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
2-P30-CA14051-39	Developmental Pilot Project	93.395	85,546
2-P30-CA14051-39	Micro-Array Technology Facility	93.395	73,204
2-P30-CA14051-40	Bioinformatics and Computing	93.395	107,064
2-P30-CA14051-40	Biopolymers & Proteomics Core Facility	93.395	64,311
2-P30-CA14051-40	ES Cell & Transgenics Core Facility	93.395	49,752
2-P30-CA14051-40	Administration	93.395	47,524
2-P30-CA14051-40	Flow Cytometry Facility	93.395	37,848
2-P30-CA14051-40	Microscopy Core Facility	93.395	16,803
2-P30-CA14051-40	Glassware Preparation Facility	93.395	19,423
2-P30-CA14051-40	Micro-Array Technology Facility	93.395	16,020
2-P30-CA14051-40	Applied Therapeutics & Whole Animal Imaging	93.395	9,644
2-P30-CA14051-40	Histology Core Facility	93.395	27,067
2-P30-CA14051-40	Shared Research Resources	93.395	28,518
2-R01-CA096504-06	Lauff - Child - 6915834	93.395	191,314
2-R01-CA096504-06	UCB Subaward - 6915834	93.395	97,318
2-R01-CA096504-06	Child - White 6915834	93.395	52,106
2-R01-CA096504-06	MSKCC Subaward - 6915834	93.395	78,075
2-R01-CA101830-05A1	Subcontract - Beth Israel - 6921920	93.395	20,266
5-R01-CA075289-14	Optical Biopsy Using Coherence Tomography	93.395	285,533
5-R01-CA086061-10	Mechanistic Comparison of Cisplatin with Synthetic	93.395	233,925
5-R01-CA096504-09	Engineered Antibody EGFR Antagonist Cancer T	93.395	222,454
5-R01-CA101830-04	Foundations of Pretargeted Radioimmunotherapy	93.395	-6,137
5-R01-CA101830-06	Foundations of Pretargeted Radioimmunotherapy	93.395	441,367
5-R01-CA128803-04	Identifying Determinants of Chemotherapeutic Response	93.395	291,359
Total for 93.395			5,581,464

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-MH091174-01A1	Capacity Limitations in the Cortex	93.242	8,719
1-T32-MH082718-01A1	Developmental Cognitive Neuroscience	93.242	-6,033
5-P50-MH058880-10	Proj. 4- Bear	93.242	39,913
5-P50-MH058880-10	Proj. 3- Miller	93.242	67,877
5-P50-MH058880-10	Proj. 1 - Wilson	93.242	96,965
5-P50-MH058880-10	Proj. 2- Tonegawa	93.242	357,916
5-P50-MH058880-10	Core 1	93.242	-2
5-R00-MH080310-05	Signaling Scaffold Of NMDA Receptor-Dependent	93.242	275,586
5-R01-MH047432-14	Competition Model of Attention and Memory	93.242	228,479

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-MH060379-10	Ensemble Activity in Rat Striatum During Habit L	93.242	425,604
5-R01-MH061976-09	Hippocampal and Prefrontal Cortical Interactions	93.242	415,795
5-R01-MH065252-10	Neural Basis of Categories	93.242	249,834
5-R01-MH067105-07	Performance Error Signals in Basal Ganglia-Forç	93.242	310,482
5-R01-MH076936-14	Molecular Organization of CNS Synapses	93.242	10,946
5-R01-MH078821-17	Molecular Genetic Approaches to Learning and l	93.242	670,231
5-R01-MH080344-03	Development of Declarative Memory	93.242	331,911
5-R01-MH081201-05	Roles of SAPAP proteins in Synaptic Functions ε	93.242	394,362
5-R01-MH084966-03	Opposing Effects of Chronic Stress on Amygdala	93.242	355,561
5-R01-MH085802-02	Mechanisms and Therapeutics for Rett Syndrom	93.242	428,586
5-R01-MH091115-02	Chemical Genomic Approaches to Neurobiology	93.242	361,859
5-R01-MH091220-02	The Role of GABAergic Synaptic Plasticity in Nei	93.242	368,601
5-R21-MH086944-02	Regulation and Function of Spontaneous Mini Rε	93.242	175,825
5-R21-MH090452-02	Neurobiology of mouse models for human chr 16	93.242	265,640
5-R37-MH087027-02	Cortical Circuits for Attention and Decisions	93.242	286,743
	Total for 93.242		6,121,400

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-U54-CA143874-01	Education & Training	93.397	-4,032
1-U54-CA143874-01	Project 2/Roose	93.397	144,596
1-U54-CA143874-01	Project 4/Sunyaev	93.397	105,234
1-U54-CA143874-01	Project 1/Jaenisch	93.397	78,686
1-U54-CA143874-01	Project 4/Mirney	93.397	66,006
1-U54-CA143874-01	Project 3/Kirschner	93.397	44,218
1-U54-CA143874-01	Project 4/Sherman	93.397	30,995
1-U54-CA143874-01	Project 1/Jacks	93.397	26,033
1-U54-CA143874-01	Project 3/Manalis	93.397	73,084
1-U54-CA143874-01	SingleMolRNA Core	93.397	12,508
1-U54-CA143874-01	Project 3/Amon	93.397	8,983
1-U54-CA143874-01	CellWeighing/Microfab Core	93.397	7,083
1-U54-CA143874-01	Project 2/Chakraborty	93.397	4,912
1-U54-CA143874-01	Project 1/van Oudenaarden	93.397	4,838
1-U54-CA143874-01	The MIT Center for Single-Cell Dynamics in Can	93.397	4,211
1-U54-CA143874-01	Project 4/Getz	93.397	17,568
2-U54-CA112967-06	Tumor Cell Network Center: Mitogenesis Networ	93.397	65,744
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Mo	93.397	60,317

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Contract Number	Government Contract Title	CFDA#	FY Expenses
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/I-	93.397	59,368
2-U54-CA112967-06	Tumor Cell Network Center: Administration	93.397	61,113
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Mo	93.397	45,186
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Netw	93.397	33,020
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Mo	93.397	66,890
2-U54-CA112967-06	Tumor Cell Network Center: Mitogenesis Networ	93.397	55,266
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/S	93.397	70,583
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Mo	93.397	174,082
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/L	93.397	84,169
2-U54-CA112967-06	Tumor Cell Network Center: Pilot Project	93.397	126,001
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Netw	93.397	129,455
2-U54-CA112967-06	Tumor Cell Network Center: Mitogenesis Networ	93.397	142,197
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/C	93.397	159,469
2-U54-CA112967-06	Tumor Cell Network Center: Mitogenesis Networ	93.397	166,750
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/I-	93.397	26,626
2-U54-CA112967-06	Tumor Cell Network Center: Education	93.397	298,257
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Netw	93.397	81,037
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Netw	93.397	11,680
3-U54-CA112967-06S1	Tumor Cell Networks Center - Analysis of c-MET	93.397	91,893
5-U54-CA112967-05	ICBP Pilot Project Griffith	93.397	-1,039
5-U54-CA112967-05	Regulatory Networks in Cancer Initiation and Pro	93.397	-368
5-U54-CA112967-05	Bioinformatics, Computation and Modeling Core	93.397	152
5-U54-CA112967-05	Summer Fellowship	93.397	350
5-U54-CA112967-07	Mitogenesis Networks/White	93.397	71,668
5-U54-CA112967-07	DNA Damage Networks/Hemann	93.397	36,219
5-U54-CA112967-07	Migration Network/Hemann	93.397	37,433
5-U54-CA112967-07	Mitogenesis Networks/Fraenkel	93.397	46,397
5-U54-CA112967-07	Migration Network/Lauffenburger	93.397	44,618
5-U54-CA112967-07	Bioinformatics & Modeling Core/Fraenkel	93.397	34,693
5-U54-CA112967-07	DNA Damage Networks/Samson	93.397	38,491
5-U54-CA112967-07	Pilot Project	93.397	31,970
5-U54-CA112967-07	Tumor Cell Network Center: Administration	93.397	26,863
5-U54-CA112967-07	Migration Network/Gertler	93.397	48,050
5-U54-CA112967-07	Bioinformatics & Modeling Core/Tidor	93.397	23,629
5-U54-CA112967-07	Migration Network/Hynes	93.397	21,888
5-U54-CA112967-07	Migration Network/Sharp	93.397	20,479

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-U54-CA112967-07	Bioinformatics & Modeling Core/Yaffe	93.397	2,552
5-U54-CA112967-07	DNA Damage Networks/Lauffenburger	93.397	60
5-U54-CA112967-07	Mitogenesis Networks/Lauffenburger	93.397	30,901
5-U54-CA112967-07	DNA Damage Networks/Yaffe	93.397	61,986
5-U54-CA112967-07	Bioinformatics & Modeling Core/Lauffenburger	93.397	51,894
5-U54-CA112967-07	Education	93.397	81,384
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environi	93.397	81,170
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environi	93.397	23,909
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environi	93.397	13,975
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environi	93.397	25,660
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environi	93.397	53,048
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environi	93.397	154,627
5-U54-CA126515-04REVISED	Tumor Stroma Interactions in the Tumor Environi	93.397	22,972
5-U54-CA126515-04REVISED	Tumor Stroma Interactions in the Tumor Environi	93.397	101,104
5-U54-CA126515-04REVISED	Tumor Stroma Interactions in the Tumor Environi	93.397	45,421
5-U54-CA126515-04REVISED	Tumor Stroma Interactions in the Tumor Environi	93.397	151,724
5-U54-CA126515-05	Tumor Stroma Interactions in the Tumor Microen	93.397	278,902
5-U54-CA126515-05	Tumor Stroma Interactions in the Tumor Microen	93.397	211,515
5-U54-CA126515-05	Tumor Stroma Interactions in the Tumor Environi	93.397	154,818
5-U54-CA126515-05	Tumor Stroma Interactions in the Tumor Environi	93.397	115,012
5-U54-CA126515-05	Tumor Stroma Interactions in the Tumor Environi	93.397	11,554
5-U54-CA143874-02	Probing Transcriptional Response as a Function	93.397	1,525
5-U54-CA143874-02	Singlemoira Core	93.397	169,189
5-U54-CA143874-02	Project 1/van Oudenaarden	93.397	114,018
5-U54-CA143874-02	Education & Training	93.397	150,227
5-U54-CA143874-02	Project 2/Chakraborty	93.397	115,230
5-U54-CA143874-02	Project 1/Jacks	93.397	84,604
5-U54-CA143874-02	Project 3/Ammon	93.397	17,385
5-U54-CA143874-02	Project 4/Mirny	93.397	196,474
5-U54-CA143874-02	Project 4/Sunyaev	93.397	105,642
5-U54-CA143874-02	Project 1/Jaenisch	93.397	160,055
5-U54-CA143874-02	Project 3/Manalis	93.397	304,210
5-U54-CA143874-02	Cellweighing/Microfab Core	93.397	70,187
5-U54-CA143874-02	Administration	93.397	86,505
5-U54-CA143874-02	Project 3/Kirschner	93.397	157,252
5-U54-CA143874-02	Outreach Plan: MIT Physical Sciences and Onco	93.397	43,156

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-U54-CA143874-02	Outreach & Dissemination	93.397	33,384
5-U54-CA143874-02	Pilot Project	93.397	109,984
5-U54-CA143874-02	Project 4/Sherman	93.397	45,161
5-U54-CA143874-02	Project 2/Roose	93.397	359,713
5-U54-CA143874-02	Project 4/Getz	93.397	43,573
5-U54-CA143874-02	Project 3/FEA/Manalis	93.397	8,382
5-U54-CA143874-02	Fabricated Equipment - Readout & Fluidic Deliver	93.397	31,065
Total for 93.397			7,196,628

Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-HL072849-04	Integrative Models of Neural Adaptive Control	93.838	-3,080
5-R01-HL093225-02	Cytoarchitecture of Central Respiratory Afferents	93.838	255,960
Total for 93.838			252,880

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-EY019271-01A2	Haptic Virtual Environments to Enhance Navigati	93.867	174,867
1-R01-EY020517-01	Project Prakash: Development of Object Percept	93.867	140,383
1-R01-EY02484-01A1	The gist of the space: A space centered approach	93.867	120,790
2-R01-EY011289-25	Novel Diagnostics With Optical Coherence Tomc	93.867	218,571
2-R01-EY013455-13	Feedback of Peripheral Visual Information to Fov	93.867	109,769
3-R01-EY012309-12S1	Experience Dependent Visual Cortical Developm	93.867	64,227
3-R01-EY015834-05S1	Human Gamma-D-Crystallin Folding, Misfolding	93.867	-1,405
5-P30-EY002621-33	Core - Vision Processes - Imaging Core	93.867	190,791
5-P30-EY002621-33	Core - Vision Processes - Machine Shop	93.867	181,923
5-P30-EY002621-33	Core - Vision Processes - Electronics Shop	93.867	155,119
5-P30-EY002621-33	Core - Vision Processes	93.867	35,982
5-R01-EY005127-25	Physical and Chemical Basis of Lens Opacity	93.867	5,973
5-R01-EY006039-28	Experiments on the Development of Neural Path	93.867	237,576
5-R01-EY007023-22	Cell-Specific Circuits in Visual Cortex	93.867	558,817
5-R01-EY011289-23	Fabrication: Fourmier Domain-Locked Lasers for	93.867	4,520
5-R01-EY011289-24	Novel Diagnostics With Optical Coherence Tomc	93.867	55,346
5-R01-EY011894-13	A Molecular Genetic Analysis of Cortical Plasticit	93.867	393,050
5-R01-EY012309-13	Experience Dependent Visual Cortical Developm	93.867	294,551
5-R01-EY012848-10	Dynamic Basal Ganglia Saccade Networks	93.867	398,868
5-R01-EY013455-12	fMRI Investigations of Visual Recognition and Ai	93.867	107,373

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-EY014074-17	Developmental Regulation of Glutamate Receptor	93.867	409,571
5-R01-EY014970-07	Construction of Invariant Shape Selectivity in the	93.867	303,833
5-R01-EY015834-05S2	Supplement: Human gammaD-crystallin Folding	93.867	167,142
5-R01-EY015834-07	Compounds blocking crystallin aggregation in vit	93.867	352,481
5-R01-EY016159-04	Reorganization of Visual Cortex on Macular Deg	93.867	100,137
5-R01-EY017098-05	Structural Correlates of Rapid Cortical Plasticity	93.867	53,049
5-R01-EY017292-05	Neural Response of Selective Visual Attention	93.867	333,166
5-R01-EY017656-04	In vivo Imaging of Neuronal Plasticity in Mouse V	93.867	358,942
5-R01-EY017921-04	Neuronal Mechanisms Mediating Visual Search	93.867	434,281
5-R01-EY018648-04	Cortical Representation and Plasticity: Neurons &	93.867	477,944
5-R21-EY019366-02	A Texture Analysis/Synthesis Model of Visual Cr	93.867	162,866
5-R21-EY019741-02	Rapid Material Perception	93.867	181,912
5-T32-EY013935-09	Integrative Training Program in Vision - Year 9	93.867	14,541
5-T32-EY013935-10	Integrative Training Program in Vision - Year 10	93.867	135,562
Total for 93.867			6,932,518

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-HL107503-01	Scalable Units for Building Vascularized Cardiac	93.837	5,566
5-P01-HL066105-07	Molecular Analysis Project V	93.837	319,474
5-P01-HL066105-07	Molecular Analysis Core D	93.837	28,470
5-P01-HL066105-07	Molecular Analysis Core B	93.837	112,902
5-P01-HL066105-07	Molecular Analysis Core A	93.837	304,545
5-P01-HL066105-07	Molecular Analysis Project I	93.837	374,760
5-P01-HL066105-10	Molecular Analysis of Cardiovascular Biology and	93.837	1,158,391
5-R01-HL052212-18	Scavenger Receptors: Ligand Binding and Patho	93.837	490,261
5-R01-HL079503-04	Nonlinear Analysis of Heart Rate Variability	93.837	385,535
5-U01-HL091737-03	Enabling Population-Scale Physical Activity Mea	93.837	-1,300
5-U01-HL091737-04	Enabling Population-Scale Physical Activity Mea	93.837	550,664
Total for 93.837			3,729,268

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-T32-HG004947-01	MIT/Whitehead/Broad Computational Genetics T	93.172	-1,037
2-T32-HG002295-06A2	Training Grant in Bioinformatics and Functional C	93.172	18
5-R01-HG002439-09	Computational and Experimental Analysis of Ver	93.172	401,692
5-R01-HG004037-04	Regulatory Motif Discovery in the Human Genom	93.172	283,719

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R21-HG004231-02	Microfluidic Devices for High Throughput Gene S	93.172	5,029
5-T32-HG002295-07	Training Grant in Bioinformatics and Functional C	93.172	143,081
5-T32-HG002295-08	Training Grant in Bioinformatics and Integrative C	93.172	598,621
5-T32-HG004947-02	MIT/Whitehead/Broad Computational Genetics T	93.172	129,628
Total for 93.172			1,560,751

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-K99-NS067062-01	Basal Ganglia-Thalamic Interactions in Behaving	93.853	96,144
1-K99-NS076364-01	Role of Arc in synaptic/experience-dependent plc	93.853	17,685
1-R01-NS056140-01A2	California Institute of Technology Subaward	93.853	48,876
1-R01-NS056140-01A2	Fabrication: Brain-Machine Interface for a Cortic	93.853	31,276
1-R21-NS075883-01	Fabricated Equipment - Custom High Power Cor	93.853	3,503
1-R21-NS075883-01	Structure-Function of the Nuclear Envelope Brid	93.853	31,614
2-R01-NS051874-16A1	The Cdk5/p35 Kinase	93.853	75,388
3-R01-NS051874-15S1	CDK5/P35 Kinase	93.853	84,000
3-R01-NS052203-05S1	Modeling Huntington's Disease in Drosophila	93.853	-95
5-P01-NS055923-04	Transcriptional Regulation of Stem Cell Differenti	93.853	470,535
5-P01-NS055923-05	Transcriptional Regulation of Stem Cell Differenti	93.853	287,771
5-R01-NS025529-22	Extrapyramidal Systems	93.853	471,739
5-R01-NS035145-15	Integrative Functions of Prefrontal Cortex	93.853	376,848
5-R01-NS040296-09	Characterization of the Drosophila Synaptotagmi	93.853	126,947
5-R01-NS043244-08	Drosophila as an Experimental Model for Epileps	93.853	411,963
5-R01-NS045130-07	Systematic Evaluation of Sensory Processing in	93.853	500,968
5-R01-NS051320-04	Regenerative Healing Using ECM Based Scaffold	93.853	289,295
5-R01-NS051826-05	Computational Modeling of Anatomical Shape Di	93.853	25,815
5-R01-NS051874-15	CDK5/P35 Kinase	93.853	152,728
5-R01-NS052203-05	Modeling Huntington's Disease in Drosophila	93.853	178,880
5-R01-NS056140-03	Low Power Analog Electronics for an Implantable	93.853	220,224
5-R01-NS066352-03	High-Throughput Single-Cell-Resolution Genetic	93.853	882,172
Total for 93.853			4,784,276

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-DP1-OD003936-02	Stochastic Gene Expression in Differentiation an	93.310	403,676
1-DP1-OD003961-02	NIH Director's Pioneer Award	93.310	844,494
1-DP2-OD007124-01	Engineered Regulated RNA Localization and Tra	93.310	148,445

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-DP2-OD002002-01	Director's New Innovator Award: Novel Tools an	93.310	574,932
1-DP2-OD002114-01	Director's New Innovator Award: Genetically-Cor	93.310	558,386
1-DP2-OD002989-01	Director's New Innovator Award: Development of	93.310	246,442
1-DP2-OD002989-01	Fabrication: High Throughput Small Animal Scre	93.310	51,346
1-DP2-OD007045-01	Antibacterial Peptides and Zinc in Innate Immuni	93.310	459,332
1-R01-EB010246-01	Perfused 3D Tissue Surrogates for Complex Cell	93.310	386,512
1-R01-GM096466-01	Very large datasets and new models to predict a	93.310	39,540
1-R21-NS063917-01	High-content screening for modifiers of the DNA	93.310	-7
5-DP1-OD006422-02	Developing novel methods to measure DNA repa	93.310	637,253
5-R01-EB010246-02	Perfused 3D Tissue Surrogates for Complex Cell	93.310	402,382
5-R01-NS073127-02	High-Throughput In Vivo Subcellular-Resolution`	93.310	98,558
	Total for 93.310		4,851,291

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
5-R01-DE013023-10	Novel Polymers for Tissue Engineering	93.121	39
5-R01-DE013023-12	Novel Polymers for Tissue Engineering	93.121	242,820
5-R01-DE016516-07	High Throughput Craniofacial Tissue Engineerin	93.121	638,657
5-R01-DE019523-12	Bioengineering Polymers for Parsing Cell Respo	93.121	347,675
	Total for 93.121		1,229,191

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-R01-AI095109-01	Engineered lipid vesicles as potent vaccine vecto	93.855	46,233
1-R21-AI084032-01A1	Polz Child Account: High-resolution analysis of d	93.855	67,004
1-R21-AI088590-01	Subcontract-Children's H-6921560	93.855	59,667
5-P01-AI071195-02	Project 2 - Wash U. Subcontract	93.855	417,373
5-P01-AI071195-02	Project 1 - Stanford Subcontract	93.855	235,862
5-P01-AI071195-02	Project 3-LANL Subcontract	93.855	120,158
5-P01-AI071195-02	Project 2 - UC Berkeley Subcontract	93.855	114,073
5-P01-AI071195-02	Project 3-NYU Subcontract	93.855	435,607
5-P01-AI071195-02	Project 1 - Chakraborty	93.855	72,330
5-P01-AI071195-02	Project 3-Chakraborty	93.855	66,599
5-P01-AI071195-02	Admin Core Chakraborty	93.855	56,866
5-P01-AI071195-02	Admin Core Wash U. Subcontract	93.855	12,514
5-P01-AI071195-02	Project 3-Visualizing, Quantifying, and Modeling	93.855	3,955
5-P01-AI071195-02	Project 3-MSKCC Subcontract	93.855	84,042

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-P01-A1071195-02	Project 2 - Chakraborty & Kardar	93.855	100,331
5-R01-A1016892-32	Bacterial Protein Tagging, Degradation and Ribosome Development and Maintenance of Memory CD8 ⁺ T Cells	93.855	813,941
5-R01-A1069208-05	Toxoplasma Strain-Specific Modulation of Mouse Host Immunity	93.855	267,231
5-R21-A1073803-02	HUS Pathogenesis and Clinical Outcome in an Infant with Hemolytic Uremic Syndrome	93.855	489,692
5-R21-A1084032-02	High-resolution analysis of diversity and variation in the human genome	93.855	15,918
5-R21-A1088590-02	Analysis of Food Specific T cells by a Novel Microarray	93.855	214,687
5-R21-A1090121-02	Investigating Complex Glycans on Biological Surfaces	93.855	73,834
5-R33-A1065354-04	Proteomics of Central Tolerance in NOD vs. B6 mice	93.855	175,060
5-U01-A1074443-03	Bi-functional Polymer Attached Inhibitors of Inflammation	93.855	70
5-U01-A1074443-03	Bi-functional Polymer Attached Inhibitors of Inflammation	93.855	43,821
5-U01-A1074443-04	Bi-functional Polymer Attached Inhibitors of Inflammation	93.855	9,462
	Total for 93.855		4,729,487

92

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R21-CA133576-01A1	Development of a Fluorescence-Based Force Spectroscopy	93.396	146,396
2-U01-CA084306-12	Integrative genomic characterization of lung cancer	93.396	825,651
5-R01-CA106416-05	Using Zebrafish to Identify and Analyze Cancer Cell Death	93.396	178,924
5-R01-CA118705-04	Quantitative Analysis of Epidermal Growth Factor Receptor Signaling	93.396	604,681
5-R01-CA118757-05	Dissecting E2f3's Role in Tumorigenesis	93.396	273,698
5-R01-CA121921-14	E2F4 and RB in differentiation control and tumorigenesis	93.396	238,332
5-R33-CA112151-03	Applications of Recombinase for Cancer Research	93.396	11,665
5-U01-CA084306-13	Integrative genomic characterization of lung cancer	93.396	243,587
	Total for 93.396		2,522,934

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-K99-HD057522-01	fMRI Investigations of the Functional Architecture of the Human Brain	93.865	74,529
1-P01-HD061315-01A1	UCLA Project 3	93.865	1,751
1-P01-HD061315-01A1	Year 2 NIH Funding	93.865	4,557
1-P01-HD061315-01A1	Harvard Project 4	93.865	45,328
1-P01-HD061315-01A1	Year 1 NIH Funding	93.865	337,683
1-R01-HD067312-01	Using Cognitive Neuroscience to Predict Dyslexia	93.865	246,225
5-R01-HD045343-05	The Effect of Proximal and Distal Training on Striatal Plasticity	93.865	302,530
5-R01-HD046943-07	Mechanisms and Functions of FMRP in Neurons	93.865	513,597
5-R37-HD028341-18	Novel Second Messenger Signaling in the Striatum	93.865	626,994
	Total for 93.865		2,152,104

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TOTAL FOR 93.389

2,153,194

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-S10-RR027895-01	800 MHz Low Temperature Magic Angle Spinning	93.389	219,605
2-R01-RR015034-06	RESTRICTED FUNDS Fabricated Equipment: PI	93.389	90,667
3-P41-RR02594-24	MIT Laser Biomedical Research Center	93.389	4,248
3-P41-RR02594-25	Fabricated Equipment - Handheld Raman Spectr	93.389	7,282
3-P41-RR02594-25S1	MIT Laser Biomedical Research Center	93.389	822,945
5-R01-RR015034-09	Phase 3A of a 3-phase 1.3-GHz LTS/HTS NMR I	93.389	526,171
5-T32-RR007036-23	Biomedical Research Training for Veterinary Sci	93.389	302,693
5-T32-RR007036-24	Biomedical Research Training for Veterinary Sci	93.389	69,867
Total for 93.389			2,043,478

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-K99-MH092715-01	Controlling Interareal Gamma Coherence by Opt	93.281	32,980
5-K99-MH085944-02	Cross Region Neural Computation Subservin A	93.281	11,106
Total for 93.281			44,086

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-R01-CA97966-03	Spectroscopic Imaging- BMC - Schust	93.394	11,782
5-R01-CA034992-29	Chemistry and Biology of Platinum Anticancer Dr	93.394	664,711
5-R01-CA124427-05	Engineering Multifunctional Nanoparticles	93.394	863,692
5-R01-CA140476-03	Nanoparticle-Mediated Support of Cancer Immur	93.394	341,604
5-R21-CA137695-03	Developing a Single Cell Growth Monitor for Glac	93.394	71,901
Total for 93.394			1,953,690

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-U54-CA151884-01	CCNE - Cima - Project 4	93.399	269,407
1-U54-CA151884-01	CCNE - Educational/Outreach	93.399	60,729
1-U54-CA151884-01	CCNE - Langer - Project 1	93.399	92,608
1-U54-CA151884-01	CCNE - Farokhzad - Project 1	93.399	117,605
1-U54-CA151884-01	CCNE - Administration	93.399	130,301
1-U54-CA151884-01	CCNE - Anderson - Project 2	93.399	72,430
1-U54-CA151884-01	CCNE - Belcher - Project 5	93.399	142,965
1-U54-CA151884-01	CCNE - Sharp - Project 2	93.399	133,658
1-U54-CA151884-01	CCNE - Weissleder - Project 3	93.399	168,816

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Contract Number	Government Contract Title	CFDA#	FY Expenses
1-U54-CA151884-01	CCNE - Bhatia - Project 2	93.399	177,857
1-U54-CA151884-01	CCNE - Bawendi - Project 5	93.399	152,269
5-R01-CA119402-04	Integrated System for Cancer Biomarker Detectic	93.399	95,070
5-R01-CA119402-04	Integrated System for Cancer Biomarker Detectic	93.399	57,624
5-R01-CA119402-05	Integrated System for Cancer Biomarker Detectic	93.399	31,935
5-U54 CA119349-05	CCNE - Weissleder Project 3	93.399	156,072
5-U54 CA119349-05	CCNE - Langer Education	93.399	149,555
5-U54 CA119349-05	CCNE - Cima Project 4	93.399	136,534
5-U54 CA119349-05	CCNE - Pilot 2 Wittrup	93.399	12,969
5-U54 CA119349-05	CCNE - Farokhzad Project 1	93.399	84,658
5-U54 CA119349-05	CCNE - Bhatia Toxicity core	93.399	13,482
5-U54 CA119349-05	CCNE - Ruoslahti Project 2	93.399	16,890
5-U54 CA119349-05	CCNE - Bhatia Project 2	93.399	18,216
5-U54 CA119349-05	CCNE - Langer Admin	93.399	27,247
5-U54 CA119349-05	CCNE - Pilot 2 Hammond	93.399	29,361
5-U54 CA119349-05	CCNE - Chen Project 2	93.399	35,764
5-U54 CA119349-05	CCNE - Lippard Mouse Project	93.399	37,419
5-U54 CA119349-05	The MIT - Harvard Nanomedical Consortium CF	93.399	43,387
5-U54 CA119349-05	CCNE - Bawendi Project 5	93.399	64,043
5-U54 CA119349-05	CCNE - Langer Project 1	93.399	68,903
5-U54 CA119349-05	CCNE - Housman Mouse core	93.399	70,624
5-U54 CA119349-05	CCNE - Pilor 1 Harvard	93.399	75,845
5-U54 CA119349-05	CCNE - Sharp Project 2	93.399	79,380
5-U54 CA119349-05	CCNE - Belcher Project 5	93.399	90,449
5-U54 CA119349-05	CCNE Carryforward funds (MIT)	93.399	105,929
	Total for 93.399		3,020,001
Contract Number 5-R21-DK078442-02	Government Contract Title HR1/elf2aP Signaling Pathway as Potential Phar	CFDA# 93.849	FY Expenses 13,177
	Total for 93.849		13,177
Contract Number 7 R03 MH085679-02	Government Contract Title Discovery of Lead Compounds whih Modulate Ti	CFDA# 93.31	FY Expenses 14,043
	Total for 93.31		14,043

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<u>Contract Number</u> 5-K99-NS060947-02	<u>Government Contract Title</u> Rodal: Structure and Regulation of Synaptic Arc	<u>CFDA#</u> 93.398	<u>FY Expenses</u> 25,862
	Total for 93.398		25,862
<u>Contract Number</u> 1-K99-CA151968-01 5-DP1-OD001022-05 5-DP1OD001022-02	<u>Government Contract Title</u> Functional Characterization of Lung Adenocarcin NIH Director's Pioneer Award UCSF Subaward-6914429	<u>CFDA#</u> 93.390 93.390 93.390	<u>FY Expenses</u> 85,437 335,270 66,957
	Total for 93.390		487,664
<u>Contract Number</u> 5-R01-AR033236-26	<u>Government Contract Title</u> Chondrocyte Response to Load: Transduction &	<u>CFDA#</u> 93.846	<u>FY Expenses</u> 86,321
	Total for 93.846		86,321
<u>Contract Number</u> 2-R56-DK052413-10A1 5-R01-DK056966-09 5-R01-DK075850-05	<u>Government Contract Title</u> Helicobacter hepaticus: pathogenesis of inflamrr Role of Tissue Micro-Architecture on Hepatocyte Elucidating Modulators of Hepatic Metabolism by	<u>CFDA#</u> 93.848 93.848 93.848	<u>FY Expenses</u> 103,203 371,603 210,027
	Total for 93.848		684,833
<u>Contract Number</u> 1-R01-DA029639-01 5-R01-DA028299-02 5-R01-DA029639-02 5-R21-DA027742-03	<u>Government Contract Title</u> Forstad Child MRI Probes for Functional Imaging ofPlasticity S Novel Platforms for Systematic Optical Control of Neural Mechanisms of Associative Learning from	<u>CFDA#</u> 93.279 93.279 93.279 93.279	<u>FY Expenses</u> 104,230 784,832 398,793 171,829
	Total for 93.279		1,459,684
<u>Contract Number</u> 3-R01-LM009723-02S1 5-R01-LM009723-03	<u>Government Contract Title</u> Capturing Patient-Provider Encounter through Tε Capturing Patient-Provider Encounter through Tε	<u>CFDA#</u> 93.879 93.879	<u>FY Expenses</u> 121,839 502,907
	Total for 93.879		624,746

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<u>Contract Number</u> 5-R01-A1037750-14 5-R37-A1015706-33	<u>Government Contract Title</u> In Vivo Pathogenesis of Helicobacter Pylori Sequence Determinants of Protein Structure and	<u>CFDA#</u> 93.856 93.856	<u>FY Expenses</u> 151,449 493,402
	Total for 93.856		644,851
	Total for NIH		135,756,471
	Total for Dept. of Health and Human Services		135,756,471

**Miscellaneous Federal Govt
Department of Homeland Security**

<u>Contract Number</u> HSHQDC-10-C-00210 HSHQDC-11-C-00018	<u>Government Contract Title</u> Novel Thallium Haide Ionic Junction Radiation Di Computer Programming Tools in Schools	<u>CFDA#</u> 97.121 97.121	<u>FY Expenses</u> 79,974 21,426
	Total for 97.121		101,400
<u>Contract Number</u> 2009-ST-108-000006	<u>Government Contract Title</u> Ocean Acoustic Hurricane Classification	<u>CFDA#</u> 97.108	<u>FY Expenses</u> 103,995
	Total for 97.108		103,995
	Total for Department of Homeland Security		205,395

Lawrence Livermore National Security, LLC

<u>Contract Number</u> B587254 B594466 SUBCONTRACT NO. B580243	<u>Government Contract Title</u> Reactor Simulations Using the DRAGON code Reactor Simulations Using the DRAGON code High Density Implosions on OMEGA and the NIF	<u>CFDA#</u> 81.CCC 81.CCC 81.CCC	<u>FY Expenses</u> -188 4,467 305,201
	Total for 81.CCC		309,480
	Total for Lawrence Livermore National Security, LLC		309,480

National Endowment For The Humanities

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<u>Contract Number</u> HD-51031-10	<u>Government Contract Title</u> Gesture, Rhetoric, and Digital Storytelling	<u>CFDA#</u> 45.169	<u>FY Expenses</u> 24,545
Total for 45.169			24,545
Total for National Endowment For The Humanities			24,545

U.S. Agency for International Development

<u>Contract Number</u> AID-OAA-G-10-00002	<u>Government Contract Title</u> Urban Resilience and Chronic Violence	<u>CFDA#</u> 98.001	<u>FY Expenses</u> 119,776
Total for 98.001			119,776
Total for U.S. Agency for International Development			119,776

U.S. Department of Agriculture

<u>Contract Number</u> 58-0111-9-001	<u>Government Contract Title</u> Climate and Fuel Policy and Competing Demand	<u>CFDA#</u> 10.001	<u>FY Expenses</u> 47,632
Total for 10.001			47,632
Total for U.S. Department of Agriculture			47,632

U.S. Department of Commerce - NOAA

<u>Contract Number</u> NA06OAR4170019	<u>Government Contract Title</u> Program Management	<u>CFDA#</u> 11.417	<u>FY Expenses</u> -43,352
NA06OAR4170019	Biomimetic Optimal Force Generation for Underv	11.417	59,125
NA06OAR4170019	An Assessment of the Tidal Kinetic Energy Reso	11.417	54,286
NA06OAR4170019	Ocean Education & Technology Center	11.417	40,610
NA06OAR4170019	Assimilation and Optimal Observing System Des	11.417	32,738
NA06OAR4170019	Autonomous Vehicle Exploration and Sampling c	11.417	28,899
NA06OAR4170019	Enabling High & Low Molecular Weight AUV-Bas	11.417	28,099
NA06OAR4170019	Biomimetic Rigid-Hull Vehicle with Flapping Foils	11.417	26,875
NA06OAR4170019	Didemnum sp A as a Agent of Change: Proposal	11.417	78,091
NA06OAR4170019	Role of Plant Pathogens in Sudden Wetland Diet	11.417	21,191
NA06OAR4170019	Regional Proposal to Test Sensors for Detecting	11.417	7,000
NA06OAR4170019	MIT Sea Grant Ocean Education and Technolog	11.417	2,996
NA06OAR4170019	Assessing the Narcosis Hazard to Marine Sedim	11.417	2,517
NA06OAR4170019	Incorporation of a Compact Digital Holographic F	11.417	1,331

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Contract Number	Government Contract Title	CFDA#	FY Expenses
NA06OAR4170019	Parent Account: Sea Grant College Program	11.417	358
NA06OAR4170019	Center for Global Resources	11.417	13
NA06OAR4170019	Data Assimilation and Optimal System Design E:	11.417	-5,834
NA06OAR4170019	Versatile High-Resolution Low-Cost AUV 3D Ser	11.417	10,401
NA06OAR4170019	Data Assimilation and Optimal Observing System	11.417	109,024
NA08OAR4170922	AISR BioBullets for the Control of Fouling Sea Sc	11.417	51,500
NA10OAR4170086	Improving Understandings of Consequences, Vu	11.417	1,595
NA10OAR4170086	Marine Social Sciences	11.417	60,771
NA10OAR4170086	Wireless Underwater Video Transmission	11.417	65,349
NA10OAR4170086	Incorporation of a Compact Digital Holographic F	11.417	79,030
NA10OAR4170086	DeepFSL - a low cost bimodal observation syste	11.417	83,768
NA10OAR4170086	Autonomous Vehicle Exploration and Sampling c	11.417	57,971
NA10OAR4170086	Acoustic Communication Networks for Distributer	11.417	84,702
NA10OAR4170086	Assessing the Distribution, Spreading Rate, and Ir	11.417	92,000
NA10OAR4170086	Education Program	11.417	98,792
NA10OAR4170086	Communications	11.417	115,254
NA10OAR4170086	Coastal Resources Focus Area	11.417	315,194
NA10OAR4170086	Interdisciplinary Science Outreach Proposal	11.417	88,189
NA10OAR4170086	Touch-at-a-Distance: Pressure Microsensor Arra	11.417	50,072
NA10OAR4170086	Ship time MIT SeaGrant	11.417	34,378
NA10OAR4170086	Enabling high and low molecular weight AUV bat	11.417	21,358
NA10OAR4170086	Fabricated Equipment - Multi-Channel Time-Res	11.417	3,706
NA10OAR4170086	Sea Grant Program Development Opportunities	11.417	4,864
NA10OAR4170086	Sea Grant Program Management	11.417	425,121
NA10OAR4170086	MIT Sea Grant: Undergraduate Research Oppor	11.417	7,930
NA10OAR4170086	Assessment of Salt Marsh Buffering Capacity an	11.417	11,908
NA10OAR4170086	Active Samplers: Development of Biomarkers for	11.417	12,094
NA10OAR4170086	An Assessment of the Tidal Kinetic Energy Reso	11.417	12,176
NA10OAR4170086	Three-Dimensional Imaging for In Site Sensing a	11.417	12,855
NA10OAR4170086	Publications	11.417	14,629
NA10OAR4170086	Coastal Community Development Project: Demo	11.417	14,957
NA10OAR4170086	Combating Nitrogen-Driven Coastal Eutrophicati	11.417	18,045
NA10OAR4170086	Using Technology to Assess the Invasive Sea Sc	11.417	388
NA10OAR4170086	Fabricated Equipment - Ion-Selective Electrode f	11.417	7,122
	Total for 11.417		2,300,086

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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NA06OAR4310059	Prediction of Seasonal to Inter-Annual Hydro-Cliir	11.431	-73
NA07OAR4310126	A Climate Process Team on Southern Ocean Ve	11.431	26,125
NA08OAR4310687	Collaborative Research: Towards a Better Under	11.431	46,391
NA09OAR4310069	Modeling Ecological Regulation of the Ocean Ca	11.431	76,239
NA09OAR4310131	Understanding and Predicting Interannual to Mul	11.431	76,240
NA09OAR4310165	A Collaborative Investigation of the Mechanisms,	11.431	126,847
NA10OAR4310106	Measurements of Semivolatile Organic Compour	11.431	16,455
NA10OAR4310135	Sensitivity Patterns of Atlantic Meridional Overtur	11.431	92,917
	Total for 11.431		461,141

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NA10NMF4270208	Socioeconomic Impacts of Herring Fishery Mana	11.427	5,531
	Total for 11.427		5,531
	Total for U.S. Department of Commerce - NOAA		2,766,758

U.S. Department of Commerce-NIST (Natl Inst of Stand & Tech)

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
60NANB10D039	ARRA - MIT Future of the Electric Grid Study (AF	11.609	80,780
70NANB8H8124	NIST: Quantum Information Processing via Neuti	11.609	-1,461
	Total for 11.609		79,319
	Total for U.S. Department of Commerce-NIST (Natl Inst of Stand & Tech)		79,319

U.S. Department of Education

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
ED-05E-10-C-0067	Web Accessibility Initiative (WAI) Core	84.CCC	339,647
ED05CC00039	Web Accessibility Initiative	84.CCC	210,478
	Total for 84.CCC		550,125
	Total for U.S. Department of Education		550,125

U.S. Department of Interior-Fort Huachuca

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
N10PC20125	Spatially- and Temporally- Resolved Electron Em	12.CCC	234,745
NBCHC0080001	OCS NETI Project on Co-Fabricated, Miniaturize	12.CCC	441,043
	Total for 12.CCC		675,788
	Total for U.S. Department of Interior-Fort Huachuca		675,788

U.S. Department of Transportation - Federal Aviation Agency

Contract Number	Government Contract Title	CFDA#	FY Expenses
03-C-NE-MIT-002	Continuous Descent Approach at SDF	20.109	-275
03-C-NE-MIT-011	Environmental Design Space	20.109	129
06-C-NE-MIT	ECBA OF ULTRA LOW SULFUR JET FUELS (P	20.109	139,243
06-C-NE-MIT	Use of Near-Term Operational Changes to Mitrig	20.109	81,635
06-C-NE-MIT	Economic and Environmental Effects of the Intro	20.109	160,492
06-C-NE-MIT	Program Management for Aircraft Noise and Avic	20.109	208
06-C-NE-MIT	ECBA OF ALTERNATIVE JET FUELS (P28)	20.109	60,493
06-C-NE-MIT-21	ARRA - Environmental Cost-Benefit Analysis of /	20.109	90,478
06-G-006	Cognitive Evaluation of Potential Approaches to	20.109	127,288
09-C-NE-MIT	ECBA of Alternative Jet Fuels (P28)	20.109	48,191
09-C-NE-MIT	Environmental Cost-Benefit Analysis of Ultra Low	20.109	142,844
09-C-NE-MIT	CGCS Alternative Fuels (P28)	20.109	194,136
09-C-NE-MIT	Alternative Jet Fuels Air Mobility Command Stud	20.109	245,579
09-C-NE-MIT, AMENDMENT 001	Phase 3 Program Management for Aircraft Noise	20.109	369,883
	Total for 20.109		1,660,324

Contract Number	Government Contract Title	CFDA#	FY Expenses
DTFA01-01-C-00030	Performance Measure Comparisons Delivery 25	20.CCC	-13
DTFA01-01-C-00030	Factors Influencing Operational and Economic P	20.CCC	7,904
DTFA01-01-C-00030	Distributed Mechanisms for Determining Nas-Wit	20.CCC	39,363
DTFA01-01-C-00030	Wake Turbulence Research	20.CCC	42,471
DTFA01-01-C-00030	Impact of the Loss System Index on NAS Risk Fi	20.CCC	42,476
DTFA01-01-C-00030	Identification of Potential Stakeholder Benefits, Ir	20.CCC	70,255
DTFAWA-05-D-00012	Task Order 0008 Advancing the Aviation Environ	20.CCC	731,243
DTFAWA-05-D-00012	Task Order 0009 - Advancing the Aviation Envir	20.CCC	555,781
DTFAWA-05-D-00012	Task Order 0009 EPPA Child (P31)	20.CCC	192,919
DTFAWA-05-D-00012	Task Order 0012: Aircraft CO2 Analysis on Duty	20.CCC	125,486
DTFAWA-05-D-00012	Task Order 0011: Estimation of Black Carbon En	20.CCC	97,329

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DTFAWA-05-D-00012	Task Order 0007 Assessment of CO2 Emission I	20.CCC	74,411
DTFAWA-05-D-00012	Task Order 0010 - Development and Assessment	20.CCC	62,027
DTFAWA-05-D-00012	Task Order 0006 Studying the Effects of Aircraft Performance Metrics Development and Analysis	20.CCC	62
DTFAWA10F00057	Benefits Analysis of Near-Term Deployment of N	20.CCC	151,653
DTFAWA10F00077	ADS-B AIRB with Alerting Research	20.CCC	31,553
DTFAWA10F00089	User Equipage: New TFM Procedure and Invest	20.CCC	1,333,527
DTFAWA10F00092	Global Mega Trends and Expected Utilization of	20.CCC	10,384
DTFAWA10F00093		20.CCC	87,642
	Total for 20.CCC		3,656,473

Contract Number	Government Contract Title	CFDA#	FY Expenses
FAA 95-G-017	Joint University Research Program to Meet Futur	20.108	32,591

Total for 20.108
Total for U.S. Department of Transportation - Federal Aviation Agency
5,349,388

U.S. Department of Transportation TSC

Contract Number	Government Contract Title	CFDA#	FY Expenses
DTR57-05-P-80003	Airline Pilot Training: Effects of Simulator Platf	20.CCC	13,545
DTR157-07-D-30006	Human Factors Recommendations for the Design	20.CCC	33,088
DTR157-10-C-10015	Assessing Metrics and Simplified Aviation Climat	20.CCC	192,600
	Total for 20.CCC		239,233

Total for U.S. Department of Transportation TSC
239,233

U.S. Department of Transportation

Contract Number	Government Contract Title	CFDA#	FY Expenses
DTRS 99-G-0001	UTC: Parent Year 15	20.701	122
DTRS99-G-0001	UTC Parent Year 17	20.701	-122
DTRS99-G-0001	University Transportation Centers Program - Eight	20.701	-15,784
DTRS99-G-0001	UTC Program Management-Year 18	20.701	-465
DTRT07-G-0001	A Multimodal Approach to Meeting Older Adult T	20.701	50,296
DTRT07-G-0001	UTC21 - UConn - Research and Fellowships	20.701	49,521
DTRT07-G-0001	UTC 23: Harvard-Research, Education & Fellow	20.701	49,211

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DTRT07-G-0001	UTC22: UNH - Graduate Fellowships	20.701	53,622
DTRT07-G-0001	UTC - UVM Graduate Fellowships	20.701	47,520
DTRT07-G-0001	UTC21 - URI - Graduate Fellowships	20.701	36,809
DTRT07-G-0001	UTC 20: Harvard-Research and Education	20.701	32,676
DTRT07-G-0001	UTC22 - Harvard Research & Education	20.701	30,513
DTRT07-G-0001	Assessing the Transportation Readiness of an A:	20.701	45,818
DTRT07-G-0001	Evaluation of a Natural Speech Based Informatic	20.701	56,208
DTRT07-G-0001	UTC22 - Fellowships	20.701	-70
DTRT07-G-0001	DAmbrosio-Caregiving and Travel Patterns	20.701	60,546
DTRT07-G-0001	UTC21 - UMass Amherst - Research, Education	20.701	189,347
DTRT07-G-0001	UTC21 - Program Management	20.701	150,360
DTRT07-G-0001	UTC22 - Program Management	20.701	141,115
DTRT07-G-0001	UTC22: URI - Research & Fellowships	20.701	99,410
DTRT07-G-0001	UTC21 - Technology Transfer	20.701	90,430
DTRT07-G-0001	UTC21 - UMaine - Research, Education and Fell	20.701	81,690
DTRT07-G-0001	Development of an Older Empathy System to As	20.701	70,109
DTRT07-G-0001	DAmbrosio - Role of Rehabilitation in Extending	20.701	69,096
DTRT07-G-0001	Reimer-Assessing the Impact of Age on Cognitiv	20.701	66,017
DTRT07-G-0001	Reimer-Age-Related Changes in Cognitive Resp	20.701	28,004
DTRT07-G-0001	UTC22 - UConn - Research & Fellowships	20.701	59,114
DTRT07-G-0001	UTC22 - Technology Transfer	20.701	25,809
DTRT07-G-0001	UTC22: UVM - Graduate Fellowships	20.701	23,880
DTRT07-G-0001	UTC 20: URI-Research and Fellowships	20.701	5,245
DTRT07-G-0001	Data Use and Organizational Innovations in Tran	20.701	3,401
DTRT07-G-0001	UTC - Harvard Education and Fellowships	20.701	2,631
DTRT07-G-0001	A Study of Speech Interfaces for This Vehicle En	20.701	6,517
DTRT07-G-0001	UTC21 - Fellowships	20.701	1,906
DTRT07-G-0001	UTC 23: Technology Transfer	20.701	1,362
DTRT07-G-0001	Measuring and Modeling Travel Being in a Dynai	20.701	355
DTRT07-G-0001	UTC 20: UMass Amherst-Research and Fellowsh	20.701	248
DTRT07-G-0001	Travel Behavior of Aging Boomers: Evidences fr	20.701	1,794
DTRT07-G-0001	UTC22 - UMass Amherst - Research & Fellowsh	20.701	189,447
DTRT07-G-0001	Modeling Cooperative Driving Behavior in Freew	20.701	8,390
DTRT07-G-0001	New Data for Relating Land Use and Urban Forn	20.701	8,740
DTRT07-G-0001	Mehler - Assessing Methods of Enhancing Older	20.701	23,382
DTRT07-G-0001	UTC 20: Fellowships	20.701	20,074

