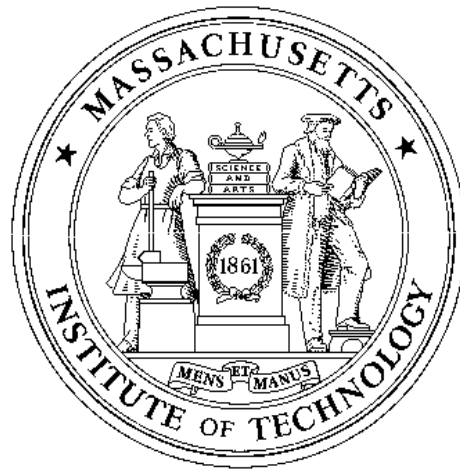


# MASSACHUSETTS INSTITUTE OF TECHNOLOGY



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

FOR THE YEAR ENDED JUNE 30, 2010



# 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, 2010

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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, 2010 and 2009, 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, 2010 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, 2010. 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 Non-Profit 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, 2010

# Massachusetts Institute of Technology

## Statements of Financial Position

at June 30, 2010 and 2009

(in thousands of dollars)

	2010	2009
<b>Assets</b>		
Cash .....	\$ 151,050	\$ 77,387
Accounts receivable, net .....	203,116	241,024
Pledges receivable, net, at fair value .....	412,310	464,736
Contracts in progress, principally U.S. Government .....	68,344	85,821
Deferred charges, inventories and other assets .....	48,828	57,457
Student notes receivable, net .....	49,496	48,953
Investments, at fair value .....	9,904,271	9,519,413
Minority interest .....	230,433	168,306
Retirement plan asset-overfunded status .....	18,841	165,842
Land, buildings & equipment (at cost \$3,206,147 for June 2010; \$2,994,190 for June 2009), net of accumulated depreciation .....	2,325,817	2,120,613
Total assets .....	<u>\$ 13,412,506</u>	<u>\$ 12,949,552</u>
<b>Liabilities and Net Assets</b>		
Liabilities:		
Accounts payable, accruals and other liabilities .....	\$ 309,098	\$ 299,565
Liabilities due under life income fund agreements, at fair value .....	74,256	72,606
Minority interest .....	230,433	168,306
Deferred revenue and other credits .....	112,516	175,070
Advance payments .....	362,147	343,296
Borrowings .....	1,728,526	1,735,843
Government advances for student loans .....	33,590	33,341
Accrued benefit liabilities .....	237,635	175,137
Total liabilities .....	<u>3,088,201</u>	<u>3,003,164</u>
Net Assets:		
Unrestricted .....	3,759,301	3,559,925
Temporarily restricted .....	4,463,066	4,401,015
Permanently restricted .....	2,101,938	1,985,448
Total net assets .....	<u>10,324,305</u>	<u>9,946,388</u>
Total liabilities and net assets .....	<u>\$ 13,412,506</u>	<u>\$ 12,949,552</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, 2010 and 2009

(in thousands of dollars)

	Unrestricted		Temporarily Restricted	
	2010	2009	2010	2009
<b>Operating Activities</b>				
<b>Operating Revenues:</b>				
Tuition and similar revenues, net of discount of \$230,269 in 2010 and \$214,383 in 2009 .....	\$ 238,301	\$ 217,389	\$ -	\$ -
Research revenues:				
Direct .....	1,172,406	1,153,620	-	-
Indirect .....	197,197	221,452	-	-
Total research revenues .....	<u>1,369,603</u>	<u>1,375,072</u>	-	-
Gifts and bequests for current use .....	108,674	100,072	-	-
Fees and services .....	162,300	157,110	-	-
Other programs .....	70,439	86,133	-	-
Investment income .....	99,669	100,624	-	-
Net gains on investments, distributed .....	459,138	476,822	-	-
Auxiliary enterprises .....	96,015	94,041	-	-
Net asset reclassification and transfers .....	58,964	36,695	-	-
Total operating revenue .....	<u>2,663,103</u>	<u>2,643,958</u>	-	-
<b>Operating Expenses:</b>				
Salaries and wages .....	967,190	967,160	-	-
Employee benefits .....	181,116	169,741	-	-
Supplies and services .....	811,780	849,641	-	-
Subrecipient agreements .....	117,442	112,732	-	-
Utilities, rent, and repairs .....	144,201	181,264	-	-
Depreciation .....	103,910	125,018	-	-
Interest expense .....	56,927	55,730	-	-
Total operating expenses .....	<u>2,382,566</u>	<u>2,461,286</u>	-	-
Results of operations .....	<u>280,537</u>	<u>182,672</u>	-	-
<b>Non-Operating Revenues, Gains and Losses</b>				
Pledges .....	-	-	67,716	92,836
Gifts and bequests .....	-	-	3,507	2,730
Investment Income .....	-	-	2,861	5,084
Net gain (loss) on investments and other assets .....	359,337	(686,881)	419,054	(1,143,063)
Distribution of accumulated investment gains .....	(152,081)	(151,590)	(307,057)	(325,232)
Net change in life income funds .....	675	1,775	5,324	(4,669)
Pension-related charges other than net periodic pension benefit income .....	(238,137)	(825,440)	-	-
Transfer of net assets to The Broad Institute .....	(90,975)	-	-	-
Net asset reclassifications and transfers .....	40,020	(46,881)	(129,354)	8,027
Total non-operating activities .....	<u>(81,161)</u>	<u>(1,709,017)</u>	<u>62,051</u>	<u>(1,364,287)</u>
Increase (decrease) in net assets .....	199,376	(1,526,345)	62,051	(1,364,287)
Net assets at the beginning of the year .....	3,559,925	5,086,270	4,401,015	5,765,302
Net assets at the end of the year .....	<u>\$ 3,759,301</u>	<u>\$ 3,559,925</u>	<u>\$ 4,463,066</u>	<u>\$ 4,401,015</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, 2010 and 2009

(in thousands of dollars)

Permanently Restricted		Total	
2010	2009	2010	2009
\$	\$	\$	\$
-	-	238,301	217,389
-	-	1,172,406	1,153,620
-	-	197,197	221,452
-	-	1,369,603	1,375,072
-	-	108,674	100,072
-	-	162,300	157,110
-	-	70,439	86,133
-	-	99,669	100,624
-	-	459,138	476,822
-	-	96,015	94,041
-	-	58,964	36,695
-	-	2,663,103	2,643,958
-	-	967,190	967,160
-	-	181,116	169,741
-	-	811,780	849,641
-	-	117,442	112,732
-	-	144,201	181,264
-	-	103,910	125,018
-	-	56,927	55,730
-	-	2,382,566	2,461,286
-	-	280,537	182,672
28,651	35,028	96,367	127,864
38,032	73,224	41,539	75,954
4,442	4,046	7,303	9,130
5,957	(24,436)	784,348	(1,854,380)
-	-	(459,138)	(476,822)
9,038	(22,975)	15,037	(25,869)
-	-	(238,137)	(825,440)
-	-	(90,975)	-
30,370	2,159	(58,964)	(36,695)
116,490	67,046	97,380	(3,006,258)
116,490	67,046	377,917	(2,823,586)
1,985,448	1,918,402	9,946,388	12,769,974
<u>\$ 2,101,938</u>	<u>\$ 1,985,448</u>	<u>\$ 10,324,305</u>	<u>\$ 9,946,388</u>

### Operating Activities

#### Operating Revenues:

Tuition and similar revenues, net of discount of  
\$230,269 in 2010 and \$214,383 in 2009

#### 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 (loss) 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

Transfer of net assets to The Broad Institute

Net asset reclassifications and transfers

Total non-operating activities

Increase (decrease) 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, 2010 and 2009

(in thousands of dollars)

	2010	2009
<b>Cash Flow from Operating Activities:</b>		
Increase (decrease) in net assets	\$ 377,917	\$ (2,823,586)
Adjustments to reconcile change in net assets to net cash used in operating activities:		
Net (gain) loss on investments	(784,348)	1,854,380
Change in retirement plan asset, net of change in accrued benefit liability	209,499	800,472
Depreciation	103,910	125,018
Gifts of securities	(4,135)	(1,894)
Net (gain) loss on life income funds	(5,144)	38,230
Transfer of land, buildings and equipment to The Broad Institute	82,563	-
Amortization of bond premiums and discounts and other adjustments	(3,823)	(2,838)
Change in operating assets and liabilities:		
Pledges receivable	52,426	(21,433)
Accounts receivable	37,908	(17,234)
Contracts in progress	17,477	(17,883)
Deferred charges, inventories and other assets	8,629	4,859
Accounts payable, accruals and other liabilities, excluding building and equipment accruals	4,765	22,928
Liabilities due under life income fund agreements	1,650	(5,766)
Deferred revenue and other credits	(62,554)	10,600
Advance payments	18,851	28,094
Reclassify investment income	(7,303)	(9,130)
Reclassify contributed securities received as payment on pledges	(28,121)	(22,479)
Reclassify contributions restricted for long-term investment	(41,539)	(75,954)
Net cash used in operating activities	<u>(21,372)</u>	<u>(113,616)</u>
<b>Cash Flow from Investing Activities:</b>		
Purchase of land, buildings and equipment	(387,908)	(299,049)
Purchases of investments	(37,929,592)	(21,221,423)
Proceeds from sale of investments, including contributed securities	38,373,562	21,105,189
Student notes issued	(9,641)	(16,016)
Collections from student notes	8,863	14,019
Net cash provided by (used in) investing activities	<u>55,284</u>	<u>(417,280)</u>
<b>Cash Flow from Financing Activities:</b>		
Proceeds from contributions restricted for:		
Investment in endowment	38,032	73,224
Investment in plant and other	3,507	2,730
Less: contributed securities, gifts for endowment, plant and other	(7,080)	(2,145)
Total proceeds from contributions	34,459	73,809
Increase in investment income for restricted purposes	7,303	9,130
Proceeds from borrowings and re-marketing of swap related to borrowings	-	649,150
Repayment of borrowings	(2,260)	(205,196)
Increase in government advances for student loans	249	284
Net cash provided by financing activities	<u>39,751</u>	<u>527,177</u>
Net increase (decrease) in cash	73,663	(3,719)
Cash at the beginning of the year	77,387	81,106
Cash at the end of the year	<u>\$ 151,050</u>	<u>\$ 77,387</u>

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

## Notes to Financial Statements

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### 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). 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. 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 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 and the release of permanent restrictions by a donor are also reported as reclassifications of net assets from temporarily or permanently restricted net assets to unrestricted 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 L 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 \$78.3 million and \$42.1 million at June 30, 2010 and 2009, 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 \$98.2 million and \$42.5 million during 2010 and 2009, respectively. Land, buildings and equipment at June 30, 2010 and 2009 are shown in Table 1 below.

	2010	2009
Land.....	\$ 59,598	\$ 51,944
Land Improvements ....	61,830	60,962
Educational buildings ...	2,423,625	2,311,995
Equipment.....	149,320	220,027
Software.....	36,733	33,084
<b>Total.....</b>	<b>2,731,106</b>	<b>2,678,012</b>
Less: accumulated depreciation.....	(880,330)	(873,577)
Construction in progress .....	471,514	309,468
Software projects in progress .....	3,527	6,710
<b>Land, buildings and equipment .....</b>	<b>\$ 2,325,817</b>	<b>\$2,120,613</b>

Depreciation expense was \$103.9 million in 2010 and \$125.0 million in 2009. Net interest expense of \$17.6 million and \$10.5 million was capitalized during 2010 and 2009, respectively, in relation to MIT's construction projects. At July 1, 2009, the separation of The Broad Institute resulted in the removal of a net of \$82.6 million from MIT's land, buildings and equipment (see Note B).

### 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.

	2010	2009
Tuition revenue.....	\$ 432,778	\$ 409,195
Executive and continuing education revenues .....	35,792	22,577
<b>Total.....</b>	<b>468,570</b>	<b>431,772</b>
Less: tuition discount ...	(230,269)	(214,383)
<b>Net tuition.....</b>	<b>\$ 238,301</b>	<b>\$ 217,389</b>

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 \$397.4 million and \$376.1 million in 2010 and 2009, respectively. Of that amount, \$125.5 million in 2010 and \$118.7 million in 2009, was aid from sponsors. Tuition support from MIT sources is displayed as tuition discount. Components of financial aid are detailed in Table 3 below.

(in thousands of dollars)	2010			2009		
	Institute Sources	External Sponsors	Total Financial Aid	Institute Sources	External Sponsors	Total Financial Aid
Tuition support.....	\$ 230,269	\$ 54,722	\$ 284,991	\$ 214,383	\$ 51,883	\$ 266,266
Stipends.....	15,850	12,254	28,104	15,566	11,943	27,509
Student salaries.....	25,820	58,484	84,304	27,374	54,913	82,287
<b>Total.....</b>	<b>\$ 271,939</b>	<b>\$ 125,460</b>	<b>\$ 397,399</b>	<b>\$ 257,323</b>	<b>\$ 118,739</b>	<b>\$ 376,062</b>



## 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 \$0.6 million and \$2.0 million in 2010 and 2009, respectively. Pledges in the amount of \$412.3 million and \$464.7 million are recorded as receivables at June 30, 2010 and 2009, respectively with the revenue assigned to the appropriate classification of restriction for 2010 and 2009, respectively. 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 a gift 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. Life income fund liabilities are classified as Level 3 under the valuation hierarchy disclosed in Note C. A rollforward

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

### Recently Adopted Accounting Standards

On July 1, 2008, MIT adopted the accounting standard relating to *Fair Value Measurements*. This standard defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. This standard applies to fair value measurements that are already required or permitted by other accounting standards and does not require any new fair value measurements. The statement defines fair value as "the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."

On July 1, 2008, MIT adopted the accounting standard update for *Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active*. This standard clarifies the application of fair value in inactive markets and allows for the use of management's internal assumptions about future cash flows with appropriately risk-adjusted discount rates when relevant observable market data does not exist. The objective of this update has not changed and continues to be the determination of the price that would be received in an orderly transaction that is not a forced liquidation or distressed sale at the measurement date. The result of this update did not have a material effect on MIT's results of operations, financial position, or liquidity.

On July 1, 2008, MIT adopted the provisions of the accounting standard *Determining Fair Value When the Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly*, and applied them prospectively in 2009. This standard provides additional guidance for estimating fair value when the volume and level of activity for the asset or liability have significantly decreased and re-emphasizes that regardless of market conditions the fair value measurement is an exit price concept. The scope of this standard does not include assets and liabilities measured under Level 1 inputs (quoted prices in active markets for identical assets).

On July 1, 2008, and in conjunction with the accounting standard *Fair Value Measurements*, MIT adopted *The Fair Value Option for Financial Assets and Financial Liabilities*. This standard allows an entity the irrevocable option to elect fair value to measure certain financial assets and liabilities under an instrument-by-instrument election, and establishes additional disclosure requirements. MIT elected the fair value option in accounting for pledges receivable and life income fund liabilities. The adoption of this standard did not have a material impact on MIT's financial statements.

**Table 4. Liabilities Due Under Life Income Funds**

(in thousands of dollars)

Balance at beginning of year . . . . .	\$ 72,606
Additions for new gifts . . . . .	5,123
Terminations and Payments to beneficiaries . . . . .	(10,845)
Net investment and actuarial gain . . . . .	7,372
<b>Balance at end of year . . . . .</b>	<b>\$ 74,256</b>

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## A. Accounting Policies (continued)

On July 1, 2008, MIT adopted the accounting standard *Endowments of Not-for-Profit Organizations: Net Asset Classification of Funds Subject to an Enacted Version of the Uniform Prudent Management of Institutional Funds Act, and Enhanced Disclosures for All Endowment Funds*. This standard provides guidance on the net asset classification of donor-restricted endowment funds for a not-for-profit organization that is subject to an enacted version of UPMIFA. The adoption of this standard had no impact on the way that MIT classifies donor-restricted endowment funds, but does require additional financial statement disclosures about MIT's endowment funds. The additional disclosures are included in Note L.

On June 30, 2009, MIT adopted the accounting standard *Subsequent Events*. This standard establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued. The adoption of this standard did not have a material impact on MIT's financial statements. MIT has evaluated subsequent events through September 15, 2010, the date the financial statements were available to be issued.

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 if 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 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.

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 retirement benefit plans. It does however require additional disclosures included in Note K.

### Non-Cash Items

Non-cash transactions excluded from the Statements of Cash Flows include the increase (decrease) in collateral for securities lending and minority interest of \$62.1 million and (\$195.2) million, as well as \$35.1 million and \$30.3 million of accrued liabilities related to plant and equipment purchases for 2010 and 2009, respectively.

### 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 and disclosure of 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, 2009 balances and amounts previously reported have been reclassified to conform to the June 30, 2010 presentation.

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## B. 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.

The separation was enabled by a \$400 million gift pledged by Los Angeles philanthropists Eli and Edythe Broad to The Broad Institute. The gift serves to create an endowment to transform The Broad Institute from a 10-year experiment, as it was conceived when founded in 2004 with a \$100 million gift of operating funds to MIT, into a permanent entity.

The Broad Institute's assets and liabilities reflected in MIT's Statements of Financial Position as of June 30, 2009 were \$188.3 million and \$97.3 million, respectively. Assets consist primarily of equipment, leasehold improvements, accounts receivable, grants and contracts in progress, cash, investments, and inventory. Liabilities include sponsor advances, agency funds held, and deferred landlord-financed leasehold improvements. The Broad Institute's revenues as reflected in MIT's Statement of Activities in 2009 totaled \$206.0 million; expenses were \$215.4 million.

At separation on July 1, 2009, MIT transferred \$91.0 million of net assets to the separately incorporated The Broad Institute as shown in the Statement of Activities.

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## C. 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, as of July 1, 2008, MIT has valued 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

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 is considered when determining the proper categorization of the investment's fair value measurement within the fair valuation 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.

## C. Investments (continued)

Table 5 below presents MIT's investments at fair value as of June 30, 2010, grouped by the valuation hierarchy as defined on page 17.

<i>(in thousands of dollars)</i>	2010			Total fair value	2009 Total fair value
	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant un-observable inputs (Level 3)		
Cash equivalents . . . . .	\$ 771,475	\$ —	\$ —	\$ 771,475	\$ 751,923
Fixed income . . . . .	582,090	131,788	75,097	788,975	682,134
Long equities . . . . .	1,377,596	272,684	3,994,837	5,645,117	4,587,465
Short equities . . . . .	(518,544)	—	—	(518,544)	—
Marketable alternatives . . . . .	—	426,755	1,388,138	1,814,893	2,203,965
Real estate . . . . .	—	—	1,352,644	1,352,644	1,256,126
Perpetual trusts . . . . .	—	—	53,134	53,134	47,618
Interest rate, credit & other derivatives . . . . .	(1,592)	(1,831)	—	(3,423)	(9,818)
<b>Total investments . . . . .</b>	<b>\$ 2,211,025</b>	<b>\$ 829,396</b>	<b>\$ 6,863,850</b>	<b>\$ 9,904,271</b>	<b>\$ 9,519,413</b>

Cash equivalents include 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 investment in these external managers using the external managers' reported NAV without further adjustment unless

MIT expects to sell the investment at a value other than NAV or if 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.

As a result of adopting new guidance for estimating the fair value of investments, certain investments have been transferred to Level 2 assets subject to criteria described above based upon recorded amounts at June 30, 2010.

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, 2010 and 2009.

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.



## C. Investments (continued)

Table 6 below is a rollforward of the investments classified by MIT within Level 3 of the fair value hierarchy defined on page 17 at June 30, 2010 and 2009.

<i>(in thousands of dollars)</i>	Fixed income	Equities	Marketable alternatives	Real estate	Perpetual trusts	Total investments
<b>Fiscal Year 2009</b>						
Fair value, July 1, 2008. . . .	\$ 57,679	\$ 4,480,221	\$ 2,898,174	\$ 1,235,092	\$ 66,912	\$ 8,738,078
Realized gains (losses). . . . .	–	(62,307)	(45,793)	91	–	(108,009)
Unrealized losses . . . . .	–	(990,951)	(522,800)	(166,114)	(19,850)	(1,699,715)
Net purchases, sales, and settlements . . . . .	7,845	552,914	(125,616)	187,057	556	622,756
<b>Fair Value, June 30, 2009. . .</b>	<b>\$ 65,524</b>	<b>\$ 3,979,877</b>	<b>\$ 2,203,965</b>	<b>\$ 1,256,126</b>	<b>\$ 47,618</b>	<b>\$ 7,553,110</b>
<b>Fiscal Year 2010</b>						
Fair value, July 1, 2009. . . .	\$ 65,524	\$ 3,979,877	\$ 2,203,965	\$ 1,256,126	\$ 47,618	\$ 7,553,110
Realized gains (losses). . . . .	–	(46)	1,868	(389)	–	1,433
Unrealized gains (losses) . .	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	–	(154,171)	(426,755)	–	–	(580,926)
<b>Fair Value, June 30, 2010. . .</b>	<b>\$ 75,097</b>	<b>\$ 3,994,837</b>	<b>\$ 1,388,138</b>	<b>\$ 1,352,644</b>	<b>\$ 53,134</b>	<b>\$ 6,863,850</b>

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 \$1,165.5 million at June 30, 2010 and \$588.1 million at June 30, 2009.

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. Cash collateral and certain securities owned by MIT held at counterparty brokers were provided at June 30, 2010 to collateralize these positions and are included in investments on the Statement 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, 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, 2010 and 2009 are listed in Table 7 below. MIT expects these funds to be called currently and for a period to extend between twelve and fifteen years.

<i>(in thousands of dollars)</i>	2010	2009
Equities . . . . .	\$ 1,296,483	\$ 1,607,993
Marketable alternatives . . . . .	177,771	153,498
Real estate . . . . .	456,656	581,070
<b>Total Unfunded Commitments</b>	<b>\$ 1,930,910</b>	<b>\$ 2,342,561</b>

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## D. Derivative Financial Instruments

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

MIT has entered into certain interest rate swap agreements to manage the interest cost and risk associated with its variable rate debt, further described in Note H. Under the terms of these agreements, MIT pays fixed rates, ranging from 4.46 percent to 4.91 percent, determined at inception, and receives the Securities Industry and Financial Market Association (SIFMA)'s municipal swap index rate on the respective notional principal amounts. At June 30, 2010, swap agreements in place for the purpose of managing interest rate risk on MIT's variable rate debt had a total fair value of \$(40.5) million and net losses for 2010 totaled \$4.9 million. The notional amount of contracts related to these swaps at June 30, 2010 was \$250.0 million. The notional amounts of these derivatives are not recorded on MIT's Statement 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 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 up-front 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 interest-rate cap and swaption instruments offer MIT an opportunity to create an asymmetric return payoff pattern in which downside

exposure is limited and upside potential is unlimited. The payoff is expected to occur in extreme market conditions that would negatively impact other of MIT's assets.

Table 8 at the top of page 21 summarizes the notional exposure and net ending fair value relative to the financial instruments with off-balance sheet risk as of June 30, 2010 related to MIT's investment management.

Table 9 at the top of page 21 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 replacements of the agreements. MIT enters into arrangements only with counterparties believed to be creditworthy.

## D. Derivative Financial Instruments (continued)

	Notional Exposure		Net ending fair value *	Net gain (loss)**
	Long	Short		
<b>Fixed income instruments</b>				
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
<b>Total fixed income instruments . . . . .</b>	<b>3,834,172</b>	<b>(2,064,898)</b>	<b>25,132</b>	<b>(7,403)</b>
<b>Currency instruments</b>				
Currency forwards . . . . .	52,496	(53,829)	(1,333)	(1,007)
<b>Total currency instruments . . . . .</b>	<b>52,496</b>	<b>(53,829)</b>	<b>(1,333)</b>	<b>(1,007)</b>
<b>Commodity instruments</b>				
Commodity futures . . . . .	1,364	-	269	(3,424)
<b>Total commodity futures . . . . .</b>	<b>1,364</b>	<b>-</b>	<b>269</b>	<b>(3,424)</b>
<b>Credit instruments . . . . .</b>	<b>200,607</b>	<b>(1,553,312)</b>	<b>12,969</b>	<b>35,390</b>
<b>Total . . . . .</b>	<b>\$ 4,088,639</b>	<b>\$ (3,672,039)</b>	<b>\$ 37,037</b>	<b>\$ 23,556</b>

*\*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 (loss) on investments and other assets in the Statements of Activities.*

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, 2010.

	Purchased protection				Written protection notional amount			
	Purchased notional amounts	Purchased fair value*	Years to maturity < 5 years	5-10 years	Written notional amounts	Offsetting purchased credit protection**	Net written credit protection	Net written credit protection fair value
<b>Credit rating on underlying or index</b>								
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 index . . . . .	29,100	16,030	-	29,100	-	-	-	-
<b>Total . . . . .</b>	<b>\$ 1,352,705</b>	<b>\$ 6,318</b>	<b>\$ 123,450</b>	<b>\$ 1,229,255</b>	<b>\$ 200,607</b>	<b>\$ (200,607)</b>	<b>\$ -</b>	<b>\$ 6,651</b>

*\*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 (loss) on investments and other assets in the Statements of Activities.*

## E. Pledges Receivable

Table 10 below shows the time periods in which pledges receivable at June 30, 2010 and 2009 are expected to be realized.

	2010	2009
In one year or less . . . . .	\$ 99,057	\$ 152,686
Between one year and five years . . . . .	193,666	195,033
More than five years . . . . .	165,997	168,897
Less: allowance for unfulfilled pledges . . . . .	(46,410)	(51,880)
<b>Pledges receivable, net . . . . .</b>	<b>\$ 412,310</b>	<b>\$ 464,736</b>

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 \$59.0 million and \$89.5 million in 2010 and 2009, respectively. MIT has gross conditional pledges, not recorded, for the promotion of education and research in the amount of \$44.1 million and \$114.0 million as of June 30, 2010 and 2009, respectively. In 2009, \$95.0 million of the \$114.0 million related to The Broad Institute.

As discussed in Note A, MIT adopted *The Fair Value Option for Financial Assets and Financial Liabilities* in accounting for pledges receivable. Pledges receivable are classified as Level 3 under the valuation hierarchy in Note C.

Table 11 below is a rollforward of the pledges receivable for 2010 and 2009.

	2010	2009
Pledges receivable at beginning of year . . . . .	\$ 464,736	\$ 443,303
New pledges . . . . .	61,630	125,502
Pledge payments received . . . . .	(139,549)	(106,431)
Decrease in pledge discount . . . . .	30,494	5,542
Decrease (increase) in reserve for unfulfilled pledges . . . . .	5,470	(3,180)
Transfer to The Broad Institute . . . . .	(10,471)	-
<b>Balance at end of year . . . . .</b>	<b>\$ 412,310</b>	<b>\$ 464,736</b>

## F. Student Notes Receivable

Table 12 below details the components of student notes receivable at June 30, 2010 and 2009.

	2010	2009
Institute-funded student notes receivable . . . . .	\$ 16,570	\$ 18,188
Perkins student notes receivable . . . . .	35,926	33,765
<b>Total student notes receivable . . . . .</b>	<b>52,496</b>	<b>51,953</b>
Less: allowance for doubtful accounts . . . . .	(3,000)	(3,000)
<b>Student notes receivable, net . . . . .</b>	<b>\$ 49,496</b>	<b>\$ 48,953</b>



## F. 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, \$33.6 million and \$33.3 million at June 30, 2010 and

2009, 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.

## G. Accounts Payable, Accruals and Other Liabilities

MIT's accounts payable, accruals and other liabilities at June 30, 2010 and 2009 are shown in Table 13 below.

	2010	2009
Accounts payable and accruals .....	\$ 256,213	\$ 249,445
Accrued vacation .....	52,885	50,120
<b>Total</b> .....	<b>\$ 309,098</b>	<b>\$ 299,565</b>

## H. Borrowings

	2010	2009
<b>EDUCATIONAL PLANT</b>		
Massachusetts Health and Educational Facilities Authority (MHEFA)		
Series I, 4.75%–5.20%, due 2028, par value \$59,200 .....	\$ 59,638	\$ 59,663
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 .....	243,041	243,804
Series L, 3.0%–5.25%, due 2004–2033, par value \$184,860 .....	185,394	188,616
Series M, 5.25%, due 2014–2030, par value \$131,110 .....	144,968	145,998
Series N, 3.5%–5.0%, due 2014–2038, par value \$325,195 .....	332,815	333,991
Series O, 4.0%–6.0%, due 2016–2036, par value \$266,460 .....	273,368	274,475
<b>Total MHEFA</b> .....	<b>1,489,224</b>	<b>1,496,547</b>
Medium Term Notes Series A, 7.125%, due 2026 .....	17,351	17,347
Medium Term Notes Series A, 7.25%, due 2096 .....	45,441	45,439
Notes payable to bank, variable rate, due 2011 .....	83,033	83,033
<b>Total educational plant</b> .....	<b>1,635,049</b>	<b>1,642,366</b>
<b>OTHER</b>		
Notes payable to bank, variable rate, due 2011 .....	93,477	93,477
<b>Total Borrowings</b> .....	<b>\$ 1,728,526</b>	<b>\$ 1,735,843</b>

## H. Borrowings (continued)

In 2010, fair value of the outstanding debt is approximately 7 percent greater than the carrying value. In 2009, fair value of the outstanding debt is approximately 3 percent more than the carrying value. Carrying value is based on estimates using current interest rates available for similarly rated debt of the same remaining maturities.

The aggregate amount of debt payments and sinking fund requirements for each of the next five fiscal years is shown in Table 15 below.

**Table 15. Debt Obligations**  
(in thousands of dollars)

2011 .....	\$ 178,879
2012 .....	2,490
2013 .....	26,500
2014 .....	26,000
2015 .....	59,110

MIT maintains a line of credit with a major financial institution for an aggregate commitment of \$500.0 million. As of June 30, 2010, \$323.5 million was available under this line of credit. The line of credit expires on March 28, 2011

and MIT plans to secure replacement financing.

Cash paid for interest on long-term debt in 2010 and 2009 was \$79.4 million and \$56.1 million, respectively. The increased cash payments in 2010 were largely due to the Series N and O fixed rate debt issued in 2009.

Variable interest rates at June 30, 2010 are shown in Table 16 below.

**Table 16. Variable Interest Rates**

(in thousands of dollars)	Amount	Rate
MHEFA Series J-1 .....	\$ 125,000	0.22%
MHEFA Series J-2 .....	125,000	0.24%
Notes payable to bank. ....	176,510	0.40%

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.

## I. Commitments and Contingencies

### Federal Government Funding

MIT receives funding or reimbursement 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), MIT's cognizant Federal agency. MIT's indirect cost reimbursements have been based on fixed rates with carry-forward of under or over recoveries, except in 2008, during which fixed rates were negotiated without carry-forward for most on and off-campus research activity. At June 30, 2010 and 2009, MIT recorded a net over-recovery of \$12.3 million and \$2.4 million, respectively.

The DCAA is responsible for auditing both direct and indirect charges to grants and contracts in support of ONR's negotiating responsibility. MIT has final audited rates through 2009. MIT's 2010 research revenues of \$1,369.6 million include reimbursement of indirect costs of \$197.2 million, which includes the adjustment for the variance between the indirect cost income determined by the fixed rates and actual costs for 2010. In 2009, research revenues were \$1,375.1 million, which included reimbursement of indirect costs of \$221.5 million.

### Leases

At June 30, 2010, there were no capital lease obligations. MIT is committed under certain operating (rental) leases. Rent expense incurred under operating lease obligations was \$37.9 million and \$65.5 million in 2010 and 2009, respectively. In 2009, \$22.1 million of rent expense related to The Broad Institute. Future minimum payments under operating leases are shown in Table 17 below.

**Table 17. Lease Obligations**

(in thousands of dollars)	
2011 .....	\$ 32,783
2012 .....	31,852
2013 .....	29,961
2014 .....	21,778
2015 .....	9,126

### Investments

As of June 30, 2010, \$41.8 million of investments were pledged as collateral to various supplier and government agencies, the largest being to the Nuclear Regulatory Commission, and for self-insured workers' compensation insurance.

## I. Commitments and Contingencies (continued)

### Future Construction

MIT has contracted for educational plant in the amount of \$116.5 million at June 30, 2010. 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.

## J. Functional Expense Classification

MIT's expenditures on a functional basis are shown in Table 18 below.

	2010	2009
General and administrative .....	\$ 438,863	\$ 497,043
Instruction and unsponsored research .....	635,668	680,848
Sponsored research .....	1,192,041	1,167,036
Auxiliary enterprises .....	104,489	104,443
Operation of alumni association .....	11,505	11,916
<b>Total operating expense .....</b>	<b>\$2,382,566</b>	<b>\$2,461,286</b>

## K. 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 2010 or 2009.

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.

## K. Retirement Benefits (continued)

The amount contributed and expenses recognized during 2010 and 2009 related to the defined contribution plan were \$39.2 million and \$40.3 million, respectively.

For purposes of calculating net periodic postretirement 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 and Other Amounts Recognized in Unrestricted Net Assets

Table 19 summarizes the components of net periodic benefit (income) cost recognized in the Statement of Activities and other amounts recognized in unrestricted net assets for the years ended June 30, 2010 and 2009.

(in thousands of dollars)	Defined Benefit Plan		Postretirement Welfare Benefit Plan	
	2010	2009	2010	2009
<b>Components of net periodic benefit (income) cost</b>				
Service cost .....	\$ 54,179	\$ 54,344	\$ 16,581	\$ 15,009
Interest cost .....	131,994	134,080	25,901	25,137
Expected return on plan assets .....	(222,291)	(215,752)	(20,422)	(20,647)
Amortization of transition amount .....	–	–	4,776	4,776
Amortization of net actuarial (gain) loss .....	(29,500)	(31,172)	4,409	2,380
Amortization of prior service cost .....	2,180	2,180	3,555	3,555
One-time specific termination benefits .....	–	1,143	–	–
<b>Net periodic benefit (income) cost .....</b>	<b>(63,438)</b>	<b>(55,177)</b>	<b>34,800</b>	<b>30,210</b>
<b>Other amounts recognized in unrestricted net assets</b>				
Current year actuarial loss .....	\$ 183,120	\$ 728,482	\$ 40,437	\$ 78,677
Amortization of actuarial gain (loss) .....	29,500	31,172	(4,409)	(2,380)
Current year prior service cost .....	–	–	–	–
Amortization of prior service cost .....	(2,180)	(2,180)	(3,555)	(3,555)
Amortization of transition obligation .....	–	–	(4,776)	(4,776)
<b>Total recognized in unrestricted net assets .....</b>	<b>210,440</b>	<b>757,474</b>	<b>27,697</b>	<b>67,966</b>
<b>Total recognized in net periodic benefit (income) cost and unrestricted net assets .....</b>	<b>\$ 147,002</b>	<b>\$ 702,297</b>	<b>\$ 62,497</b>	<b>\$ 98,176</b>

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 \$3.1 million and \$2.2 million, respectively. The estimated net actuarial loss, prior service cost,

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 \$10.3 million, \$3.6 million, and \$4.8 million, respectively.

## K. Retirement Benefits (continued)

### Benefit Obligations and Fair Value of Assets

Table 20 summarizes the benefit obligations, plan assets, amounts recognized in the Statements of Financial Position, and amounts recognized in unrestricted net assets 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	
	2010	2009	2010	2009
<b>Change in benefit obligation</b>				
Benefit obligation at beginning of year . . . . .	\$ 2,118,977	\$ 2,066,978	\$ 409,738	\$ 382,845
Service cost . . . . .	54,179	54,344	16,581	15,009
Interest cost . . . . .	131,994	134,080	25,901	25,137
Retiree contributions . . . . .	—	—	3,200	3,105
Net benefit payments and transfers . . . . .	(117,535)	(111,972)	(23,474)	(22,043)
Assumption changes and actuarial net loss (gain) . . . . .	106,262	(25,596)	40,224	5,685
One-time specific termination benefits . . . . .	—	1,143	—	—
<b>Benefit obligations at end of year . . . . .</b>	<b>2,293,877</b>	<b>2,118,977</b>	<b>472,170</b>	<b>409,738</b>
<b>Change in plan assets</b>				
Fair value of plan assets at beginning of year . . . . .	2,284,819	2,989,316	234,601	251,684
Actual return on plan assets . . . . .	145,434	(538,325)	20,209	(52,345)
Employer contributions . . . . .	—	(54,200)	2,038	56,604
Retiree contributions . . . . .	—	—	3,200	3,105
Net benefit payments and transfers . . . . .	(117,535)	(111,972)	(25,513)	(24,447)
<b>Fair value of plan assets at end of year . . . . .</b>	<b>2,312,718</b>	<b>2,284,819</b>	<b>234,535</b>	<b>234,601</b>
<b>Funded (unfunded) status at end of year . . . . .</b>	<b>\$ 18,841</b>	<b>\$ 165,842</b>	<b>\$ (237,635)</b>	<b>\$ (175,137)</b>
<b>Amounts recognized in the statements of financial position consist of:</b>				
Benefit assets . . . . .	\$ 18,841	\$ 165,842	\$ —	\$ —
Benefit liability . . . . .	—	—	(237,635)	(175,137)
<b>Total . . . . .</b>	<b>\$ 18,841</b>	<b>\$ 165,842</b>	<b>\$ (237,635)</b>	<b>\$ (175,137)</b>
<b>Amounts recognized in unrestricted net assets consist of:</b>				
Net actuarial loss (gain) . . . . .	\$ 192,250	\$ (20,371)	\$ 184,971	\$ 148,942
Prior service cost . . . . .	9,001	11,182	3,557	7,113
Transition liability . . . . .	—	—	14,327	19,103
<b>Total . . . . .</b>	<b>\$ 201,251</b>	<b>\$ (9,189)</b>	<b>\$ 202,855</b>	<b>\$ 175,158</b>

## K. Retirement Benefits (continued)

The accumulated benefit obligation for MIT's defined benefit pension plan was \$2,157.9 million and \$2,011.3 million at June 30, 2010 and 2009, respectively.

Defined benefit plan funding rules are set forth under the Pension Protection Act of 2006 (PPA). On a PPA basis, the funded position of a plan is measured by comparing the actuarial value of assets with the funding target. The actuarial value of assets is an average of the fair market value over a three-year period adjusted for cash flow and expected earnings, but not greater than 110 percent of the fair market value. The funding target is the present value of benefits accrued or earned as of the valuation date (January 1). As of January 1, 2010 (the plan's valuation date), the MIT defined benefit pension plan was estimated at 132.4 percent funded on a PPA basis. This is based on a funding target of \$1,986.0 million and an actuarial value of assets of \$2,630.3 million.