**Appendix A-1 - Detail
Massachusetts Institute of Technology
Federal Research Support - On Campus
Fiscal 2011 Expenditures**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DTRT07-G-0001	Teaching Transportation Systems Thinking Conc	20.701	17,398
DTRT07-G-0001	UTC 20: UVM-Research and Fellowships	20.701	8,592
DTRT07-G-0001	Reimer - Individual Differences in Peripheral Phy	20.701	16,047
DTRT07-G-0001	UTC22: UMaine - Graduates Fellowship	20.701	11,454
DTRT07-G-0001	UTC 20: UMaine Research	20.701	10,371
DTRT07-G-0001	Travel Behavior of the Aging Boomers: Evidence	20.701	10,131
DTRT07-G-0001	Capturing well being in activity pattern models wi	20.701	15,968
DTRT07-G-0001	UTC 20: Technology Transfer	20.701	25,719
	Total for 20.701		1,979,974

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DTRT57-07-C-10002	Library Services for DOT	20.CCC	74,220

Total for 20.CCC 74,220
Total for U.S. Department of Transportation 2,054,194

U.S. Environmental Protection Agency

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
RD 83456001	Emissions of Gas-phase LVOCs from Mobile Sot	66.516	52,337
SU 83436701-0	A Novel Solar Thermal Combined Cycle for Distr	66.516	1,344
	Total for 66.516		53,681

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
PI-83412601-0	Biofuel Trade-Offs: Fuel, Forests, and Food	66.034	13,886
XA-83240101	Dynamic Modeling of Emissions from Land Use /	66.034	140,845
XA-83344601-3	Integrated Assessment of Multiple Greenhouse C	66.034	146,262
	Total for 66.034		300,993

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
RD-83427901-0	Air Pollution, Health and Economic Impacts of Gi	66.509	217,079

Total for 66.509 217,079
Total for U.S. Environmental Protection Agency 571,753

U.S. Geological Survey

**Appendix A-1 - Detail
 Massachusetts Institute of Technology
 Federal Research Support - On Campus
 Fiscal 2011 Expenditures**

<u>Contract Number</u> G09AC00330 G10AC00434	<u>Government Contract Title</u> MIT USGS Science Impact Collaboration Addressing the challenge of climate change in th	<u>CFDA#</u> 15.808 15.808	<u>FY Expenses</u> 148,886 106,852
	Total for 15.808		255,738
	Total for U.S. Geological Survey		255,738

U.S. Library of Congress

<u>Contract Number</u> QA-LCOS110C0121 QA-LCOS110C0121	<u>Government Contract Title</u> Exhibit 2.0 - RA Costs Exhibit 2.0	<u>CFDA#</u> 42.CCC 42.CCC	<u>FY Expenses</u> 29,160 215,238
	Total for 42.CCC		244,398
	Total for U.S. Library of Congress		244,398

U.S. Miscellaneous Agencies

<u>Contract Number</u> CONTRACT #2008*1260924*000	<u>Government Contract Title</u> CISR Multi-Sponsored Consortium	<u>CFDA#</u> 12.000	<u>FY Expenses</u> 50,668
	Total for 12.000		50,668
	Total for U.S. Miscellaneous Agencies		50,668

U.S. Nuclear Regulatory Commission

<u>Contract Number</u> NRC-04-07-084 NRC-04-08-150 NRC-04-09-151 NRC-38-09-893	<u>Government Contract Title</u> Advanced Nuclear Technologies Advanced Methods for Probabilistic Risk Assess: Automation and HSI Complexity in Advance Rea The Impact of Human Activities on Radiation in th	<u>CFDA#</u> 77.CCC 77.CCC 77.CCC 77.CCC	<u>FY Expenses</u> 51,012 791 265,892 24,215
	Total for 77.CCC		341,910
	Total for U.S. Nuclear Regulatory Commission		341,910

United States Institute of Peace

<u>Contract Number</u> USIP-077-07F	<u>Government Contract Title</u> The Sources of Chinese Military Doctrine 1975-21	<u>CFDA#</u> 91.001	<u>FY Expenses</u> 14,268
	Total for 91.001		14,268

**Appendix A-1 - Detail
Massachusetts Institute of Technology
Federal Research Support - On Campus
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Total for 91.001
Total for United States Institute of Peace
14,268
14,268

Va Hospital - Boston

Contract Number
VA241-P-0743_VA523C18197
VA241-P-1222
VA523D07014
VA523D07015

Government Contract Title
VA Enterprise Systems Engineering Analysis
Intervertebral Disc Tissue Engineering
INTERVERTEBRAL DISC TISSUE ENGINEERII
SPINAL CORD TISSUE ENGINEERING

CFDA#
64.CCC
64.CCC
64.CCC
64.CCC

FY Expenses
114,252
-102
15,744
9,846

Total for 64.CCC

139,740

Total for Va Hospital - Boston

139,740

VA Medical Center

Contract Number
B3688-C

Government Contract Title
Task Oriented Exercise and Robotics in Neurolog

CFDA#
64.CCC

FY Expenses
2,249

Total for 64.CCC

2,249

Total for VA Medical Center

2,249

Total for Miscellaneous Federal Govt

14,042,357

Nat'l Aro & Space Administration

NASA - Ames Research Center

Contract Number
NNA06CN23A
NNA08CN84A
NNA08CN84A
NNA09DB36A
NNX10AJ98G

Government Contract Title
Cognitively Based Traffic complexity Metrics for I
Bowring Child Account: Requirements for the De
Requirements for the Development and Maintena
The Moon as Cornerstone to the Terrestrial Plan
Geometric Control for Design Through Analysis

CFDA#
43.000
43.000
43.000
43.000
43.000

FY Expenses
214,917
70,434
1,815,995
336,630
51,597

Total for 43.000

2,489,573

Contract Number
NNA06CN24A

Government Contract Title
Optimization of Super-Density Multi-Airport Term

CFDA#
43.CCC

FY Expenses
240,022

**Appendix A-1 - Detail
Massachusetts Institute of Technology
Federal Research Support - On Campus
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<u>Contract Number</u> NNA11AB46C NNX10AN92A	<u>Government Contract Title</u> MIT/SPHERES Transition Support Methodologies to Evaluate Trade-offs Between E	<u>CFDA#</u> 43.CCC 43.CCC	<u>FY Expenses</u> 47,058 144,321
	Total for 43.CCC		431,401
	Total for NASA - Ames Research Center		2,920,974

NASA - Glenn Research Center

<u>Contract Number</u> NNX07AE08G-S01 NNX09AV99G	<u>Government Contract Title</u> The Effects of Shear History on the Extensional f Rapid Turn Around Opportunity (RTA)	<u>CFDA#</u> 43.000 43.000	<u>FY Expenses</u> 6,991 152,856
	Total for 43.000		159,847

<u>Contract Number</u> NNC09CA14C NNX07AO10A NNX07AV29A NNX08AW63A NNX11AB35A	<u>Government Contract Title</u> SiC-Based MEMS Sensors for Real-Time Plasm Advanced Multidisciplinary Optimization Techniq Control of Boundary Respresentaiton Topology i Aircraft and Technology Concepts for an N+3 Su Aircraft and Technology Concepts for an N+3 Su	<u>CFDA#</u> 43.CCC 43.CCC 43.CCC 43.CCC 43.CCC	<u>FY Expenses</u> 253,626 167,564 179,313 252,938 473,205
	Total for 43.CCC		1,326,646

<u>Contract Number</u> NNX11AI66A	<u>Government Contract Title</u> Geometry Interface for the NASA OpenMDAO Fr	<u>CFDA#</u> 43.000	<u>FY Expenses</u> 2,406
	Total for 43.000		2,406
	Total for NASA - Glenn Research Center		1,488,899

NASA - Goddard Space Flight Center

<u>Contract Number</u> NNG04GM55G NNG06G167G NNG06GC28G NNG06GE48G NNH08PQ88P NNX06AB86G	<u>Government Contract Title</u> U.S. GODAE: Sustained Global Ocean State Est Phase Equilibrium Investigation of Planetary Mat ECCO II High Resolution Global Ocean and Seæ Estimation of the Evaporation Linking Land Watt CISR - NASA Agreement Multi-Instrument Investigation of Inner-Magnetos	<u>CFDA#</u> 43.000 43.000 43.000 43.000 43.000 43.000	<u>FY Expenses</u> -4,653 93,226 557,731 146,478 30,760 -103
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Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNX06AC30A	The NASA Energy and Water-Cycle	43.000	132,119
NNX06AD14G	Thermal and Magnetic History of Mars from Mete	43.000	-8,182
NNX07AE35G	Evaluation of Millimeter-Wave Satellite Precipitat	43.000	-1,081
NNX07AE89G	Advanced Global Atmospheric Gases Experimer	43.000	677,281
NNX07AI49G	Climate Effect of Black Carbon Aerosol on Tropic	43.000	34,053
NNX07AK95G	IRTF Optical Camera System	43.000	3,363
NNX07AN63G	Large Telescope Photometry of Extra-Solar Plan	43.000	71,544
NNX07AO76G	Ionosphere Redistribution: Storm Enhanced Den	43.000	3,410
NNX07AR02G	Phase Equilibrium Investigations of Melting and	43.000	89,802
NNX07AU12G	A Multi-proxy Search for Atmospheric Oxygen in	43.000	128,373
NNX08AC04G	Direct Space Weathering of Icy Surfaces for Sol	43.000	24
NNX08AC21G	X-Ray Spectra of Neutron-Star X-Ray Transients	43.000	17,260
NNX08AD87G	Searching for orbital motion close to the black ho	43.000	14,094
NNX08AD95G	Planetary Topography and Gravity	43.000	-1,032
NNX08AE49G	Wind SWE/Faraday Cup MO&DA	43.000	205,513
NNX08AE92G	Deciphering Pluto's Atmosphere: Synthesis of O	43.000	38,428
NNX08AF09G	Studies of Ocean Bottom Pressure and Circulatic	43.000	36,669
NNX08AG16G	GPS Observations in Central Asia: IGS Infrastu	43.000	21,804
NNX08AI62G	Development of Critical Angle X-Ray Transmissi	43.000	604,787
NNX08AI62G	Fab Eq - Laboratory Environmental Monitor	43.000	6,049
NNX08AI62G	Nanoruler Fabrication	43.000	46,453
NNX08AK68G	Off-Campus Account: U.S. Participation in the Mi	43.000	33,988
NNX08AK68G	U.S. Participation in the Marco Polo Mission	43.000	-6,283
NNX08AL42G	How Well Can LISA Measure Black Hole Binary |	43.000	128,390
NNX08AL45G	Solar System Dynamics	43.000	125,259
NNX08AM24G	Geophysics of Terrestrial Planets	43.000	200,021
NNX08AM30G	A Lunar Array for Radio Cosmology: Reionizatio	43.000	24,266
NNX08AR33G	Application of Satellite Atimetry Gravity Winds ar	43.000	296,868
NNX08AR36G	Advanced Microcalorimeter Arrays for High-Resc	43.000	19,859
NNX08AT14G	Laboratory Study of the Effect of Impurities on th	43.000	142,054
NNX08AV89G	Atlantic MOC Observing System Studies Using A	43.000	375,536
NNX08AX15G	A Search for Extra-Terrestrial Genomes (SETG):	43.000	495,733
NNX08AX15G	Fab Eq - Upgraded Portable Instrument	43.000	15,205
NNX08AX18G	A Nanosatellite Concept Study to Find Transiting	43.000	106,623
NNX08AX23G	XMM Observerserv AS1063 One of the Most Lu	43.000	4,185
NNX08AX29G	The Environmental and Epoch Dependence of R	43.000	150

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNX08AX41G	XMM-Newton Observations of Very Faint X-Ray	43.000	129
NNX08AY59A	Research on the Natural Variability of Climate an	43.000	195,967
NNX08AY96G	Measuring Paleomagnetism and Orienting Samp	43.000	49,316
NNX08AZ64G	Understanding Group Evolution with Suzaku (Su	43.000	4,392
NNX08BA20G	The Role of Water In The Early Formation of mai	43.000	54,502
NNX08BA51G	Theoretical Interpretation of Kepler Exoplanet A	43.000	129,658
NNX09AD36G	Exoplanetary Spin-Orbit Alignment	43.000	28,296
NNX09AE44G	Phytoplankton Community Organization by Cell	43.000	254,119
NNX09AE58G	Continuing MIT Participation in the Monitoring an	43.000	182,052
NNX09AE73G	Reanalysis of Cassini/Titan Radar Altimetry	43.000	68,901
NNX09AE82A	Payload Definition Document (PDD) for a Critical	43.000	85,694
NNX09AI87G	Extending the Scientific Capability for Ocean Sta	43.000	224,047
NNX09AJ70G	The Final Stages of Soft X-Ray Transient Outbur	43.000	54,178
NNX09AJ91A	Investigating the Organic and Nutrient Chemistry	43.000	24,064
NNX09AK26G	Shifts in Extreme Precipitation Events Based on	43.000	113,222
NNX09AK68G	Improvements to the Accuracy of Global Geodes	43.000	108,024
NNX09AK70G	Improved Estimation of Geocenter motion using I	43.000	135,813
NNX09AL61G	Swift multiwavelength follow-up of gravitational-w	43.000	31,721
NNX09AM88G	Molecular and Isotopic Studies of Two Contrastir	43.000	224,691
NNX09AP42G	The X-ray nuclei of FR II radio galaxies: unificatio	43.000	13,194
NNX09AP80G	The Mechanism of Jet Formation in Cyg X-2 and	43.000	393
NNX09AR12G	The Final Stages of Outbursts in Soft X-Ray Trar	43.000	16,327
NNX09AV65G	ABELL 1795 WITH SUZAKU: A NEW WINDOW	43.000	11,099
NNX09AV84G	Comprehensive Analysis and Synthesis of Explo	43.000	381,036
NNX10AB27G	Exploring the Outer Solar System with Stellar Oc	43.000	128,572
NNX10AC70G	NRA/Research Opportunities in Space & Earth Si	43.000	362,041
NNX10AD41G	Atomic Data Unleashed: Interactive, Scriptable Ir	43.000	58,521
NNX10AD67G	Studying Exoplanet Atmospheres with Spitzer Ar	43.000	93,605
NNX10AE25G	Detector System fo Micro-X Sounding Rocket Pa	43.000	34,133
NNX10AE25G	Supernova remnant and galaxy cluster observati	43.000	268,566
NNX10AE50G	High Performance Three-Dimensionally Integrat	43.000	21,750
NNX10AE68G	Astro-comb Visible Wavelength Calibrator as Sup	43.000	56,353
NNX10AE68G	Subaward to Smithsonian Astrophysical Observ	43.000	74,798
NNX10AE68G	Fabricated Equipment - Timing Jitter Measureme	43.000	98,317
NNX10AF59G	Fabricated Equipment - Upgraded Mirror Slumpir	43.000	114,526
NNX10AF59G	Development of high-resolution lightweight x-ray	43.000	352,020

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Contract Number	Government Contract Title	CFDA#	FY Expenses
NNX10AG27G	SMASS-Next: Next Generation Neo Spectroscop	43.000	34,687
NNX10AH32G	Search for Records of Early Solar System Magn	43.000	137,460
NNX10AH60G	Patterns of Innovation in Government Space Age	43.000	40,702
NNX10AH84G	Multiwavelength Spectroscopy of 330.2 1.0 (Suz	43.000	8,096
NNX10AK87G	CONSTRAINING THE EPISODIC LOW-LEVEL /	43.000	27,049
NNX10AK91G	A UNIQUE EXPERIMENT: MONITORING THE C	43.000	31,175
NNX10AL11G	Electron Beam Heating During Magnetotail Reco	43.000	106,798
NNX10AM68G	MIT Radar Observations in Niger for Megha-Trop	43.000	267,122
NNX10AP35G	The Wind SWE/Faraday Cup: Mission Operation	43.000	11,778
NNX10AR85G	Laboratory Photochemistry Experiments to Ident	43.000	79,361
NNX10AR94G	4U1957+11: THE MOST RAPIDLY GALACTIC E	43.000	5,149
NNX10AR96G	ACCRETION DISKS IN STRONG GRAVITY: FE	43.000	10,639
NNX11AC86G	Hunting For The Variable Iron Line in NGC 42	43.000	1,676
Total for 43.000			9,721,753

Contract Number	Government Contract Title	CFDA#	FY Expenses
NAS5-30612	The All Sky Monitor/Experiment Data System for	43.CCC	248,990
NNG05GK27G	SETG: A Search for Extraterrestrial Genomes	43.CCC	16,824
NNG05GQ63G	Crater Ice Deposits at the periphery of the Polar	43.CCC	416
NNG05GQ85G	Properties and Modification Processes of the Ma	43.CCC	15,508
NNG10HP00C	Continued Development and Operation of the N/	43.CCC	1,828,136
NNG10HP00C	VLBI Antenna System - Fabrication	43.CCC	134,975
NNH10CC27C	Supporting the SPHERES Facility aboard the ISS	43.CCC	417,948
NNH11CC25C	Leonard Verigo Child	43.CCC	27,067
NNH11CC25C	Visual Estimation and Relative Tracking for Insp	43.CCC	123,300
NNH11CC26C	Zero Robotics	43.CCC	238,277
NNX07AD29G	Predicting Landslides Using Measurements of Pr	43.CCC	156,621
NNX07AI42G	Rheologies of Planetary Ices	43.CCC	73,246
NNX07AK73G	Exploring the Outer Solar System with Stellar Oc	43.CCC	-1,660
NNX08AF20A	Extra Solar Planet Observations and Characteriza	43.CCC	88,555
NNX08AU06G	Comprehensive Analysis and Synthesis of Syste	43.CCC	29,376
Total for 43.CCC			3,397,579

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNX10AV02G	THE OUTER LIMITS OF RICH CLUSTERS: SUZ	43.000	9,314
Total for 43.000			9,314

**Appendix A-1 - Detail
Massachusetts Institute of Technology
Federal Research Support - On Campus
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Total for 43.00

9,314

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NNX11AF17G	Advanced Global Atmospheric Gases Experimer	43.001	128,404
NNX11AF77G	In situ measurements of ice nuclei and aerosol ci	43.001	26,383
NNX11AG85G	Exoplanetary Spin-Orbit Angles	43.001	29,847
	Total for 43.001		184,634

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NNX09AM53G	Lunar and Planetary Gravity and Topography	43.003	143,271
	Total for 43.003		143,271

143,271

Total for NASA - Goddard Space Flight Center

13,456,551

NASA - Johnson Space Center

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NNJ04HC72G	Microgravity Tissue Engineering	43.000	31,704
NNX09AE50G	A Critical Benefit Analysis of Artificial Gravity as i	43.000	1,203
	Total for 43.000		32,907

32,907

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NNJ05HF82A	NASA Manipulator Research	43.CCC	-136
NNJ05HF82A	Autonomous Manipulation Capabilities for Space	43.CCC	136
	Total for 43.CCC		0

Total for NASA - Johnson Space Center

32,907

NASA - Langley Research Center

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NNL10AA13C	ARRA - Assuring Safety using System Theoretic	43.CCC	399,262
NNX07AC70A	Development and application of Higher-Order Ad	43.CCC	47,369
NNX07AD42A	A Noise Assessment Methodology for Highly-Inte	43.CCC	70,142
	Total for 43.CCC		516,773

516,773

Total for NASA - Langley Research Center

516,773

**Appendix A-1 - Detail
Massachusetts Institute of Technology
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NASA - Marshall Space Flight Center

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
NNM08AA18C	GRAIL	43.CCC	1,107,845
	Total for 43.CCC		1,107,845
	Total for NASA - Marshall Space Flight Center		1,107,845
	Total for Nat'l Aero & Space Administration		19,523,949

**National Science Foundation
NSF**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
BCS-0640097	Computational Models and Physiological Studies	47.075	428
BCS-0640097	Computational Models and Physiological Studies	47.075	21,107
BCS-0827094	Collaborative Research: Dynamics of Initial Trust	47.075	105,499
BCS-0922263	MRI: Acquisition of Magnetoencephalography (M	47.075	-310,390
BCS-0955818	CAREER: Typical and atypical development of b	47.075	47,845
BCS-1023596	Collaborative Research: Integrating shape, scalar	47.075	36,543
BCS-1027686	Experimental Investigation of Verification Proced	47.075	78,652
SBE-0965259	Predictive Modeling of the Emergence and Deve	47.075	199,830
SBE-0965364	Collaborative Research: New Methods to Enhanc	47.075	47,414
SES-0527660	DRU: Dynamic Modeling of System Safety to Ma	47.075	121,697
SES-0550431	Collaborative Research: The American Mass Pu	47.075	6,828
SES-0617441	Collaborative Research: Primary Elections for L	47.075	16,801
SES-0617744	Unemployment	47.075	45,866
SES-0617836	Estimation with Many Instruments	47.075	754
SES-0620207	Consequences of Subjective Value in Negotiation	47.075	6,405
SES-0648741	Intertemporal Aspects of Optimal Income Taxatic	47.075	13,750
SES-0721112	Collaborative Research Economies with Dispers	47.075	13,440
SES-0729361	NSF Shah Child Account	47.075	1,256
SES-0729361	AOC: An Analytic Framework for Political and So	47.075	8,185
SES-0729361	NSF Dahleh Child Account	47.075	15,001
SES-0729361	NSF Ozdaglar Child Account	47.075	43,089

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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
SES-0752823	Collaborative Research: Research on Distributio	47.075	71,562
SES-0752935	Collaborative Research: Social Networks and the	47.075	113,856
SES-0825915	An Improved Model of Endogenous Technical Ct	47.075	132,800
SES-1015335	RAPID: Rumors, Truths, and Reality: A Study of	47.075	56,537
SES-1024619	Complexity, Uncertainty, and Macroeconomic Po	47.075	42,034
	Total for 47.075		936,789
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
AGS-0733510	Fabricated Equipment: Millstone Hill UHF Radar	47.050	2,325
AGS-0733510	Solar Maximum Studies at the Millstone Hill Obs	47.050	2,724,506
AGS-0808831	Stratosphere-Troposphere Interactions	47.050	71,921
AGS-0944121	Tropospheric Anthropogenic Aerosols and Clima	47.050	119,915
AGS-1023098	Space Weather Investigations: Ionospheric effec	47.050	55,282
AGS-1032244	Collaborative Research: Convective Organizer	47.050	33,930
AGS-1042622	Support for the CEDAR Science Steering Comm	47.050	23,483
AGS-1053648	CAREER: Understanding Chemistry, Transport ;	47.050	11,370
AGS-1056225	CAREER: Photochemical aging of atmospheric c	47.050	16,753
ATM-0449793	Collaborative Research: Is Deforestation Chang	47.050	13,912
ATM-0528227	Collab Resrch: Characterization of Sources & Pri	47.050	-26,910
ATM-0637400	Collaborative Research: Theory and Numerical S	47.050	40,772
ATM-0734806	Collaborative Research: West African Mesoscale	47.050	20,010
EAR-0003571	Collaborative Research in Eastern Tibet: Evoluti	47.050	4,133
EAR-0003571	Proposal for Collaborative Research in Eastern T	47.050	7,809
EAR-0409373	Off Campus Account: Collaborative Research: N	47.050	65,553
EAR-0409373	Collaborative Research: Multi-disciplinary Exper	47.050	206,626
EAR-0420592	Dynamical Change in Global Biogeochemical Cy	47.050	4,628
EAR-0451802	The Earth Time Network: Developing an Infrastr	47.050	78,219
EAR-0507486	Collaboration Research Understanding the Caus	47.050	53,669
EAR-0509658	Thermally-Driven Exchange Flows in Regions of	47.050	31,552
EAR-0510412	Dislocation Creep in Calcite Rocks with Evolving	47.050	-5,415
EAR-0538179	Experimental Investigations on the Role of H2O in	47.050	70,403
EAR-0544996	Collaborative Research: Earthscope integrated ir	47.050	61,490
EAR-0548706	Collaborative Research: Saltwater & Freshwater	47.050	3,688
EAR-0609617	Deformation Mechanics of an Asperity Under Hy	47.050	56
EAR-0609730	Deciphering the Dynamics of Continental Deform	47.050	9,871
EAR-0609905	Collaborative Research: Lower Crustal Flow, Sh	47.050	66,835

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Contract Number	Government Contract Title	CFDA#	FY Expenses
EAR-0635702	Collaborative Research: Active rifting Along the F	47.050	87,378
EAR-0643158	Collaborative Research: High Resolution Calibra	47.050	98,614
EAR-0711139	Microstructure of Marble: Comparison of Dislocat	47.050	128,818
EAR-0720253	Collab Res:Testing Orbital Forcing of Terrestrial	47.050	72,057
EAR-0738352	Predicting In-Canopy Velocity and Retention Tim	47.050	95,922
EAR-0746205	Collaborative Research: Thermal Evolution of Ni	47.050	46,782
EAR-0754205	Collaborative Research: Lithosphere Removal: T	47.050	531
EAR-0757871	Collaborative Research: Multi-Scale Analysis of	47.050	99,059
EAR-0807475	Fabricated Equipment - Collaborative Research:	47.050	45,105
EAR-0807475	Collaborative Research: The Siberian Traps and	47.050	24,108
EAR-0807476	Collaborative Research: The Siberian Traps and	47.050	10,554
EAR-0807585	Off Campus: Collaborative Research: The Siberi	47.050	24,813
EAR-0807585	Collaborative Research: The Siberian Traps and	47.050	175,349
EAR-0824398	SGER: Hydrology of Water Pools Near African V	47.050	-16
EAR-0838488	Off Campus: Present-Day Kinematics and Dynar	47.050	97,407
EAR-0838488	Present-Day Kinematics and Dynamics of The E:	47.050	54,936
EAR-0841161	Acquisition of An Electron Microprobe for the MI	47.050	103,658
EAR-0930166	Collaborative Research: Analytical Techniques a	47.050	40,620
EAR-0944122	Understanding the Complexity of The 660-km Se	47.050	137,152
EAR-0946280	Environmental Determinants of Malaria Transmis	47.050	102,081
EAR-0946634	Collaborative Research: Simultaneous Inversion:	47.050	47,776
EAR-0947969	Collaborative Research: Space-Based Measurer	47.050	36,155
EAR-0948388	Collaborative Research: tectonic links, magma fl	47.050	45,774
EAR-0951672	Field and numerical studies of self-organization i	47.050	-4,660
EAR-0951901	Collaborative Research: Multiscale travel time to	47.050	8,052
EAR-0968685	CSEDI Collaborative Research: Valence state of	47.050	14,780
EAR-0968863	Collaborative Research: CSEDI - Grand Challen	47.050	9,068
EAR-1024196	Collaborative Research: High-Precision U-Pb Zir	47.050	45,691
EAR-1045193	Collaborative Research: Characterization and M	47.050	1,553
EAR-1045487	Collaborative Research: Postseismic deformation	47.050	13,818
EAR-1045673	The Perovskite to Post-Perovskite Phase Bound	47.050	13,851
OCE-0425150	Collaborative Research: CLIMODE	47.050	121,915
OCE-0425602	The Ecology of Prochlorococcus	47.050	79,542
OCE-0645529	CAREER: From the Lab to the Ocean: Experime	47.050	131,045
OCE-0645936	Beyond the Instrumental Record: The Case of Ci	47.050	13,501
OCE-0647446	Spatial and Temporal variability of Pb, Fe, Zn an	47.050	89,059

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Contract Number	Government Contract Title	CFDA#	FY Expenses
OCE-0727914	Spatial and Temporal Patterns of Magnetism in 1	47.050	157
OCE-0744641	CAREER: Motility of Marine Bacteria: Observing	47.050	281,322
OCE-0751358	Mass Exchange Between Flexible Submerged C	47.050	82,719
OCE-0821574	MRI: Development of A System for Continuously	47.050	161,559
OCE-0824783	Collaborative Research: Fast Spin Up of Ocean (	47.050	51,779
OCE-0825147	Geochronological and Geochemical Studies of R	47.050	161,062
OCE-0825376	Collaborative Research Critical Layers and Isopy	47.050	198,646
OCE-0849233	Collaborative Research: Quantifying The Kinetic	47.050	16,824
OCE-0849940	Cyanobacterial hopanoids: Function, Natural Dis	47.050	280,474
OCE-0926204	Collaborative Research: Management and Logisti	47.050	79,193
OCE-0930866	Collaborative Research ETBC: Combined Experi	47.050	69,338
OCE-0960826	Collaborative Research: Impact of Bottom Bounc	47.050	1,541
OCE-0960892	Collaborative Research: Growth of Oceanic Low	47.050	15,439
OCE-0961711	Studies of Multiple Equilibria in Ocean-Atmosph	47.050	89,651
OCE-0961713	Collaborative Research: The Physics and Statisti	47.050	226,728
OCE-1024198	CMG Collaborative Research: From internal wav	47.050	34,813
OCE-1029900	The Biogeography of primary producers in the su	47.050	96,443
OCE-1048926	Collaborative Research Type 2 - MOBY: Modelin	47.050	64,267
OCE-1048976	RAPID: Collaborative Research: Deepwater Hori	47.050	7,821
OCE-1060735	Collaborative Research: Beyond the Instrumenta	47.050	22,029
OCE-1061160	Collaborative Research: Causes and Effects of (	47.050	2,312
Total for 47.050			7,822,351

Contract Number	Government Contract Title	CFDA#	FY Expenses
AST-0506716	Near-Earth Object Reconnaissance and Source I	47.049	-1,197
AST-0507590	Astrometric Search for Exoplanets	47.049	11,701
AST-0607601	Strong Gravitational Lensing of Quasars and the	47.049	54,821
AST-0647787	REU Site: Astronomy and Atmospheric Science (	47.049	57,707
AST-0705058	Collaborative Research: Ultra-Precision Silicon Ir	47.049	228,256
AST-0707609	Exploring the Kuiper Belt with the Magellan Teles	47.049	138,852
AST-0708106	Collaborative Proposal: Models of the Deep Circi	47.049	98,068
AST-0708534	MSPA-AST: Precision cosmology with galaxies, (	47.049	158,869
AST-0747154	CAREER: Building Rocky Planets: From Mercury	47.049	116,994
AST-0804311	Collaborative Research Proposal: A Bright, Ultra	47.049	27,128
AST-0907766	SMASS- Next: Next Generation Asteroid Spectro	47.049	134,088
AST-0908920	Chemical Abundances in the Intergalactic Mediu	47.049	154,465

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Contract Number	Government Contract Title	CFDA#	FY Expenses
AST-1006507	Collaborative Research: Development of a Greener	47.049	269,097
AST-1009644	The HI 21-cm Line as a Probe of Stellar Mass-Lc	47.049	32,223
CHE-0535604	Collaborative Research: Cyberinfrastructure and I	47.049	106,870
CHE-0547877	CAREER: Constrained Density Functional Methoc	47.049	46,155
CHE-0547905	CAREER: New Methodologies for the Synthesis	47.049	80,864
CHE-0616939	Condensed Matter Coherent Spectroscopy and C	47.049	80,838
CHE-0714189	Collaborative Research: High Throughput and M	47.049	189,735
CHE-0714189	Collaborative Research: Bawendi Child	47.049	118,189
CHE-0714189	Collaborative Research: Jensen Child	47.049	99,450
CHE-0719157	Early Metal Mediated Chemistry of the Group 15	47.049	196,261
CHE-0724158	A Convergent Synthesis Approach to the Uranium	47.049	23,522
CHE-0749821	Pure Electronic Rydberg Spectroscopy: The Use	47.049	157,826
CHE-0750239	Multielectron Activation of Metal-Halide, Metal-H	47.049	242,465
CHE-0806266	A New Approach to the Decomposition of Compl	47.049	86,227
CHE-0841187	Multiple Metal-Carbon Bonds, Metallacycles, anc	47.049	148,869
CHE-0907905	Metal Coordination Compounds as Reporters for	47.049	247,883
CHE-0911107	Big Lab Interferometer Fabrication	47.049	-11,580
CHE-0911107	Fabricated Equipment - Pump - Probe Optimized	47.049	1,849
CHE-0911107	Two-dimensional infrared spectroscopy of proteir	47.049	10,892
CHE-0911107	Two-dimensional infrared spectroscopy of proteir	47.049	191,279
CHE-0946721	Purchase of an X-Ray Diffractometer	47.049	107,750
CHE-1012809	Detailed studies of the chemistry of alkoxy and a	47.049	110,208
CHE-1019990	The Chemical Biology of Phosphothioate Modifi	47.049	90,792
CHE-1058219	Accurate Photochemistry in the Condensed Pha:	47.049	28,301
CHE-1058709	The Impact of Chirped Pulse Millimeter-Wave Te	47.049	52,570
DMR-0504158	Spin Transport Studies in Band and Interface Tai	47.049	79,199
DMR-0504158	Child Account for PUF/FACE Cost Sharing unde	47.049	77,464
DMR-0604430	GOALI: Magneto-optical Materials for Integrated C	47.049	89,555
DMR-0606276	The Ab-initio Prediction of Crystal Structure: Cor	47.049	153,160
DMR-0645323	CAREER: Structure-Property Relationships for M	47.049	36,449
DMR-0701386	Physics of Electron Spins in Quantum Dots	47.049	114,502
DMR-0704197	Advancing the Photophysics of Carbon Nanotub	47.049	5,792
DMR-0704717	Structure Evolution During Volmer-Weber Growth	47.049	153,038
DMR-0705234	Lipodendrisomes: Co-assembly of New Comb-Ri	47.049	105,542
DMR-0705255	Frustrated Quantum Magnetism in Insulators anc	47.049	48,354
DMR-0706078	Physical Properties of Strongly Correlated Quant	47.049	45,613

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Contract Number	Government Contract Title	CFDA#	FY Expenses
DMR-0706408	Organizing and Optimizing Electronic Materials v	47.049	431
DMR-0709557	Materials World Network: Magnetic Properties of	47.049	13,854
DMR-0745555	CAREER: Semiconductor Nanowires: Structure-I	47.049	134,245
DMR-0803315	Constrained Fluctuations	47.049	119,237
DMR-0804040	Physics of Strong Disorder and Correlation	47.049	103,424
DMR-0804449	Periodic Polymeric Materials: Deaf and Blind Str	47.049	124,107
DMR-0819762	CMSE - SEED - Roman	47.049	9,199
DMR-0819762	CMSE - SEED - Gedik	47.049	46,578
DMR-0819762	CMSE - Initiative 1 - Rubner	47.049	137
DMR-0819762	CMSE - Initiative 2 - Shim	47.049	2,099
DMR-0819762	CMSE - SEED - Wang	47.049	24,204
DMR-0819762	Supplement - Participant Travel Expenses for Ju	47.049	2,314
DMR-0819762	CMSE - Initiative 1 - Stellacci	47.049	4,681
DMR-0819762	CMSE - Initiative 1 - Cohen	47.049	4,709
DMR-0819762	CMSE - Initiative 2 - Chu	47.049	4,968
DMR-0819762	CMSE - SEED - Dinca	47.049	24,729
DMR-0819762	CMSE - MRSEC Day Camp	47.049	23,498
DMR-0819762	CMSE - SUPER SEED - KATZ	47.049	18,280
DMR-0819762	CMSE - Initiative 1 - Wardle	47.049	6,922
DMR-0819762	CMSE - Initiative 2 - Nocera	47.049	48,152
DMR-0819762	CMSE - IRG-3 - Fink	47.049	129,204
DMR-0819762	CMSE MRSEC Grant Supplement - MRSEC We	47.049	31,920
DMR-0819762	CMSE - IRG-1 - Belcher	47.049	74,934
DMR-0819762	CMSE - IRG-2 Van Vliet	47.049	74,740
DMR-0819762	CMSE - IRG-1 - Marzari	47.049	74,378
DMR-0819762	CMSE - IRG-2 Ortiz	47.049	68,307
DMR-0819762	CMSE - MRSEC Special Projects	47.049	67,006
DMR-0819762	CMSE - IRG-1 - Ceder	47.049	64,791
DMR-0819762	CMSE - IRG-3 - Soljacic	47.049	63,488
DMR-0819762	CMSE - SEED - Beach	47.049	56,345
DMR-0819762	CMSE - IRG-2 Buehler	47.049	55,192
DMR-0819762	CMSE - IRG-2 Boyce	47.049	53,629
DMR-0819762	CMSE MRSEC Grant Supplement - MRSEC We	47.049	51,072
DMR-0819762	CMSE - SEED - Gradecak	47.049	50,816
DMR-0819762	CMSE - Subcontract - Univ. of Pittsburgh	47.049	50,677
DMR-0819762	CMSE - IRG-2 Hammond	47.049	48,652

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Contract Number	Government Contract Title	CFDA#	FY Expenses
DMR-0819762	CMSE - SEED - Jarillo-Herrer	47.049	48,383
DMR-0819762	CMSE - IRG-1 - Hamad-Schifferli	47.049	88,071
DMR-0819762	CMSE - SEED - Kong	47.049	90,093
DMR-0819762	CMSE - IRG-2 Cohen	47.049	84,876
DMR-0819762	CMSE - Initiative 2 - Lee	47.049	97,017
DMR-0819762	CMSE - IRG-3 - Johnson	47.049	37,734
DMR-0819762	CMSE - Major Equipment	47.049	332,905
DMR-0819762	CMSE - MRSEC Administration	47.049	197,547
DMR-0819762	CMSE - MRSEC Education Support	47.049	174,124
DMR-0819762	MRSEC Supplement - Reconfigurable Array Mac	47.049	162,587
DMR-0819762	CMSE - MRSEC Undergrad/REU	47.049	138,806
DMR-0819762	CMSE - IRG-1 - Thompson	47.049	93,081
DMR-0819762	CMSE - Initiative 1 - Irvine	47.049	125,514
DMR-0819762	CMSE - IRG-3 - Ippen	47.049	112,993
DMR-0819762	CMSE - SEED - Lu	47.049	40,255
DMR-0819762	CMSE - IRG-1 - Shao-Horn	47.049	109,290
DMR-0819762	MRSEC Supplement - NSF MRF	47.049	99,421
DMR-0819762	CMSE - Initiative 1 - Rubner	47.049	104,117
DMR-0819762	CMSE - IRG-3 - Joannopoulos	47.049	103,356
DMR-0845287	CAREER: Exploration of novel quantum phenom	47.049	134,731
DMR-0845358	CAREER: Understanding the Chemical Vapor Depo	47.049	100,339
DMR-0849278	SGER: Spin-transfer-torque devices based on m	47.049	7,936
DMR-0904400	Disentangling Pseudogap from Superconductivity	47.049	32,912
DMR-0906838	Surface Modification and Bioconjugation of Gold	47.049	144,435
DMR-0934312	Collaborative Research: EAGER Non-Homogeniz	47.049	22,179
DMR-1004147	Photophysical Studies of Nanocarbons	47.049	94,672
DMR-1005434	Physics Near the Mott Transition	47.049	75,429
DMR-1005541	Physical Properties of Strongly Correlated Quant	47.049	126,281
DMR-1005810	Synthesis and Organization of Electronic Molecu	47.049	179,702
DMR-1005926	Spin Bath of a Central Spin System in Diamond:	47.049	40,835
DMR-1005926	Fabrication: Quantum Control Technique Device	47.049	24,655
DMR-1006147	Collaborative Research: Hierarchically Assemble	47.049	14,180
DMR-1007760	Materials World Network: Triblock Terpolymers fo	47.049	25,385
DMR-1007793	Fabricated Equipment: CVD Thermal Chamber	47.049	8,352
DMR-1007793	Materials World Network: Novel Catalyst System	47.049	91,516
DMR-1042342	EAGER: IMR: Compact source of coherent x-ray	47.049	202,287

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Contract Number	Government Contract Title	CFDA#	FY Expenses
DMR-1054671	CAREER: Self-Healing Under Flow: From Single	47.049	48,924
DMS-0530851	CMG: Understanding Ensemble Approaches to E	47.049	176,044
DMS-0545904	CAREER: Cohomological Methods in Algebraic C	47.049	50,293
DMS-0546209	CAREER: Algebraic Combinatorics and its Appli	47.049	175,266
DMS-0602678	Advances in the Theory of Dispersive Equations	47.049	461
DMS-0604416	Nonlinear Wave Dynamics in Fluid Flows	47.049	9,491
DMS-0604423	Studies in Algebraic Combinatorics	47.049	68,969
DMS-0606629	Geometric Analysis: Minimal Surfaces, Geometri	47.049	157,719
DMS-0652630	FRG Collaborative Research Homological Mirror	47.049	51,044
DMS-0701162	Functional Inequalities in Global Analysis and Nc	47.049	1,001
DMS-0702438	Multiple Dirichlet Series with Applications to Auto	47.049	0
DMS-0703937	New Challenges in Aggregation Kinetics	47.049	6,669
DMS-0706967	Floer Theories in Symplectic Geometry and Low	47.049	115,653
DMS-0707641	Mathematical Modeling of Induced-Charge Elect	47.049	31,359
DMS-0724778	Collaborative Research: Multi-Scale (Wave Equa	47.049	41,574
DMS-0732175	Collaborative Research: Algorithms for Near-Opt	47.049	7,532
DMS-0732334	MSPA-MCS: Learning to Rank	47.049	5,565
DMS-0757207	FRG: Collaborative Research: Semidefinite Optir	47.049	43,603
DMS-0757765	Investigations in the areas of Sphere Packing an	47.049	39,107
DMS-0758197	Applications of the Relative Trace Formula in Hig	47.049	42,456
DMS-0758262	Mathematical Sciences Geometric Methods in th	47.049	164,389
DMS-0805834	Parabolic Differential Equations and the Geomet	47.049	30,502
DMS-0805841	Low Dimensional Topology and Gauge Theory	47.049	122,074
DMS-0807330	Collaborative Research: Time-Dependent and In	47.049	25,900
DMS-0813648	Capturing subgrid structures with level set metho	47.049	82,623
DMS-0841321	Rational points on varieties in families, and count	47.049	98,392
DMS-0844185	CAREER: Multiple Dirichlet Series, Automorphic	47.049	100,045
DMS-0848804	Collaborative Research: Cognitive Rhythms Coll	47.049	1,569
DMS-0848804	Collaborative Research: Cognitive Rhythms Coll	47.049	184
DMS-0848804	Collaborative Research: Cognitive Rhythms Coll	47.049	-308
DMS-0854764	Off Campus Account - Bezrukavnikov	47.049	7,029
DMS-0854764	FRG: Collaborative Research: Quantum Cohomc	47.049	253,681
DMS-0854774	FRG: Collaborative Research: Mean curvature fl	47.049	27,031
DMS-0854877	FRG: Collaborative Research: Characters, Lifting	47.049	1,709
DMS-0900524	Microlocal analysis in nonlinear PDE and PDE or	47.049	17,393
DMS-0900996	Algebraic Structures Arising in Physics	47.049	108,792

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DMS-0905950	Collaborative Research: Homotopy Theory: Appl	47.049	241,524
DMS-0906038	Non-variational Plateau problems in geometry ar	47.049	50,009
DMS-0907955	The stability of hydraulic jumps: analysis, compu	47.049	88,843
DMS-0908122	Nonlinear Wave Propagation in Fluid Flows	47.049	75,014
DMS-0930146	Mathematical Modeling of Rechargeable Batterie	47.049	493
DMS-0934689	CMG Collaborative Research: Imaging Magnetiz	47.049	64,877
DMS-0943787	EMSW21-RTG: Geometry and Topology	47.049	107,149
DMS-0946296	CAREER: Random Surfaces and Conformal Pro	47.049	119,918
DMS-0952486	CAREER: Lattices and Sphere Packings, Arithm	47.049	10,384
DMS-0967272	FRG: Collaborative Research: Atlas of Lie group	47.049	61,313
DMS-0969470	Geometric methods in local and global represent	47.049	39,628
DMS-0969495	Rationally Connected Varieties	47.049	39,720
DMS-0969745	Semiclassical Analysis in Inverse Problems; on k	47.049	32,525
DMS-1000113	Tensor categories, quantum groups, and Hecke	47.049	67,188
DMS-1005288	Cohomological methods in symplectic topology	47.049	51,797
DMS-1005365	Symplectic homology and Stein manifolds	47.049	29,063
DMS-1005539	High Dimensional Inference and Signal Recovery	47.049	67,821
DMS-1005696	Spectral problems in semi-classical analysis, wa	47.049	46,943
DMS-1005944	Compactifications, resolution and differential equ	47.049	32,449
DMS-1007790	Geometrical algorithms for the inverse scattering	47.049	94,654
DMS-1016125	Collaborative Research: Theory and Algorithms f	47.049	1,937
DMS-1017062	Collaborative Research: Wave Computations in f	47.049	6,995
DMS-1022356	The Fluid Dynamics of Respiratory Disease Tran	47.049	70,521
DMS-1025302	CMG Collaborative Research: Nonlinear elastic-v	47.049	5,349
DMS-1035400	Jeffrey Grossman	47.049	132,570
DMS-1035400	Of Randomness and Disorder: A New Paradigm	47.049	94,371
DMS-1035400	Troy Van Voorhis	47.049	64,422
DMS-1035400	Alan Edelman	47.049	32,386
DMS-1054622	Minimal Model Program	47.049	78,918
DMS-1056390	Growth of Random Surfaces	47.049	4,197
DMS-1068815	New perspectives on dispersive equations	47.049	26,706
DMS-1104623	Critical percolation in high dimensions	47.049	16,249
PHY-0449884	Career: Beyond Gravitational Wave Detection	47.049	118,155
PHY-0503076	A Program in Ultra-Low Temperature Atomic Phy	47.049	24,168
PHY-0503076	Fabrication: Fermi 1	47.049	9,897
PHY-0548484	The Relationship Between Spatial Nuclear Orgar	47.049	327,379

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
PHY-0551153	CUA-Core Project	47.049	54,931
PHY-0551153	CUA - Seminar	47.049	40,785
PHY-0551153	Fabrication: Cold Atom Apparatus	47.049	45,769
PHY-0551153	CUA - M. Zwierlein	47.049	233
PHY-0551153	CUA-W. Ketterle	47.049	149,893
PHY-0551153	CUA-Visitor Project	47.049	31,153
PHY-0551153	CUA-I. Chuang	47.049	188,900
PHY-0551153	Fabrication: Cold Atom Apparatus	47.049	4,195
PHY-0551153	CUA-V. Vuletic	47.049	195,780
PHY-0551153	CUA-Harvard University Subaward	47.049	1,557,882
PHY-0551153	CUA-Outreach Project	47.049	11,142
PHY-0551153	Fabrication: Ion Trap Apparatus	47.049	15,391
PHY-0613734	Laboratory Studies of Spontaneous Reconnectio	47.049	30,037
PHY-0653414	Surface-Electrode Ion Lattices for Quantum Infor	47.049	93,188
PHY-0653414	Fabrication: Cryogenic UHV Ion Trap System	47.049	137
PHY-0653414	Chuang Lab Expenses	47.049	5,132
PHY-0653414	Fabrication: Microchip Ion Trap Array for Quantu	47.049	5,185
PHY-0653456	Fabricated Equipment: dark Matter Detection Api	47.049	3,116
PHY-0653456	Dark Matter & Neutron Detector Testing System	47.049	460
PHY-0653456	Collaborative Research: Developing new readou	47.049	7,944
PHY-0653456	Dark Matter Test Detector Fabrication	47.049	5,637
PHY-0653514	Strongly Interacting Quantum Mixtures of Ultraco	47.049	35,990
PHY-0758188	Fabricated Equipment: Quantum radiation Pressi	47.049	58,050
PHY-0758188	Quantum effects in radiation-pressure-dominat	47.049	290,601
PHY-0847342	CAREER: Increasing the Dark Matter Science Ri	47.049	24,911
PHY-0903906	Interaction of A Flowing Plasma With Collecting (	47.049	11,049
PHY-0967299	Research in Theoretical Elementary Particle Phy	47.049	41,609
PHY-0968893	Neutrino Detector Development at MIT	47.049	19,891
PHY-0969311	Stongly Interacting Quantum Mixtures of Ultraco	47.049	20,096
PHY-0969731	Fabricated Equipment - Bec 5	47.049	167,659
PHY-0969731	A Program in Ultra-Low-Temperature Atomic Ph	47.049	501,897
PHY-0970047	Distinguishing Dark Matter Signals from Neutron	47.049	63,183
PHY-1005373	Noise Characterization and Dynamic Decoupling	47.049	65,254
PHY-1041588	Toward the Experimental Detection of Cosmic R	47.049	40,184
	Total for 47.049		18,330,401

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
CCF-0347776	CAREER: Fundamental Research in Geometric I	47.070	165,211
CCF-0541183	Deep and Scalable Software Checking	47.070	3,957
CCF-0541227	Acquisition and Modeling of Non-Rigid Shape an	47.070	-14
CCF-0621511	HECJRA: Microdata Storage Systems for High-E	47.070	-3,666
CCF-0635191	Collaborative Research: MIMO Networking: Fron	47.070	26,817
CCF-0635297	Program Obfuscation: Foundations and Applicati	47.070	55,368
CCF-0643836	CAREER: Acquisition, Approximation, and Comp	47.070	130,840
CCF-0702295	Electron Mediated Quantum Computing with Nuc	47.070	7
CCF-0702670	Extending the Power and Applicability of the Tim	47.070	157,010
CCF-0726514	Theoretical Foundations for Reliable Computing	47.070	11,157
CCF-0726648	Collaborative Research: EMT: Novel Operations,	47.070	-6,400
CCF-0728554	Collaborative Research:Flow Level Models and t	47.070	78,137
CCF-0728645	Katabi Child	47.070	113,547
CCF-0728645	Rubinfield Child	47.070	59,053
CCF-0728645	Fast Approximate Algorithms for Wireless Sens	47.070	3,237
CCF-0729011	New Handles on Program Correctness	47.070	171,310
CCF-0729069	Compressing Unordered Data: Theory, Algorith	47.070	55,693
CCF-0810888	G&V: Physically Valid Simulation of Active Huma	47.070	102,215
CCF-0811397	CCF-CPA: Automatic Parallelization Using Sema	47.070	110,871
CCF-0811696	CPA-CPL: A Hardware-Design Inspired Methodo	47.070	89,928
CCF-0811724	Child - Kimerling	47.070	-2,606
CCF-0811724	CPA-CSA-T: ATAC: Enhancing Multicore Progra	47.070	47,812
CCF-0829421	EMT/QIS: Physics Based Approaches to Quantu	47.070	121,208
CCF-0829672	Invariance in property Testing	47.070	151,008
CCF-0829878	Polyhedral Techniques for the Design of Approx	47.070	161,328
CCF-0829893	EMT/MISC: Collaborative Research: Harnessing	47.070	14,846
CCF-0830100	Information Theory with Directions: Geometric St	47.070	98,317
CCF-0832997	Petabricks: CSAIL	47.070	121,390
CCF-0832997	Petabricks: A Language and Compiler for Scalab	47.070	101,972
CCF-0836720	Collaborative Research: CDI-Type II: Discovery	47.070	235,082
CCF-0843915	CAREER: Geometric Techniques for Algorithm C	47.070	46,409
CCF-0904305	CIF: Medium Collaborative Research Understan	47.070	47,055
CCF-0904598	SHF: Medium: Collaborative Research: Throug	47.070	168,972
CCF-0905244	SHF: medium: Exposing and Eliminating Errors	47.070	174,357
CCF-0915155	AF: Small: Logic and Computational Complexity	47.070	1,921
CCF-0937274	CCF-AF: Abstract MAC Layers	47.070	62,003

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Contract Number	Government Contract Title	CFDA#	FY Expenses
CCF-0937832	Collaborative Research: Programming Models ar	47.070	175,975
CCF-0937860	HECURA: Collaborative: Multidimensional and St	47.070	191,476
CCF-0953960	CAREER: Towards a Constructive Theory of Net	47.070	92,504
CCF-0964106	SHF: Medium: Intelligent and efficient data move	47.070	180,926
CCF-0964646	CIF: Medium: Collaborative Research: From Rei	47.070	233,546
CCF-1008324	Collaborative Research: Enabling technology for	47.070	9,239
CCF-1008325	NSF Collaborative Research: CPA-CSA:COMP Ar	47.070	13,757
CCF-1012042	AF: Large: Collaborative Research: Compact Re	47.070	69,473
CCF-1017772	CIF: Small: Theory and Codes for Intermittent an	47.070	27,232
CCF-1018064	TC:Small: Securing Programs and data in Remoi	47.070	4,156
CCF-1049406	EAGER: Human-Centered Software Synthesis	47.070	80,951
CCF-1049457	Eager: Technologies for Elastic OS Services in It	47.070	57,422
CNS-0428107	ITR: Collaborative: Byzantine Fault Tolerance for	47.070	-373
CNS-0448287	Career: Adaptive Reliable and Self-Managed Nei	47.070	55,054
CNS-0520032	NeTS-NOSS: WaveScope---An Adaptive Wireles	47.070	1,264
CNS-0546590	CAREER: Implementable Network Algorithms via	47.070	2,043
CNS-0615215	CSR-AES: Feedback-Driven Adaptive Multithrea	47.070	12,739
CNS-0626781	NETS-NBD: Architecture for Fast Reconfigurable	47.070	145,483
CNS-0626800	NeTS-FIND: Future Optical Network Architecture	47.070	13,932
CNS-0627021	NeTS:NBD: XORs in the Air: Medard Child	47.070	1
CNS-0627021	NeTS:NBD: XORs in the Air: Practical Wireless I	47.070	-2,571
CNS-0707612	Fabricated Equipment - Wireless Test Bed	47.070	22,005
CNS-0708375	CRI: CRID: - Development of Alloy Tools, Techn	47.070	165,825
CNS-0715397	CSR-EHS: Virtual Node Abstraction Layers for D	47.070	59,837
CNS-0715680	CT-ISC: Applications and Evolution of Trusted Pl	47.070	35,374
CNS-0716273	Collaborative Research CT-T Towards a More Ai	47.070	66,533
CNS-0719753	CSR-AES: User Support Software for a Fresh Br	47.070	94,082
CNS-0720029	CSR-PDOS: ISG: Collaborative Research: Buildi	47.070	-4
CNS-0720079	CSR-CST: XStream, a Distributed Stream Proces	47.070	97,276
CNS-0721702	NeTS-WN: Bit-Switched Wireless Networks	47.070	136,227
CNS-0721702	Fabricated Equipment - Airblue Network	47.070	202,830
CNS-0808907	SGER- Cryptographic Techniques for Trustworth	47.070	15,961
CNS-0830961	NECO Cross-Layer Survivability in WDM-based I	47.070	37,667
CNS-0831442	CT-M: Theory and Practice of Accountable Syste	47.070	134,322
CNS-0831660	NeTS-NEDG: Adaptive Wideband Networks for t	47.070	383,862
			81,882

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Contract Number	Government Contract Title	CFDA#	FY Expenses
CNS-0831664	Fabricated Equipment - Wireless Testbed	47.070	16,704
CNS-0831664	NeTS-ANET: One Video Multicast to Serve Diver	47.070	213,574
CNS-0834239	CSR-DMSS,SM: Aeolus: Secure Support for Pres	47.070	100,854
CNS-0834415	CSR-PSCE,SM: An Operating System for Multi-C	47.070	95,578
CNS-0836555	Future Innovative Network Design (FIND) Archite	47.070	124,247
CNS-0915629	NeTS: Small: KPBase: Core of the Knowledge P	47.070	110,734
CNS-0931550	CPS: Medium: Vehicular Cyber-Physical Systems	47.070	368,057
CNS-0940520	Collaborative Research: BPC-DP: A Cultural Shil	47.070	82,536
CNS-1016213	CSR: Small: Incremental Sampling Methods for O	47.070	27,856
CNS-1017058	CSR: Small: Using Thread-Local Memory Mappi	47.070	170,163
CNS-1035199	CPS: MEDIUM: Collaborative Research: Geometr	47.070	60,333
CNS-1040020	FIA: Collaborative Research: Mobility First: A F	47.070	43,967
CNS-1040023	FIA: Collaborative Research: NEBULA: A Futur	47.070	50,700
CNS-1040072	FIA: Collaborative Research: Architecting for Inn	47.070	36,808
CNS-1046733	CAREER: A Partial Order Approach to Dynamic	47.070	98,239
IIS-0347631	CAREER: Statistical Learning Theory for Natural	47.070	-383
IIS-0426838	ITR: Collaborative Research: -(NHS+ASE)-(int+	47.070	10,792
IIS-0447800	Career: End-user Programming for Web Automat	47.070	112,527
IIS-0448124	Career: MACAJUE - Managing Ambiguity and C	47.070	106,431
IIS-0448168	Career: Content and Cohesion Models with Appli	47.070	73,505
IIS-0546262	CAREER: Categorization and Identification of Vis	47.070	143,525
IIS-0546467	Career: Model Probability Planning for Mobile R	47.070	72,255
IIS-0642971	CAREER: Computational Modeling of Spatial Aci	47.070	89,382
IIS-0704424	III-COR - ChunkyStore: Physical Database Desig	47.070	18,269
IIS-0705647	HCC: Collaborative Research: Social-Emotional	47.070	85,841
IIS-0711069	HCC: Protocols for Negotiating Complex Contrac	47.070	1,080
IIS-0711891	III-COR: Collaborative Research: The Morpheus	47.070	46,742
IIS-0712012	Ri: Robot Manipulation Under Uncertainty	47.070	142,934
IIS-0712793	Child - Miller	47.070	24,080
IIS-0712793	III-COR: Data Homesteading: Tools to Let Scient	47.070	-53
IIS-0746194	CAREER: Machine Learning Control of Underact	47.070	123,068
IIS-0747120	CAREER: Integrated System for Object and Scel	47.070	73,363
IIS-0827483	Collaborative proposal: Object and action recogn	47.070	247,535
IIS-0835652	Katabi-Child	47.070	1,698
IIS-0835652	CDI-Type II: Exploiting Collective Human Knowle	47.070	21,600
IIS-0835652	Barzilay-Child	47.070	14,802

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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
IIS-0844013	Collaborative Research: A Comparative Study of	47.070	62,128
IIS-0855773	Collaborative Major Computation Textiles as Mat	47.070	101,015
IIS-0904594	Computational Mechanisms for Storing Motor Me	47.070	134,564
IIS-0904625	Finding Structure in the Space of Activation Profi	47.070	155,639
IIS-0904625	Kanwisher Child	47.070	172,277
IIS-0915148	RI:Small:Randomized Feedback Motion Planninç	47.070	148,370
IIS-0915176	RI:Small: Statistical machine translation through	47.070	30,210
IIS-0963285	Collaborative Research: Measuring Collective Int	47.070	13,869
IIS-0964004	III: Medium: Collaborative Research: Frankencar	47.070	9
IIS-0964269	RI; Medium; Collaborative Research: Unlocking t	47.070	126,699
IIS-0968321	SoCS: The Climate Collaboratorium:A Tool for Li	47.070	7,976
IIS-1002713	Major: Scratch 2.0: Cultivating Creativity and Col	47.070	232,564
IIS-1016862	RI: Small: Hierarchical Visual Scene Understandir	47.070	42,869
IIS-1016998	HCC-Small: Tactile communication in human-cor	47.070	94,454
IIS-1017862	High resolution tactile sensing	47.070	106,347
IIS-1017992	RI: Small: Plan Execution for Continuous Dynam	47.070	14,625
IIS-1018055	HC: Small: Enabling and Exploring Natural Interæ	47.070	124,725
IIS-1029585	Collaborative Research: Behavior Imaging: Ena	47.070	90,520
IIS-1053235	CAREER: Material Computing for Everyone: De	47.070	3,424
IIS-1053398	CAREER Digital Privacy and Regulation	47.070	602
IIS-1064495	CAREER: Computing for Advanced Identity Repr	47.070	118,044
IIS-1065219	III: Medium Scalable and Secure Database as a	47.070	18,235
Total for 47.070			10,581,768

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
BES-0348259	Career: Colloidal Micelles as Multifunctional Vac	47.041	8,709
BES-0609182	NIRT: Biomeimetic Nanostructured Medical Adhe	47.041	207,716
CBET 0753036	NIRT: Single Molecule Detection in Living Cells t	47.041	115,354
CBET 0753036	UIUC Subaward - 6915791	47.041	181,397
CBET-0644846	CAREER: Chemomechanical Imaging and Engin	47.041	115,889
CBET-0651678	Investigation of a hydrological and biogeochemic	47.041	-1,433
CBET-0730238	Eliciting Novel Microbial Phenotypes through Tra	47.041	20,216
CBET-0753020	Near Infrared Fluorescent Single Walled Carbon	47.041	670
CBET-0755825	Phonon Heat Conduction in Nanostructures: 3D	47.041	62,952
CBET-0758352	CAREER Understanding and Exploiting the Surf	47.041	79,024
CBET-0830098	Work Completed for Heat Transfer from Nanopar	47.041	-1

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Contract Number	Government Contract Title	CFDA#	FY Expenses
CBET-0845347	CAREER: Technologies for Genome-Wide In Vivo	47.041	41,555
CBET-0852235	DNA Polymer Dynamics in Nanoconfinement	47.041	21,186
CBET-0853866	Assessing Environmental Sustainability using FL	47.041	96,359
CBET-0933095	Advances in Global Dynamic Optimization	47.041	100,091
CBET-0939511	NSF Science and Technology Center: Emergent	47.041	2,164
CBET-0939511	L. Griffith STC	47.041	98,197
CBET-0939511	P. So RTC	47.041	68,799
CBET-0939511	L. Boyer STC	47.041	72,165
CBET-0939511	H. Asada STC	47.041	112,491
CBET-0939511	P. Hammond STC	47.041	143,886
CBET-0939511	R. Weiss RTC	47.041	154,594
CBET-0939511	NSF Science and Technology Center: Emergent	47.041	1,554,861
CBET-0939511	R. Kamm STC	47.041	176,836
CBET-0952493	CAREER: CELL SEPARATION BY ROLLING OI	47.041	140,869
CBET-0952564	CAREER: Fundamental Studies of Condensator	47.041	8,691
CBET-0954986	CAREER: Design, Construction and Characterizi	47.041	89,071
CBET-0966000	Collaborative Proposal: Chiral Objects in Microfl	47.041	59,611
CBET-0966452	Bouncing droplets: from fundamentals to digital r	47.041	155,931
CBET-1001092	Engineered Quorum Sensing & Programmed Mu	47.041	71,314
CBET-1033316	Probing Delays and Memory in Gene Activation I	47.041	95,423
CBET-1033533	Directed Assembly of Nanoscale Process System	47.041	11,249
CBET-1046890	RAPID: Multiscale plume modeling of the Deepw	47.041	1,274
CBET-1066566	Collaborative Research: Swimming and Settling	47.041	2,195
CMMI-0517966	Manufacturing Processes for Polymer-Based Mic	47.041	62,311
CMMI-0555053	Effect of Inclusions on Material Performance-Invr	47.041	90,808
CMMI-0555614	Constitutive Equations and Computational Proce	47.041	66,378
CMMI-0625241	NSF/Sandia: Effect of Loading History on Ductile	47.041	49,442
CMMI-0642545	CAREER: Mechanics of Chemically Complex, Hi	47.041	12,217
CMMI-0700044	Modern Mathematical Programming Approaches	47.041	145,829
CMMI-0700414	Engineered Fuel Cell Membranes: Multiscale De	47.041	68,827
CMMI-0726733	Stochastic Networks in the Heavy Traffic Regime	47.041	18,817
CMMI-0728162	Stochastic Recruitment and Broadcast Feedbac	47.041	37,256
CMMI-0758061	Price of Anarchy and its Applications	47.041	95,751
CMMI-0758069	Nearly Optimal Solutions for Stochastic Optimiza	47.041	33,189
CMMI-0758651	Nanomechanics of Cartilage Extracellular Matrix	47.041	130,382
CMMI-0824674	Alleviating Travel Delay Uncertainties in Traffic A	47.041	95,751

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Contract Number	Government Contract Title	CFDA#	FY Expenses
CMMI-0830134	CAREER: A Design Data Analysis Approach to E	47.041	87,009
CMMI-0846554	CAREER: New Algorithmic Approaches to Comp	47.041	115,520
CMMI-0856063	Collaborative Research: Adaptive Allocation Rul	47.041	61,368
CMMI-0856171	Collaborative Research: Mechanical and Electric	47.041	52,287
CMMI-0856325	Debonding in Bi-layer Material Systems under M	47.041	90,555
CMMI-0918571	Cavern Design for the Deep Underground Scient	47.041	36,622
CMMI-0926349	Preparing Cities for Climate Change: An Internat	47.041	54,250
CMMI-0926671	A Robust Methodology for the Standoff Condition	47.041	109,948
CMMI-0970017	Collaborative Research: Optimal Gaits and Desig	47.041	75,803
CMMI-1000727	A Multi-Cellular PZT Actuator/Generator with Tur	47.041	77,069
CMMI-1029260	What Do Customers Like: A New Approach That	47.041	18,997
CMMI-1029603	Online Optimization for Dynamic Resource Alloc	47.041	15,382
CMMI-1031332	Statistical physics methods and algorithmic appli	47.041	63,761
CMMI-1058436	MRI-RAPID: Characterization of Spill Oil Retenti	47.041	214,036
CTS-0506830	NIRT: Integrated Study of Thermoelectric Transp	47.041	15,291
DMI-0545910	CAREER: Distributed Multi-Agent Control and Op	47.041	106,577
ECCS-0644245	CAREER: Manipulating Microcomponents for Se	47.041	111,558
ECCS-0701623	Data Fusion Architectures	47.041	6,257
ECCS-0725555	Collaborative Research: Energy-Efficient Comm	47.041	-4,243
ECCS-0731100	Ultra Sensitive Sensory Materials for Detection o	47.041	-1,131
ECCS-0745237	CAREER: Practical Algorithms for Next Generati	47.041	15,476
ECCS-0747501	CAREER: Digitally-Assisted Architectures for Ne	47.041	111,241
ECCS-0801549	Control Over Networks	47.041	74,357
ECCS-0823778	Single Photon Detection in the Near and Mid Infr	47.041	91,300
ECCS-0823778	Fabricated Equipment - Visible to Near Infrared C	47.041	2,586
ECCS-0823778	Fabricated Equipment - Motorized TTP4 Probe S	47.041	2,437
ECCS-0835623	Collaborative Research CDI-Type II Advanced TI	47.041	16,239
ECCS-0941043	CDI Type I: Collaborative Research: Integration c	47.041	85,396
ECCS-0968633	Development of Tunable THz Wire Lasers	47.041	120,742
ECCS-1001994	Organic Polariton Microcavities for Ultra-Low Enr	47.041	110,732
ECCS-1002286	Octave Spanning Gain by Cavity Enhanced Optic	47.041	263,246
ECCS-1027905	A New Paradigm for Understanding and Controlli	47.041	4,382
ECCS-1027922	Novel Game-Theoretic Tools and Solution Conco	47.041	53,703
EEC-0824328	BRIGE: Dynamically Tunable Nanostructured Su	47.041	24,178
EFRI-0735905	EFRI-ARESCI: Theory and Algorithms for Auton	47.041	428,531
EFRI-0735953	EFRI-ARESCI: Controlling the Autonomously Re	47.041	393,392

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
EFRI-0735956	EFRI-ARESCI: Foundations for Reconfigurable ;	47.041	358,291
EFRI-0735997	Child Asada - 6915994	47.041	158,780
EFRI-0735997	Child Lauffenburger - 6915994	47.041	72,142
EFRI-0735997	EFRI-CBE: A Multifaceted Approach to the Modi	47.041	122,245
EFRI-0835947	EFRI-COPN: Dynamics of Neural Networks on a	47.041	499,081
EFRI-0835947	Seung-EFRI	47.041	108,926
EFRI-0835947	Megretski-EFRI	47.041	18,474
EFRI-1023152	Layered Systems, Industries and Organizations	47.041	5,001
OCE-0752346	Dynamics of Eddies and Dipoles in the South Atl	47.041	121,312
Total for 47.041			9,545,369

Contract Number	Government Contract Title	CFDA#	FY Expenses
AGS-0952853	ARRA - The Millstone Geospace Science Center	47.082	43,925
AGS-0959280	ARRA - MRI-R2: Development and Deployment	47.082	418,403
AGS-0959280	ARRA - MRI-R2: Development and Deployment	47.082	68,934
AST-0905592	ARRA - Collaborative Research: An Ultrastable E	47.082	20,908
AST-0905592	ARRA - Fabricated Equipment - Astro - Comb	47.082	28,412
AST-0908848	ARRA - Collaborative Research: Probing dark m:	47.082	86,964
AST-0908848	ARRA - Combined Digitizer and Correlation - Fat	47.082	9,613
AST-0908848	ARRA - Fab Equip - Radio-Frequency (RF) Rece	47.082	23,756
AST-0908884	ARRA - Low-Frequency Radio Transient Science	47.082	122,898
ATM-0842751	ARRA - Merging of Observations and Models for	47.082	130,571
ATM-0844620	ARRA - Fab Eq - Reconnection Drive	47.082	4,196
ATM-0844620	ARRA - CAREER Three-Dimensional Onset and	47.082	181,534
ATM-0850639	ARRA - Collaborative Research Environmental c	47.082	95,152
ATM-0852384	ARRA - Transport in Baroclinic Flows	47.082	95,711
ATM-0856093	ARRA - Studies of Plasmasphere Boundary Laye	47.082	100,629
BCS-0844472	ARRA - Collaborative Research: Bayesian Cue li	47.082	109,486
CBET-0854026	ARRA - Science and Engineering of Ion Concen	47.082	38,145
CBET-0854230	ARRA - Propulsion Through Diffusion	47.082	-4,046
CBET-0941312	ARRA - CDI: Type I: Geometric Algorithms for St	47.082	259,560
CCF-0844626	ARRA - CAREER: Efficient Computation in the P	47.082	58,374
CMMI-0900255	ARRA - Linguistics-based preference informatio	47.082	144,976
CNS-0915164	ARRA - CSR:Small: CoreTime:Dynamic Comput	47.082	79,093
CNS-0915988	ARRA - NetS: Small Collaborative Research: E	47.082	7,114
DMR-0845296	ARRA - CAREER: Non-equilibrium Dynamics in i	47.082	126,339

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DMR-0855402	ARRA - Quantifying Material Microstructures with	47.082	135,125
DMR-0906931	ARRA - Collaborative Research: Development of	47.082	115,095
DMR-0908627	ARRA - Materials World Network: In-situ Investig	47.082	113,137
DMS-0844188	ARRA - CAREER: The Symplectic Category, Flc	47.082	148,955
DMS-0853488	ARRA - FRG: Collaborative Research: Mathema	47.082	101,803
DMS-0900233	ARRA - Heisenberg and Weil representations in	47.082	42,972
DMS-0900907	ARRA - W-algebras and Algebraic Group Action	47.082	35,126
DMS-0948071	ARRA - FRG: Collaborative Research: Mathema	47.082	228,165
EAR-0843358	ARRA - Microbial Structures in Neoproterozoic C	47.082	80,272
EAR-0910618	ARRA - Structure and Deformation of the Crust ε	47.082	127,571
EAR-0910644	ARRA - The Dynamics of Mantle-Melt Extraction:	47.082	202,969
EAR-0910721	ARRA - New Theory and Methods for Rainfall Ex	47.082	54,789
EAR-0931839	ARRA - Acquisition of a Thermal Ionization Mass	47.082	188,849
ECCS-0844994	ARRA - CAREER: Circuit and System Technique	47.082	33,051
ECCS-0846628	ARRA - CAREER: Terahertz Electronics based c	47.082	30,515
ECCS-0853470	ARRA - Fabricated Equipment - Micro-manipulat	47.082	4,870
ECCS-0853470	ARRA - High Temperature Terahertz Quantum C	47.082	53,777
ECCS-0900901	ARRA - Quantum Limits to Timing Jitter in Femic	47.082	151,826
ECCS-0901034	ARRA - Cooperative Tracking in Harsh Environir	47.082	17,160
ECCS-0901394	ARRA - Integrated Actuation, Alignment, and Lat	47.082	78,666
ECCS-0925147	ARRA - Collaborative Research: Stacked Contr	47.082	61,708
OCE-0926197	ARRA - Lead and Lead Isotopes Sample Collecti	47.082	132,261
OCE-0926372	ARRA - Collaborative Research: Were protists th	47.082	96,573
OCE-0940422	ARRA - Collaborative Research: Microfluidc Ass	47.082	12,242
OCI-0904338	ARRA - Petascale Artic, Atlantic and Antarctic Virt	47.082	159,090
OCI-0926191	ARRA - Cloud-computing infrastructure and tech	47.082	199,513
OCI-0943139	ARRA - VOSS: Empirical Analysis of Large-Scale	47.082	148,181
PHY-0847843	ARRA - Fabricated Equipment Micro Boone HV?	47.082	-1,323
PHY-0847843	ARRA - Fabricated Equipment - Wavelength Shif	47.082	4,271
PHY-0847843	ARRA - Fabricated Equipment Double Chooz De	47.082	9,228
PHY-0847843	ARRA - Fabricated Equipment - 2.5L DCTPC	47.082	14,753
PHY-0847843	ARRA - Neutrino Physics Off-Campus	47.082	330,829
PHY-0847843	ARRA - Neutrino Physics at MIT	47.082	110,810
PHY-0855052	ARRA - Fabricated Equipment - Atomic Clock Se	47.082	8,290
PHY-0855052	ARRA - Atomic Ensembles Entangled by Light fo	47.082	75,114
PHY-0959057	ARRA - MRI-R2: Laser Acquisition and Moderniz	47.082	1,916,102
Total for 47.082			7,472,982

Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2011 Expenditures

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DRL-0744213	CAREER: Curiosity, exploratory play, and the fo	47.076	107,137
DRL-0917442	Mass Extinction: A Curated Game	47.076	763,094
DRL-1019228	DRK12-BioGraph: Graphical Programming for C	47.076	315,676
DRL-1019396	ScratchEd: Working with Teachers to Develop C	47.076	445,034
DRL-1022684	Origins of numerical competence: Assessment o	47.076	20,459
DRL-1049718	Kreyol-Based and Technology-Enhanced Learnin	47.076	155,127
DUE-0618483	Exploiting Laboratory Experiments in the Teachir	47.076	4,578
DUE-1043632	Mathematics Communication Space: Resource fi	47.076	44,072
Total for 47.076			1,855,177

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
DBI-0644282	CAREER Compative Genomics and Biological S	47.074	207,129
DBI-0649879	IDBR: Microscale Continuous Culture Bioreactor	47.074	6,428
DBI-0754339	IDBR: Field-Based Tomographic Microscopy Inst	47.074	38,843
DBI-0754662	Collaborative Research: IDBR: VoxNet- A Deploy	47.074	75,764
DBI-0821391	MRI: Acquisition of Computing Equipment for Re	47.074	26,613
DBI-0852654	IDBR: Development of an Iso-dielectric Separatic	47.074	137,842
DEB-0918333	MSB: Genomics of Ecologically Defined Bacteria	47.074	251,776
DEB-0936234	Assembling the Tree of Life: Can Phylogenomics	47.074	184,408
IOS-0824373	Collaborative Research: The Hemo-Neural Hypo	47.074	90,203
MCB-0543833	Crystallographic Snapshots of Adenosyl Radical	47.074	85,695
MCB-0643745	Career: ClipXP Machinery Studies at the Single-I	47.074	8,064
MCB-0719120	Combinatorial Biosynthesis of New Alkaloids in Pε	47.074	42,997
MCB-0744483	Collaborative Research: Lathamide Binding Tags	47.074	237,937
MCB-0745638	CAREER: The Structure of Collagen and Collage	47.074	127,764
MCB-0844442	Career Dissecting the Molecular Determinants of	47.074	172,011
MCB-0950233	Coiled-coil modules for molecular engineering ar	47.074	191,835
MCB-0968682	CAREER: Artificial Pattern Formation with Synthi	47.074	8,907
Total for 47.074			1,894,216

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
OCI-0753324	CI-TEAM Implementation Project - Experimental	47.080	7,543
OCI-0753324	Fab Eq - Linear Motion System for Student Spec	47.080	10,638
OCI-0753324	CI-TEAM Implementation Project - The iLab Netw	47.080	238,267

**Appendix A-1 - Detail
Massachusetts Institute of Technology
Federal Research Support - On Campus
Fiscal 2011 Expenditures**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
OCI-1027848	CDI-Type II: Collaborative Research: Preparing t	47.080	243,446
OCI-1047955	S12-SSE: SciDB- A Scientific Data Management	47.080	62,792
	Total for 47.080		562,686
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
OISE-0710537	US-Egypt Cooperative Research: Size and Shap	47.079	20,520
OISE-1048974	Microbial Successions in the Aftermath of a Snow	47.079	9,316
	Total for 47.079		29,836
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
ANT-0739726	Collaborative Research: High Precision U-Pb Ge	47.078	58,846
ANT-0944519	Parameterization of Tracer Transport By Geostrc	47.078	90,910
ARC-0804150	Collaborative Proposal AOMIP Synthesis and Int	47.078	37,418
ARC-0806228	Collaborative Research: TransArctic Paleoclimat	47.078	151,676
ARC-0806229	Collaborative Research: The Role of Microbial Fc	47.078	78,455
ARC-0934404	CMG Collaborative Research: Enabling Ice Shee	47.078	137,729
ARC-1023499	Collaborative Research: An Eddy-permitting Arct	47.078	162,652
ARC-1118473	Collaborative Research: An Eddy-Permitting Arc	47.078	15,771
	Total for 47.078		733,457
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
IOS-1048133	Culturing the Uncultured: Custom Microfluidic Sy	47.047	49,336
	Total for 47.047		49,336
	Total for NSF		59,814,368
	Total for National Science Foundation		59,814,368
	Total On Campus Federal Research Support		373,163,091

Appendix A-2 Detail
Massachusetts Institute of Technology
Schedule of Federal Expenditures - Lincoln Laboratory
By Sponsor & Contract - FY 2011

<u>Sponsor</u>	<u>Program</u>	<u>Program Name</u>	<u>Total</u>
DIRECT AWARDS			
<u>DEPARTMENT OF DEFENSE</u>			
AIR FORCE			
FA8721-05-C-0002	Various		300,098,764
ARMY			
FA8721-05-C-0002	Various		47,686,115
MDA			
FA8721-05-C-0002	Various		65,392,812
DARPA			
FA8721-05-C-0002	Various		34,156,297
NAVY			
FA8721-05-C-0002	Various		34,256,502
NSA			
FA8721-05-C-0002	Various		8,698,101
OTHER DOD			
FA8721-05-C-0002	Various		146,417,939
CLASSIFIED			
FA8721-05-C-0002	Various		77,299,737
TOTAL DEPARTMENT OF DEFENSE			\$ 714,006,267
<u>NON-DEPARTMENT OF DEFENSE</u>			
FAA			
FA8721-05-C-0002	Various		40,282,185
NASA-Prime			
FA8721-05-C-0002	Various		20,395,526
NOAA			
FA8721-05-C-0002	Various		4,732,679
DOE			
FA8721-05-C-0002	Various		1,747,144
DHS			
FA8721-05-C-0002	Various		19,387,661
Other - Classified			
FA8721-05-C-0002			666,521
FA8721-05-C-0002			1,106,358
FA8721-05-C-0002			96,417
FA8721-05-C-0002			13,900
FA8721-05-C-0002			(1,325)
FA8721-05-C-0002			900,242
FA8721-05-C-0002			264,927
Total Other Classified			\$ 3,047,040
Total Direct Awards			\$ 803,598,502

Appendix A-2 Detail
Massachusetts Institute of Technology
Schedule of Federal Expenditures - Lincoln Laboratory
By Sponsor & Contract - FY 2011

Sponsor	Federal Contract Number	Program Name	Total
<u>PASSTHROUGH AWARDS</u>			
Research Corporation of the University of Hawaii	FA9451-06-2-0338	OTA Dev. & Device Processing	408,930
California Association for Research in Astronomy (CARA)	AST 0132798	Adv Adaptive Optics	66,695
University Corporation for Atmospheric Research (UCAR)	NN07CN14A	Oceanic Weather Diagnosis	5,859
Harvard University	3U54 AI057159-6S1	ARRA - PANACEA Antiviral Therapeutics	372,650
University Corp. for Atmospheric Research	ATM 0753581	University Corp. for Atmospheric Research	106,712
San Diego State University	N66001-08-2-0058	San Diego State University	491,669
Applied Radar	HQ0147-11-C-7699	Applied Radar	28,278
Superconductor Technologies	N00014-10-0329	Superconductors Technologies	19,736
Total Passthrough Awards			\$ 1,500,529
Total Federal Expenditures			\$ <u>805,099,031</u>

**Appendix A-3 - Detail
Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
Fiscal 2011 Expenditures**

Johns Hopkins University									
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>					
6919711	2000336980	Clinical And Translational Science Award	93.389	0					
6921948	2000336980	Clinical And Translational Science Award	93.389	111,062					
6924123	2000336980	Continuation Of 6921948	93.389	5,491					
		Total for 93.389		116,553					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>					
6920512	CONTRACT NO. 960101	Anti-Threat Control Systems (Atcs)	12.CCC	159,377					
		Total for 12.CCC		159,377					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>					
6899866	SUBAWARD AGMT. NO.2000011059	Muri- Mechanisms Of Fluid-Mud Interactio	12.300	52,901					
6914100	SUBAWARD AGMT. NO. 8607-62303	Child Account For Chiang C. Mei	12.300	44,073					
6919234	CONTRACT NO. 957722	Concealable Biometric Sensors For Covert	12.300	8,944					
		Total for 12.300		105,918					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>					
6893470	JHU PO 2000009816.	Development And Evaluation Of Biomarkers	93.113	-4,476					
6918308	SUB UNDER NIH PRIME 2-P01-ES006052	Molecular Biomarkers For Environmental T	93.113	273,149					
6918309	SUB UNDER NIH PRIME 2-P01-ES006052	Child - Wogan 6918308	93.113	178,652					
6921821	AGREEMENT DATED 5/4/10	Accelerator Mass Spectrometry Technology	93.113	-1					
		Total for 93.113		447,324					
		Total for Johns Hopkins University		829,172					
Aurora Flight Sciences Corporation									
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>					
6924074	AFS11-0343	Darpa System F6 Technical Area 4	12.CCC	5,020					
		Total for undefined		5,020					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>					
6918257	AFS08-1778	Low Design Impact Inspection Vehicle (Li	12.CCC	-6					
6918857	AFS09-0058	Ops-Users Phase II	12.CCC	46,770					
6921009	AFS09-1297	Spheres Fault Detection And Reconfigurat	12.CCC	-71					
6921664	AGRMT DATED 3/30/10	Micro-Sized Microwave Atmospheric Satel	12.CCC	1,577					

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

				48,270
Total for 12.CCC				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922331	AGMT DATED 8/4/10	Adaptive Turbine Engine Control For Stal	12.300	23,229
				23,229
Total for 12.300				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921662	AGREEMENT DATED 3/30/10	Spheres Most Rendezvous & Docking With O	43.CCC	2,495
6922047	AFS10-0234	Sbir: A Robust Flare Planning Logic For	43.CCC	49,189
6922882	AFS10-0736	Multi-Robot Planetary Exploration Archit	43.CCC	46,200
6923231	AFS10-0736	Multi-Robot Planetary Exploration Archit	43.CCC	22,466
				120,350
Total for 43.CCC				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919489	NX09CA65C	Synthetic Imaging Maneuver Optimization	43.000	60,514
				60,514
Total for 43.000				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922912	AGMT. DTD. 10/14/10	Cubesat Distributed Satellite Systems (C	12.910	14,426
				14,426
Total for 12.910				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922175	AFS10-0454	Afri Sbir Phase Ii Coordinated Sensor Fu	12.800	46,090
6922843	AFS10-0823	Afri Strr Phase Ii Development Of Multid	12.800	105,508
				151,598
Total for 12.800				
Total for Aurora Flight Sciences Corporation				
423,407				
Lincoln Laboratory				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898674	PO 3070557+7000049429	Npoess Program Science Team Support	12.CCC	88,903
6914807	PO 3114736	Carbon Nanotube Chemo-Resistive Sensors	12.CCC	-961
6917052	PO 7000025443	Microcombustor For Compact Thermoelctri	12.CCC	18,174
6917166	PO #7000027767	Ionospheric Variation Studies Using Sate	12.CCC	23,146
6917241	PO 7000029124	Enzyme Design And Synthesis	12.CCC	11,113
6917259	PO NO. 7000031361	Campus/Lincoln Photonics Initiative	12.CCC	42,707

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917336	PO 7000032361	Signal Processing Research	12.CCC	19,303
6917724	PO 7000038334	Agile Robotics For Logistics	12.CCC	362,539
6917756	PO 7000038334	Agile Robotics For Logistics	12.CCC	52,638
6917757	PO 7000038334	Agile Robotics For Logistics	12.CCC	58,541
6917758	PO 7000038334	Agile Robotics For Logistics	12.CCC	10,941
6917848	700039951	Decision Modeling Research Initiative	12.CCC	54,059
6917858	PO #7000035313	Ballistic Missile Defense Decision Suppo	12.CCC	46,645
6918159	PO 7000038334	Fabricated Equipment - Autonomous Forkli	12.CCC	1,064
6918240	PO 7000038334	Agile Robotics For Logistics (How)	12.CCC	20,889
6918382	PO 7000048838	Dynamically Composable Systems	12.CCC	-3,010
6918655	PO #7000049785	Engineering Support To The Lincoln Labor	12.CCC	0
6919075	PO NO. 7000058284	Network Coding - A Taxonomy Of Benefits	12.CCC	-1,315
6919347	PO #7000066344	Support Of The Radio Communication Link	12.CCC	322,029
6919398	PO 7000067500	Program 2209-9448: Magneto-Optical Mater	12.CCC	30
6919414	PO 7000062627	A Multi-Objective Algorithm For Embedded	12.CCC	81,681
6919415	PO 7000063327	Dynamically Composable Systems	12.CCC	80,523
6919498	7000067510	Ultrabroadband Em Field Generation From	12.CCC	111,104
6919573	7000071107	A New Power Amplifier Architecture For H	12.CCC	-10,370
6919602	PO 7000071111	Sparse Random Matrix Models Exploration	12.CCC	3,919
6919653	PO 7000074210	Joint Position-Amplitude Modeling For Co	12.CCC	86,337
6919729	PO#7000075443	Microcoil, A Mems-Based Chemical Oxygen	12.CCC	-6,038
6919750	PO 7000074667	Variability Compensation Techniques For	12.CCC	172,820
6919752	7000071112	Characterization Of Micromilling For Rap	12.CCC	343
6919781	PO 7000077806	Information Access For Multi-Sensor Deci	12.CCC	152,801
6919799	7000077786	Superconducting Nanowire Single-Photon D	12.CCC	-113
6919832	7000077762	Completion Of Radiometer System On Upgra	12.CCC	113,288
6919982	PO #7000079784	Optimization Of Airport Configurations	12.CCC	148,637
6920361	PO 7000082206	Demonstration Of Reduced Surface Emissio	12.CCC	195,312
6920444	PO # 7000084371	Airborne Sensing Platform For High Preci	12.CCC	67,579
6920456	700083323	Broadband Mid-Ir Frequency Combs	12.CCC	-11,162
6920775	7000087748	Architecture Study Of Defense Communicat	12.CCC	494,991
6920852	PO # 7000084371	Airborne Sensing Platform For High Preci	12.CCC	5,670
6920982	7000092117	Precision, Monolithic Flexure Mechanisms	12.CCC	4,504
6921158	7000093904	Task Planning For Sensor-Based, Multi-Ua	12.CCC	58,460
6921163	7000095032	SI-LI Biophotonics Collaboration	12.CCC	42,552
6921192	PO 7000095897	Program 2209-3066: Campus Collaboration:	12.CCC	70,485
6921235	PO #7000095663	Engineering Support To The Lincoln Labor	12.CCC	5
6921236	PO #7000095663	Husir Proj, Network, Admin Mgmt 1247-11	12.CCC	5,226
6921237	PO #7000095663	Ssa Admin Proj & Network 1800-12	12.CCC	30,357

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921239	PO #7000095663	Ssa Sys Eng Mhr 1800-213	12.CCC	153,777
6921240	PO #7000095663	Ssa Sys Eng Lrir 1800-214	12.CCC	47,299
6921241	PO #7000095663	Ssa Sys Eng Hax 1800-215	12.CCC	79,458
6921242	PO #7000095663	Ssa Mission Execution Analysis 1800-542	12.CCC	32,235
6921243	PO #7000095663	Debris Data Collection 10102-14	12.CCC	6,356
6921244	PO #7000095663	Firepond Optics 331-83032	12.CCC	9,162
6921246	PO #7000095663	Integration & Testing 1247-25	12.CCC	151,672
6921371	PO 7000099499	Social Behavior Prediction Study	12.CCC	50,340
6921481	PO 7000100066	Imaging Into Obscured Areas	12.CCC	49,998
6921484	PO 7000115498	Tcas Program	12.CCC	40,087
6921557	PO #7000100934	Managing Alternative Energy Projects: Te	12.CCC	6,345
6921635	PO #7000105486	Characterizing Coherence In Long-Lived S	12.CCC	268,132
6921652	PO #7000105211	Exploratory Development Of Gan Silicon P	12.CCC	128,695
6921674	PO 70000106869	Target Tracking With Constraints	12.CCC	44,284
6921685	P.O. 7000105224	Advanced Communication Techniques For Bi	12.CCC	160,994
6921720	PO #7000107287	Development Of Control Algorithm And Imp	12.CCC	63,733
6921897	7000077762	Fabrication - Radiometer Pointing System	12.CCC	3,453
6921970	7000114032	Bio-Inspired Cellular Systems	12.CCC	83,794
6922011	7000114035	Nanofluidic Dna Ruler	12.CCC	51,319
6922524	7000122737	Micromas Cubesat	12.CCC	50,328
6922560	7000128865	Studies Of Snsdp Jitter	12.CCC	45,409
6922621	PO NO. 7000031361	Campus/Lincoln Photonics Initiative - Ko	12.CCC	32,675
6922746	7000122737	Fabricated Equipment - Cubesat	12.CCC	71,880
6922828	7000126589	The Airtraffic Flow Management Problem I	12.CCC	166,220
6922829	7000126525	Small Deployable Jav Systems	12.CCC	100,338
6923001	PO #7000132120	Husir Proj, Network, Admin Mgmt 1247-112	12.CCC	8,824
6923002	PO #7000132120	Ssa Admin Proj & Network 1800-12	12.CCC	79,417
6923003	PO #7000132120	Ssa Sys Eng Common 1800-212	12.CCC	3,742
6923004	PO #7000132120	Ssa Sys Eng Mhr 1800-213	12.CCC	380,565
6923005	PO #7000132120	Ssa Sys Eng Lrir 1800-214	12.CCC	174,191
6923006	PO #7000132120	Ssa Sys Eng Hax 1800-215	12.CCC	174,025
6923007	PO #7000132120	Ssa Mission Execution Analysis 1800-542	12.CCC	158,187
6923008	PO #7000132120	Debris Data Collection 10102-14	12.CCC	10,618
6923009	PO #7000132120	Firepond Optics 331-83032	12.CCC	16,523
6923010	PO #7000132120	Husir Integration & Testing 1247-25	12.CCC	423,686
6923013	7000132466	Lincoln Laboratory-Mit Joint Research On	12.CCC	153,901
6923053	PO #7000066344	Support Of The Radio Communication Link	12.CCC	43,213
6923089	7000146526	Computational Sensing	12.CCC	4,758
6923198	7000130142	Polarization Entanglement Sources With Hi	12.CCC	58,875

**Appendix A-3 - Detail
Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
Fiscal 2011 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923230	7000136110	Exploratory Development Of Gan Silicon P	12.CCC	272,086
6923342	7000130142	Fab Equipment: Fiber Coupled 780-Nm Pump	12.CCC	2,159
6923360	7000130142	Fab Equipment: Telecom-Band Polarizatio	12.CCC	8,069
6923367	7000142874	Technical Support Of Dep Cell Sorting	12.CCC	60,926
6923385	7000139390	High Power-Per-Weight Organic Solar Cell	12.CCC	39,779
6923392	7000130142	Cavity Downconversion Source	12.CCC	4,686
6923394	7000139220	Autonomous Robot Control Via Autonomy Le	12.CCC	4,378
6923444	7000143598	Topological Insulation For Quantum Nanoe	12.CCC	90,712
6923505	PO 7000143501	4.155 Masters Of Architecture Studio - D	12.CCC	51,180
6923506	7000126525	Fabricated Equipment - Locusts Mirco-Uav	12.CCC	6,490
6923521	7000139180	Development Of The Micro-X Sounding Rock	12.CCC	59,188
6923523	7000130142	Fabricated Equipment: Two High Speed Ing	12.CCC	2,886
6923559	PO #7000132120	Mission Support 10087	12.CCC	1,147
6923583	PO 7000147668	Program 2209-3703: Robotic Arm And Envir	12.CCC	43,773
6923598	7000139380	Task Planning For Sensor-Based, Multi-Ua	12.CCC	19,327
6923642	7000147334	Compact Low-Power Ccd Electronics Packag	12.CCC	19,970
6923685	7000147776	A Knowledge Discovery Framework For Thre	12.CCC	4,053
6923693	PO 700014774	Development Of A Microfluidic Gene Assem	12.CCC	64,189
6923709	PO 7000147775	Collaborative Mapping And Point-Of-Inter	12.CCC	38,890
6923967	PO 7000147775	Fabricated Equipment - Wearable Mapping	12.CCC	4,082
6924009	PO NO. 7000031361	Campus/Lincoln Photonics Initiative - M.	12.CCC	6,735
		Total for 12.CCC		7,419,559

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921079	PO# 7000094649	Isr Deep Structure Translation (ldst)	12.910	127,621
		Total for 12.910		127,621

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923415	PO 7000144104	Modular Architecture For Remote Robotic	12.000	19,962
		Total for 12.000		19,962
		Total for Lincoln Laboratory		7,567,142

University of California

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897872	S0176938	Dawn: Dynamic Ad-Hoc Wireless Networking	12.431	1,331
6919767	KK9151-1	Icb Task 1 Manalis	12.431	365,811

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919782	KK9151-7	Icb Task 7 Administration	12.431	46,943
6919783	KK9151	Icb Task 3 Lauffenburger	12.431	269,763
6919784	KK9151	Icb Task 4.1: Spinning - Belcher	12.431	181,187
6919785	KK9151	Icb Task 4.2: Virus - Belcher	12.431	176,547
6920091	KK9151-13	Icb Task 13 Belcher	12.431	23,463
6923979	KK9151	Icb Task 3- Fraenkel	12.431	33,682
6923986	KK9151	Icb - Task 5 Prather- Year 3 Funds	12.431	9,825
6923987	KK9151	Icb - Task 5 Doyle- Year 3 Funds	12.431	33,879
		Total for 12.431		1,142,431

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915229	SUBAWARD NO. 1000 G HE149	Us Cms Operations At The Lhc	47.049	110
6915249	SUBAWARD NO. 1000 G HE149	Cms Tier - 2	47.049	386,294
6915250	SUBAWARD NO. 1000 G HE149	Cms M&O 07 Daq	47.049	245,999
6915251	SUBAWARD NO. 1000 G HE149	Cms M&O 07 Silicon Tracker	47.049	87,806
6916764	SUBAWARD NO. 1000 G HE149	Fabrication: Tier-2 Computing Facility	47.049	214,525
6920136	SUBAWARD NO. 1000 G HE149	Cms Tier - 2 - Off-Campus	47.049	93,812
		Total for 47.049		1,028,546

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923078	1015GNA126	Knowledge Representaion, Reasoning And L	12.300	46,672
6923297	1015GNA126	Knowledge Representaion, Reasoning And L	12.300	21,108
		Total for 12.300		67,780

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921587	SUBAWARD NO. 1000 G MC415	Request For Cmpd Closeout Funds	81.049	2,868
		Total for 81.049		2,868

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921633	SUBCONTRACT NO. 2090-S-MA838	Dawn A Journey To The Beginning Of Teh S	43.CCC	32,788
		Total for 43.CCC		32,788

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914696	1580 G HF563	Pathologic Protein Folding And Human Dis	93.866	152,635
		Total for 93.866		152,635

**Appendix A-3 - Detail
 Massachusetts Institute of Technology
 Federal Research Support - Passthrough - On Campus
 Fiscal 2011 Expenditures**

Total for University of California **2,427,048**

Florida Power and Light Company

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923906	LETTER DTD 5/16/11	ARRA - Smart Energy Grid Associates Partnership	81.122	53,708
		Total for 81.122		53,708
		Total for Florida Power and Light Company		53,708