Under rules set forth in the accounting standard for accounting and reporting of pension costs, the funded position of the plan is measured by comparing the fair value

of assets with the accumulated benefit obligation (ABO) or the projected benefit obligation (PBO). The ABO equals the present value of benefits as of the end of the fiscal year (June 30). The PBO equals the ABO adjusted for the effect of future expected pay increases. As of June 30, 2010, the MIT defined benefit pension plan was 107.2 percent funded on an ABO basis. This is based on an ABO of \$2,157.9 million and the fair value of assets of \$2,312.7 million.

The ABO and PPA funded percentages differ primarily due to the difference in plan assets and economic conditions (and therefore plan valuation assumptions) between January 1, 2010 and June 30, 2010.

MIT has recognized the effect of the expected Medicare subsidy by reducing its accumulated postretirement benefit obligation by \$62.6 million and \$67.8 million as of June 30, 2010 and 2009, respectively. This initial reduction was recognized as an actuarial gain. Additionally, the service and interest cost components of postretirement benefits cost were reduced in 2010 and future periods.

**Table 21. Assumptions and Health Care Cost Trend Rates**

	Pension Benefit Plan		Postretirement Welfare Benefit Plan	
	2010	2009	2010	2009
<b>Assumptions used to determine benefit obligation as of June 30:</b>				
Discount rate . . . . .	5.84%	6.25%	5.71%	6.25%
Rate of compensation increase <sup>1</sup> . . . . .	4.00%	4.00%		
<b>Assumptions used to determine net periodic benefit (income) cost for year ended June 30:</b>				
Discount rate . . . . .	6.25%	6.50%	6.25%	6.50%
Expected long-term return on plan assets . . . . .	8.00%	8.00%	7.00%	7.00%
Rate of compensation increase <sup>1</sup> . . . . .	4.00%	4.00%		
<b>Assumed health care cost trend rates:</b>				
Health care cost trend rate assumed for next year . . . . .			7.50%	8.00%
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 . . . . .			2015	2015

<sup>1</sup> The average rate of salary increase is assumed to be 2% for 2011, 3% for 2012, and 4% thereafter.

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.



## K. Retirement Benefits (continued)

As an indicator of sensitivity, a one percentage point change in the assumed health care cost trend rate would effect 2010 as shown in Table 22 below.

**Table 22. Health Care Cost Trend Rate Sensitivity**

<i>(in thousands of dollars)</i>	1% point increase	1% point decrease
Effect on 2010 post-retirement service and interest cost .....	\$ 7,078	\$ (5,820)
Effect on post-retirement benefit obligation as of June 30, 2010 .....	\$ 56,690	\$ (47,743)

### Plan Assets

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 and the maintenance of a portfolio diversified by asset class, investment approach and security holdings, and the maintenance of sufficient liquidity to meet benefit obligations as they come due.

Table 23 below presents investments of MIT's defined benefit plan and postretirement welfare benefit plan, which are included in plan assets at fair value as of June 30, 2010, grouped by the valuation hierarchy defined in Note C. Details of the methodology used to value each category of investments are discussed in Note C.

**Table 23. Investments in Retirement Benefit Plans**

*(in thousands of dollars)*

	Quoted prices in active markets (level 1)	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)	Total fair value
<b>Defined Benefit Plan</b>				
Cash equivalents .....	\$ 11,441	\$ -	\$ -	\$ 11,441
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)
	<u>\$ 533,003</u>	<u>\$ 219,721</u>	<u>\$ 1,549,422</u>	<u>\$ 2,302,146</u>
Less: Amounts held in 401(h) accounts .....				(4,371)
<b>Total investments</b> .....				<u>\$ 2,297,775</u>
<b>Postretirement Welfare Benefit Plan</b>				
Cash equivalents .....	\$ 1,920	\$ -	\$ -	\$ 1,920
Fixed income .....	-	52,857	-	52,857
Equities .....	20,823	73,176	29,527	123,526
Marketable alternatives .....	-	7,328	33,232	40,560
Real estate .....	-	-	7,140	7,140
<b>Total investments</b> .....	<u>\$ 22,743</u>	<u>\$ 133,361</u>	<u>\$ 69,899</u>	<u>\$ 226,003</u>

## K. Retirement Benefits (continued)

Table 24 below 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 C as at June 30, 2010.

<b>Defined Benefit Plan</b>	<b>Equities</b>	<b>Marketable alternatives</b>	<b>Real Estate</b>	<b>Total Investments</b>
<b>Fair value, July 1, 2009</b> .....	\$ 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 .....	(9,079)	(42,150)	-	(51,229)
<b>Fair value, June 30, 2010</b> .....	<u>\$ 727,149</u>	<u>\$ 597,032</u>	<u>\$ 225,241</u>	<u>\$ 1,549,422</u>
<b>Postretirement Welfare Benefit Plan</b>				
<b>Fair value, July 1, 2009</b> .....	\$ 23,511	\$ 32,919	\$ 6,519	\$ 62,949
Realized gains (losses) .....	(5)	105	-	100
Unrealized gains (losses) .....	2,948	(1,409)	(108)	1,431
Net purchases, sales, settlements .....	4,299	8,945	729	13,973
Transfers of assets .....	(1,226)	(7,328)	-	(8,554)
<b>Fair value, June 30, 2010</b> .....	<u>\$ 29,527</u>	<u>\$ 33,232</u>	<u>\$ 7,140</u>	<u>\$ 69,899</u>

The unfunded commitments which MIT's defined benefit plan and postretirement welfare benefit plan have made to various investments as of June 30, 2010 and 2009 are listed in Table 25 below.

	<b>Defined Benefit Plan</b>		<b>Postretirement Welfare Benefit Plan</b>	
	<b>2010</b>	<b>2009</b>	<b>2010</b>	<b>2009</b>
Equities .....	\$ 276,607	\$ 313,986	\$ 20,440	\$ 22,881
Marketable alternatives .....	65,078	114,244	10,061	10,891
Real estate .....	183,496	222,749	11,280	12,993
<b>Total</b> .....	<u>\$ 525,181</u>	<u>\$ 650,979</u>	<u>\$ 41,781</u>	<u>\$ 46,765</u>

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, 2010 and 2009 are shown in Table 26 at the top of the next page.



## K. Retirement Benefits (continued)

	Defined Benefit Plan Plan Assets as of June 30			Postretirement Welfare Benefit Plan Plan Assets as of June 30		
	Target Allocation	2010	2009	Target Allocation	2010	2009
Cash & cash equivalents .....	—	—	4%	—	1%	1%
Fixed income .....	8%	11%	8%	20%	23%	18%
Equities .....	52%	51%	51%	55%	55%	62%
Marketable alternatives .....	29%	28%	27%	20%	18%	16%
Real estate .....	11%	10%	10%	5%	3%	3%
<b>Total</b> .....	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

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, 2010. Refer to Note D for detailed discussion regarding derivative financial instruments. The postretirement welfare benefit plan did not have any outstanding derivative financial instrument at June 30, 2010.

	Notional exposure		Net ending fair value amount	Net loss
	Long	Short		
Fixed income instruments				
Fixed income futures .....	\$ —	\$ (11,900)	\$ (196)	\$ (649)
<b>Total fixed income instruments</b> .....	<b>\$ —</b>	<b>\$ (11,900)</b>	<b>\$ (196)</b>	<b>\$ (649)</b>

### Contributions

MIT does not expect to contribute to its defined benefit pension plan, and expects to contribute approximately \$37.2 million to its postretirement welfare benefit plan in 2011. These contributions have been estimated based on the same assumptions used to measure MIT's benefit obligation at June 30, 2010. In 2009, under the provisions of Section 420 of the Internal Revenue Code, the MIT defined benefit plan transferred \$54.2 million of excess pension assets to the postretirement welfare benefit plan. The transfer resulted in a negative contribution of \$54.2 million for the defined benefit plan and a positive contribution of

\$54.2 million to the postretirement welfare benefit plan. MIT also contributed \$2.0 million and \$2.4 million to the postretirement welfare benefit plan in 2010 and 2009, respectively.

### Expected Future Benefit Payments

Table 28 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 obligation at June 30, 2010.

	Pension Benefits	Other Benefits <sup>1</sup>	Federal Subsidy <sup>2</sup>
2011 .....	\$ 119,717	\$ 30,251	\$ 2,449
2012 .....	128,704	32,710	2,716
2013 .....	132,490	34,896	2,988
2014 .....	136,379	36,755	3,249
2015 .....	140,416	38,554	3,494
2016–2020 .....	763,818	218,485	21,261

<sup>1</sup> Other benefits reflect the total net benefits expected to be paid from the plans (i.e., gross benefit reimbursements offset by retiree contributions).  
<sup>2</sup> Federal subsidy reflects the amount MIT is expected to receive from the government and reflects MIT's expected drugs claims experience.

## L. Components of Net Assets and Endowment

Table 29 below presents the three categories of net assets by purpose as of June 30, 2010. The amounts listed in the unrestricted column labeled Endowment Funds Principal are those gifts 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 investment funds is pledges, the majority of which will be reclassified to unrestricted net assets when cash is received. Certain funds invested in MIT's endowment pool previously shown as part of MIT's endowment have been reclassified to other invested funds to conform to the June 30, 2010 presentation.

<i>(in thousands of dollars)</i>	2010			Total	2009 Total
	Unrestricted	Temporarily Restricted	Permanently Restricted		
<b>Endowment funds principal</b>					
General purpose . . . . .	\$ 582,060	\$ 684,205	\$ 217,665	\$ 1,483,930	\$ 1,432,233
Departments and research . . . . .	346,759	585,748	417,113	1,349,620	1,271,207
Library . . . . .	8,119	13,397	7,833	29,349	28,463
Professorships . . . . .	330,279	1,611,015	582,449	2,523,743	2,416,802
Graduate general . . . . .	50,029	76,029	76,856	202,914	189,690
Graduate departments . . . . .	63,678	179,230	171,322	414,230	386,302
Undergraduate . . . . .	146,915	656,135	312,027	1,115,077	1,058,510
Prizes . . . . .	5,719	15,705	17,041	38,465	37,225
Miscellaneous . . . . .	711,311	124,036	71,087	906,434	813,699
Investment income held for distribution . . . . .	253,559	—	—	253,559	246,190
Endowment funds before pledges . . . . .	2,498,428	3,945,500	1,873,393	8,317,321	7,880,321
Pledges . . . . .	—	—	146,137	146,137	169,784
<b>Total endowment funds . . . . .</b>	<b>2,498,428</b>	<b>3,945,500</b>	<b>2,019,530</b>	<b>8,463,458</b>	<b>8,050,105</b>
<b>Other invested funds</b>					
Student loan funds . . . . .	20,180	—	16,928	37,108	37,425
Building funds . . . . .	45,396	143,373	—	188,769	205,881
Designated purposes:					
– Departments and research . . . . .	265,207	—	—	265,207	258,747
– Other purposes . . . . .	83,620	—	—	83,620	51,440
Reserve funds . . . . .	95,168	—	—	95,168	98,316
Real estate gifts held for sale . . . . .	6,275	—	—	6,275	7,908
Life income funds . . . . .	6,209	36,598	65,480	108,287	99,412
Pledges . . . . .	—	264,945	—	264,945	294,953
Other funds available for current expenses . . . . .	329,537	72,650	—	402,187	416,783
Funds expended for educational plant . . . . .	409,281	—	—	409,281	425,418
<b>Total other funds . . . . .</b>	<b>1,260,873</b>	<b>517,566</b>	<b>82,408</b>	<b>1,860,847</b>	<b>1,896,283</b>
<b>Total net assets at fair value . . . . .</b>	<b>\$ 3,759,301</b>	<b>\$ 4,463,066</b>	<b>\$ 2,101,938</b>	<b>\$ 10,324,305</b>	<b>\$9,946,388</b>

## L. Components of Net Assets and Endowment (continued)

MIT's endowment consists of approximately 3,000 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 endowments. 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

### Fiscal Year 2010

**Table 30. Endowment Net Asset Composition by Type of Fund as of June 30, 2010**

<i>(in thousands of dollars)</i>	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
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
<b>Total endowment funds . . . . .</b>	<b><u>\$ 2,498,428</u></b>	<b><u>\$ 3,945,500</u></b>	<b><u>\$ 2,019,530</u></b>	<b><u>\$ 8,463,458</u></b>

**Table 31. Changes in Endowment Net Assets for the Fiscal Year ended June 30, 2010**

<i>(in thousands of dollars)</i>	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
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 . . . . .	2,964	—	58,815	61,779
Appropriation of endowment assets for expenditure . . .	(137,784)	(317,796)	(3,964)	(459,544)
Other changes:				
Underwater gain adjustment and funds held for reinvestment. . . . .	(4,794)	4,794	630	630
Net asset reclassifications and transfers to create board-designated endowment funds . . . . .	12,315	(5,349)	35,734	42,700
<b>Endowment net assets, June 30, 2010 . . . . .</b>	<b><u>\$ 2,498,428</u></b>	<b><u>\$ 3,945,500</u></b>	<b><u>\$ 2,019,530</u></b>	<b><u>\$ 8,463,458</u></b>

## L. Components of Net Assets and Endowment (continued)

Fiscal Year 2009

<i>(in thousands of dollars)</i>	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Donor-restricted endowment funds . . . . .	\$ (24,312)	\$ 3,807,297	\$ 1,913,952	\$ 5,696,937
Board-designated endowment funds . . . . .	2,353,168	—	—	2,353,168
<b>Total endowment funds . . . . .</b>	<b>\$ 2,328,856</b>	<b>\$ 3,807,297</b>	<b>\$ 1,913,952</b>	<b>\$ 8,050,105</b>

<i>(in thousands of dollars)</i>	Unrestricted	Temporarily Restricted	Permanently Restricted	Total
Endowment net assets, June 30, 2008 . . . . .	\$ 3,033,023	\$ 5,257,253	\$ 1,823,073	\$ 10,113,349
Investment return:				
Investment income . . . . .	21,970	48,094	4,046	74,110
Net depreciation (realized and unrealized) . . . . .	(609,868)	(1,131,858)	(24,337)	(1,766,063)
Total investment return. . . . .	(587,898)	(1,083,764)	(20,291)	(1,691,953)
Contributions . . . . .	4,455	—	108,155	112,610
Appropriation of endowment assets for expenditure . . . . .	(153,545)	(364,402)	—	(517,947)
Other changes:				
Underwater gain adjustment and funds held for reinvestment. . . . .	(23,984)	23,984	4,587	4,587
Net asset reclassifications and transfers to create board-designated endowment funds . . . . .	56,805	(25,774)	(1,572)	29,459
<b>Endowment net assets, June 30, 2009 . . . . .</b>	<b>\$ 2,328,856</b>	<b>\$ 3,807,297</b>	<b>\$ 1,913,952</b>	<b>\$ 8,050,105</b>

### 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 \$29.1 million and \$24.3 million as of June 30, 2010 and 2009, respectively. The underwater status of these funds resulted from unfavorable market fluctuations.

### 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 \$8,603.4 million at June 30, 2010 and \$8,143.7 million at June 30, 2009. Pool A includes certain operating and life income funds totaling \$454.7 million at June 30, 2010 and \$425.5 million at June 30, 2009. Certain assets are also maintained in separately invested funds. Separately invested funds totaled \$168.6 million as of June 30, 2010 and \$162.1 million as of June 30, 2009.

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## L. Components of Net Assets and Endowment (continued)

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. In 2010, the distribution rate was \$69.21 per Pool A unit, consistent with 2009. In 2010, the amount distributed for spending from Pool A and Pool C totaled \$581.8 million, compared to \$574.5 million distributed in the prior year. In 2010, the distribution to Pool A and Pool C included \$459.1 million from investment gains, or 78.9 percent of the total distributed to funds. In 2009, the comparable amount distributed included \$476.8 million, or 83.0 percent, from investment gains. During 2010, distributions from separately invested funds were \$4.2 million, compared to \$5.4 million in 2009. 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 \$24.0 million from gains in Pool C in 2009. No such distribution was made in 2010.

**SECTION II**

**SCHEDULE OF EXPENDITURES OF FEDERAL  
AWARDS**

**Massachusetts Institute of Technology**  
**Schedule of Expenditures of Federal Awards**  
**For the Year Ended June 30, 2010**

<b>Federal Grantor/ Pass Through Grantor/ Program Title</b>	<b>Federal CFDA Number</b>	<b>Federal Expenditures</b>
<b>Research and Development</b>		
U.S. Department of Defense:		
Air Force		\$ 267,253,900
Army		77,527,660
Navy		54,285,363
Defense Advance Research Project Agency		29,609,821
Ballistic Missile Defense Organization		78,331,823
National Security Agency		7,396,092
Classified		72,009,781
Other DOD		145,360,095
Passthrough		38,993,142
Total Department of Defense		<u>\$ 770,767,677</u>
U.S. Department of Energy		65,493,619
U.S. Department of Energy - Passthrough		7,619,490
U.S. Department of Health and Human Services		142,591,970
U.S. Department of Health and Human Services - Passthrough		15,530,858
National Aeronautics & Space Administration		44,575,897
National Aeronautics & Space Administration - Passthrough		10,208,904
National Science Foundation		54,678,389
National Science Foundation - Passthrough		15,325,553
Federal Aviation Administration		39,142,073
National Oceanic & Atmospheric Administration		5,355,872
Other Federal Sponsors		16,727,285
Other Federal Sponsors - Passthrough		1,157,701
Total Research and Development, non-capital projects	Appendix A	<u>\$ 1,189,175,288</u>
Research and Development, Capital Projects - ARRA	Note 5	244,184
Total Research and Development*		<u>\$ 1,189,419,472</u>
<b>Fellowships</b>		
National Science Foundation Fellowships	47.076	<u>\$ 8,568,678</u>

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

The accompanying notes are an integral part of this schedule.

Federal Grantor/ Pass Through Grantor/ Program Title	Federal CFDA Number	Federal Expenditures
<b>Student Financial Assistance Cluster Expenditures</b>		
U.S. Department of Education Cluster:		
Grants:		
Pell	84.063	\$ 3,376,058
Federal Supplemental Educational Opportunity Academic Competitiveness Grant	84.007	1,875,059
National SMART Grant	84.375	166,625
	84.376	480,000
Federal Work Study*	84.033	1,792,899
Federal Direct Stafford	84.268	15,276,240
Perkins:	84.038	
New Loans		7,251,387
Balance Outstanding From Prior Years		28,674,148
Loan Administrative Cost Allowance		444,129
Guaranteed Loans:		
Parent Loans for Undergraduate Students (PLUS)	84.032	6,248,364
Total Student Financial Assistance Cluster Expenditures		<u>\$ 65,584,909</u>
Other Federal Expenditures:		
Department of Defense	Appendix B	\$ 230,014
Department of Defense - Passthrough	Appendix C	4,391,544
Department of Energy	Appendix B	232,461
Department of Energy - Passthrough	Appendix C	1,630,392
Department of Health and Human Services	Appendix B	2,241,245
Department of Health and Human Services - Passthrough	Appendix C	33,768
National Aeronautics & Space Administration	Appendix B	1,008,642
National Aeronautics & Space Administration - Passthrough	Appendix C	460,753
National Science Foundation	Appendix B	2,494,573
National Science Foundation - Passthrough	Appendix C	614,985
Miscellaneous Federal Government	Appendix B	1,564,020
Miscellaneous Federal Government - Passthrough	Appendix C	233,429
Total Other Federal Expenditures*		<u>\$ 15,135,826</u>
Total Federal Expenditures		<u>\$ 1,278,708,885</u>

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

The accompanying notes are an integral part of this schedule.



# Massachusetts Institute of Technology

## Notes to Schedule of Expenditures of Federal Awards

### June 30, 2010

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#### 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, 2010. 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 both direct and indirect charges to grants and contracts in support of ONR's negotiating responsibility. The Institute has 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 Federal Direct Stafford and PLUS (CFDA #84.268 and #84.032) 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.

**Massachusetts Institute of Technology**  
**Notes to Schedule of Expenditures of Federal Awards**  
**June 30, 2010**

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**4. Subrecipients**

In the Research and Development cluster (Appendix A-1, A-2 and A-3), a total of \$106,674,691 was passed-on to subrecipients.

For other programs (Appendix B and C), a total of \$107,076 was passed-on to subrecipients, as follows.

<b>Project Name</b>	<b>CFDA</b>	<b>Amount Passed to Subrecipients</b>
Cdio In Aerospace Engineering Education	43.000	\$47,330
Bbsi Hst-Mgh Summer Institute for Biomed	47.041	\$45,466
Precise Localization of Neutron Star Sof	43.000	\$14,280

**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 from the U.S. Department of Health and Human Services:

<b>Project Name</b>	<b>CFDA</b>	<b>Federal Expenditures</b>
ARRA – Extramural Research Facilities Improvements	93.702	\$244,184

**Appendix A**  
**Massachusetts Institute of Technology**  
**Schedule of Federal Awards - Worksheet**  
**Federal Research Support**  
**FY 10 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	\$ 15,916,172	\$ 251,337,728	\$ -	\$ -	\$ 267,253,900
Army	27,402,902	50,124,758	-	-	77,527,660
Navy	17,365,095	36,920,268	-	-	54,285,363
DARPA	6,133,288	23,476,533	-	-	29,609,821
MDA	-	78,331,823	-	-	78,331,823
NSA	-	7,396,092	-	-	7,396,092
Classified	-	72,009,781	-	-	72,009,781
Other DOD	2,660,598	142,699,497	-	-	145,360,095
Passthrough	-	-	695,361	38,297,781	38,993,142
Total Department of Defense	69,478,055	662,296,480	695,361	38,297,781	770,767,677
Department of Energy	65,034,647	458,972		7,619,490	73,113,109
Department of Health & Human Services	129,333,942	13,258,028	303,890	15,226,968	158,122,828
Nat'l Aeronautics & Space Administration	20,463,995	24,111,902	43,893	10,165,011	54,784,801
National Science Foundation	54,678,389	-	203,344	15,122,209	70,003,942
FAA	-	39,142,073	-	-	39,142,073
Nat'l Oceanic & Atmospheric Administration	-	5,355,872	-	-	5,355,872
<u>Other Federal Sponsors:</u>					
Department of Agriculture	100,097	-	-	-	100,097
Department of Commerce	2,628,167	-	-	-	2,628,167
Department of Education	670,872	-	-	-	670,872
Department of Interior	336,348	-	-	-	336,348
Department of Transportation	4,789,424	-	-	-	4,789,424
Environmental Protection Agency	681,135	-	-	-	681,135
Nuclear Regulatory Commission	571,081	-	-	-	571,081
Other	1,599,168	5,350,993	-	-	6,950,161
Passthrough	-	-	83,387	1,074,314	1,157,701
Total Other Federal Sponsors	11,376,292	5,350,993	83,387	1,074,314	17,884,986
<b>Total Federal Sponsors</b>	<b>\$ 350,365,320</b>	<b>\$ 749,974,320</b>	<b>\$ 1,329,875</b>	<b>\$ 87,505,773</b>	<b>\$ 1,189,175,288</b>

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 2010 Expenditures**

**Department of Defense**

**Air Force**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
FA7014-09-D-0011	Enterprise Transformation IDIQ: Task 1 Program Portfolio Index	12.CCC	167,365
FA8650-07-C-7704	Hybrid Insect - MEMS	12.CCC	-20
FA8650-07-C-7704	Hybrid Insect - MEMS - Chandrakasan Child	12.CCC	50
FA8650-07-C-7704	Hybrid Insect - MEMS - Schmidt Child	12.CCC	5,627
FA8650-07-C-7704	Hybrid Insect - MEMS - Travel	12.CCC	34,144
FA8650-07-C-7704	Hybrid Insect - MEMS Voldman Child	12.CCC	180,011
FA8650-07-C-7704	Hybrid Insect - MEMS Univ. of Washington Subaward	12.CCC	217,477
FA8650-07-C-7704	Hybrid Insect - MEMS - Lang Child	12.CCC	226,079
FA8650-07-C-7704	Hybrid Insect - MEMS Arizona Subaward	12.CCC	317,270
FA8650-08-C-7835	Strained-Se/Strained-GE Heterostructure Tunnel-FET (HTFET) Technology	12.CCC	439,227
	<b>Total for 12.CCC</b>		<b>1,587,230</b>
	<b>Total for Air Force</b>		<b>1,587,230</b>

**Air Force - Hanscom AFB**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
FA8718-07-C-0001	Seismic Tomography of the Arabian-Eurasian Collision Zone and Surrounding Area	12.CCC	185,264
	<b>Total for 12.CCC</b>		<b>185,264</b>
	<b>Total for Air Force - Hanscom AFB</b>		<b>185,264</b>

**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 Decisions, and Cultural Shifts	12.800	1,458,320
FA9550-06-1-0092	Detection of Lagrangian Coherent Structures in the Atmosphere	12.800	-7,150
FA9550-06-1-0462	AFRL Nanotechnology Initiative High Performance Terahertz Quantum-Cascade Lasers	12.800	-2,186
FA9550-06-1-0470	Si-Laser MURI+U of Delaware	12.800	118,486
FA9550-06-1-0470	Si-Laser MURI-Boston Univ.	12.800	121,621
FA9550-06-1-0470	Si-Laser MURI-Stanford University	12.800	154,417
FA9550-06-1-0470	ST-Laser MURI-University -Rochester	12.800	179,168
FA9550-06-1-0470	Si-Laser MURI-Cornell Univ	12.800	84,061

**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
Federal Research Support - On Campus  
Fiscal 2010 Expenditures**

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-06-1-0470	Si-Laser MURI-Jurgen Michel	12.800	266,089
FA9550-06-1-0470	Si-Laser MURI-Kimerling	12.800	32,459
FA9550-06-1-0470	Si-Laser MURI-California Institute of Tech.	12.800	94,589
FA9550-06-1-0470	Si-Laser MURI-Lehigh University	12.800	91,494
FA9550-07-1-0005	Gravity Wave Dynamics in the Atmosphere	12.800	60,032
FA9550-07-1-0014	Ultrafast Optics: Ippen Child	12.800	70,199
FA9550-07-1-0014	Ultrafast Optics: Advanced Devices and Ultrafast Phenomena	12.800	-94
FA9550-07-1-0014	Fabricated Equipment - Lisa F Laser	12.800	7,117
FA9550-07-1-0014	Ultrafast Optics: Kaertner Child	12.800	40,088
FA9550-07-1-0014	Ultrafast Optics: Fujimoto Child	12.800	94,602
FA9550-07-1-0075	Theory-Based Bayesian Models of Inductive Inference	12.800	53,787
FA9550-07-1-0272	Designing Multifunctional Nanocomposites with FluoroPOSS	12.800	-23,233
FA9550-08-1-0035	DOD CAP Funds - FY09 Appropriation	12.800	52,168
FA9550-08-1-0035	DOD CAP Funds - FY08 Appropriation	12.800	-767
FA9550-08-1-0085	DoD CAP Funds # FY09 Appropriation	12.800	32,235
FA9550-08-1-0085	DoD CAP Funds # FY08 Appropriation	12.800	77
FA9550-08-1-0085	DoD CAP Funds # FY10 Appropriation	12.800	47,593
FA9550-08-1-0086	DOD CAP Funds - FY08 Appropriation	12.800	-2,556
FA9550-08-1-0086	DOD CAP Funds - FY09 Appropriation	12.800	96,008
FA9550-08-1-0086	DOD CAP Funds - FY10 Appropriation	12.800	41,185
FA9550-08-1-0143	DoD CAP Funds - FY08 Appropriation	12.800	62,492
FA9550-08-1-0143	DoD CAP Funds - FY09 Appropriation	12.800	147,227
FA9550-08-1-0143	DoD Cap Funds - FY10 Appropriation	12.800	691
FA9550-08-1-0143	YIP-08 Dynamic Wireless Networks Based on Open Physical Media	12.800	-2,767
FA9550-08-1-0159	DOD Cap Funds - FY10 Appropriation	12.800	45,805
FA9550-08-1-0159	DOD Cap Funds - FY09 Appropriation	12.800	35,008
FA9550-08-1-0159	DOD Cap Funds - FY08 Appropriation	12.800	59,809
FA9550-08-1-0180	DoDCAP Funds FY09 Appropriation-Willisky	12.800	81,418
FA9550-08-1-0180	DoDCAP Funds FY10 Appropriation-Willisky	12.800	28,091
FA9550-08-1-0180	DoDCAP Funds#FY08 Appropriation-Willisky	12.800	1
FA9550-08-1-0304	DoDCAP Funds#FY08 Appropriation-Van Vliet	12.800	69,570
FA9550-08-1-0304	DoDCAP Funds#FY09 Appropriation-Van Vliet	12.800	183,156
FA9550-08-1-0321	YIP 08: Structural Hierarchies in Biomimetic Materials	12.800	-96,672
FA9550-08-1-0321	DoDCAP: Funds FY08 Appropriation - Buehler	12.800	12,265
FA9550-08-1-0321	DoDCAP: Funds FY10 Appropriation - Buehler	12.800	46,623
FA9550-08-1-0321	DoDCAP: Funds FY09 Appropriation - Buehler	12.800	100,459

**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
Federal Research Support - On Campus  
Fiscal 2010 Expenditures**

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-08-1-0350	DOD Cap Funds - FY 08 Appropriation	12.800	1,052
FA9550-08-1-0350	DOD Cap Funds - AFOSR Child: Parrilo FY09	12.800	66,106
FA9550-08-1-0350	DOD Cap Funds - FY 09 Appropriation	12.800	145,880
FA9550-08-1-0350	DOD Cap Funds - AFOSR Child: Parrilo FY10	12.800	33,648
FA9550-08-1-0350	DOD Cap Funds - FY 10 Appropriation	12.800	55,562
FA9550-08-1-0369	DOD Cap Funds - FY09 Appropriation	12.800	205,046
FA9550-08-1-0369	DOD Cap Funds - FY08 Appropriation	12.800	198
FA9550-08-1-0379	DoD CAP Funds - FY09 Appropriation	12.800	322,976
FA9550-08-1-0379	MURI Dod CAP funds FY10 Appropriation.	12.800	72,563
FA9550-08-1-0379	DoD CAP funds - FY10 Appropriation - MECH E Child	12.800	77,932
FA9550-08-1-0379	FY09 MURI Sub to Purdue Membrane Technology and 3D Photonic-Crystal Devices	12.800	182,239
FA9550-08-1-0379	DoD CAP Funds - FY08 Appropriation - Mech E Child	12.800	22,394
FA9550-08-1-0379	MURI FY08: Membrane Technology and 3D Photonic-Crystal Devices	12.800	0
FA9550-08-1-0379	DoD CAP Funds - FY08 Appropriation	12.800	-3,000
FA9550-08-1-0379	FY08 MURI Sub to Purdue-Membrane Technology and 3D Photonic-Crystal Devices	12.800	115,986
FA9550-08-1-0409	DoD Cap - FY09 Appropriation	12.800	397,362
FA9550-08-1-0409	DoD Cap Funds - FY08 Appropriation: Fabrication: 800NM Optical Parametric Chirped Pulse Amplifier (OPCPA)	12.800	480
FA9550-08-1-0409	DoD Cap Funds - FY08 Appropriation	12.800	-374
FA9550-09-1-0152	FY10 DoD Capped Funds	12.800	10,019
FA9550-09-1-0152	FY09 DoD Capped Funds	12.800	89,114
FA9550-09-1-0196	DoD CAP Funds FY09 Appropriation	12.800	162,932
FA9550-09-1-0212	Single-Cycle Optical Pulses and Isolated Attosecond Pulse Generation	12.800	373
FA9550-09-1-0212	Fabricated Equipment: Multilayer Dielectric Grating Compressor	12.800	62
FA9550-09-1-0212	FY09 DoD Cap Funds Single-Cycle Optical Pulses and Isolated Attosecond Pulse Generation	12.800	-60,066
FA9550-09-1-0212	FY10 DoD Cap Funds Single-Cycle Optical Pulses and Isolated Attosecond Pulse Generation	12.800	266,793
FA9550-09-1-0212	Fabricated Equipment - ToF Spectrometer	12.800	114,711
FA9550-09-1-0239	DoD Cap Funds - FY09 Appropriation	12.800	56,120
FA9550-09-1-0274	DOD Cap Funds - FY09 Appropriation	12.800	88,486
FA9550-09-1-0274	DOD Cap Funds - FY10 Appropriation	12.800	4,027
FA9550-09-1-0299	DoD Cap-FY10 Appropriation	12.800	3,681
FA9550-09-1-0299	DoD Cap-FY09 Appropriation	12.800	73,990
FA9550-09-1-0330	DOD Cap Funds - FY10 Appropriation	12.800	23,359
FA9550-09-1-0330	DOD Cap Funds - FY09 Appropriation	12.800	72,202
FA9550-09-1-0330	AF-Metastable Electronically Excited Atoms and Molecules: Excitation Transfer in Slow Collisions, probed by Me	12.800	-1,949
FA9550-09-1-0363	DoD Cap - FY09 Appropriation	12.800	75,000
FA9550-09-1-0363	DoD Cap - FY09 Appropriation (Option 1)	12.800	38,137

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Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-09-1-0364	DOD cap - FY09 Appropriation	12.800	1,000
FA9550-09-1-0364	Fabricated Equipment - DURIP: Vacuum & Spectroscopic Upgrades	12.800	106,225
FA9550-09-1-0364	Fabricated Equipment - DURIP: Electro spray Upgrade	12.800	125,555
FA9550-09-1-0364	Fabricated Equipment - DURIP: Super Computer Upgrade	12.800	15,305
FA9550-09-1-0420	AFOSR Child: Acemoglu - DoD CAP FY10	12.800	21,416
FA9550-09-1-0420	DoD Cap Funds-AFOSR Child: Acemoglu	12.800	86,344
FA9550-09-1-0420	AFOSR Child: Dahleh - DoD CAP FY10	12.800	30,963
FA9550-09-1-0420	DoD Cap Funds-FY09 Appropriations-Ozdaglar	12.800	159,990
FA9550-09-1-0420	Dynamics of Beliefs Culture and Social Interactions - DoD CAP FY10 Child - Dahleh	12.800	93,500
FA9550-09-1-0420	DoD Cap FY10 Appropriations - Ozdaglar	12.800	65,193
FA9550-09-1-0438	DoD Cap - FY09 Appropriation	12.800	74,250
FA9550-09-1-0522	DoD Cap Funds FY09 Appropriations-AFOSR Child- Frazzoli	12.800	62,713
FA9550-09-1-0522	DoD Cap Funds FY09 Appropriations-AFOSR Child - Roy	12.800	37,522
FA9550-09-1-0522	DOD Cap Funds-FY09 Appropriations-How	12.800	45,935
FA9550-09-1-0606	DoD Cap - FY09 Appropriation	12.800	113,189
FA9550-09-1-0627	FY10 DoD Capped Funds	12.800	23,229
FA9550-09-1-0627	FY09 DoD Capped Funds	12.800	90,150
FA9550-09-1-0663	Multiscale, Intermittent, Turbulent Fluctuations in Space Plasmas and their Influence on the Interscale Behavior c	12.800	54,096
FA9550-09-1-0681	DOD Cap - FY09 Appropriation	12.800	261,110
FA9550-09-1-0689	DoD Cap Funds - FY09 Appropriation	12.800	150,929
FA9550-09-1-0689	DoD Cap Funds - FY10 Appropriation	12.800	76,583
FA9550-09-1-0700	DODCap Funds FY09 Appropriation - Strano	12.800	62,537
FA9550-10-1-0063	UltraFast Optics: Fujimoto Child	12.800	2,046
FA9550-10-1-0063	UltraFast Optics: Kaertner Child	12.800	92,073
FA9550-10-1-0063	DoD Cap Funds - FY10 Appropriation	12.800	10,528
<b>Total for 12.800</b>			<b>8,508,404</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-06-1-0550	Architecture Science Practical Tools for Architecting Flexible Systems	12.000	40,542
<b>Total for 12.000</b>			<b>40,542</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
FA9550-04-1-0462	(PECASE) Nanostructure Hybrid Organic/Inorganic Materials for Active Opto-Electronic Devices	12.630	-3
FA9550-07-1-0101	Advanced Technologies fo Structural and Functional OCT	12.630	122,521
FA9550-09-1-0056	DoD Cap Funds - FY09 Appropriation	12.630	54,884

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Contract Number FA9550-09-1-0056	Government Contract Title Fabricated Equipment: MIT Orbital Transfer Vehicle (MOTV)	CFDA# 12.630	FY Expenses 14,231
<b>Total for 12.630</b>			<b>191,634</b>
<b>Total for Air Force Office of Scientific Research - AFOSR</b>			<b>8,740,581</b>

**Air Force Research Laboratory**

Contract Number FA8750-09-1-0152 FA8750-10-1-0076	Government Contract Title FOS: A Factored Operating System for High Assurance and Scalability on Multicores Defining and Demonstration Capabilities for Experienced-Based Narrative Memory	CFDA# 12.300 12.300	FY Expenses 147,842 156,864
<b>Total for 12.300</b>			<b>304,707</b>

Contract Number FA8650-05-C-7262 FA8650-05-C-7262	Government Contract Title Child - Roy Learning Locomotion: Heirarchical Reinforcement Learning for Dynamic Quadrupedal Locomotion Over Extreme	CFDA# 12.CCC 12.CCC	FY Expenses 251 93,548
<b>Total for 12.CCC</b>			<b>93,799</b>

Contract Number FA8750-05-2-0274 FA8750-05-2-0274 FA8750-06-2-0189 FA8750-07-2-0031 FA8750-07-2-0031 FA8750-07-2-0032 FA8750-07-2-0032	Government Contract Title Catriona Kennedy Child Winston Child for Sajit Rao Add-On Collaborative Learning for Security and Repair in Application Communities DHS Child End-to-End Semantic Accountability Trust-Management, Intrusion-Tolerance, Accountability, and Reconstitution Architecture (TIARA) Child - Shrobe	CFDA# 12.910 12.910 12.910 12.910 12.910 12.910 12.910	FY Expenses 71,089 270,023 1,294,344 484,347 621,572 -4,768 7,109
<b>Total for 12.910</b>			<b>2,743,715</b>