Los Alamos National Security, L.L.C.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918244	SUBCONTRACT: 67870-001-08	Lanl/Mit Science Algorithms And Methods	81.CCC	176,445
6919303	SUBCONTRACT: 72297-001-09: TASK 1	Task 1: Lanl Ldrd+Dr Project Enhanced Ra	81.CCC	85,393
6920237	68238-001-09	Implosion Dynamics And Symmetry From Pro	81.CCC	13,227
6920437	SUBCONTRACT: 78966-001-09	MiniBoone Neutrino Experiment	81.CCC	94,269
6920708	SUBCONTRACT: 72297-001-09: TASK 2	Task 2: Extreme Environment-Tolerant Mat	81.CCC	238,852
6921805	82758-001-10	Evaluating The Feasibility Of A Time-Res	81.CCC	34,986
6921950	85554-001-10	Conceptual Design For The Construction O	81.CCC	503,426
6923901	SUBCONTRACT 139843-1	Framework And Models For Ice Sheet Dynam	81.CCC	6,865
		Total for 81.CCC		1,153,463
		Total for Los Alamos National Security, L.L.C.		1,153,463

Busek Company, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920225	FA9550-09-C-0179	Fabrication Of High Density Electropray	12.CCC	-53
6922435	AGMT DATED 6-28-10	Sstr - Photo Triggered Carbon Nanotube	12.CCC	34,993
6923199	AGMT. DTD. 12/14/10	Variable Thrust/Specific Impulse Electro	12.CCC	39,918
6923900	N00014-11-M-0193	Sstr - Massive Arrays Of Monodisperse Na	12.CCC	4,112
		Total for 12.CCC		78,970
		Total for Busek Company, Incorporated		78,970

APIC Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921852	AGMT DATED 5-1-10	Flip Program Task E Ge Laser	12.CCC	730,205
6922318	AGMT DATED 5-1-10	Tasks For Flip - Stojanovic	12.CCC	193,235
6922319	AGMT DATED 5-1-10	Tasks For Flip (Peh)	12.CCC	154,069

**Appendix A-3 - Detail
Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
Fiscal 2011 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923116	AGMT DATED 5-1-10	Tasks For Flip (Lezama)	12.CCC	65,199
6923401	AGMT DATED 5-1-10	Task A Year 1 Of Flip Program (Kimerling)	12.CCC	74,546
6923468	AGMT DATED 5-1-10	Task A Year 1 Of Flip Program (Watts)	12.CCC	21,993
6923897	SUBCONTRACT/PO 27287	Low Power, Wide-Band, Wdm Microphotonic	12.CCC	97,357
		Total for 12.CCC		1,336,604
		Total for APIC Corporation		1,336,604

Georgia Institute of Technology

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918210	D5802-G2	Integrated Optics Technology For Ion Tra	12.431	-4,025
6923504	RB492-G1	Neuro-Inspired Adaptive Perception And C	12.431	41,743
6923520	RB492-G1	Neuro-Inspired Event-Driven Preception A	12.431	148,965
		Total for 12.431		186,683

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920707	R7747-G8 YEAR 4	Nanomedicine Center For Nucleoprotein Ma	93.867	7,869
6923894	R7747-G8 YEAR 6	Nanomedicine Center For Nucleoprotein Ma	93.867	6,147
		Total for 93.867		14,016

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918937	R0897-G15	Game Theoretic Learning For Distributed	12.300	151,654
6920742	R0897-G15	Game Theoretic Learning For Distributed	12.300	85,912
		Total for 12.300		237,566

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916828	R8771-G1	Surface Traffic Optimization In The Pres	43.CCC	104,362
		Total for 43.CCC		104,362

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899572	SUBAWARD NO. E-20-L05-G6	Neesr-Grand Challenge: Seismic Risk Miti	47.041	15,512
		Total for 47.041		15,512

**Appendix A-3 - Detail
Massachusetts Institute of Technology
Federal Research Support - Passthrough - On Campus
Fiscal 2011 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918603	R9710-G1	Impact Of Degraded Environment On Airspa	43.000	106,481
		Total for 43.000		106,481
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923405	RB220-G3	Multimodal Multiplexed Integrated Photon	12.910	95,622
6923562	RB220-G3	Prof. Johnnyoon Han, Rle	12.910	13,232
		Total for 12.910		108,854
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920198	R6756-G2	Muri-09: Distributed Learning And Inform	12.800	185,336
6920503	R6756-G2	Muri-09: Distributed Learning And Inform	12.800	215,902
6920755	R6756-G2	Muri-09: Distributed Learning And Inform	12.800	86,914
		Total for 12.800		488,152
		Total for Georgia Institute of Technology		1,261,626

Carnegie-Mellon University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923891	1130128-258552	Omnitrans: An Omnivorous Framework For T	12.431	3,650
		Total for 12.431		3,650
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921196	1141207-236214	Decentralized Reasoning In Reduced Infor	12.300	149,744
		Total for 12.300		149,744
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918868	1150069-218432	Human Automated Planner Interaction For	12.800	106,796
6918905	1150069-218432	Human Automated Planner Interaction For	12.800	97,428
		Total for 12.800		204,224
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921370	1121137-238174	The Two Wonders Of Working Together: How	47.075	83,326
		Total for 47.075		83,326
		Total for Carnegie-Mellon University		440,944

**Appendix A-3 - Detail
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Florida Fish and Wildlife Conservation Commission

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923885	AGREEMENT NO. 10321	Considering Climate Change In State Wild	15.634	66,589
		Total for 15.634		66,589

Total for Florida Fish and Wildlife Conservation Commission

Boston University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922936	GC208258NGA	Cognitive Rhythms Collaborative: A Disc	47.049	89,382
6923882	GC208258NGA	Fab Equipment: Wired 1000Channel System	47.049	29,955
		Total for 47.049		119,337

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922340	GC208299NGE	Muri: Topic #2 Adaptive Cognitive Maps F	12.300	156,063
6923074	GC208299NGE	Muri: Topic #2 Adaptive Cognitive Maps F	12.300	0
6923207	GC208299NGE	Muri: Topic #2 Adaptive Cognitive Maps F	12.300	72,654
6923208	GC208299NGE	Muri: Topic #2 Adaptive Cognitive Maps F	12.300	29,992
		Total for 12.300		258,709

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917890	PO NO. GC202749NGA	A Sounding Rocker Measurement Of D/H Rat	43.CCC	98,504
6918980	SUBCONTRACT NO. GC204036 NGA	Phase B: Radiation Belt Storm Probes - E	43.CCC	-4
		Total for 43.CCC		98,500

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920835	GC207223NGC	Complex Chemotypes: Discovery, Methodolo	93.859	6,830
6920891	GC207223NGC	Fab Eq - Photochemical Microreactor	93.859	7,081
6922626	GC208173NGC	Complex Chemotypes: Discovery, Methodolo	93.859	130,297
		Total for 93.859		144,208

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920709	SUBAWARD NO. GC2066679NGC	Crcns: Gamma Rhythms And Cell Assemblies	93.853	197,660
		Total for 93.853		197,660

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915087	SUBCONTRACT NO. GC 198598 NGA	Interstellar Boundary Explorer (Ibex) Sc	43.000	96,891
		Total for 43.000		96,891
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919757	GC 206006NGD	Investigation Of Ionospheric Turbulence &	12.800	141,610
		Total for 12.800		141,610
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920514	SUBAWARD NO. GC207107NGC	Neural Modeling And Imaging Of Speech	93.173	5,106
		Total for 93.173		5,106
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921761	LTR. AWARD GC-208001NGA	Slc Center: Celest: A Center For Learnin	47.075	157,139
		Total for 47.075		157,139
		Total for Boston University		1,219,160

Stanford University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899909	SUBAWARD NO. 18332380-35520-A	Muri- Physics-Based Multidisciplinary Fa	12.431	92,748
		Total for 12.431		92,748
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923875	27513450-50355-A	High-Fidelity Simulation And Modeling Of	12.300	40,868
		Total for 12.300		40,868
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916694	19390650-37434-A	Multifidelity Analysis And Design Method	43.CCC	-6,346
		Total for 43.CCC		-6,346
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918770	SUBAWARD 22244450-42533-C	Efri-Copn: Deep Learning In The Mammalia	47.041	197,810
		Total for 47.041		197,810

**Appendix A-3 - Detail
 Massachusetts Institute of Technology
 Federal Research Support - Passthrough - On Campus
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923180	26699040-47281-C	Center For Cancer Nanotechnology Excellence	93.397	100,127
		Total for 93.397		100,127
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922501	25081590-44868-B	Muri: Robust And Complex On-Chip Nanopho	12.800	126,698
		Total for 12.800		126,698
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922504	25433430-40367-C	Quantification Of Epistemic Uncertainti	81.124	63,758
		Total for 81.124		63,758
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915101	18870740-37362-C	Capacity, Cooperation, And Optimization	12.630	12,182
6920898	18870740-37362-C	Medard - Capacity, Cooperation, & Optimi	12.630	178,718
6920899	18870740-37362-C	Ozdoglar - Capacity, Cooperation, & Opti	12.630	34,804
6920900	18870740-37362-C	Shah - Capacity, Cooperation, & Optimiza	12.630	137,965
6920901	18870740-37362-C	Zheng - Capacity, Cooperation, & Optimiz	12.630	88,658
		Total for 12.630		452,327
		Total for Stanford University		1,067,990
Jefferson Science Associates, LLC				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923874	JSA-11-C1871	Conceptual Design Of The Hall D Solenoid	81.049	84,957
		Total for 81.049		84,957
		Total for Jefferson Science Associates, LLC		84,957
Harvard Medical School				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919606	149734.386545.0223	Clinical Translational Science Award (Ct	93.389	-23
6921232	027343-386541.02120	Xouttb-A Low-Cost, Incentive-Abased, The	93.389	16,258
6921904	149734.386545.0323	Clinical Translational Science Award (Ct	93.389	435,738
6923713	027343.386541.04214	Harvard Clinical And Translational Scien	93.389	1,731
6923869	TBD	Clinical Translational Science Award (Ct	93.389	74,977

**Appendix A-3 - Detail
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Total for 93.389 **528,681**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922963	150754.0002	ARRA - Preventing The Incidentalome	93.701	130,731
		Total for 93.701		130,731

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923188	HMS FUND # 151844	Year 19 Birt T15 Training Grant - Robert	93.879	33,715
6923189	HMS FUND # 151844	Year 19 Birt T15 Training Grant - Ying Z	93.879	46,884
		Total for 93.879		80,599

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920218	149581-0402	The Role Of Cdk5 In The Dna Damage Respo	93.866	139,492
6922704	149581-0502	The Role Of Cdk5 In The Dna Damage Respo	93.866	259,564
		Total for 93.866		399,056
		Total for Harvard Medical School		1,139,067

Princeton Plasma Physics Laboratory

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920926	SUBCONTRACT NO. S009248-F	Pertaining To Fatigue And Fracture Analy	81.CCC	-105
6921056	SUBCONTRACT NO. S009403-F	Feasibility Study For Employing High Tem	81.CCC	48,685
6922519	SUBCONTRACT NO. S010117-F	Research Pertaining To Fatigue & Fractur	81.CCC	29,923
6923499	SUBCONTRACT NO. S010550-G	Services Of Martin Greenwald As Esp Depu	81.CCC	56,480
6923860	SUBCONTRACT NO. S010826-G	Research Pertaining To Fatigue And Fract	81.CCC	14,317
		Total for 81.CCC		149,300
		Total for Princeton Plasma Physics Laboratory		149,300

Science Applications International Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898830	SUB #4400121046	Computational Approach And Hydrodynamics	12.CCC	-5,201
6921716	P010040434	Identifying Individual Susceptibility To	12.CCC	180,147
6922563	P010053329	Lanthanide Based Quantum Dots For Optica	12.CCC	114,354
6923858	P010069889	Identifying Individual Susceptibility To	12.CCC	32
		Total for 12.CCC		289,332
		Total for Science Applications International Corporation		289,332

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Cooperation

Smithsonian Inst. - Astrophysical Observatory

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CEDA #</u>	<u>FY Expenses</u>
6895251	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	139,065
6895252	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	1,309,093
6895253	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	104,560
6895254	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	1,184,426
6895255	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	643,785
6919170	SV9-79008	Professional Services Related To The Tra	43.CCC	75,439
6923825	GO1-12053X	Precise Localization Of Transient Low-Ma	43.CCC	11,246
Total for 43.CCC				3,467,614

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CEDA #</u>	<u>FY Expenses</u>
6915904	G07-8047B	X-Raying The Faintest Black Hole Binarie	43.000	1,729
6916867	G07-8117A	The Definitive Chandra Observations Of N	43.000	4,114
6917212	TM8-9002X	Learning How Globular Cluster Lmxb's And	43.000	1,199
6917332	G08-9051X	Precise Localization Of Neutron Star Sof	43.000	2,066
6917333	G07-8098B	Microensing Of The Quadruply Lensed Qua	43.000	1,247
6917390	G08-9042B	Following A Blackhole Candidate X-Ray Tr	43.000	19,454
6917773	G08-9047B	Monitoring Observations Of The Galacti	43.000	21
6918123	G08-9044X	Photoionization In The Microquasar Circi	43.000	393
6918653	G09-0119X	The Nature Of Active Nuclei In Radio Gal	43.000	3,929
6918731	G08-9071X	Measuring The Expansion Rate Of G266.2-1	43.000	14,108
6918837	G08-9045X	Quasi-Persistent Neutron-Star X-Ray Bina	43.000	1,958
6918902	G08-9084A	X-Ray Localization Of The Globular Clust	43.000	534
6919114	G09-0121A	Completing A Flux-Limited Survey For X-R	43.000	106
6919115	G09-0012X	Anomalous Adara: The Spatial And Spectra	43.000	3,223
6919171	AR9-0019X	Galaxy Cluster Scaling Relation Evolutio	43.000	25,254
6919258	G09-0069A	The Spin And Magnetic Moment Of The Neut	43.000	27,704
6919279	G09-0057X	The Cooling Neutron Star In Super-Edding	43.000	72,868
6919581	G09-0025B	Chandra Observation Of A New Galactic Gl	43.000	841
6919772	G09-0101X	Multiwavelength Monitoring Of The Spectr	43.000	37,552
6920558	G09-0040X	Precise Localization Of Neutron Star Sof	43.000	16,937
6920568	G09-0054X	Validating Neutron Star Radius Measureme	43.000	668
6920772	G09-0153X	Understanding Group Evolution With Chand	43.000	33,588
6920773	G09-0035X	Investigating New Integral Sources With	43.000	71
6920972	G00-11001X	The Mechanism Of Jet Formation In Cyg X-	43.000	12,845
6921249	G09-0018X	The True Nature Of Hd 110432: The Most E	43.000	22,005
6921294	G00-11107X	Search For The Most Luminous Ujxs In Col	43.000	9,548
6921295	G00-11143C	Chandra Observations Of A Complete Sampl	43.000	21,179

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921319	AR0-11005X	The Physical Properties Of Accretion Disks	43.000	1,727
6921364	G00-11013X	Precise Positions Of Historically Bright	43.000	25,695
6921402	G00-11047X	Primordial Formation Of Close Binaries I	43.000	13,739
6921403	G00-11126X	Variability And Particle Acceleration In	43.000	12,579
6921424	G00-11060X	Spectroscopy Of The Resurgent Ultracompa	43.000	31,260
6921432	G00-11054X	Cygnus X-1 Viewed Outside Of Its Seconda	43.000	17,064
6921818	G00-11066X	Precise Localization Of Transient Low-Ma	43.000	18,044
6922325	G00-11058B	Following A Black Hole Candidate X-Ray T	43.000	7,319
6922844	G00-11068X	The Cooling Neutron Star In The Super-Ed	43.000	6,792
6923117	G00-11057B	Transient Lmxbs In Globular Clusters: Mo	43.000	2,018
6923118	G00-12063X	Validating Neutron Star Radius Measureme	43.000	1,118
6923396	GO1-12065X	Filling The Gap In Understanding The Win	43.000	5,592
		Total for 43.000		478,088

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922782	083110 - SAFAVI - NAINI	A. Safavi - Naini	47.046	29,168
		Total for 47.046		29,168

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921684	SK0-10004	Murchison Widefield Array (Mwa) Developm	85.CCC	249,832
		Total for 85.CCC		249,832
		Total for Smithsonian Inst. - Astrophysical Observatory		4,224,702

Oak Ridge Associated Universities

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922200	4000102892	Consortium For Advanced Simulation Of Lw	81.CCC	1,374
6923805	4000102892	Pre-Awd Kazimi Mpo Task 1	81.CCC	148,094
6923806	4000102892	Pre-Awd Demkowicz Mpo Task 2	81.CCC	36,251
6923807	4000102892	Pre-Awd Yildiz Mpo Task 3	81.CCC	74,970
6923808	4000102892	Pre-Awd Yip Mpo Task 4	81.CCC	169,042
6923810	4000102892	Pre-Awd Buongiorno Mnm Task 1	81.CCC	82,644
6923811	4000102892	Pre-Awd Forget Mnm Task 2	81.CCC	85,552
6923812	4000102892	Pre-Award Equipment Summary	81.CCC	751
6923815	4000102892	Post-Awd Kazimi Mpo Task 1	81.CCC	115,698
6923816	4000102892	Post-Awd Demkowicz Mpo Task 2	81.CCC	21,357
6923817	4000102892	Post -Awd Yildiz Mpo Task 3	81.CCC	50,429

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923818	4000102892	Post -Awd Yip Mpo Task 4	81.CCC	58,964
6923820	4000102892	Post-Awd Buongiorno Mnm Task 1	81.CCC	49,567
6923821	4000102892	Post-Awd Forget Mnm Task 2	81.CCC	40,170
6923822	4000102892	Post-Award Dir's Task Summary	81.CCC	14,290
6923823	4000102892	Post-Award Equipment Summary	81.CCC	2,439
6923824	4000102892	Post-Award Education Summary	81.CCC	10,467
		Total for 81.CCC		962,059
		Total for Oak Ridge Associated Universities		962,059

Dana Farber Cancer Institute

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921216	5-P01-CA117969-05	Project 4: Pancreatic Adenocarcinoma Ce	93.396	136,032
6923800	P #1120206	Genetics And Biology Of Pancreatic Ducta	93.396	45,817
		Total for 93.396		181,849

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920833	1006711	Antigen Presentation In Human Autoimmune	93.855	10,847
6922748	1006712	Antigen Presentation In Human Autoimmune	93.855	49,771
6923095	1188501	Eliciting B Cells To Produce Anti-Hiv Gp	93.855	247,393
		Total for 93.855		308,011

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923374	5-P50-CA090381-09	Project 1: Biguanides For The Treatment	93.397	10,442
		Total for 93.397		10,442
		Total for Dana Farber Cancer Institute		500,302

The Joint Institute for Strategic Energy Analysis

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923255	UGA-0-41029-01 TASK NO. 6A502011	Impact Of Alkalinity Sources On The Life	81.CCC	12,187
		Total for 81.CCC		12,187
6923788	UGA-0-41029-03 TASK NO. 6A502023	Power System Balancing With High Renewab	43.CCC	2,906

**Appendix A-3 - Detail
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Total for 43.CCC **2,906**
 Total for The Joint Institute for Strategic Energy
 Analysis **15,093**

Mayo Clinic Rochester

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923076	90TR0002/01	ARRA - Arra Child - Sharp Area 4: Secondary Use	93.728	69,139
6923787	90TR0002/01	ARRA - Sharp Area 4: Secondary Use Of Ehr Data	93.728	35,612
		Total for 93.728		104,751

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920851	2 R01EB002640-11A1	Arterial Properties From Stimulated Acou	93.286	250
		Total for 93.286		250
		Total for Mayo Clinic Rochester		105,001

University of Tennessee at Chattanooga

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923775	AGRMT DATED 4/12/11	Geometry Handling Beyond Grid Generation	12.CCC	17,650
		Total for 12.CCC		17,650
		Total for University of Tennessee at Chattanooga		17,650

General Motors Company

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923761	GVS01289	Research, Development, And Demonstration	81.087	104,247
		Total for 81.087		104,247
		Total for General Motors Company		104,247

The Scripps Research Institute

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920767	PO #5-21189	Bioinformatics Core	93.859	225,051
6922884	PO #5-23542	Bioinformatics Core - Core B	93.859	799,198
6923715	PO #5-23586	Advanced Development Of Aza-Beta-Lactam	93.859	57,040
		Total for 93.859		1,081,289
		Total for The Scripps Research Institute		1,081,289

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Harvard University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920145	027343.386541.0114	Harvard Clinical And Translational Scien	93.389	8,744
6922264	027343.386541.0114	Fabricated Equipment - Nerve Imaging And	93.389	7,877
		Total for 93.389		16,621
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914400	#123365	Science Of Nanoscale Systems And Their D	47.049	38,183
6914401	#123365	Science Of Nanoscale Systems And Their D	47.049	35,982
6914402	#123365	Science Of Nanoscale Systems And Their D	47.049	95,879
		Total for 47.049		170,044
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920743	133512-02	Transport And Imaging Of Mesoscopic Phen	81.049	333,840
		Total for 81.049		333,840
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921775	23515.112096	Superfund Basic Research And Training Pr	93.143	194,010
6923714	23515.112096	Superfund Basic Research And Training Pr	93.143	44,327
		Total for 93.143		238,337
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923372	P.O. 11-S_TO-400-0000218924	R.A. Support For Katherine Deck	43.000	21,395
		Total for 43.000		21,395
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921619	SUB # 149047.0746	New England Regional Center Of Excellenc	93.855	192,386
6923509	SUB # 149047.0846	New England Regional Center Of Excellenc	93.855	83,462
		Total for 93.855		275,848
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922538	123446-5039289	Sticking And Jamming: Adhesion Of Cells	93.837	14,442
		Total for 93.837		14,442

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920140	AGREEMENT NO. 123546	Control And Manipulation Of Casimir Forc	12.910	79,913
		Total for 12.910		79,913
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914498	SUBAWARD NO. 133473-01	Slow Light: Novel Techniques For Optical	12.800	63,626
6915782	SUBAWARD NO. 133486-09	Muri - Fy07 Quantum Simulations Of Conde	12.800	325,515
6915914	SUBAWARD NO. 133486-09	Child - M. Zwiernlein	12.800	42,853
6916411	SUBAWARD NO. 133486-08	Fabrication: Cold Atom Machine	12.800	31,340
6917810	SUBAWARD NO. 133486-08	Fabrication: Cold Atom Quantum Simulator	12.800	2,527
6919366	SUBAWARD NO. 133473-01	Fabricated Equipment - Optical Fiber-Bas	12.800	13,066
		Total for 12.800		478,927
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916842	5013444-00-132502	Pancreatic Islet Design And Engineering	93.310	142,052
		Total for 93.310		142,052
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922033	033110 - CHU	R. A. Support For Chester Chu	47.046	26,626
		Total for 47.046		26,626
		Total for Harvard University		1,798,045
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898545	SUBAGREEMENT KK5157	Teg And Element Efficiency Measurements	12.300	20,605
6915363	KK7108	Mine Muri Add On : New Technologies For	12.300	20,319
6917883	KK8152	Muri - Jesus Del Alamo	12.300	101,673
6917884	KK8152	Drift Muri - Tomas Palacios	12.300	140,728
6917885	KK8152	Muri - Carl Thompson	12.300	94,108
6922506	KK1104	Mine Muri Add On : New Technologies For	12.300	64,195
6923035	KK 1131	Define Dielectric Enhancements For Innov	12.300	58,976
		Total for 12.300		500,604
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921655	KK6142-04	Development Of Cdkd5 Inhibitors	93.853	240,259

University of California-Santa Barbara

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923710	KK6142-06	Development Of Cdkd5 Inhibitors	93.853	67,882
		Total for 93.853		308,141
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919502	SUBAGREEMENT KK9134	Quantum Information Processing With Spin	12.910	7,249
6923170	SUBAGREEMENT KK1124	Photonic Integration For Coherent Optics	12.910	34,686
		Total for 12.910		41,935
		Total for University of California-Santa Barbara		850,680

Advanced Cooling Technologies, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923708	AGREEMENT DTD 5/10/11	Advanced Cooling Technologies Through Ph	47.041	1,911
		Total for 47.041		1,911
		Total for Advanced Cooling Technologies, Inc.		1,911

Massachusetts General Hospital

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919612	SUB UNDER DAMD17-02-2-0006-FUND 213621	Mit-Cimit-A Label-Free Viral Detection M	12.CCC	19,067
6919876	SUB UNDER W81XWH-07-2-0011	Mit-Cimit Operating On The Heart From Wi	12.CCC	50,944
6921498	FUND 215442	Cimit Neurotechnology Program Leadershi	12.CCC	24,900
6923363	SUB UNDER W81XWH-09-2-0001	Elliott Greenblatt Off- Campus Ra Cimit	12.CCC	42,230
		Total for 12.CCC		137,141
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920550	214763	In Vivo Systems Biology Of Inflammatory	93.859	59,006
		Total for 93.859		59,006
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917295	SUBAWARD 205852	Multiscale Dynamic Measurements And Mode	93.853	43,074
		Total for 93.853		43,074

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Massachusetts Institute of Technology
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922720	MGH#215186	Letter Agreement: Juwell Wu	93.000	22,411
6923064	LETTER AGREEMENT 11/9/10	Letter Agreement: Pavitra Krishnaswamy	93.000	17,718
6923093	213287.213302	Dependability For Proton Therapy Softwar	93.000	78,305
6923329	LETTER AGREEMENT 1/18/2011	Letter Agreement: Akash Chandawakar	93.000	4,677
6923707	MGH ACCT PS. NO 217736	Training Future Proton Scientists	93.000	34,213
		Total for 93.000		157,324
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922960	217129	A Microengraving Technology For The Stud	93.855	33,691
		Total for 93.855		33,691
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921228	R01 HL096576-02	Cluster-Imaging Of Emerging Biomarker Ne	93.837	8,808
		Total for 93.837		8,808
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923358	MGH ACCOUNT 205752	Chanikarn Wongviriyawong Off-Campus Ra	93.838	21,115
6923474	5-R01-HL068011-08	Chanikarn Wongviriyawong Off Campus Ra S	93.838	21,115
		Total for 93.838		42,230
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917106	SUBAWARD 206392	Parallel Excitation Methods For High Fie	93.286	131,591
		Total for 93.286		131,591
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919916	SUBAWARD NO. 206505	A System Neuroscience Approach For The S	93.310	87,920
		Total for 93.310		87,920
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922274	5-R01-AG026240-05	Non-Invasive Optical Imaging Of Neuropat	93.866	106,806
		Total for 93.866		106,806

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920923	SUBAWARD 215009	Small-Molecule Probes And Methods For Mo	93.279	133,158
		Total for 93.279		133,158
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918124	207607	Probing The Tumor Microenvironment Using	93.395	336,072
6918459	207607	Probing The Tumor Microenvironment Using	93.395	303,823
		Total for 93.395		639,895
		Total for Massachusetts General Hospital		1,580,644

Space Telescope Science Institute

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899477	HST-GO-10518.01-A	Dark Matter And The Missing Imaging Of	43.000	-42
6915974	HST-GO-11201.06-A	Systematic And Internal Motions Of The M	43.000	-187
6920970	HST-AR-11252.04-A	Ultraluminous X-Ray Sources In Elliptica	43.000	-2
6920971	HST-GO-111838.01-A	Completing A Flux-Limited Survey For X-R	43.000	5,808
6921065	HST-GO-11730.01	Continued Proper Motions Of The Magellan	43.000	6,428
6922949	HST-GO-12008.03-A	Primordial Formation Of Close Binaries I	43.000	703
6923081	HST-GO-12181.08-A	The Atmospheric Structure Of Giant Hot E	43.000	18,287
6923688	HST-GO-12261-01-A	Resolving The Pictor A Jet	43.000	1,010
		Total for 43.000		32,005
		Total for Space Telescope Science Institute		32,005

CalTech - Jet Propulsion Lab

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915824	RSA NO. 1309053	Intense Photometry Of The Exotic Exoplan	43.CCC	637
6916689	RSA NO. 1315544	Target Of Opportunity: New Transitioning	43.CCC	-426
6917338	SUBCONTRACT NO. 1332802	Lunar Surface Robotic Exploration	43.CCC	-40
6917472	SUBCONTRACT NO. 1335484	Soil Moisture Mission Science And Produc	43.CCC	54,150
6917943	RSA NO. 1343207	Spitzer Low-Mass X-Ray Binary Archive	43.CCC	8,822
6918043	RSA NO. 1343195	Science Proposal: A Search For Water On	43.CCC	-1,707
6918872	RSA NO. 1360267	New Transiting Exoplanets: Targets Of O	43.CCC	562
6919109	RSA NO. 1365748	Spitzer Ddt Proposal 495: Confirming The	43.CCC	934
6919270	RSA NO. 1367398	Detecting The Transits Of Nearby Super-E	43.CCC	43,222
6919652	RSA NO. 1376303	Exoplanet Hht-P.11B Secondary Transit Ob	43.CCC	-4,632
6919934	RSA NO. 1379869	Confirmation And Characterization Of Kep	43.CCC	-8,163

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920079	SUBCONTRACT 1379501	Operator Interface And Control Software	43.CCC	7,460
6920968	RSA NO. 1388735	The Spin-Orbit Angles In Four Exoplaneta	43.CCC	9,874
6921423	RSA NO. 1397154	A Survey Of Exoplanetary Spin-Orbit Angl	43.CCC	9,499
6921595	RSA NO. 1399497	Improving The Modeling Of Arctic Sea-Ice	43.CCC	44,981
6921663	RSA NO. 1399494	An Ultra-Low-Power Digital Correlator Fo	43.CCC	8,244
6922367	RSA NO. 1421387	A Survey Of Exoplanetary Spin-Orbit Angl	43.CCC	1,149
6922750	RSA NO. 1417386	Towards Earth And Beyond: The Gji214 Opp	43.CCC	16,512
6922866	SUBCONTRACT 1418850	Nasa Cms 2010, Pilot Study: Surface Carb	43.CCC	40,072
6923183	SUBCONTRACT 1422439	A Global Ocean And Sea Ice Reanalysis Fo	43.CCC	14,165
6923676	SUBCONTRACT 1428190	Estimating The Circulation And Climate O	43.CCC	82,954
		Total for 43.CCC		328,269

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899758	1283622	Voyager Interstellar Mission (Vim) Plasm	43.000	268,347
		Total for 43.000		268,347
		Total for CalTech - Jet Propulsion Lab		596,616

Alion

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923672	PO #PUR1214265	Agile Robotics Technology Transfer Activ	12.CCC	57,660
		Total for 12.CCC		57,660
		Total for Alion		57,660

Aerodyne Research Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918737	ARI SUBCONTRACT 10546-3	Quantifying Sulfate, Organics, And Lubri	12.CCC	81,497
6918755	STTR AGMT. DTD 10/16/08	Ultrasound Degulfunization Of Jet Fuel	12.CCC	35,966
6920131	STTR AGMT. DTD 8/7/09	Str: Characterizing Jp-10 High Temperat	12.CCC	-5,386
6922930	STTR AGMT. DTD 9/24/10	Characterizing Jp-10 High Temperature De	12.CCC	57,635
		Total for 12.CCC		169,712

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920580	ARI10609-1	Sbir: Volatility-Resolved Measurements	81.049	-455
6921620	ARI10609-1	Fab Equip: Total Gas-Phase Organics Inst	81.049	-301

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922883	ARI-10609-03	Stir Phase II: Volatility-Resolved Meas	81.049	80,208
		Total for 81.049		79,452
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921427	AGREEMENT DATED 12/3/2009	ARRA - Sbir: An Adaptive Chemistry Approach To	43.CCC	214,641
6923645	SUBCONTRACT NO. ARI10715-1	New Combustion Cfd Algorithms Designed Fo	43.CCC	6,882
		Total for 43.CCC		221,523
		Total for Aerodyne Research Incorporated		470,687
University of California - Berkeley				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914137	SA5211-11087	Uc Berkeley/Muri Willisky Child	12.431	179,615
6919274	SA5211-11087	Fisher - Child	12.431	66,489
		Total for 12.431		246,104
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923514	00007454/PO 2000018838	Supercdrms Soudan	47.049	25,559
		Total for 47.049		25,559
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916722	SA5748-11747	Advanced Stochastic Network Queing Model	43.CCC	-85
		Total for 43.CCC		-85
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914148	SA5284-11210	Synberc: Child Prather	47.041	252,795
6914149	SA5284-11210	Synberc: Child Knight	47.041	-52,370
6914151	SA5284-11210	Synberc: Child Retberg	47.041	279,086
6917043	SA5284-11210	Synberc: Child Kuldell	47.041	10,945
6921117	SA5284-11210	Synberc:Synthetic Biology Engineering	47.041	82,942
6921118	SA5284-11210	Synberc:Synthetic Biology Engineering	47.041	204,671
6921229	00006991	Nsec: Center For Scalable & Integrated N	47.041	20,929
6921230	00006934	Nsec: Center For Scalable & Integrated N	47.041	158,918
6923299	00007444	Research	47.041	10,735
6923302	00007444	Research	47.041	51,307

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923303	00007444	Research	47.041	80,466
6923304	00007444	Research	47.041	67,993
6923305	00007444	Research	47.041	94,593
6923306	00007444	Research	47.041	49,051
6923638	00007481	A Study Of Fidelity In Systems Level Des	47.041	3,863
		Total for 47.041		1,315,924
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921299	00006931/PO 1607607	Nano-Electro-Mechanical Technologies And	12.910	163,328
		Total for 12.910		163,328
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920545	SUBAWARD #00006517	Thermodynamics Of Large-Scale Heterogene	12.800	99,995
		Total for 12.800		99,995
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898625	SA4888-10787 PO#1085323	Nets-Nbod: Internet Revolution Through FI	47.070	9,707
6921266	00006900	Modeling Analysis And Control Of Distrib	47.070	70,360
		Total for 47.070		80,067
		Total for University of California - Berkeley		1,930,892
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921129	PSA #6795	ARRA - Language Development And Outcome In Chil	93.701	27,099
6923607	PSA #6795	ARRA - Fab Equipment: Speechome Recorder	93.701	69,026
		Total for 93.701		96,125
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920410	FRS NO. 525227	Production, Manipulation And Application	12.800	-4,406
6921256	FRS NO. 525227	Chuang Research	12.800	33,966
6921257	FRS NO. 525227	Ketterle Research	12.800	163,322
6921451	FRS NO. 525227	Fabricated Equipment - Molecular Ion Det	12.800	1,598
		Total for 12.800		194,480
		Total for University of Connecticut		290,605

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International AIDS Vaccine Initiative

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923588	MITRSA1001	Yr1 Child: Interplay Of B Cells And Hiv	93.855	53,743
		Total for 93.855		53,743
		Total for International AIDS Vaccine Initiative		53,743

Case Western Reserve University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920637	RES504358; PARENT RES109575	Investigating The Early Embryonic Murine	93.837	107,551
6923587	RES504358; PARENT RES109575	Fabrication: Fourier Domain Mode-Locked	93.837	11,888
		Total for 93.837		119,439

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920554	RES504334	Raman Spectroscopy For Guidance Of Stere	93.394	157,946
		Total for 93.394		157,946

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919338	RES503835; PARENT RES111936	Integrating The Local And Global Structu	47.070	-2,407
		Total for 47.070		-2,407
		Total for Case Western Reserve University		274,978

BAE Systems Info & Electronic Systems Integration, Inc

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918998	066915	Bae Seeding	12.CCC	-1,081
6922586	739520	Meta Program: Adaptive, Reflective, Robu	12.CCC	257,775
6923121	739532	Service-Oriented Netcoded Architecture F	12.CCC	24,379
6923416	739532	Child - Karger	12.CCC	35,103
6923517	741274	Coverage By Teams Of Autonomous Ground A	12.CCC	14,012
6923548	739520	Meta Program: Adaptive, Reflective, Robu	12.CCC	93,308
		Total for 12.CCC		423,496
		Total for BAE Systems Info & Electronic Systems Integration. Inc		423,496

University of Maryland

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923071	Z841801	Muri: Atomtronics: Material And Device P	12.431	93,600
6923511	Z841801	Chuang Child	12.431	60,788
		Total for 12.431		154,388
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916691	Z634013	Lunar Campaign Logistics Analysis For Hu	43.CCC	-43
		Total for 43.CCC		-43
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915353	SUBAWARD #Z913701	Computer Science Futures: Deb Roy Child	12.910	332
6915354	SUBAWARD #Z913701	Computer Science Futures: Sam Madden Ch	12.910	39,756
		Total for 12.910		40,088
		Total for University of Maryland		194,433

Harvard College Observatory

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919144	131225-02	Astro-Comb Optical Wavelength Calibrator	43.000	31,119
		Total for 43.000		31,119
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923508	LF469475	Nv-Diamond Magnetometry - R.A. Support -	12.910	21,395
		Total for 12.910		21,395
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921715	AGREEMENT 131258	ARRA - Quantum Control Techniques For Diamond-B	11.609	159,479
6922622	AGREEMENT 131258	ARRA - Fabrication: Mw/Rf Controller	11.609	46,075
		Total for 11.609		205,554
		Total for Harvard College Observatory		258,068

Brigham & Women's Hospital

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919911	103891	Neuroimaging Analysis Center	93.389	-99

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920969	SUBAWARD U41RR019703	Image Guided Therapy Center	93.389	8,042
6921995	103891	Neuroimaging Analysis Center	93.389	80,475
6922562	SUBAWARD P41RR013218-13	Neuroimaging Analysis Center - Technology	93.389	16,380
		Total for 93.389		104,798
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923485	BWH 102908	Letter Agreement: Michael Mi	93.000	4,676
		Total for 93.000		4,676
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920576	104771	ARRA - Inhibition Of Microflora-Induced Colitis	93.701	78,093
		Total for 93.701		78,093
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922081	105750	Examining Firm Adhesion And Transmigrati	93.837	104,857
		Total for 93.837		104,857
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923168	106458	Informatics For Integrating Biology And	93.704	122,507
6923484	106462	Informatics For Integrating Biology And	93.704	26,129
		Total for 93.704		148,636
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918759	102948-2	Improving Health Outcomes Thorough Automa	93.847	-14,925
6922210	106028	Network Analysis Of Signal Transduction	93.847	44,788
		Total for 93.847		29,863
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919188	U54-LM008748-06	Informatics For Integrating Biology And	93.879	80,837
6921151	U54-LM008748-06	Berger Child I2B2 Year Vi	93.879	26,144
6921446	5-U54-LM008748-06	Informatics For Integrating Biology And	93.879	47,603
		Total for 93.879		154,584

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915971	AGMT. DTD 6/15/07	Pathobiology-Inspired Engineering Of Nan	12.420	38,972
		Total for 12.420		38,972
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920815	BWH #149881/766321	National Alliance For Medical Image Comp	93.286	38
6922997	106368	National Alliance For Medical Image Comp	93.286	162,100
6922998	106370	National Alliance For Medical Image Comp	93.286	27,661
		Total for 93.286		189,799
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921384	LETTER AGREEMENT 1-27-10	Letter Agreement: Philip Rolfe	93.310	-27,623
6922965	LETTER AGREEMENT 9/30/10	Letter Agreement: Philip Rolfe	93.310	46,750
		Total for 93.310		19,127
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922066	105888	Engineered Induction Of A Stem Cell Homi	93.939	97,214
		Total for 93.939		97,214
		Total for Brigham & Women's Hospital		970,619
University of North Carolina-Chapel Hill				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921047	5-50741	Bioengineering Partnership To Improve Ch	93.114	74,024
6923482	5-50741	Bioengineering Partnership To Improve Ch	93.114	70,475
		Total for 93.114		144,499
		Total for University of North Carolina-Chapel Hill		144,499
University of Michigan				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922211	SUBCONTRACT NO. 3001511396	Creation Of The Naval Engineering Educat	12.CCC	246,613
6923477	SUBCONTRACT NO. 3001719385	Neec - Techet	12.CCC	153,598
6923478	SUBCONTRACT NO. 3001719385	Neec - Patrikalakis	12.CCC	98,588
		Total for 12.CCC		498,799

**Appendix A-3 - Detail
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 Federal Research Support - Passthrough - On Campus
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918491	3001044658	Limiting Growth Mechanisms And Continuou	47.041	20,863
		Total for 47,041		20,863
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921217	3001431889	Ground Network Design And Dynamic Operat	43.000	85,023
		Total for 43,000		85,023
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917323	SUBCONTRACT #3000913650	Michigan/Afrl Collaborative Center For C	12.800	174,418
6920740	SUBCONTRACT NO. 3001117357	C2Uav Human Supervisor Control Extension	12.800	48,619
		Total for 12,800		223,037
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921877	SUBCONTRACT # 3001478930	Subaward Umich: Cps: Small: Control Of D	47.070	82,123
		Total for 47,070		82,123
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922859	3001772291	ARRA - Goali: Hybrid Dynamic Feedback For Parti	47.082	21,379
		Total for 47,082		21,379
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921585	SUBCONTRACT NO. 3001396971	A University Consortium On High Pressure	81.117	178,221
		Total for 81,117		178,221
		Total for University of Michigan		1,109,445
Missouri Botanical Garden				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923470	NSF 05986W2	Lions	47.076	2,347
		Total for 47,076		2,347
		Total for Missouri Botanical Garden		2,347

UChicago Argonne, LLC

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919456	9F-30982	Feasibility Study For Leu Conversion Of	81.CCC	751,488
6923460	9F-30982	Fab Eq - Onb Flow Loop	81.CCC	10,022
		Total for 81.CCC		761,510
		Total for UChicago Argonne, LLC		761,510

Pennsylvania State University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923097	S11-06	Superconducting Cyclotron With Integral	12.CCC	444,441
6923448	S11-07	2.1 Cyclotron Design & Analysis	12.CCC	69,567
6923449	S11-07	2.2 Magnet & Charging Circuit	12.CCC	211,539
6923450	S11-07	2.3 Rf System	12.CCC	56,616
6923451	S11-07	2.4 Cyclotron Systems	12.CCC	51,355
6923452	S11-07	2.5 Instrument-Ation & Controls	12.CCC	61,759
6923453	S11-07	2.6 Neutronics Simulation & Beam Dump	12.CCC	27,416
6923454	S11-07	2.7 Radiation Effects & Safety	12.CCC	30,000
		Total for 12.CCC		952,693

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895256	2834-MIT-SAO-4018	Data Analysis Of The Advanced Ccd Imagin	43.CCC	620,243
		Total for 43.CCC		620,243

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898796	3050-MIT-NSF-4940	Be/Muses: Moving To Sustainability: Impr	47.041	23,479
		Total for 47.041		23,479
		Total for Pennsylvania State University		1,596,415

Raytheon Company

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916860	PURCHASE ORDER NO. 4400251003	Cosmos Program	12.CCC	89,476
6921374	4400352761	Next Generation Data Interoperability St	12.CCC	254,334
6921855	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	5,441
6921856	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	190,638
6921857	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	7,972
6921858	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	88,821

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921859	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	213,619
6921860	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	14,156
6921861	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	14,156
6921862	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	282,188
6921863	PO NO. 4400354854	Fab Eq - Integrated Standoff Inspection	12.CCC	51,442
6921864	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	14,156
6921865	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	12,736
6921866	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	14,156
6922220	PO#4400371320	Darpa Gan-Cmos Integration	12.CCC	305,329
6923069	PO NO. 4400354854	Fab Eq - Gamma Detector System	12.CCC	23,562
6923417	PO NO. 4400354854	Fabricated Equipment - Isis Bremsstrahlu	12.CCC	76,344
		Total for 12.CCC		1,658,526
		Total for Raytheon Company		1,658,526

Sandia National Laboratories

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921121	AGREEMENT # 611557 P.O. # 973849	Structural Origins Of Scintillation: Met	12.CCC	23,816
		Total for 12.CCC		23,816
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917099	777117	Integrated Optical Phase Locked Loop (Ilo	81.CCC	-1,122
6919233	611557	Bayesian Data Assimilation For Stochasti	81.CCC	70,648
6920907	AGREEMENT # 611557 P.O. # 960114	Tunable Thermodynamics And Kinetics For	81.CCC	142,078
6921072	PO#966279, AGREEMENT #611557	Deep Borehole Disposal Of Spent Nuclear	81.CCC	26,612
6921174	PO#978634	Characterization Of Variation In Deep Re	81.CCC	8,098
6921323	AGREEMENT #611557 PO #969966	Sc02 Materials Testing	81.CCC	1,583
6921362	971321	Quantifying Prediction Fidelity In Multi	81.CCC	62,099
6921876	1023347	Vrdsmc For The Variable Hard Sphere Mode	81.CCC	-1,934
6922434	PO #1053100 UNDER 611557	Design Of A Polarization Independent Sil	81.CCC	14,964
6922494	AGREEMENT #611557 PO #1052751	Calibration Of Indium Activation Neutro	81.CCC	21,998
6922572	PO #1059747 UNDER 611557	Micro- And Nanophotonics For A 2X2 Array	81.CCC	125,094
6923172	PO #1086844 UNDER 611557	Germanium Optoelectronics	81.CCC	40,630
6923413	PO #1072678 UNDER 611557	Research For Next Generation Biofuels An	81.CCC	125,656
		Total for 81.CCC		636,404
		Total for Sandia National Laboratories		660,220

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 Massachusetts Institute of Technology
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Clemson University						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6923393	1501-203-2008185	Gradient Films From Shape Memory Nanofoa	12.351	30,995		
		Total for 12.351		30,995		
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6923026	1483-225-2007743	Compact, Highly Selective And Specific,	81.113	1,154		
		Total for 81.113		1,154		
		Total for Clemson University		32,149		
New England Fishery Management Council						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6923391	RES. AGMT. DTD. 1/1/11	Nefmc Herring Management Impact Plan Soc	11.441	1,601		
		Total for 11.441		1,601		
		Total for New England Fishery Management Council		1,601		
The Oceanscience Group						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6923388	AGRMT DATED 2/7/11	Active Riverine Drifter	12.CCC	21,000		
		Total for 12.CCC		21,000		
		Total for The Oceanscience Group		21,000		
Metis Design Corp.						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6919077	FA9550-09-C-0165	Af08-T23 Health Monitoring Of Carbon Nan	12.CCC	-28		
6923387	AGRMT DATED 1/11/11	Multi-Physics, Multi-Functional Nano-Erg	12.CCC	77,912		
		Total for 12.CCC		77,884		
		Total for Metis Design Corp.		77,884		
University of Massachusetts Medical Center						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6923380	6128297/RFS2011178	Systems Biology Of Insulin Resistance	93.847	162,002		

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923381	6128298/RFS2011179	Systems Biology Of Insulin Resistance	93.847	83,881
6923382	6128299/RFS2011177	Systems Biology Of Insulin Resistance	93.847	117,364
		Total for 93.847		363,247
		Total for University of Massachusetts Medical Center		363,247

Idesta Quantum Electronics

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923362	STTR SUBCONTRACT UNDER DE-SC0004702	Str: Femtosecond Timing Distribution An	81.049	45,000
		Total for 81.049		45,000
		Total for idesta Quantum Electronics		45,000

Oregon Health and Science University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923337	GCAE10268A MIT	Advanced Imaging For Glaucoma	93.867	189,659
		Total for 93.867		189,659
		Total for Oregon Health and Science University		189,659

CREARE, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922854	58249	Light Field Imaging For Dense Sprays	12.CCC	33,615
		Total for 12.CCC		33,615
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922474	SUBCONTRACT NO. 58352	Low Loss High Power Current Lead For Cry	12.300	21,996
6923333	SUBCONTRACT NO. 60081	Current Leads For High Current Supercond	12.300	24,099
		Total for 12.300		46,095
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921583	SUBCONTRACT NO. 56533	ARRA - Str: Design, Optimization And Fabricati	43.CCC	45,615
6922483	SUBCONTRACT NO. 58351	Str: Development Of Advanced Radiative	43.CCC	84,695
		Total for 43.CCC		130,310
		Total for CREARE, Incorporated		210,020

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Massachusetts Institute of Technology
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Mount Sinai Medical Center			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6923327	MSSM NO. 0258-3921/HHSN268201000045C	Translational Nanomedical Therapies For C	93.CCC
		Total for 93.CCC	96,548
			<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6920429	MSSM 0254-7832-4609	Neural Substrates Of Appetitive Behavior	93.242
6922301	0254-7833-4609	Neural Substrates Of Appetitive Behavior	93.242
		Total for 93.242	82,068
		Total for Mount Sinai Medical Center	178,616
			<u>FY Expenses</u>
DCG Systems, Inc			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6923294	SUBCONTRACT UDR. FA8650-11-C-7105	Development Of Superconducting Nanowire	12.CCC
		Total for 12.CCC	34,655
		Total for DCG Systems, Inc	34,655
			<u>FY Expenses</u>
Praevium Research Inc.			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6923290	SBIR AGMT 2R44CA101067-05	Ultrahigh Speed And Resolution Oct/Ocm U	93.394
		Total for 93.394	18,090
		Total for Praevium Research Inc.	18,090
			<u>FY Expenses</u>
MIT - Internal Cost Sharing			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6923288	SUBCONTRACT NO. 6947174	Natural Ventilation For Cooling In Comme	81.CCC
		Total for 81.CCC	28,973
			<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6922600	GC12015.136208	Cell Migration Consortium - Cost Sharing	93.821
		Total for 93.821	20,506
		Total for MIT - Internal Cost Sharing	49,479
			<u>FY Expenses</u>