Contract Number FA8650-05-2-5706 FA8650-05-2-5706 FA8750-08-1-0088	Government Contract Title Enterprise Management LAI Phase V: Year 3 Dynamo REA: Secure Execution or Multi-Core Processors Using Dynamic Run-Time Enforcement of Abstraction	CFDA# 12.800 12.800 12.800	FY Expenses 286,154 1,501,977 292,534
<b>Total for 12.800</b>			<b>2,080,666</b>
<b>Total for Air Force Research Laboratory</b>			<b>5,222,886</b>



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**Air Force Surgeon General**

Contract Number FA7014-08-C0005	Government Contract Title Economics Based Human Systems Integration	CFDA# 12.CCC	FY Expenses 180,211
<b>Total for 12.CCC</b>			<b>180,211</b>
<b>Total for Air Force Surgeon General</b>			<b>180,211</b>

**Army**

Contract Number W911NF-04-1-0353	Government Contract Title Site Specific Incorporation of Amino Acid Analogues Into Proteins In Vivo	CFDA# 12.431	FY Expenses 97,281
W911NF-04-1-0431	Fabrication: Two-Color Pump Probe Carrier Lifetime Measurement Setup	12.431	1,383
W911NF-04-1-0431	FAB: Tunable 1220nm Laser	12.431	4,633
W911NF-04-1-0431	Fabrication: Low Jitter 2 GHz Repetition Rate Er-Fiber Laser	12.431	7,268
W911NF-04-1-0431	GHOST-GigaHertz Optical Sampling Technology	12.431	403,527
W911NF-09-1-0059	Athermal Photonic Circuits AphoCs	12.431	180,392
W911NF-09-1-0170	Electron Spectrometer for Time and Angle Resolved Photoemission Spectroscopy	12.431	151,360
W911NF-10-1-0059	New Treatments - Task 7 - Stressor Interaction	12.431	42,440
W911NF-10-1-0059	New Treatments for Stress-induced Dysregulation of Circuits Regulating Reward, Fear and Habit Learning	12.431	43,578
W911NF-10-1-0059	New Treatments - Task 5 - Striatal Recordings	12.431	138,911
W911NF-10-1-0059	New Treatments - Task 6 - Amygdala Recordings	12.431	184,491
W911NF-10-1-0059	New Treatments - Task 1 - Gene Expression	12.431	7,940
W911NF-10-1-0059	New Treatments - Task 3 - Longitudinal Neuroimaging	12.431	20,154
W911NF-10-1-0059	New Treatments - Task 4 - Neuroimaging of Reward	12.431	20,884
<b>Total for 12.431</b>			<b>1,304,244</b>

Contract Number CONTRACT NO. W911QY-1 Leg Exoskeleton for Load-Carrying Augmentation in Walking	Government Contract Title Leg Exoskeleton for Load-Carrying Augmentation in Walking	CFDA# 12.CCC	FY Expenses -406
CONTRACT NO. W911QY-1 A Neuroscience Approach to Accelerated Learning - Phase II	A Neuroscience Approach to Accelerated Learning - Phase II	12.CCC	1,005,564
W911QY-08-C-0066	A Neuroscience Approach to Accelerated Learning - Phase II	12.CCC	62,342
W9124Q-09-P-0230	Prescriptive and Adaptive Testing of Framework (PAT Frame): Phase 1	12.CCC	745,949
W91CRB-07-P-0311	Joint Warfighter Test and Training Capability Modified Cooper Harper for Unmanned Vehicle Displays	12.CCC	45,739
<b>Total for 12.CCC</b>			<b>1,859,188</b>

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Contract Number	Government Contract Title	CFDA#	FY Expenses
W31P4Q-10-1-0005	COMPACT MECHANICAL AND ION PUMPING TO ACHIEVE HIGH VACUUM	12.910	1
W31P4Q-10-1-0005	DoD Cap - FY09 Appropriation	12.910	288,525
W31P4Q-10-1-0005	DoD Cap - FY09 Akinwande	12.910	159,231
W911QY-05-1-0002	MGA Child Account - Administrative	12.910	7,278
W911QY-05-1-0002	MGA Child Account - Schmidt	12.910	23,095
W911QY-05-1-0002	Sphere Vacuum System	12.910	34,414
W911QY-05-1-0002	MGA Child Account - Univ of Cambridge	12.910	44,580
W911QY-05-1-0002	MGA Child Account - Akinwande	12.910	222,556
	<b>Total for 12.910</b>		<b>779,680</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
W81XWH-09-1-0240	An RNAI-Enhanced Circuit for Cancer-Specific Drection and Destruction	12.420	137,881
	<b>Total for 12.420</b>		<b>137,881</b>
	<b>Total for Army</b>		<b>4,080,992</b>

**Army - Electronics R&D Command**

Contract Number	Government Contract Title	CFDA#	FY Expenses
W15P7T-08-C-P408	Ultra-low-Power Electronics	12.910	77,711
	<b>Total for 12.910</b>		<b>77,711</b>
	<b>Total for Army - Electronics R&amp;D Command</b>		<b>77,711</b>

**Army Aviation and Missile Command**

Contract Number	Government Contract Title	CFDA#	FY Expenses
W31P4Q-09-1-0007	High Power Pumped Heat Exchanger (Phump)	12.910	-11,068
W31P4Q-09-1-0007	Phump JHL	12.910	-4,411
W31P4Q-09-1-0007	Fabricated Equipment-Analogue to a Heat Sink	12.910	3,427
W31P4Q-09-1-0007	DoD Cap Funds-FY09 Appropriation	12.910	912,544
W31P4Q-09-1-0007	Fabricated Equipment: Two-Phase Flow Visualization & Characterization Rig	12.910	20,278
W31P4Q-09-1-0007	Phump JHB	12.910	205,156
	<b>Total for 12.910</b>		<b>1,125,927</b>
	<b>Total for Army Aviation and Missile Command</b>		<b>1,125,927</b>

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### Army Corps of Engineers

Contract Number	Government Contract Title	CFDA#	FY Expenses
W9-12HQ-06-C-0017	Using Passive Polyethylene Samplers to Evaluate Chemical Activities Controlling Fluxes and Accumulation of Or	12.431	667
W912HQ-09-C-0008	Passive PE Sampling of In Situ Remediation of Contaminated Sediments	12.431	245,340
W912HQ-10-C-0005	Robust Means for Estimating Black Carbon-Water Sorption Coefficients of Organic Contaminants in Sediments	12.431	48,052

**Total for 12.431**

**294,059**

**Total for Army Corps of Engineers**

**294,059**

### Army Research Office

Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-05-1-0469	Center for NMR Quantum Information Processing	12.431	197,833
W911NF-06-1-0101	Ultrasensitive Chem-Bio-Optical Sensors on Small Length Scales-CBT	12.431	246,585
W911NF-06-1-0232	Effect of Strain Rate on Fracture Initiation	12.431	11,475
W911NF-06-1-0291	Differential multiscale modeling of chemically complex materials under heavy deformation	12.431	79,266
W911NF-07-1-0035	Fabricated equipment - computer cluster for simulation of blast - induced traumatic brain injury	12.431	134,416
W911NF-07-1-0035	Child Account	12.431	150,724
W911NF-07-1-0035	Child Account - 6914602 Aero&Astro	12.431	18,808
W911NF-07-1-0035	Investigation of Tissue-Level mechanisms of Primary Blast Injury through modeling Simulation Neuroimaging and	12.431	810,354
W911NF-07-1-0035	Johnson TBI Child	12.431	171,522
W911NF-07-1-0126	Using the Maximum Entropy Principle as a Unifying Theory for Characterization and Sampling of Multi-Scaling Pi	12.431	5,110
W911NF-07-1-0139	Kinetics and Mechanisms of the Destruction of Toxic Agents by Recyclable Catalytic Nanoparticles as Decontam	12.431	148,847
W911NF-07-1-0210	Generation of a Synthetic Cell Patch	12.431	-247
W911NF-07-1-0493	Fabrication: Cold Atom Source	12.431	62,994
W911NF-07-1-0493	Fabricated Equipment - Imbalanced Fermi Mixtures in Optical Lattices	12.431	68,879
W911NF-07-1-0493	Quantum Emulations-CNRS	12.431	62,482
W911NF-07-1-0493	Quantum Emulations-Amherst	12.431	73,981
W911NF-07-1-0493	Zwierlein Research	12.431	74,927
W911NF-07-1-0493	Quantum Emulations-Austin	12.431	112,242
W911NF-07-1-0493	Quantum Emulations-Mainz	12.431	114,067
W911NF-07-1-0493	Quantum Emulations-Innsbruck	12.431	129,254
W911NF-07-1-0493	Fabricated Equipment - Strongly Interacting Fermi Mixtures in 2D	12.431	3,149
W911NF-07-1-0493	Quantum Emulations-Harvard	12.431	227,265
W911NF-07-1-0493	Program-Wide Tasks	12.431	27,003
W911NF-07-1-0493	Quantum Emulations of New Materials Using Ultracold Atoms	12.431	144,634
W911NF-07-1-0496	Fabrication: Resonator-Stabilized High Frequency Laser System	12.431	17,325

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-07-1-0496	Atom Interferometry on Atom Chips - A Novel Approach Towards Precision Inertial Navigation System (PINS)	12.431	164,443
W911NF-07-1-0540	Fabrication: Omnidirectional Vehicle System	12.431	3,981
W911NF-07-1-0540	Self-Supervised Mobility-Based Terrain Classification for Unmanned Ground Vehicles	12.431	116,507
W911NF-07-1-0568	Limitations and Capabilities of Control Under Communication Constraints	12.431	73,027
W911NF-07-1-0654	Standoff Detection of Explosives Using Luminescent Particles	12.431	454,887
W911NF-07-2-0078	Policy Award Data Integration	12.431	627
W911NF-08-1-0087	Electrical spin-injection into Silicon and Spin FET	12.431	19,033
W911NF-08-1-0098	Cathode Device	12.431	-219,316
W911NF-08-1-0098	Integrated Vacuum Micro-Electronics for Upper Millimeter Wave Applications	12.431	-17,323
W911NF-08-1-0098	DOD Cap Funds-FY09 Appropriation	12.431	314,058
W911NF-08-1-0098	DOD Cap Funds-FY08 Appropriation	12.431	600,000
W911NF-08-1-0098	Sheet Beam	12.431	-142,737
W911NF-08-1-0098	Program Management	12.431	-22,468
W911NF-08-1-0134	Analysis and Design of Manycore Processor to DRAM Opto-Electrical Networks with Integrated Silicon Photonics	12.431	73,519
W911NF-08-1-0211	Instrumentation Enhancements for Studies in Hydrothermal and Supercritical Fluid Media	12.431	65,888
W911NF-08-1-0228	DOD CAP Funds - FY08, 09, 10 Appropriations Appropriation	12.431	1,286,776
W911NF-08-1-0228	Fabricated Equipment - Programmable Matter Fabrication	12.431	18,438
W911NF-08-1-0228	Programmable Matter: Creating Systems that Can Think, Talk and Morph Autonomously	12.431	-3,134
W911NF-08-1-0254	DOD CAP Funds FY09 Appropriation MilliBiology	12.431	1,805,652
W911NF-08-1-0254	Erik Demaine, Phase II Milli-Biology Research	12.431	136,903
W911NF-08-1-0254	Erik Demaine Milli Biology Research	12.431	75,184
W911NF-08-1-0254	DOD CAP Funds FY08 Appropriation MilliBiology	12.431	-117,433
W911NF-08-1-0337	Fabricated Equipment - Cryogenic Test Apparatus	12.431	9,026
W911NF-08-1-0337	Comprehensive Materials and Morphologies Study of Ion Traps (COMMIT) for Scalable Quantum Computation	12.431	-0
W911NF-08-1-0337	DOD Cap Funds - FY08 Appropriation: Fabrication Stabilized Self-Referenced Optical COMB	12.431	3,577
W911NF-08-1-0337	Fabricated Equipment - Single Photon Detection Apparatus	12.431	31,819
W911NF-08-1-0337	DOD Cap Funds - FY09 Appropriation	12.431	182,836
W911NF-08-1-0337	DOD Cap Funds - FY08 Appropriation	12.431	17,807
W911NF-08-1-0337	Fabricated Equipment - Closed Cycle Cryostat Upgrade	12.431	24,688
W911NF-08-1-0337	DOD Cap Funds - FY08 Appropriation: Fabrication Laser Systems for Precision Spectroscopy	12.431	15
W911NF-08-1-0362	Hitless High-speed Photonic Switches for Integrated Photonic Networks	12.431	152,025
W911NF-08-1-0458	Extremely High Resolution Spectroscopy of Oxide Electronic Systems	12.431	-5,384
W911NF-08-1-0458	DOD Cap Funds - FY 08 Appropriation	12.431	21,211
W911NF-08-1-0458	DOD Cap Funds - FY09 Appropriation	12.431	130,758
W911NF-08-1-0458	Dod Cap Funds - FY10 Appropriation	12.431	21,522
W911NF-09-1-0157	DoD Cap Funds-FY09 Appropriations	12.431	184,430

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Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-09-1-0222	DoD Cap Funds -FY09 Appropriation	12.431	173,757
W911NF-09-1-0317	DOD Cap FUND - FY09 Appropriation	12.431	96,197
W911NF-09-1-0317	Fabricated Equipmnet-Second Generation Omnidirectional Robot	12.431	11,845
W911NF-09-1-0334	DOD cap- FY09 Appropriation	12.431	126,170
W911NF-09-1-0340	RAM Research	12.431	46,555
W911NF-09-1-0340	Stojanovic Research	12.431	120,169
W911NF-09-1-0340	Optical Isolator Measurement Setup	12.431	4,574
W911NF-09-1-0411	Chalcogenide Glasses for Ultra-Low Loss Waveguides	12.431	143,316
W911NF-09-1-0422	DOD cap-FY08 Appropriation	12.431	55,046
W911NF-09-1-0422	DOD Cap- FY10 Appropriation	12.431	37,684
W911NF-09-1-0422	DOD Cap- FY09 Appropriation	12.431	3,735
W911NF-09-1-0438	The Design of Quantum Algorithms Using Physics Tools	12.431	102,818
W911NF-09-1-0448	DoD Cap Funds -FY09 Appropriation: Malone	12.431	17,202
W911NF-09-1-0480	DoD Cap - FY09 Appropriation	12.431	43,490
W911NF-09-1-0480	Dod Cap - FY10 Appropriation	12.431	1,321
W911NF-09-1-0542	Asynchronous Logic Automata for Large Scale Circuits and Systems	12.431	168,139
W911NF-09-1-0556	DODCap funds FY09 Appropriation - Ozdaglar	12.431	58,004
W911NF0510125	Lattice-Mismatched Substrate Engineering	12.431	-22,994
W911QX-09-P-0009	Optimizing Nanocrystalline Metals: Alloying Permits Precise Grain Size Control	12.431	20,533
<b>Total for 12.431</b>			<b>9,761,297</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-07-1-0630	Child - Kolodziejcki: Ultrafast Integrated Optical Signal Processing	12.910	-13,951
W911NF-07-1-0630	Ultrafast Integrated Optical Signal Processing	12.910	2,285
<b>Total for 12.910</b>			<b>-11,665</b>
<b>Total for Army Research Office</b>			<b>9,749,632</b>

**ARO-ISN UARC**

Contract Number	Government Contract Title	CFDA#	FY Expenses
DAAD19-02-D-0002	FY 2007 Technology Transition for the ISN	12.CCC	6,150
DAAD19-02-D-0002	ISN Project 3.10: Active/Passive Cylindrical Photonic Crystal Systems	12.CCC	-5,563
W911NF-07-D-0004	Polyurethanes For Face Shields Applications	12.CCC	-16,443
W911NF-07-D-0004	FY2009: ISN Technology 6.2	12.CCC	1,267,790
W911NF-07-D-0004	ISN Management (no F&A)	12.CCC	309,609

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Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-07-D-0004	Outreach for the ISN	12.CCC	188,863
W911NF-07-D-0004	ISN 6.2-SIMM Fibers for Multianalyte Explosive S Sensing	12.CCC	120,575
W911NF-07-D-0004	ISN 6.2-Thin Profile Imager: V. Bulvoic	12.CCC	34,817
W911NF-07-D-0004	ISN 6.2-Thin Profile Imager: M. Bawendi	12.CCC	29,006
W911NF-07-D-0004	ISN 6.2-Transparent lcvd Bragg ReFlect	12.CCC	20,718
W911NF-07-D-0004	ISN 6.2-Low Skin Depth Transparent Conductive Electrodes	12.CCC	126,811
W911NF-07-D-0004	T.O. 1 ISN Management & Outreach Task Order 1	12.CCC	114,420
W911NF-07-D-0004	T.O. 3 ISN 1.5.1 - Functional and Responsive Elastomers	12.CCC	136,537
W911NF-07-D-0004	T.O. 3 ISN 1.6.1 - Simultaneous Control of Light and Sound Emissions	12.CCC	13,036
W911NF-07-D-0004	T.O. 3 ISN 1.4.1 - Active Multimaterial Fibers	12.CCC	272,441
W911NF-07-D-0004	T.O. 3 ISN 1.2.3 - Smart Quantum Dot Sensors	12.CCC	96,449
W911NF-07-D-0004	T.O. 3 ISN 1.1.1 - Surface Active Multifunctional Fabrics	12.CCC	209,308
W911NF-07-D-0004	T.O. 3 ISN 1.2.1 - Integrated Microfluidic Synthesis of Nanostructures	12.CCC	363,447
W911NF-07-D-0004	T.O. 3 ISN 1.2.2 - Quantum Dot Photodetectors	12.CCC	300,645
W911NF-07-D-0004	T.O. 4 ISN 2.3.4 - Low-power, Portable Electro-microfluidic Devices for Real-time Medical Monitoring	12.CCC	17,652
W911NF-07-D-0004	T.O. 4 ISN 2.1.1 - Nanostructured Actuators: First Principles to Fabrication	12.CCC	276,592
W911NF-07-D-0004	T.O. 4 ISN 2.3.3 - Integrated Amplifying Fluorescent Polymer Biosensory Systems	12.CCC	334,295
W911NF-07-D-0004	T.O. 4 ISN 2.3.2 - Non-invasive Delivery and Sensing	12.CCC	171,622
W911NF-07-D-0004	T.O. 4 ISN 2.2.1 - New Controlled Release Films and Functional Surfaces for Battlefield Medicine	12.CCC	315,504
W911NF-07-D-0004	T.O. 4 ISN 2.3.1 - MEMS Based Device for the Prevention of Hemorrhagic Shock	12.CCC	43,251
W911NF-07-D-0004	T.O. 4 ISN 2.2.2 - Environment-Sensitive Micellar Nanocapsules for Non-Invasive Drug Delivery	12.CCC	337,879
W911NF-07-D-0004	T.O. 5 ISN 3.1.5 - Nanoscale Superelastic Alloys for Integration into Flexible Armor	12.CCC	209,236
W911NF-07-D-0004	T.O. 5 ISN 3.3.1 - Light Nanocrystalline Alloy Fibers for Impact and Blast Protection	12.CCC	312,522
W911NF-07-D-0004	T.O. 5 ISN 3.1.1 - Molecular Approaches to Mechanical Properties for Ballistic Protection	12.CCC	293,573
W911NF-07-D-0004	T.O. 5 ISN 3.2.1 - Materials and Structures for Blast Damage and Injury Mitigation	12.CCC	567,790
W911NF-07-D-0004	T.O. 5 ISN 3.1.3 - Nanomechanical Heterogeneity As A Design Strategy In Natural and Biomimetic Body Armor	12.CCC	172,167
W911NF-07-D-0004	T.O. 5 ISN 3.1.2 - Ultra Light Weight Micro Trusses and Photopatterned Nanocomposites	12.CCC	340,004
W911NF-07-D-0004	T.O. 5 ISN 3.2.2 - Nanoscale Chemomechanics of Soft Tissue Impact-Trauma Behind Rigid vs. Flexible Armor	12.CCC	113,140
W911NF-07-D-0004	T.O. 5 ISN 3.1.4 - Top Down Placement and Assembly of Graphene Chainmaille Structures	12.CCC	38,789
W911NF-07-D-0004	T.O. 6 ISN 4.1.1 - Chemically Vapor Deposited (CVD) Functional Polymeric Nanocoatings	12.CCC	143,230
W911NF-07-D-0004	T.O. 6 ISN 4.1.2 - Switchable Surfaces and Novel Elastomers for Improving Cell Function and Device Performance of C	12.CCC	67,410
W911NF-07-D-0004	T.O. 6 ISN 4.2.1 - Fluorescence Microscopy at Sub 5-nm Scale	12.CCC	20,428
W911NF-07-D-0004	T.O. 6 ISN 4.3.1 - Nanostructured Origami	12.CCC	387,009
W911NF-07-D-0004	T.O. 6 ISN 4.2.3 - Order at the Nanoscale: Novel Nanoparticles Supracrystals as Power-free Chemical Sensors	12.CCC	-14,085
W911NF-07-D-0004	T.O. 6 ISN 4.1.3 - Virucidal Coatings	12.CCC	235,014
W911NF-07-D-0004	T.O. 7 ISN 5.2.1 - Fabric Systems That See	12.CCC	453,439

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
W911NF-07-D-0004, T.O. 7	ISN 5.3.1 - Nanophotonics for the Enhancement of Optical Nonlinear Functionalities	12.CCC	237,333
W911NF-07-D-0004, T.O. 7	ISN 5.1.2 Graphone Devices for Future Multifunctional Battle Suits.	12.CCC	75,575
W911NF-07-D-0004, T.O. 7	ISN 5.4.1 - Nanophotonics for Enhancement of Nonlinear Operations	12.CCC	308,936
W911NF-07-D-0004, T.O. 7	ISN 5.1.1 - Nanoelectronics	12.CCC	90,208
W911NF-07-D-0004, T.O. 8	SOCOM Project : SOF Photonic Bandgap Fiber Technology (SOF-PBG)	12.CCC	14,408
W911NF-07-D-0004, T.O. 8	Biomimetic Living Cell Systems for Detection of Toxins	12.CCC	1,498
W911NF-07-D-0004, T.O. 8	Identification & Communication Multifunctional Helmet	12.CCC	1
W911NF-07-D-0004, T.O. 8	Cell-Based Biosensor for Detecting Toxins in Water	12.CCC	-2,617
W911NF-07-D-0004, T.O. 8	3D Hydrogel Scaffolding for Cell and Tissue Support	12.CCC	69,138
W911NF-07-D-0004, T.O. 8	Development of Superoleophobic Coated Materials for CB Protective Clothing	12.CCC	73,428
W911NF-07-D-0004, T.O. 8	Engineering Carbon Nanotubes for Trace Sensing and Mechanical Reinforcement	12.CCC	23,020
W911NF-07-D-0004, T.O. 8	Identification and Communication Multifunctional Helmet	12.CCC	-751
W911NF-07-D-0004, T.O. 8	Biometric Living Cell Systems for Detection	12.CCC	87,847
W911NF-07-D-0004, T.O. 9	ISN Task Order 9 - 6.2 Applied Research	12.CCC	296,039
W911NF-07-D-0004, T.O. 9	ISN 6.2 - Transparent iCVD Bragg Reflector Coatings for Laser Protection	12.CCC	24,988
W911NF-07-D-0004, T.O. 9	ISN 6.2 - Thin Profile Imager	12.CCC	14,823
W911NF-07-D-0004, T.O. 9	FY 2008: ISN Technology 6.2	12.CCC	11,775
W911NF-07-D-0004, T.O. 9	ISN 6.2 - Multi-Layer Blowing Sand Resistant Nanocoatings	12.CCC	9,836
W911NF07-D-0004, T.O. 2	ISN Research Enrichment Task Order 2	12.CCC	1,607,453
W911NF07-D0004, T.O. 2	Experimental Capabilities to Enable the Bio-Inspired Design and Development of Multifunctional Polymer Geis - I	12.CCC	195,995
<b>Total for 12.CCC</b>			<b>11,564,011</b>
<b>Total for ARO-ISN UARC</b>			<b>11,564,011</b>

### Defense Advanced Research Projects Agency

Contract Number	Government Contract Title	CFDA#	FY Expenses
HR-0011-09-1-0046	High Amperage Storage Device	12.431	242,619
<b>Total for 12.431</b>			<b>242,619</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
HR0011-05-C-0155	Kaertner Child	12.CCC	-10,527
HR0011-05-C-0155	Kolodziejcki Child	12.CCC	112,966
HR0011-05-C-0155	Kolodziejcki/Ippen - DARPA Supplemental Funding Child	12.CCC	98,044
HR0011-05-C-0155	Kaertner/Ippen DARPA Supplemental Funding Child	12.CCC	69,704
HR0011-05-C-0155	InPlane Subcontract	12.CCC	55,195



## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
HR0011-05-C-0155	Ippen/DARPA Supplemental Funding Child	12.CCC	49,009
HR0011-05-C-0155	U.C. Davis Subcontract	12.CCC	1,185,589
HR0011-05-C-0155	Ippen Child	12.CCC	14,808
HR0011-05-C-0155	Fabrication: Ultra-High Fundamental Repetition Rate Fiber Laser	12.CCC	1,548
HR0011-05-C-0155	Ultrahigh Resolution Sensing and Imaging With Arbitrary Optical Waveforms	12.CCC	865
HR0011-05-C-0155	Fabrication: 2GHz Ti: Sapphire Clockwork	12.CCC	-9
HR0011-05-C-0155	Ippen Child #2	12.CCC	32,648
HR0011-09-C-0012	Flexitral - Subaward	12.CCC	130,704
HR0011-09-C-0012	EPFL - Subaward	12.CCC	123,862
HR0011-09-C-0012	ThingMagic - Subaward	12.CCC	106,925
HR0011-09-C-0012	Vanderbilt - Subaward	12.CCC	88,714
HR0011-09-C-0012	CalTechL - Subaward	12.CCC	40,994
HR0011-09-C-0012	Child - Mershin	12.CCC	65,485
HR0011-09-C-0012	Child - Jacobson/Gershenfeld	12.CCC	394,491
HR0011-09-C-0012	Microfluidic Integrated Transduction Realnose	12.CCC	584,704
HR0011-09-C-0012	Child - Rich	12.CCC	130,764
HR0011-09-C-0012	Subcontract - UW Madison - 6918273	12.CCC	78,138
HR0011-09-C-0012	Child-Manu Prakash	12.CCC	174,649
HR0011-09-C-0131	Future Optical Network Study - Task II - Integrated Heterogeneous Network Architecture	12.CCC	357,404
HR0011-10-C-0028	Sensor System Design and Autonomy for Long-Distance River Navigation	12.CCC	227,838
HR0011-10-C-0028	Fabricated Equipment - Data Collection Robotic Kayak	12.CCC	6,687
<b>Total for 12.CCC</b>			<b>4,121,199</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
HR0011-04-1-0037	Learning On-line From a Few Examples	12.910	104,788
HR0011-06-1-0045	DARPA Admin	12.910	-1,401
HR0011-06-1-0045	DARPA F&A Account	12.910	1,129
HR0011-06-1-0045	DARPA Sodini	12.910	2,295
HR0011-06-1-0045	MEMS/NEMS S&T Fundamentals	12.910	477,930
HR0011-06-1-0045	DARPA Bulovic	12.910	28,519
HR0011-06-1-0045	MEMS/NEMS Prof. Tuller	12.910	44,130
HR0011-07-1-0006	Integrally Packaged 3D Microbatteries	12.910	488,667
HR0011-07-1-0006	Draper Lab Subcontract - 6914864	12.910	197,898
HR0011-08-1-0051	On-Wafer Integration of Nitride and Silicon CMOS Electronics	12.910	-151,092
HR0011-08-1-0051	DOD Cap Funds - FY08 Appropriation	12.910	137,135
HR0011-08-1-0053	Tunable Nanostructured Arrays for Stable High-Flux Microchannel Heat Sinks	12.910	19,828

**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
HR0011-08-1-0053	Fabricated Equipment -High-Speed Droplet Goniometer/Imaging System	12.910	4,282
HR0011-08-1-0067	DOD Cap Funds: Nano-Engineered Hierarchical Structures for Adaptive Thermal Management	12.910	73,940
HR0011-08-1-0079	Glass-Child	12.910	78,380
HR0011-08-1-0079	Real-World Interaction: Moving Beyond the Mouse	12.910	134,294
HR0011-09-1-0048	Absolute Algebraic Geometry, Arithmetic Cohomology, and the Riemann Hypothesis	12.910	111,752
	<b>Total for 12.910</b>		<b>1,752,474</b>

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
HR0011-07-1-0023	Program Analysis for Software Reliability and Security	12.191	2,239
HR0011-08-1-0008	Future Optical Network Architecture (FONA) Study - M Medard Child	12.191	-1,980
HR0011-08-1-0008	Future Optical Network Architecture (FONA) Study	12.191	16,738
	<b>Total for 12.191</b>		<b>16,997</b>

**Total for Defense Advanced Research Projects Agency 6,133,288**

**Defense Threat Reduction Agency**

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
HDTRA1-07-1-0015	Composite-Nanoparticle Thermal History Sensors	12.000	149,390
	<b>Total for 12.000</b>		<b>149,390</b>

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
HDTRA1-07-1-0004	Robust Architectures for Networks under Attack	12.351	220,751
HDTRA1-09-01-0012	University of Michigan Subcontract	12.351	145,477
HDTRA1-09-01-0012	Hatton Child Account	12.351	195,319
HDTRA1-09-1-0012	Iterative Experimental and Computational Approaches Toward Highly Efficient Surface-Structured Nanosized Ca	12.351	207,437
HDTRA1-09-1-0042	Fab Eq - High Intensity Ion Source Tested Stand	12.351	9,663
HDTRA1-09-1-0042	Frontier Studies of Single Stage Superconducting Cyclotron-Based Primary Accelerators for Topic I: Sensing Fis	12.351	353,440
HDTRA1-10-1-0032	DoD Cap Funds-FY10 Appropriations - Theoretical Understanding and Prediction of Nanoscale Vibrational Energ	12.351	120,997
	<b>Total for 12.351</b>		<b>1,253,084</b>

**Total for Defense Threat Reduction Agency 1,402,474**

**National Geospatial Intelligence Agency**

**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
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<u>Contract Number</u> HM1582-05-C-0011	<u>Government Contract Title</u> Exploiting Statistical Regularities to Interpret the Visual World	<u>CFDA#</u> 12.CCC	<u>FY Expenses</u> 165,137
<b>Total for 12.CCC</b>			<b>165,137</b>
<b>Total for National Geospatial Intelligence Agency</b>			<b>165,137</b>

**National Reconnaissance Office**

<u>Contract Number</u> NRD000-10-C-0080	<u>Government Contract Title</u> High delta-V Ion Electro Spray Propulsion system (IEPS) for CubeSat-Class Satellites	<u>CFDA#</u> 12.CCC	<u>FY Expenses</u> 109,151
NRO 000-05-C-0086	MOST CLIN 6	12.CCC	84,245
NRO 000-08-C-0167	Responsive Systems Method for Performance at Less Cost	12.CCC	371,233
NRO000-09-C-0349	Molecular Dynamics Simulations for Microelectronics Thermal Management	12.CCC	512,936
<b>Total for 12.CCC</b>			<b>1,077,565</b>
<b>Total for National Reconnaissance Office</b>			<b>1,077,565</b>

**Naval Facilities Engineering Service Center**

<u>Contract Number</u> N62473-06-C-3018	<u>Government Contract Title</u> Environmental Assessments Involving Organic Contaminants Derived from Seafloor Communication Cables	<u>CFDA#</u> 12.CCC	<u>FY Expenses</u> 1,621
<b>Total for 12.CCC</b>			<b>1,621</b>
<b>Total for Naval Facilities Engineering Service Center</b>			<b>1,621</b>

**Naval Surface Warfare Center**

<u>Contract Number</u> N00167-08-P-0411	<u>Government Contract Title</u> Investigate the feasibility of a zero wave resistance hull design	<u>CFDA#</u> 12.CCC	<u>FY Expenses</u> 18,021
<b>Total for 12.CCC</b>			<b>18,021</b>
<b>Total for Naval Surface Warfare Center</b>			<b>18,021</b>

**Navy (NAVAIR)**

<u>Contract Number</u> N61339-06-C-0136	<u>Government Contract Title</u> Creating an Advanced Question Answering System: from Architecture to Reality	<u>CFDA#</u> 12.CCC	<u>FY Expenses</u> 885
<b>Total for 12.CCC</b>			<b>885</b>
			<b>885</b>

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

### Total for Navy (NAVAIR)

#### Navy - ONR

Contract Number	Government Contract Title	CFDA#	FY Expenses
MURI N00014-07-1-0749	MURI: Cynthia Breazeal Child Account: Cognitively Compatible Human-Robot Teaming	12.300	119,991
MURI N00014-07-1-0749	MURI: U Washington Subaward	12.300	138,372
MURI N00014-07-1-0749	MURI: Nick Roy Child Account: Cognitively Compatible Human-Robot Teaming	12.300	131,411
MURI N00014-07-1-0749	MURI: Vanderbilt Subaward	12.300	109,938
MURI N00014-07-1-0749	MURI: Deb Roy Child Account: Cognitively Compatible Human-Robot Teaming	12.300	108,560
MURI N00014-07-1-0749	Breazeal Fab Equipment: MDS Robot	12.300	101,841
MURI N00014-07-1-0749	MURI: Jonathan How Child Account: Cognitively Compatible Human-Robot Teaming	12.300	84,005
MURI N00014-07-1-0749	MURI: UMass Subaward	12.300	66,010
MURI N00014-07-1-0749	MURI: Stanford Subaward	12.300	63,615
N00014-01-1-0124	The Numerical Simulation of Breaking Waves and Spray, and the Resulting Entrainment of Air Around a Ship	12.300	155,380
N00014-01-1-0124	DOD Cap Funds - FY 09 Appropriation	12.300	-955
N00014-02-1-0862	Free Surface Hydrodynamics of High-Speed Vessels	12.300	133,684
N00014-03-1-0897	MURI-George Washington University Sub	12.300	6,897
N00014-03-1-0897	MURI-Harvard Subcontract	12.300	44,256
N00014-03-1-0897	Integrated Artificial Muscle, High-Lift, Bio-Hydrodynamic Mechanism for Biorobotic Autonomous Undersea Vehicle	12.300	212
N00014-03-1-0897	MURI-Drexel University Sub	12.300	-0
N00014-04-1-0141	Direct Phase-Resolved Simulation of Large-Scale Nonlinear Ocean Wave-Field	12.300	4,539
N00014-04-1-0208	Representation of States and Time for Learning Actions in Novel Environments	12.300	-155
N00014-05-1-0073	ONR Graduate Traineeship Award in Ocean Acoustics for Mr. Sunwoong Lee: Optimal Source and Target	12.300	8,667
N00014-05-1-0148	Combinatorial Optimization Under Uncertainty	12.300	104,232
N00014-05-1-0244	Feature-Based Target Reacquisition Using Low-Cost Sensors	12.300	406,959
N00014-05-1-0244	Leonard ONR Singapore Feature-based Navigation	12.300	7,520
N00014-05-1-0252	Novel Hydrocarbon-Flame Anchoring Strategies Using Highly Reactive Fuels	12.300	41,062
N00014-06-1-0027	A Direct Simulation-Based Study of Radiance in a Dynamic Ocean	12.300	67,611
N00014-06-1-0043	Integrated Feature-Relative Navigation and Control for Autonomous Ship Hull Inspection	12.300	1,898
N00014-06-1-0043	Quadrotter	12.300	4,726
N00014-06-1-0043	XAUV- Autonomous Underwater Vehicle	12.300	42
N00014-06-1-0043	Fabricated Equipment - Autonomous Visually Navigating Airship	12.300	-2,471
N00014-06-1-0043	Ship Hull Inspection with Frame-and-Feature Based Navigation and Control	12.300	320,850
N00014-06-1-0043	Fabricated Equipment - HAUUV Camera	12.300	89
N00014-06-1-0043	DOD Cap Funds- FY09 Appropriation	12.300	4,152
N00014-06-1-0149	Experiments with Trapped Neutral Atoms	12.300	42,167
N00014-06-1-0171	Imaging Charge Transport Inside Semiconductors	12.300	1,307

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-06-1-0290	Designing Optimal Sampling Networks, Fixed and Adaptive, for Ocean Forecast Modeling	12.300	50,141
N00014-06-1-0445	Projectile Water Entry at Shallow Angles	12.300	-2
N00014-06-1-0445	DoD Cap Funds - FY09 Appropriation	12.300	383
N00014-06-1-0459	Fabricated Equipment: Death Star	12.300	225
N00014-06-1-0459	2D SLM	12.300	1,621
N00014-06-1-0459	Response of Energetic Materials to Dynamic Stimuli (MURI)	12.300	868,077
N00014-06-1-0463	THz Pump Probe Fabrication	12.300	9,521
N00014-06-1-0463	IED Neutralization with Long Wavelength Radiation	12.300	54,749
N00014-06-1-0463	Fabricated Equipment-Quantitative Terahertz Imaging System	12.300	10,377
N00014-07-1-0202	Orthogonal Frequency-Division Multiplexing for High-Rate Underwater Acoustic Communications	12.300	26,384
N00014-07-1-0230	Human Supervisory Control Models for Coman and Control of Unmanned Systems	12.300	148,097
N00014-07-1-0230	DOD Cap Funds - FY10 Appropriation	12.300	35,606
N00014-07-1-0326	Oceanographic Variability and the Performance of Passive and Active Sonars in the Philippine Sea	12.300	340,860
N00014-07-1-0397	Fabricated Equipment - Tethered Reef Explorer AUV	12.300	13,598
N00014-07-1-0397	Recruiting the Next Generation of Naval Architects	12.300	78,446
N00014-07-1-0473	Interdisciplinary Modeling and Dynamics of Archipelago Straits	12.300	109,261
N00014-07-1-0501	Autonomous Wide Aperture Cluster for Surveillance (AWACS)	12.300	103,598
N00014-07-1-0614	Lengthscale Issues in the Mechanical Behavior and Failure of Composite Structures	12.300	49,079
N00014-07-1-0821	Development of a New Concept of Blast and Fragment Protection of Ship Structures	12.300	67,587
N00014-07-1-0999	Excitation of Large-Scale Ionospheric Plasma Irregularities, Plasma Waves and Electron Energization by HAARF	12.300	40,189
N00014-07-1-1102	Cooperative Navigation and Autonomy for Unmanned Surface and Underwater Vehicles	12.300	113,648
N00014-08-1-0011	DoD Cap - FY10 Appropriation	12.300	21,856
N00014-08-1-0011	DOD Cap Funds - FY08 Appropriation	12.300	-71,741
N00014-08-1-0011	DOD Cap Funds - FY09 Appropriation	12.300	73,704
N00014-08-1-0013	DOD Cap Funds - FY09 Appropriation	12.300	443,605
N00014-08-1-0013	GOATS' 2008 Autonomous, Adaptive Multistatic Acoustic Sensing	12.300	23
N00014-08-1-0013	DOD Cap Funds - FY08 Appropriation	12.300	22,496
N00014-08-1-0013	DOD Cap Funds - FY10 Appropriations	12.300	114,069
N00014-08-1-0029	Stochastic Optimization, Submodular Functions, Matroids, and Network Games	12.300	155,051
N00014-08-1-0169	DOD CAP Funds - FY08 Appropriation	12.300	-53,021
N00014-08-1-0169	Superconducting MgB2 Tunneling Devices: Materials Optimization and Josephson Junction Circuit Development	12.300	-614
N00014-08-1-0169	DOD CAP Funds - FY09 Appropriation	12.300	-7,398
N00014-08-1-0219	EWall Electronic Card Well Computational Support for Decision Making in Collaborative Environments	12.300	146,303
N00014-08-1-0261	DOD Cap Funds - FY09 Appropriation	12.300	158,306
N00014-08-1-0261	DOD Cap Funds - FY08 Appropriation	12.300	21,945
N00014-08-1-0298	DOD CAP Funds - FY09 Appropriation	12.300	326,646

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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-08-1-0298	DOD CAP Funds - FY08 Appropriation	12.300	-23,883
N00014-08-1-0298	DOD CAP Funds - FY10 Appropriation	12.300	53,442
N00014-08-1-0312	DOD CAP Funds - FY09 Appropriation	12.300	80,424
N00014-08-1-0312	Deformation Mechanisms of Amorphous Metals Under Cyclic Loading	12.300	-3,609
N00014-08-1-0312	DOD CAP Funds - FY10	12.300	30,486
N00014-08-1-0390	DOD CAP Funds - FY08 Appropriation	12.300	399
N00014-08-1-0390	Fabricated Equipment-Internal Wave Generator	12.300	2,680
N00014-08-1-0390	DOD Cap Funds-FY09 Appropriation	12.300	8,239
N00014-08-1-0510	DOD Cap Funds - FY09 Appropriation	12.300	73,074
N00014-08-1-0520	DOD CAP Funds - FY08 Appropriation	12.300	4,766
N00014-08-1-0533	DOD Cap Funds - FY10 Appropriation	12.300	8,741
N00014-08-1-0533	Turbulent Air-Sea Exchange in Extreme Winds and Its Effects on Storm Structure	12.300	-1,464
N00014-08-1-0533	DOD Cap Funds - FY08 Appropriation	12.300	18,132
N00014-08-1-0533	DOD Cap Funds - FY09 Appropriation	12.300	38,073
N00014-08-1-0586	DOD CAP Funds - FY10 Appropriation	12.300	25,339
N00014-08-1-0586	DoD Cap Funds - FY09 Appropriation	12.300	153,842
N00014-08-1-0610	DOD Cap Funds - FY10 Appropriation	12.300	101,380
N00014-08-1-0610	DOD CAP Funds - FY08 Appropriation	12.300	2,703
N00014-08-1-0610	DOD CAP Funds - FY09 Appropriation	12.300	173,371
N00014-08-1-0680	PLUS-SEAS: Persistent Littoral Undersea Surveillance: Simulation, Estimation, and Assimilation Systems	12.300	-19,485
N00014-08-1-0694	DOD Cap Funds - FY09 Appropriation	12.300	49,818
N00014-08-1-0694	Phase-Resolved Reconstruction and Forecast of Ocean Wavefields Using Scanning-Sensing Wave Measurement	12.300	-7,711
N00014-08-1-0715	DOD Capped Funds - FY09 Appropriation	12.300	149,499
N00014-08-1-0715	DOD Cap Funds - FY08 Appropriation	12.300	9,398
N00014-08-1-0826	DURIP: A Distributed System for Robust and Accurate Location-Awareness	12.300	19,732
N00014-08-1-0841	Equipment for Josephson Junction and Spintronic Multifunctional Device Exploration: Fabrication, Characterization	12.300	4,784
N00014-08-1-0844	Hierarchical Nanomechanics of Amyloid Protein Fibers	12.300	-45,675
N00014-08-1-0844	DOD Cap Funds - FY09 Appropriation	12.300	94,049
N00014-08-1-0844	DOD Cap Funds - FY10 Appropriation	12.300	36,731
N00014-08-1-0877	DOD CAP Funds - FY08 Appropriation	12.300	23,249
N00014-08-1-0898	DOD Capped Funds - FY09 Appropriation	12.300	94,071
N00014-08-1-0898	DOD Capped Funds - FY10 Appropriation	12.300	75,657
N00014-08-1-0898	Architectures for Future Networks; Security, Availability and Management	12.300	-108,453
N00014-08-1-0898	DOD Capped Funds - FY08 Appropriation	12.300	125,606
N00014-08-1-0941	Reduction of Parasitic Delays in Nitride-based Transistors	12.300	-191,431
N00014-08-1-0941	DOD Cap Funds - FY08 Appropriation	12.300	184,208

**Appendix A-1 - Detail  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-08-1-0941	DOD Cap Funds - FY09 Appropriation	12.300	50,774
N00014-08-1-0941	DoD Cap Fund - FY10 Appropriation	12.300	116,698
N00014-08-1-1060	DOD Cap Funds - FY 08 Appropriation	12.300	31,652
N00014-08-1-1097	DoD Cap Funds - FY08 Appropriation	12.300	-3,990
N00014-08-1-1097	DOD Cap Funds - FY09 Appropriation	12.300	163,989
N00014-08-1-1247	DOD CAP Funds - FY10 Appropriation	12.300	21,090
N00014-08-1-1247	DoD Cap Funds - FY09 Appropriation	12.300	393,309
N00014-08-1-1247	DoD Cap Funds - FY08 Appropriation	12.300	14,689
N00014-09-1-0112	DOD Cap: Funds FY09 Appropriation	12.300	205,960
N00014-09-1-0112	DOD Cap: Funds FY10 Appropriation	12.300	52,969
N00014-09-1-0124	A Framework for Core Cognition	12.300	57,331
N00014-09-1-0131	DOD Cap Funds - FY09 Appropriation	12.300	62,492
N00014-09-1-0160	DOD Capped Funds - FY10 Appropriation	12.300	10,928
N00014-09-1-0160	DOD Capped Funds - FY09 Appropriation	12.300	14,277
N00014-09-1-0160	Sea-Basing: T-Craft Dynamic Analysis	12.300	76,806
N00014-09-1-0183	DOD Cap Funds - FY08 Appropriation-C. Ross Child	12.300	170,913
N00014-09-1-0183	DOD Cap Funds - FY08 Appropriation	12.300	137,925
N00014-09-1-0187	DOD Cap: Funds FY10	12.300	45,944
N00014-09-1-0187	DOD Cap: Funds FY09 Appropriation	12.300	214,729
N00014-09-1-0282	DoD Cap Funds - FY09 Appropriation	12.300	73,101
N00014-09-1-0326	DOD Cap: Funds FY09 Appropriation	12.300	16,739
N00014-09-1-0326	DOD Cap: Funds FY10 Appropriation	12.300	69,720
N00014-09-1-0374	DOD Cap Funds-FY10 Appropriation	12.300	90,022
N00014-09-1-0374	DOD Cap Funds-FY09 Appropriation	12.300	98,589
N00014-09-1-0435	Synchronization of Bursty Ultra-Wide Bandwidth Transmission	12.300	86,777
N00014-09-1-0458	DOD Capped Funds - FY09 Appropriation	12.300	117,468
N00014-09-1-0591	DOD Cap Funds-FY09 Appropriations	12.300	53,846
N00014-09-1-0597	CSAIL Micali FY2009	12.300	217,256
N00014-09-1-0597	Political Science FY09 Expenses	12.300	946,959
N00014-09-1-0597	CSAIL Winston FY2009	12.300	256,274
N00014-09-1-0597	CSAIL Subparent FY2009	12.300	33,017
N00014-09-1-0597	CSAIL Winston FY10	12.300	52,150
N00014-09-1-0597	CSAIL Micali - FY10	12.300	62
N00014-09-1-0597	Political Science - FY10 Expenses	12.300	5,150
N00014-09-1-0597	CSAIL Clark FY2009	12.300	152,816
N00014-09-1-0625	Child-Frazzoli	12.300	60,829



## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government_Contract_Title	CFDA#	FY_Expenses
N00014-09-1-0625	Child-Roy	12.300	81,594
N00014-09-1-0625	Child-How	12.300	60,143
N00014-09-1-0625	Integrating Global and Local Situational Awareness in Distributed Unmanned and Manned Ground Operations	12.300	144,949
N00014-09-1-0625	Child-Davis	12.300	21,024
N00014-09-1-0641	DoD Cap Funds - FY09 Appropriation	12.300	106,090
N00014-09-1-0641	FY10 Dod Capped funds	12.300	41,476
N00014-09-1-0676	DOD CAP Funds - FY10 Appropriation	12.300	5,165
N00014-09-1-0676	DoD Cap Funds-FY09 Appropriations	12.300	101,381
N00014-09-1-0679	DoD Cap Funds - FY09 Appropriation	12.300	35,040
N00014-09-1-0715	Remote Micropower Generators	12.300	19,442
N00014-09-1-0715	Sub to UCSB - Remote Micropower Generators	12.300	107,728
N00014-09-1-0845	DOD Cap - FY09 Appropriation	12.300	196,917
N00014-09-1-0863	DoD Cap Funds-FY09 Appropriation	12.300	171,129
N00014-09-1-0864	DoD cap - FY10 Appropriation	12.300	95,420
N00014-09-1-0864	DoD Cap Funds-FY09 Appropriation	12.300	56,667
N00014-09-1-0902	DOD CAP - FY09 Appropriation	12.300	127,294
N00014-09-1-0952	DoD Cap Funds-FY09 Appropriation	12.300	15,289
N00014-09-1-0973	DoD Cap - FY09 Appropriation	12.300	435,272
N00014-09-1-1000	Fabricated Equipment - TRF Microscopy System	12.300	11,168
N00014-09-1-1000	Nanoengineered Surfaces for High Flux Thin Film Evaporation	12.300	-3,948
N00014-09-1-1000	DoD Cap-FY09 Appropriation	12.300	150,331
N00014-09-1-1015	An Electronic System for Ultra Low Power Heating Implants	12.300	357,614
N00014-09-1-1051	FY10 Dod Capped Funds	12.300	62
N00014-09-1-1051	Cummings Child	12.300	41,476
N00014-09-1-1063	BU Subaward 6920025	12.300	42,000
N00014-09-1-1063	DoD Cap Funds FY10 - Kong	12.300	14,118
N00014-09-1-1063	DoD Cap Funds FY09 - Kong	12.300	40,666
N00014-09-1-1063	DoD Cap Funds FY09 - Palacios	12.300	83,671
N00014-09-1-1063	DoD Cap Funds - FY10 - Dresselhaus	12.300	15,769
N00014-09-1-1063	DoD Cap Funds FY10 - Palacios	12.300	91,718
N00014-09-1-1063	Graphene Approaches to Terahertz Electronics (GATE)	12.300	1,151
N00014-09-1-1063	Fab Eq - Strano Custom Computer	12.300	3,831
N00014-09-1-1063	BU Subaward 6921406	12.300	24,302
N00014-09-1-1063	DoD Cap Funds - FY09 - Dresselhaus	12.300	17,441
N00014-09-1-1063	DoD Cap Funds FY09 - Jarillo	12.300	100,735
N00014-09-1-1063	DoD Cap Funds-FY10-Strano	12.300	103,172

**Appendix A-1 - Detail  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
N00014-09-1-1063	DoD Cap Funds-FY09-Strano	12.300	70,679
N00014-09-1-1063	Harvard Subaward 6920025	12.300	67,614
N00014-09-1-1063	DoD Cap Funds FY10 - Jarillo	12.300	125,251
N00014-09-1-1103	Fabricated Equipment - Data Acquisition System	12.300	2,393
N00014-09-1-1103	Fabricated Equipment - High Power Terahertz Radiation with Laser System	12.300	13,108
N00014-09-1-1103	Fabricated equipment - Ultrabroadband THz Source	12.300	9,524
N00014-09-1-1103	DoD Cap Fund-FY09 Appropriation	12.300	33,316
N00014-09-1-1103	DoD Cap - FY10 Appropriation	12.300	416,868
N00014-09-1-1149	DOD Cap Funds - FY09 Appropriation	12.300	91,134
N00014-09-1-1167	Fabricated Equipment - 3D Camera Array	12.300	14,922
N00014-09-1-1167	DoD Cap - FY09 Appropriation	12.300	69,470
N00014-09-1051	FY09 DoD Capped Funds	12.300	247,713
N00014-10-1-0122	DoD Capped Funds - FY10 Appropriation	12.300	42,950
N00014-10-1-0122	Programmed Pathogen Sense and Destroy Circuits	12.300	41,600
N00014-10-1-0166	Superconducting MgB2 tunneling devices: Materials optimization and Josephson junction circuit development.	12.300	0
N00014-10-1-0166	DOD Cap funds - FY10 Appropriation	12.300	92,904
N00014-10-1-0194	DOD CAP Funds - FY10 Appropriation	12.300	14,962
N00014-10-1-0342	DoD Cap Funds - FY 10 Appropriation	12.300	27,144
N00014-10-1-0485	DoD Cap Funds - FY10 Appropriation	12.300	28,093
N00014-10-1-0562	DOD Cap Funds - FY10 Appropriation	12.300	13,438
N00014-10-1-0630	Dod cap - FY10 Appropriation	12.300	66,124
N00014-10-1-0693	DoD Cap - FY 10 Appropriation	12.300	41,076
N00014-10-1-0699	DoD Cap - FY10 Appropriation	12.300	113,533
N00014-10-1-0758	DoD Capped Funds - FY10 Appropriation	12.300	1,343
N00014-10-1-0759	DoD Capped Funds - FY10 Appropriation	12.300	159
N00014-10-1-0829	Event Representation in Humans and Machines	12.300	25,807
N00014-10-1-0841	DoD Cap - FY10 Appropriation	12.300	5,781
N00014/09-1-0177	DOD Cap Funds - FY09 Appropriation	12.300	48,188
N00014/09-1-0177	DoD Cap Funds - FY10 Appropriation	12.300	107,245
N0014-09-1-1051	Child Account - Cummings	12.300	21,562
N0014-09-1-1051	Child Account - Kaelbling	12.300	26

**Total for 12.300 15,929,753**

**Total for Navy - ONR 15,929,753**

**Navy Non-Pool**

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
N00189-08-C-Z104	Engineering Support for the Interagency Mark IV Correlator and Recorder Hardware	12.CCC	194,287
N00189-09-C-Z099	USNO Signal Chain	12.CCC	293,558
	<b>Total for 12.CCC</b>		<b>487,845</b>
	<b>Total for Navy Non-Pool</b>		<b>487,845</b>

### Space and Naval Warfare Systems Center

Contract Number	Government Contract Title	CFDA#	FY Expenses
N66001-08-1-2002	Nanoelectromechanical Switches	12.910	-801
N66001-09-1-2028	DOD Cap Funds - FY08 Appropriation	12.910	-42,692
N66001-09-1-2028	Task A OPS	12.910	115,424
N66001-09-1-2028	Fabricated Equipment - Master-Slave laser system with transfer laser.	12.910	93,803
N66001-09-1-2028	Fabricated Equipment - Transfer Cavity	12.910	73,805
N66001-09-1-2028	Task C OPs	12.910	33,023
N66001-09-1-2028	Task A Fabrication: SR+ Cavity to Comb Locking Apparatus	12.910	31,330
N66001-09-1-2028	Task B OPs	12.910	238,670
N66001-09-1-2028	Task A Equipment	12.910	6,899
N66001-09-1-2028	Task B Fabrication: RF Signal Generator	12.910	27,428
N66001-09-1-2028	Task B Fabrication: RF Spectrum Analyzer	12.910	21,853
N66001-09-1-2028	Entanglement Transfer and Processing with Photons Interconnecting Atomic and Trapped Ion Ensembles	12.910	0
N66001-09-1-2028	Task B Fabrication: Electronic Biasing	12.910	5,054
N66001-09-1-2028	Task B Fabrication: Electronic Biasing	12.910	2,680
N66001-09-1-2068	Avniel Subaward	12.910	99,728
N66001-09-1-2068	Stojanovic Research	12.910	38,363
N66001-09-1-2068	Daniel Research	12.910	41,172
N66001-09-1-2068	Megretski Research	12.910	46,416
N66001-09-1-2087	Dod Capped Funds - FY09	12.910	32,621
N66001-09-1-2096	DOD Capped Funds - FY09	12.910	62,191
	<b>Total for 12.910</b>		<b>926,970</b>
	<b>Total for Space and Naval Warfare Systems Center</b>		<b>926,970</b>

### U.S. Army Medical Research and Material Command

Contract Number	Government Contract Title	CFDA#	FY Expenses
W81XWH-07-1-0343	Powered Leg Prosthesis for the Restoration of Amputee Balance, Locomotory Metabolism and Speed	12.420	-281
W81XWH-08-1-0401	High-Throughput Screening of Therapeutic Neural Stimulation Targets: Toward Principles of Preventing and Tre	12.420	95,392

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Contract Number	Government Contract Title	CFDA#	FY Expenses
W81XWH-09-1-0088	Studying Protein Synthesis-Dependent Synaptic Changes in Tuberos Sclerosis	12.420	99,296
W81XWH-09-2-0143	Prosthetic knee-ankle-foot system with biomechatronic sensing, control, and power generation	12.420	302,709
W81XWH-10-1-0290	T-Pharmacies for Prostate Cancer Immunotherapy	12.420	7,536
W81XWH-10-1-0370	Dev of a High-Content Neuronal Assay to Screen Therapeutics on the Indictment of Cognitive Dysfunction in Auti:	12.420	5,916
	<b>Total for 12.420</b>		<b>510,570</b>
	<b>Total for U.S. Army Medical Research and Material Command</b>		<b>510,570</b>

**U.S. National Security Agency**

Contract Number	Government Contract Title	CFDA#	FY Expenses
H98230-08-1-0103	The Arithmetic of the Coefficients of Modular Forms and Applications to Number Theory	12.901	15,422
	<b>Total for 12.901</b>		<b>15,422</b>
	<b>Total for U.S. National Security Agency</b>		<b>15,422</b>
	<b>Total for Department of Defense</b>		<b>69,478,056</b>

**Department of Energy  
Argonne National Laboratory**

Contract Number	Government Contract Title	CFDA#	FY Expenses
9F-32142	Polymer Electrolyte Fuel Cell Lifetime Limitations: The Role of Electrocatalyst Degradation	81.CCC	60,374
	<b>Total for 81.CCC</b>		<b>60,374</b>
	<b>Total for Argonne National Laboratory</b>		<b>60,374</b>

**DOE - Chicago**

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-01ER54648	Center for Simulation of Wave Plasma Interactions	81.049	210,486
DE-FC02-06ER41444	National Computational Infrastructure for Lattice Gauge Theory	81.049	236,305
DE-FC02-06ER54855	SWIM: Incorporating TORIC in the IPS	81.049	44,840
DE-FC02-06ER54855	SWIM: Extended - MHD Closure Models in the Presence of RF	81.049	50,747
DE-FC02-08ER54966	Center for the Study of Microturbulence	81.049	10,101
DE-FC02-08ER54969	Center for Extended Magneto-hydrodynamics Modeling	81.049	57,388
DE-FC02-93ER54186	Design Activities for Steady State Tokamah with High Temperature Walls	81.049	62,290

**Appendix A-1 - Detail  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-93ER54186	FAB-Temkin (6395800)	81.049	14,708
DE-FC02-93ER54186	Porkolab N.I. (6395200)	81.049	11,734
DE-FC02-93ER54186	FY07-FY12-Minervini	81.049	5,108
DE-FC02-93ER54186	HTS Tape Test Device-Fab E	81.049	4,991
DE-FC02-93ER54186	Bromberg Task 03 (6394500)	81.049	1,924
DE-FC02-93ER54186	DT 01B ITER Model Coil	81.049	153,537
DE-FC02-93ER54186	Operations (6769700)	81.049	136,507
DE-FC02-93ER54186	Temkin Task 02 (6394300)	81.049	221,255
DE-FC02-93ER54186	Personnel (6770100)	81.049	919,112
DE-FC02-93ER54209	ECH Technology Development	81.049	9,129
DE-FC02-94ER40818	Kowalski Support Off	81.049	103,288
DE-FC02-94ER40818	Heavy Ion Phobos Off	81.049	109,027
DE-FC02-94ER40818	Accelerator Physics	81.049	135,996
DE-FC02-94ER40818	Donnelly Support Off-Site Research	81.049	139,440
DE-FC02-94ER40818	Logistic Support HPG	81.049	146,998
DE-FC02-94ER40818	Milner Support Off-Site Research	81.049	163,446
DE-FC02-94ER40818	Matthews Support Off	81.049	208,304
DE-FC02-94ER40818	Lattice Hadron Physics Initiative	81.049	244,056
DE-FC02-94ER40818	Computer	81.049	271,719
DE-FC02-94ER40818	Surrow Support-Off-site - OFF	81.049	291,358
DE-FC02-94ER40818	Mechanical Engineering	81.049	890,915
DE-FC02-94ER40818	Olympus Project at BATES	81.049	326,227
DE-FC02-94ER40818	Heavy Ion Off	81.049	910,096
DE-FC02-94ER40818	Nuclear Theory	81.049	909,696
DE-FC02-94ER40818	Nuclear Theory Off	81.049	91,921
DE-FC02-94ER40818	Heavy Ion	81.049	300,477
DE-FC02-94ER40818	Surrow Support-Off-site - ON	81.049	766,996
DE-FC02-94ER40818	Redwine Support Off-Site Research	81.049	511,901
DE-FC02-94ER40818	Electrical Engineering	81.049	470,706
DE-FC02-94ER40818	Polarized Source	81.049	330,977
DE-FC02-94ER40818	Bertozi Support OFF	81.049	537,437
DE-FC02-94ER40818	NIG Group Off-Site Research	81.049	71,412
DE-FC02-94ER40818	Computing Resources and Operations for U.S. CMS HI Research	81.049	123,034
DE-FC02-94ER40818	Bates R&E Lab-Administration	81.049	64,682
DE-FC02-94ER40818	Bernstein Support Off	81.049	5,369
DE-FC02-94ER40818	Headquarters Support	81.049	4,270

**Appendix A-1 - Detail  
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Contract Number	Government_Contract_Title	CFDA#	FY_Expenses
DE-FC02-94ER40818	OJI Stewart	81.049	3,757
DE-FC02-94ER40818	QTOR Assembly	81.049	6,228
DE-FC02-94ER40818	Bernstein Support Off-Site Research	81.049	675
DE-FC02-94ER40818	BLAST Physics	81.049	153
DE-FC02-94ER40818	OJI-Roland	81.049	-1
DE-FC02-94ER40818	Matthews Support Off-Site Research	81.049	69,814
DE-FC02-94ER40818	GEM	81.049	257
DE-FC02-94ER40818	HEP Admin No OH	81.049	8,197
DE-FC02-94ER40818	Heavy Ion Phobos Management	81.049	1,987
DE-FC02-94ER40818	Star Upgrade	81.049	12,956
DE-FC02-94ER40818	Logistical Support	81.049	14,258
DE-FC02-94ER40818	Bates R&E Lab-Safety	81.049	14,797
DE-FC02-94ER40818	Miliner Support Off	81.049	28,246
DE-FC02-94ER40818	Redwine Support Off	81.049	34,406
DE-FC02-94ER40818	Heavy Ion CMS-OFF	81.049	56,891
DE-FC02-94ER40818	Kowalski Support Off-Site Research	81.049	40,888
DE-FC02-94ER40818	Heavy Ion High Level Trigger	81.049	50,000
DE-FC02-94ER40818	LNS Research NTR	81.049	10,891
DE-FC02-99ER54512	Fabricated: ICRF Transmitter	81.049	46,517
DE-FC02-99ER54512	Alcator C-Mod Administration	81.049	77,372
DE-FC02-99ER54512	Alcator CMOD Electronics Computer	81.049	85,485
DE-FC02-99ER54512	Alcator C-Mod	81.049	56,977
DE-FC02-99ER54512	Alcator C-Mod Personnel	81.049	15,927,417
DE-FC02-99ER54512	Fab: ICRF Edge Reflectometer	81.049	32,389
DE-FC02-99ER54512	Fab: Diverter Heat Flux	81.049	37,187
DE-FC02-99ER54512	Alcator C-Mod Radio Frequency	81.049	33,559
DE-FC02-99ER54512	Alcator CMOD-Radiology/Safety	81.049	24,162
DE-FC02-99ER54512	Fabricated: Machine Upgrade	81.049	21,651
DE-FC02-99ER54512	Alcator CMOD Alternator House	81.049	85,835
DE-FC02-99ER54512	K Star	81.049	38,768
DE-FC02-99ER54512	ARRA - TAS::89 0227: :TAS RECOVERY ACT ALCATOR C-MOD FUSION RESEARCH PROGRAM	81.049	744,677
DE-FC02-99ER54512	Fabricated: Equip Alcator C-Mod	81.049	269,763
DE-FC02-99ER54512	Lower Hybrid Materials and Services	81.049	126,082
DE-FC02-99ER54512	Fab: 99 Channel Fast Optical Fluctuation Fabrication	81.049	19,640
DE-FC02-99ER54512	Alcator C-Mod Travel	81.049	475,874
DE-FC02-99ER54512	Alcator C-Mod Operations	81.049	1,673,577

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-99ER54512	Alcator C-Mod Computers	81.049	291,693
DE-FC02-99ER54512	MDSpplus Development	81.049	205,749
DE-FC02-99ER54512	Alcator CMOD Vacuum Shop	81.049	123,424
DE-FC02-99ER54512	Alcator C-Mod Subcontracts	81.049	192,716
DE-FC02-99ER54512	Alcator C-Mod New Initiative	81.049	182,377
DE-FC02-99ER54512	Fabricated: C-Mod Polarimeter Diagnostic	81.049	157,821
DE-FC02-99ER54512	Alcator C-Mod Research	81.049	151,036
DE-FC02-99ER54512	Fab: 4-Strap ICRF Antenna Fabrication	81.049	140,610
DE-FC02-99ER54512	Alcator C-Mod Diagnostics	81.049	133,131
DE-FC02-99ER54512	Alcator OPS/Equipment	81.049	190,320
DE-FC02-99ER54512	Fab Eq - EUV Spectrometer	81.049	18,625
DE-FC02-99ER54512	Jet	81.049	45,497
DE-FC02-99ER54512	Fabricated: Control Systems Upgrade	81.049	15,203
DE-FC02-99ER54512	Alcator CMOD Stockroom Expense	81.049	1,656
DE-FC02-99ER54512	Fabricated: Two-Color Interferometer Upgrade	81.049	987
DE-FC02-99ER54512	Fabricated: Charge Exchange Spectroscopy	81.049	704
DE-FC02-99ER54512	Fab Eq - MSE Shutter upgrade	81.049	589
DE-FC02-99ER54512	FAB: Spatially Resolving High Resolution X-Ray Spectrometer (SR-HIREX)	81.049	1,932
DE-FC02-99ER54512	Fabricated: Fast Optical Fluctuation Diagnostic	81.049	542
DE-FC02-99ER54512	Fabricated: Neon Soft X-Ray Spectroscopy System	81.049	188
DE-FC02-99ER54512	Fab: Fast Ferrite Tuner System	81.049	80
DE-FC02-99ER54512	Fabricate: Phase Contrast Imaging (PCI) Diagnostic	81.049	67
DE-FC02-99ER54512	Fab: Divertor Probe Data Acquisition	81.049	15,886
DE-FC02-99ER54512	Fab Eq - ICRF Transmitter: FMIT#5	81.049	360
DE-FC02-99ER54512	New Initiatives Alcator-Whyte	81.049	3,454
DE-FC02-99ER54512	Fabricated: Outer Divertor Upgrade	81.049	430
DE-FC02-99ER54512	Alcator CMOD - Project Engineering	81.049	3,868
DE-FC02-99ER54512	Fabricated: Imaging X-Ray Spectrometer	81.049	3,615
DE-FC02-99ER54512	Fab: DNB Upgrade	81.049	12,261
DE-FC02-99ER54512	Divertor OPS account	81.049	11,832
DE-FC02-99ER54512	Fab: Plasma Potential Diagnostic	81.049	8,215
DE-FC02-99ER54512	Fab: Alternator Systems Upgrade	81.049	12,278
DE-FC02-99ER54512	Fabricated Equipment: ICRF Breakdown Fabrication	81.049	10,895
DE-FC02-99ER54512	Fabricated: MSE (Motional Stark Effect) Diagnostic	81.049	7,313
DE-FC02-99ER54512	Fabricated: Core Thomson Scattering Upgrade	81.049	6,269
DE-FC02-99ER54512	Fab Eq - Divertor Spectroscopy Phase II	81.049	5,864



**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC02-99ER54512	Fabricated: Surface Analysis Station	81.049	5,833
DE-FC02-99ER54512	FAB: Laser Blow-Off System (Impurity Injector)	81.049	7,343
DE-FC02-99ER54512	Fabricated: 2-D Bolometry	81.049	3,921
DE-FC02-99ER54512	ARRA - Fab Eq - Second 4 Strap Antenna	81.049	39,974
DE-FC02-99ER54512	ARRA - Fab Eq - Fourth Cart and Control Upgrades for Lower Hybrid	81.049	106,923
DE-FC02-99ER54512	ARRA - Fab Eq - Divertor Spectroscopy Phase I	81.049	1,237
DE-FC02-99ER54512	ARRA - Fab Eq - Advanced 4-Strap ICRF Antenna	81.049	1,101
DE-FC02-99ER54512	ARRA - Fab Eq - ICRF Power/Match Upgrade/FFT	81.049	24,610
DE-FC02-99ER54512	ARRA - Complete 3 Klystron Order	81.049	450,976
DE-FC02-99ER54512	ARRA - Fab Eq - Polarimeter Upgrade	81.049	14,500
DE-FG02-00ER15087	Ultrafast Coherent Soft X-Rays: A Novel Tool for Spectroscopy of Collective Behavior in Complex Materials	81.049	118,751
DE-FG02-01ER63257	Mechanistically Based Diagnostics & Parameterizations for Climate Models	81.049	99,188
DE-FG02-02ER45977	Heat Conduction in Nanowire Structures	81.049	68,191
DE-FG02-03-ER54700	Physics of High Energy Plasmas	81.049	435,315
DE-FG02-03ER46076	Strongly Correlated Electronic Systems: Local Moments and Conduction Electrons	81.049	110,671
DE-FG02-04ER25647	Geometric Folding Algorithms	81.049	-4,290
DE-FG02-04ER46134	Establishing a United Effort to Crystal Growth, Neutron Scattering, and X-ray Scattering Studies of Novel Correla	81.049	296,243
DE-FG02-04ER46149	Self-Assembling Biological Springs Force Transducers on the Micron Nanoscale	81.049	251,464
DE-FG02-04ER54802	Center for Extended Magneto-hydrodynamic Modeling	81.049	36,505
DE-FG02-05ER15665	Scattering Chamber Upgrade	81.049	15,731
DE-FG02-05ER15665	An Exploration of Catalytic Chemistry on Autni (iii)	81.049	-14,136
DE-FG02-05ER15728	Instability of Noble Metal Catalysts in Proton Exchange Membrane Fuel Cells: Experiments and Theory	81.049	110,340
DE-FG02-05ER15745	Hangman Catalysis for Phot- and Photoelectro- Chemical Activation of Water	81.049	211,781
DE-FG02-05ER25681	Scientific Discovery with the Blue Gene/L	81.049	89,740
DE-FG02-05ER41360	OJL-Hong Liu	81.049	57,795
DE-FG02-05ER41360	EMI Operations	81.049	2,960,875
DE-FG02-05ER41360	Particle Theory Off	81.049	260,053
DE-FG02-05ER41360	Fabrication: AMS-02 Detector and Integration	81.049	935,440
DE-FG02-05ER41360	Fabrication: AMS Thermal Control System	81.049	194,980
DE-FG02-05ER41360	Particle Theory On	81.049	1,122,919
DE-FG02-05ER41360	EMI A&C	81.049	188,801
DE-FG02-05ER41360	Phobus	81.049	-1,853
DE-FG02-05ER41360	PPC-CDF	81.049	1,190,990
DE-FG02-05ER41360	Lepton Quark Studies-Task F	81.049	148,918
DE-FG02-05ER41360	Fabrication: AMS-02 Cryomagnet Avionics Systems	81.049	435,148
DE-FG02-05ER41360	PPC-General	81.049	64,844

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FG02-05ER41360	LQS Detector R&D	81.049	145,132
DE-FG02-05ER41360	Lepton Quark	81.049	409,318
DE-FG02-05ER41360	Fabrication: AMS-02 Gas Systems	81.049	125,356
DE-FG02-05ER41360	Fabrication: AMS-02 Detector Electronic Equipment	81.049	115,474
DE-FG02-05ER41385	Proposal for the Design and Construction of a Prototype Dark Matter Detector and Directional Sensitivity	81.049	4,279
DE-FG02-05ER41385	Fabrication: CF4 Chamber #1	81.049	712
DE-FG02-05ER41385	Fabrication: Scintillation Output Measuring Devise of CF4 Discharges	81.049	75
DE-FG02-05ER46241	High Throughput Screening of Nanostructured Hydrogen Storage Materials	81.049	60,697
DE-FG02-05ER46253	Child Marzari - 6898635	81.049	215,268
DE-FG02-05ER46253	UCLA Subcontract - 6898635	81.049	104,468
DE-FG02-05ER46253	Thermodynamics and Kinetics of Phase Transformations in Hydrogen Storage Materials	81.049	103,574
DE-FG02-05ER54836	Exploration of Plasma Jets Approach to High Energy Density Physics	81.049	65,644
DE-FG02-05ER64053	Mechanisms of Low Dose Radio-Suppression of Genomic Instability	81.049	458
DE-FG02-06ER41420	OJ1 - Probing the Absolute Mass Scale	81.049	194,091
DE-FG02-06ER41420	off-campus OJ1-Probing the Absolute Mass Scale	81.049	5,280
DE-FG02-07ER15839	Rheological Properties of Earth's Upper Mantle at High Pressure: Roles of Melt, Water and Pressure	81.049	33,753
DE-FG02-07ER41519	Experimental Studies of a Neutron Tagger and Shield for Dark Matter	81.049	1,877
DE-FG02-07ER46454	Probing nanocrystal electronic structure and dynamics in the limit of single nanocrystals	81.049	295,464
DE-FG02-07ER46474	T. Van Voorhis: High Efficiency Biomimetic Organic Solar Cells	81.049	75,092
DE-FG02-07ER46474	High Efficiency Biomimetic Organic Solar Cells	81.049	71,488
DE-FG02-07ER64465	Collaborative Research: The Influence of Cloud Microphysics and Radiation on the Response of Water Vapor an	81.049	117,737
DE-FG02-08ER25858	Large-Scale Optimization for Bayesian Inference in Complex Systems	81.049	149,319
DE-FG02-08ER46488	Self Assembly & Self-Repair of Novel Photosynthetic Reaction Center/Single Walled Carbon Nanotube Complex	81.049	134,979
DE-FG02-08ER46514	Fabricated Equipment - Microwave Probe	81.049	2,132
DE-FG02-08ER46514	Novel Temperature Limited Tunneling Spectroscopy of Quantum Hall Systems	81.049	212,355
DE-FG02-08ER46515	Measurement of Single Electronic Charging of Semiconductor Nano-Crystal	81.049	241,966
DE-FG02-08ER46516	Thermoelectric Nanocomposites at Intermediate Temperature Range: Synthesis and Fundamental Studies	81.049	405,873
DE-FG02-08ER46521	Fab Equipment	81.049	1,921
DE-FG02-08ER46521	Fabricated Equipment - Ultra-Fast Pump-Probe Spectrometer	81.049	7,700
DE-FG02-08ER46521	Ultrafast Electronic and Structural Dynamics in Complex Materials	81.049	193,601
DE-FG02-08ER64516	Genomic Structure, Metagenomics, Horizontal Gene Transfer, and Natural Diversity of <i>Prochlorococcus</i> and <i>Vibr</i>	81.049	44,987
DE-FG02-08ER64516	Genomic Structure, Metagenomics, Horizontal Gene Transfer, and Natural Diversity of <i>Prochlorococcus</i> and <i>Vibr</i>	81.049	193,527
DE-FG02-08ER64516	Genomic Structure, Metagenomics, Horizontal Gene Transfer, and Natural Diversity of <i>Prochlorococcus</i> and <i>Vibr</i>	81.049	130,469
DE-FG02-08ER64592	Collaborative Research: Abrupt Climate Change and the Atlantic Meridional Overturning Circulation - sensitivity	81.049	19,126
DE-FG02-08ER64597	Quantifying Climate Feedbacks from Abrupt Changes in High-Latitude Trace-Gas Emissions	81.049	126,415
DE-FG02-09ER46556	Optics for Advanced Neutron Imaging	81.049	171,590