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TOTAL FOR UNIT - FEDERAL COST SHARING

43,413

Lawrence Berkeley National Laboratory

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6893506	SUBCONTRACT #6806960	First Principles, Calculations And Nmr S	81.CCC	374,992
6899207	SUBCONTRACT NO. 6804921	Tem And Afrm Studies Of Nanoparticle Coat	81.CCC	297,209
6917334	SUBCONTRACT NO. 6838062	Molecular Determinants Of Community Acti	81.CCC	137,029
6920789	SUBCONTRACT NO. 6896518	Center For Nanoscale Control Of Geologic	81.CCC	165,420
6921874	SUBCONTRACT NO. 6920999	New Electrode Designs To Enable Ultrahig	81.CCC	182,951
6922118	SUBCONTRACT NO. 6927716	Advanced 3D Geophysical Imaging Technolo	81.CCC	192,053
6923287	SUBCONTRACT NO. 6947174	Natural Ventilation For Cooling In Comme	81.CCC	30,312
		Total for 81.CCC		1,379,966

Total for Lawrence Berkeley National Laboratory

1,379,966

National Renewable Energy Laboratory

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923263	ZAM-1-40897-01	Wave Device Dynamics Modeling And Analys	81.CCC	209,716
		Total for 81.CCC		209,716

Total for National Renewable Energy Laboratory

209,716

Detroit Diesel Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923260	P.O. #: 1590007713	ARRA - Fuel-Economy Improvement Via Low-Engine-	81.049	173,410
		Total for 81.049		173,410

Total for Detroit Diesel Corporation

173,410

Battelle Energy Alliance, LLC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919066	AMENDMENT 4 TO RELEASE 00001 UNDER BLANKET MASTER 00042439	Cont. Development Of An Academic Center	81.CCC	9
6920548	RELEASE #000033/CONTRACT#000000063	-09-095:Heterogeneous Recycling In Fast	81.CCC	58,359
6920549	RELEASE #000035/CONTRACT#000000063	Millimeter-Wave Thermal Analysis Develop	81.CCC	183,396
6920791	RELEASE #000029/CONTRACT#00000063AMD. 002	Collaboration On The Nuclear Fuel Cycle	81.CCC	92,325

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920887	AMENDMENT 5 TO RELEASE 00001 UNDER BLANKET MASTER 00042439	Cont. Development Of An Academic Center	81.CCC	61,319
6921372	CNTR # 00000063, RLSE 00039	Degradation Investigation Of Solid Oxide	81.CCC	52,337
6921373	CNTR# 00000063,RELEASE 00037	Enviornmental Effects Of Crack Growth In	81.CCC	62,836
6921396	CNTR # 00000063, RLSE 00040	Hybrid Systems For Process Integration A	81.CCC	182,320
6921609	RELEASE #000038/CONTRACT#000000063	Chair The Institute Advisory Board For T	81.CCC	19,041
6921700	RELEASE NO. 00041 UNDER 00000063	Literature Review: Molten Bromide Salt S	81.CCC	9,353
6921784	CONTRACT 00000063, RELEASE 00037	Enviornmental Effects Of Crack Growth In	81.CCC	3,127
6921938	RELEASE #000042/CONTRACT#0000063AMD. 001	Safety And Licensing-Centers Of Research	81.CCC	22,285
6922016	RELEASE #000043/CONTRACT#000000063	Quantitative Phenomena Identification An	81.CCC	60,000
6922846	AMENDMENT 6 TO RELEASE 00001 UNDER BLANKET MASTER 00042439	Fy 2011 Statement Of Work For National	81.CCC	108,243
6922941	CNTR# 00000063,RELEASE 00044	Enviornmental Effects Of Crack Growth In	81.CCC	113,986
6922944	RELEASE #000038/CONTRACT#000000063	6921609-Inest- Fy11	81.CCC	42,034
6923123	RELEASE #000029/CONTRACT#0000063AMD. 003	Collaboration On The Nuclear Fuel Cycle	81.CCC	159,704
6923247	RELEASE #000045/CONTRACT#000000063	Development And Application Of Qpirt In	81.CCC	33,497
		Total for 81.CCC		1,264,171
		Total for Battelle Energy Alliance, LLC		1,264,171
Fred Hutchinson Cancer Research Center				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923229	SUBAWARD 0000702854	Integrated Single-Cell Assays For Multid	93.855	43,213
		Total for 93.855		43,213
		Total for Fred Hutchinson Cancer Research Center		43,213
University of Washington				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918384	SUBAWARD NO. 548656	A Unified Approach To Abductive Inferenc	12.431	120,518
		Total for 12.431		120,518
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916796	SUBCONTRACT NO. 431135	Center For Enabling New Technologies Thr	47.049	139,793
		Total for 47.049		139,793

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923111	SUBAWARD NO. 701301	The Katrin Neutrino Experiment	81.049	11,192
6923228	SUBAWARD NO. 701301	Fabricated Equipment - Katrin Focal Plan	81.049	33,586
		Total for 81.049		44,778
		Total for University of Washington		305,089

UT- Battelle LLC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899538	SUBCONTRACT NO. 4000048870	1.5.2.1.1 Task 2 Personnel	81.CCC	47,864
6899539	SUBCONTRACT NO. 4000048870	1.5.2.1.1 Task 2 Operations	81.CCC	2,665
6899541	SUBCONTRACT NO. 4000048870	1.5.2.1.2 Task 3 Personnel	81.CCC	34,261
6899542	SUBCONTRACT NO. 4000048870	1.5.2.1.2 Task 3 Operations	81.CCC	3,101
6921880	4000091126	Design Of Magnets For The Neutron Beamli	81.CCC	196,163
6922327	4000096701	Use Of Methanol As A Transportation Fuel	81.CCC	68,141
6923222	SUBCONTRACT NO. 4000100452	Iter Ech Transmission Line System: Resea	81.CCC	117,184
		Total for 81.CCC		469,379
		Total for UT- Battelle LLC		469,379

Draper Laboratory Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919775	SC001-369	Augmenting Human Cognition Through Quest	12.CCC	-2,018
6919776	SC001-381	Development Of Microfluidic Platform Tec	12.CCC	0
6919836	SC001-394	Decision Aids For The Qualitative Analys	12.CCC	-2,646
6919841	SC001-366	Generalized Filtering For Navigation	12.CCC	-53
6919920	SC001-399	Architecture Of Earth Observing Systems	12.CCC	67
6919944	SC001-364	Development Of Small, Light Lander/Hoppe	12.CCC	9,441
6921334	SC001-364	Fabricated Equipment - Talaris Lunar Veh	12.CCC	26,568
6922035	SC001-453	Opinion Formation And Influence In Confl	12.CCC	104,833
6922097	SC001-453	Opinion Formation And Influence In Confl	12.CCC	653
6922250	SC001-474	A Core Microfluidic Technology For Bacte	12.CCC	117,620
6922493	SC001-0000000466	Multi-Spectral Sensor Development For No	12.CCC	33,717
6922711	SC001-494	Compressive Signal Processing Project	12.CCC	32,618
6923184	SC001-523	Development Of Improved Methodology And	12.CCC	66,000
		Total for 12.CCC		386,800

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922442	SC001-484	Envelope: Glycan Chemistry	12.431	415,208
		Total for 12.431		415,208
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922703	SC001-417	Microfluidic 3D Scaffold Assay For Cance	93.396	107,564
		Total for 93.396		107,564
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922995	SC001-513	Advanced Seismometer, Gravimeter, And Ac	43.000	49,993
		Total for 43.000		49,993
		Total for Draper Laboratory Incorporated		959,565

Baylor College of Medicine

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920952	SHOPPING CART NO. 101140603 - PRIME 5-PN2-EY016525-06 - PO 5600503246	Center For Protein Folding Machinery	93.867	103,801
6920980	SHOPPING CART NO. 101140603 - PRIME 5-PN2-EY016525-06	Center For Protein Folding Machinery - G	93.867	52,743
6923165	SHOPPING CART NO. 101379874 PRIME AWARD NO. 2-PN-2EY016525-07	Center For Protein Folding Machinery	93.867	127,005
6923181	SHOPPING CART NO. 101379874 PRIME AWARD NO. 2-PN-2EY016525-07	Center For Protein Folding Machinery - H	93.867	129,671
		Total for 93.867		413,220
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919644	NBPF 02001	Validation Of Assessment Tests And Count	43.000	3,090
6919919	SA01604	Sensorimotor Display And Control To Enha	43.000	5,365
6920189	SA01301	Advanced Displays For Efficient Training	43.000	132,789
6920196	SA01302	Modeling And Mitigating Spatial Disorien	43.000	32,752
6920367	HFP02001	Human Automation Interactions And Perfor	43.000	178,290
6920583	HFP00003	Thermal Control During Astronaut Travers	43.000	22,545
6922067	SA01604	Sensorimotor Display And Control To Enha	43.000	201,575
6922221	NBPF 02001	Validation Of Assessment Tests And Count	43.000	200,966
6922812	SA01302	Modeling And Mitigating Spatial Disorien	43.000	61,344
6922813	SA01301	Advanced Displays For Efficient Training	43.000	282,487

**Appendix A-3 - Detail
 Massachusetts Institute of Technology
 Federal Research Support - Passthrough - On Campus
 Fiscal 2011 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920850	5600481177	ARRA - Structures Of The Portal Vertex In Ds Dn	93.701	179,428
		Total for 93.701		179,428
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922879	PO 101321035	Modulation Of Nf-Kb Signaling By Immunop	93.847	22,758
		Total for 93.847		22,758
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917286	PO 5600299597	Intestinal Lactobacillus And Mucosal Imm	93.848	47,796
		Total for 93.848		47,796
		Total for Baylor College of Medicine		1,784,405

Columbia University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923058	1(ACCT#5-21132)	Theory Columbia	12.431	14,257
6923059	1(ACCT#5-21132)	Experiment-B Columbia	12.431	64,350
6923060	1(ACCT#5-21132)	Experiment-W Columbia	12.431	154,366
6923146	1(ACCT#5-21132)	Fab Equip: 1560-Nm Ppkt Waveguide Param	12.431	6,515
6923176	1(ACCT#5-21132)	Fab Equip: Four High Speed Ingaas Single	12.431	13,756
		Total for 12.431		253,244
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921054	1(ACCT # 5-22620)	Petascale Hierarchical Modeling Via Paral	81.049	27,123
		Total for 81.049		27,123
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920909	3 (ACCT # 5-24747)	ARRA - Collaborative Research: Enhancing The Su	47.082	7,167
		Total for 47.082		7,167
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914853	3-5-32255 UDR, NIH R01	Stem Cells And Gastric Cancer	93.393	117,102
6917022	5-32460	Mouse Models Of Gastric Cancer	93.393	66,568

**Appendix A-3 - Detail
 Massachusetts Institute of Technology
 Federal Research Support - Passthrough - On Campus
 Fiscal 2011 Expenditures**

183,670
471,204

Total for 93.393
 Total for Columbia University

BBN Technologies Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919265	PO 9500008393	Option Iii - Phase Iv	12.CCC	22,655
6920544	PO 9500008942	Coherent Control, Characterization And N	12.CCC	72,376
6920572	PO 9500008941	Phase Ii: Characterization And Integrati	12.CCC	335,608
6922043	PO 9500008393	Option Vi - Phase V	12.CCC	90,692
6922727	P.O. #9500010426; BBN REF ID #13901	Photon Information Efficient Communicati	12.CCC	0
6923037	BBN REF ID #13901	Piecomm Theory	12.CCC	53,178
6923038	BBN REF ID #13901	Piecomm Experiment-W	12.CCC	150,787
6923039	BBN REF ID #13901	Piecomm Experiment-B	12.CCC	62,133
6923068	PO #9500010544	Integrated Cognitive Neuroscience Archit	12.CCC	189,498
6923167	PO 9500010547	Biocompiler	12.CCC	229,890
		Total for 12.CCC		1,206,817

FY Expenses
 37,661

CFDA #
 47.082

37,661
1,244,478

Total for 47.082
 Total for BBN Technologies Corporation

Mercury Federal Systems, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923164	AGREEMENT DATED 10/29/10	A Real-Time Computer Vision Library For	12.CCC	26,139
		Total for 12.CCC		26,139
		Total for Mercury Federal Systems, Inc.		26,139

General Dynamics

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923153	PURCHASE ORDER #2010-01628	Interpretation Of Spatial Language	12.431	242,052
		Total for 12.431		242,052
		Total for General Dynamics		242,052

**Appendix A-3 - Detail
Massachusetts Institute of Technology
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University of Innsbruck					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6922724	SQUIP AGREEMENT UNDER W911NF-10-1-0284	Scalable Quantum Information Processing	12.431	313,551	
6923143	SQUIP AGREEMENT UNDER W911NF-10-1-0284	Fabrication: Qubit Control System	12.431	58,891	
6923144	SQUIP AGREEMENT UNDER W911NF-10-1-0284	Fabrication: Qubit Cooling Laser System	12.431	25,083	
		Total for 12.431		397,525	
		Total for University of Innsbruck		397,525	
Cytex Therapeutics, Inc.					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6923102	RES. AGMT. DTD. 11/23/10	Hip Joint Resurfacing With Functional Hu	93.846	89,694	
		Total for 93.846		89,694	
		Total for Cytex Therapeutics, Inc.		89,694	
International Business Machine					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6922817	PO# 5003753286	Machine Reading	12.CCC	37,267	
6923094	491005935.0	Impact Analysis Of Informal Organization	12.CCC	30,088	
		Total for 12.CCC		67,355	
		Total for International Business Machine		67,355	
University of Pittsburgh					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6899424	110916-1	Novel Glaucoma Diagnostics For Structure	93.867	4,542	
6923091	0013954 (118082-3)	Novel Glaucoma Diagnostics For Structure	93.867	41,673	
		Total for 93.867		46,215	
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6917732	0001271	Spatial Segregation Of Cell Functioning	93.859	93,417	
		Total for 93.859		93,417	
		Total for University of Pittsburgh		140,632	

**Appendix A-3 - Detail
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Total for University of Pittsburgh

139,632

Scientific Systems Company, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918981	SUBCONTRACT NO. 1467-1-MIT	Str: Evaluation Of Microchip Atom Inter	12.CCC	81,910
6919778	N68335-09-C-0590	Real-Time Determination And Prediction O	12.CCC	5,912
6921414	SBIR 1498-1-MIT	Sbir - Dynamic Surface Control For Nauti	12.CCC	12,726
6922820	STTR AGMT 1518-1	Real-Time Determination And Prediction O	12.CCC	30,012
6923067	SBIR 1519-1-MIT	Enliv-N: Effective Natural Language Inte	12.CCC	16,986
		Total for 12.CCC		147,546

Total for Scientific Systems Company, Incorporated

147,546

Logos Technologies, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921142	SUB-226-MIT1	Microbial Processes For Jet Fuel Precurs	12.CCC	189,951
6923061	SUB-226-MIT1	Microbial Processes For Jet Fuel Precurs	12.CCC	245,479
		Total for 12.CCC		435,430

Total for Logos Technologies, Inc.

435,430

Ohio State University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922848	60023980	Developing A Scientific Workforce Analys	93.859	96,128
		Total for 93.859		96,128

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922491	RF01224242	Cryogenic Peltier Cooling	12.800	90,725
6923049	RF01224242	Cryogenic Peltier Cooling - Child Millie	12.800	34,045
		Total for 12.800		124,770

Total for Ohio State University

220,898

California Institute of Technology

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6304100	PC045667	Detector Alignment Design	47.049	-68,954
6304200	PC045667	Detector Length Control Design	47.049	-20,495

Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6304300	PC045667	Laboratory Operations	47.049	-3,078
6760400	PC045667	Stochastic Forces S&W	47.049	1,266
6917531	SUBAWARD NO. 75ADV-1085563	C.O.40.M.Laa Core Optics - Salaries And	47.049	46,432
6917533	SUBAWARD NO. 75ADV-1085563	Fm.40.M.Laa Facilities Modifications - S	47.049	59,360
6917535	SUBAWARD NO. 75ADV-1085563	Project Management - Salaries And Wages	47.049	388,974
6917537	SUBAWARD NO. 75ADV-1085563	System Engineering - Salaries And Wages	47.049	188,329
6917538	SUBAWARD NO. 75ADV-1085563	Systems Engineering - Other	47.049	-32
6917539	SUBAWARD NO. 75ADV-1085563	Si.12.M.Laa Seismic Lead - Salaries And	47.049	199,167
6917541	SUBAWARD NO. 75ADV-1085563	Seismic Fabrication - Salaries And Wages	47.049	610,618
6917545	SUBAWARD NO. 75ADV-1085563	Suspensions Fabrication - Salaries And W	47.049	61,352
6918488	SUBAWARD #68D-1086050	Powering The Planet: A Chemical Bonding	47.049	541,218
6918489	SUBAWARD #68D-1086050	Powering The Planet: A Chemical Bonding	47.049	306,067
6918865	SUBAWARD #68D-1086050	Powering The Planet: A Chemical Bonding	47.049	215,646
6918882	SUBAWARD NO. 75-1086390	Ligo Operations: Detector Alignment Desi	47.049	534,667
6918883	SUBAWARD NO. 75-1086390	Ligo Operations: Detector Length Control	47.049	274,214
6918884	SUBAWARD NO. 75-1086390	Ligo Operations: Laboratory Operations	47.049	408,150
6918885	SUBAWARD NO. 75-1086390	Ligo Operations:Project Management	47.049	118,756
6918886	SUBAWARD NO. 75-1086390	Ligo Operations: Project Administration	47.049	91,611
6918887	SUBAWARD NO. 75-1086390	Ligo Operations: General Computing Supp	47.049	631,848
6918889	SUBAWARD NO. 75-1086390	Ligo Operations: Stochastic Forces S&W	47.049	341,961
6918890	SUBAWARD NO. 75-1086390	Ligo Operations: Fabrication - Adaptive	47.049	4,962
6921550	PO # 75-1088179	Cit-Gravity Wave Antenna	47.049	91,261
6922385	SUBAWARD NO. 75ADV-1085563	Interferometer Sensing And Control Fabri	47.049	314,021
6922568	SUBAWARD NO. 75ADV-1085563	Is.12.M.Laa Isc Subsystem Management - S	47.049	133,033
6922569	SUBAWARD NO. 75ADV-1085563	In.10.M.Laa Installation Mgmt Mit	47.049	1,612
6922570	SUBAWARD NO. 75ADV-1085563	In.20.M.Laa Installation Technical Sup	47.049	51,076
6922571	SUBAWARD NO. 75ADV-1085563	Da.40.C.Laa Daq Fabrication Labor	47.049	17,882
6923033	SUBAWARD NO. 75-1086390	Ligo Ops Fabe Suspended Instrument Platt	47.049	6,567
6923034	SUBAWARD NO. 75-1086390	Ligo Ops Fabe I/O Expansion Chassis	47.049	63,701
		Total for 47.049		5,611,192
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899926	67F-1080867	Muri - Caltech	12.300	159,188
		Total for 12.300		159,188
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922609	HR0011-10-1-0076	Novel Anti-Fogging Nanostructure Fabrica	12.910	4,375
		Total for 12.910		4,375

**Appendix A-3 - Detail
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899771	SUBAWARD NO. 102-1080673	Specification, Design And Verification O	12.000	308,487
		Total for 12.000		308,487
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922881	65P-1089493	High-Resolution Mars Polar Stratigraphy	43.AAA	9,491
		Total for 43.AAA		9,491
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921338	51A-1088245	ARRA - Edges: An Ultra-Clean Spectrometer For F	47.082	26,004
		Total for 47.082		26,004
		Total for California Institute of Technology		6,118,737

University of Rochester

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897852	413008-14G	Muri: Quantum Imaging: New Methods And A	12.431	88,507
6922962	415337-G, UR 5-29617	High Information Capacity Quantum Imagin	12.431	13
6923028	415337-G, UR 5-29617	Theory - U. Rochester	12.431	26,632
6923029	415337-G, UR 5-29617	Experiment - U Rochester	12.431	98,282
		Total for 12.431		213,434
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916723	PO #414005-G, UR ACCOUNT #5-27939	Muri (Onr): Complex Learning And Skill T	12.300	152,098
		Total for 12.300		152,098
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917101	414090-G	National Inertial Confinement Fusion Pr	81.049	428,825
6921558	PO #415023-G, UR ACCOUNT #5-24431	Fusion Science Ceneter For Extreme State	81.049	264,817
		Total for 81.049		693,642
		Total for University of Rochester		1,059,174

Center for Integration of Medicine & Innovative Technol

**Appendix A-3 - Detail
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921231	W81XWH-07-2-0011 / FUND 215439	Tissue Engineering Therapies For Inhalat	12.CCC	63,195
		Total for 12.CCC		63,195
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922357	W81XWH-09-Z-0001-FUND 216740	Resuscitation Tech For Saving Newborn Li	12.420	10,479
6923025	W81XWH-07-2-0001 / CIMIT 11-282 / 217424	A Fully Autonomous Brain Body Interface	12.420	38,083
		Total for 12.420		48,562
		Total for Center for Integration of Medicine & Innovative Technology		111,757

University of Massachusetts - Amherst

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923018	06-003720 K 01	Metrology And Process Modeling For Roll-	47.041	45,132
		Total for 47.041		45,132
		Total for University of Massachusetts - Amherst		45,132

University of Virginia

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915786	GG10931-128299	An Integrated Cellulr Materials Approa	12.300	112,948
		Total for 12.300		112,948
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920440	GC11893.133556	Cell Migration Consortium	93.000	-4,534
6920481	GC11893.133556	Griffith Child - 6920440	93.000	10,323
6922648	GC12015.136211	Cell Migration Consortium	93.000	71,859
6922857	GC12015.136211	Griffith Cell Migration Child - 6922648	93.000	113,362
		Total for 93.000		191,010
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6923012	GG11371-136709	Reconfigurable Array Of Magnetic Automat	12.910	38,066
		Total for 12.910		38,066

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Massachusetts Institute of Technology
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920126	GC11893.133553	Cell Migration Consortium	93.821	12,513
6922599	GC12015.136208	Cell Migration Consortium	93.821	176,992
		Total for 93.821		189,505
		Total for University of Virginia		531,529

University of Chicago

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920629	CHE-0943639	Center For Energetic Non-Equilibrium Che	47.049	116,919
		Total for 47.049		116,919

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918895	36984-3	Cd8 & T Cells And Immunological Tumor Re	93.396	0
6919345	36984-3	Cd8 & T Cells And Immunological Tumor Re	93.396	-924
6919346	36984-3	Cd8 & T Cells And Immunological Tumor Re	93.396	924
		Total for 93.396		0

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922994	45634-C	Room Temperature Coherent Energy Transfe	12.910	173,546
		Total for 12.910		173,546

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921898	SUB 34588-06	A Cis Regulatory Map Of The Drosophila Ge	93.172	124,269
		Total for 93.172		124,269
		Total for University of Chicago		414,734

Connecticut Analytical Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922990	AGMT. DTD. 10/26/10	Electrospray-Based High Vacuum Diffusion	15.CCC	27,999
		Total for 15.CCC		27,999
		Total for Connecticut Analytical Corporation		27,999

Kestrel Institute

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922988	10-C-7026-MIT	Confinement Of New Executable Software B	12.CCC	339,375
		Total for 12.CCC		339,375
		Total for Kestrel Institute		339,375

Stevens Institute of Technology

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918979	SUBAWARD #527583-0901	Stevens Institute Of Technology Center O	97.061	8,656
6922987	SUBAWARD #527782-001	The National Center For Secure And Resil	97.061	129,425
		Total for 97.061		138,081
		Total for Stevens Institute of Technology		138,081

Northwestern University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920867	SUBAWARD SP0005442 - PROJ0001738	Multiscale Design And Manufacturing Of H	12.431	69,229
		Total for 12.431		69,229
6922982	SUB SP0008093-PROJ0002233	A Hybrid Forming System: Electrical-Assi	81.086	59,132
		Total for 81.086		59,132

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921918	611-4733000-60026039 PROJ0002226	ARRA - The Science Of Concrete With Fly Ash: Fu	11.609	-8,643
6921919	611-4733000-60026039 PROJ0002226	ARRA - The Science Of Concrete With Fly Ash: Fu	11.609	105,771
		Total for 11.609		97,128
		Total for Northwestern University		225,489

University of Kentucky

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914573	UKRF 3048051300-07-152	Nirt: Goali - An Electron-Beam Based Mic	47.041	-10,229
		Total for 47.041		-10,229

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Federal Research Support - Passthrough - On Campus
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921181	3048106580-10-156	ARRA - Advancing Drug Development In Medicinal	93.701	77,946
6922964	3048107714-11-124	ARRA - Advancing Drug Development In Medicinal	93.701	298,547
		Total for 93.701		376,493
		Total for University of Kentucky		366,264

SAIC Telcordia Technologies, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922943	SUBCONTRACT NO. P010059851	Confinement Of New Executable Software B	12.CCC	239,565
		Total for 12.CCC		239,565
		Total for SAIC Telcordia Technologies, Incorporated		239,565

Teledyne Scientific & Imaging LLC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920026	G9U535369, LLC GENERAL ORDER 71327	Carbon Based Nanothermal Interface	12.CCC	278,244
6922939	B0U541911, LLC GENERAL ORDER 71327	Cnt/Solder And Graphene/Solder Interface	12.CCC	33,809
		Total for 12.CCC		312,053
		Total for Teledyne Scientific & Imaging LLC		312,053

J. David Gladstone Institutes

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920845	R2216-A	The Epigenetic Landscape Of Heart Develo	93.837	32,420
6922923	R2216-A	The Epigenetic Landscape Of Heart Develo	93.837	216,735
		Total for 93.837		249,155
		Total for J. David Gladstone Institutes		249,155

Purdue University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918661	AGMT. NO. 4104-23214	Nanoscale Optical Antenna Array For Cont	12.CCC	109,140
		Total for 12.CCC		109,140

**Appendix A-3 - Detail
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919995	AGMT. NO. 4103-30368	Changes Of Land-Cover And Land-Use And G	43.CCC	61,411
		Total for 43.CCC		61,411
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918125	SUBAWARD #4101-24873	Polarionics Platform For Terhertz Signa	47.041	92,821
6921215	SUBAWARD #4101-32475	Ncn@Mit University Partnership	47.041	286,407
		Total for 47.041		379,228
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916978	4102-21004	Exploratory Study Of Environmental Effec	93.394	2,345
		Total for 93.394		2,345
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922872	SUBAWARD #4101-38045	Emerging Frontiers Of Science Of Informa	47.070	138,016
6922873	SUBAWARD #4101-38045	Emerging Frontiers Of Science Of Informa	47.070	36,172
6922874	SUBAWARD #4101-38045	Emerging Frontiers Of Science Of Informa	47.070	42,007
6922875	SUBAWARD #4101-38045	Emerging Frontiers Of Science Of Informa	47.070	11,440
		Total for 47.070		227,635
		Total for Purdue University		779,759
The Wellcome Trust				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920790	SUBAWARD 0244-05	Integrated Human Genome Annotation: Gene	93.172	132,752
6922856	SUBAWARD 0244-05	Integrated Human Genome Annotation: Gene	93.172	137,704
		Total for 93.172		270,456
		Total for The Wellcome Trust		270,456
Q-Peak, Inc.				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922676	PO55097	Strr: Phase Ii: Mid-Ir Precision Frequen	12.CCC	65,376
6922851	PO55097	Strr: Phase Ii: Mid-Ir Precision Frequen	12.CCC	35,392
		Total for 12.CCC		100,768
		Total for Q-Peak, Inc.		100,768

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Loyola University of Chicago		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922845	5-U01-HD061978-02			Mots: Modeling Obesity Through Simulatio	93.865	21,771
				Total for 93.865		21,771
				Total for Loyola University of Chicago		21,771

Beth Israel Hospital		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920168	1-U01-EB008577-03			Research Resource For Complex Physiologi	93.286	27,748
6922809	5-U01-EB008577-04			Research Resource For Complex Physiologi	93.286	491,154
				Total for 93.286		518,902

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919085	1-R18-HS017907-01	Optimizing Safety In Ambulatory Procedur	93.226	-238
6921073	1-R18-HS017907-02	Optimizing Safety In Ambulatory Procedur	93.226	16,986
		Total for 93.226		16,748
		Total for Beth Israel Hospital		535,650

Harvard School of Public Health		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919113	1-P01-TP000307-01			Linking Assessment And Measurement To Ph	93.930	-13,540
6921270	5-P01-TP000307-02			Linking Assessment And Measurement To Ph	93.930	131,529
6922778	5-P01-TP000307-03			Linking Assessment And Measurement To Ph	93.930	194,201
		Total for 93.930		Total for 93.930		312,190
		Total for Harvard School of Public Health		Total for Harvard School of Public Health		312,190

Rensselaer Polytechnic Institute		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922756	SUBAWARD A12141			Tms: Defect Modeling Beyond Density Func	81.049	112,114
				Total for 81.049		112,114

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921530	A12160	Web 3.0 For Army Knowledge Online	12.910	105,805
		Total for 12.910		105,805
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921314	A71357	Social And Cognitive Networks Academic R	12.630	140,029
		Total for 12.630		140,029
		Total for Rensselaer Polytechnic Institute		357,948

Haskins Laboratories

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920368	CONSORTIUM AGMT. UNDER NIH R01-DC008780	Variability And Error In Speech Producti	93.173	15,657
6922744	CONSORTIUM AGMT. UNDER NIH R01-DC008780	Variability And Error In Speech Producti	93.173	55,359
		Total for 93.173		71,016
		Total for Haskins Laboratories		71,016

Tufts University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920573	P.O.500 2927-SERV	Understanding And Eliminating Oncogenic	93.396	47,525
6922743	P.O.5004210-SERV	Understanding And Eliminating Oncogenic	93.396	195,659
		Total for 93.396		243,184
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918999	SUBCONTRACT UNDER NNX09AM63G	Lunar Volatiles And Magma Ocean Differen	43.000	1,563
		Total for 43.000		1,563
		Total for Tufts University		244,747

HRL Laboratories, LLC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922728	SUBCONTRACT 9040-000174	Neovision2	12.CCC	152,566
		Total for 12.CCC		152,566

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Total for HRL Laboratories, LLC **152,566**

Hampton University				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922700	10-002	ARRA - Mri-R2 Consortium: Development Of Forwar	47.082	77,386
Total for 47.082				77,386
Total for Hampton University				77,386

Yale University				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922317	M11A10859 AS0246	ARRA - Defining Signatures For Immune Responsiv	93.701	218,846
6922694	M11A10859 AS0246	ARRA - Child - Lauffenburger - 6922316	93.701	92,210
Total for 93.701				311,056
Total for Yale University				311,056

Radiation Monitoring Devices				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919822	RMDC07-43	Ionic Conduction Studies In Tlbr	97.CCC	240
6922688	RMDC09-35	High Performance Gamma Ray Detectors	97.CCC	49,762
Total for 97.CCC				50,002
Total for Radiation Monitoring Devices				50,002

The Broad Institute, Inc.				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922666	SUB NO: 7215110-5500000272	High-Throughput Sequencing Of Chromatic	93.172	33,655
Total for 93.172				33,655
Total for The Broad Institute, Inc.				33,655

Weill Medical College				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921332	10030434	ARRA - Design Of Peptide Entry Inhibitors & Del	93.701	21,853
6922662	10030434	ARRA - Design Of Peptide Entry Inhibitors & Del	93.701	91,220
Total for 93.701				113,073

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University of California-San Diego		Total for Weill Medical College		113,073
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922643	10307756	ARRA - Ocean Observatories Initiative	47.082	262,203
		Total for 47.082		262,203
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922644	10307757	Ocean Observatories Initiative	47.050	6,206
		Total for 47.050		6,206
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920513	PO #10261302-005	Center For Nanotechnology For Treatment,	93.399	18,274
		Total for 93.399		18,274
		Total for University of California-San Diego		286,683
Universidad Central del Caribe				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920464	SUB UNDER PRIME 454-NS039408-10	Snrp Program At Ucc	93.853	8,958
6922628	SUB UNDER PRIME U54-NS039408-11	Snrp Program At Ucc	93.853	82,014
		Total for 93.853		90,972
		Total for Universidad Central del Caribe		90,972
Battelle-Pacific Northwest Laboratories				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922606	CONTRACT NO. 130168	Crri Nuclear Security Education Initiati	81.CCC	57,410
		Total for 81.CCC		57,410
		Total for Battelle-Pacific Northwest Laboratories		57,410
Addx Corporation				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922597	AGMT. DTD. 9/29/10	Financial Factors Moving Energy Prices	81.CCC	98,014
		Total for 81.CCC		98,014

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Total for Addx Corporation **98,014**

Rockefeller University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920778	R01DK085713-01	Modeling Human Hepatotropic Infections I	93.310	158,850
6922584	R01DK085713-02	Modeling Human Hepatotropic Infections I	93.310	342,268
		Total for 93.310		501,118
		Total for Rockefeller University		501,118

Vector Controls, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922475	AGMT DATED 6-28-10	Sttr - N10A-T036 Mitigation Of Usv Motio	12.CCC	21,000
		Total for 12.CCC		21,000
		Total for Vector Controls, Inc.		21,000

University of Wisconsin

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914562	K083643	Enabling Gravitational-Wave Astronomy On	47.049	61,601
		Total for 47.049		61,601
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920652	162K971	Multistability In Biological Networks	93.859	2,882
6922440	162K971	Multistability In Biological Networks	93.859	88,554
		Total for 93.859		91,436
		Total for University of Wisconsin		153,037

University of Massachusetts

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920904	6114287/RFS900203	ARRA - A Mobile Enhancing Technology To Promote	93.701	163,631
6922436	6114287/RFS900203	ARRA - A Mobile Enhancing Technology To Promote	93.701	127,854
		Total for 93.701		291,485

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916777	SUBAWARD NO. 08-004588-A00 PO#0001225507	Interactive Vision Tools To Interact And	47.074	77,225
		Total for 47.074		77,225
		Total for University of Massachusetts		368,710

Boston Dynamics, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917682	AGMT. DTD. 8/15/08	Squishbot (Soft Quietshape-Shifting Robo	12.CCC	901
6922387	SUBCONTRACT 20100728	High Torque Density Electromagnetic Moto	12.CCC	441,914
		Total for 12.CCC		442,815
		Total for Boston Dynamics, Incorporated		442,815

University of Arizona

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922356	Y560211	3D Holographic Display Technology With L	12.910	69,839
		Total for 12.910		69,839

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920932	Y553501	A Spatial Spectral Volume Holographic Im	93.394	131,914
6921480	Y553501	Fabricated Equipment - Confocal Volume H	93.394	2,372
		Total for 93.394		134,286
		Total for University of Arizona		204,125

Aurora Flight Sciences RDC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921659	AGREEMENT DATED 3/28/10	Extensible Data Set Architecture For Sys	43.CCC	24,305
6922354	AFS10-0647	Autonomous Landing At Unprepared Site Fo	43.CCC	13,243
		Total for 43.CCC		37,548
		Total for Aurora Flight Sciences RDC		37,548

Vanderbilt University

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920844	VUMC36112	Etiological Studies Of Gastric Carcinoma	93.393	37,570
6922351	VUMC36112	Etiological Studies Of Gastric Carcinoma	93.393	148,594
		Total for 93.393		186,164
		Total for Vanderbilt University		186,164

Supercon

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922314	STTR AGMT. DTD 6/1/10	Development Of High Current 2G Hts Cabi	81.049	29,910
		Total for 81.049		29,910
		Total for Supercon		29,910

Florida State University Foundation, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917413	SUBAWARD NO. R00907	Task 3.4 Slip Ring Motors For Ship Propu	12.CCC	25,254
6917414	SUBAWARD NO. R00907	Task 3.5 Electric Distribution Systems S	12.CCC	45,978
6917415	SUBAWARD NO. R00907	Task 3.5 Electric Distribution Systems S	12.CCC	95,456
6917416	SUBAWARD NO. R00907	Task 3.6 Control And Protection Systems	12.CCC	116,536
6917417	SUBAWARD NO. R00907	Task 3.7 Research Integration And Techno	12.CCC	103,344
6917497	SUBAWARD NO. R00907	Esrdc Integration And Technology	12.CCC	24,638
6917498	SUBAWARD NO. R00907	Esrdc Board	12.CCC	117,441
6922251	SUBAWARD NO. R00907	Contra Rotating Propeller Test Bed Devic	12.CCC	15,768
		Total for 12.CCC		544,415

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918453	SUBAWARD NO. R01017	Fighter Jet Aircraft Noise Suppression U	12.300	9,163
		Total for 12.300		9,163
		Total for Florida State University Foundation, Incorporated		553,578

Industrial Economics, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922249	5600-MIT	Identification Of Ocs Renewable Energy S	15.CCC	11,230
		Total for 15.CCC		11,230
		Total for Industrial Economics, Inc.		11,230

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Children's Hospital Boston		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6922227	74401	Image-Guided Interacardiac Beating Cardi	93.837	28,887
				Total for 93.837		28,887
Children's Hospital Boston		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6920942	80295	Cps: Medium: Programmable Second Skin To	47.070	51,751
				Total for 47.070		51,751
				Total for Children's Hospital Boston		80,638

University of Southern California

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920697	PO 137773 UNDER NRO CONTRACT NO. 06-C-0249	Opera Software Architecture (Osa)	12.CCC	115,368
6921489	P.O. 141193	Neuromorphic Visual System For Intellige	12.CCC	296,663
6921551	P.O. 141193	Desimone Child Account	12.CCC	340,018
		Total for 12.CCC		752,049
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920886	AGMT. H42864 UNDER 2-R01-EY01356-06	Advanced Imaging For Glaucoma	93.867	29,499
		Total for 93.867		29,499
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920416	137760	Intelligent Coordination And Adaptive Ci	12.300	143,782
6920504	138802	Antidote: Adaptive Networks For Threat A	12.300	28,611
6921645	138802	Fabricated Equipment: Optically-Guided U	12.300	17,236
		Total for 12.300		189,629
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920793	138822	ARRA - Ri: Medium: Deciphering National Languag	47.082	122,964
		Total for 47.082		122,964

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922218	PO 119512/EAR-0529922	Child Account: Collaborative Research Sc	47.050	60,108
		Total for 47.050		60,108
		Total for University of Southern California		1,154,249

Applied Physical Sciences Corp.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922207	APS-10-11	Str: Deep Sea Operations (Dsop)	12.CCC	50,000
		Total for 12.CCC		50,000
		Total for Applied Physical Sciences Corp.		50,000

Duke University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921607	10-AFRL-1022	Aeromechanics Response In High Performan	12.CCC	60,817
		Total for 12.CCC		60,817
6922182	U01-HL096720	Cell Phone Intervention Trial For Young	93.837	81,979
		Total for 93.837		81,979

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922037	10-DARPA-1102	The Multiscale Optical Sensor Array Imag	12.910	145,337
		Total for 12.910		145,337
		Total for Duke University		288,133

Research Foundation S.U.N.Y.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921013	1078897-2-50158	Molecular Toxicology Of Dna Adducts - Pr	93.113	-14
6922168	1087317-2-54037	Molecular Toxicology Of Dna Adducts	93.113	28,548
		Total for 93.113		28,534
		Total for Research Foundation S.U.N.Y.		28,534

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Burke Medical Research Institute		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6921015	SUBCONTRACT UDR. GRANT #1-R21-HD060999-01	ARRA - Subaward: Transcranial Direct Current St	93.701	-28
		6922152	SUBCONTRACT UDR. GRANT #1-R21-HD060999-01	ARRA - Subaward: Transcranial Direct Current St	93.701	67,966
				Total for 93.701		67,938
				Total for Burke Medical Research Institute		67,938

Woods Hole Oceanographic Institution		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6915384	AGMT. NO. A100529	Muri: Underwater Acoustic Propagation An	12.300	506
		6915893	AGMT. NO. A100529	A. Baggeroer Child	12.300	2,846
		6921145	AGMT. NO. A100529	G. Wormell Child	12.300	35,889
		6922136	A100706	Full-Scale Measurement And Prediction Of	12.300	21,552
				Total for 12.300		60,793

Woods Hole Oceanographic Institution		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6920165	A100642	The Woods Hole Center For Oceans And Hum	47.050	134,654
				Total for 47.050		134,654
		6917622	AGMT. NO. A100589	Oxidatively Damaged Nucleic Acids In Mar	93.113	7,045
				Total for 93.113		7,045
				Total for Woods Hole Oceanographic Institution		202,492

UES, Inc.		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6921322	PO. S-875-050-001	Semi-Solid Flow Cells: Low-Cost, Ultrahi	12.CCC	227,828
		6922119	PO. S-875-080-002	Ultrahigh Energy Density Nanomaterials C	12.CCC	123,344
				Total for 12.CCC		351,172
				Total for UES, Inc.		351,172

Luna Innovations, Inc.

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922086	STTR SUBCONTRACT UNDER DE - C8ER86348 (1927-DOE-2T)	Low Drift Temperature Sensor Gen Iv Simu	81.049	168,379

Total for 81.049
Total for Luna Innovations, Inc.