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FG02-09ER46556	Fab Eq - Opto-Mechanical Setup for Testing Novel Neutron Focusing Mirrors	81.049	3,847
DE-FG02-86ER13564	Catalysts for the Living Polymerizations of Olefins	81.049	147,644
DE-FG02-87ER13671	Spectroscopic and Dynamical Studies of Highly Energized Small Polyatomic Molecules	81.049	183,040
DE-FG02-90ER45429	Neutron and X-Ray Scattering Studies of Kinetic Glass Transition in Colloidal Systems	81.049	299,628
DE-FG02-91ER40648	Electron Spectrometer	81.049	6,232
DE-FG02-91ER40648	RF Gun	81.049	36,540
DE-FG02-91ER40648	Task A High Gradient Acceleration	81.049	660,752
DE-FG02-91ER54109	Plasma Turbulence Transport	81.049	42,457
DE-FG02-91ER54109	Fusion Theory	81.049	1,293,625
DE-FG02-93ER61677	Coupled Atmosphere - Ocean Models	81.049	202,312
DE-FG02-94ER54235	New Initiatives	81.049	1,647
DE-FG02-94ER54235	Fabricated Equipment	81.049	59,788
DE-FG02-94ER54235	Off Campus: CODA	81.049	206,636
DE-FG02-94ER54235	Development of an Accelerator-Based Diagnostic for Plasma Facing Surfaces in Magnetic Confinement Devices	81.049	185,863
DE-FG02-94ER54235	Millimeter/Submillimeter Diagnostic	81.049	106,876
DE-FG02-94ER54235	Phase - Contrast Imaging Diagnostic on DIII-D.	81.049	799
DE-FG02-94ER54235	Phase - Contrast Imaging Diagnostic (C-Mod)	81.049	632
DE-FG02-94ER61937	An Integrated Framework for Climate Change Assessment	81.049	924,338
DE-FG02-95ER40919	Focused Intense Charged Particle Beams	81.049	212,999
DE-FG02-96ER45571	First Principles Determination of Structure, Thermodynamics, and Transport in Metals and Oxides	81.049	248,767
DE-FG02-97ER14760	Evolution of Pore Structure and Permeability of Rocks Under Hydrothermal Conditions	81.049	287,192
DE-FG02-98ER14914	Computer-Aided Construction of Chemical Kinetic Models	81.049	93,454
DE-FG02-98ER54458	Levitated Dipole Experiment	81.049	40,100
DE-FG02-98ER54458	Levitated Dipole Experiment-Operations	81.049	55,990
DE-FG02-98ER54458	Levitated Dipole Experiment-Personnel	81.049	605,930
DE-FG02-98ER54458	Levitated Dipole Experiment-Parent	81.049	170,777
DE-FG02-99ER14988	Structural Dynamics in Complex Liquids Studied with Multidimensional Vibrational Spectroscopy	81.049	264,911
DE-FG02-99ER14988	Water Spectroscopy	81.049	6,172
DE-FG02-99ER14988	Two-Color Spectroscopy	81.049	89
DE-FG02-99ER15004	Physics of Channelization: Theory, Experiment, and Observation	81.049	199,568
DE-FG02-99ER45778	Design and Fabrication of Photonic Crystals for Thermal Energy Conservation	81.049	21,722
DE-FG02-99ER54521	Heating and Current Drive in NSTX with Electron Bernstein Waves and High Harmonic Fast Waves	81.049	35,279
DE-FG02-99ER54525	Numerical Modelling of High harmonic Fast Wave Heating in the NSTX Device Using The Toric Code	81.049	87,266
DE-FG02-99ER54563	Fast Particle-wave Interaction and Alfvén Eigenmodes in the JET Tokamak Plasma	81.049	77,681
DE-FG02-99ER54563	JET Collaboration Off-Campus	81.049	1,568
DE-SC0001088	ARRA - Recovery Act - Harvard Subaward	81.049	274,939

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-SC0001088	ARRA - Excitonics Kong	81.049	9,394
DE-SC0001088	ARRA - Excitonics Nelson	81.049	9,212
DE-SC0001088	ARRA - Fabricated Equipment - Multi-Dimensional Broadband Spectrometer	81.049	6,658
DE-SC0001088	ARRA - Excitonics Postdocs and Research Staff	81.049	648,497
DE-SC0001088	ARRA - Excitonics Barton	81.049	3,242
DE-SC0001088	ARRA - Excitonics Van Voorhis	81.049	3,107
DE-SC0001088	ARRA - Fabricated Equipment: Mode-Locked Laser	81.049	1,704
DE-SC0001088	ARRA - Excitonics Admin Travel	81.049	656
DE-SC0001088	ARRA - Fabricated Equipment - FROG	81.049	10,463
DE-SC0001088	ARRA - Brookhaven	81.049	15,588
DE-SC0001088	ARRA - Excitonics Core Activities	81.049	5,326
DE-SC0001088	ARRA - Excitonics Bawendi	81.049	28,985
DE-SC0001088	ARRA - Excitonics Bulovic	81.049	40,654
DE-SC0001088	ARRA - Excitonics Research Assistants	81.049	784,730
DE-SC0001088	ARRA - Excitonics Berggren	81.049	42,577
DE-SC0001088	ARRA - Excitonics Pl's	81.049	183,312
DE-SC0001088	ARRA - Excitonics Gradedak	81.049	47,638
DE-SC0001088	ARRA - Excitonics Swager	81.049	17,901
DE-SC0001088	ARRA - Excitonics Equipment	81.049	157,616
DE-SC0001088	ARRA - Excitonics Travel	81.049	67,080
DE-SC0001088	ARRA - Excitonics Baldo	81.049	152,621
DE-SC0001299	Boston College Sub-Award-EFRC-S3TEC Center	81.049	217,295
DE-SC0001299	Solid-State Solar-Thermal Energy Conversion Center (S3Tec Center)	81.049	229,797
DE-SC0001299	EFRC-S3TEC Center-Research	81.049	1,476,645
DE-SC0001299	MPC-EFRC Research Center S3Tec - Seed Funding	81.049	35,201
DE-SC0001299	Fabricated Equipment - UVISS Pump/Probe	81.049	3,236
DE-SC0001299	RPI subaward (seed funding)	81.049	32,744
DE-SC0001682	Plasma Simulation Program	81.049	72,219
DE-SC0002060	ARRA - TAS::89 0227::TAS RECOVERY ACT - PLASMA SCIENCE CENTER BRIDGING THE PSI KNOWLEDG	81.049	246,002
DE-SC0002517	Large-Scale Optimization for Bayesian Inference in Complex Systems	81.049	76,377
DE-SC0002626	Child - Carter [6920590]	81.049	14,097
DE-SC0002626	Electrochemically-Driven Phase Transitions in Battery Storage Compounds	81.049	61,447
DE-SC0002629	New Approach for 2D Readout of GEM Detectors	81.049	11,641
DE-SC0002633	SISGR: Chemomechanics of Far-From Equilibrium Interfaces	81.049	534,793
DE-SC0003564	ARRA - TAS::89 0227::TAS Recovery Act - Analysis and Reduction of Complex Networks under Uncertainty, Prc	81.049	12,068
DE-SC0003907	ARRA - TAS:89 0227::TAS Recovery Act - Nonequilibrium Physics and Phase-Field Modeling of Multiphase Flow	81.049	3,681

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number DE-SC0003908	Government Contract Title ARRA - TAS:89 0227::TAS Recovery Act - Predictive Modeling of Complex Physical Systems: New Tools for Unt	CFDA# 81.049	FY Expenses 12,621
<b>Total for 81.049</b>			<b>58,914,635</b>
Contract Number DE-FC02-04ER54786 DE-FC02-06ER54859	Government Contract Title MIT Participation in the Center for Multiscale Plasma Dynamics SciDAC - Center for Plasma Edge Simulation	CFDA# 81.CCC 81.CCC	FY Expenses 50,006 74,534
<b>Total for 81.CCC</b>			<b>124,540</b>
Contract Number DE-FG02-06ER54878 DE-FG02-06ER54878 DE-FG02-06ER54891 DE-FG02-07ER64506 DE-FG02-08ER46488	Government Contract Title FAB: High Density Electrostatics Plasma Proves Laboratory studies of reconnection in magnetically confined plasmas Interactions of a Flowing Plasma with a Collecting Sphere Microbial Gene Expression in Ocean: Community Gene Function and Dynamics Revealed UIUC Subaward - 6916988	CFDA# 81.000 81.000 81.000 81.000 81.000	FY Expenses 1,478 6,842 70,778 591,504 86,734
<b>Total for 81.000</b>			<b>757,336</b>
<b>Total for DOE - Chicago</b>			<b>59,796,511</b>

### DOE - Chicago - Equipment

Contract Number DE-FC02-99ER54512 DE-FC02-99ER54512 DE-FC02-99ER54512 DE-FC02-99ER54512 DE-FC02-99ER54512 DE-FC02-99ER54512 DE-FC02-99ER54512 DE-FC02-99ER54512 DE-FC02-99ER54512	Government Contract Title Fabricated: Divertor Impurity Spectroscopy Fabricated: High Resolution X-Ray Spectrometer Fabricated: Active MHD Spectroscopy Fab Equip/RF Instrumentation & Control Fab Equipment/Lower Hybrid 4th Cart Fab Equipment/Lower Hybrid Coupler Protection System Upgrade Fab Equip/Divertor Cryopump Fabricated: Reflectometer Fab Equipment/Lower Hybrid 2nd Launcher	CFDA# 81.049 81.049 81.049 81.049 81.049 81.049 81.049 81.049 81.049	FY Expenses 80 100 1,581 2,421 2,691 3,973 14,987 21,360 317,980
<b>Total for 81.049</b>			<b>365,173</b>
<b>Total for DOE - Chicago - Equipment</b>			<b>365,173</b>

### DOE - Idaho Falls

**Appendix A-1 - Detail  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC07-06ID14742	Pb-Furnace	81.121	32,399
DE-FC07-06ID14742	NERI: The Development and Production of Functionally Graded Composite for Pb-Bi Service	81.121	77,873
DE-FC07-06ID14751	NERI: Dynamic Simulation & Optimization of Nuclear Hydrogen Production Systems	81.121	-2,762
DE-FG07-07ID14856	Global Nuclear Energy Partnership University Readiness of the MIT Nuclear Research Reactor	81.121	11,298
DE-FG07-07ID14888	NERI: Risk-Informed Balancing of Safety, Nonproliferation, and Economics for the SFR	81.121	835,391
DE-NE0000144	NEUP	81.121	139,908
	<b>Total for 81.121</b>		<b>1,094,106</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FG07-02ID14420	Nano-Fluid Heat Transfer	81.114	3,669
DE-FG07-02ID14420	Fabricated: Cooling Tower Equipment Building	81.114	5,440
DE-FG07-02ID14420	Innovations in Nuclear Infrastructure and Education	81.114	9,266
DE-FG07-07ID14765	NEER: Two- Phase Heat Transfer in Water-Based Nanofluids for Nuclear Applications	81.114	190
	<b>Total for 81.114</b>		<b>18,566</b>
	<b>Total for DOE - Idaho Falls</b>		<b>1,112,672</b>

**DOE - Oak Ridge**

Contract Number	Government Contract Title	CFDA#	FY Expenses
4000091126	Design of magnets for the neutron beamline of the nEDM Project at Oak Ridge National Laboratory	81.CCC	23,223
	<b>Total for 81.CCC</b>		<b>23,223</b>
	<b>Total for DOE - Oak Ridge</b>		<b>23,223</b>

**DOE - Office of ARPA-E**

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-AR0000047	ARRA - Fabricated Equipment - Medium Cell Test Stand	81.135	7,325
DE-AR0000047	ARRA - Fabricated Equipment - Small Cell Test Stand	81.135	36,765
DE-AR0000047	ARRA - Electroville: High-Ampere Energy Storage Device-Energy Storage for the Neighborhood, Project 2010	81.135	465,825
	<b>Total for 81.135</b>		<b>509,915</b>
	<b>Total for DOE - Office of ARPA-E</b>		<b>509,915</b>

**DOE-Golden Colorado**

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-EE0002743	ARRA - Recovery Act: Decision Analysis for Enhanced Geothermal Systems	81.087	36,073
DE-FG36-08GO18007	All-Inorganic, Efficient Photovoltaic Solid State Devices Utilizing Semiconducting Colloidal Nanocrystal Quantum Thin, High Lifetime Silicon Wafers with No Sawing; Recrystallization in a Thin Film Capsule	81.087	209,959
DE-FG36-08GO18008	Detection and Characterization of Natural and Induced Fractures for the Development of Enhanced Geothermal ;	81.087	272,059
DE-FG36-08GO18190	Monitoring and Modeling Fluid Flowdown in Developing Enhanced Geothermal System (EGS) Reservoir	81.087	347,044
DE-FG36-08GO18197	Fabricated Equipment - Keithly Current-Voltage Measurement System	81.087	166,453
DE-FG36-09GO19001	Fabricated Equipment - High Temperature MSAS for Silicon Feedstock Materials	81.087	-119
DE-FG36-09GO19001	Fabricated Equipment: Photoluminescence Imaging System	81.087	191
DE-FG36-09GO19001	Defect Engineering, Cell Processing, and Modeling for High-Performance, Low-Cost Crystalline Silicon Photovoltaic	81.087	34,705
DE-FG36-09GO19001		81.087	640,168
	<b>Total for 81.087</b>		<b>1,706,534</b>
	<b>Total for DOE-Golden Colorado</b>		<b>1,706,534</b>

### DOE-NETL

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FC26-02NT41622	Development of a Carbon Management Geophysical Information Systems (GIS) for the United States	81.086	3,789
	<b>Total for 81.086</b>		<b>3,789</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-NT004117	Fabricated Equipment	81.089	4,825
DE-NT004117	Chemistry of SOFC Cathode Surfaces: Fundamental Investigation and Tailoring of Electronic Behavior	81.089	213,745
	<b>Total for 81.089</b>		<b>218,571</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-FE0002041	ARRA - Recovery Act: Modeling and Risk Assessment of CO2 Sequestration at the Geologic-basin Scale	81.133	28,388
DE-FE0002128	ARRA - Recovery Act: Monitoring Accounting and Verification Analysis of Microbial Activity Under a Spuperc	81.133	25,802
	<b>Total for 81.133</b>		<b>54,190</b>
	<b>Total for DOE-NETL</b>		<b>276,550</b>

### DOE/NNSA/ALB

Contract Number	Government Contract Title	CFDA#	FY Expenses
DE-AC52-08NA28539	A Unified Approach to Joint Regional and Teleseismic Calibration and Event Location with a 3-D Earth Model	81.113	101,015
DE-FC52-05NA26603	Modeling Travel-Time Correlations Based on Sensitivity Kernels and Correlated Velocity Anomalies	81.113	-771

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<u>Contract Number</u> DE-FG52-09NA29032	<u>Government Contract Title</u> Monoenergetic Proton and Alpha Radiography of Laser Plasma Generated Fields and of ICF Implosions	<u>CFDA#</u> 81.113	<u>FY Expenses</u> 126,319
<b>Total for 81.113</b>			<b>226,563</b>
<u>Contract Number</u> DE-FG52-06NA26203 DE-FG52-06NA26203 DE-FG52-09NA29553 DE-FG52-09NA29553	<u>Government Contract Title</u> Fab: Particle Accelerator-Related Equipment Nuclear Probing of Dense Plasmas and Implosion Physics at OMEGA, Z, OMEGA with EP and the NIF Fabricated Equipment Particle Accelerator Studying Fields and Matter in Head Plasmas	<u>CFDA#</u> 81.112 81.112 81.112 81.112	<u>FY Expenses</u> 36,874 80,131 85,683 694,613
<b>Total for 81.112</b>			<b>897,301</b>
<b>Total for DOE/NNSA/ALB</b>			<b>1,123,864</b>

**Fermilab**

<u>Contract Number</u> PO-580079	<u>Government Contract Title</u> Coordination of Data Re-Processing in the Data Operations Team for the CMS Experiment	<u>CFDA#</u> 81.CCC	<u>FY Expenses</u> 59,831
<b>Total for 81.CCC</b>			<b>59,831</b>
<b>Total for Fermilab</b>			<b>59,831</b>
<b>Total for Department of Energy</b>			<b>65,034,647</b>

**Dept. of Health and Human Services**

**NIH**

<u>Contract Number</u> 1-R03-EB008673-01 1-R21-EB0008156-02 1-R21-EB005460-02 1-R21-EB008177-01A2 1-R21-EB009180-02 1-T32-EB006348-02 1-T32-EB006348-03 2-R01-EB000351-17A1 2-R01-EB002887-04A2	<u>Government Contract Title</u> Dissemination of Cross-Platform Software for Artifact Detection and Region of Interest Analysis of FMRI Data Using Nanoparticle-DNA to Enhance Antisense Gene Regulation Neuromorphic Electronic Model of Synaptic Plasticity Continuous-flow, Ampholyte-free pl-based Sorting Peptides/proteins at Extreme pH Conditions Nanofluidic system for analysis of single biological molecules and particles Molecular, Cell and Tissue Biomechanics Training Grant Molecular, Cell and Tissue Biomechanics Training Grant Expanding the Clinical Utility of Ultrasound-Assisted Transdermal Drug Delivery Fabricated Equip: MgB2 Whole-Body MRI Magnet: Phase I	<u>CFDA#</u> 93.286 93.286 93.286 93.286 93.286 93.286 93.286 93.286 93.286 93.286	<u>FY Expenses</u> 40,657 125,461 222 54,534 189,752 -10,868 11,287 20,581 581
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## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
2-R01-EB002887-04A2	MgB2 0.5-T/800-mm Whole-Body MRI Magnet: Phase I	93.286	299,802
2-R01-EB003151-31	800 MHz Magnet	93.286	237,319
2-R01-EB003151-31	Fab E: P&P Probe	93.286	3,977
2-R01-EB006365-06A2	Subcontract Case Western - 6915916	93.286	90,435
2-R01-EB006365-06A2	Subcontract Johns Hopkins - 6915916	93.286	131,285
2-R01-EB006365-06A2	Child -Cima - 6915916	93.286	451,840
3-R01-EB003805-03	Minority Suppl - Vickerman - 6898360	93.286	14,971
5-P41-EB002026-33	Center for Magnetic Resonance	93.286	-217,656
5-P41-EB002026-34	Child Account: Advisory Board Meeting Restricted Funds	93.286	9,414
5-P41-EB002026-35	Harvard/MIT Center for Magnetic Resonance	93.286	1,581,641
5-R01-EB000244-27	Controlled Release of Macromolecules	93.286	-10,443
5-R01-EB000351-16	Ultrasonic Drug Delivery via Localized Transport Regions	93.286	826
5-R01-EB001436-03	A Cryocooler/Solid-Ne Cooled 500MHz/20cm MRI Magnet	93.286	8,103
5-R01-EB001659-07	Peter Szolovits - 6918054	93.286	171,485
5-R01-EB001659-07	George Verghese - 6918054	93.286	194,968
5-R01-EB001659-07	Integrating Data, Models, and Reasoning in Critical Care	93.286	647,948
5-R01-EB001960-30	800MHz Magnet	93.286	160,219
5-R01-EB001960-32	Solid State NMR Studies of Membrane Proteins	93.286	75,476
5-R01-EB001960-33A2	Solid State NMR Studies of Membrane Proteins	93.286	205,192
5-R01-EB001965-07	Fabricated Equipment: A Gyrotron Amplifier Tube	93.286	11,262
5-R01-EB001965-07	High Power Millimeter Wave/Terahertz Sources for Magnetic Resource	93.286	313,731
5-R01-EB002804-20	High Field DNP and EPR in Biological Systems	93.286	15,222
5-R01-EB002804-20	Fabricated Equipment: DNP Probe	93.286	5,360
5-R01-EB002887-03	Development of Low-Cost MgB2/Solid N2 MRI Magnets	93.286	-20
5-R01-EB003151-32	Fabricated Equipment - 400 MHz Deuterium NMR Apparatus	93.286	4,528
5-R01-EB003151-33	Solid State NMR Studies of Peptides and Proteins	93.286	480,258
5-R01-EB003805-03	Child Semino - 6898360	93.286	49
5-R01-EB003805-03	Child Grodzinsky - 6898360	93.286	185,613
5-R01-EB003805-03	Child Zhang - 6898360	93.286	70,449
5-R01-EB003805-03	Child Kamm - 6898360	93.286	196,409
5-R01-EB003805-03	Child Griffith - 6898360	93.286	197,705
5-R01-EB003805-05	Self-Assembling Peptides for Tissue Engineering	93.286	494,451
5-R01-EB004866-03	Fabricated Equipment: Tunable 330 GHz Gyration for DNP/NMR	93.286	4,708
5-R01-EB004866-04	Tunable 330 GHz Gyration for DNP/NMR	93.286	141,412
5-R01-EB005743-04	Nanofluidic Tools for Proteomic Sample Preparation	93.286	28,141
5-R01-EB006365-08	Microchip Drug Delivery System	93.286	529,760

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-EB007278-04	Microscale Control of Stem Cell Signaling Using Cell Patterning and Perfusion	93.286	320,403
5-R01-EB007280-02	Dissecting Lymphocyte Chemotaxis Using Synthetic Chemokine-Releasing Microspheres	93.286	47,230
5-R01-EB007942-03	Spiral Spectroscopic Human Neuroimaging	93.286	346,129
5-R21-EB005753-02	Continuous Cell Screening Using Iso-Dielectric Separation	93.286	-22,574
5-R21-EB008217-02	Mass Flow Cytometry	93.286	63,312
5-R21-EB008550-02	Microfluidic-Based High-Efficiency Cell Fusion for Studying Nuclear Reprogramming	93.286	175,847
5-R21-EB008814-02	Barcoded Hydrogel Microparticles and Scanner for Multiplexed Biomolecule Assays	93.286	205,643
5-R21-EB008844-02	3-D Digital Holography Device	93.286	787
5-R21-EB008844-02	A new experimental platform to study biofilms: Microfluidic-DHM	93.286	188,464
5-R37-EB000244-30	Controlled Release of Macromolecules	93.286	134,440
5-R37-EB000244-31	Controlled Release of Macromolecules	93.286	446,516
5-T32-EB006348-04	Molecular, Cell and Tissue Biomechanics Training Grant	93.286	265,580
<b>Total for 93.286</b>			<b>9,339,824</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
2-R01-AG015339-11A1	Function of Mammalian SIRT1 in Aging	93.866	324,728
5-R01-AG015339-10	Function of Mammalian SIRT1 in Aging	93.866	-74,583
5-R01-AG021150-08	Molecular Study of sir-2 Genes and Aging in C. elegans	93.866	596,073
5-R01-AG021525-05	Emotional Memory in Aging: Cognitive & Neural Processes	93.866	63,321
5-R01-AG029601-03	HMS Subcontract - 6914977	93.866	20,799
5-R01-AG029601-03	BWH Subcontract - 6914977	93.866	24,874
5-R01-AG029601-03	Research Supplement to Promote Diversity in Health Related Research for Raymond E. Samuel	93.866	172,307
5-R01-AG029601-04	Nanoscale Electrostatic Assemblies for Multi-Agent Drug Delivery from Orthopedic Implant Surfaces	93.866	352,882
5-R21-AG030770-02	Neuroimaging the impact of aging on economic decisions	93.866	188,479
5-R37-AG011119-18	Cell Senescence in Saccharomyces Cerevisiae	93.866	477,368
<b>Total for 93.866</b>			<b>2,146,247</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-P41-HG003057-02	A Haplotype Map of the Laboratory Mouse Genome	93.172	181,701
1-T32-HG004947-01	MIT/Whitehead/Broad Computational Genetics Training Program	93.172	136,287
1-U01-HG004424-01	Boerwinkle - Geneva	93.172	-27,760
2-T32-HG002295-06A2	Training Grant in Bioinformatics and Functional Genomics	93.172	76,151
3-U54-HG003067-04S1	Large Scale Sequencing and Analysis of Genomes-Action Plan	93.172	-1,839
5-R01-HG002439-09	Computational and Experimental Analysis of Vertebrate RNA Splicing	93.172	439,249
5-R01-HG003474-04	Whole-Genome Shotgun Sequencing Strategy and Assembly	93.172	4,059

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-HG004037-03	Regulatory Motif Discovery in the Human Genome Using Comparative Genomics	93.172	42,175
5-R21-HG004231-02	Microfluidic Devices for High Throughput Gene Synthesis	93.172	282,413
5-T32-HG002295-07	Training Grant in Bioinformatics and Functional Genomics	93.172	507,460
5-U01-HG004424-02	A Center for GEI Association Studies	93.172	81,208
5-U01-HG004424-02	Forrage-GENEVA	93.172	13,050
5-U01-HG004424-02	Vanderbilt-GENEVA	93.172	1,910
5-U54-HG003067-06	Equipment	93.172	5,388
5-U54-HG003067-06	Cancer Medical Sequencing	93.172	55,070
5-U54-HG003067-06	Whole Genome Assembly	93.172	11,273
5-U54-HG003067-06	Large Scale Sequencing and Analysis of Genomes	93.172	9,077
5-U54-HG003067-06	Microbial Biology	93.172	764
5-U54-HG003067-06	Auto Annotation	93.172	-17,076
5-U54-HG003067-06	NHGRI-Platform Tech Dev.	93.172	-15,985
5-U54-HG003067-06	NHGRI-Platform Informatics	93.172	-14,853
5-U54-HG003067-06	Reads	93.172	863,228
5-U54-HG003067-06	Microbial Analysis	93.172	-6,592
5-U54-HG003067-06	Center Management	93.172	-6,517
5-U54-HG003067-06	Organism Management	93.172	-3,538
5-U54-HG003067-06	Computer Finishing	93.172	-3,495
5-U54-HG003067-06	Manual Annotation	93.172	-2,751
5-U54-HG003067-06	Assembly Analysis	93.172	-82
5-U54-HG003067-06	Other Analysis	93.172	206,037
5-U54-HG003067-06	Computational Projects	93.172	1,089
5-U54-HG004570-02	High-Throughput Sequencing of Chromatic Regulatory Elements	93.172	-51,271
<b>Total for 93.172</b>			<b>2,765,831</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-EY017656-03	In vivo Imaging of Neuronal Plasticity in Mouse Visual Cortex	93.867	520,024
1-R21-EY019366-01A1	A Texture Analysis/Synthesis Model of Visual Crowding	93.867	76,549
1-R21EY019741-01	Rapid Material Perception	93.867	123,010
2-R01-EY007023-21	Cell-Specific Circuits in Visual Cortex	93.867	150,714
2-R01-EY011894-12	A Molecular Genetic Analysis of Cortical Plasticity	93.867	153,777
2-R01-EY014970-06	Construction of Invariant Shape Selectivity in the Ventral Visual Stream	93.867	334,815
2R01EY015834-06	Compounds blocking crystallin aggregation in vitro; path to anti-cataract agents	93.867	27,487
3-R01-EY012309-12S1	Experience Dependent Visual Cortical Development	93.867	322,675
3-R01-EY015834-05S1	Human Gamma-D-Crystallin Folding, Misfolding and Fibril Forms	93.867	410,746

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Contract Number	Government Contract Title	CFDA#	FY Expenses
3-R01-EY017921-03S1	Neuronal Mechanisms Mediating Visual Search	93.867	165,431
3-R01-EY018648-03S1	Cortical Representation and Plasticity: Neurons and Astrocytes	93.867	462,591
5-P30-EY002621-30	Core - Vision Processes	93.867	-36,874
5-P30-EY002621-33	Core - Vision Processes	93.867	599,976
5-R01-EY005127-25	Physical and Chemical Basis of Lens Opacity	93.867	127,565
5-R01-EY006039-28	Experiments on the Development of Neural Pathways	93.867	421,600
5-R01-EY008502-15	Neural Control of Visually Guided Eye Movements	93.867	-2,599
5-R01-EY011289-23	Fabrication: Fournier Domain-Locked Lasers for Ophthalmic Imaging Novel Diagnostics with OCT (Laser)	93.867	18,800
5-R01-EY011289-24	Novel Diagnostics With Optical Coherence Tomography	93.867	206,911
5-R01-EY012309-12	Experience Dependent Visual Cortical Development	93.867	394,473
5-R01-EY012848-10	Dynamic Basal Ganglia Saccade Networks	93.867	500,501
5-R01-EY013455-12	fMRI Investigations of Visual Recognition and Attention	93.867	324,602
5-R01-EY014074-16	Developmental Regulation of Glutamate Receptor Function	93.867	968,614
5-R01-EY014884-05	The Role of Areas V1 and V2 in Target Selection	93.867	82,937
5-R01-EY014970-05	Visual Object Processing in the Inferotemporal Cortex	93.867	15,065
5-R01-EY015068-05	Cortical Plasticity: Inputs, Networks, and Behavior	93.867	13,833
5-R01-EY016159-04	Reorganization of Visual Cortex on Macular Degeneration	93.867	413,374
5-R01-EY017098-05	Structural Correlates of Rapid Cortical Plasticity	93.867	339,173
5-R01-EY017292-04	Neural Response of Selective Visual Attention	93.867	447,466
5-R01-EY017921-03	Neuronal Mechanisms Mediating Visual Search	93.867	417,308
5-R01-EY018648-03	Cortical Representation and Plasticity: Neurons and Astrocytes	93.867	353,680
5-R21-EY015521-02	Project Prakash: Development of Face Perception Following Extended Visual	93.867	29,759
5-T32-EY013935-08	Integrative Training Program in Vision - Year 8	93.867	19,468
5-T32-EY013935-09	Integrative Training Program in Vision - Year 9	93.867	147,466
5R01EY015834-05S2	Supplement: Human gammaD-crystallin Folding Misfolding and Fibril F	93.867	11,559
<b>Total for 93.867</b>			<b>8,562,474</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
HHSN266200400001C	Reads	93.CCC	-12,087
HHSN266200400001C	Other Analysis	93.CCC	716
HHSN26620040001C	Microbiome Roadmap Analysis	93.CCC	-28,289
HHSN268200625226C	Large-Scale Genotyping of NHLBI Cohorts	93.CCC	595,425
HHSN272200900006C	NIAID-Reads	93.CCC	-4,405
HHSN272200900006C	NIAID-Computer Finishing	93.CCC	840
HHSN272200900006C	NIAID-Center Management	93.CCC	4,057
HHSN272200900006C	NIAID-Other Analysis	93.CCC	6,693

**Appendix A-1 - Detail  
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Contract Number HHSN272200900006C	Government Contract Title NIAID-Directed Sequencing (SNP)	CFDA# 93.CCC	FY Expenses 33,431
<b>Total for 93.CCC</b>			<b>596,381</b>
Contract Number 1-R56-DC010849-01	Government Contract Title Neuroanatomical and Behavioral Anomalies in Persistent Developmental Stuttering	CFDA# 93.173	FY Expenses 6,127
2-T32-DC00038-16	Training for Speech and Hearing Sciences	93.173	-1,731
2-T32-DC00038-17	Training for Speech and Hearing Sciences	93.173	28,693
3-U54-HG02750-03S3	Design/Productin of the Haplotype Map of the Human Genome - Supplemental Work	93.173	44,919
5-K99-DC009280-02	Cellular and Synaptic Rules Enabling Vocal Communication	93.173	21,856
5-R01-DC000117-32	Hearing Aid Research	93.173	272,511
5-R01-DC000238-25	Experimental-Theoretical Studies of Cochlear Mechanisms	93.173	233,137
5-R01-DC001925-14	Constraints and Strategies in Speech Production	93.173	176,966
5-R01-DC003007-14	Effects of Hearing Status on Audit Speech Production	93.173	641,223
5-R01-DC007152-05	Aids for the Deaf: Models of Speech Intelligibility	93.173	318,600
5-R01-DC008870-04	Diversity in the Integration of Granule Neurons into the Postnatal Olfactory Bulb	93.173	386,902
5-R01-DC009183-03	Neuronal Mechanisms of Motor Exploration in the Songbird	93.173	291,301
5-T32-DC00038-15S1	Training for Speech and Hearing Sciences	93.173	-1,731
5-T32-DC00038-18	Training for Speech and Hearing Sciences	93.173	859,891
7-U54-HG02750-03	HapMap Analysis	93.173	-2,202
7-U54-HG02750-03	HapMap Genotyping	93.173	-1,483
7-U54-HG02750-03	Design/Productin of the Haplotype Map of the Human Genome	93.173	-26,786
<b>Total for 93.173</b>			<b>3,248,195</b>
Contract Number 1-K99-GM084157-01	Government Contract Title Specificity, Regulation and Proteomic Profiling of an Essential AAA + and Protease	CFDA# 93.859	FY Expenses 46,683
1-K99-GM085279-01	Cooperation and Conflict in Microbial Systems	93.859	11,348
1-K99-GM092970-01	Developing fluorescent probes for the endogenous gaseous transmitters NO and H2S	93.859	20,970
1-P20-GM072029-01	Cell Imaging-Ting Lab	93.859	679
1-R01-GM081336-01A1	UPitt Subaward - 6918665	93.859	141,107
1-R01-GM085323-01A1	Subcontract - Tufts - 6919490	93.859	196,435
1-R01-GM085323-01A1	Subcontract - SUNY Buffalo - 6919490	93.859	61,785
1-R01-GM085323-02	Metabolic Engineering for Microbial Taxol Biosynthesis	93.859	312,956
1-R01-GM085457-01	High Throughput Monitoring of Mass, Density and Fluorescence of Single Cells	93.859	13,755
1-R01-GM086214-02	Single-molecule imaging with super-resolution	93.859	529,114
1-R01-GM089732-01	Synthesis and Study of Dimeric Diketopiperazine Alkaloids	93.859	187,013

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Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-GM089903-01	A Systems Biology Approach to Reveal Huntington's Disease Mechanisms	93.859	35,571
1-R01-GM090194-01	Cell-Based Sensors for Measuring Impact of Microsystems on Cell Physiology	93.859	16,911
1-T32-GM081081-01	Chemistry/Biology Interface Training Program	93.859	19,335
1-T32-GM087237-01	Graduate Training in Computational and Systems Biology	93.859	106,864
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Project 4	93.859	36,850
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Project 10	93.859	36,607
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Scripps Research Institute	93.859	51,451
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Project 2	93.859	79,767
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Project 6	93.859	55,871
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - New Mexico State University	93.859	63,569
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - MIT Outreach	93.859	33,600
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Harvard Medical School	93.859	775,766
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Harvard University	93.859	53,218
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Project 7	93.859	32,508
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Project 3	93.859	32,056
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Admin	93.859	21,851
2-P50-GM068762-06	Systems Biology of Cell Decision Processes	93.859	12,816
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Microfabrication	93.859	9,601
2-P50-GM068762-06	Systems Biology of Cell Decision Processes - Proteomics	93.859	8,350
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Project 6	93.859	79,688
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Admin	93.859	83,486
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Project 7	93.859	114,539
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Project 4	93.859	67,884
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Project 10	93.859	84,688
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Project 3	93.859	112,191
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Project 2	93.859	290,778
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Core 1	93.859	57,531
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - N.M.S.U	93.859	39,755
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Core 5	93.859	141,355
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - H.M.S	93.859	1,108,420
2-P50-GM068762-07	Systems Biology of Cell Decision Processes - Harvard	93.859	90,124
2-P50-GM069721-07	Child - Young	93.859	255,860
2-P50-GM069721-07	Child - Clemons	93.859	23,634
2-P50-GM069721-07	Child - Jacobsen	93.859	153,068
2-P50-GM069721-07	Project 1a	93.859	-858
2-P50-GM069721-07	Child - Core A Admin	93.859	2,115

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Contract Number	Government Contract Title	CFDA#	FY Expenses
2-P50-GM069721-07	Child - Schreiber	93.859	4,029
2-P50-GM069721-07	Child - Core B Library Synthesis	93.859	-897
2-R01-GM046941-18	Molecular Genetics of Intracellular Protein Transfer	93.859	609,702
2-R01-GM049224-18	Protein Recognition for Remodeling and Degradation by Bacterial AAA+ ATPases	93.859	41,263
2-R01-GM057034-13	Asymmetric Nucleophilic Catalysis	93.859	96,008
2-R01-GM062207-09	Regulation of the meiotic cell cycle	93.859	153,150
2-R01-GM062871-09	Metal-Catalyzed Coupling Reactions	93.859	262,360
2-R01-GM065519-09	Investigation of Zinc Neurochemistry by Fluorescent Sensing and MRI	93.859	58,768
2-R01-GM068678-06A2	Cytoskeletal Regulation During Growth Cone Migration and Axon Guidance	93.859	448,646
2-R01-GM069857-05A1	Complex Metallocluster Structure and Assembly	93.859	53,257
2-R01-GM072566-06	Synthetic strategies based on epoxide-coupling reactions	93.859	312,760
2-R01-GM072670-06	Site-specific protein labeling in cells with engineered LpIA	93.859	168,744
2-R01-GM34277-25	Regulation of mRNA Processing	93.859	292,532
2-R56-GM017151-38	Structure and Function of Transfer Ribonucleic Acids	93.859	202,864
2-T32-GM08334-19	Interdepartmental Biotechnology Training Program	93.859	-4,654
2-T32-GM08334-20	Interdepartmental Biotechnology Training Program	93.859	-3,747
2-T32-GM08334-21	Interdepartmental Biotechnology Training Program	93.859	765,639
3-R01-GM046941-18S1	Supplement for Roymarie Ballester: Molecular Genetics of Intracellular Protein Transfer	93.859	56,423
4-R00-GM085279-02	Cooperation and Conflict in Microbial Systems: Sucrose Metabolism in Yeast	93.859	167,554
5-P20-GM072029-04	Library-based Development of New Optical Imaging Probes	93.859	-4,444
5-P41-GM066360-05	Acquisition of a 900 MHz NMR Spectrometer	93.859	9,174
5-R00-GM081399-03	Mechanisms and Regulation of Yeast Internal Ribosome Entry Sites	93.859	232,505
5-R01-GM017980-40	Folding, Misfolding and Aggregation of Beta-Sheet and Delta-Helix Proteins	93.859	437,692
5-R01-GM024663-31	Genetic Analysis of Nematode Egg Laying	93.859	2,278
5-R01-GM024663-33	Genetic Analysis of Nematode Egg Laying	93.859	394,363
5-R01-GM028273-29	Pericyclic Reactions for Organic Synthesis	93.859	276,347
5-R01-GM029595-31	Ribonucleotide Reductases: Structure and Function	93.859	351,052
5-R01-GM031030-28	Molecular Genetics of Rhizobium Nodulation Plasmids	93.859	170,521
5-R01-GM031978-27	Controlled Catalytic Reduction of Dinitrogen at a Transition Metal Center	93.859	274,927
5-R01-GM032134-28	Nonheme Diiron Centers and the Biological Oxidation of Hydrocarbons	93.859	500,764
5-R01-GM038627-23	Studies of Materials with Physiological Problems	93.859	43,077
5-R01-GM039334-22	Specificity in Co- and Post-Translational Modification	93.859	-16,210
5-R01-GM046941-17	Molecular Genetics of Intracellular Protein Transport	93.859	-11,910
5-R01-GM049039-15	Vascular Drug Delivery	93.859	495,711
5-R01-GM049171-16	Polyhydroxyalkanoates: A paradigm for non-template dependent polymerizations	93.859	167,367
5-R01-GM049224-17	Protein Architecture and Remodeling in DNA Transportation and DNA Protection	93.859	189,847