Mass. Eye And Ear

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898348	AGMT. DTD. 7/22/05/MEEI #60019	Development Of A Technological Platform	47.070	1,585
		Total for 47.070		1,585

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898683	AGMT. DTD. 9/13/05	Auditory Neural Coding Of Speech	93.173	-1,627
6918861	PO F272662/2-R01-DC005755-06A1	Bilateral Cochlear Implants: Physiology	93.173	53,227
6922079	MEEI 30423	Auditory Neural Coding Of Speech	93.173	183,290
		Total for 93.173		234,890
		Total for Mass. Eye And Ear		236,475

Triquint Semiconductor, LP

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898819	PO 5029342	Wide Band Gap Semiconductors For Rf Appl	12.CCC	148,540
6922065	PO 5073526	Darpa Next Project	12.CCC	253,458
		Total for 12.CCC		401,998
		Total for Triquint Semiconductor, LP		401,998

Physical Sciences, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919826	SC49378-1626	Sbir: Suraface Plasmon Enhanced Optical	12.CCC	141,293
		Total for 12.CCC		141,293
6922048	SC52197-6237	Plasmonics For Energy Generation	12.800	29,986
		Total for 12.800		29,986

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Total for Physical Sciences, Incorporated **171,279**

Rutgers University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922031	SUBAWARD #4000 - PO #S1363788	ARRA - Genome-Wide Chromatin Modification Targe	93.701	129,069
Total for 93.701				129,069

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917789	1043530/4-29429/10578	Afirm: Langer Nerve Project	12.420	484,818
6918003	00003418/4-29429/10578	Bioactive Polymer Scaffolds For Repair O	12.420	97,177
6919730	00003418/4-29429/10578	Afirm: Langer Ear Project	12.420	27,091
6922010	W18XWH-08-2-0034	Isolation And Expansion Of Native Vascul	12.420	337,802
Total for 12.420				946,888
Total for Rutgers University				1,075,957

Evolved Machines Federal Contracting, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6922027	HR0011-10-C-0032	Neovision 2 - Next Generation Visual Obj	12.CCC	468,555
Total for 12.CCC				468,555
Total for Evolved Machines Federal Contracting, Inc.				468,555

University of Pennsylvania

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918026	549969	Coverage By Teams Of Autonomous Ground A	12.CCC	15,783
6921931	549969	Child Account: Roy: Coverage By Teams Of	12.CCC	42,055
Total for 12.CCC				57,838

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897818	544252	Swarms: Scallable Swarms Of Autonomous R	12.431	138,067
Total for 12.431				138,067

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920502	R01-EB008396-03	Engineering Multicellular Tissue Structu	93.286	319,469
Total for 93.286				319,469

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 Massachusetts Institute of Technology
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Total for University of Pennsylvania **515,374**

Brown University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916449	PO #P9966642	Biologically Inspired Flight For Micro A	12.800	210,919
6920882	00000272	Multi-Scale Fusion Of Information For Un	12.800	205,851
6920918	00000272	Willcox Child Account	12.800	178,027
		Total for 12.800		594,797

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919097	SUBAWARD 00000207	Constraints On Phonological And Morpholo	93.865	55,450
		Total for 93.865		55,450

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921051	SUBAWARD 0000276; P.O. P261163	Multiscale Modeling And Parallel Simulat	93.839	257,996
6921890	SUBAWARD 0000276;P.O. P261163	Multiscale Modeling And Parallel Simulat	93.839	41,002
		Total for 93.839		298,998
		Total for Brown University		949,245

Sri International

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921577	61-000759	Robust Combined Face And Ocular Acquisit	12.CCC	100,424
		Total for 12.CCC		100,424

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920650	27-001343, RELEASE 1	Base Period	12.910	-6,300
6921888	27-001343, RELEASE 1	Option 1 - Phase 2	12.910	33,803
		Total for 12.910		27,503

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919662	SUBAGREEMENT 33-000075	Nuclear Energy Release From Metal Deuter	12.351	7,176
		Total for 12.351		7,176

**Appendix A-3 - Detail
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916649	SUBCONTRACT NO. 59-001315	Madrigal Database System For Teh Advance	47.050	132,863
		Total for 47.050		132,863
		Total for Sri International		267,966

University of New Hampshire

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921871	SUBCONTRACT NO. 10-071	Phase B: Radiation Belt Storm Probes - E	43.CCC	92,370
		Total for 43.CCC		92,370

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918756	SUBAWARD NO. 09-038	Proposal To Test Sensors For Detecting T	11.472	12,790
		Total for 11.472		12,790
		Total for University of New Hampshire		105,160

SURA / Jefferson Lab

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914433	JSA-06-C2694	Hall-C Compton Polarimeter For Jefferson	81.CCC	-140
		Total for 81.CCC		-140

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921867	P.O. 10-P2471	Experimental Research Supervision At Jef	81.049	14,334
		Total for 81.049		14,334
		Total for SURA / Jefferson Lab		14,194

Ferro Solutions, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921765	SBIR AGMINT DATED 4/15/10	Phase I Sbir: Wireless Optical Neuromodu	93.CCC	130,656
		Total for 93.CCC		130,656
		Total for Ferro Solutions, Inc.		130,656

L3 Communications

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920745	SUBCONTRACT #M152981	Phase II: Advanced Technology Demonstrat	97.CCC	218,278
6921745	SUBCONTRACT #M152981	Phase III: Advanced Technology Demonstra	97.CCC	68,840
		Total for 97.CCC		287,118
		Total for L3 Communications		287,118

Princeton University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919906	SUBAWARD 00001811	Highly Extensible Programmable Biosensin	12.431	69,232
		Total for 12.431		69,232

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921076	00001736	Fabricated Equipment - Max Radon Mitigat	47.049	22,480
		Total for 47.049		22,480

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897077	00000917	Muri: Acoustic Rapid Environmental Asses	12.300	7
6915084	00000917	Optimal Asset Distribution For Environme	12.300	-189
		Total for 12.300		-182

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920547	SUBAWARD NO. 00001702	Energy Frontier Research Center In Combu	81.049	198,944
		Total for 81.049		198,944

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921113	SUBAWARD NO 00001760	Gsrc Marco: Network-Driven Computing	12.910	125,974
		Total for 12.910		125,974

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919497	00001652	Advanced Plasma Propulsion	12.800	112,311
		Total for 12.800		112,311

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921710	SUBAWARD 00001828	Csr-Ehs A Space And Resource Aware Compu	47.070	44,817
6921711	SUBAWARD 00001836	Csr: Ehs: Flow Based Computer Systems Ar	47.070	47,933
		Total for 47.070		92,750
		Total for Princeton University		621,509

Nitronex Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921681	AGMT. DTD 4/27/10	Sbir: Device Level Thermal Management So	12.CCC	86,872
		Total for 12.CCC		86,872
		Total for Nitronex Corporation		86,872

1366 Technologies, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921654	AGRMT SIGNED APRIL 2, 2010 DE-AR0000031	ARRA - 1366 Direct Wafer: Enabling Terawatt Pho	81.135	973
		Total for 81.135		973
		Total for 1366 Technologies, Incorporated		973

Whitehead Institute/Biomedical Research

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921571	11-1640-3056	ARRA - Chaperone Protein & Protein Conformation	93.701	43,445
		Total for 93.701		43,445
		Total for Whitehead Institute/Biomedical Research		43,445

University of Texas - Austin

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921569	UTA09-01181	Iter Ece Diagnostic Conceptual Design	81.CCC	30,619
		Total for 81.CCC		30,619
6918867	UTA08.950	The Interface Of Infrast, Markets, & Nat	47.041	111,969
		Total for 47.041		111,969

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914683	UTA06-788	Rethinking Mobile Ad Hoc Networks: A No	12.630	97,050
		Total for 12.630		97,050
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914675	SUBAWARD UTA06-845	Netl: Mechanisms Leading To Co-Existence	81.089	74,743
		Total for 81.089		74,743
		Total for University of Texas - Austin		314,381

ERC, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920628	RSO91114	Spacecraft Engineering Research	12.CCC	-4,623
6921454	RS1000052	Development Of Omniphobic Surfaces With	12.CCC	161,716
		Total for 12.CCC		157,093
		Total for ERC, Inc.		157,093

Orbital Sciences Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921450	3021004004	Darpa F6 Value-Centric Design Methodolog	12.CCC	6,005
		Total for 12.CCC		6,005
		Total for Orbital Sciences Corporation		6,005

LongWave Photonics LLC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921447	RESEARCH AGMT UNDER NINXL0CF71P	Str: Terahertz Quantum Cascade Laser Ba	43.CCC	17,634
		Total for 43.CCC		17,634
		Total for LongWave Photonics LLC		17,634

NEROC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899471	AST-0457585	Mileura Wide-Field Array Science And Tec	47.049	370,466
6899980	AST-0618401	Developmentof A Wideband Digital Spectro	47.049	4,143

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915784	AST-0705062	Development of A Wideband Burst Mode Data	47.049	-101,505
6916834	AST-0722168	Mri: Development Of A Cooled Sapphire O	47.049	46,688
6918040	AST-0807843	Techniques Of Submm-Vlbi: Observing An E	47.049	93,522
6918926	AST-0821321	Mri: Acquisition Of An Archive For The M	47.049	49,402
6919322	AST-0457585	Mileura Wide-Field Array Science And Tec	47.049	26,613
6920030	AST-0908731	Ultra Wideband Vlbi:Origins Of Extragala	47.049	202,663
6920133	AST-0905844	Ati: High Sensitivity Vlbi Arrays: Towar	47.049	897,640
6920405	AST-0922984	Mri Acquisition Of Stable Hydrogen-Maser	47.049	115,324
6921422	AST-0705062	Fab Eq - Blast Modules	47.049	61,265
6921429	AST-0722168	Cryogenic Sapphire Oscillator System - F	47.049	74,342
		Total for 47.049		1,840,563

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918253	DUE-0817136	Undergraduate Science And Technology Edu	47.076	215,265
		Total for 47.076		215,265

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899472	AST-0457585	Mileura Wide-Field Array Science And Tec	47.000	264,300
		Total for 47.000		264,300
		Total for NEROC		2,320,128

Brookhaven National Laboratory

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921421	157503	Brookhaven Sub: Platinum Monolayer Oxyge	81.CCC	70,246
		Total for 81.CCC		70,246
		Total for Brookhaven National Laboratory		70,246

UtopiaCompression Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921383	RES. AGMT. DATED 1/28/10	Synergetic Design Of A Five-Fingered Rob	12.CCC	0
		Total for 12.CCC		0
		Total for UtopiaCompression Corporation		0

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University of California - San Francisco

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921298	4714SC	Experimentally Validated Mathematical Mo	93.394	12,236
		Total for 93.394		12,236
		Total for University of California - San Francisco		12,236

The Ohio State University Foundation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919092	FOUNDATION PROJECT #60013800	Empirical Estimation Of Information Meas	12.CCC	153,119
		Total for 12.CCC		153,119
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918097	60014918	Stochastic Control Of Multi-Scale Networ	12.431	180,918
		Total for 12.431		180,918

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921207	PO RF01227732 / RF01192687 PROJECT NO. 60023094	Automated, Flexible And Massively Parall	47.041	67,601
		Total for 47.041		67,601

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899599	FOUNDATION PROJECT #60006916	Muri- Integrated Fusion, Performance Pre	12.800	147,097
6899946	FOUNDATION PROJECT #60006916	Willsky - Child	12.800	328,561
		Total for 12.800		475,658
		Total for The Ohio State University Foundation		877,296

Nemometrics LLC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920781	AGMT DTD 11/03/09 UNDER DE-SC0002231	Str Phase I: Lighting With No Watt Lef	81.049	165,589
6921202	STTR SUBCONTRACT UNDER DE-SC0003575	ARRA - Strr: Nonintrusive Utility Monitoring -	81.049	-102
		Total for 81.049		165,487
		Total for Nemometrics LLC		165,487

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University of Tennessee						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6921172	SUBGRANT NO. 0R12410-001.04	Mapping, Characterization And Analysis O	43.000	8,757		
		Total for 43.000		8,757		
		Total for University of Tennessee		8,757		
University of Utah						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6918968	10007909-MIT	Visualization Of High-Order Finite Eleme	12.431	35,379		
		Total for 12.431		35,379		
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6921157	10014858-02	Improving Health Outcomes Through Comput	93.847	46,313		
		Total for 93.847		46,313		
		Total for University of Utah		81,692		
Florida Institute of Technology						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6921131	AGMNT DATED 11-20-09	Acquisition Of Long-Duration, Low-Gravit	43.CCC	1,241		
		Total for 43.CCC		1,241		
		Total for Florida Institute of Technology		1,241		
NanoLab, Inc.						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6921064	STTR AGMT. DTD 1/1/10	Multifunctional Nanocomposite Structures	12.CCC	23,676		
		Total for 12.CCC		23,676		
		Total for NanoLab, Inc.		23,676		
Microelectronics Advanced Research Corp.						
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>		
6895309	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	-100,550		
6895310	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	-25,073		

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895311	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	-19,340
6895312	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	-42,573
6895314	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	-86,615
6920985	NO. 2009-MT-2051	Columbia University	12.CCC	84,443
6920986	NO. 2009-MT-2051	Cornell University	12.CCC	328,047
6920987	NO. 2009-MT-2051	Harvard University	12.CCC	157,176
6920988	NO. 2009-MT-2051	Penn State	12.CCC	205,396
6920989	NO. 2009-MT-2051	University Of Pennsylvania	12.CCC	133,452
6920990	NO. 2009-MT-2051	Purdue University	12.CCC	721,268
6920991	NO. 2009-MT-2051	Stanford University	12.CCC	1,222,124
6920992	NO. 2009-MT-2051	Suny Albany	12.CCC	127,065
6920993	NO. 2009-MT-2051	University Of California Berkeley	12.CCC	695,064
6920994	NO. 2009-MT-2051	University Of California San Diego	12.CCC	67,904
6920995	NO. 2009-MT-2051	University Of Illinois Chicago	12.CCC	259,359
6920996	NO. 2009-MT-2051	University Of Massachusetts	12.CCC	84,614
6920997	NO. 2009-MT-2051	University Of Texas Austin	12.CCC	178,488
6920998	NO. 2009-MT-2051	University Of Texas Dallas	12.CCC	211,363
6921000	NO. 2009-MT-2051	Antoniadis	12.CCC	265,258
6921001	NO. 2009-MT-2051	Bulovic	12.CCC	33,215
6921002	NO. 2009-MT-2051	Dealamo	12.CCC	227,574
6921003	NO. 2009-MT-2051	Fitzgerald	12.CCC	148,956
6921004	NO. 2009-MT-2051	Hoyt	12.CCC	181,648
6921005	NO. 2009-MT-2051	Jing Kong	12.CCC	53,380
6921006	NO. 2009-MT-2051	Tomas Palacios	12.CCC	159,145
6921010	NO. 2009-MT-2051	Dana Weinstein	12.CCC	144,764
6921011	NO. 2009-MT-2051	Program Admin	12.CCC	376,075
		Total for 12.CCC		5,791,627

Total for Microelectronics Advanced Research Corp.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920983	SUBCONTRACT #1359-S001	Catheter Guidance System For Rf Ablation	93.837	522,939
		Total for 93.837		522,939
		Total for InfoScitex Corporation		522,939

DSO National Laboratories

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920974	SUBAWARD #DSOCC09210	Transfer Learning For Adaptive Relation	12.910	35,381
		Total for 12.910		35,381
		Total for DSO National Laboratories		35,381

University of Louisville Research Foundation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916470	SUBAWARD NO. ULRF 05-0583-01 PO TBD	Nirt: Directed Self-Assembly Of Suspende	47.041	22,424
		Total for 47.041		22,424
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920973	SUBAWARD NO. ULRF 09-0532-01	Enhancement Of Excition Dissociation In	47.000	14,438
		Total for 47.000		14,438
		Total for University of Louisville Research Foundation		36,862

ExplorationWorks

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920945	AGREEMENT DATED 10/9/09	Montana'S Big Sky Space Education: The N	43.CCC	55,258
		Total for 43.CCC		55,258
		Total for ExplorationWorks		55,258

University of Minnesota

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917008	X5336645105	Radiation Belt Storm Probe Efw Project	43.CCC	3,182
		Total for 43.CCC		3,182
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920941	A000649301	Towards A Theory For Network Robustness	12.351	77,250
		Total for 12.351		77,250
		Total for University of Minnesota		80,432

National Academy of Sciences

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920927	HR 20-83 (001)	Economic Changes Driving Future Freight	20.200	494,601
		Total for 20.200		494,601
		Total for National Academy of Sciences		494,601

Symmetricon, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919655	PO EA39380BV	Miniature Cold-Atom Frequency Standard	12.CCC	143,450
6920881	PO EA39380BV	Fabricated Equipment - Miniature Cold-At	12.CCC	36,189
		Total for 12.CCC		179,639
		Total for Symmetricon, Inc.		179,639

Rehabilitation Institute of Chicago

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920877	AGREEMENT DATED 10/29/2009	Development Of A Neural Interface For Po	12.42	111,175
		Total for 12.42		111,175
		Total for Rehabilitation Institute of Chicago		111,175

Texas A & M

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920809	A7991	Computational And Single Molecule Analys	93.859	75,641
		Total for 93.859		75,641
6917014	SUBAWARD NO. 08-003	Field Validation Of General Methodology	11.419	665
		Total for 11.419		665
		Total for Texas A & M		76,306

Weston Geophysical Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920794	FA8718-09-C-0013	Estimating The Uncertainty And Predictiv	12.CCC	123,863
		Total for 12.CCC		123,863

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918467	SBIR AWD NO DE-FG02-07ER84683	Enhanced Monitoring Of Geologic Carbon S	81.CCC	5,598
		Total for 81.CCC		5,598
		Total for Weston Geophysical Corporation		129,461

Research Foundation of SUNY-Albany

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920792	09-18	Rna Modifications As Biomarkers Of Envir	93.113	189,003
		Total for 93.113		189,003

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919101	SUBCONTRACT AGMT. #08-58	Index Program: Supplemental Projects	11.CCC	-3,654
6919154	SUBCONTRACT AGMT. #08-58	Nri/Index Program: Supplemental Project	11.CCC	95,843
6919155	SUBCONTRACT AGMT. #08-58	Nri/Index Program: Supplemental Project	11.CCC	85,645
6919724	SUBCONTRACT AGMT. #08-58	Index Program: Supplemental Projects	11.CCC	14,407
6919726	SUBCONTRACT AGMT. #08-58	Index Program: Supplemental Projects	11.CCC	121,312
		Total for 11.CCC		313,553
		Total for Research Foundation of SUNY-Albany		502,556

Atmospheric and Environmental Research, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920768	AGMT DATED 09/23/09	Investigation Of Cassini Data For The Ci	43.000	23,347
		Total for 43.000		23,347
		Total for Atmospheric and Environmental Research, Incorporated		23,347

IRobot Corporation

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918293	PO 48486	A Soft, Flexible, Mobile System	12.CCC	94,919
6918762	PO#50905 NOSTRA:54931	Str: Nostra: Power System Condition Mon	12.CCC	80,616
6919184	PO 48486	Fabricated Equipment-Darpa Chembots	12.CCC	2,514
6920705	PO 48486	Kim Child Account	12.CCC	-40
		Total for 12.CCC		178,009
		Total for IRobot Corporation		178,009

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DRS Sensors & Targeting Systems, Inc			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6920519	PO# S9-9004723	Modeling Of Nanowire Arrays For Quantum	12.910
		Total for 12.910	56,387
		Total for DRS Sensors & Targeting Systems, Inc	56,387
The Research Foundation - Stony Brook University			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6920499	51055	Northeastern Chemical Energy Storage Cen	81.049
		Total for 81.049	338,413
		Total for The Research Foundation - Stony Brook University	338,413
Carnegie Institution of Washington			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6920454	SUBCONTRACT NO. DTM-325-1018	Messenger Discovery Mission To Mercury	43.CCC
		Total for 43.CCC	96,879
		Total for Carnegie Institution of Washington	96,879
Alliance for Sustainable Energy, LLC			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6920382	SUBCONTRACT NO. XEU-0-9920-01	Research To Support Renewable Electricit	81.087
		Total for 81.087	242,876
		Total for Alliance for Sustainable Energy, LLC	242,876
Indiana University			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6920381	SUBAWARD NO. IUB-4840215-MIT	Transactive Art: An Inclusive Game-Base	47.070
		Total for 47.070	107,684
		Total for Indiana University	107,684
Harris Corporation			

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920183	A000110991	Quantum Sensor Program	12.CCC	345,873
		Total for 12.CCC		345,873
		Total for Harris Corporation		345,873
Nano-C Inc.				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920084	AGMT. DTD. 4/23/09	Large-Scale Manufacture Of Exclusively C	47.082	-15,585
		Total for 47.082		-15,585
		Total for Nano-C Inc.		-15,585

University of Wisconsin-Madison

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919979	SUBAWARD 124K784	Basic Studies Of Disributed Limiters Fo	12.800	186,146
		Total for 12.800		186,146
University of Wisconsin-Madison				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918294	036K282	Global Benchmarking Project Springboard	98.002	54,658
6918295	036D282	Basis Grant - Ifmr Expenses	98.002	247,686
6918296	036D282	Basis Grant - Harvard Expenses	98.002	6,720
		Total for 98.002		309,064
		Total for University of Wisconsin-Madison		495,210

University of California-Riverside

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919683	S-0000343	Graphene Strain-Tronics	12.300	57,403
		Total for 12.300		57,403
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916819	S-00000257	Natural User Interfaces For Conceptual D	47.041	8,242
		Total for 47.041		8,242

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919960	S-000354	Casimir Force Neutralization And Dynamic	12.910	103,478
		Total for 12.910		103,478
		Total for University of California-Riverside		169,123

ICX Nomadics

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919941	NOM-1605-003	Analyte Responsive Microcantilever Senso	12.CCC	-419
		Total for 12.CCC		-419
		Total for ICX Nomadics		-419

Advanced Mechanical Technologies, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919874	AMTI-JN2415	Str: Cryogenic Cooling Technologies For	43.CCC	85,884
		Total for 43.CCC		85,884
		Total for Advanced Mechanical Technologies, Incorporated		85,884

ATA Engineering

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919870	NNX09CA33C	Phase II - Engine Air Brake	43.CCC	-3,906
		Total for 43.CCC		-3,906
		Total for ATA Engineering		-3,906

Aptima, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918705	SUBCONTRACT # 0488-1411	Cartos: Collaborative Assistance And Rap	12.CCC	-4,317
6919838	SUBCONTRACT # 0488-1411	Fab. Equip: Sociometric Badge System	12.CCC	30,520
		Total for 12.CCC		26,203
		Total for Aptima, Inc.		26,203

Brookhaven Science Associates, LLC

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916676	125898	Polarized Electron Source Research And D	81.CCC	65,618
6917879	135819	Development Of Low Mass Detector Modules	81.CCC	-10,851
6918383	137005	Construction Of The Forward Gem Tracker	81.CCC	127,061
6919358	125898	Fabricated Equipment-Bnl Polarized Elect	81.CCC	91,226
6919664	137005	Fabricated Equipment-Star Forward Gem Tr	81.CCC	281,335
		Total for 81.CCC		554,389
		Total for Brookhaven Science Associates, LLC		554,389

Battelle-Research Triangle Park

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919621	SUBCONTRACT #TCN08235	High Performance Data Analysis Of Terrai	12.CCC	38,920
		Total for 12.CCC		38,920
		Total for Battelle-Research Triangle Park		38,920

University of Colorado

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919457	154-5647	Lunar University Node For Astrophysics R	43.002	24,877
		Total for 43.002		24,877
		Total for University of Colorado		24,877

Perceptronics Solutions, Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919452	N00014-09-C-0405	Automated Mission Scheduler (Ams)	12.CCC	9,541
		Total for 12.CCC		9,541
		Total for Perceptronics Solutions, Incorporated		9,541

Magnolia Optical Technologies, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919438	AGMT DTD. 4/7/09	Design And Development Of Silicon-Based	12.CCC	89,856
		Total for 12.CCC		89,856
		Total for Magnolia Optical Technologies, Inc.		89,856

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Joslin Diabetes Center					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6919202	AGMT UNDER 1-R01-EY019029-01	Role Of The Kallikrein-Kinin System In D	93.867	27,317	
		Total for 93.867		27,317	
		Total for Joslin Diabetes Center		27,317	

The Boeing Company					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6919199	PO 208542	Acoustic Assessment Of Very Quiet Hybrid	43.CCC	107,574	
		Total for 43.CCC		107,574	
		Total for The Boeing Company		107,574	

Rush University Medical Center					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6918729	2-P01-AG009466-18	Anatomic, Physiologic And Cognitive Path	93.866	10,278	
6918754	2-P01-AG009466-17	Anatomic, Physiologic And Cognitive Path	93.866	20,564	
		Total for 93.866		30,842	
		Total for Rush University Medical Center		30,842	

Genetix Pharmaceuticals					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6918741	AGMT. DTD. 10/7/08	Facilitation Of Atuologous Hemotopoietic	93.839	9,577	
		Total for 93.839		9,577	
		Total for Genetix Pharmaceuticals		9,577	

University of Illinois-Urbana Champaign					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6898644	2003-00972-06	Center For Advanced Materials For Water	47.041	10,011	
		Total for 47.041		10,011	

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6918707	SUBAWARD NO. 2008-02016-3; GRANT CODE A3718	Uic Muri: Passive And Active Control Of	12.800	264,669
		Total for 12.800		264,669
		Total for University of Illinois-Urbana Champaign		274,680

Applied Physics Lab of John Hopkins

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918668	SUB. CONTR. #943802	A Model-Based Approach To Robust Goal-Ba	12.CCC	-6,544
		Total for 12.CCC		-6,544
		Total for Applied Physics Lab of John Hopkins		-6,544

UNAVCO

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918636	SUB. UNDER EAR-0732947-03	Pbo Analysis Center Coordinator	47.050	48,496
		Total for 47.050		48,496
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915864	PO #02676	Geo Earth Scope Geochronology	47.000	24,750
6917525	SUB. UNDER EAR-735156-01	Unavco Community And Facility: Geodesy A	47.000	85,058
		Total for 47.000		109,808
		Total for UNAVCO		158,304

University of California - Santa Cruz

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918633	SO1822209	Metal-Semiconductor Nanocomposites For H	12.431	155,973
		Total for 12.431		155,973
		Total for University of California - Santa Cruz		155,973

Quantum Signal LLC

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918601	AGMT. DTD. 9/5/08	Str: A Unified Approach To Sensor Based	12.CCC	102,994

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6918602	AGMT. DTD. 9/5/08	Str: Efficient Stochastic Mobility Pred	12.CCC	16,230
		Total for 12.CCC		119,224
		Total for Quantum Signal LLC		119,224

New England Research, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918454	NNSA-08-45/DOE DE-AC52-08NA28751	Caucasus Seismic Information Network: In	81.CCC	-18,045
		Total for 81.CCC		-18,045
		Total for New England Research, Inc.		-18,045

Microbiotix, Inc

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918268	AGMT. DTD. 7/20/08	Antibiotic Potentiators Targeting Sos In	93.855	-26
		Total for 93.855		-26
		Total for Microbiotix, Inc		-26

Dartmouth College

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918261	SUBAWARD NO. 490	Modular Social Intelligence For Teaming	12.300	133,668
		Total for 12.300		133,668
		Total for Dartmouth College		133,668

Tufts Medical Center

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918149	5-P01-HL077378-05	Molecular Mechanisms Of Vascular Relaxat	93.837	19,001
		Total for 93.837		19,001
		Total for Tufts Medical Center		19,001

Aerospace Corporation

**Appendix A-3 - Detail
 Massachusetts Institute of Technology
 Federal Research Support - Passthrough - On Campus
 Fiscal 2011 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918046	PO #4600003761	Mit Support Of Development Of The Radiat	43.CCC	213,896
		Total for 43.CCC		213,896
		Total for Aerospace Corporation		213,896

Auburn University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917989	SUB AGREEMENT NO. 08-SFWS-209365.MIT	Land Use-Ecosystem-Climate Interactions	43.000	52,920
		Total for 43.000		52,920
		Total for Auburn University		52,920

Lankenau Institute for Medical Research

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917787	SUBAWARD 5-R01-CA115527-04	Targeted Nanoparticle Dna Delivery To Pr	93.395	38,363
6917796	SUBAWARD UDR. 5-R01-CA132091-03	Targeted Nanoparticle Dna Therapy For Ov	93.395	88,507
		Total for 93.395		126,870
		Total for Lankenau Institute for Medical Research		126,870

Soliant Energy

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917759	AGMT. DTD. 5/19/08	Culpepper: Design And Manufacturing Of D	81.087	-1,472
		Total for 81.087		-1,472
		Total for Soliant Energy		-1,472

Cornell University

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917411	46514-8593	A Technology Development Project For The	47.049	59,201
		Total for 47.049		59,201
		Total for Cornell University		59,201

Rite-Solutions

**Appendix A-3 - Detail
 Massachusetts Institute of Technology
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917308	RS08-101/TASK 001	Hsi Design Environment	12.CCC	-1
		Total for 12.CCC		-1
		Total for Rite-Solutions		-1

University of Illinois

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917203	2007-02206-01/GCA4399	Capitalizing On Research On Animal And H	12.300	559,650
		Total for 12.300		559,650
		Total for University of Illinois		559,650

National Institute of Aerospace

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917092	SUBAWARD NO. X08-7036-MIT	An Adaptive Control Technology For Safe	43.CCC	44,186
		Total for 43.CCC		44,186
		Total for National Institute of Aerospace		44,186

Museum of Science - Boston

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916937	4537-MIT-1	A Participatory Model For Integrating Co	47.076	15,661
		Total for 47.076		15,661
		Total for Museum of Science - Boston		15,661

Maricopa County Community College District

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915925	DUE-0702753-PO #335590	A New Systems View Of Electronics For 20	47.076	-109
		Total for 47.076		-109
		Total for Maricopa County Community College District		-109

Electric Power Research Institute

**Appendix A-3 - Detail
 Massachusetts Institute of Technology
 Federal Research Support - Passthrough - On Campus
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898216	EP-P21701/C10623	Gis--Crosscut--Mit	81.089	13,026
6915347	EP-P22706/C11057	West Coast Regional Carbon Sequestration	81.089	7,651
		Total for 81.089		20,677
		Total for Electric Power Research Institute		20,677

Texas Engineering Experiment Station

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915242	SUBAWARD NO. 38221	Computational And Single Molecule Charac	93.853	-5,438
		Total for 93.853		-5,438
		Total for Texas Engineering Experiment Station		-5,438

A123 Systems, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914891	SUBCONTRACT UNDER DOE PRIME COOPERATIVE AGMT. DE-FC26-05NT42403	Thermodynamic Modeling, X-Ray And Neutro	81.CCC	-4,591
		Total for 81.CCC		-4,591
		Total for A123 Systems, Inc.		-4,591

University of Hawaii

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914649	Z792093-06	C-More Child - Chisholm	47.074	345,110
6914650	Z792093-06	C-More Child - Delong	47.074	477,079
6914651	Z792093-06	C-More Child - Boyle	47.074	94,224
		Total for 47.074		916,413
		Total for University of Hawaii		916,413

University of California/Davis

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914503	SUBAWARD NO. SUB 0600176	Institute For Quantum Simulations Of Mat	81.049	83,184
		Total for 81.049		83,184
		Total for University of California/Davis		83,184

**Appendix A-3 - Detail
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Lehigh Univeristy		<u>WBS Title</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>	Nirt-Goali: Solution Based Dispersion,	61,594
6914501	541352-8001		
		Total for 47.041	61,594
		Total for Lehigh Univeristy	61,594

Universal Technology Corporation		<u>WBS Title</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>	Ultra-High Energy Density Nanomaterials	-20,251
6912935	09-S568-060-01-C1		
		Total for 12.CCC	-20,251
		Total for Universal Technology Corporation	-20,251

Kent State University		<u>WBS Title</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>	NsdI Materials Digital Library Pathway:	100,355
6899110	442197-P060507		
		Total for 47.076	100,355
		Total for Kent State University	100,355

University of North Carolina at Charlotte		<u>WBS Title</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>	Nirt: Nanometrology For Nanoscale Scien	11
6898583	2975-05-02055		
6898648	2975-05-02055	Nirt: Nanometrology For Nanoscale Scien	3,301
		Total for 47.041	3,312
		Total for University of North Carolina at Charlotte	3,312

Georgia State University		<u>WBS Title</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>	Spatiotemporal Coherent Control On The N	294
6898383	SUBCONTRACT GLV13-01		
		Total for 47.049	294
		Total for Georgia State University	294

Southwest Research Institute

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 Federal Research Support - Passthrough - On Campus
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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6893453	299433Q/SUB UNDER NASW-02008	New Horizon Science Team Member 05310-So	43.CCC	38,829
		Total for 43.CCC		38,829
		Total for Southwest Research Institute		38,829

Lowell Observatory

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6666200	PO 2011-78250 /PRIME NAS2-97-001	Sofia Instrument Development And Operati	43.CCC	114,265
		Total for 43.CCC		114,265
		Total for Lowell Observatory		114,265
		Total Passthrough		96,357,505

**Appendix B - Detail
Massachusetts Institute of Technology
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Department of Education

U.S. Department of Education

<u>Contract Number</u> P047A080317-11	<u>Contract Title</u> TRIO - Upward Bound	Cfdano 84.047A	<u>FY Expenses</u> 359,090
Total for 84.047A			359,090
<u>Contract Number</u> Q1841N100013	<u>Contract Title</u> Comprehensive Model to address High-Risk Alcohol Service and Consumption by Fraternity members	Cfdano 84.184H	<u>FY Expenses</u> 11,810
Q184H090103	Comprehensive, Campus/Community-Based Approach to Reducing Alcohol-Related Violence Among Fraternity and Sorority Students	84.184H	107,448
Total for 84.184H			119,258
<u>Contract Number</u> P170B060010	<u>Contract Title</u> Javits Fellowship: Frank	Cfdano 84.170B	<u>FY Expenses</u> -20,614
P170B070010-10	Javits Fellowship: Spinak	84.170B	15,831
Total for 84.170B			-4,783
<u>Contract Number</u> P017A080083	<u>Contract Title</u> Visualizing Cultures: Exploring the History and Cultures of Asia Through Visuals	Cfdano 84.170	<u>FY Expenses</u> 215,370
P170B050025	Javits Fellowships: Kinnan	84.170	-25,614
Total for 84.170			189,756
Total for U.S. Department of Education			663,321
Total for Department of Education			663,321

Nat'l Aero & Space Administration

NASA - Glenn Research Center

<u>Contract Number</u> NNX10AL44HH	<u>Contract Title</u> Improved Design for a Low Cost Parabolic - GF - R. Heller	Cfdano 43.000	<u>FY Expenses</u> 27,263
NNX10AN2IH	GSRP - Power Electronics - GF for M. Medlock	43.000	21,885
Total for 43.000			49,148
Total for NASA - Glenn Research Center			49,148

NASA - Goddard Space Flight Center

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
NNX06AH24H	GSRP Fellow: A. Assad	43,000	-442
NNX08BA18H	Moon Mystery: Investigating the Source of Ancient Lunar Rock Magnetization - GFP for E. Shea	43,000	3,902
NNX09AF65G	CDIO in Aerospace Engineering Education	43,000	238,216
NNX09AQ87H	Conditions of Early Solar Systems Volcanism - GFP for M. Krawczynski	43,000	29,364
NNX10AJ90A	CAN/National Needs Grant: Summer of Innovation Pilot	43,000	664,022
NNX10AJ90A	Kavli Center (Talented and Gifted Latino Astronomy Project)	43,000	29,690
NNX10AJ90A	Space Systems Laboratory (Zero Robotics)	43,000	74,559
NNX10AJ90A	MIT Edgerton Center (You Go Girls)	43,000	111,914
NNX10ANI5H	NESSF - Integration, Testing, and Flight - GF for J. Rutherford	43,000	23,851
	Total for 43,000		1,175,076

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
NNG05GK67G	Massachusetts Space Grant Consortium	43,CCC	224,004
NNX10AT92H	Massachusetts Space Grant Consortium	43,CCC	512,904
	Total for 43,CCC		736,908
	Total for NASA - Goddard Space Flight Center		1,911,984

NASA - Johnson Space Center

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
NNX10AC35A	Enhanced Planetary Surface Eva Mobility - GFP for J. Kaderka	43,000	15,573
	Total for 43,000		15,573
	Total for NASA - Johnson Space Center		15,573
	Total for Nat'l Aero & Space Administration		1,976,705

Miscellaneous Federal Govt.

Institute of Museum and Library Services

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
MA-04-10-0304-10	MFA - Engaging Communities	45,301	17,403
	Total for 45,301		17,403

**Appendix B - Detail
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National Endowment For The Arts		Total for Institute of Museum and Library Services	
<u>Contract Number</u> 11-4400-7070	<u>Contract Title</u> Stan Vanderbeek - The Cultural Intercom	<u>Cfdano</u> 45.024	<u>FY Expenses</u> 17,847
GRANT NO. 10-4400-7028	Tavares Strachan Exhibition with Catalogue	45.024	20,862
		38,709	38,709
National Endowment For The Humanities			
<u>Contract Number</u> FS-50246-10	<u>Contract Title</u> NEH Summer Seminar: Reading the English Encounter with the Americas, 1550-1610: Interdisciplinary Sources and Methods	<u>Cfdano</u> 45.163	<u>FY Expenses</u> 57,157
			57,157
			57,157
National Geospatial Intelligence Agency			
<u>Contract Number</u> HM1582-08-1-0027	<u>Contract Title</u> FY 08 DNI Postdoctoral Program - In Space Robotic Assembly (SRA)	<u>Cfdano</u> 12.630	<u>FY Expenses</u> 10,931
HM1582-09-1-0025	FY 09 DNI Postdoctoral Program -Dev and Application of Novel Molecular Wires	12.630	92,791
			103,722
			103,722
U.S. Department of Commerce - NOAA			
<u>Contract Number</u> NA 060AR4170203	<u>Contract Title</u> Regional Ocean Science Plan to Support Ecosystem - Based Management	<u>Cfdano</u> 11.417	<u>FY Expenses</u> 3,327
NA090AR4170009	Abigail Franklin MITSG Knauss Fellowship 2009	11.417	0
NA100AR4170233	MIT Sea Grant-NMFS Population Dynamics Sea Grant Fellowship	11.417	34,757
PENDING	Knauss Fellowship - Caitlin Frame	11.417	14,604
			52,688
			52,688
U.S. Department of Justice			
<u>Contract Number</u> 2005-WA-AX-0015	<u>Contract Title</u> MIT Violence Education, Prevention and Response Project	<u>Cfdano</u> 16.525	<u>FY Expenses</u> 5,699

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<u>Contract Number</u> 2009-WA-AX-0021	<u>Contract Title</u> MIT Violence Education, Prevention and Response Project	<u>Cfdano</u> 16.525	<u>FY Expenses</u> 66,115
Total for 16.525			71,814
Total for U.S. Department of Justice			71,814

U.S. Department of Transportation

<u>Contract Number</u> DTFH64-10-G-00027	<u>Contract Title</u> Eisenhower Graduate Fellowship: R. Clewlow	<u>Cfdano</u> 20.215	<u>FY Expenses</u> 4,825
Total for 20.215			4,825
Total for U.S. Department of Transportation			4,825

U.S. Environmental Protection Agency

<u>Contract Number</u> FP-91685901-0	<u>Contract Title</u> Graduate Fellow: Amanda Engler	<u>Cfdano</u> 66.514	<u>FY Expenses</u> -437
<u>Contract Number</u> FP-91690801-0	<u>Contract Title</u> Graduate Fellow: Hanan Karam	<u>Cfdano</u> 66.514	8,156
<u>Contract Number</u> FP-91713401-0	<u>Contract Title</u> Graduate Fellow: David Griffith	<u>Cfdano</u> 66.514	14,473
<u>Contract Number</u> FP-91716101-0	<u>Contract Title</u> Graduate Fellow: Valerie Karplus	<u>Cfdano</u> 66.514	16,964
Total for 66.514			39,156
Total for U.S. Environmental Protection Agency			39,156

U.S. Nuclear Regulatory Commission

<u>Contract Number</u> NRC-38-08-940	<u>Contract Title</u> Child Account: Us Nuclear Regulatory Commission Nuclear Education Grant Program: Faculty Development	<u>Cfdano</u> 77.CCC	<u>FY Expenses</u> 82,591
<u>Contract Number</u> NRC-38-08-958	<u>Contract Title</u> U.S. NRC Nuclear Education Graduate Fellowship Program	<u>Cfdano</u> 77.CCC	49,874
Total for 77.CCC			132,465
Total for U.S. Nuclear Regulatory Commission			132,465
Total for Miscellaneous Federal Govt.			517,939

National Science Foundation

<u>Contract Number</u> AST-0647787	<u>Contract Title</u> REU - Students	<u>Cfdano</u> 47.049	<u>FY Expenses</u> 76,094
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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
AST-0647787	REU - Teachers	47.049	39,396
AST-0747154	Participant Costs Child Account: CAREER: Building Rocky Planets: From Mercury and Vesta to GL 581C	47.049	23,847
AST-1003139	Seeking the Lost Interstellar Medium of Red-Sequence Galaxies - PDF for Kathy Cooksey	47.049	2,352
CHE-1041863	Directed Synthesis of a Pure Spin Liquid - Towards a Comprehensive theory of High-TC Superconductivity - PDF for D. Freedman	47.049	75,415
CHE-1041979	Ultrafast Energy Dynamics of Strongly Coupled Vibrational Systems	47.049	73,802
DMR-0504158	REU Child	47.049	7,679
DMS - 0803041	Postdoctoral Research Fellowship - B. Rhoades	47.049	3,000
DMS - 1004395	Postdoctoral Research Fellowship - K. Datcher	47.049	2,124
DMS-0545904	Participant Support Costs	47.049	15,000
DMS-0652630	FRG Collaborative Research Homological Mirror Symmetry and Its Applications	47.049	63,450
DMS-0703567	Postdoctoral Research Fellowship - S. Assaf	47.049	1,499
DMS-0739255	Image Statistics in Digital Forensics-PDF-K. Johnson	47.049	10,905
DMS-0803077	NSF Mathematical Sciences Fellowship-J. Taylor	47.049	250
DMS-0803083	Reduced Dimension Modeling of Slurry Flow in Peristaltic Pumping-PDF for J. Kao	47.049	1,563
DMS-0805838	Conference Proposal Talbot Workshops 2008-2010	47.049	3,317
DMS-0854764	FRG: Collaborative Research: Quantum Cohomology, Quantized Algebraic Varieties, and Representation Theory (budget revision)	47.049	120
DMS-0928515	Conference: Perspectives in Mathematics and Physics	47.049	4,439
DMS-0943108	Summer workshop on Homotopy Theory; Cambridge, MA	47.049	27,533
DMS-0943787	Participant Support Costs	47.049	136,939
DMS-1007096	Talbot Workshops: 2011 - 2013	47.049	19,057
DMS-1047530	Conference: Derived Categories of Algebro-Geometric Origin and Integrable Systems	47.049	34,374
DMS-1064420	Collaborative Research: AGNES. Algebraic Geometry NorthEastern Series	47.049	19,917
PHY-0551153	CUA - Sponsored Workshops	47.049	5,531
PHY-0551153	CUA-Support for TOPS Program	47.049	128,234
PHY-0653514	REU Supplement Strongly Interacting Quantum Mixtures of Ultracold Atoms	47.049	8,735
PHY-0757931	Physics Problems to Tutor Generic Expertise	47.049	61,439

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<u>Contract Number</u> PHY-1049389	<u>Contract Title</u> Collaborative Research: Conference for Undergraduate Women in Physics on January 15-16, 2011	<u>Cfdano</u> 47.049	<u>FY Expenses</u> 6,944
Total for 47.049			
<u>Contract Number</u> AST-0901985	<u>Contract Title</u> Gravitational - Wave Astronomy - P. F. J. Mandel	<u>Cfdano</u> 47.079	<u>FY Expenses</u> 1,131
OISE-0623565	IRES: US-India Research Experience for Global Scientists and Engineers	47.079	10,048
OISE-0623834	NSF/OISE/Workshop: A Proposal for a First US_China Workshop Series on Neutron Scattering Science and Technology, November 2006, Beijing, China	47.079	654
OISE-0941547	US-India Workshop: Distributed Development of the Principles and Applications of Digital Fabrication	47.079	20,584
Total for 47.079			
<u>Contract Number</u> DBI-0649152	<u>Contract Title</u> REU Site: Biological Engineering Research Experience for Undergraduates (BE REU)	<u>Cfdano</u> 47.074	<u>FY Expenses</u> 32,774
DBI-0804231	NSF minority Postdoctoral Fellowship for 2008-P. Welander	47.074	5,000
DBI-0905973	Non-Coding RNA's Direct Epigenetic - PDF L. Goff	47.074	5,817
DBI-1005055	REU Site: Biological Engineering Research Experience for Undergraduates (BE REU)	47.074	79,990
Total for 47.074			
<u>Contract Number</u> CCF-0948699	<u>Contract Title</u> Workshop: NSF: Cryptography in the Clouds	<u>Cfdano</u> 47.070	<u>FY Expenses</u> 6,904
CNS-0831612	GOALI-FIND: Optical Flow Switched Core Networks - PDF to be determined	47.070	17,386
CNS-0939080	Workshop: NSF FIND Workshop	47.070	3,508
CNS-1000965	Workshop Future Internet Architecture Summit	47.070	66,513
CNS-1041290	Broadening Participation at the Scratch@MIT Conference	47.070	16,250
CNS-1049123	NSF Workshop on Highly Controllable Dynamic Heterogeneous Networking	47.070	9,251
CNS-1049123	Participant Support Costs	47.070	47,470
DMS-0902649	Combinatorics of Quantum Groups - PDF P. Tingley	47.070	863
IIS-1036816	NSF Conference: 2nd International Conference on Computational Sustainability	47.070	32,670
IIS-1037986	2010 SIGMOD Programming Contest	47.070	21,745
IIS-1053105	Workshop: Frontiers in Computer Vision	47.070	15
Total for 47.070			
123,581			

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
IIS-1057908	WORKSHOP: Identifying Synergies and Fostering Collaborations in A Joint Meeting of the National Science Foundation and the National Endowment for the Arts - Non Participant Support	47.070	4,983
IIS-1057908	WORKSHOP: Identifying Synergies and Fostering Collaborations in A Joint Meeting of the National Science Foundation and the National Endowment for the Arts	47.070	30,864
IIS-1103422	Workshop: Social Remote Presence Robots	47.070	8,074
IIS-1115939	HRI Pioneers Workshop	47.070	27,109
IIS-1129526	SIGMOD Programming Contest 2011	47.070	4,623
IIS0-0948946	Support for Student Participation in the International Conference on Multimodal Interfaces/Machine Learning for Multimodal Interfaces '09	47.070	14,801
Total for 47.070			313,029
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
BCS-0726806	Doctoral Dissertation for Charuleka Varadharajan	47.075	2,160
BCS-0841282	Workshop of Formal Approaches to Maya Linguistics	47.075	3,299
BCS-0951620	Workshop on Rich Grammars From Poor Inputs	47.075	-227
BCS-1025309	Doctoral Dissertation Research: Discovering Semantic Primitives - GF for S. Piantadosi	47.075	10,214
BCS-1051566	Doctoral Dissertation Research: Online Control of Multisyllabic Speech Articulation based on Auditory Feedback - GF for S. Cai	47.075	498
SBE-0965259	Predictive Modeling of the Emergence and Development of Scientific Fields: Participant Support Costs	47.075	10,727
SES-0847853	Doctoral Dissertation Research: Crafting Life: A Sensory Ethnography of Constructive Biologies - GF for Hannah Roosth	47.075	1,461
SES-0956692	Doctoral Dissertation Research: When Worlds Collide: Terrestrial Places and Outer Spaces - GF for L. Messeri	47.075	2,667
SES-1057311	Doctoral Dissertation Research: Making Mathematics Manifest Material and Virtual Modes in Mathematical Research and Pedagogy - Graduate Fellowship - A. Steingart	47.075	3,478
SES-1057917	Doctoral Dissertation Research: Experimenting with Security: Mexican Biology and Biosecurity - GF for E. Wanderer	47.075	4,752
Total for 47.075			39,029

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<u>Contract Number</u> CHE-0936816	<u>Contract Title</u> ARRA - Cobalt-Based Water Oxidation Catalyst Formation at Metal Electrode Interfaces and Incorporation of Catalyst with Photoanode Materials	<u>Cfdano</u> 47.082	<u>FY Expenses</u> 108,268
DBI-0905968	ARRA - Postdoctoral Research Fellowships in Biology for FY 2009	47.082	4,884
DGE-0946798	ARRA - Graduate Research Fellowship Program - '09-'10	47.082	5,000
DGE-0946798	ARRA - Graduate Research Fellowship Program - '10-'11	47.082	2,452,917
	Total for 47.082		2,571,069
<u>Contract Number</u> CBET-0755825	<u>Contract Title</u> REU Supplement	<u>Cfdano</u> 47.041	<u>FY Expenses</u> 553
CMMI-0830134	REU Supplement - CAREER: A Design Data Analysis Approach to Early Stage Design Process Modeling	47.041	804
CMMI-1029040	Student Travel to 54th International Conference on Electron, Ion & Photon-Beam Technology & Nanofabrication	47.041	10,000
ECCS-1036108	Workshop on the Future of Carbon-Nanoscience and Engineering	47.041	7,000
ECCS-1036822	Funding Request for the Organization of a Short Course on Spin Transport and Devices during the 68th Device Research Conference	47.041	5,750
	Total for 47.041		24,107
<u>Contract Number</u> EAR-0451802	<u>Contract Title</u> The Earth Time Network: Developing an Infrastructure for High-Resolution Calibration of Earth History-Workshop	<u>Cfdano</u> 47.050	<u>FY Expenses</u> 8,908
EAR-0807585	Workshop: The Siberian Traps and the End-Permian Extinction: Coincidence and Casualty	47.050	2,597
	Total for 47.050		11,505
<u>Contract Number</u> OCI-1048563	<u>Contract Title</u> Bayesian Models of Social Behavior - PDF for K. Heller	<u>Cfdano</u> 47.080	<u>FY Expenses</u> 2,224
	Total for 47.080		2,224
	Total for NSF		3,969,916
	Total for National Science Foundation		3,969,916

Department of Energy

DOE - Chicago

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<u>Contract Number</u> DE-SC0005257 DE-SC0005709	<u>Contract Title</u> Particles and Nuclei International Conference PANIC11 at MIT Young Scientist Support Conference for Undergraduate Women in Physics	<u>Cfdano</u> 81.049 81.049	<u>FY Expenses</u> 21,385 33,610 54,995 54,995
Total for 81.049			
Total for DOE - Chicago			

DOE - Idaho Falls

<u>Contract Number</u> DE-NE0000102	<u>Contract Title</u> MIT Nuclear Energy University Fellowship Program	<u>Cfdano</u> 81.121	<u>FY Expenses</u> 250,000 250,000 250,000
Total for 81.121			
Total for DOE - Idaho Falls			

DOE-Golden Colorado

<u>Contract Number</u> DE-EE0000442	<u>Contract Title</u> MIT \$100K Entrepreneurship Competition (Clean Energy Prize)	<u>Cfdano</u> 81.117	<u>FY Expenses</u> 200,000 200,000 200,000 504,995
Total for 81.117			
Total for DOE-Golden Colorado			
Total for Department of Energy			

Department of Defense

Army Research Office

<u>Contract Number</u> W911NF-09-1-0412	<u>Contract Title</u> DoD Cap Funds -YF 10 Appropriation - Dahleh	<u>Cfdano</u> 12.431	<u>FY Expenses</u> 0 0 0
Total for 12.431			
Total for Army Research Office			

Defense Advanced Research Projects Agency

<u>Contract Number</u> HR0011-09-1-0048	<u>Contract Title</u> Kedlaya - Conference Participant Support	<u>Cfdano</u> 12.910	<u>FY Expenses</u> 40,410 40,410 40,410
Total for 12.910			
Total for Defense Advanced Research Projects Agency			

Navy - ONR

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
N00014-08-1-1097	Physical and Interdisciplinary Regional Ocean Dynamics and Modeling Systems	12.300	25,541
N00014-11-1-0189	Funding Request for the Organization of a Workshop on the Future of Carbon Nanoscience and Engineering	12.300	6,765
	Total for 12.300		32,306
	Total for Navy - ONR		32,306

U.S. Army Medical Research and Material Command

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
W81XWH-08-1-0298	Signature and Mechanism of the Epithelial-to-Mesenchymal Transition-Grad Fellow for J. Kah	12.420	23,207
W81XWH-08-1-0788	Identification of a Putative Metastasis-Grad Fellow for S. Valastyan	12.420	4,750
W81XWH-10-1-0040	Systems Analysis of Cell Invasion - PDF - S. Alford	12.420	76,919
W81XWH-10-1-0733	Systems Level Analysis of EGFR - PDF M. Lee	12.420	76,987
W81XWH-11-1-0088	Molecular Regulatory Network Dysregulation - GF for A. Meyer	12.420	15,657
	Total for 12.420		197,520
	Total for U.S. Army Medical Research and Material Command		197,520

270,236

Dept. of Health and Human Services

NIH

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F32-AR055438-03	Postdoctoral Fellow: A. Jaklenec	93.846	7,542
5-F32-AR056567-02	Development of Biodegradable Scaffolds for Stem Cell-based Tissue Reneneration - PDF for F. Yang	93.846	-5,072
	Total for 93.846		2,470
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-GM082031-01	Postdoctoral Fellow: Z. Tonzetich	93.859	8
1-F32-GM087028-01A1	Bioconjugation & Self-Assembly of Carbon nanotubes - PDF D. Chenoweth	93.859	22,921
1-F32-GM087872-02	A Total Synthesis of Gambierol Using an Epoxide-Opening Cascade Approach - PDF for Denise Colby	93.859	20,070

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-GM094994-01	The functions and mechanism of SHSP degradation in Escherichia coli - PDF for E. Kloss	93.859	34,565
1-F32-GM095014-01	Epoxide-Opening Cascade Approach to the Synthesis of Marine Ladder Polyethers-PDF for M. Beaver	93.859	37,743
1-F32-GM095060-01A1	The role of nonsense-mediated mRNA decay in embryonic stem cell gene expression - PDF for J. Hurt	93.859	7,361
1-F32-GM096546-01	A Photo-triggered on-demand drug delivery system for chronic pain - PDF - B. Timko	93.859	24,845
5-F31-GM081916-03	Elucidating the Role of mai1 in Cell Cycle Control --Grad Fellow-Cruz	93.859	21,017
5-F32-GM079885-02	Regulation of the E. coli Y-Family - PDF for J. Foti	93.859	6,304
5-F32-GM080866-03	Water Oxidization in Synthetic Heme - PDF for A. Radosevich	93.859	-625
5-F32-GM083472-03	Mesenchymal Stem Cell Behavior-PDF-S. Peyton	93.859	25,098
5-F32-GM084564-03	Evaluating Aspects of O2-Activation by Bacterial Multicomponent Monooxygenase-PDF for R. Behan	93.859	15,680
5-F32-GM084640-02	Ecological Fitness of Vibrios -PDF for H. Wildschutte	93.859	9,434
5-F32-GM085909-03	Design, Synthesis& Application of a Real-time MAPK Activity Sensor - PDF for C. Stains	93.859	50,481
5-F32-GM085930-02	Fluorescence Sensing of NO: Development of Reversible Sensor Using Fe (III) - PDF for M. Pluth	93.859	-66
5-F32-GM086040-03	Nucleophilic Planar-Chiral Heterocycles for Activatin of Electrophilic Halogens - PDF for Justin Mohr	93.859	46,258
5-F32-GM086044-02	Synthesis of Novel Macrocyclic-Containing Polymers as Protease Sensors-PDF for Mindy Levine	93.859	1,065
5-F32-GM087032-02	Enzymes of the Vinca Alkaloids - PDF for A. Usera	93.859	15,083
5-F32-GM087034-02	Kinetics of Radical Initiation in the Ribonucleotide Reductase Holoenzyme - PDF for P. Holder	93.859	47,968
5-F32-GM087100-03	Elucidating Cofactor-Biosynthesis- PDF for C. Shih	93.859	57,184
5-F32-GM087889-03	Asymmetric, Phosphine-Catalyzed Syntheses - PDF J. Murphy	93.859	43,627
5-F32-GM088931-02	Shape Shifting Phosphines in Transition Metal Catalysis - PDF for Thomas Maimone	93.859	44,644
5-F32-GM089050-02	Molecular Basis for Priming of the Neutrophil DNADPH Oxidase in Trauma and Sepsis - PDF for A. Hsu	93.859	50,730
5-F32-GM090486-02	Structural Studies of Ribonucleotide Reductase - PDF - N. Ando	93.859	45,261

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F32-GM093408-02	Regulation of DNA Application - PDF for H. Merrikh.	93.859	50,801
5-F32-GM093532-02	Palladium-Catalyzed Enantioselective Amination - PDF. A. Parsons	93.859	38,276
5-F32-GM080794-02	Probing the Glycan Biosynthetic Machinery of Campylobacter Jejuni PDF for Jerry Troutman	93.859	6,166
	Total for 93.859		721,899
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F32-MH084488-02	Rumination, Arousal and Cognition in Depression - PDF F. Polli	93.282	5,256
5-F32-MH085454-03	Esemble Recording in Corticostraital Pathways-PDF for K. Smith	93.282	46,659
	Total for 93.282		51,915
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-EB008962-01A2	Dev. of Blood-brain - PDF - M. Royzen	93.286	48,426
1-F32-EB009623-01A1	I.D. and Analysis of Lipid - PDF. K. Whitehead	93.286	46,698
1-F32-EB009969-02	Near-IR Fluorescence Sensors-D. Buccella	93.286	46,933
1-F32-EB011866-01	3D Microvascular Networks - PDF - L. Bellan	93.286	41,585
1-F32-EB011867-01A1	siRNA delivery by structured polymers synthesized via combinatorial RAFT & ATR-PDF for D. Stegwart	93.286	22,167
1-F32-EB012351-01	Mechanistic probe for siRNA-polyplex delivery towards potent cancer therapeutics - PDF - C. Alabi	93.286	38,944
1-F32-EB012362-01	Therapeutic cell engineering - PDF N. Stephan	93.286	39,072
1-F32-EB012937-01	Polymer-Supported Nitroxide Radicals for Dynamic Nuclear Polarization- PDF - M.Kieswetter	93.286	18,867
5-F32-EB009291-02	Self-Organized Tissue Mirovasculature - PDF, D. Wood	93.286	35,827
5-F32-EB011580-02	Understanding Biocompatibility - PDF - K Brattie	93.286	54,921
	Total for 93.286		393,440
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-CA142150-01	Modelling BRaf-dependent Thyroid Cancer in the Mouse - PDF for D. McFadden	93.398	16,360
5-F32-CA132358-03	SiRT1 Attenuates Beta-Catenin Mediated Tumorigenesis - PDF for E. Bell	93.398	51,965
5-F32-CA139902-02	In vivo Characterization of MicroRNA Regulation - PDF for Jesse Zamudio	93.398	46,863
5-F32-CA142144-02	Roles of Rho Proteins During Stages: PDF - J - Lamar	93.398	53,240
	Total for 93.398		168,428

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-AI084442-01A1	Molecular Regulation - PDF - S. Lima	93.855	47,543
5-F31-AI080286-03	Role of Cytokines in the Persistence of Tolerized T Cells - Grad Fellow- M. Olurinde	93.855	40,228
5-F32-AI074245-03	DegS Protease and Initiation of the Envelope-stress Response - PDF for J. Sohn	93.855	29,978
	Total for 93.855		117,749
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-EY019622-01A2	Perception of Tactile Graphics - PDF - A. Kalia	93.867	18,333
1-F32-EY020692-01	Interactions Between LIP - PDF for G. Mulliken	93.867	38,893
5-F31-EY020057-02	Unsupervised neuronal and perceptual learning of invariant object representation - GF for N. Li	93.867	38,420
5-F32-EY0 20066-02	The Role of MicroRNAs - PDF - N. Mellios	93.867	49,367
5-F32-EY018993-03	PDF for J. Cromer-Comparison of Frontal Cortex and Straitum During Visual Categorization	93.867	35,918
5-F32-EY019228-02	Causal Perceptual Processing - PDF for P. Battaglia	93.867	7,395
5-F32-EY019609-03	The Neural Organization of Face and Object Patches - PDF E. Issa	93.867	46,621
5-F32-EY020157-02	Updating Location Information across Object and Eye Movements - PDF - J. Golumb	93.867	46,022
	Total for 93.867		280,969
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-AI082928-01	ARRA - Master Regulators of Transcription in the C. Crescentus Cell Cycle	93.701	33,951
1-F32-AI082929-01	ARRA - Defining AAA+ Enzyme Function in Bacterial Secretion	93.701	49,670
	Total for 93.701		83,621
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F32-HD059302-03	Neural Substate of Language and Social Cognition - PDF for E. Redcay	93.865	25,769
5-F32-HD061180-2	Neural Correlates of Orthographic and Phonological Processing - PDF for Marianna Eddy	93.865	48,971
	Total for 93.865		74,740
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F32-HG005192-02	Analysis and Integration of Expression Patterns in Embryonic Regulatory networks - PDF for C. Bristow	93.172	49,438
	Total for 93.172		49,438
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F30-NS057899-03	Molecular Mechanisms of Visual Thalamic Dev-Graduate Fellow - Horng	93.853	24,682

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F31-NS061625-03	Modulation of Neural Representation & Perception - G F for D. Pritchett	93.853	27,063
5-F31-NS067951-02	The Role of Inhibition in the Mapping - Grad Fellow - C. Runyan	93.853	42,419
5-F31-NS069510-02	Molecular Regulation of Experience-Dependent Synapse - GF for J. Leslie	93.853	40,763
5-F32-NS054390-04	Postdoctoral Fellow: B. Jarosiewicz	93.853	-78
5-F32-NS063694-2	Testing the Hemo-Neural Hypothesis - PDF - D. Vierling-Claassen	93.853	55,162
5-F32-NS064750-02	Molecular Mechanisms - PDF for Richard Cho	93.853	55,041
	Total for 93.853		245,052
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-HL104913-01	Dissecting the role of H2AZ in regulating early cardiac development - PDF for J. Wamstad	93.837	38,332
	Total for 93.837		38,332
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F32-MH081507-03	PDF-S. Brincat-Prefrontal and Temporal Lobe	93.242	62,840
	Total for 93.242		62,840
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-DK091007-01	Micropatterned scaffold-free liver tissue - PDF - K. Stevens	93.847	18,842
	Total for 93.847		18,842
	Total for NIH		2,309,735
	Total for Dept. of Health and Human Services		2,309,735
	Total Federal Non-Research Support		10,212,847

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American Society/Engineering Education

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2291100	LETTER DATED 8/11/99	Ndseg Fellowship Program	12.300	2,893,199
		Total for 12.300		2,893,199

Total for American Society/Engineering Education

Baylor College of Medicine

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2743687	SHOPPING CART NO. 101269146	Summer Urop Student - Ginger Yang - Cent	93.867	5,000
		Total for 93.867		5,000

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2742579	EO01001	Graduate Education Program In In Space L	43.000	99
2743521	SA01701	Team Leader Funding - Seniorimotor Adapta	43.000	72,662
2743652	EO01001	Graduate Education Program In In Space L	43.000	176,642
2744597	SA01701	Team Leader Funding - Seniorimotor Adapta	43.000	46
		Total for 43.000		249,449

Total for Baylor College of Medicine

Brigham & Women's Hospital

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388208	104821	ARRA - Supplemental Fellowship Support - Gf H.	47.082	16,138
		Total for 47.082		16,138

Total for Brigham & Women's Hospital

California Institute of Technology

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388332	2-10898-40 UNDER NASA PRIME	Sagan Postdoctoral Fellowship Program -	43.000	54,127
		Total for 43.000		54,127

54,127

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CalTech - Jet Propulsion Lab			
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>
2743257	1399500	Castor Nanostaellite - Space Systems Eng	43.CCC
2743266	RSA NO. 1399499	Exoplanetsat Development: Educating The	43.CCC
Total for 43.CCC			35,875
Total for CalTech - Jet Propulsion Lab			35,875
Commonwealth of Massachusetts - Miscellaneous			
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>
2732483	MASSACHUSETTS SPACE GRANT C	Massachusetts Space Grant Consortium	43.CCC
Total for 43.CCC			686
Total for Commonwealth of Massachusetts - Miscellaneous			686
Computing Research Association			
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>
2388145	CIF-237	Computing Innovation Fellows Project - P	47.070
2388314	CIF-B-204	Computing Innovation Fellows Project - P	47.070
2388322	CIF-B-87	Computing Innovation Fellows Project - P	47.070
2388328	CIF-A-237	Cifp - Year 2 - Pdf For Stellos Sidirogl	47.070
Total for 47.070			214,780
Total for Computing Research Association			214,780
Consortium for Oceanographic Research & Education (Core)			
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>
2741899	UNDER NA07SEC4690001	Blue Lobster Bowl	11.431
2742562	SA10-08 UNDER PRIME NA07SEC	Blue Lobster Bowl	11.431
Total for 11.431			16,046
Total for Consortium for Oceanographic Research & Education (Core)			16,046

Total for California Institute of Technology

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**Total for Consortium for Oceanographic Research
& Education (Core)**

Draper Laboratory Incorporated

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2743431	PO 0001-0001016650	Draper Fellow - Agte - Usaf	12.CCC	21,974
2743432	PO 0001-0001016680	Draper Fellow - Lowry	12.CCC	47,287
2743433	PO 0001-0001016640	Draper Fellow - Cook	12.CCC	26,173
2743434	PO 0001-0001016652	Draper Fellow - Han	12.CCC	44,897
2743435	PO 0001-0001016649	Draper Fellow - Nothnagel	12.CCC	44,897
2743436	PO 0001-0001016647	Draper Fellow - Effinger	12.CCC	47,287
2743437	PO 0001-0001016773	Draper Fellow - Middleton	12.CCC	3,254
2743438	PO 0001-0001016770	Draper Fellow - Butts	12.CCC	47,287
2743439	PO 0001-0001016769	Draper Fellow - Kotru	12.CCC	46,853
2743440	P00001-0001017621	Draper Fellow - Stockham - Usaf	12.CCC	23,174
2743441	P00001-0001017648	Draper Fellow - Knutson, Usaf	12.CCC	31,182
2743442	P00001-0001017647	Draper Fellow - Steiner	12.CCC	40,274
2743443	P00001-0001017644	Draper Fellow - Rossi	12.CCC	40,274
2743444	PO 0001-0001017810	Draper Fellow - Saunders	12.CCC	36,682
2743445	PO 0001-0001017814	Draper Fellow - Hainley	12.CCC	9,108
2743450	PO 0001-0001016679	Draper Fellow - Ko	12.CCC	44,897
2743451	PO 0001-0001016722	Draper Fellow - Inamdar	12.CCC	44,679
2743452	PO 0001-0001016718	Draper Fellow - Norell	12.CCC	44,897
2743453	PO 0001-0001016726	Draper Fellow - Holzer	12.CCC	44,897
2743454	PO 0001-0001016727	Draper Fellow - Jeon	12.CCC	39,701
2743455	PO 0001-0001016651	Draper Fellow - Giuliano	12.CCC	47,322
2743456	PO 0001-0001016648	Draper Fellow - Varsanik	12.CCC	47,322
2743457	PO 0001-0001016724	Draper Fellow - Wooten	12.CCC	24,822
2743458	P00001-0001017593	Draper Fellow - Giraldez	12.CCC	40,359
2743459	P00001-0001017646	Draper Fellow - Gupta	12.CCC	40,359
2743460	PO 0001-0001017645	Draper Fellow - Fink, Usaf	12.CCC	28,655
2743463	PO 0001-0001016728	Draper Fellow - Wang	12.CCC	45,800
2743464	PO 0001-0001016885	Draper Fellow - Zens	12.CCC	19,971
2743467	PO 0001-0001016772	Draper Fellow - Cates, Usn	12.CCC	31,182
2743468	P00001-0001017595	Draper Fellow - Bradwick, Usaf	12.CCC	31,182
2743469	P00001-0001017594	Draper Fellow - Evans, Usaf	12.CCC	31,182
2743470	P00001-0001017812	Draper Fellow - Crimmel, Usco	12.CCC	8,761
2743472	PO 0001-0001016784	Draper Fellow - E. Lanford	12.CCC	29,493
2743475	PO 0001-0001017016	Draper Fellow - Phan	12.CCC	47,287

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Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2743477	P00001-0001017596	Draper Fellow - Ramirez	12.CCC	40,274
2743478	P00001-0001018283	Draper Fellow - Shreffler - Usn	12.CCC	30,205
2744651	PI 001-0001019884	Draper Fellow - K. Kotru	12.CCC	2,592
2744652	PI 001-0001019867	Draper Fellow - D. Butts	12.CCC	2,592
2744654	PI 001-0001019875	Draper Fellow - C. Rossi	12.CCC	2,370
2744656	PI 001-0001019948	Draper Fellow - T. Steiner	12.CCC	2,370
2744657	PO 0001-0001020014	Draper Fellow - E Cook	12.CCC	2,592
2744658	PO 0001-0001020015	Draper Fellow - R. Effinger	12.CCC	2,592
2744673	PO 0001-0001020016	Draper Fellow -Giuliano	12.CCC	2,595
2744686	PI 001-0001019947	Draper Fellow - J. Wang	12.CCC	2,592
2744690	PI 001-0001019918	Draper Fellow - L. Phan	12.CCC	2,592
2744691	PI 001-0001019873	Draper Fellow - J. Jeon	12.CCC	2,529
2744693	PI 001-0001019915	Draper Fellow - N. Inamdar	12.CCC	2,370
2744694	PO 0001-0001020017	Draper Fellow - A. Ramirez	12.CCC	2,370
Total for 12.CCC				1,304,006

George Washington University

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2739909	07-S09	Department Of Defense National Security	12.000	48,349
2744551	07-S09	Department Of Defense National Security	12.000	26,762
Total for 12.000				75,111

Total for George Washington University

75,111

Harvard Medical School

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2743349	LETTER AGREEMENT 3/30/10	Letter Agreement: Robert Rubin	93.879	56,428
2743350	LETTER AGREEMENT 4/13/2010	Letter Agreement: Sharon Lojun	93.879	8,000
2743351	LETTER AGREEMENT 3/30/10	Letter Agreement: James Stewart Evans	93.879	8,000
2743352	LETTER AGREEMENT 3/30/10	Letter Agreement: Choong-Hyun Lee	93.879	21,984
2743353	LETTER AGREEMENT 3/30/10	Letter Agreement: Ying Zhang	93.879	50,567
Total for 93.879				144,979

Total for Harvard Medical School

144,979

Appendix C - Detail
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
Fiscal 2011 Expenditures

Institute for Complex Adaptive Matter

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388254	IZ CAMPS -0005	Deniz Alpay Internship	47.049	10,000
Total for 47.049				10,000
Total for Institute for Complex Adaptive Matter				10,000

Institute of International Education, Inc.

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388109	AGREEMENT DATED 6/1/09	Hubert H Humphrey Fellowship Program (Sp	19.CCC	58,438
2388239	AGREEMENT DATED 7/1/10	Hubert H Humphrey Fellowship Program (Sp	19.CCC	139,748
Total for 19.CCC				198,186
Total for Institute of International Education, Inc.				198,186

Johns Hopkins University

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388321	SUBAWARD UNDER NSF PRIME -	Lhc Fellowship	47.049	32,118
Total for 47.049				32,118
Total for Johns Hopkins University				32,118

Krell Institute

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2225900	FELLOWSHIP COMMITMENT	Doe-Csgf Krell Institute	81.049	29,041
2388139	LTR. DTD. 9/09	Doe Nnsa Stewardship Science Graduate Fe	81.049	868
2388183	LTR. AGREEMENT	Doe Nnsa Stewardship Science Graduate Fe	81.049	2,425
2388330	LTR. AGREEMENT	Doe Nnsa Stewardship Science Graduate Fe	81.049	252
Total for 81.049				32,586
Total for Krell Institute				32,586

Lincoln Laboratory

Appendix C - Detail
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2743157	7000097584	Suups Of The Security Studies Program	12.CCC	10,908
2744450	PO #7000149034	Support Of The Security Studies Program	12.CCC	21,685
		Total for 12.CCC		32,593
		Total for Lincoln Laboratory		32,593

Massachusetts General Hospital

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2744462	208346	Letter Of Agreement - Jeremiah Wala	93.CCC	4,676
		Total for 93.CCC		4,676
		Total for Massachusetts General Hospital		4,676

Missouri Botanical Garden

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2742101	DRL-0833663/NSF05848MI	Csi: Community Science Investigators	47.076	172,425
		Total for 47.076		172,425
		Total for Missouri Botanical Garden		172,425

Pennsylvania State University

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388031	MOA DATED 9/9/08	Plusnet Program - Graduate Fellowship	12.300	38,619
		Total for 12.300		38,619
		Total for Pennsylvania State University		38,619

Sandia National Laboratories

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388045	PO 885049	Sandia Fellowship-Thomas	81.CCC	40,854
		Total for 81.CCC		40,854
		Total for Sandia National Laboratories		40,854

**Appendix C - Detail
 Massachusetts Institute of Technology
 Federal Non-Research Support - Passthrough - On Campus
 Fiscal 2011 Expenditures**

Smithsonian Inst. - Astrophysical Observatory

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388273	PF0-110080	Exploiting Gravitational Wave Observatio	43.000	82,086
2739939	G07-8039X	Kids Question The Cosmos	43.000	26
2741118	G08-9051X	Precise Localization Of Neutron Star Sof	43.000	7,222
2742204	G09-0069A	Building Partnerships Through Kids Captu	43.000	20,300
		Total for 43.000		109,634
		Total for Smithsonian Inst. - Astrophysical Observatory		109,634

Space Telescope Science Institute

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2388006	HST-HF-01218-01-A	Energy Feedback From Weakly Accreting Su	43.000	-360
2388193	HST-HF-51241.01-A	Energy Feedback From Weakly Accreting Su	43.000	13,718
		Total for 43.000		13,358
		Total for Space Telescope Science Institute		13,358

Sri International

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2741133	SUBCONTRACT NO. 59-001315	Participant Costs	47.050	12,631
		Total for 47.050		12,631
		Total for Sri International		12,631

University of California-San Diego

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2742980	PO# 10298908	National Science Festival	47.076	222,958
		Total for 47.076		222,958
		Total for University of California-San Diego		222,958

University of Massachusetts - Amherst

Appendix C - Detail
Massachusetts Institute of Technology
Federal Non-Research Support - Passthrough - On Campus
Fiscal 2011 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2737505	05-003146-E-01	No Longer A Dream Deferred: Greater Site	47.076	283
		Total for 47.076		283
		Total for University of Massachusetts - Amherst		283

University of Minnesota

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>FY Expenses</u>
2744558		ARRA - Trade Adjustment Assistance Program For	10.000	3,961
		Total for 10.000		3,961
		Total for University of Minnesota		3,961
		Total		5,934,278

SECTION III

**REPORTS ON INTERNAL CONTROL AND
COMPLIANCE AND SUMMARY OF AUDITORS'
RESULTS**



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 Audit Committee of the
Massachusetts Institute of Technology

We have audited the financial statements of the Massachusetts Institute of Technology (the "Institute") as of and for the year ended June 30, 2011, and have issued our report thereon dated September 15, 2011. 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 Institute'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 Institute's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of the Institute's internal control over financial reporting.

A deficiency in internal controls 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 Institute'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 Institute'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 Institute in a separate letter dated September 15, 2011.

This report is intended solely for the information and use of the Institute'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

September 15, 2011



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

To the Audit Committee of the
Massachusetts Institute of Technology

In connection with the coordinated audit approach of the Massachusetts Institute of Technology (the "Institute") as provided for in U.S. Office of Management and Budget (OMB) *Circular A-133*, the U.S. Defense Contract Audit Agency ("DCAA") and PricewaterhouseCoopers LLP each performed specific audit requirements and provided respective audit reports. Responsibilities under the coordinated audit approach were assigned as follows:

1. The Student Financial Aid Cluster: PricewaterhouseCoopers LLP conducted the audit of the Institute's compliance with all of the requirements described in the *OMB Circular A-133 Compliance Supplement* that are applicable to its Student Financial Aid Cluster, except as noted in the third paragraph of this report.
2. The National Science Foundation Fellowships Program: PricewaterhouseCoopers LLP conducted the audit of the Institute's compliance with all of the requirements described in the *OMB Circular A-133 Compliance Supplement* that are applicable to its National Science Foundation Fellowships Program.
3. The Research and Development Cluster:
 - a. The DCAA conducted the audit of the Institute's compliance with requirements described in *OMB Circular A-133 Compliance Supplement* that are applicable to its major federal research and development program at Lincoln Lab, which totaled \$805,099,030 of the total on the Schedule of Federal Awards. In addition, DCAA tested the internal control structure with respect to the compliance requirements as they relate to these awards at Lincoln Lab under the Institute's major research and development program. Additionally, DCAA tested the Institute's indirect cost rates, which includes testing of the Institute's service centers for all awards within Lincoln Lab. The DCAA's reports on compliance and internal controls are included in the package, beginning on page 257.



- b. PricewaterhouseCoopers LLP conducted the audit of the Institute's compliance with all of the requirements described in the OMB Circular A-133 Compliance Supplement that are applicable to its major federal research and development program for awards, except those awards at Lincoln Lab and the compliance requirement, allowable costs/cost principles as it relates to indirect cost rates (See 3a above).

Compliance

As part of the aforementioned coordinated audit, we have audited the compliance of the Institute with the types of compliance requirements described in the *OMB Circular A-133 Compliance Supplement* that are direct and material to its research and development awards, subject to the limitations stated in the first paragraph above, and the Student Financial Assistance Cluster and the National Science Foundation Fellowships Program for the year ended June 30, 2011, except as described in the next paragraph of this report. The Institute's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs (page 247 - 251). Compliance with the requirements of the law, regulations, contracts and grants applicable to these major federal programs is the responsibility of the Institute's management. Our responsibility is to express an opinion on the Institute's compliance based on our audit.

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



In our opinion, based on our audit and the reports of other auditors, the Institute complied, in all material respects, with the requirements that are applicable to the Student Financial Assistance Cluster, the National Science Foundation Fellowships Program and the research and development program, excluding those requirements noted in Item 3a in the first paragraph above, that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2011. However, the results of our auditing procedures disclosed an instance of noncompliance with those requirements, which is required to be reported in accordance with OMB Circular A-133 and which is described in the accompanying schedule of findings and questioned costs as item 11-1.

Internal Control Over Compliance

Management of the Institute 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 Institute'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 Institute's internal control over compliance.

We did not consider internal control over compliance with the billing, collection and due diligence compliance requirements specified by Federal Perkins Loan Program and described in the *OMB Circular A-133 Compliance Supplement*. Internal control over these compliance requirements was considered by the other auditor referred to above; and our report, insofar as it relates to the Institute's internal control over those compliance requirements, is based solely upon the reports 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 Institute'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 Institute's responses and, accordingly, we express no opinion on the responses.

This report is intended solely for the information and use of the Institute'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 30, 2012

**Massachusetts Institute of Technology
Schedule of Findings and Questioned Costs
Year Ended June 30, 2011**

Section I Summary of PwC's Results¹

Financial Statements

Type of auditor's report issued	Unqualified	
Internal control over financial reporting		
Material weakness(es) identified	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Significant deficiency (ies) identified that are not considered to be material weaknesses	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> None Reported
Noncompliance material to financial statements noted?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Federal Awards

Internal control over major programs		
Material weakness (es) identified?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Significant deficiency (ies) identified that are not considered to be material weaknesses?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> None Reported

Type of auditor's report issued on compliance for major programs PwC Report - page 243	Unqualified
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Any audit findings disclosed that are required to be reported in accordance with section 510(a) of OMB Circular A-133?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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Identification of major programs

CFDA Number	Name of Federal Program or Cluster
Various	Student Financial Assistance Cluster,
Various	Research & Development Cluster
47.076	National Science Foundation Fellowships

Dollar threshold used to distinguish between Type A and Type B programs	\$4,104,829
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Auditee qualifies as a low-risk auditee?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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¹ Note: This summary includes the portion of the A-133 audit performed by PricewaterhouseCoopers LLP only. OMB Circular A-133 reports including the schedule of findings and questioned costs and schedule of prior year audit findings, for the research and development cluster at Lincoln Lab are issued by DCAA and are included elsewhere within this A-133 report.

**Massachusetts Institute of Technology
Schedule of Findings and Questioned Costs
Year Ended June 30, 2011**

Section II Financial Statement Findings

None noted.

Section III Federal Award Findings and Questioned Costs

The following section identifies instances of noncompliance, including questioned costs, related to the audit of major federal programs conducted by PricewaterhouseCoopers LLP as noted on page 247 of the package, as required to be reported by Circular A-133, Section 510.

**Massachusetts Institute of Technology
Schedule of Findings and Questioned Costs
Year Ended June 30, 2011**

**Research and Development Cluster - on-campus
Finding No. 11-1
Compliance Requirements: Reporting (L)**

Federal Programs Involved	Federal CFDA Number	Award Number	Award Year
National Institutes of Health	93.286	5-R01-EB004866-04 (26 days)	8/15/09- 8/14/10
Air Force Research Laboratory	12.910	FA8750-07-2-0031 (51 days)	6/1/09 - 5/31/10
National Institutes of Health	93.867	5-R01-EY016159-04 - (72 days)	9/1/09 - 8/31/10
Air Force Office of Scientific Research - AFOSR	12.800	FA9550-05-1-0321 - (91 days)	9/1/09 - 8/31/10

Criteria

Per the National Institutes of Health "Terms and Conditions of NIH Grant Awards," grantees must submit a final FSR, financial progress report, within 90 days of the end of the grant support.

Per "Title 2, Code of Federal Regulations," recipients shall submit, within 90 calendar days after the date of completion of the award, all financial, performance, and other reports as required by the terms and conditions of the award.

In addition, recipients must submit the SF-269 or SF-269A no later than 30 days after the end of each specified reporting period for quarterly and semi-annual reports, and 90 calendar days for annual reports.

Condition

We selected a total of 65 reports, across multiple agencies: 25 closeout reports, 25 reports for other reporting, including quarterly reports, and 15 reports for ARRA reporting for testing of the MIT on-campus R&D cluster.

We noted that for four out of the 25 closeout reports, the reports were not filed by the due dates. The reports were filed 26, 51, 72 and 91 days late, respectively.

None of the selected 25 reports for other reporting or 15 reports for ARRA reporting were late.

Cause

The delay in the filings were a result of the untimely receipt of subcontractor charges, as well as the late posting of adjustments or credits to the grant records.

Effect

Federal agencies did not receive the required financial information in accordance with the policy and therefore timely agency review and/or close out process is hindered.

Amount of Questioned Costs

There are no questioned costs.

Massachusetts Institute of Technology
Schedule of Findings and Questioned Costs
Year Ended June 30, 2011

Recommendation

As noted in the prior year report, 4 out of 41 reports were filed late. In 2011, the number of late reports has remained consistent. We recommend that the Institute continue to identify the causes of the late reports and determine what changes are necessary to continue to improve performance to allow all reports to be filed in a timely manner to comply with federal requirements.

Management's Views and Corrective Action Plan

See the Institute's views and corrective action plan.

Massachusetts Institute of Technology
Summary Schedule of Prior Audit Findings
Year Ended June 30, 2011

See the Institute's Schedule of Prior Audit Findings, beginning on page 253 of the package.



Office of Sponsored Programs

Phone 617.324.9022
Fax 617.253.4734
Email mchristy@mit.edu

February 2, 2012

Ms. Lee Ann C. Leahy
PricewaterhouseCoopers LLP
125 High Street
Boston, MA. 02110

Dear Ms. Leahy:

MIT has received and reviewed your draft audit finding regarding Federal Financial Reporting developed as part of PWC's FY 2011 A-133 audit of MIT. MIT management's response and corrective action plan appear below.

11-1. Federal Financial Reporting

Timely financial reporting for all sponsored awards is an issue of critical importance to MIT, and one where we continue to devote considerable resources and effort to bring the Institute into full compliance. We have seen improvement in compliance with reporting requirements in fiscal year 2011 (6% late reports, 4 of 65) over fiscal year 2010 (10% late reports, 4 of 41), and we are committed to sustaining great attention in this area to assure further improvement. While our interim financial reporting remains timely, maintaining 100% compliance with final financial reporting has presented challenges.

We have identified root causes of late financial reports in order to correct the underlying deficiencies that lead to untimely financial reports, and are now in the early stages of an Institute-wide rollout of our sponsored award pre closeout notice system, which will provide information to operating units 90 days in advance of award expiration. This advance notice will provide staff with additional time to address issues. Our goal is to raise awareness of the importance of timely financial reporting and award closeout, and to give MIT administrators the opportunity to address issues well in advance of award expiration, facilitating timely closeout and reporting. We have completed a pilot program over the past year, and have now achieved a technical solution to scale this automated system across MIT. We expect to have this system in use MIT-wide by the end of the current fiscal year.

We have brought the issue of late financial reporting to members of MIT's Research Administration Coordinating Council (RACC) Management Subgroup for discussion. The membership of this group includes Assistant Dean level representation from each school and the offices of the Provost and Vice President for Research. With heightened awareness and visibility of the challenges we have faced in achieving full compliance, we are gaining the cooperation of campus administrators in resolving accounting problems in an expedited way to facilitate award close and final reporting.

We are also actively monitoring government awards where final reporting is late in an effort to pursue timely resolution for issues preventing award close. MIT is committed to bringing this number to zero and sustaining timely reporting with very few late reports.

Issue Coordinator: Robin Elices, Senior Director, Office of the Vice President for Finance

Completion Date: Pre closeout notice implementation June 30, 2012

Continuous monitoring of financial reporting to bring late reporting to a minimum

Sincerely,


Michelle D. Christy
Director of Sponsored Programs

Cc: M. Howard, Vice President for Finance
R. Elices, Sr. Director, Office of the Vice President for Finance
D. Fisher, Institute Auditor

Office of Sponsored Programs

Phone 617.324.9022
Fax 617.253.4734
Email mchristy@mit.edu

March 5, 2012

Ms. Lee Ann C. Leahy
PricewaterhouseCoopers LLP
125 High Street
Boston, MA. 02110

Dear Ms. Leahy:

MIT has reviewed the conditions and recommendations in the referenced audit reports. Our Schedule of Prior Audit Findings containing updated responses to each is provided below.

Reference: PWC Report on MIT Compliance with OMB Circular A-133 (FY10)

10-1. Noncompliance with OMB Circular A-133 Compliance Requirement L - Reporting
Corrective Action was taken --- see finding 11-1 for update on current year results.

Issue Coordinator: Robin Elices, Senior Director, Office of the Vice President for Finance
Completion Date: June 2011

Reference: DCAA Audit Report # 2171-2009G10110001 (FY09)

The following is the Massachusetts Institute of Technology's report (Campus) on corrective action planned/taken in response to prior audit findings contained in the referenced audit report.

Facilities and Administrative Expenses and Rates

09-A. Equipment Depreciation – Not Calculated in Accordance with GAAP

DCAA questioned MIT's practice of taking a full year's depreciation in the year of acquisition. *MIT did not concur with the questioned cost. However, MIT has recently upgraded its equipment depreciation system and, based on FY09 rate negotiation discussions with ONR, has modified practices to now recognize equipment depreciation in the month of acquisition on a prospective basis beginning in FY 2011.*

09-B. Rental Costs – Constructive Cost of Ownership

DCAA questioned MIT's accounting practices related to leasing space in buildings controlled by MIT's investment management group.

Corrective Action was taken --- Beginning in FY10, for all MIT investment properties leased to MIT for academic/research purposes, MIT's Office of Cost Analysis will compare the constructive cost of ownership and the lease cost paid. Lease costs paid in excess of the constructive cost of ownership will be removed from MIT's request for reimbursement prior to submission.

09-C. Assignable Square Footage – Landau Building

DCAA questioned the research allocation of one laboratory.

Corrective Action was taken --- space was adjusted in MIT's cost model to reflect the audit identified portion of the questioned room used for instruction purposes.

09-D. Legal Fees – In Excess of Contract

DCAA questioned the documentation related to extension of an engagement of outside legal counsel.

MIT did not concur with the questioned cost. However, based on FY09 rate negotiation discussions with ONR, MIT has agreed to stress, with its Office of General Counsel, the importance of documenting decisions to extend external attorney services beyond originally contracted dates, amounts.

09-E. Legal Fees – MIT's Boathouse

DCAA questioned, as unallocable, legal expense related to MIT's boathouse.

Corrective Action was taken --- MIT will continue to screen all external legal bills for allocability to research.

09-F. Legal Fees – Duplicate Unallowable Entry

DCAA questioned errors made in posting an initial cost and its correction incorrectly.

Corrective Action was taken --- The duplicate entry was the result of human error and was removed from MIT's cost model.

09-G. Legal Fees – Settlements

Corrective Action was taken --- These costs had been included in MIT's cost submission in error and were voluntarily withdrawn.

09-H. Internal Lawyers – General Counsel Office

DCAA questioned MIT's voluntary disallowance of internal attorney costs based on history.

MIT did not concur with the questioned cost. However, based on FY09 rate negotiation discussions with ONR, MIT agreed to explore, with ONR, alternatives for determining the percentage of time internal attorneys devote to unallocable activities.

09-I. Severance Costs

DCAA questioned a payment of separation costs in excess of MIT policy.

Corrective Action was taken --- Additional screening will be implemented to ensure that any payments in excess of those calculated under MIT's layoff policy are excluded from future cost submissions.

09-J. Professional Services Costs - Huron

DCAA questioned these costs as out-of-period.

Corrective Action was taken --- MIT will continue to stress, in its year-end closing workshops, the importance of the accrual/deferral of costs to achieve alignment with benefiting periods.

09-K. Insurance Premiums – MIT Flying Club

DCAA questioned these costs as unallocable to research.

Corrective Action was taken --- MIT will take steps to ensure that this cost is excluded from all future cost submissions.

09-L. Moving Expenses

DCAA questioned these costs as unallocable to research.

Corrective Action was taken --- MIT will continue to carefully screen expenses in Senior Officers' accounts.

09-M. Software Depreciation Costs

Corrective Action was taken --- These costs had been included in MIT's cost submission in error and were voluntarily withdrawn.

09-N. Indirect Travel – First Class Airfare

DCAA questioned the first class airfare of an MIT employee.

Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.

09-O. Indirect Travel – Hotel Room

DCAA questioned hotel costs associated with fundraising.

Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.

09-P. Indirect Travel – Out of Period Costs

DCAA questioned indirect travel costs incurred in a prior fiscal year.

Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.

09-Q. Indirect Travel – Former Employee

DCAA questioned travel costs associated with a former employee.

Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.

09-R. Professional Services Costs – DOS Software

DCAA questioned these costs as unallocable to research.

Corrective Action was taken --- MIT will continue to screen new accounts for allocability to research.

09-S. MIT's Unallowable Analysis

DCAA questioned these costs as out-of-period.

Corrective Action was taken --- MIT will continue to stress, in its year-end closing workshops, the importance of the accrual/deferral of costs to achieve alignment with benefiting periods.

Direct Costs

09-T. Non-Reimbursable Expense (Prime Contractor – Microelectronics Advance Research Corp. – Award No. 2003-MT-887)

DCAA questioned, as unreasonable, costs related to a contractually obligated, sponsor approved, annual conference held in Cambridge each year.

MIT does not concur with the questioned cost. No corrective action is planned.

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - N/A

Noncompliances

**09-U. Noncompliance with OMB Circular A-133 Compliance Requirement L - Reporting
Developing a long-term solution**

Corrective Action was taken --- see finding 11-1 for update on current year results.

Issue Coordinator - Robin Elices, Senior Director, Office of the Vice President for Finance

Completion Date - June 2010

If you have any questions regarding our responses, or require further information, please contact me directly or John Donahue (617.258.7950 --- jpd@mit.edu) of my staff.

Sincerely,



Michelle D. Christy
Director of Sponsored Programs

Cc: R. Elices, Sr. Director, Office of the Executive Vice President
D. Fisher, Institute Auditor

Defense Contract Audit Agency



United States
Department of Defense



March 30, 2012

Independent Audit of MIT Lincoln Laboratory's Compliance with Requirements Applicable to its Research & Development Program and on Internal Control Over Compliance in Accordance with OMB Circular A-133, for the Year Ended June 30, 2011

AUDIT REPORT NO. 2171-2011F10110001

RESTRICTIONS:

1. The Defense Contract Audit Agency has no objection to the auditee releasing this report at its discretion for public inspection.
2. This report is intended solely for the information and use by 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.
3. The For Official Use Only (FOUO) marking normally placed on this audit report is not a security marking. It is a marking required by DoD Freedom Of Information Act (FOIA) regulations, which provides notice that the report might contain information that is subject to withholding under FOIA. The FOUO marking is a notice limited to the Department of Defense employees. The auditee has provided DCAA with written authorization to permit removal of the FOUO markings from this report.

DEFENSE CONTRACT AUDIT AGENCY

PREPARED FOR: Administrative Contracting Officer (Mr. Gary Tutungian)
Department of the Air Force
Headquarters Electronic System Division
ESC/XPKL (Lincoln Laboratory)
5 Eglin Street
Hanscom AFB, MA 01731

PREPARED BY: DCAA Boston Branch Office
495 Summer Street
Suite 336
Boston, MA 02210-2192
Telephone No. (617) 753-3777
FAX No. (617) 753-3404
E-mail Address dcaa-fao2171@dcaa.mil

AUDITEE: MIT Lincoln Laboratory
244 Wood Street
Lexington, MA 02420-9185

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SUBJECT OF AUDIT

COMPLIANCE

We have audited the compliance of Massachusetts Institute of Technology Lincoln Laboratory (MIT LL) with the types of compliance requirements described in the U.S. Office of Management and Budget (OMB) Circular A-133 Compliance Supplement that are applicable to its research and development program for the year ended June 30, 2011. MIT LL's major federal program is identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs. We have also audited MIT LL's direct cost submission and related books and records as well as the application of its fixed indirect rates for reimbursement of Fiscal Year (FY) 2011 incurred costs. MIT LL's FY end is September 30. However, we audited the cited period to coincide with MIT's FY 2011 since MIT LL participates in MIT's indirect rates. The purpose of the audit was to determine the allowability and allocability of direct costs for the period ended June 30, 2011.

The proposal and compliance with the requirements of laws, regulations, contracts, and grants applicable to each of its major federal programs are the responsibility of MIT LL's management. Our responsibility is to express an opinion on the proposal and compliance based on our audit.

INTERNAL CONTROL OVER COMPLIANCE

The management of MIT LL is also 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, we considered MIT LL's internal control over compliance with requirements that could have a direct and material effect on a major federal program in order to determine our auditing procedures for the purpose of expressing an opinion on compliance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance taken as a whole. Accordingly, we do not express an opinion on the effectiveness of MIT LL's internal control over compliance.

SCOPE OF AUDIT

We conducted our audit in accordance with Generally Accepted Government Auditing Standards (GAGAS), except DCAA does not currently have an external opinion on its quality control system as required by GAGAS 3.55. The most recent external quality control review opinion expired on August 26, 2009. We also conducted our audit in accordance with Office of Management and Budget (OMB) Circular A-133, *Audits of States, Local Governments and Nonprofit Organizations*. GAGAS 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 listed below that could have a direct and material effect on the research and development program being audited occurred.

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- Activities allowed or unallowed
- Allowable cost/cost principles
- Cash management
- Davis-Bacon Act
- Eligibility
- Equipment and real property management
- Matching, level of effort, earmarking
- Period of availability of Federal funds
- Procurement and suspension and debarment
- Program income
- Real property acquisition and relocation assistance
- Reporting
- Subrecipient monitoring
- Special tests and provisions

An audit includes:

- obtaining an understanding of the auditee's internal controls, assessing control risk, and determining the extent of audit testing needed based on the control risk assessment;
- examining, on a test basis, evidence about the auditee's compliance with those requirements and performing other procedures as the auditor considered necessary in the circumstances;
- assessing the accounting principles used and significant estimates made by the auditee; and
- evaluating the overall data and records presentation.

We evaluated MIT LL's incurred cost proposal, compliance with applicable compliance requirements and the related internal controls using the applicable requirements contained in:

- Federal Acquisition Regulation (FAR),
- Defense FAR Supplement (DFARS),
- NASA FAR Supplement (NFS),
- Homeland Security Acquisition Regulation (HSAR),
- Federal Aviation Administration Acquisition Management (FAAM) System.
- Cost Accounting Standards (CAS),
- 2 CFR, Subtitle A, Chapter II, Part 220 (OMB Circular A-21) - Cost Principles for Educational Institutions,
- OMB Circular A-133 Audits of States, Local Government and Nonprofit Organizations, and
- OMB Circular A-133 Compliance Supplement

We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination of MIT LL's compliance with those requirements.

RESULTS OF AUDIT

COMPLIANCE:

In our opinion, MIT LL complied, in all material respects, with the requirements referred to above that are applicable to the research and development program for the year ended June 30, 2011. However, the results of our auditing procedures disclosed instances of noncompliance with those requirements of Allowable Costs/Cost Principles and Equipment and Real Property Management that are applicable to the research and development program, 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, Appendix 1, page 11.

Direct Costs: Our audit of direct costs disclosed \$187,245 in architectural and engineering design costs relating to building improvement projects that were misclassified as material and service (M&S) costs. Details of the misclassified direct costs are summarized in the accompanying Schedule of Findings and Questioned Costs, Appendix 1, page 11, and Allowable Cost by Federal Award, Appendix 2, page 24 of this report. Final acceptance of amounts proposed under federal awards does not take place until performance under the award is completed and accepted by the cognizant authorities and the audit responsibilities have been completed.

Indirect Costs: The indirect costs are based on negotiated fixed rates with carry-forward provisions established by agreement with the Office of Naval Research (ONR). Indirect costs are recovered at the negotiated fixed rates unless a particular agreement limits the recovery on indirect costs. As part of our audit, we verified that MIT LL applied the negotiated indirect rates to the appropriate bases, and that the amounts claimed were the products of applying the indirect rates to the applicable bases. The negotiated fixed indirect rates that pertain to MIT LL for FYE June 30, 2011 are as follows:

<u>Indirect Category</u>	FY 2011 <u>Negotiated Fixed Indirect Rates</u>	<u>Allocation Base</u>
Facilities & Administrative (F&A) Rate – Off Campus	5.5%	(a)
Employee Benefit Rates		
Full Time Non-Student Employees Rate – Off Campus	20.0%	(b)
Part Time Employees and non-Registered MIT Students	8.0%	(c)
Vacation Leave Rates		
Full Time Research Employees – Off Campus	10.0%	(d)

Allocation Bases:

- (a) Modified Total Direct Cost (MTDC) as defined in OMB Circular A-21 that relates to MIT’s Off Campus activity (which includes Lincoln Lab). It specifically consists of all salaries and wages, fringe benefits, materials and supplies, services, travel, and subcontracts up to the first \$25,000 each (regardless of the period covered by the subcontract); and excluding equipment, capital expenditures, charges for tuition remission, rental costs, scholarships and fellowships as well as the portion of each subcontract in excess of \$25,000.

Audit Report No. 2171-2011F10110001

- (b) The base for MIT’s Off-campus employee benefit rate consists of salaries and wages of all full time non-student MIT employees (which includes Lincoln Lab employees) charged to MIT research Off-campus accounts and Lincoln Laboratory.
- (c) The base for MIT’s part time employee benefit rate consists of salaries and wages of all part time employees and non-registered MIT students (on and off campus)
- (d) The base for MIT’s Off-campus vacation leave rate consists of salaries and wages of all full time non-student, non-faculty MIT research personnel (Research Staff, Hourly Personnel, Project Support Staff, and Tech/Admin Support) charged to MIT Research Off-campus accounts and Lincoln Laboratory.

None of the costs questioned in this audit are subject to interest as provided in OMB Circular A-21, Section C., subsection 8.

GOVERNMENT PARTICIPATION

<u>Category</u>	<u>Government Flexibly-Priced Federal Awards</u>	<u>FFP Federal Awards and Commercial Work</u>	<u>Total</u>
Direct Costs	99.87%	0.13%	100.00%

MIT LL has one primary contract, which is administered by the U.S. Air Force. U.S. Air Force contract no. FA8721-05-C-0002 was effective from April 1, 2005 through March 31, 2010. Options on CLIN 0003 and CLIN 0004 were exercised on contract no. FA8721-05-C-0002 to extend the terms and conditions of the contract from April 1, 2010 through March 31, 2015. Details of the claimed and questioned costs under contract no. FA8721-05-C-0002 is shown on the Schedule of Findings and Questioned Costs under Section III (Federal Government Expenditures). In addition, Appendix 2, page 24, includes a Schedule of Allowable Costs by Federal Award.

INTERNAL CONTROL OVER COMPLIANCE:

Our consideration of the internal control over compliance was for the limited purpose described in the Subject of Audit section above and would not necessarily identify all deficiencies in internal control that might be significant deficiencies or material weaknesses. We did not identify any deficiencies in internal control over compliance that we consider to be significant deficiencies or material weaknesses as defined below.

A control deficiency in an entity’s internal control over compliance 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 noncompliance with a type of compliance requirement of a federal program on a timely basis. A significant deficiency in an entity’s internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

A material weakness is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a compliance requirement will not be prevented, or detected and corrected, on a timely basis. In this

Audit Report No. 2171-2011F10110001

section, a reasonable possibility exists when the likelihood of the event is either reasonably possible or probable as defined as follows:

- Reasonably possible. The chance of the future event or events occurring is more than remote but less than likely.
- Remote. The chance of the future event or events occurring is slight.
- Probable. The future event or events are likely to occur.

AUDITOR'S COMMENTS ON SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS:

As part of our audit, we included procedures to assess the reasonableness of MIT LL's Summary Schedule of Prior Audit Findings, included as Appendix 3, page 25. Our audit disclosed that MIT LL adequately presented the status of its corrective action taken. However, our testing of corrective measures associated with audit findings 09-CC (Subrecipient Monitoring) and 09-DD (Subcontract Quick Closeout Procedures) disclosed similar subcontract closeout deficiencies. MIT LL's response to the similar current year audit findings are in the Schedule of Findings and Questioned Costs, Appendix 1, Notes 11-D and 11-E, on page 17 and 20.

We discussed the audit results with Ms. Patricia O'Riordan, Department Head, Financial Services Department and Mr. Scott Thornhill, Assistant to the Controller, Financial Services Department, on March 27, 2012. MIT LL's current corrective action plan, which addresses each audit finding, is included as Appendix 4, page 27. We did not audit MIT LL's corrective action plan and accordingly we express no opinion on it.

We provided a draft copy of the report to the contractor's representative on March 27, 2012.

AUDITEE ORGANIZATION AND SYSTEMS

1. Organization:

MIT Lincoln Laboratory (MIT LL) was established by the Massachusetts Institute of Technology (MIT) in 1951 at the request of the United States Air Force with participation by the Army and Navy to pursue research pertinent to the national defense in the area of advance electronics. The Laboratory designated as a Federally Funded Research and Development Center (FFRDC), is operated as a special laboratory of MIT under a cost no fee prime contract with the US Air Force. Federally sponsored research expenditures for the fiscal year ended June 30, 2011 were \$805 million.

MIT LL is staffed and managed by MIT. The operations are overseen by a Joint Advisory Committee. The organizational structure of MIT LL consists of two Service Divisions (Administrative and Engineering), six Technical and Operating Divisions, and the Director's Office. The facilities at MIT LL are primarily government owned and the property is government furnished.

2. Accounting System:

MIT LL maintains a program or project cost accounting system controlled by a general ledger to accumulate cost of labor, materials, overhead, employee benefits, travel, and other direct charges on subsidiary ledgers. Monthly, a financial report is prepared showing the summary of expenditures for the current month and the fiscal year to date by contract. A budget report is prepared monthly indicating the expenditures and net commitments for each program.