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-GM050895-15	Cell-Cell Signaling, Gene Expression, and Horizontal Gene Transfer in Bacillus	93.859	360,936
5-R01-GM052339-16	Initiation of DNA Replication of Yeast Chromosomes	93.859	258,061
5-R01-GM056800-15	Regulation of MITOSIS by Proteolysis in Yeast	93.859	265,455
5-R01-GM056933-12	Molecular Genetics of Regulated Protein Delivery of the Plasma Membrane	93.859	371,416
5-R01-GM057034-12	Asymmetric Catalysis with Planar-Chiral Derivatives of DMAP	93.859	157,968
5-R01-GM057073-11	Enzymatic Degradation of Glycosaminoglycans	93.859	20,615
5-R01-GM057073-12	Enzymatic Degradation of Glycosaminoglycans	93.859	276,661
5-R01-GM058160-12	Late Transition Metal Catalysts for Organic Synthesis	93.859	483,758
5-R01-GM058801-11	Cellular and Developmental Function of Mena	93.859	354,224
5-R01-GM059281-13	Neutrophil Priming in Trauma and Sepsis	93.859	388,617
5-R01-GM059426-11	Catalytic Enantioselective Olefin Metathesis Reactions	93.859	524,544
5-R01-GM059870-08S1	Bioengineered Polymers for Parsing Cell Responses - Platt	93.859	-63
5-R01-GM060594-09	Phosphoserine Dependent Assembly of Signaling Complexes	93.859	549
5-R01-GM062871-08	Palladium - and Nickel-Catalyzed C-C Bond Formation.	93.859	137,519
5-R01-GM063755-08	Convergent Synthesis via Asymmetric Catalysis	93.859	195,238
5-R01-GM063857-08	Molecular Microdosimetry for Electric Fields and Electroporation Mechanism	93.859	357,496
5-R01-GM065418-06	Packing and Electrostatic Effects on Folding and Binding	93.859	264,805
5-R01-GM065519-08	Investigation of Zinc Neurochemistry by Fluorescent Sensing and MRI	93.859	196,779
5-R01-GM067681-05	Analysis and Design of Coiled Coil Partnering	93.859	-4,597
5-R01-GM067681-07	Analysis and Design of Coiled Coil Partnering	93.859	317,078
5-R01-GM067741-04	Proteins Carrying One or More Unnatural Amino Acids	93.859	87,146
5-R01-GM068957-08	MAPK Signaling in Single Yeast Cells: Dynamics, Variability, and Evolution	93.859	298,779
5-R01-GM069857-04	Complex Metallocluster Structure and Assembly	93.859	9,860
5-R01-GM070757-06	Functional LnFe-Nx Models of Biological N2 Fixation	93.859	209,949
5-R01-GM072670-05	Specific Protein Labeling in Cells with Reengineered BirA	93.859	182,664
5-R01-GM074024-04	Supporting Expression Analysis Users with GenePattern	93.859	-1,794
5-R01-GM074820-04	Early Steps of Alkaloid Biosynthesis	93.859	225,639
5-R01-GM074825-05	Synthesis and Study of Complex Natural Products	93.859	181,906
5-R01-GM076147-03	Dynamics, Control and Design of Bacteriophage T7	93.859	-10
5-R01-GM077183-04	Noise, Biostability & Beneficial Heterogeneity in the Galactose Signaling Network	93.859	83,236
5-R01-GM077465-03	A Comprehensive Proteomic Map of Mammalian Mitochondria	93.859	265,978
5-R01-GM077537-04	High Resolution Assembly Structure of the Nuclear Pore Complex	93.859	333,476
5-R01-GM081336-02	Computational Modeling of Cell Migration in 3D Matrices	93.859	193,543
5-R01-GM081393-03	Ribonucleotide Reductase Regulation: Diferric Y* assembly/maintenance and Sml1	93.859	587,465
5-R01-GM081871-03	Structure-Based Prediction of the Interactome	93.859	179,854
5-R01-GM082209-02	Computational Design of Inhibitor Specificity	93.859	193,742



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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-GM082899-03	Cell Cycle Regulation in Caulobacter Crescentus	93.859	284,924
5-R01-GM084181-03	Analysis and Design of Interaction Specifically in Proteins Regulating Apoptosis	93.859	319,221
5-R01-GM084477-03	Molecular Genetics of Innate Immunity in C. elegans	93.859	370,101
5-R01-GM085319-03	Identification and Function of Sequence-Specific Splicing Regulators	93.859	366,893
5-R01-GM085457-02	High Throughput Monitoring of Mass, Density and Fluorescence of Single Cells	93.859	292,228
5-R01-GM34277-24	Regulation of mRNA Processing	93.859	87,019
5-R01-GM47274-18	Proton Coupled Electron Transfer in Biomimetic and Natural Systems	93.859	327,179
5-R01-GM62207-08	Regulation of the Meiotic Cell Cycle	93.859	107,078
5-R37-GM041934-19	Cell Cycle and Sporulation in Bacillus Subtilis	93.859	485,566
5-R37-GM17151-37	Structure and Function of Transfer Ribonucleic Acids	93.859	17,084
5-R37-GM46059-18	Catalytic Methods for Organic Synthesis	93.859	797,855
5-R56-GM50315-13	An Evolutionary Link Between Telomeres and Transposons	93.859	244,724
5-T32-GM007287-34	Pre-doctoral Grant in the Biological Sciences	93.859	1,139
5-T32-GM007287-35	Pre-doctoral Grant in the Biological Sciences	93.859	2,345,964
5-T32-GM007484-32	Integrative Neuronal Systems-Year 32	93.859	210,991
5-T32-GM007484-33	Integrative Neuronal Systems-Year 33	93.859	448,001
5-T32-GM081081-02	Chemistry/Biology Interface Training Program	93.859	253,183
7-R01-GM074712-05	Engineering Synthetic Multicellular Systems	93.859	189,013
<b>Total for 93.859</b>			<b>28,012,782</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-U54-RR020278-01	An NCRR Center for High Throughput SNP Genotyping and Analysis	93.389	115,458
2-R01-RR015034-06	RESTRICTED FUNDS Fabricated Equipment: Phase 3A LTS/HTS NMR Magnet	93.389	261,031
2-R01-RR14334-03A2	Fabricated Equipment: Digital Flux Injector	93.389	-1,128
3-P41-RR02594-23	Fabricated Equipment: Confocal Scanning Laser Microscope System	93.389	-1,975
3-P41-RR02594-23	Clinical DRS/IFS Spectroscopy Apparatus (Fab E)	93.389	-851
3-P41-RR02594-23	MIT Laser Biomedical Research Center	93.389	1,512
3-P41-RR02594-24	Portable Raman Spectroscopy System For Clinical Study	93.389	39,070
3-P41-RR02594-24	Fabricated Equipment - UV Refractometer	93.389	18,419
3-P41-RR02594-24	MIT Laser Biomedical Research Center	93.389	798,607
3-P41-RR02594-25	MIT Laser Biomedical Research Center	93.389	45,039
5-R01-RR014334-07	Digital Flux Injectors for Super Conducting NMR Magnets	93.389	27,981
5-R01-RR015034-08	Phase 3A of a 3-phase 1.3-GHz LTS/HTS NMR Magnet	93.389	447,271
5-R01-RR019652-05	A Microscale Sorting Cytometer for Cell-Based Screens	93.389	-16,048
5-T32-RR007036-22	Biomedical Research Training for Veterinary Scientists	93.389	268,655
5-T32-RR007036-23	Biomedical Research Training for Veterinary Scientists	93.389	43,734

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-U54-RR020278-05	An NCRR Center for High Throughput SNP Genotyping and Analysis	93.389	3,099
<b>Total for 93.389</b>			<b>2,049,874</b>
<b>Contract Number</b>	<b>Government Contract Title</b>	<b>CFDA#</b>	<b>FY Expenses</b>
1-R01-NS056140-01A2	Fabrication: Brain-Machine Interface for a Cortical Prosthetic	93.853	52,810
1-R01-NS056140-01A2	California Institute of Technology Subaward	93.853	147,029
2-R56-NS025529-20A1	Extrapyramidal System	93.853	56,447
3-R01-NS052203-05S1	Modeling Huntington's Disease in Drosophila	93.853	51,730
5 R01 NS051320-04	Regenerative Healing Using ECM Based Scaffolds	93.853	184,572
5-P01-NS055923-03	Transcriptional Regulation of Stem Cell Differentiation into Motor Neurons	93.853	398,335
5-P01-NS055923-04	Transcriptional Regulation of Stem Cell Differentiation into Motor Neurons	93.853	595,019
5-R01-NS025529-21	Extrapyramidal Systems	93.853	375,902
5-R01-NS033778-19	Role of Skin Biomechanics in Mechanoreceptor Response	93.853	-14,667
5-R01-NS035145-14	Integrative Functions of Prefrontal Cortex	93.853	194,648
5-R01-NS037675-09	Migraine-Assignment and Isolation of Predisposing Genes	93.853	51,233
5-R01-NS040296-08	Characterization of the Drosophila Synaptotagmin Family	93.853	7,761
5-R01-NS040296-09	Characterization of the Drosophila Synaptotagmin Family	93.853	401,224
5-R01-NS043244-07	Drosophila as an Experimental Model for Epilepsy	93.853	257,074
5-R01-NS045130-04	Systematic Evaluation of a Vibrissa Resonance Hypothesis	93.853	-221
5-R01-NS045130-06	Systematic Evaluation of Sensory Processing in Distinct Interneuron Types	93.853	315,651
5-R01-NS051826-05	Computational Modeling of Anatomical Shape Distributions	93.853	149,841
5-R01-NS051874-15	CDK5/P35 Kinase	93.853	484,739
5-R01-NS052203-05	Modeling Huntington's Disease in Drosophila	93.853	216,783
5-R01-NS056140-02	Low Power Analog Electronics for an Implantable Cortical Prosthetic	93.853	418,419
5-R01-NS066352-02	High-Throughput Single-Cell-Resolution Genetic and Pharmacological Screens Using Sub-Micron-Scale Combin	93.853	364,181
<b>Total for 93.853</b>			<b>4,708,510</b>
<b>Contract Number</b>	<b>Government Contract Title</b>	<b>CFDA#</b>	<b>FY Expenses</b>
1-DP1-OD003936-02	Stochastic Gene Expression in Differentiation and Development	93.310	826,705
1-DP1-OD003961-02	NIH Director's Pioneer Award	93.310	664,342
1-DP1-OD006422-01	Developing novel methods to measure DNA repair capacity in human populations	93.310	171,964
1-DP1OD003958-01	The Temporal Reconfiguration of Regulatory Networks: From Yeast to Cancer	93.310	36,924
1-DP2-OD002002-01	Director's New Innovator Award: Novel Tools and Principles for Precisely Controlling Brain Activity	93.310	610,508
1-DP2-OD002002-01	EECS - Director's Innovator Award	93.310	2,355
1-DP2-OD002114-01	Director's New Innovator Award: Genetically-Controlled MRI Contrast Agents for Functional Brain Imaging	93.310	753,691

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Contract Number	Government Contract Title	CFDA#	FY Expenses
1-DP2-OD002989-01	Director's New Innovator Award: Development of On-Chip Ultra High-Throughput Whole-Animal Assay Technology	93.310	560,366
1-DP2-OD002989-01	Fabrication: High Throughput Small Animal Screening	93.310	65,634
1-R01-EB010246-01	Perfused 3D Tissue Surrogates for Complex Cell-Cell Communication Systems	93.310	383,886
1-R21-NS063917-01	High-content screening for modifiers of the DNA damage response	93.310	65,049
1-RL1-CA133834	Discovery Pipeline (2 of 4)	93.310	75,817
1-RL1-GM084437-01	Driving Medical Projects (4 of 4)	93.310	233,781
1-U54-HG005032-01	High-Throughput Screening	93.310	1,048,091
1-U54-HG005032-01	Administration	93.310	-5,294
1-U54-HG005032-01	Informatics/Computational Research	93.310	785
1-U54-HG005032-01	Follow Up Chemistry	93.310	6,359
1-U54-HG005032-01	Software Engineering	93.310	13,246
1-U54-HG005032-01	Informatics/Computational Research	93.310	16,007
1-U54-HG005032-01	Imaging	93.310	131,839
1-U54-HG005032-01	Center Driven Research Project	93.310	-11,261
5-RL1-HG004671-02	Target ID (3 of 4)	93.310	33,445
8-UL1-DE019585-02	Genomic Based Drug Discovery (1 of 4)	93.310	-9,544
<b>Total for 93.310</b>			<b>5,674,695</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
2-U01-CA84306-11	Integrative genomic characterization of lung cancer metastasis in mouse and human	93.396	321,884
2-U01-CA84306-12	Integrative genomic characterization of lung cancer metastasis in mouse and human	93.396	145,990
5-R01-CA106416-05	Using Zebrafish to Identify and Analyze Cancer Genes	93.396	445,905
5-R01-CA118705-03	Quantitative Analysis of Epidermal Growth Factor Receptor Signaling Networks	93.396	359,255
5-R01-CA118757-04	Dissecting E2f3's Role in Tumorigenesis	93.396	188,555
5-R01-CA121921-14	E2F4 and RB in differentiation control and tumorigenesis	93.396	293,156
5-R01-CA121941-03	Knowledge-Based Gene Expression Analysis for Biomedical and Cancer Research	93.396	-1,642
5-R33-CA112151-03	Applications of Recombinome for Cancer Research	93.396	70,297
5-U01-CA84306-10	Investigation of Lung Tumor Development and Treatment Using Mouse Models - Core	93.396	-9,733
5-U01-CA84306-10	Investigation of Lung Tumor Development and Treatment Using Mouse Models - Jacks' Lab	93.396	-3,299
7-R21-CA133576-02	Development of a Fluorescence-Based Force Sensor Molecule	93.396	27,473
<b>Total for 93.396</b>			<b>1,837,840</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R21-AI088590-01	Analysis of Food Specific T cells by a Novel Microengraving Technology	93.855	1,679
1-R21-AI090121-01	Investigating Complex Glycans on Biological Surfaces	93.855	361

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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
5-P01-A1071195-02	Project 2 - UC Berkeley Subcontract	93.855	95,064
5-P01-A1071195-02	Project 1 - Chakraborty	93.855	54,992
5-P01-A1071195-02	Project 3-LANL Subcontract	93.855	30,040
5-P01-A1071195-02	Admin Core Wash U. Subcontract	93.855	12,221
5-P01-A1071195-02	Project 2 - Chakraborty & Kardar	93.855	146,131
5-P01-A1071195-02	Project 3-MSKCC Subcontract	93.855	174,710
5-P01-A1071195-02	Project 1 - Stanford Subcontract	93.855	257,006
5-P01-A1071195-02	Project 3-NYU Subcontract	93.855	323,618
5-P01-A1071195-02	Project 2 - Wash U. Subcontract	93.855	405,945
5-P01-A1071195-02	Project 3-Chakraborty	93.855	92,025
5-P01-A1071195-02	Admin Core Chakraborty	93.855	137,377
5-R01-A1016892-31	Bacterial Protein Tagging, Degradation and Ribosome Rescue	93.855	653,056
5-R01-A1065824-04	Engineering and Analysis of T Cell CD3 and IL2R Signals	93.855	-2,757
5-R01-A1069208-05	Development and Maintenance of Memory CD8 T Cells	93.855	328,366
5-R01-A1080621-02	Toxoplasma Strain-Specific Modulation of Mouse Immune Cells	93.855	381,088
5-R21-A1073165-02	Chemokine and Antigen-carrying Nanoparticle Co-delivery for an Oral HIV Vaccine	93.855	-7,186
5-R21-A1073803-02	HUS Pathogenesis and Clinical Outcome in an In vivo Model	93.855	239,410
5-R33-A1065354-04	Proteomics of Central Tolerance in NOD vs. B6 mice	93.855	243,107
5-U01-A1074443-02	Bi-functional Polymer Attached Inhibitors -Klibanov	93.855	2,175
5-U01-A1074443-02	Bi-functional Polymer Attached Inhibitors of Influenza Viruses	93.855	47,288
5-U01-A1074443-03	Bi-functional Polymer Attached Inhibitors of Influenza Viruses	93.855	378,403
5-U01-A1074443-03	Bi-functional Polymer Attached Inhibitors of Influenza Viruses-Klibanov	93.855	316,282
7-U01-A1074575-02	Child - Root	93.855	170,982
7-U01-A1074575-02	Child - Chen - CCR	93.855	-362
			<b>4,481,020</b>

<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
2-P30-CA14051-38	Bioinformatics and Computing	93.395	330,542
2-P30-CA14051-38	Flow Cytometry Facility	93.395	221,499
2-P30-CA14051-38	Developmental Pilot Project	93.395	182,238
2-P30-CA14051-38	Developmental Pilot: R. Langer	93.395	73,778
2-P30-CA14051-38	Histology Core Facility	93.395	181,661
2-P30-CA14051-38	Media Preparation Core Facility	93.395	90,032
2-P30-CA14051-38	Developmental Pilot Project (Yaffe)	93.395	120,363
2-P30-CA14051-38	Developmental Pilot: R. Young - Whitehead	93.395	142,510
2-P30-CA14051-38	Transgenic Animal Core Facility	93.395	291,162
			<b>Total for 93.855</b>

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Contract Number	Government Contract Title	CFDA#	FY Expenses
2-P30-CA14051-38	Developmental Pilot: H Ploegh - Whitehead	93.395	95,323
2-P30-CA14051-38	Shared Research Resources	93.395	122,958
2-P30-CA14051-38	Program Planning & Evaluation	93.395	45,926
2-P30-CA14051-38	Micro-Array Technology Facility	93.395	69,704
2-P30-CA14051-38	Glassware Preparation Facility	93.395	142,171
2-P30-CA14051-38	Biopolymers Core Facility	93.395	265,768
2-P30-CA14051-38	Developmental Funds: Vander Heiden	93.395	62
2-P30-CA14051-38	Developmental Pilot Project (Langer/Anderson)	93.395	100,520
2-P30-CA14051-38	Administration	93.395	164,339
2-P30-CA14051-38	Senior Leadership	93.395	4,290
2-P30-CA14051-38	Virus Production Core Facility	93.395	69,794
2-P30-CA14051-38	Developmental Pilot Project (Irvine)	93.395	53,403
2-R01-CA096504-06	UCB Subaward - 6915834	93.395	87,575
2-R01-CA096504-06	MSKCC Subaward - 6915834	93.395	93,191
2-R01-CA096504-06	Child - White 6915834	93.395	108,383
2-R01-CA096504-06	Lauffenburger - Child	93.395	137,942
2-R01-CA101830-05A1	Foundations of Pretargeted Radioimmunotherapy	93.395	4,301
5-P30-CA14051-37	Biopolymers Core Facility	93.395	-958
5-P30-CA14051-37	Transgenic Animal Care Facility	93.395	-779
5-P30-CA14051-39	Flow Cytometry Facility	93.395	36,912
5-P30-CA14051-39	Histology Core Facility	93.395	35,346
5-P30-CA14051-39	ES Cell & Transgenics Core Facility	93.395	58,147
5-P30-CA14051-39	Developmental Pilot Project (Langer)	93.395	578
5-P30-CA14051-39	Bioinformatics and Computing	93.395	71,157
5-P30-CA14051-39	Shared Research Resources	93.395	22,947
5-P30-CA14051-39	Biopolymers & Proteomics Core Facility	93.395	67,653
5-P30-CA14051-39	Applied Therapeutics & Whole Animal Imaging	93.395	18,635
5-P30-CA14051-39	Administration	93.395	37,813
5-P30-CA14051-39	Micro-Array Technology Facility	93.395	14,093
5-P30-CA14051-39	Developmental Pilot Project (Langer/Anderson)	93.395	1,735
5-P30-CA14051-39	Developmental Pilot Project (Hopkins)	93.395	2,742
5-P30-CA14051-39	Glassware Preparation Facility	93.395	17,974
5-P30-CA14051-39	Developmental Pilot Project (Jacks)	93.395	3,993
5-P30-CA14051-39	Senior Leadership	93.395	3,528
5-P30-CA14051-39	KI-Cost Sharing	93.395	12,604
5-P30-CA14051-39	Microscopy Core Facility	93.395	13,270

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-P30-CA14051-39	Developmental Pilot Project (Irvine)	93.395	13,642
5-P30-CA14051-39	Virus Production Core Facility	93.395	6,037
5-R01-CA075289-14	Optical Biopsy Using Coherence Tomography	93.395	230,637
5-R01-CA086061-10	Mechanistic Comparison of Cisplatin with Synthetic DNA Repair-Shielding Anticancer Agents	93.395	193,572
5-R01-CA096504-08	Engineered Antibody EGFR Antagonist Cancer Therapeutics	93.395	253,258
5-R01-CA101830-04	Foundations of Pretargeted Radiomunotherapy	93.395	-6,066
5-R01-CA128803-03	Identifying Determinants of Chemotherapeutic Response In Vivo	93.395	293,687
<b>Total for 93.395</b>			<b>4,601,589</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-MH084966-02	Opposing Effects of Chronic Stress on Amygdala and Hippocampus	93.242	506,882
1-R01-MH085802-01A1	Mechanisms and Therapeutics for Rett Syndrome	93.242	85,766
1-R01-MH091220-01	The Role of GABAergic Synaptic Plasticity in Neural Circuit Functions	93.242	1,062
1-R21-MH090452-01	Neurobiology of mouse models for human chr 16p11.2 microdeletion and fragile x	93.242	11,865
1-T32-MH082718-01A1	Developmental Cognitive Neuroscience	93.242	82,214
2-P50-MH058880-09	Proj. 2 - Tonegawa	93.242	-516
2-R01-MH067105-06	Performance Error Signals in Basal Ganglia-Forebrain Circuits of the Songbird	93.242	282,475
4-R00-MH080310-03	Signaling Scaffold Of NMDA Receptor-Dependent Long-Term Plasticity	93.242	237,450
5-P50-MH058880-10	Proj. 3- Miller	93.242	44,238
5-P50-MH058880-10	Proj. 4- Bear	93.242	112,654
5-P50-MH058880-10	Core 2	93.242	12,970
5-P50-MH058880-10	Proj. 2- Tonegawa	93.242	7,865
5-P50-MH058880-10	Core 1	93.242	2,334
5-P50-MH058880-10	Proj. 5 - Sheng	93.242	834
5-P50-MH058880-10	Core 3 Admin	93.242	38,774
5-P50-MH058880-10	Proj. 1 - Wilson	93.242	39,620
5-R01-MH028783-32	Psychopharmacological Effects of Exogenous Choline	93.242	-4,323
5-R01-MH047432-14	Competition Model of Attention and Memory	93.242	211,262
5-R01-MH060379-09	Ensemble Activity in Rat Striatum During Habit Learning	93.242	341,584
5-R01-MH061976-09	Hippocampal and Prefrontal Cortical Interactions in Rodent Memory Formation	93.242	445,631
5-R01-MH065252-09	Neural Basis of Categories	93.242	258,771
5-R01-MH067105-05	Neural Basis of Sequence Generation in the Songbird	93.242	192,288
5-R01-MH076936-14	Molecular Organization of CNS Synapses	93.242	159,199
5-R01-MH078821-16	Molecular Genetic Approaches to Learning and Memory	93.242	846,534
5-R01-MH080344-03	Development of Declarative Memory	93.242	384,239
5-R21-MH076089-02	Role of NR2A and NR2B Intracellular Tails in Hippocampal LTP and LTD	93.242	98,496

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<u>Contract Number</u> 5-R21-MH086944-02	<u>Government Contract Title</u> Regulation and Function of Spontaneous Mini Release at Synapses	<u>CFDA#</u> 93.242	<u>FY Expenses</u> 131,976
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**Total for 93.242**

<u>Contract Number</u> 5-P01-HL066105-07	<u>Government Contract Title</u> Molecular Analysis Core B	<u>CFDA#</u> 93.837	<u>FY Expenses</u> 174,223
5-P01-HL066105-07	Molecular Analysis Project V	93.837	456,756
5-P01-HL066105-07	Molecular Analysis Project I	93.837	432,162
5-P01-HL066105-07	Molecular Analysis Core A	93.837	241,083
5-P01-HL066105-07	Molecular Analysis Core D	93.837	66,537
5-P01-HL066105-09	Molecular Analysis of Cardiovascular Biology and Pathology	93.837	1,067,574
5-R01-HL052212-17	Scavenger Receptors: Ligand Binding and Pathophysiology	93.837	482,362
5-R01-HL060435-09	Vascularization of Engineered Cardiac Tissue	93.837	1,009
5-R01-HL079503-04	Nonlinear Analysis of Heart Rate Variability	93.837	196,533
5-R01-HL087679-02	Genetics of Cardiovascular Risk Factors in Large Founder Population Birth Cohorts	93.837	50,450
5-U01-HL091737-02	Enabling Population-Scale Physical Activity Measurement on Common Mobile Phones	93.837	-3,838
5-U01-HL091737-03	Enabling Population-Scale Physical Activity Measurement on Common Mobile Phones	93.837	677,820
5-U01-HL091737-04	Enabling Population-Scale Physical Activity Measurement on Common Mobile Phones	93.837	24,603

**Total for 93.837**

<u>Contract Number</u> 2-R56-DK052413-10A1	<u>Government Contract Title</u> Helicobacter hepaticus: pathogenesis of inflammatory bowel disease	<u>CFDA#</u> 93.848	<u>FY Expenses</u> 87,334
3-R01-DK052413-09S1	H Hepaticus-Pathogenesis of Inflammatory Bowel Disease	93.848	-3,590
5-R01-DK056966-08	Role of Tissue Micro-Architecture on Hepatocyte Function	93.848	341,567
5-R01-DK065152-04	Intercellular Communication in Hepatic Function	93.848	66
5-R01-DK075850-04	Fab Eq - Detection Stand	93.848	15,285
5-R01-DK075850-04	Elucidating Modulators of Hepatic Metabolism by Quantitative Flux Analysis	93.848	264,347

**Total for 93.848**

<u>Contract Number</u> 1-R01-CA97966-03	<u>Government Contract Title</u> LSI System	<u>CFDA#</u> 93.394	<u>FY Expenses</u> -45
1-R01-CA97966-03	Spectroscopic Imaging - Tufts - Georgahoudi	93.394	26,802
1-R01-CA97966-03	Spectroscopic Imaging- BMC - Schust	93.394	29,661
1-R21-CA135827-01	An Integrative Genomics Data Viewer to Support the TCGA Project	93.394	-491
1-R21-CA137695-02	Developing a Single Cell Growth Monitor for Classifying Therapeutic Response	93.394	253,247

**705,009**

**Appendix A-1 - Detail  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
1-U24-CA126476-01	Supplemental Funding for UNC-Chapel Hill Sub	93.394	29,676
5-R01-CA034992-28	Chemistry and Biology of Platinum Anticancer Drugs	93.394	857,589
5-R01-CA124427-05	Engineering Multifunctional Nanoparticles	93.394	911,261
5-R01-CA126219-03	A Platform for Pattern-Based Proteomic Biomarker Discovery - R01	93.394	-1,519
5-R01-CA140476-02	Nanoparticle-Mediated Support of Cancer Immunotherapy	93.394	233,743
5-R01-CA97966-05	Spectroscopic Imaging and Diagnosis of Neoplasia	93.394	86,913
5-U24-CA126476-03	Measuring Cancer Biomarker Candidates by Targeted MS & Ab Enrichment	93.394	370,774
5-U24-CA126546-02	Center for Cancer Genome Characterization	93.394	396,331
<b>Total for 93.394</b>			<b>3,193,943</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
1-U01ES017155-01	Production Sequencing of Reference Human Epigenomes	93.113	635,144
5-P30-ES002109-29	PP - Changes in the Spectrum of tRNA Secondary Modifications as Biomarkers...	93.113	-81
5-P30-ES002109-30	Genomics Facilities Core - Yr 30	93.113	198,964
5-P30-ES002109-30	Bioanalytical Facilities Core - Yr. 30	93.113	286,930
5-P30-ES002109-30	Animal Models Facilities Core - Yr 30	93.113	155,477
5-P30-ES002109-30	COEC - YR 30	93.113	95,953
5-P30-ES002109-30	CF PP-A Clinical Study of Base Excision Repair Activity, Genetic Polymorphisms & chronic Inflammation	93.113	69,072
5-P30-ES002109-30	Admin Core - Yr. 30	93.113	168,567
5-P30-ES002109-30	Startup Funds K Ribbeck	93.113	39,786
5-P30-ES002109-30	Carryforward - Genomic Facilities Core	93.113	29,775
5-P30-ES002109-30	Carryforward - Admin Core	93.113	64,793
5-R01-ES015339-04	Protein Kinase Signaling and Cell Cycle Control	93.113	351,203
5-R01-ES015818-04	Mechanism of Eukaryotic Environmental Multigenesis	93.113	474,275
5-R01-ES016313-03	The Environment as a Variable to Calibrate Mouse Models of Human Disease	93.113	340,237
5-R01-ES016313-03	The Environment as a Variable to Calibrate Mouse Models of Human Disease - Wogan Child	93.113	167,287
5-R01-ES016313-03	The Environment as a Variable to Calibrate Mouse Models of Human Disease - Tannenbaum Child	93.113	34,570
5-R01-ES016450-11	DNA Oxidation Products and Endogenous DNA Adducts	93.113	314,868
5-T32-ES007020-35	Training Grant in Environmental Toxicology	93.113	436,760
5-U01-ES016045-02	YR 1 Carryforward-Engelward 6917777	93.113	1,050
5-U01-ES016045-02	Bhatia Child 6917777 - Engelward	93.113	1
5-U01-ES016045-02	Comet-Chip: A High-Throughput DNA Damage Sensor for Environmental Health Studies	93.113	277
5-U01-ES016045-03	Comet-Chip: A High-Throughput DNA Damage Sensor for Environmental Health Studies	93.113	289,832
5-U01-ES016045-03S1	Comet-Chip: A High-Throughput DNA Damage Sensor for Environmental Health Studies	93.113	17,753
5-U01-ES016045-04	Comet-Chip: A High-Throughput DNA Damage Sensor for Environmental Health Studies	93.113	42,937
<b>Total for 93.113</b>			<b>4,215,430</b>



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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-R01-HL093225-01A2	Cytoarchitecture of Central Respiratory Afferents Processing	93.838	-0
1-R01-HL095045-01	Development and Implementation of Genome-Wide Exome Re-Sequencing for Medical Genetics	93.838	39
5-R01-HL072849-04	Integrative Models of Neural Adaptive Control	93.838	254,265
	<b>Total for 93.838</b>		<b>254,304</b>
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-U54-CA143874-01	Project 4/Mirney	93.397	87,707
1-U54-CA143874-01	Project 3/Kirschner	93.397	142,282
1-U54-CA143874-01	Project 3/Manalis	93.397	94,250
1-U54-CA143874-01	The MIT Center for Single-Cell Dynamics in Cancer (SCDC)	93.397	65,582
1-U54-CA143874-01	Outreach & Dissemination	93.397	861
1-U54-CA143874-01	Education & Training	93.397	4,032
1-U54-CA143874-01	Project 2/Roose	93.397	238,415
1-U54-CA143874-01	Project 3/Amon	93.397	11,576
1-U54-CA143874-01	Project 1/Jacks	93.397	23,112
1-U54-CA143874-01	Project 1/van Oudenaarden	93.397	29,140
1-U54-CA143874-01	Project 4/Sherman	93.397	37,479
1-U54-CA143874-01	CellWeighing/Microfab Core	93.397	39,094
1-U54-CA143874-01	Project 4/Getz	93.397	40,346
1-U54-CA143874-01	SingleMolRNA Core	93.397	12,476
1-U54-CA143874-01	Project 2/Chakraborty	93.397	54,985
1-U54-CA143874-01	Project 1/Jaenisch	93.397	60,610
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Modeling Core/Tidor	93.397	9,839
2-U54-CA112967-06	Tumor Cell Network Center: Education	93.397	137,202
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Networks/Yaffe	93.397	82,234
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Modeling Core/Lauffenburger	93.397	68,703
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Networks/Samson	93.397	54,359
2-U54-CA112967-06	Tumor Cell Network Center: Mitogenesis Networks/Jacks	93.397	49,769
2-U54-CA112967-06	Tumor Cell Network Center: Administration	93.397	48,710
2-U54-CA112967-06	Tumor Cell Network Center: Mitogenesis Networks/White	93.397	45,466
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/Sharp	93.397	13,668
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/Gertler	93.397	39,256
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/Hynes	93.397	24,505
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/Hemann	93.397	24,458

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Contract Number	Government Contract Title	CFDA#	FY Expenses
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Networks/Hemann	93.397	23,771
2-U54-CA112967-06	Tumor Cell Network Center: Migration Network/Lauffenburger	93.397	20,882
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Modeling Core/Yaffe	93.397	927
2-U54-CA112967-06	Tumor Cell Network Center: Pilot Project	93.397	3,030
2-U54-CA112967-06	Tumor Cell Network Center: Bioinformatics & Modeling Core/Fraenkel	93.397	15,254
2-U54-CA112967-06	Tumor Cell Network Center: DNA Damage Networks/Lauffenburger	93.397	37,621
2-U54-CA112967-06	Tumor Cell Network Center: Mitogenesis Networks/Fraenkel	93.397	9,371
5-U54-CA112967-05	Project 2 - DNA Repair Signaling Core - Yaffe	93.397	-0
5-U54-CA112967-05	ICBP Supplement	93.397	102,001
5-U54-CA112967-05	Project 3 - Migration Signaling Networks - Hynes	93.397	71,698
5-U54-CA112967-05	Project 2 - DNA Repair Signaling-Lauffenburger	93.397	69,991
5-U54-CA112967-05	ICBP: Pilot Project Hemann	93.397	50,627
5-U54-CA112967-05	Harvard Carryforward - Sorger	93.397	75,436
5-U54-CA112967-05	Regulatory Networks - Education	93.397	278,335
5-U54-CA112967-05	Virginia Carry Forward	93.397	24,063
5-U54-CA112967-05	Lauffenburger Carry Forward	93.397	22,261
5-U54-CA112967-05	Regulatory Networks-RNAi-Sabatini	93.397	6,140
5-U54-CA112967-05	RNAi Interference Core-Chen	93.397	24,388
5-U54-CA112967-05	Project 3 - Migration Signaling Networks - Lauffenburger	93.397	75,918
5-U54-CA112967-05	Harvard/Vanderbilt/Virginia Tech	93.397	61,322
5-U54-CA112967-05	RNAi Interference Core - Sharp	93.397	81,942
5-U54-CA112967-05	ICBP Pilot Project Griffith	93.397	81,716
5-U54-CA112967-05	Bioinformatics, Computation and Modeling Core	93.397	158,132
5-U54-CA112967-05	Project 2 - DNA Repair Signaling - Yaffe	93.397	147,770
5-U54-CA112967-05	Project 2 - DNA Repair Signaling - Samson	93.397	141,278
5-U54-CA112967-05	Pilot Project 1	93.397	126,825
5-U54-CA112967-05	Project 1-Mitogenic Signaling Networks-Jacks	93.397	169,213
5-U54-CA112967-05	Project 3 - Migration Signaling Networks - Gertler	93.397	107,886
5-U54-CA112967-05	Regulatory Networks in Cancer Initiation and Progression - Administration	93.397	97,483
5-U54-CA112967-05	Project 1-Mitogenic Signaling Network-Sorger	93.397	90,540
5-U54-CA112967-05	Project 1-Mitogenic Signaling Network-Lauffenburger	93.397	125,254
5-U54-CA126515-03	Tumor Stroma Interactions in the Tumor Environment - Weissleder	93.397	118,247
5-U54-CA126515-03	Tumor Stroma Interactions in the Tumor Environment - Weinberg	93.397	85,628
5-U54-CA126515-03	Tumor Stroma Interactions in the Tumor Environment - Hynes	93.397	39,449
5-U54-CA126515-03	Tumor Stroma Interactions in the Tumor Environment - Jacks	93.397	15,397
5-U54-CA126515-03	Tumor Stroma Interactions in the Tumor Environment - Administration	93.397	33,606

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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environment - Weinberg	93.397	156,788
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environment - Hynes	93.397	186,534
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environment - Jacks	93.397	203,756
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environment - Administration	93.397	8,937
5-U54-CA126515-04	Tumor Stroma Interactions in the Tumor Environment - Weissleder	93.397	225,701
5-U54-CA126515-04REVISI	Tumor Stroma Interactions in the Tumor Environment - Wessleder Supplement - MGH	93.397	97,725
5-U54-CA126515-04REVISI	Tumor Stroma Interactions in the Tumor Environment - Hynes Supplement	93.397	122,816
5-U54-CA126515-04REVISI	Tumor Stroma Interactions in the Tumor Environment - Weinberg Supplement - Whitehead	93.397	23,019
5-U54-CA126515-04REVISI	Tumor Stroma Interactions in the Tumor Environment - Jacks Supplement	93.397	145,146
	<b>Total for 93.397</b>		<b>5,303,939</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
1-DP2-DK083048-01	Small-Molecule Approaches to Restore Glycemic Control in Type 1 Diabetes	93.847	207,468
5-R90-DK071503-04	Graduate Training in Computational Systems Biology	93.847	-0
5-R90-DK071503-05	Graduate Training in Computational Systems Biology	93.847	64,872
5-R90-DK071511-05	MIT EECS/Whitehead/Broad Training Grant in Computational Biology - Year 5	93.847	3,462
5-T90-DK070069-05	MIT Training Program in Computational Biology - Year 5	93.847	6,924
5-T90-DK070114-05	Graduate Training in Computational Systems Biology	93.847	45,423
	<b>Total for 93.847</b>		<b>328,150</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
2-T32-ES007020-33	Training Grant in Environmental Toxicology	93.894	12,752
5-T32-ES007020-34	Training Grant in Environmental Toxicology	93.894	648
	<b>Total for 93.894</b>		<b>13,400</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
5-T32-MH074249-02	Training Program in Neurobiology of Learning and Memory - Year 2	93.282	1,792
5-T32-MH074249-03	Training Program in Neurobiology of Learning and Memory - Year 3	93.282	172,993
	<b>Total for 93.282</b>		<b>174,785</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-GM076689-02	MSM Multi-Scale Analysis of Cellular Force Transmission and Biochemical Activation	93.059	37,736
5-R01-GM076689-03	MSM Multi-Scale Analysis of Cellular Force Transmission and Biochemical Activation	93.059	2,313
	<b>Total for 93.059</b>		<b>40,049</b>

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

TOTAL FOR 93.399

**40,049**

Contract Number	Government Contract Title	CFDA#	FY Expenses
5-R01-CA119402-04	Integrated System for Cancer Biomarker Detection with High Dynamic Range-S. Manalis Child	93.399	136,107
5-R01-CA119402-04	Integrated System for Cancer Biomarker Detection with High Dynamic Range-J. Han Child	93.399	59,740
5-R01-CA119402-04	Integrated System for Cancer Biomarker Detection with High Dynamic Range	93.399	7,009
5-R01-CA119402-05	Integrated System for Cancer Biomarker Detection with High Dynamic Range	93.399	358,104
5-U54 CA119349-05	CCNE - Chen Project 2	93.399	61,253
5-U54 CA119349-05	CCNE - Weissleder Project 3	93.399	523,270
5-U54 CA119349-05	CCNE - Pilot 2 Hammond	93.399	37,786
5-U54 CA119349-05	CCNE - Langer Project 1	93.399	247,696
5-U54 CA119349-05	CCNE - Bawendi Project 5	93.399	190,181
5-U54 CA119349-05	CCNE - Sharp Project 2	93.399	184,708
5-U54 CA119349-05	CCNE - Pilot 2 Wittrup	93.399	53,404
5-U54 CA119349-05	CCNE - Pitor 1 Harvard	93.399	57,605
5-U54 CA119349-05	CCNE - Ruoslahti Project 2	93.399	61,411
5-U54 CA119349-05	CCNE - Belcher Project 5	93.399	167,409
5-U54 CA119349-05	CCNE - Farokhzad Project 1	93.399	116,975
5-U54 CA119349-05	The MIT - Harvard Nanomedical Consortium CF Year 3	93.399	117,449
5-U54 CA119349-05	CCNE - Housman Mouse core	93.399	156,767
5-U54 CA119349-05	CCNE - Cima Project 4	93.399	309,183
5-U54 CA119349-05	CCNE - Langer Admin	93.399	166,231
5-U54 CA119349-05	CCNE - Langer Education	93.399	267,198
5-U54 CA119349-05	CCNE - Bhatia Project 2	93.399	234,552
5-U54 CA119349-05	CCNE - Bhatia Toxicity core	93.399	27,754
5-U54-CA119349-04	CCNE - Bhatia Project 2	93.399	25,405
5-U54-CA119349-04	CCNE - Bhatia - Toxicity Core	93.399	3,444
5-U54-CA119349-04	CCNE - Chen Project 2	93.399	25,964
5-U54-CA119349-04	CCNE - Housman - Mouse Model Core	93.399	39,625
5-U54-CA119349-04	CCNE - Langer - Administration	93.399	41,555
5-U54-CA119349-04	CCNE - Langer Project 1	93.399	41,811
5-U54-CA119349-04	CCNE - Bawendi Project 5	93.399	48,485
5-U54-CA119349-04	CCNE - Sharp Project 2	93.399	50,085
5-U54-CA119349-04	CCNE - Westervelt - Pilot 1 (Harvard)	93.399	58,859
5-U54-CA119349-04	CCNE - Belcher Project 5	93.399	70,198
5-U54-CA119349-04	CCNE - Farokhzad Proj. 1 (BWH)	93.399	100,538
5-U54-CA119349-04	CCNE - Langer - Education	93.399	160,363

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<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
5-U54-CA119349-04	CCNE - Cima Project 4	93.399	161,268
5-U54-CA119349-04	CCNE - Weissleder Proj. 3 (MGH-CMIR)	93.399	385,597
5-U54-CA119349-04	CCNE - Hammond - Pilot 2	93.399	11,633
5-U54-CA119349-04	CCNE - Wittrup - Pilot 2	93.399	15,666
5-U54-CA119349-04	CCNE - Ruoslahti - Proj. 2 (Burnham)	93.399	2,388
	<b>Total for 93.399</b>		<b>4,784,677</b>
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-K99-HD057522-01	fMRI Investigations of the Functional Architecture of the Language System	93.865	87,215
4-R37-HD28341-17	Novel Second Messenger Signaling in the Striatum	93.865	319,224
5-R01-HD045343-05	The Effect of Proximal and Distal Training on Stroke Recovery	93.865	69,649
5-R01-HD046943-05	Mechanisms and Functions of FMRP in Neuronal Development	93.865	4,139
5-R37-HD28341-16	Novel Second Messenger Signaling in the Striatum	93.865	9,888
	<b>Total for 93.865</b>		<b>490,115</b>
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-R01-DA028299-01	MRI Probes for Functional Imaging of Plasticity Signals in the Brain	93.279	330,719
5-R01-DA017310-04	Optical detection of the molecular processes underlying hippocampal LTP	93.279	6,729
	<b>Total for 93.279</b>		<b>337,449</b>
<u>Contract Number</u>	<u>Government Contract Title</u>	<u>CFDA#</u>	<u>FY Expenses</u>
1-P30-CA147882-01	ARRA - Koch Institute Faculty Recruitment for an MD/PHD Physician-Scientist	93.701	519,901
1-R01-EB006422-01A2	ARRA - Fabricated Equipment: NMR-Class Annulus Magnet	93.701	9,919
1-R01-EB006422-01A2	ARRA - Compact, Neon/Cryocooled NMR Magnets Assembled from Superconducting YBCO Annuli	93.701	514,484
1-R01-EB008082-01A2	ARRA - Dendritic Block Copolymer Micelles as New Targeted Drug Delivery Systems	93.701	339,349
1-R01-EY019152-01A2	ARRA - Molecular and functional mechanisms underlying binocular vision	93.701	40,087
1-R01-EY019262-01	ARRA - Mechanisms for the Perception of Surfaces and Materials	93.701	90,639
1-R01-HL086521-01A2	ARRA - Rational Design of a Cardiac Tissue Engineering Scaffold	93.701	392,979
1-R01-HL086521-01A2	ARRA - Rational Design of a Cardiac Tissue Engineering Scaffold - Penn	93.701	119,319
1-R01-HL086521-01A2	ARRA - Rational Design of a Cardiac Tissue Engineering Scaffold - Draper	93.701	171,003
1-R01-HL090856-01A1	ARRA - The Role of Glycocalyx in Mechanotransduction	93.701	349,900
1-R21-DK081783-01A1	ARRA - Intravesical Drug Delivery Device	93.701	114,595
1-R21-NS063185-01A2	ARRA - Structure-Based Ligand Design of Inhibitors that Prevent Tau Aggregation	93.701	227,233
1-RC1-AG035711-01	ARRA - HDAC1 Activating Compounds as Therapeutics for Neurodegenerative Disorders	93.701	218,895

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Contract Number	Government Contract Title	CFDA#	FY Expenses
1-RC1-AI086152-01	ARRA - Analytical microtools for discovering autoreactive lymphocytes	93.701	104,252
1-RC1-AI086152-01	ARRA - Subcontract - BWH - 6920565	93.701	25,344
1-RC1-AI086152-01	ARRA - Subcontract - DFCI - 6920565	93.701	63,655
1-RC1-DE020761-01	ARRA - Human Pluripotent Stem Cell Differentiation with Defined O2 & Protein Engagement	93.701	44,296
1-RC1-EB011187-01	ARRA - Child - Langer - 6920608	93.701	92,491
1-RC1-EB011187-01	ARRA - Fab Eq - Microfluidic Microinjector	93.701	21,320
1-RC1-EB011187-01	ARRA - High throughput cell reprogramming by microfluidic jet injection	93.701	223,948
1-RC1-HG005334-01	ARRA - Integrative analysis of genomic and epigenomic datasets in multiple cell types	93.701	109,601
1-RC1-MH088182-01	ARRA - Optogenetic control of attention through prefrontal synchrony - E. Boyden	93.701	225,785
1-RC1-MH088182-01	ARRA - Optogenetic control of attention through prefrontal synchrony	93.701	186,357
1-RC1-MH088316-01	ARRA - The Functional Circuitry of Category Learning	93.701	184,269
1-RC1-MH088912-01	ARRA - Ubiquitous Games for Biology-Developing Understanding of Biology and Biological Practices through Mc	93.701	154,405
1-RC1-NS068103-01	ARRA - Applying a Multidimensional Algorithm for Motor Control	93.701	145,640
1-RC1-RR028241-01	ARRA - Entrainment-based mechanical ventilation	93.701	325,167
1-RC1-RR028302-01	ARRA - Integrating and Evaluating the Modeling Applied to Problem Solving Pedagogy	93.701	121,131
1-RC2-DE020919-01	ARRA - Modulating Cortical and Sub-Cortical Brain Circuits in Chronic Facial Pain	93.701	130,233
1-RC2-DE020919-01	ARRA - Modulating Cortical and Sub-Cortical Brain Circuits in Chronic Facial Pain - MGH Brenner Subaward	93.701	73,240
1-RC2-HG005624-01	ARRA - Deep Sequencing Analysis of mRNA Isoform Expression Changes in Myotonic Dystrophy	93.701	625,132
1-RC2-HG005639-01	ARRA - A Data Analysis Center for integration of fly and worm modENCODE datasets	93.701	135,900
1-RC2-HG005639-01	ARRA - A Data Analysis Center for integration of fly and worm modENCODE datasets - Subawards Year 1	93.701	410,804
1-RC2-HL101721-01	ARRA - Characterization of Anticoagulant Heparin and Related Polysaccharides	93.701	386,740
1-RC2-HL101721-01	ARRA - Characterization of Anticoagulant Heparin and Related Polysaccharides - RPI subcontract	93.701	197,904
1-S10-RR024526-01A1	ARRA - Acquisition of Automated Nanoscale Crystallization Equipment	93.701	341,968
1-U01-AI082204-01	ARRA - Development of a Therapy for Smallpox, Vaccinia, and Monkeypox	93.701	606,255
2-R01-EB002804-21A1	ARRA - High Field DNP in Biological Systems	93.701	629,447
2-R01-EB002804-21A1	ARRA - Fabricated Equipment: 700 MHz DNP Apparatus	93.701	20,456
2-R01-EB002804-21A1	ARRA - Fabricated Equipment: 250 GHz Gyrotron Rebuild	93.701	11,430
2-R01-EB002804-21A1	ARRA - Pulsed EPR at 140 GHz	93.701	32,739
2-R01-EY016674-04A1	ARRA - Fabricated equipment: Retinal Prosthesis	93.701	215,335
2-R01-EY016674-04A1	ARRA - Recovery Act - MEEI Subaward	93.701	240,501
2-R01-EY016674-04A1	ARRA - Recovery Act - Florida International University Subaward	93.701	83,381
2-R01-EY016674-04A1	ARRA - Recovery Act - University of Alabama Huntsville Subaward	93.701	88,328
2-R01-EY016674-04A1	ARRA - Advanced Engineering Development of a Chronic Retinal Implant	93.701	186,702
2-R01-GM039334-23A1	ARRA - N-Linked Protein Glycosylation: Pathways and Processes	93.701	295,637
2-R01-HL067966-05A2	ARRA - Pontomedullary Integration of Respiratory Afferents	93.701	205,851
3-P01-CA042063-24S1	ARRA - Characterization of Pathways Controlling Cancer at the Level of Gene Regulation	93.701	198,813

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
3-P41-RR002594-24S1	ARRA - MIT Laser Biomedical Research Center	93.701	54,993
3-P50-GM068762-07S2	ARRA - Systems Biology of Cell Decision Processes	93.701	40,624
3-R0-1EY014970-05S1	ARRA - Visual Object Processing in the Inferotemporal Cortex	93.701	64,219
3-R00-GM081399-03S1	ARRA - Mechanism and Regulation of Yeast Internal Ribosome Entry Sites	93.701	35,976
3-R01-CA101830-04S1	ARRA - Foundations of Pretargeted Radiomunotherapy	93.701	166,704
3-R01-CA103146-07S1	ARRA - Chemistry and Biology of Deoxyribose Oxidation	93.701	31,026
3-R01-CA124427-04S1	ARRA - Engineering Multifunctional Nanoparticles	93.701	230,423
3-R01-DC007152-04S1	ARRA - Aids for the Deaf: Models of Speech Intelligibility	93.701	63,015
3-R01-EB001659-07S1	ARRA - Integrating Data, Models, and Reasoning in Critical Care: Verghese	93.701	93,133
3-R01-EB003151-31S1	ARRA - Solid State NMR Studies of Peptides and Proteins	93.701	9,777
3-R01-ES015818-03S1	ARRA - Mechanism of Eukaryotic Environmental Mutagenesis	93.701	95,597
3-R01-EY016159-04S1	ARRA - Reorganization of Visual Cortex in Macular Disease	93.701	81,151
3-R01-GM031030-27S1	ARRA - Molecular Genetics of Rhizobium Nodulation Plasmids	93.701	72,450
3-R01-GM032134-28S1	ARRA - Nonheme Diiron Centers and the Biological Oxidation of Hydrocarbons	93.701	57,548
3-R01-GM050895-14S1	ARRA - Cell-cell signaling, gene expression, and horizontal gene transfer in Bacillus	93.701	172,432
3-R01-GM056800-14S1	ARRA - Regulation of mitosis by proteolysis in yeast	93.701	105,335
3-R01-GM057073-12S1	ARRA - Enzymatic Degradation of Glycosaminoglycans	93.701	9,363
3-R01-GM059281-12S1	ARRA - Neutrophil Priming in Trauma and Sepsis	93.701	75,969
3-R01-GM062871-08S1	ARRA - Palladium- and Nickel-Catalyzed C-C Bond Formation	93.701	111,686
3-R01-GM068957-07S1	ARRA - MAPK Signaling in Single Yeast Cells: Dynamics, Variability, and Evolution	93.701	308,354
3-R01-GM074820-03S1	ARRA - Early Steps in Alkaloid Biosynthesis	93.701	106,461
3-R01-GM074825-05S1	ARRA - Synthesis and Study of Complex Natural Products	93.701	124,593
3-R01-GM081393-02S1	ARRA - Ribonucleotide Reductase Regulation: Diferric Y <sup>+</sup> assembly/maintenance and Sm11	93.701	42,814
3-R01-GM081871-02S1	ARRA - Structure-Based Prediction of the Interactome	93.701	59,064
3-R01-HG002439-08S1	ARRA - Computational and Experimental Analysis of Vertebrate RNA Splicing	93.701	95,368
3-R01-MH065252-08S1	ARRA - Neural Basis of Categories	93.701	156,636
3-R01-NS035145-13S1	ARRA - Integrative Functions of the Prefrontal Cortex	93.701	97,541
3-R21-DK078442-02S1	ARRA - HRI/eIF2aP Signaling Pathway as Potential Pharmaceutical Targets for Thalassemia	93.701	70,785
3-T32-GM081081-02S1	ARRA - Chemistry-Biology Interface Training Program	93.701	69,485
3-T32-GM087237-01S1	ARRA - Graduate Training in Computational and Systems Biology	93.701	35,137
<b>Total for 93.701</b>			<b>12,990,420</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
1-R01-CA149261-01	The influence of DNA repair on inflammation associated carcinogenesis	93.393	32,273
2-P01-CA026731-30	No PPG - Project 4 - Schauer	93.393	74,318
2-P01-CA026731-30	No PPG - Project 4 - Erdman	93.393	26,034

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Massachusetts Institute of Technology  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
5-P01-CA026731-31	No PPG Project 4 Parent	93.393	9,282
5-P01-CA026731-31	No PPG Project 3 Wogan	93.393	222,091
5-P01-CA026731-31	No PPG - Project 1 - Deen	93.393	172,941
5-P01-CA026731-31	No PPG Project 2 Dedon	93.393	200,676
5-P01-CA026731-31	No PPG Project 3 Essigmann	93.393	145,334
5-P01-CA026731-31	NO PPG Project 4A - Fox	93.393	50,714
5-P01-CA026731-31	NO PPG Project 4B - Engelward	93.393	50,278
5-P01-CA026731-31	NO PPG Core 1 Wogan	93.393	31,997
5-P01-CA026731-31	No PPG - Core 2 - Fox	93.393	156,168
5-P01-CA42063-24	Pathways Controlling Cancer - Tyler Jacks	93.393	320,646
5-P01-CA42063-24	Pathways Controlling Cancer - J. Lees Lab	93.393	438,251
5-P01-CA42063-24	Characterization of Pathways Controlling Cancer - Prof. Sharp	93.393	352,453
5-P01-CA42063-24	Pathways Controlling Cancer - Core	93.393	222,124
5-PO1-CA026731-31	Endogenous Nitrite Carcinogenesis in Man	93.393	657,266
5-R01-CA021615-33	Mutagenesis and Repair of DNA	93.393	303,247
5-R01-CA055042-20	Eukaryotic DNA Alkylation Repair	93.393	362,071
5-R01-CA067529-14	Helicobacter Induced Hepatitis and Tumorigenesis	93.393	68,137
5-R01-CA075576-12	In Vivo Role of DNA Alkylation Repair	93.393	510,861
5-R01-CA079827-08	Mechanisms of Damage-Induced Homologous Recombination	93.393	276,376
5-R01-CA103146-08	Chemistry and Biology of Deoxyribose Oxidation in DNA	93.393	380,124
5-R01-CA108854-04	Role of IL10 and TGFBI in Colon Cancer	93.393	42,646
5-R01-CA108854-06	Role of IL10 and TGFBI in Colon Cancer	93.393	22,282
5-R01-CA110261-05	Basis for Sequence Selective Guanine Oxidation in DNA	93.393	27,708
5-R01-CA116318-05	Genetic Toxicology of Purine Metabolism	93.393	287,686
5-R01-CA133404-03	Stress and Proliferation States Impact MicroRNA-Mediated Regulation in Cancer	93.393	400,279
5-R37-CA080024-13	Intra and Extra-Chromosomal Probes for Mutagenesis by Carcinogens	93.393	434,556
<b>Total for 93.393</b>			<b>6,278,818</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
2-R01-DE013023-11	Novel Polymers for Tissue Engineering	93.121	49,047
2-R01-DE016516-06	High Throughput Craniofacial Tissue Engineering	93.121	67,024
5-R01-DE013023-10	Novel Polymers for Tissue Engineering	93.121	334,866
5-R01-DE016516-05	Craniofacial Tissue Engineering with Human Embryonic & Adult Derived Stem Cells	93.121	217,720
5-R01-DE019523-11	Bioengineering Polymers for Parsing Cell Responses	93.121	336,579
5-R21-DE017412-02	A Microfluidic Platform for Dental Biofilm Growth and Characterization	93.121	9,335
<b>Total for 93.121</b>			<b>1,014,570</b>



**Appendix A-1 - Detail  
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Contract Number 5-R21-EB007043-02 5-R21-EB007043-02	Government Contract Title Design and Testing of New Additives for the Stabilization of Biopharmaceuticals Stanford Subcontract-6915703	CFDA# 93.256 93.256	FY Expenses 10,800 86,813 <b>97,613</b>
<b>Total for 93.256</b>			
Contract Number 5-K99-CA131474-02 5-K99-NS060947-02	Government Contract Title Post-Transcriptional Regulation of Polycistronic MicroRNAs in Mammalian Cells Rodai: Structure and Regulation of Synaptic Architecture	CFDA# 93.398 93.398	FY Expenses 11,749 69,202 <b>80,951</b>
<b>Total for 93.398</b>			
Contract Number 5-R01-GM065337-07 5-R01-GM48358-09	Government Contract Title X-ray Studies of Metalloenzyme Regulation and Catalysis Thermodynamics of Biochemical Systems	CFDA# 93.821 93.821	FY Expenses 79,878 16,160 <b>96,038</b>
<b>Total for 93.821</b>			
Contract Number 3-R01-LM009723-02S1 5-R01-LM009723-02	Government Contract Title Capturing Patient-Provider Encounter through Text Speech and Dialogue Processing Capturing Patient-Provider Encounter through Text Speech and Dialogue Processing	CFDA# 93.879 93.879	FY Expenses 21,075 440,381 <b>461,456</b>
<b>Total for 93.879</b>			
Contract Number 5-R01-AR03236-26 5-R01-AR045779-10	Government Contract Title Chondrocyte Response to Load: Transduction & Molec Mech Chondrocyte Response to Cartilage Injury	CFDA# 93.846 93.846	FY Expenses 298,999 85,951 <b>384,950</b>
<b>Total for 93.846</b>			
Contract Number 5-K99-MH085944-02	Government Contract Title Cross Region Neural Computation Subservicing Attention	CFDA# 93.281	FY Expenses 90,832 <b>90,832</b>
<b>Total for 93.281</b>			
Contract Number 5-DP10D001022-02	Government Contract Title UCSF Subaward-6914429	CFDA# 93.390	FY Expenses 121,383

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Contract Number 5-DP10D001022-04	Government Contract Title NIH Director's Pioneer Award	CFDA# 93.390	FY Expenses 483,487
<b>Total for 93.390</b>			
Contract Number 5-R01-AI037750-14 5-R37-AI015706-31	Government Contract Title In Vivo Pathogenesis of Helicobacter Pylori Sequence Determinants of Protein Structure and Stability	CFDA# 93.856 93.856	FY Expenses 188,199 356,834
<b>Total for 93.856</b>			
Contract Number 5-R01-HL080278-04	Government Contract Title Structure-Activity Relationships of LMWHs	CFDA# 93.839	FY Expenses 191,978
<b>Total for 93.839</b>			
Contract Number 5-R21-DK078442-02	Government Contract Title HRI/eIF2aP Signaling Pathway as Potential Pharmaceutical Targets for Thalassemia	CFDA# 93.849	FY Expenses 230,488
<b>Total for 93.849</b>			
<b>Total for NIH</b>			
			<b>129,333,942</b>
<b>Total for Dept. of Health and Human Services</b>			<b>129,333,942</b>

**DOE/NNSA/ALB  
Sandia National Laboratories**

Contract Number 611557 777117 DOC. NO. 767569 UNDER I	Government Contract Title Bayesian Data Assimilation for Stochastic Multiscale Models of Transport in Porous Media Integrated Optical Phase Locked Loop (IO-PLL) for Attosecond Timing in Microwave Oscillators Self-Consistent DFT+U and Potentially Electron Transfer and NMR	CFDA# 81.CCC 81.CCC 81.CCC	FY Expenses 93,399 160,953 -7,888
<b>Total for 81.CCC</b>			
<b>Total for Sandia National Laboratories</b>			<b>246,464</b>
<b>Total for DOE/NNSA/ALB</b>			<b>246,464</b>

**Appendix A-1 - Detail  
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**Miscellaneous Federal Govt  
Department of Homeland Security**

Contract Number      Government Contract Title  
2009-ST-108-000006      Ocean Acoustic Hurricane Classification

FY Expenses  
144,745

CFDA#  
97.108

**Total for 97.108**

**144,745**

**Total for Department of Homeland Security**

**144,745**

**Institute of Museum and Library Services**

Contract Number      Government Contract Title  
LG-06-06-0062      FACADE: Future-Proofing Architectural Computer-Aided Design

FY Expenses  
554

CFDA#  
45.312

**Total for 45.312**

**554**

**Total for Institute of Museum and Library Services**

**554**

**Lawrence Livermore National Security, LLC**

Contract Number      Government Contract Title  
B587254      Reactor Simulations Using the DRAGON code  
SUBCONTRACT NO. B580: High Density Implosions on OMEGA and the NIF

FY Expenses  
15,188  
274,460

CFDA#  
81.CCC  
81.CCC

**Total for 81.CCC**

**289,649**

**Total for Lawrence Livermore National Security, LLC**

**289,649**

**Millennium Challenge Corporation**

Contract Number      Government Contract Title  
MCC-05-0191-CFO TO02      Task Order 2, Madagascar: Option Period 1 - Labor Expenses

FY Expenses  
0

CFDA#  
85.CCC

**Total for 85.CCC**

**0**

**Total for Millennium Challenge Corporation**

**0**

**Sandia National Laboratories**

Contract Number      Government Contract Title  
1023347      VRDSMC for the Variable Hard Sphere model: A collaborative SANDIA/MIT approach

FY Expenses  
25,871

CFDA#  
12.CCC

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number AGREEMENT # 611557 P.C	Government Contract Title Structural Origins of Scintillation: Metal Organic Frameworks as a Nanolaboratory	CFDA# 12.CCC	FY Expenses 38,984
<b>Total for 12.CCC</b>			<b>64,854</b>
Contract Number 971321	Government Contract Title Quantifying Prediction Fidelity in Multiscale Multiphysics Simulations	CFDA# 81.CCC	FY Expenses 33,260
AGREEMENT # 611557 P.C	Tunable Thermodynamics and Kinetics for Hydrogen Storage: Nanoparticle Synthesis Using Ordered Polymer Templates	81.CCC	76,209
AGREEMENT #611557 PO	SC02 Materials Testing	81.CCC	70
DOCUMENT #746450 UND	MEMS-Based Platform for Thermoelectric Transport Property Measurement of Nanowires and Nanotubes Inside	81.CCC	2,538
DOCUMENT #982006 UND	Characterizing Thermoelectric Properties of Silicon Structures	81.CCC	45,186
PO#966279, AGREEMENT	Deep Borehole Disposal of Spent Nuclear Fuel	81.CCC	47,643
PO#978634	Characterization of Variation in Deep Reactive Ion Etching (DRIE)	81.CCC	11,862
<b>Total for 81.CCC</b>			<b>216,769</b>
<b>Total for Sandia National Laboratories</b>			<b>281,623</b>

### U.S. Department of Agriculture

Contract Number 58-0111-9-001	Government Contract Title Climate and Fuel Policy and Competing Demands for Land	CFDA# 10.001	FY Expenses 20,382
59-3640-8-667	Comparative Functional Genomics of Plant Pathogenic Fusarium Species	10.001	645
<b>Total for 10.001</b>			<b>21,027</b>
Contract Number 2008-35600-04691	Government Contract Title Genome dynamics of host specificity in the Fusarium oxysporum species complex	CFDA# 10.206	FY Expenses 79,070
<b>Total for 10.206</b>			<b>79,070</b>
<b>Total for U.S. Department of Agriculture</b>			<b>100,097</b>

### U.S. Department of Commerce - NOAA

Contract Number NA060AR4170019	Government Contract Title Center for Fisheries Engineering	CFDA# 11.417	FY Expenses -27,881
NA060AR4170019	Role of Plant Pathogens in Sudden Wetland Dieback in Connecticut and Massachusetts	11.417	27,402
NA060AR4170019	Acoustic Communication Networks for Distributed Autonomous Platforms	11.417	39,628
NA060AR4170019	Enabling High & Low Molecular Weight AUV-Based Chemical Analysis: Complementing Mass Spectrometry with	11.417	42,425
NA060AR4170019	Wireless Underwater Video Transmission	11.417	45,410

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Contract Number	Government Contract Title	CFDA#	FY Expenses
NA060AR4170019	Development and Validation of In Vitro Bioassays for Pesticides in Coastal Water	11.417	68,746
NA060AR4170019	Data Assimilation and Optimal System Design Experiments in Massachusetts Waters: Adaptive Sampling	11.417	70,836
NA060AR4170019	An Investigation of Transient Tidal Eddies in the Western Gulf of Maine	11.417	25,624
NA060AR4170019	Biomimetic Optimal Force Generation for Underwater Manipulators	11.417	76,766
NA060AR4170019	Autonomous Vehicle Exploration and Sampling of Deep-Water Corals	11.417	81,606
NA060AR4170019	Assessing the Narcosis Hazard to Marine Sediment: Applications of GCxGC Analyses	11.417	82,623
NA060AR4170019	Versatile High-Resolution Low-Cost AUV 3D Sensor	11.417	85,918
NA060AR4170019	Ocean Education & Technology Center	11.417	102,326
NA060AR4170019	Center for Global Resources	11.417	106,908
NA060AR4170019	Marine Communications	11.417	212,300
NA060AR4170019	Incorporation of a Compact Digital Holographic Plankton Camera and Gliders & Drifters	11.417	76,807
NA060AR4170019	Regional Proposal to Test Sensors for Detecting the Sea Squirt, Didemnum sp.A on George's Bank	11.417	19,714
NA060AR4170019	Assimilation and Optimal Observing System Design Experiments in Massachusetts Waters: Modeling	11.417	64,029
NA060AR4170019	Center for Coastal Resources	11.417	8,816
NA060AR4170019	Program Management	11.417	355,220
NA060AR4170019	Mapping Biological & Environmental data in Real Time: A Coastal Community Development Program	11.417	11,729
NA060AR4170019	Center for Marine Social Sciences	11.417	88,435
NA060AR4170019	Publications	11.417	4,776
NA060AR4170019	Sea Grant Lecture 2008	11.417	395
NA060AR4170019	MIT Sea Grant/Undergraduate Research Opportunities Program	11.417	1,758
NA060AR4170019	Biomimetic Rigid-Hull Vehicle with Flapping Foils for Enhanced Agility in Surf Zone	11.417	4,727
NA060AR4170019	Marine Communications	11.417	-370
NA060AR4170019	Development of a Management Model System for the New England Shelf	11.417	5,425
NA060AR4170019	Didemnum sp A as a Agent of Change: Proposal to Develop a Research Agenda for Georges Bank to Support Fi	11.417	5,870
NA060AR4170019	Low Cost Diagnostic System for Shipboard Environments	11.417	5,213
NA060AR4170019	Fabricated Equipment - Under Water Vehicle	11.417	6,036
NA060AR4170019	MIT Sea Grant Ocean Education and Technology Center Algae Proudcion for Biofuel Demonstration and Educa	11.417	6,124
NA060AR4170019	Program Development	11.417	6,336
NA060AR4170019	An Assessment of the Tidal Kinetic Energy Resource of The Massachusetts Coast & Potential Impacts of Extract	11.417	7,335
NA070AR4170451	NOAA Marine Aquaculture Program, Pilot Scale Test of Ocean Drifter	11.417	-12,053
NA080AR4170922	AISR BioBullets for the Control of Fouling Sea Squirts	11.417	68,500
NA100AR4170086	Sea Grant Program Management	11.417	177,413
NA100AR4170086	Wireless Underwater Video Transmission	11.417	96,782
NA100AR4170086	Coastal Resources Focus Area	11.417	30,309
NA100AR4170086	Interdisciplinary Science Outreach Proposal	11.417	24,233
NA100AR4170086	Publications	11.417	7

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Contract Number	Government Contract Title	CFDA#	FY Expenses
NA100AR4170086	Marine Social Sciences	11.417	24,127
NA100AR4170086	Communications	11.417	4,069
NA100AR4170086	Autonomous Vehicle Exploration and Sampling of Deep Water Corals	11.417	3,372
NA100AR4170086	Education Program	11.417	1,119
NA100AR4170086	Acoustic Communication Networks for Distributed Autonomous Underwater Platforms	11.417	22,533
NA100AR4170086	Coastal Community Development Project: Demonstration Project on Algal Biofuel	11.417	89

**Total for 11.417 2,159,510**

Contract Number	Government Contract Title	CFDA#	FY Expenses
NA05OAR4311132	Joint Proposal: the importance of Oceanic Mesoscale Features for the Seasonal Cycle of the Atlantic Marine ITC	11.431	1,127
NA06OAR4310059	Prediction of Seasonal to Inter-Annual Hydro-Climatology Including the Effect of Vegetation Dynamics and Topog	11.431	78,861
NA07OAR4310126	A Climate Process Team on Southern Ocean Ventilation and Carbon Cycle	11.431	-14,522
NA08OAR4310687	Collaborative Research: Towards a Better Understanding of the Relationship between Climate Change and Trop	11.431	35,936
NA09OAR4310069	Modeling Ecological Regulation of the Ocean Carbon Cycle	11.431	57,881
NA09OAR4310131	Understanding and Predicting Interannual to Multi. Decadal Variability of Atlantic Hurricane Activity.	11.431	158,800
NA09OAR4310165	A Collaborative Investigation of the Mechanisms, Predictability, and Climate Impacts of Simulated AMOC Multi-D	11.431	22,696
NA10OAR4310106	Measurements of Semivolatile Organic Compounds, Intermediate-Volatility Organic Compounds and Total Gas-F	11.431	22,787

**Total for 11.431 363,567**

**Total for U.S. Department of Commerce - NOAA 2,523,077**

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

Contract Number	Government Contract Title	CFDA#	FY Expenses
60NANB10D039	ARRA - MIT Future of the Electric Grid Study (ARRA)	11.609	19,294
70NANB7H6186	Fabrication: PPKTP Downconverter	11.609	1,230
70NANB7H6186	High-Flux Entanglement Source Development for Quantum Key Distribution	11.609	30,782
70NANB8H8124	NIST: Quantum Information Processing via Neutron Interferometry	11.609	53,785

**Total for 11.609 105,090**

**Total for U.S. Department of Commerce-NIST (Natl Inst of Stand & Tech) 105,090**

**U.S. Department of Education**

Contract Number	Government Contract Title	CFDA#	FY Expenses
ED05CO0039	Web Accessibility Initiative	84.CCC	670,872

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Total for 84.CCC **670,872**

Total for U.S. Department of Education **670,872**

**U.S. Department of Inter-U.S. Bureau of Mines USGS**

Contract Number 08HQGR0101	Government Contract Title Locating Non-Volcanic Tremors & Imaging Their Source Region Structure Beneath The San Andreas Fault, Cent	CFDA# 15.807	FY Expenses -534
<b>Total for 15.807</b>			<b>-534</b>

Contract Number 04HQAG0215	Government Contract Title USGS Science Impact Collaborative - Cohort 4	CFDA# 15.808	FY Expenses 9,313
<b>Total for 15.808</b>			<b>9,313</b>
<b>Total for U.S. Department of Inter-U.S. Bureau of Mines USGS</b>			<b>8,779</b>

**U.S. Department of Interior-Fort Huachuca**

Contract Number NBCHC00671	Government Contract Title High-Efficiency Super-Conducting Single-Photon Detector for Quantum Key Distribution	CFDA# 12.CCC	FY Expenses 85,514
Contract Number NBCHC0080001	OCS NETI Project on Co-Fabricated, Miniaturized, Integrated Control and Actuation Systems for Small Robots	12.CCC	402,107
Contract Number NBCHC070105	A Neuroscience Approach to Accelerated Learning- Graybiel	12.CCC	-160,052
<b>Total for 12.CCC</b>			<b>327,569</b>
<b>Total for U.S. Department of Interior-Fort Huachuca</b>			<b>327,569</b>

**U.S. Department of Transportation - Federal Aviation Agency**

Contract Number DTFA01-01-C-00030	Government Contract Title Total Cost Delay and its Impact on the US Economy and Productivity	CFDA# 20.CCC	FY Expenses 36,783
Contract Number DTFA01-01-C-00030	Wake Turbulence Research	20.CCC	80,861
Contract Number DTFA01-01-C-00030	Identification of Potential Stakeholder Benefits, Incentivization Approaches and Implication for ADS-B- Roll	20.CCC	63,817
Contract Number DTFA01-01-C-00030	Safety Risks Associated with Increased Air Traffic	20.CCC	50,436
Contract Number DTFA01-01-C-00030	Portfolio Optimization	20.CCC	-237
Contract Number DTFA01-01-C-00030	Performance Measure Comparisons Delivery 25	20.CCC	110,380
Contract Number DTFA01-01-C-00030	Factors Influencing Operational and Economic Performance of the NAS	20.CCC	44,823
Contract Number DTFAWA-05-D-0012	Task Order 0006 Studying the Effects of Aircraft Exhaust on Global and Regional Climate	20.CCC	-523
Contract Number DTFAWA-05-D-0012	Task Order 0002 Aviation Research, Aviation Environmental Portfolio Management Tool (AEPMT)	20.CCC	196,996
Contract Number DTFAWA-05-D-0012	Task Order 0007 Assessment of CO2 Emission Metrics for Commercial Aircraft Certification and Fleet Performar	20.CCC	150,387

**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
DTFAWA-05-D-0012	Task Order 0008 Advancing the Aviation Environment Portfolio Management Toll (APMT)	20.CCC	787,671
DTFAWA-09-F-MIT26	Factors Influencing Operational and Economic Performance of the NAS-Business Case Analysis	20.CCC	3,933
	<b>Total for 20.CCC</b>		<b>1,525,327</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
03-C-NE-MIT-002	Continuous Descent Approach at SDF	20.109	-141
03-C-NE-MIT-011	Environmental Design Space	20.109	8,256
03-C-NE-MIT-028	Alternative Fuels (Project 17)	20.109	19,495
06-C-NE-MIT	Program Management for Aircraft Noise and Aviation Emissions COE	20.109	411,986
06-C-NE-MIT	Economic and Environmental Effects of the Introduction of a Cap and Trade Policy in Aviation	20.109	230,982
06-C-NE-MIT	Opportunities for Reducing Surface Emissions Through Airport Surface Movement Optimization	20.109	83,699
06-C-NE-MIT	ECBA OF ULTRA LOW SULFUR JET FUELS (P27)	20.109	75,790
06-C-NE-MIT	Use of Near-Term Operational Changes to Mitigate Environmental Impacts of Aviation States 1 and 2	20.109	40,220
06-C-NE-MIT	Environmental Design Space	20.109	119,972
06-C-NE-MIT	ECBA OF ALTERNATIVE JET FUELS (P28)	20.109	66,228
06-C-NE-MIT-21	ARRA - Environmental Cost-Benefit Analysis of Alternative Jet Fuels	20.109	209,313
06-G-006	Cognitive Evaluation of Potential Approaches to Increase the Efficiency of Air Traffic Controller Training and Staff	20.109	93,510
09-C-NE-MIT, AMENDMEN	Phase 3 Program Management for Aircraft Noise and Emissions Mitigation COE	20.109	9,409
10-C-NE-MIT-M	Document and Event Support for FAA Air Transportation Centers of Excellence	20.109	16,555
	<b>Total for 20.109</b>		<b>1,385,273</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
FAA 95-G-017	Joint University Research Program to Meet Future Air Transportation Technological Needs	20.108	82,306
	<b>Total for 20.108</b>		<b>82,306</b>
	<b>Total for U.S. Department of Transportation - Federal Aviation Agency</b>		<b>2,992,906</b>