MIT LL is currently operating under the SAP R/3 Management/Financial system. SAP R/3 is a modular business application software system designed for open systems based on the client/server network architecture. The modules are integrated and they provide real time enterprise information system processing. At MIT, the SAP R/3 system runs on UNIX and Windows NT operating systems with Oracle providing database support functions. Implemented SAP modules are as follows:

- FI/CO: Finance and Controlling
- Logistics: Purchasing
- MM: Materials Management (stockroom inventory management-The Property Office also uses this module to track property)
- SRM: Supplier Relationship Management (web based shopping/requisitioning – This module is also tied to the Logistics module above)
- PM: Plant maintenance work order processing (Basically only used by Group 12-facilities)
- HR: Human Resources
- BW: Business Warehouse (Data Warehouse)
- PS: Project systems (research project master data only)
- SD: Sales and Distribution (for prime contract billing only-This is the system

Audit Report No. 2171-2011F10110001

- used to develop the monthly public vouchers)
• TM: Time Management (All staff and subcontractors)

As noted on the previous page, MIT LL is an FFRDC, which operates primarily under a cost no-fee prime contract. This contract is awarded to MIT LL every five years, based on the government fiscal year ending September 30. In light of this, MIT LL has established a fiscal year, which coincides with the government fiscal year. As an educational institution, MIT has established a fiscal year, which coincides with its school year of July 1 to June 30.

Indirect rates are established at MIT and negotiated in advance of a fiscal year with the Office of Naval Research (ONR) as fixed rates with carry forward provisions. The over or under recovery for that year is included as an adjustment to the indirect rates for the next rate negotiation. This is in accordance with OMB Circular A-21, Section G.5. The indirect rates are used in determining indirect cost applicable to each contract. Indirect expenses claimed by the auditee represent the application of negotiated fixed rates applied to the Modified Total Direct Cost (MTDC) base as defined in OMB Circular A-21, Section G.2.

3. System Reviews (previously reported conditions which are still open)

<u>Audit Report Number</u>	<u>Date</u>	<u>Report Title</u>
02171-2008F11510001	Mar. 21, 2008	Report on Follow-Up Audit of MIT LL Information Technology General Internal Controls

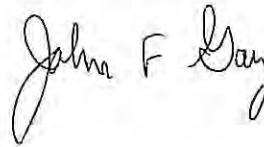
In the above audit report, we identified a deficiency in the internal control which led us to consider the subject system inadequate-in-part. However, we do not consider these deficiencies significant enough to be material weaknesses. MIT LL is aware of the stated deficiency and is in the process of taking corrective action. Please refer to the previously issued report for a complete discussion on the condition.

DCAA PERSONNEL

	<u>Telephone No.</u>
Primary contacts regarding this audit:	
David S. Duncan, Auditor	(781) 981-2485
José I. Molina, Auditor	(781) 981-2486
Peter G. Meade, Technical Specialist	(617) 252-1030
Robert S. Neil, Supervisory Auditor	(617) 753-3383
Other contacts regarding this audit report:	
John F. Gay, Branch Manager	(617) 753-3777
Zelma Calderon, Financial Liaison Advisor	(781) 377-5223
	<u>FAX No.</u>
Boston Branch Office	(617) 753-3404
Zelma Calderon, Financial Liaison Advisor	(781) 377-8374
	<u>E-mail Address</u>
Boston Branch Office	dcaa-fao2171@dcaa.mil

General information on audit matters is available at <http://www.dcaa.mil/>.

AUDIT REPORT AUTHORIZED BY:



Digitally signed by
GAY.JOHN.F.1228573309
DN: c=US, o=U.S. Government,
ou=DoD, ou=PKI, ou=DCAA,
cn=GAY.JOHN.F.1228573309
Date: 2012.03.30 10:17:36 -04'00'

JOHN F. GAY
Branch Manager
DCAA Boston Branch Office

AUDIT REPORT DISTRIBUTION

DISTRIBUTION

Department of the Air Force
Headquarters Electronic System Division
ESC/XPKL (Lincoln Laboratory)
5 Eglin Street
Hanscom AFB, MA 01731
ATTN: Mr. Gary Tutungian, ACO
E-mail: tutungian@ll.mit.edu

DCAA Financial Liaison Auditor
AF Electronic Systems Center
ATTN: ESC/JSX/ Ms. Zelma Calderon
75 Vandenberg Drive, Building 1630
Hanscom AFB, MA 01731
E-mail: dcaa-fla-escpk-hanscom@dcaa.mil

Department of the Navy
Office of Naval Research
Indirect Cost Branch
875 North Randolph Street, Suite 1425
Arlington, VA 22203
ATTN: Ms. Linda Shipp, Contracting Officer
E-mail: shippl@onr.navy.mil

Massachusetts Institute of Technology
Office of the Executive V.P. & Treasurer
ATTN: Mr. Michael W. Howard, V.P. for Finance
77 Massachusetts Avenue
Cambridge, MA 02139
E-mail: mhoward@mit.edu

Massachusetts Institute of Technology
Lincoln Laboratory
Lexington, MA 02420
ATTN: Ms. Patricia O'Riordan, Department Head
E-mail: poriordan@ll.mit.edu

INDEX OF APENDIXES
MIT Lincoln Laboratory
For the Year Ended June 30, 2011

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Summary Schedule of Prior Audit Findings	Appendix 3	25
Corrective Action Plan for the Current Year	Appendix 4	27

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

MIT Lincoln Laboratory
For the Year Ended June 30, 2011

SECTION I: -- SUMMARY OF AUDITOR'S RESULTS:

A. Financial Statements:

Information pertaining to the financial statements can be found in the independent public accountant's audit report.

B. Federal Awards:

1. Type of auditor's report issued on compliance for major programs:

Type of Audit Opinion	
Unqualified	X
Qualified	
Adverse	
Disclaimer	

2. Internal control over major programs:

	Yes	None Reported
Material weaknesses were identified.		X
Significant deficiencies identified not considered to be material weaknesses.		X

3. Any audit findings disclosed that are required to be reported in accordance with Circular A-133, Section .510(a):

Yes	X
No	

4. Identification of Major Programs:

CFDA Number	Program
N/A	Research and Development -Cluster

5. Dollar threshold used to distinguish between Type A and Type B programs:

\$4,104,829

6. Auditee classified as a low-risk under Circular A-133, section .530:

Yes	X
No	

SCHEDULE OF FINDINGS AND QUESTIONED COSTS

MIT Lincoln Laboratory
For the Year Ended June 30, 2011

SECTION II: -- FINDINGS RELATED TO FINANCIAL STATEMENTS:

Information pertaining to the financial statements can be found in the independent public accountant's audit report.

SECTION III: FINDINGS RELATED TO FEDERAL AWARDS:

A. DIRECT COSTS

<u>Major Cost Element</u>	<u>Schedule of Expenditures of Federal Awards</u>	<u>Questioned Costs</u>	<u>Difference</u>	<u>Reference</u>
Total Salaries & Wages	\$286,267,877		\$ 286,267,877	
Material & Services	201,355,199	\$187,245	201,167,954	11-A
Other Direct Charges	76,914		76,914	
Equipment Under \$3,000	10,423,525		10,423,525	
Equipment Over \$3,000	64,166,285		64,166,285	
Equipment Rental	1,606,518		1,606,518	
Subcontracts < \$25K	2,813,988		2,813,988	
Subcontracts > \$25K	59,194,036		59,194,036	
Plant & Operations	51,943,413	(187,245)	52,130,658	11-A
Travel	15,542,086		15,542,086	
Employee Benefits	83,600,534		83,600,534	
Indirect Expense	28,223,047		28,223,047	
Prior Year Adjustments	(114,392)		(114,392)	
Total	\$805,099,030	\$0	\$805,099,030	

EXPLANATORY NOTES

11-A. Building Capitalization

a. Condition

MIT LL improperly classified \$187,245 in building architectural and engineering design costs relating to building improvement projects as material and service (M&S) costs to Federal awards.

Building 1718 (Hanger Renovation to Lab Space) and Building I-222 (Rapid Prototyping Lab) are currently undergoing building renovations. Construction costs for the buildings were correctly charged to Plant and Operations. However, the associated \$187,489 in architectural and

engineering design and construction support service costs for the renovations were incorrectly charged to M&S. In accordance with OMB Circular A-21, building design costs should be part of a building’s capitalized cost. As a result, we are transferring the costs from the M&S account to the Plant and Operations account. Of the \$187,489 in architectural and engineering costs approximately \$187,245 is directly allocable to Federal Government awards. Below is a summary of the misclassified costs as well as amount allocable to Federal awards.

<u>Vendor</u>	<u>P.O. No.</u>	<u>Item</u>	<u>P.O. Amount</u>	<u>Claimed FY 2011</u>	<u>Gov't Percentage 99.87%</u>
Payette Associates Inc.	7000092668	Building Architectural & Engineering Design	\$131,790	\$20,000	\$19,974
Payette Associates Inc.	7000091824	Building Architectural & Engineering Design	\$315,596	\$167,489	\$167,271
Total Misclassified M&S Costs				<u>\$187,489</u>	<u>\$187,245</u>

b. Criteria:

OMB Circular A-21, Section J14.d(4) *Depreciation and Use Allowances*, states the following:

“The entire building, including the shell and all components, may be treated as a single asset and depreciated over a single useful life. A building may also be divided into multiple components. Each component item may then be depreciated over its estimated useful life. The building components shall be grouped into three general components of a building: building shell (including construction and design costs), building services systems (e.g., elevators, HVAC, plumbing system and heating and air-conditioning system) and fixed equipment (e.g., sterilizers, casework, fume hoods, cold rooms and glassware/ washers).”

MIT LL does not depreciate any of these costs as all costs at the Lab are considered direct and direct costs are expensed in the year that they are incurred. This A-21 reference is being used solely to illustrate how building costs should be accumulated.

c. Recommendation:

We recommend that the Laboratory correctly classify the architectural and engineering design costs as building plant and operations.

d. Contractor's Reaction:

MIT LL concurs with the DCAA recommendation, and all costs and commitments associated with the architectural and engineering design purchase orders cited have been transferred to building plant and operations. In order to better ensure the proper classification of building design costs, a review of procurements using the Operational Services product category will be performed on a quarterly basis.

Completion date: March 28, 2012

Issue Coordinator: Kathleen Ryan
Administrative Staff
MIT LL Financial Services Department.

B. NONCOMPLIANCES

11-B Noncompliance with OMB Circular A-133 Compliance Requirement I – Procurement and Suspension and Debarment

a. Condition:

Our review of twenty equipment purchase order folders disclosed that seven were awarded competitively and thirteen were sole source awards. Our review of the sole source procurements disclosed the following deficiencies.

- In seven of the sole source awards, LL's Purchasing Dept did not perform market research to determine if the items could be procured competitively or to validate LL's engineering sole source justifications.
- Two of the sole source procurement folders did not adequately document commerciality.
- One sole source procurement folder did not document adequate price analysis.

Based on our tests, we concluded that MIT LL did not comply with the OMB Circular A-133 Compliance requirements for Procurement and Suspension and Debarment.

b. Criteria:

In accordance with the OMB Circular A-133 Compliance Supplement (Part 3-I), the requirements for procurement are contained in the following documents:

- OMB Circular A-110 (2 CFR sections 215.40 through 215.48),
- Federal awarding agency regulations,
- The terms and conditions of the award.

DFARS 252.244-7001 (effective May of 2011) provides a description of an acceptable purchasing system. Specifically, DFARS 252.244-7001 (c), *Contractor Purchasing System Administration, System Criteria*, Section (9) states that the contractor's purchasing system shall "Require management level justification and adequate cost and price analysis, as applicable, for any sole or single source award." Also, Section (10) states the contractor's purchasing system shall "Perform timely and adequate cost or price analysis and technical evaluation for each subcontractor and supplier proposal or quote to ensure fair and reasonable subcontract prices." This clause is not specifically referenced in Lincoln Lab's contract with the Air Force.

In addition, DFARS 244.402 (a), *Subcontracts for Commercial Items and Commercial Components, Policy Requirements* states that "Contractors shall determine whether a particular subcontract item meets the definition of a commercial item. Contractors are expected to exercise reasonable business judgment in making such determinations, consistent with the guidelines for conducting market research in FAR Part 10."

c. Recommendation:

We recommend that MIT LL ensure that future sole source procurement folders contain appropriate information to support the vendor selected and the price paid as discussed below:

- Single or sole source selection should be adequately researched and documented.
- Determination of commerciality should be supported with sufficient market research.
- Price analysis should be adequate to ensure that the overall price is fair and reasonable.

d. Contractor's's Reaction:

MIT LL shall comply with the DCAA recommendation.

Completion date: June 28, 2012

Issue Coordinator: Mark Syrnick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-C Noncompliance with OMB Circular A-133 Compliance Requirement L – Reporting

a. Condition:

In five out of the ten programs tested, Lincoln Laboratory did not submit their June 2011 monthly Management Financial Report (MFR) to government sponsors within the 15 day end of month requirement stipulated in the Contract Data Requirements List for contract FA8721-05-C-0002. The following schedule is a summary of our findings:

Sponsor Name	Program Number	Government Contract Number	June 2011 Financial Report Due Date	Date Financial Report Submitted	Notes
DARPA	1879	FA 8721-05-C-0002	7/15/2011	12/14/2011	4 + months late
Air Force	1922	FA 8721-05-C-0002	7/15/2011	7/31/2011	16 days late
DOE	10079	FA 8721-05-C-0002	7/15/2011	7/24/2011	9 days late
Other DoD	1936	FA 8721-05-C-0002	7/15/2011	8/5/2011	21 days late
FAA	10129	FA 8721-05-C-0002	7/15/2011	7/18/2011	3 days late

Based on our tests, we concluded that MIT LL did not comply with the OMB Circular A-133 Compliance requirements for financial reporting.

b. Criteria:

In accordance with the OMB Circular A-133 Compliance Supplement (Part 3-L), financial reporting requirements are contained in the following documents:

- OMB Circular A-110 - Financial reporting, §____.52; (which is 215.52)
- The laws, regulations, and the provisions of contract or grant agreements pertaining to the program.

Under contract number FA8721-05-C-0002 there is a requirement within the Contract Data Requirements List for Lincoln Laboratory to issue a performance and cost report on a monthly basis. This requirement further stipulates that this report has to be submitted within fifteen days after month's end.

c. Recommendation:

We recommend that MIT LL develop a corrective action plan to ensure that financial reports are submitted timely in the future.

d. MIT LL's Reaction:

MIT Lincoln Laboratory will revise its procedure for distributing the monthly Management Financial Report to government sponsors. In the future, the monthly reports for the unclassified programs will be automatically distributed to sponsors by the required 15th day of the month following month end. Monthly reports for the classified programs cannot be sent out in an automated fashion and thus, will be monitored for proper distribution by the mid-month deadline.

Estimated completion date: September 1, 2012

Issue Coordinator: William McDowell
Administrative Staff
MIT LL Financial Services Department

11-D Noncompliance with OMB Circular A-133 Compliance Requirement M – Subrecipient Monitoring.

a. Condition:

During FY 2011 the Laboratory improperly closed out nine cost reimbursable (CR) subawards (six non-profit and three for-profit) without adequate documentation. The majority of the subawards had multi-year period of performances. However, annual audits for the subaward's period of performance were not documented in the close out folders as required by OMB Circular A-133, the OMB Circular Compliance Supplement and FAR 52.216-7. The impact of this noncompliance is that all nine subawards were not monitored in accordance with the Subrecipient Monitoring requirements of the OMB Circular A-133 Compliance Supplement. The details behind these deficiencies are shown below:

- Six Cost Reimbursable Non-Profit Subawards:
The six non-profit subrecipient close out folders did not contain evidence that Lincoln Lab considered the results of the respective OMB Circular A-133 audits for those subrecipients when closing out the subaward.
- Three Cost Reimbursable For-Profit Subawards:
The three for-profit subrecipient close out folders did not contain evidence of FAR 52.216-7 required audited, negotiated and settled annual indirect cost rate proposals for the subawards period of performance. Also, all three closeout folders contained statements from the subrecipients stating that their audited indirect rates could not be released to the Laboratory due to proprietary reasons.

Based on our tests, we concluded that Lincoln Laboratory did not comply with the subrecipient monitoring compliance requirements contained in the A-133 Compliance Supplement.

Similar subcontract closeout deficiencies were reported under Note 09-CC in audit report no. 02171-2009F10110001 dated March 30, 2010.

b. Criteria:

OMB Circular A-133 Compliance Supplement, Part 3, *Subrecipient Monitoring Compliance Requirements* states the following responsibilities when a contractor issues a non-profit subaward:

- *Award Identification* – At the time of the award, identifying to the subrecipient the Federal award information (e.g., CFDA title and number, award name, name of Federal agency) and applicable compliance requirements.
- *During-the-Award Monitoring* – Monitoring the subrecipient’s use of Federal awards through reporting, site visits, regular contact, or other means to provide reasonable assurance that the subrecipient administers Federal awards in compliance with laws, regulations, and the provisions of contracts or grant agreements and that performance goals are achieved.
- *Subrecipient Audits* – (1) Ensuring that non profit subrecipients expending \$500,000 or more in Federal awards during the subrecipient’s fiscal year have met the audit requirements of OMB Circular A-133.

OMB Circular A-133, Subpart B.210 (e), *Audits, Subrecipient and Vendor Determinations, For-Profit Subrecipient* states the following responsibilities when a contractor issues a for-profit subaward:

“The pass-through entity is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The contract with the for-profit subrecipient should describe applicable compliance requirements and the for-profit subrecipient's compliance responsibility. Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the contract, and post-award audits”.

FAR 52.216-7 (d), *“Allowable Cost and Payment, Final Indirect Cost Rates”* states the following:

“Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal. The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years.The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor’s proposal. The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates.....Within 120 days (or longer if approved in writing by the Contracting Officer) after settlement of the final annual indirect cost rates for all years of a

physically complete contract, the Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates”.

c. Recommendation:

We recommend that Lincoln Laboratory develop a corrective action plan to ensure that annual audits for future subawards are recorded and documented in accordance with OMB Circular A-133, OMB Circular A-133 Compliance Supplement and FAR 52.216-7 as discussed below:

Non-Profit Subawards:

The Laboratory should research, record and document the results of the subrecipient’s OMB Circular A-133 audits for all years of the subrecipient’s period of performance. The Federal Audit Clearinghouse website <http://harvest.census.gov/sac> should be used to obtain audits for the subrecipient’s entire period of performance. The audit results should be used to verify the claimed costs on the subrecipient’s final invoice.

For-Profit Subawards:

The Laboratory should obtain certified final year-end indirect cost rate proposals for auditable subcontracts, assure the proposals are audited, and incorporate the final audit results into billings to the Government.

If the Laboratory is unable to obtain the final year end proposals (due to proprietary reasons), they should obtain their subcontractor’s submitted and certified indirect cost rates, and when audits of the rates have been completed, they should obtain the audited final year-end indirect cost rates (including a signed Indirect Cost Rate Agreement Letter and a Schedule of Allowable Cost by Subcontract).

- If the audited indirect cost rate proposals are unavailable, the Laboratory should perform a final audit of the subcontract.
- If the Laboratory is denied access to their subcontractor’s audited indirect rates due to proprietary reasons, the Laboratory should request a final audit of the subcontract through their cognizant ACO.

d. Contractor’s Reaction:

MIT LL shall comply with the DCAA recommendation.

Completion date: June 28, 2012

Issue Coordinator: Mark Syrnick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-E. Noncompliance with FAR 42.708 Quick-Closeout Procedures.

a. Condition:

During FY 2011 the Laboratory closed out three cost reimbursable subawards using FAR 42.708 Quick Closeout procedures. FAR 42.708 allows for quick close out of specific contracts before settlement of final indirect cost rates if certain criteria are met. One of the criteria is that the cumulative unsettled indirect costs allocated to all contracts closed using quick closeout procedures in a single fiscal year do not exceed 15 percent of the estimated total unsettled indirect costs allocable to cost-type contracts for that year. Lincoln Laboratory did not document that the three subawards closed out during FY 2011 using quick closeout procedures fell within this 15 percent criterion. As a result, the three subawards were not closed out in accordance with the quick closeout requirements of FAR 42.708.

Similar subcontract quick closeout deficiencies were reported under Note 09-DD in audit report no. 02171-2009F10110001 dated March 30, 2010.

b. Criteria:

FAR 42.708, *Quick-closeout procedure* states in part “..that the contracting officer responsible for contract closeout shall negotiate the settlement of indirect costs for a specific contract, in advance of the determination of final indirect cost rates, if

- (1) the contract is physically complete;
- (2) the total unsettled indirect cost allocable to that contract does not exceed \$1 million,
- (3) the cumulative unsettled indirect costs allocated to all contracts closed using quick closeout procedures in a single fiscal year do not exceed 15 percent of the estimated total unsettled indirect costs allocable to cost-type contracts for that year. The contracting officer may waive the restriction on the amount of cumulative unsettled indirect costs based upon a risk assessment that considers the contractor's accounting, estimating, and purchasing systems; other concerns of the auditor; and any other pertinent information; and
- (4) agreement can be reached on a reasonable estimate of allocable dollars”.

c. Recommendation:

We recommend that future cost reimbursable subaward quick closeout folders contain adequate documentation demonstrating compliance with FAR 42.708 Quick closeout procedures. As a note, the FAR 42.708 quick closeout procedures were revised effective June 30, 2011. Going forward MIT LL should follow the new closeout procedures.

d. Contractor’s Reaction:

As stated in your recommendation, MIT LL shall follow these procedures.

Completion date: June 28, 2012

Issue Coordinator: Mark Syrnick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-F. Noncompliance with Administrative Contracting Officer Consent Thresholds and FAR 52.244-02 Subcontracts

a. Condition:

In three out of fifteen equipment transactions tested, Lincoln Laboratory did not obtain the Administrative Contracting Officer’s (ACO) written consent before entering into subcontracts, in accordance with the current ACO Consent Threshold Approval Letter.

Purchase Order Number	Program Number	SEA Approval Yes/No	Air Force Contract Number	Vendor Name	Purchase Order Amount
7000127893	331-3459	No	FA8721-05-C-0002	BEEcube, Inc.	\$ 399,211
7000139724	2085-2242	No	FA8721-05-C-0002	Northrop Grumman	299,000
7000098844	1151-565	No	FA8721-05-C-0002	Communications & Power Industries	396,134

b. Criteria:

In accordance with FAR 52.244-02(d) Subcontracts, Lincoln Laboratory “...shall obtain the ACO’s written consent before entering into subcontracts, in accordance with the current ACO Consent Threshold Approval Letter.”

Lincoln Laboratory’s has established a specific set of procedures incorporated in their Purchasing Policies and Procedures Manual, Section 44.301 states “...Pursuant to the requirements in FAR 52.244-02, written consent of the Government ACO is required prior to the award of purchase orders and change orders, as stated...3) Fabrication, purchase, installation or other acquisition of equipment or items or facilities (or any item referred to as Special Test Equipment) at or exceeding \$50,000 in value.”. In addition, the Purchasing Policies and Procedures Manual, Section 44.400 states “...An SEA is the official letter from the Laboratory to the Air Force ACO whereby written consent is requested to issue a purchase order in conformance with the requirements of the FAR Subcontracts clause of the prime contract”.

c. Recommendation:

We recommend that Lincoln Laboratory ensure they obtain the ACO's written consent before entering into subcontracts, in accordance with the current ACO Consent Threshold Approval Letter.

d. Contractor's Reaction:

MIT LL shall comply with the DCAA recommendation.

Completion date: June 28, 2012

Issue Coordinator: Mark Syrnick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-G. Lincoln Laboratory 2011 Compliance Requirement F – Equipment and Real Property Management

a. Condition:

During our performance of compliance testing with OMB Circular A-133 requirement Part F – Equipment and Real Property Management, we performed a review of equipment dispositions to ensure equipment acquired with Federal Awards were properly disposed of in accordance with Federal requirements. Based on our review of the dispositions, specifically cannibalization (which is the removal of serviceable parts from equipment for use in other similar items), we identified six parts, which had an original acquisition value of \$9,500,217, that were not cannibalized in accordance with the contractor's policies and procedures. The contractor's policies and procedures require the contractor to submit requests for cannibalization of parts to the Government Property Administrator; however, this was not done for the six parts we reviewed. During our review, the contractor informed us that these parts were not submitted based on a March 19, 2010 notification that was received from the Government Property Administrator that had indicated that cannibalization requests should be approved by the Administrative Contracting Officer (ACO) and not by the Property Administrator. Since receipt of this notification, however, the contractor has not been informed as to who should be approving these requests. Therefore, absent any further notifications from the Government, the contractor has been proceeding with the cannibalization of parts without obtaining Government approval from either the Government Property Administrator or the ACO.

Despite not receiving any further notifications as to who is responsible for approving the cannibalization of equipment, it is the contractor's responsibility to ensure equipment is properly disposed of in accordance with Federal requirements. The contractor's policies and procedures define the steps that should be taken to ensure equipment items are properly disposed. Failure to follow their established policies and procedures could result in the improper disposition of equipment. Since the contractor did not follow their policy and procedure, we consider them to be in noncompliance with Compliance Requirement F of the OMB Circular A-133 Compliance Requirement.

b. Criteria:

The contractor's Property Procedure P-3 (Rev. 1), dated May 4, 2007, requires that Lincoln Laboratory requests for changes of Government property configuration (removal of incorporated assets assigned to a higher tag assembly item) shall be prepared by the responsible user via Laboratory memorandum submitted to the Lincoln Property Office. The memorandum shall contain the higher assembly tag number, individual identified (tagged property) component being removed, estimated dollar value of removed items (not including tagged items), and the purpose and identified tag numbered item for which the property will be incorporated. This request for cannibalization will then be submitted by the Lincoln Property Office to the Government Property Administrator for approval.

c. Recommendation:

We recommend that Lincoln Laboratories take immediate action by; contacting their ACO to determine the appropriate process in order to obtain government approval for the cannibalization process, and updating their Property Procedure P-3 (Rev. 1) to reflect the appropriate process so they are in compliance with the recipient's required property management standards outlined in the OMB Circular A-133 Compliance Supplement.

d. Contractor's Reaction:

Lincoln Laboratory agrees with the description and recommendation above. Corrective action was begun to address compliance after discussions with the Administrative Contracting Office. Currently all requests for cannibalization of Government assets are being routed for ACO approval prior to cannibalization. Edits to existing procedures to insure an effective review and approval process will be addressed as necessary.

Estimated Completion Date: April 30, 2012

Issue Coordinator: William Conley
Administrative Staff
MIT LL Property Office

ALLOWABLE COST BY FEDERAL AWARD

MIT Lincoln Laboratory
For the Year Ended June 30, 2011

Program	Sponsor	Federal Award No.	Sub Award No.	FY2011 Expenditures
Multiple	Multiple	FA8721-05-C-0002	N/A	\$ 803,598,501
200045	California Association for Research in Astronomy	AST 0132798	C33002T	66,695
200051	Research Corporation of the University of Hawaii	FA9451-06-2-0338	N/A	408,930
200070	University Corporation for Atmospheric Research	NN07CN14A	S08-62186	5,859
200088	Harvard University	3U54 A1057159-6S1	149061.0735	372,650
200091	Applied Radar	HQ0147-11-C-7699	N/A	28,278
200092	Superconductor Technologies	N00014-10-0329	N/A	19,736
200093	University Corporation for Atmospheric Research	ATM 0753581	Z10-80484	106,712
200095	San Diego State University	N66001-08-2-0058	N/A	491,669
				<u>\$ 805,099,030</u>

SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LINCOLN LABORATORY

244 WOOD STREET
LEXINGTON, MASSACHUSETTS 02420-9108

25 January 2012

Area Code 781
981-8302

Defense Contract Audit Agency
495 Summer St., Suite 336
Boston, MA 02210-2192

Attention: Mr. John F. Gay

Subject: Schedule of Prior Audit Findings – FY2010 A-133 Audit

Dear Mr. Gay,

The following is Lincoln Laboratory's response to the subject inquiry:

DCAA Audit Report No. 2171-2010F10110001

10-A. Severance Pay

Action Taken

MIT Lincoln Laboratory's Financial Services Department has written off questioned costs of \$36,089 on journal voucher SA100395772, dated 03/15/2011.

Action Coordinator: Pamela Weldon

10-B. Employee Benefits

Action Taken

MIT Lincoln Laboratory's Financial Services Department has adjusted questioned costs of \$45,201 on the following journal vouchers:

P4 700000806 03/04/2011
SA 100394959 03/08/2011
SA 100398771 03/15/2011
P4 700000819 03/18/2011
P4 700000824 03/28/2011

Action Coordinator: Pamela Weldon

10-C. Building Capitalization

Action Taken

MIT Lincoln Laboratory's Financial Services Department has re-classified the costs on PO number 70000926668 on the following journal vouchers:

CO Doc# 1001105813 06/14/2011

CO Doc# 1001105814 06/14/2011

Action Coordinator: Pamela Weldon

Sincerely,



Patricia M. O'Riordan
Financial Services Department Head

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY
LINCOLN LABORATORY

244 WOOD STREET
LEXINGTON, MASSACHUSETTS 02420-9185

29 March 2011

Area Code 781
981-5307

Defense Contract Audit Agency
495 Summer St., Suite 336
Boston, MA 02210-2192

Attention: John F. Gay

Subject: Response to DCAA Audit 2171-2011F10110001

Dear Mr. Gay,

The following is Lincoln Laboratory's response to the subject inquiry:

A. DIRECT COSTS

11-A. Building Capitalization
a. Condition:

MIT LL improperly classified \$187,245 in building architectural and engineering design costs relating to building improvement projects as material and service (M&S) costs to Federal awards.

Building 1718 (Hanger Renovation to Lab Space) and Building I-222 (Rapid Prototyping Lab) are currently undergoing building renovations. Construction costs for the buildings were correctly charged to Plant and Operations. However, the associated \$187,489 in architectural and engineering design and construction support service costs for the renovations were incorrectly charged to M&S. In accordance with OMB Circular A-21, building design costs should be part of a building's capitalized cost. As a result, we are transferring the costs from the M&S account to the Plant and Operations account. Of the \$187,489 in architectural and engineering costs approximately \$187,245 is directly allocable to Federal Government awards. Below is a summary of the misclassified costs as well as amount allocable to Federal awards.

Vendor	P.O. No.	Item	P.O. Amount	Claimed FY 2011	Gov't Percentage 99.87%
Payette Associates Inc.	7000092668	Building Architectural & Engineering Design	\$131,790	\$20,000	\$19,974
Payette Associates Inc.	7000091824	Building Architectural & Engineering Design	\$315,596	\$167,489	\$167,271
Total Misclassified M&S Costs				<u>\$187,489</u>	<u>\$187,245</u>

1

b. Criteria:

OMB Circular A-21, Section J14d(4) *Depreciation and Use Allowances*, states the following:

“The entire building, including the shell and all components, may be treated as a single asset and depreciated over a single useful life. A building may also be divided into multiple components. Each component item may then be depreciated over its estimated useful life. The building components shall be grouped into three general components of a building: building shell (including construction and design costs), building services systems (e.g., elevators, HVAC, plumbing system and heating and air-conditioning system) and fixed equipment (e.g., sterilizers, casework, fume hoods, cold rooms and glassware/washers).”

MIT LL does not depreciate any of these costs as all costs at the Lab are considered direct and direct costs are expensed in the year that they are incurred. This OMB Circular A-21 reference is being used solely to illustrate how building costs should be accumulated.

c. Recommendation:

We recommend that the Laboratory correctly classify the architectural and engineering design costs as building plant and operations.

d. MIT LL's Reaction:

MIT LL concurs with the DCAA recommendation, and all costs and commitments associated with the architectural and engineering design purchase orders cited have been transferred to building plant and operations. In order to better ensure the proper classification of building design costs, a review of procurements using the Operational Services product category will be performed on a quarterly basis.

Completion date: March 28, 2012

Issue Coordinator: Kathleen Ryan
Administrative Staff
MIT LL Financial Services Department.

B. NONCOMPLIANCES

11-B Noncompliance with OMB Circular A-133 Compliance Requirement I – Procurement and Suspension and Debarment

a. Condition:

Our review of twenty equipment purchase order folders disclosed that seven were awarded competitively and thirteen were sole source awards. Our review of the sole source procurements disclosed the following deficiencies.

- In seven of the sole source awards, LL's Purchasing Dept did not perform market research to determine if the items could be procured competitively or to validate LL's engineering sole source justifications.
- Two of the sole source procurement folders did not adequately document commerciality.
- One sole source procurement folder did not document adequate price analysis.

Based on our tests, we concluded that MIT LL did not comply with the OMB Circular A-133 Compliance requirements for Procurement and Suspension and Debarment.

b. Criteria:

In accordance with the OMB Circular A-133 Compliance Supplement (Part 3-I), the requirements for procurement are contained in the following documents:

- OMB Circular A-110 (2 CFR sections 215.40 through 215.48),
- Federal awarding agency regulations,
- The terms and conditions of the award.

DFARS 252.244-7001 (effective May of 2011) provides a description of an acceptable purchasing system. Specifically, DFARS 252.244-7001 (c), *Contractor Purchasing System Administration, System Criteria*, Section (9) states that the contractor's purchasing system shall "Require management level justification and adequate cost and price analysis, as applicable, for any sole or single source award." Also, Section (10) states the contractor's purchasing system shall "Perform timely and adequate cost or price analysis and technical evaluation for each subcontractor and supplier proposal or quote to ensure fair and reasonable subcontract prices." This clause is not specifically referenced in Lincoln Lab's contract with the Air Force.

In addition, DFARS 244.402 (a), *Subcontracts for Commercial Items and Commercial Components, Policy Requirements* states that "Contractors shall determine whether a particular subcontract item meets the definition of a commercial item. Contractors are expected to exercise reasonable business judgment in making such determinations, consistent with the guidelines for conducting market research in FAR Part 10."

c. Recommendation:

We recommend that MIT LL ensure that future sole source procurement folders contain appropriate information to support the vendor selected and the price paid as discussed below:

- o Single or sole source selection should be adequately researched and documented.
- o Determination of commerciality should be supported with sufficient market research.
- o Price analysis should be adequate to ensure that the overall price is fair and reasonable.

d. MIT LL's Reaction:

MIT LL shall comply with the DCAA recommendation.

Completion date: June 28, 2012

Issue Coordinator: Mark Syrnick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-C Noncompliance with OMB Circular A-133 Compliance Requirement L – Reporting

a. Condition:

In five out of the ten programs tested, Lincoln Laboratory did not submit their June 2011 monthly Management Financial Report (MFR) to government sponsors within the 15 day end of month requirement stipulated in the Contract Data Requirements List for contract FA8721-05-C-0002. The following schedule is a summary of our findings:

Sponsor Name	Program Number	Government Contract Number	June 2011 Financial Report Due Date	Date Financial Report Submitted	Notes
DARPA	1879	FA8721-05-C-0002	7/15/2011	12/14/2011	4 + months late
Air Force	1922	FA8721-05-C-0002	7/15/2011	7/31/2011	16 days late
DOE	10079	FA8721-05-C-0002	7/15/2011	7/24/2011	9 days late
Other DoD	1936	FA8721-05-C-0002	7/15/2011	8/5/2011	21 days late
FAA	10129	FA8721-05-C-0002	7/15/2011	7/18/2011	3 days late

Based on our tests, we concluded that MIT LL did not comply with the OMB Circular A-133 Compliance requirements for financial reporting.

b. Criteria:

In accordance with the OMB Circular A-133 Compliance Supplement (Part 3-L), financial reporting requirements are contained in the following documents:

- OMB Circular A-110 - Financial reporting, § ____ .52: (which is 215.52)
- The laws, regulations, and the provisions of contract or grant agreements pertaining to the program.

Under contract number FA8721-05-C-0002 there is a requirement within the Contract Data Requirements List for Lincoln Laboratory to issue a performance and cost report on a monthly basis. This requirement further stipulates that this report has to be submitted within fifteen days after month's end.

c. Recommendation:

We recommend that MIT LL develop a corrective action plan to ensure that financial reports are submitted timely in the future.

d. MIT LL's Reaction:

MIT Lincoln Laboratory will revise its procedure for distributing the monthly Management Financial Report to government sponsors. In the future, the monthly reports for the unclassified programs will be automatically distributed to sponsors by the required 15th day of the month following month end. Monthly reports for the classified programs cannot be sent out in an automated fashion and thus, will be monitored for proper distribution by the mid-month deadline.

Estimated completion date: September 1, 2012

Issue Coordinator: William McDowell
Administrative Staff
MIT LL Financial Services Department

11-D Noncompliance with OMB Circular A-133 Compliance Requirement M – Subrecipient Monitoring.

a. Condition:

During FY 2011 the Laboratory improperly closed out nine cost reimbursable (CR) subawards (six non-profit and three for-profit) without adequate documentation. The majority of the subawards had multi-year period of performances. However, annual audits for the subaward's period of performance were not documented in the close out folders as required by OMB Circular A-133, the OMB Circular Compliance Supplement and FAR 52.216-7. The impact of this noncompliance is that all nine subawards were not monitored in accordance with the Subrecipient Monitoring requirements of the OMB Circular A-133 Compliance Supplement. The details behind these deficiencies are shown below:

Six Cost Reimbursable Non-Profit Subawards:

The six non-profit subrecipient close out folders did not contain evidence that Lincoln Lab considered the results of the respective OMB Circular A-133 audits for those subrecipients when closing out the subaward.

◦ Three Cost Reimbursable For-Profit Subawards:

The three for-profit subrecipient close out folders did not contain evidence of FAR 52.216-7 required audited, negotiated and settled annual indirect cost rate proposals for the subawards period of performance. Also, all three closeout folders contained statements from the subrecipients stating that their audited indirect rates could not be released to the Laboratory due to proprietary reasons.

Based on our tests, we concluded that Lincoln Laboratory did not comply with the subrecipient monitoring compliance requirements contained in the A-133 Compliance Supplement.

Similar subcontract closeout deficiencies were reported under Note 09-CC in audit report no. 02171-2009F10110001 dated March 30, 2010.

b. Criteria:

OMB Circular A-133 Compliance Supplement, Part 3, *Subrecipient Monitoring Compliance Requirements* states the following responsibilities when a contractor issues a non-profit subaward:

- *Award Identification* – At the time of the award, identifying to the subrecipient the Federal award information (e.g., CFDA title and number, award name, name of Federal agency) and applicable compliance requirements.
- *During-the-Award Monitoring* – Monitoring the subrecipient’s use of Federal awards through reporting, site visits, regular contact, or other means to provide reasonable assurance that the subrecipient administers Federal awards in compliance with laws, regulations, and the provisions of contracts or grant agreements and that performance goals are achieved.
- *Subrecipient Audits* – (1) Ensuring that nonprofit subrecipients expending \$500,000 or more in Federal awards during the subrecipient’s fiscal year have met the audit requirements of OMB Circular A-133.

OMB Circular A-133, Subpart B.210 (c), *Audits, Subrecipient and Vendor Determinations, For-Profit Subrecipient* states the following responsibilities when a contractor issues a for-profit subaward:

“The pass-through entity is responsible for establishing requirements, as necessary, to ensure compliance by for-profit subrecipients. The contract with the for-profit subrecipient should describe applicable compliance requirements and the for-profit subrecipient’s compliance responsibility. Methods to ensure compliance for Federal awards made to for-profit subrecipients may include pre-award audits, monitoring during the contract, and post-award audits”.

FAR 52.216-7 (d), *“Allowable Cost and Payment, Final Indirect Cost Rates”* states the following:

“Final annual indirect cost rates and the appropriate bases shall be established in accordance with Subpart 42.7 of the Federal Acquisition Regulation (FAR) in effect for the period covered by the indirect cost rate proposal. The Contractor shall submit an adequate final indirect cost rate proposal to the Contracting Officer (or cognizant Federal agency official) and auditor within the 6-month period following the expiration of each of its fiscal years. . . . The appropriate Government representative and the Contractor shall establish the final indirect cost rates as promptly as practical after receipt of the Contractor’s proposal. The Contractor and the appropriate Government representative shall execute a written understanding setting forth the final indirect cost rates. . . . Within 120 days (or longer if approved in writing by the Contracting

Officer) after settlement of the final annual indirect cost rates for all years of a physically complete contract, the Contractor shall submit a completion invoice or voucher to reflect the settled amounts and rates”.

c. Recommendation:

We recommend that Lincoln Laboratory develop a corrective action plan to ensure that annual audits for future subawards are recorded and documented in accordance with OMB Circular A-133, OMB Circular A-133 Compliance Supplement and FAR 52.216-7 as discussed below:

Non-Profit Subawards:

The Laboratory should research, record and document the results of the subrecipient’s OMB Circular A-133 audits for all years of the subrecipient’s period of performance. The Federal Audit Clearinghouse website <http://harvest.census.gov/sac> should be used to obtain audits for the subrecipient’s entire period of performance. The audit results should be used to verify the claimed costs on the subrecipient’s final invoice.

For-Profit Subawards:

The Laboratory should obtain certified final year-end indirect cost rate proposals for auditable subcontracts, assure the proposals are audited, and incorporate the final audit results into billings to the Government.

- If the Laboratory is unable to obtain the final year end proposals (due to proprietary reasons), they should obtain their subcontractor’s submitted and certified indirect cost rates, and when audits of the rates have been completed, they should obtain the audited final year-end indirect cost rates (including a signed Indirect Cost Rate Agreement Letter and a Schedule of Allowable Cost by Subcontract).
- If the audited indirect cost rate proposals are unavailable, the Laboratory should perform a final audit of the subcontract.
- If the Laboratory is denied access to their subcontractor’s audited indirect rates due to proprietary reasons, the Laboratory should request a final audit of the subcontract through their cognizant ACO.

d. MIT LL’s Reaction:

MIT LL shall comply with the DCAA recommendation.

Completion date: June 28, 2012

Issue Coordinator: Mark Syrnick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-E. Noncompliance with FAR 42.708 Quick-Closeout Procedures.

a. Condition:

During FY 2011 the Laboratory closed out three cost reimbursable subawards using FAR 42.708 Quick Closeout procedures. FAR 42.708 allows for quick close out of specific contracts before settlement of final indirect cost rates if certain criteria are met. One of the criteria is that the cumulative unsettled indirect costs allocated to all contracts closed using quick closeout procedures in a single fiscal year do not exceed 15 percent of the estimated total unsettled indirect costs allocable to cost-type contracts for that year. Lincoln Laboratory did not document that the three subawards closed out during FY 2011 using quick closeout procedures fell within this 15 percent criterion. As a result, the three subawards were not closed out in accordance with the quick closeout requirements of FAR 42.708.

Similar subcontract quick closeout deficiencies were reported under Note 09-DD in audit report no. 02171-2009F10110001 dated March 30, 2010.

b. Criteria:

FAR 42.708, *Quick-closeout procedure* states in part “..that the contracting officer responsible for contract closeout shall negotiate the settlement of indirect costs for a specific contract, in advance of the determination of final indirect cost rates, if

- (1) the contract is physically complete;
- (2) the total unsettled indirect cost allocable to that contract does not exceed \$1 million,
- (3) the cumulative unsettled indirect costs allocated to all contracts closed using quick closeout procedures in a single fiscal year do not exceed 15 percent of the estimated total unsettled indirect costs allocable to cost-type contracts for that year. The contracting officer may waive the restriction on the amount of cumulative unsettled indirect costs based upon a risk assessment that considers the contractor’s accounting, estimating, and purchasing systems; other concerns of the auditor; and any other pertinent information; and
- (4) agreement can be reached on a reasonable estimate of allocable dollars”.

c. Recommendation:

We recommend that future cost reimbursable subaward quick closeout folders contain adequate documentation demonstrating compliance with FAR 42.708 Quick closeout procedures. As a note, the FAR 42.708 quick closeout procedures were revised effective June 30, 2011. Going forward MIT LL should follow the new closeout procedures.

d. MIT LL’s Reaction:

As stated in your recommendation, MIT LL shall follow these procedures.

Completion date: June 28, 2012

Issue Coordinator: Mark Szymick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-F. Noncompliance with Administrative Contracting Officer Consent Thresholds and FAR 52.244-02 Subcontracts

a. Condition:

In three out of fifteen equipment transactions tested, Lincoln Laboratory did not obtain the Administrative Contracting Officer's (ACO) written consent before entering into subcontracts, in accordance with the current ACO Consent Threshold Approval Letter.

Purchase Order Number	Program Number	SEA Approval Yes/No	Air Force Contract Number	Vendor Name	Purchase Order Amount
7000127893	331-3459	No	FA8721-05-C-0002	BEEcube, Inc.	\$ 399,211
7000139724	2085-2242	No	FA8721-05-C-0002	Northrop Grumman	299,000
7000098844	1151-565	No	FA8721-05-C-0002	Communications & Power Industries	396,134

b. Criteria:

In accordance with FAR 52.244-02(d) Subcontracts, Lincoln Laboratory "...shall obtain the ACO's written consent before entering into subcontracts, in accordance with the current ACO Consent Threshold Approval Letter."

Lincoln Laboratory's has established a specific set of procedures incorporated in their Purchasing Policies and Procedures Manual, Section 44.301 states "...Pursuant to the requirements in FAR 52.244-02, written consent of the Government ACO is required prior to the award of purchase orders and change orders, as stated...3) Fabrication, purchase, installation or other acquisition of equipment or items or facilities (or any item referred to as Special Test Equipment) at or exceeding \$50,000 in value.". In addition, the Purchasing Policies and Procedures Manual, Section 44.400 states "...An SEA is the official letter from the Laboratory to the Air Force ACO whereby written consent is requested to issue a purchase order in conformance with the requirements of the FAR Subcontracts clause of the prime contract".

c. Recommendation:

We recommend that Lincoln Laboratory ensure they obtain the ACO's written consent before entering into subcontracts, in accordance with the current ACO Consent Threshold Approval Letter.

d. MIT LL's Reaction:

MIT LL shall comply with the DCAA recommendation.

Completion date: June 28, 2012

Issue Coordinator: Mark Syrnick
Laboratory Ethics Officer
MIT LL Contracting Services Department.

11-G. Lincoln Laboratory 2011 Compliance Requirement F – Equipment and Real Property Management

a. Condition:

During our performance of compliance testing with OMB Circular A-133 requirement Part F – Equipment and Real Property Management, we performed a review of equipment dispositions to ensure

equipment acquired with Federal Awards was properly disposed of in accordance with Federal requirements. Based on our review of the dispositions, specifically cannibalization (which is the removal of serviceable parts from equipment for use in other similar items), we identified six parts, which had an original acquisition value of \$9,500,217, that were not cannibalized in accordance with the contractor's policies and procedures. The contractor's policies and procedures require the contractor to submit requests for cannibalization of parts to the Government Property Administrator; however, this was not done for the six parts we reviewed. During our review, the contractor informed us that these parts were not submitted

based on a March 19, 2010 notification that was received from the Government Property Administrator that had indicated that cannibalization requests should be approved by the Administrative Contracting Officer (ACO) and not by the Property Administrator. Since receipt of this notification, however, the contractor has not been informed as to who should be approving these requests. Therefore, absent any further notifications from the Government, the contractor has been proceeding with the cannibalization of parts without obtaining Government approval from either the Government Property Administrator or the ACO.

Despite not receiving any further notifications as to who is responsible for approving the cannibalization of equipment, it is the contractor's responsibility to ensure equipment is properly disposed of in accordance with Federal requirements. The contractor's policies and procedures define the steps that should be taken to ensure equipment items are properly disposed. Failure to follow their established policies and procedures could result in the improper disposition of equipment. Since the contractor did not follow their policy and procedure, we consider them to be in noncompliance with Compliance Requirement F of the OMB Circular A-133 Compliance Requirement.

b. Criteria:

The contractor's Property Procedure P-3 (Rev. 1), dated May 4, 2007, requires that Lincoln Laboratory requests for changes of Government property configuration (removal of incorporated assets assigned to a higher tag assembly item) shall be prepared by the responsible user via Laboratory memorandum submitted to the Lincoln Property Office. The memorandum shall contain the higher assembly tag number, individual identified (tagged property) component being removed, estimated dollar value of removed items (not including tagged items), and the purpose and identified tag numbered item for which the property will be incorporated. This request for cannibalization will then be submitted by the Lincoln Property Office to the Government Property Administrator for approval.

c. Recommendation:

We recommend that Lincoln Laboratories take immediate action by; contacting their ACO to determine the appropriate process in order to obtain government approval for the cannibalization process, and updating their Property Procedure P-3 (Rev. 1) to reflect the appropriate process so they are in compliance with the recipient's required property management standards outlined in the OMB Circular A-133 Compliance Supplement.

d. Contractor's Reaction:

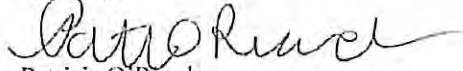
Lincoln Laboratory agrees with the description and recommendation above. Corrective action was begun to address compliance after discussions with the Administrative Contracting Office.

Currently all requests for cannibalization of Government assets are being routed for ACO approval prior to cannibalization. Edits to existing procedures to insure an effective review and approval process will be addressed as necessary.

Estimated Completion Date: April 30, 2012

Issue Coordinator: William Conley
Administrative Staff
MIT I.L. Property Office

Sincerely,



Patricia O'Riordan
Financial Services Department Head