**U.S. Department of Transportation TSC**

Contract Number	Government Contract Title	CFDA#	FY Expenses
DTR57-05-P-80003	Airline Pilot Training: Effects of Simulator Platform Motion on Initial Training	20.CCC	10,410
DTR157-07-D-30006	Locomotive Cognitive Aceter Technology Development and Evaluation	20.CCC	-9,729
DTR157-07-D-30006	Human Factors Recommendations for the Design of Instrument procedures and Associated Charting	20.CCC	22,190
DTR157-10-C-10015	Assessing Metrics and Simplified Aviation Climate Impact Models	20.CCC	39,255
	<b>Total for 20.CCC</b>		<b>62,125</b>



**Appendix A-1 - Detail**  
**Massachusetts Institute of Technology**  
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**Fiscal 2010 Expenditures**

62,125

Total for U.S. Department of Transportation TSC

**U.S. Department of Transportation**

Contract Number	Government Contract Title	CFDA#	FY Expenses
DTRS 99-G-0001	UTC 15: Technology Transfer	20.701	3,866
DTRS 99-G-0001	UTC 14: Program Management	20.701	-3,866
DTRS99-G-0001	UTC 19: UNH-Graduate Fellowships	20.701	-15,815
DTRS99-G-0001	Living & Moving in 2021	20.701	6,992
DTRS99-G-0001	UTC 16: Fellowships	20.701	7,699
DTRS99-G-0001	UTC 17 Fellowships	20.701	10,846
DTRS99-G-0001	Securing Global Trade Through Secure Freight Transportation	20.701	29,362
DTRS99-G-0001	UTC 19: UConn - Research & Fellowships	20.701	5,136
DTRS99-G-0001	UTC 19: UVM - Research	20.701	32,623
DTRS99-G-0001	Design & Management of Flexible Transportation Networks Throughout the Use of ITS	20.701	56,591
DTRS99-G-0001	University Transportation Centers Program - Eighteenth Year	20.701	15,784
DTRS99-G-0001	UTC Improv Understanding of Transfer Behavior-Year 18	20.701	4,807
DTRS99-G-0001	UTC 19: Harvard - Research & Education	20.701	75,550
DTRS99-G-0001	UTC Fellowship-Year 18	20.701	1,147
DTRS99-G-0001	UTC 19: UMassAmherst - Res, Educ, & Fellowships	20.701	2,243
DTRS99-G-0001	Measuring & Modeling Travel Well-Being	20.701	-271
DTRS99-G-0001	UTC 19: URI - Graduate Fellowships	20.701	177
DTRS99-G-0001	Gated Communities & Boomers' Travel Behavior	20.701	199
DTRS99-G-0001	UTC Parent Year 17	20.701	122
DTRS99-G-0001	D'Ambrosio-Transitioning from Passenger to Driver	20.701	305
DTRS99-G-0001	UTC 19: UMaine - Education	20.701	383
DTRS99-G-0001	UTC URI Year 18 Fellowships	20.701	465
DTRS99-G-0001	Older Transit Workers & Managing Healthcare Costs	20.701	1,006
DTRS99-G-0001	UTC 19: Graduate Fellowships	20.701	266
DTRT07-G-001	UTC 20: Technology Transfer	20.701	35,652
DTRT07-G-001	Travel Behavior of the Aging Boomers: Evidence From Naturally Occurring Retirement Communities (Phase IV)	20.701	34,296
DTRT07-G-001	UTC21 - URI - Graduate Fellowships	20.701	30,097
DTRT07-G-001	UTC 20: UVM-Research and Fellowships	20.701	29,867
DTRT07-G-001	Reimer-Age-Related Changes in Cognitive Response Style in the Driving Task	20.701	39,206
DTRT07-G-001	UTC 20: UNH-Research	20.701	23,628
DTRT07-G-001	Data Use and Organizational Innovations in Transportation Planning	20.701	31,620
DTRT07-G-001	UTC 20: Fellowships	20.701	40,098

**Appendix A-1 - Detail  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
DTRT07-G-001	UTC - Harvard Education and Fellowships	20.701	78,106
DTRT07-G-001	UTC22 - UMass Amherst - Research & Fellowship	20.701	48,912
DTRT07-G-001	UTC22: URI - Research & Fellowships	20.701	55,283
DTRT07-G-001	UTC21 - UMaine - Research, Education and Fellowships	20.701	66,039
DTRT07-G-001	UTC21 - Program Management	20.701	71,650
DTRT07-G-001	UTC21 - UConn - Research and Fellowships	20.701	93,919
DTRT07-G-001	UTC 20: Program Management	20.701	97,980
DTRT07-G-001	UTC21 - UMass Amherst - Research, Education and Fellowships	20.701	116,538
DTRT07-G-001	UTC22: UVM - Graduate Fellowships	20.701	22,080
DTRT07-G-001	UTC 20: Harvard-Research and Education	20.701	46,859
DTRT07-G-001	A Study of Speech Interfaces for This Vehicle Environment	20.701	21,226
DTRT07-G-001	New Data for Relating Land Use and Urban Form to Private Passenger Vehicle Miles	20.701	8,142
DTRT07-G-001	Modeling Cooperative Driving Behavior in Freeway Merges	20.701	17,672
DTRT07-G-001	UTC - Twentieth Year Parent Account	20.701	-89
DTRT07-G-001	Parent Account - DTRT07-G-0001 - University Transportation Centers Program	20.701	-11
DTRT07-G-001	UTC22 - Fellowships	20.701	70
DTRT07-G-001	Development of an Older Empathy System to Assess Transit and Livability	20.701	70
DTRT07-G-001	Mehler - Assessing Methods of Enhancing Older Driver Performance	20.701	1,679
DTRT07-G-001	UTC21 - Technology Transfer	20.701	5,000
DTRT07-G-001	Evaluation of a Natural Speech Based Informational Inquiry System as a Potential Means to Increase Transit Util	20.701	6,467
DTRT07-G-001	UTC 20: UConn-Research & Fellowships	20.701	7,616
DTRT07-G-001	Assessing the Transportation Readiness of an Aging America	20.701	19,102
DTRT07-G-001	UTC21 - Cost Share Account	20.701	121,191
DTRT07-G-001	UTC22: UNH - Graduate Fellowships	20.701	9,857
DTRT07-G-001	D'Ambrosio - Role of Rehabilitation in Extending the Driving Lifetimes and Enhancing the Mobility of Older Adult:	20.701	10,573
DTRT07-G-001	Teaching Transportation Systems Thinking Concepts to Undergraduates	20.701	12,960
DTRT07-G-001	UTC22: UMaine - Graduates Fellowship	20.701	14,706
DTRT07-G-001	D'Ambrosio-Caregiving and Travel Patterns	20.701	15,338
DTRT07-G-001	Reimer-Assessing the Impact of Age on Cognitively Induced Visual Tunneling	20.701	15,850
DTRT07-G-001	UTC 20: UMaine Research	20.701	16,167
DTRT07-G-001	Reimer - Individual Differences in Peripheral Physiology & Implications for the Real Time Assessment of Driver S	20.701	16,663
DTRT07-G-001	UTC 20: URI-Research and Fellowships	20.701	9,366
DTRT07-G-001	UTC 20: UMass Amherst+Research and Fellowships	20.701	134,093
<b>Total for 20.701</b>			<b>1,661,153</b>

**Appendix A-1 - Detail  
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<u>Contract Number</u> DTR157-07-C-10002	<u>Government Contract Title</u> Library Services for DOT	<u>CFDA#</u> 20.CCC	<u>FY Expenses</u> 73,240
<b>Total for 20.CCC</b>			<b>73,240</b>
<b>Total for U.S. Department of Transportation</b>			<b>1,734,393</b>

**U.S. Environmental Protection Agency**

<u>Contract Number</u> EP08H001431	<u>Government Contract Title</u> PJM Smart Trading Assessment	<u>CFDA#</u> 66.CCC	<u>FY Expenses</u> 60
<b>Total for 66.CCC</b>			<b>60</b>
<u>Contract Number</u> RD 83456001 SU 83391801-0 SU 83436701-0 SU 83436701-0	<u>Government Contract Title</u> Emissions of Gas-phase LVOCs from Mobile Sources A Novel Solar Thermal Combined Cycle Fab Equipment: Hybrid Solar PV - Thermal Power Plant A Novel Solar Thermal Combined Cycle for Distributed Power Generation	<u>CFDA#</u> 66.516 66.516 66.516 66.516	<u>FY Expenses</u> 329 484 24,873 48,541
<b>Total for 66.516</b>			<b>74,226</b>

**U.S. Geological Survey**

<u>Contract Number</u> RD-83427901-0	<u>Government Contract Title</u> Air Pollution, Health and Economic Impacts of Global Change Policy and Future Technologies: An Integrated Mo	<u>CFDA#</u> 66.509	<u>FY Expenses</u> 45,212
<b>Total for 66.509</b>			<b>45,212</b>
<u>Contract Number</u> PI-83412601-0 XA-83240101 XA-83344601-3	<u>Government Contract Title</u> Biofuel Trade-Offs: Fuel, Forests, and Food Dynamic Modeling of Emissions from Land Use Activities Integrated Assessment of Multiple Greenhouse Gases, Climate Impacts, and Pollution	<u>CFDA#</u> 66.034 66.034 66.034	<u>FY Expenses</u> 62,524 312,448 186,664
<b>Total for 66.034</b>			<b>561,637</b>
<b>Total for U.S. Environmental Protection Agency</b>			<b>681,135</b>

<u>Contract Number</u> G09AC00330 G10AC00434	<u>Government Contract Title</u> MIT USGS Science Impact Collaboration Addressing the challenge of climate change in the greater Everglades Ecosystem.	<u>CFDA#</u> 15.808 15.808	<u>FY Expenses</u> 293,012 10,597
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Total for 15.808 **303,609**

Contract Number  
08WRSA0634

CFDA#  
15.CCC

FY Expenses  
48,590

Government Contract Title  
TRACK Kinematic GPS Software

Total for 15.CCC **48,590**

Total for U.S. Geological Survey **352,199**

**U.S. Miscellaneous Agencies**

Contract Number  
CONTRACT #2008\*126092 CISR Multi-Sponsored Consortium

CFDA#  
12.000

FY Expenses  
-28,720

Government Contract Title  
CISR Multi-Sponsored Consortium

Total for 12.000 **-28,720**

Total for U.S. Miscellaneous Agencies **-28,720**

**U.S. Nuclear Regulatory Commission**

Contract Number  
NRC-04-07-084  
NRC-04-08-150  
NRC-04-09-151  
NRC-38-09-893

CFDA#  
77.CCC  
77.CCC  
77.CCC  
77.CCC

FY Expenses  
238,339  
83,735  
172,283  
76,724

Government Contract Title  
Advanced Nuclear Technologies  
Advanced Methods for Probabilistic Risk Assessment  
Automation and HSI Complexity in Advance Reactors  
The Impact of Human Activities on Radiation in the Environment and Exposure of the Public: Curriculum Develop

Total for 77.CCC **571,081**

Total for U.S. Nuclear Regulatory Commission **571,081**

**United States Institute of Peace**

Contract Number  
USIP-077-07F

CFDA#  
91.001

FY Expenses  
22,164

Government Contract Title  
The Sources of Chinese Military Doctrine 1975-2005

Total for 91.001 **22,164**

Total for United States Institute of Peace **22,164**

**Va Hospital - Boston**

Contract Number  
0288/PO 523-D95002

CFDA#  
64.CCC

FY Expenses  
13,228

Government Contract Title  
Design of a Retinal Recording System

**Appendix A-1 - Detail  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
V00241P-004577/PO NO. 52	Intervertebral Disc Tissue Engineering	64.CCC	11,097
V00241S-00043/PO NO. 52	Spinal Cord Tissue Engineering	64.CCC	-12,113
VA241-P-0591/523-D95001	Wyatt VA Contract	64.CCC	1,617
VA241-P-1204	SPINAL CORD TISSUE ENGINEERING	64.CCC	19,540
VA241-P-1222	Intervertebral Disc Tissue Engineering	64.CCC	18,133
VA518V05005	VA Enterprise Systems Engineering Analysis	64.CCC	123,568
VA523D07014	INTERVERTEBRAL DISC TISSUE ENGINEERING	64.CCC	51,931
VA523D07015	SPINAL CORD TISSUE ENGINEERING	64.CCC	64,591
<b>Total for 64.CCC</b>			<b>291,592</b>
<b>Total for Va Hospital - Boston</b>			<b>291,592</b>

**VA Medical Center**

Contract Number	Government Contract Title	CFDA#	FY Expenses
V512(B)P-4559	Task Oriented Exercise and Robotics in Neurological Disease	64.CCC	3,543
V512(B)P-4580	Evaluation of Robotic Upper Extremity Neuro-Rehabilitation	64.CCC	-4,644
<b>Total for 64.CCC</b>			<b>-1,101</b>
<b>Total for VA Medical Center</b>			<b>-1,101</b>
<b>Total for Miscellaneous Federal Govt</b>			<b>11,129,828</b>

**Nat'l Aroo & Space Administration**

**NASA - Ames Research Center**

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNA06CN23A	Cognitively Based Traffic complexity Metrics for Future NGATS Concepts of Operations	43.000	147,490
NNA08CN84A	Requirements for the Development and Maintenance of Multicellular Life	43.000	1,535,196
NNA08CN84A	Bowring Child Account: Requirements for the Development and Maintenance of Multicellular Life	43.000	126,365
NNA09DB36A	The Moon as Cornerstone to the Terrestrial Planets: the Formative Years	43.000	204,492
NNX07AC48A	Adaptive Robust Control for Hypersonic Vehicles (ARCH)	43.000	124,838
NNX08BA61A	Advances in Photometric For All-Sky Exoplanet Surveys	43.000	17,718
<b>Total for 43.000</b>			<b>2,156,098</b>

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

<u>Contract Number</u> NNA06CN24A	<u>Government Contract Title</u> Optimization of Super-Density Multi-Airport Terminal Area Systems in the Presence of Uncertainty	<u>CFDA#</u> 43.CCC	<u>FY Expenses</u> 252,560
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**Total for 43.CCC**

**Total for NASA - Ames Research Center**

### NASA - Glenn Research Center

<u>Contract Number</u> NNX07AE08G-S01 NNX09AV99G	<u>Government Contract Title</u> The Effects of Shear History on the Extensional Rheology of Complex Fluids Rapid Turn Around Opportunity (RTA)	<u>CFDA#</u> 43.000 43.000	<u>FY Expenses</u> 65,730 39,114
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**Total for 43.000**

**104,844**

<u>Contract Number</u> NNC06GA48G NNC09CA14C NNX07AO10A NNX07AV29A NNX08AW63A	<u>Government Contract Title</u> Nanocomposite for Radioisotope Power Conversion SiC-Based MEMS Sensors for Real-Time Plasma Diagnosis During Spacecraft Re-Entry Advanced Multidisciplinary Optimization Techniques for Efficient Subsonic Aircraft Design Control of Boundary Respresentation Topology in MDAO Aircraft and Technology Concepts for an N+3 Subsonic Transport	<u>CFDA#</u> 43.CCC 43.CCC 43.CCC 43.CCC 43.CCC	<u>FY Expenses</u> -5 200,676 400,048 280,060 1,079,095
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**Total for 43.CCC**

**1,959,874**

**Total for NASA - Glenn Research Center**

**2,064,718**

### NASA - Goddard Space Flight Center

<u>Contract Number</u> NNG04GJ80G NNG04GM55G NNG05GA17G NNG05GB65G NNG05GE58G NNG05GM92G NNG05WC13G NNG06G167G NNG06GC28G NNG06GD63G NNG06GE48G NNG06GE58G	<u>Government Contract Title</u> Testing Trace-Gas Flux Models Using in Situ and Remotely-Sensed Data U.S. GODAE: Sustained Global Ocean State Estimation for Scientific and Practical Application Dynamic Hydrology and Ecosystem Modeling in Semi-Arid Complex Terrain Using NASA EOS Observations from Planetary Topography and Gravity Evaporation Estimation Using Multi-Platform Data MIT Participation in the Data Analysis of the XRS and XIS Instruments on the Astro-E2 Mission Novel Methods for Fabricating Variable Period Gratings Phase Equilibrium Investigation of Planetary Materials ECCO II High Resolution Global Ocean and Sea Ice Reanalysis Discovery Driven NEWS Investigation: THP Hydroclimatic Impacts of Amazon Deforestation Estimation of the Evaporation Linking Land Water and Energy Balance Based on Remotely Sensed Measurements Hydra A New Paradigm for Astrophysical Modeling, Simulation and Analysis	<u>CFDA#</u> 43.000 43.000 43.000 43.000 43.000 43.000 43.000 43.000 43.000 43.000 43.000 43.000	<u>FY Expenses</u> 71 100,699 38,431 1,668 2,002 62,781 -476 112,007 821,815 35 165,536 279,411
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## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNG06GF43G	Monitoring and Diagnosis of Complex Software and Hardware for Earth Observing Missions	43.000	1,597
NNG06GG09G	Synthetic Imaging Formation Flight Testbed (SIFFT)	43.000	-166
NNG06GG99G	Indirect and direct Detection of Dark Matter	43.000	52,407
NNG06WC08G	High Performance Active Pixel Sensors with Extended Spectral Range	43.000	141,173
NNH08PQ88P	CISR - NASA Agreement	43.000	23,630
NNX06AB86G	Vodcasting Space Weather: An Exploration of Earth's Upper Atmosphere and New Research Insights into its Str	43.000	19,164
NNX06AC30A	The NASA Energy and Water-Cycle	43.000	134,941
NNX06AD14G	Thermal and Magnetic History of Mars from Meteorites	43.000	136,748
NNX07AE35G	Evaluation of Millimeter-Wave Satellite Precipitation Retrieval Algorithms and Assimilation Using MMS Simulator	43.000	41,575
NNX07AE89G	Advanced Global Atmospheric Gases Experiment (AGAGE) Collaborative Research Project MIT Component	43.000	724,143
NNX07AE89G	MBR H2 Flux Tower System	43.000	11,024
NNX07AG98G	High Efficiency Transmission Gratings for X-Ray and EUV Spectroscopy Telescopes	43.000	344,183
NNX07AI49G	Climate Effect of Black Carbon Aerosol on Tropical Convective Clouds and Precipitation	43.000	374,767
NNX07AI99G	Development of Solid-State Local-Oscillator Sources for Terahertz Frequencies	43.000	371,116
NNX07AK52G	Fabricated Equipment: Micro-X Sounding Rocket Payload	43.000	96,971
NNX07AK52G	High Resolution Microcalorimeter X-Ray Imaging Rocket	43.000	111,551
NNX07AK95G	IRTF Optical Camera System	43.000	21,189
NNX07AN48G	Investigating the Localization, Regulation and Biosynthesis of 2-Methylhopanioids	43.000	40,569
NNX07AN63G	Large Telescope Photometry of Extra-Solar Planet Transits	43.000	91,262
NNX07AO76G	Ionosphere Redistribution: Storm Enhanced Density as a Source for Ion Outflow in the Cusp and Polar Cap	43.000	165,967
NNX07AO99G	A Survey of X-Ray Emission in Magnetic Be Stars (XMM 040212)	43.000	2,980
NNX07AP93G	Transient Millisecond X-Ray Pulsars in Outburst (RXTE 92050)	43.000	-3
NNX07AQ58G	Measuring the Spin-Downs of Three Nearby Isolated Neutron Stars	43.000	1,415
NNX07AR02G	Phase Equilibrium Investigations of Melting and Early Differentiation on Mars	43.000	80,429
NNX07AU12G	A Multi-proxy Search for Atmospheric Oxygen in the 2.9 Ga Pongola	43.000	109,921
NNX08AB82G	Suzaku Spectroscopy of Distant Galaxy Groups in Bootes (Suzaku #21424)	43.000	10,595
NNX08AC02G	X-Ray Spectra of Atoll-type Neutron Stars (Suzaku #21113)	43.000	26,915
NNX08AC04G	Direct Space Weathering of Icy Surfaces for Solar System Bodies in the Outer Heliosphere	43.000	18,245
NNX08AC21G	X-Ray Spectra of Neutron-Star X-Ray Transients (Suzaku #21114)	43.000	4,417
NNX08AC66G	4U 2129+47: A Powerful Probe of Quiescent Neutron Star Emission (XMM 050246)	43.000	31,682
NNX08AD87G	Searching for orbital motion close to the black hole in NGC 3516 (XMM 040037)	43.000	9,549
NNX08AD95G	Planetary Topography and Gravity	43.000	146,117
NNX08AE49G	Wind SWE/Faraday Cup MO&DA	43.000	67,430
NNX08AE92G	Deciphering Pluto's Atmosphere: Synthesis of Occultation Observations and Theoretical Models	43.000	84,289
NNX08AF09G	Studies of Ocean Bottom Pressure and Circulation Using Gravity Field Measurements from GRACE (MIT)	43.000	138,831
NNX08AG16G	GPS Observations in Central Asia: IGS Infrastructure and Characterization of Earthquake Hazard, Bishkek, Kyrc	43.000	29,997

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Contract Number	Government Contract Title	CFDA#	FY Expenses
NNX08A149G	The First INTEGRAL Image of M31 (INTEGRAL 0520047)	43.000	32,610
NNX08A162G	Nanoruler Fabrication	43.000	66,585
NNX08A162G	Development of Critical Angle X-Ray Transmission Gratings	43.000	302,915
NNX08AJ43G	Millisecond Pulsars in Low-Mass X-Ray Binaries	43.000	460
NNX08AK68G	Off-Campus Account: U.S. Participation in the Marco Polo Mission	43.000	9,300
NNX08AK68G	U.S. Participation in the Marco Polo Mission	43.000	26,370
NNX08AL42G	How Well Can LISA Measure Black Hole Binary Inspirals?	43.000	86,633
NNX08AL45G	Solar System Dynamics	43.000	161,414
NNX08AM24G	Geophysics of Terrestrial Planets	43.000	42,283
NNX08AM30G	A Lunar Array for Radio Cosmology: Reionization, The Dark Ages and More	43.000	24,061
NNX08AO61G	From Super Eddington to Zero: Following a Z-Source into Quiescence (XMM 41339)	43.000	55,060
NNX08AR33G	Application of Satellite Atimetry Gravity Winds and in Situ Data to Problems of the Ocean Circulation	43.000	315,199
NNX08AR36G	Advanced Microcalorimeter Arrays for High-Resolution Imaging X-Ray Spectroscopy	43.000	41,854
NNX08AT14G	Laboratory Study of the Effect of Impurities on the Flow and Fracture of Ice Materials On Mars	43.000	32,823
NNX08AV89G	Atlantic MOC Observing System Studies Using Adjoint Models	43.000	297,610
NNX08AX15G	A Search for Extra-Terrestrial Genomes (SETG): An In-situ Detector for Life on Mars Ancestrally Related to Life (	43.000	103,976
NNX08AX18G	A Nanosatellite Concept Study to Find Transiting Earth Analogs Around the Brightest Sun-Like Stars	43.000	229,812
NNX08AX23G	XMM Observation AS1063 One of the Most Luminous Clusters Known Signatures of a Merger? (XMM50463)	43.000	34,899
NNX08AX29G	The Environmental and Epoch Dependence of Radio-Loud AGN Feedback (XMM 055163)	43.000	19,566
NNX08AX30G	The X-Ray Nuclei of FR II Radio Galaxies: Unification and Accretion Modes (XMM 055176-Evans)	43.000	25,833
NNX08AX31G	Environments and Environmental Impact of Local FR II Radio Galaxies (XMM 055258)	43.000	-4,051
NNX08AX41G	XMM-Newton Observations of Very Faint X-Ray Transients (XMM 055200)	43.000	17,132
NNX08AY59A	Research on the Natural Variability of Climate and the Impact on Anthropogenic Forcing on Climate	43.000	151,050
NNX08AY96G	Measuring Paleomagnetism and Orienting Samples on the Moon	43.000	57,009
NNX08AZ64G	Understanding Group Evolution with Suzaku (Suzaku 31411)	43.000	8,007
NNX08AZ66G	Continuing to Enhance the Long Term Monitoring Campaign in the Suzaku Era (31172)	43.000	15,711
NNX08BA20G	The Role of Water In The Early Formation of mars: Wet Magma Ocean Crystallization, The Growth of a water Atn	43.000	94,607
NNX08BA51G	Theoretical Interpretation of Kepler Exoplanet Albedos and Reflected Light Curves	43.000	92,732
NNX09AD36G	Exoplanetary Spin-Orbit Alignment	43.000	168,426
NNX09AE44G	Phytoplankton Community Organization by Cell Size, Optical Properties and Meso-Scale Motions in an Eddy Rε	43.000	296,108
NNX09AE58G	Continuing MIT Participation in the Monitoring and Interpretation of Data from the Suzaku XIS	43.000	100,192
NNX09AE73G	Reanalysis of Cassini/Titan Radar Altimetry	43.000	84,084
NNX09AE82A	Payload Definition Document (PDD) for a Critical-Angle Transmission Grating Spectrometer (CAT-GS) on Board	43.000	137,911
NNX09AI87G	Extending the Scientific Capability for Ocean State Estimation using Observation and a GCM	43.000	475,433
NNX09AJ70G	The Final Stages of Soft X-Ray Transient Outbursts	43.000	5,401
NNX09AJ91A	Investigating the Organic and Nutrient Chemistry of Glacial Ice	43.000	27,347



## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNX09AK26G	Shifts in Extreme Precipitation Events Based on Resolved Atmospheric Changes	43.000	114,124
NNX09AK68G	Improvements to the Accuracy of Global Geodesy	43.000	128,277
NNX09AK70G	Improved Estimation of Geocenter motion using Imperfectly distributed networks	43.000	161,204
NNX09AL61G	Swift multiwavelength follow-up of gravitational-wave transient candidates	43.000	7,226
NNX09AM53G	Lunar and Planetary Gravity and Topography	43.000	1
NNX09AM88G	Molecular and Isotopic Studies of Two Contrasting Mass Extinction Events.	43.000	184,503
NNX09AP42G	The X-ray nuclei of FR II radio galaxies: unification and accretion modes (XMM 060045)	43.000	31,511
NNX09AP80G	The Mechanism of Jet Formation in Cyg X-2 and the Nature of the Hot (XMM 60231)	43.000	30,548
NNX09AV01G	Development of Iridium-based transition edge sensors (TESs) for Zeptobolometer applications	43.000	39,989
NNX09AV65G	ABELL 1795 WITH SUZAKU: A NEW WINDOW ON CLUSTER FORMATION AND STRUCTURE (Suzaku 4152)	43.000	13,115
NNX09AV84G	Comprehensive Analysis and Synthesis of Exploration Systems Architectures	43.000	235,650
NNX10AB27G	Exploring the Outer Solar System with Stellar Occultations	43.000	13,777
NNX10AC70G	NRA/Research Opportunities in Space & Earth Sciences	43.000	116,434
NNX10AD41G	Atomic Data Unleashed: Interactive, Scriptable Interfaces to Databases and Codes for X-RAY Spectroscopic Analysis	43.000	25,392
NNX10AD67G	Studying Exoplanet Atmospheres with Spitzer Archival Data	43.000	23,019
NNX10AE25G	Detector System for Micro-X Sounding Rocket Payload - Fabrication.	43.000	39,990
NNX10AE25G	Supernova remnant and galaxy cluster observations with the Micro-X high resolution microcalorimeter X-ray imager	43.000	138,637
NNX10AE50G	High Performance Three-Dimensionally Integrated Active Pixel X-Ray Sensors	43.000	9,467
NNX10AE68G	Astro-comb Visible Wavelength Calibrator as Supporting Technology for Exoplanet Research	43.000	109,131
NNX10AF59G	Development of high-resolution lightweight x-ray telescope optics	43.000	66,166
NNX10AF59G	Fabricated Equipment - Upgraded Mirror Slumping Process	43.000	1,992
NNX10AG27G	SMASS-Next: Next Generation Neo Spectroscopic Survey	43.000	15,356
NNX10AH32G	Search for Records of Early Solar System Magnetic Fields	43.000	15,753
NNX10AH60G	Patterns of Innovation in Government Space Agencies	43.000	13,512
<b>Total for 43.000</b>			<b>10,421,734</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
NAS5-02094	Astro-E2 Re-Flight (Phase B/C/D Effort)	43.CCC	-554
NAS5-30612	The All Sky Monitor/Experiment Data System for the X-Ray Timing Explorer (XTE) of the EAP Project	43.CCC	574,046
NNG05GK27G	SETG: A Search for Extraterrestrial Genomes	43.CCC	171,888
NNG05GK27G	Fabricated Equipment: Microfluidic Testbed	43.CCC	30,248
NNG05GN62G	Global Biogeochemical Transitions: Molecular and Isotopic Markers for Biogeochemical Processes during Major	43.CCC	141
NNG05GQ63G	Crater Ice Deposits at the periphery of the Polar Layered Deposits	43.CCC	103,008
NNG05GQ85G	Properties and Modification Processes of the Martian Polar Deposits	43.CCC	110,127
NNG05HY03C	Operations for the Space Geodesy Project and VLBI Development	43.CCC	901,588
NNG05HY04C	Fabricated Equipment: Broadband Receiver Data Acquisition Systems	43.CCC	28,304

**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
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Contract Number	Government Contract Title	CFDA#	FY Expenses
NNG05HY04C	Fabricated Equipment: VLBI Antenna System	43.CCC	575,107
NNG09FD65C	Transiting Exoplanet Survey Satellite (TESS) Phase A Study	43.CCC	6,440
NNG09LW58P	Universal Docking Port	43.CCC	10,000
NNG10HP00C	Continued Development and Operation of the NASA Mark IV and Next Generation Very Long Baseline Interferon	43.CCC	987,668
NNH07CC12C	Methods for Risk-Informed Decision Making Services	43.CCC	81,521
NNH10CC27C	Supporting the SPHERES Facility aboard the ISS for STEM Educational Objectives	43.CCC	205,991
NNX07AD29G	Predicting Landslides Using Measurements of Precipitation from Space	43.CCC	4,514
NNX07A142G	Rheologies of Planetary Ices	43.CCC	119,250
NNX07AK73G	Exploring the Outer Solar System with Stellar Occulations	43.CCC	154,238
NNX07AK73G	High Speed Optical Camera System	43.CCC	66,625
NNX07AT03G	Cyclones from Africa: The Transition of African Easterly Waves from Continent to Ocean	43.CCC	2,147
NNX08AF20A	Extra Solar Planet Observations and Characterization	43.CCC	116,253
NNX08AU06G	Comprehensive Analysis and Synthesis of System Architectures for Earth Campaigns	43.CCC	40,298
NNX08AV86G	Comprehensive Analysis and Synthesis of System Architectures	43.CCC	95,229
	<b>Total for 43.CCC</b>		<b>4,384,076</b>

**Total for NASA - Goddard Space Flight Center**

**14,805,810**

**NASA - Johnson Space Center**

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNJ04HC72G	Microgravity Tissue Engineering	43.000	48,141
NNX09AE50G	A Critical Benefit Analysis of Artificial Gravity as a Microgravity Countermeasure	43.000	103,980
	<b>Total for 43.000</b>		<b>152,120</b>

**Total for NASA - Johnson Space Center**

**152,120**

**NASA - Langley Research Center**

Contract Number	Government Contract Title	CFDA#	FY Expenses
NNX07AC70A	Development and application of Higher-Order Adaptive Method for Aerodynamic and Sonic-Boom Design of Sup	43.CCC	143,625
NNX07AD42A	A Noise Assessment Methodology for Highly-Integrated Propulsion Systems with Inlet Flow Distortion	43.CCC	136,991
	<b>Total for 43.CCC</b>		<b>280,616</b>

**Total for NASA - Langley Research Center**

**280,616**

**NASA - Marshall Space Flight Center**

### Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number NAS8-37716 NNM08AA18C	Government Contract Title ACIS Science Instrument AXAF Charge Coupled Device (CCD) Imaging Spectrometer (ACIS) GRAIL	CFDA# 43.CCC 43.CCC	FY Expenses 29,561 722,512  <b>752,073</b> <b>752,073</b> <b>20,463,995</b>
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Total for 43.CCC

Total for NASA - Marshall Space Flight Center

**Total for Nat'l Aereo & Space  
 Administration**

### National Science Foundation NSF

Contract Number	Government Contract Title	CFDA#	FY Expenses
BES-0348259	Career: Colloidal Micelles as Multifunctional Vaccines	47.041	9,153
BES-0522845	Biophotonics-Microscanning Technology for High-Speed, High Resolution in Vivo Optical Coherence Tomograph	47.041	1,741
BES-0609182	NIRT: Biomeimetic Nanostructured Medical Adhesives	47.041	361,726
CBET 0753036	UIUC Subaward - 6915791	47.041	135,355
CBET 0753036	NIRT: Single Molecule Detection in Living Cells Using Carbon Nanotube Optical Probes	47.041	102,468
CBET-0506830	NIRT: Integrated Study of Thermoelectric Transport and Energy Conversion in Bismuth-Based Nanowires	47.041	30,580
CBET-0644846	CAREER: Chemomechanical Imaging and Engineering of Single Cell Phenotype	47.041	38,521
CBET-0651678	Investigation of a hydrological and biogeochemical controls on arsenic mobilization at a field site in Munshiganj, t	47.041	29,195
CBET-0730238	Eliciting Novel Microbial Phenotypes through Transcriptional, Degradation and Translational Engineering	47.041	171,920
CBET-0753020	Near Infrared Fluorescent Single Walled Carbon Nanotubes as Novel Solution Phase Optical Sensing Materials	47.041	76,917
CBET-0755825	Phonon Heat Conduction in Nanostructures: 3D to 1D Transition	47.041	72,227
CBET-0758352	CAREER Understanding and Exploiting the Surface Chemistry of Carbon Nanotubes	47.041	38,059
CBET-0830098	Work Completed for Heat Transfer from Nanoparticles to Liquids (NSF 0500402)	47.041	53,804
CBET-0844526	SGER - Probing Oxygen Reduction Reaction Kinetics Using Heterostructured Thin-Film Microelectrodes	47.041	35,257
CBET-0845347	CAREER: Technologies for Genome-Wide In Vivo Study of Neuronal (Axonal) Degeneration	47.041	27,258
CBET-0852235	DNA Polymer Dynamics in Nanoconfinement	47.041	46,009
CBET-0853866	Assessing Environmental Sustainability using FLAG: A case study of a novel semiconductor material critical to e	47.041	85,090
CBET-0933095	Advances in Global Dynamic Optimization	47.041	69,837
CBET-0939511	NSF Science and Technology Center: Emergent Behaviors of Integrated Cellular Systems	47.041	1,842
CBET-0952493	CAREER: CELL SEPARATION BY ROLLING ON ASYMMETRIC RECEPTOR PATTERNS	47.041	23,596
CBET-0954986	CAREER: Design, Construction and Characterization of Metabolite Valves	47.041	23,520
CBET-1001092	Engineered Quorum Sensing & Programmed Multi-Step Differentiation of Mammalian Stem Cells Into Pancreatic Bt	47.041	133,912

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
CMMI-0447766	CAREER: Performance, Adaptation and Robustness in Approximate Dynamic Programming	47.041	-177,787
CMMI-0448972	CAREER: Using Experiments More Effectively in Engineering Design	47.041	-7,643
CMMI-0517966	Manufacturing Processes for Polymer-Based Microfluidic Devices	47.041	6,712
CMMI-0555053	Effect of Inclusions on Material Performance-Investigation Through Microcontinuum, Discontinuum and Nano-Ind	47.041	145,278
CMMI-0555614	Constitutive Equations and Computational Procedures for Modeling Nano/Micro-Scale Superplastic Forming of B	47.041	38,200
CMMI-0625241	NSF/Sandia: Effect of Loading History on Ductile Fracture	47.041	129,421
CMMI-0642545	CAREER: Mechanics of Chemically Complex, Hierarchical Nanostructured Protein-Based Materials Under Extrin	47.041	38,126
CMMI-0700044	Modern Mathematical Programming Approaches to Obtain Deeper Insights into Machine Scheduling	47.041	117,193
CMMI-0700414	Engineered Fuel Cell Membranes: Multiscale Design and Processing for Multifunctional Performance	47.041	111,210
CMMI-0705453	Dynamic Task-Based Coordination of Large Scale Mobile Robotic Network	47.041	9
CMMI-0726733	Stochastic Networks in the Heavy Traffic Regime: Algorithms, Approximations and Applications	47.041	133,114
CMMI-0728162	Stochastic Recruitment and Broadcast Feedback of Cellular Control Systems and Its Application to Muscle Acti	47.041	166,895
CMMI-0758061	Price of Anarchy and its Applications	47.041	40,128
CMMI-0758069	Nearly Optimal Solutions for Stochastic Optimization Problems	47.041	64,476
CMMI-0758651	Nanomechanics of Cartilage Extracellular Matrix Macromolecules from Aged, Diseased, and Engineered Tissues	47.041	102,716
CMMI-0824674	Alleviating Travel Delay Uncertainties in Traffic Assignment and Traffic Equilibrium	47.041	75,835
CMMI-0830134	CAREER: A Design Data Analysis Approach to Early Stage Design Process Modeling	47.041	63,585
CMMI-0833150	SGER: Collaborative Research in Low-Cost Manufacturing of High Performance Thermoelectric Nanocomposite	47.041	23,353
CMMI-0846554	CAREER: New Algorithmic Approaches to Computationally Challenging Stochastic Supply Chain and Revenue M	47.041	65,243
CMMI-0856063	Collaborative Research: Adaptive Allocation Rules in High Dimensional Settings, with Applications	47.041	76,430
CMMI-0856171	Collaborative Research: Mechanical and Electrical Reliability Maximization of Rechargeable Lithium-Ion Batterie	47.041	1,665
CMMI-0856325	Debonding in Bi-layer Material Systems under Moisture Effects: A Multi-scale Fracture Approach	47.041	85,348
CMMI-0918571	Cavern Design for the Deep Underground Science and Engineering Laboratory (DUSEL)	47.041	18,034
CMMI-0926349	Preparing Cities for Climate Change: An International Comparative Assessment of Urban Adaptation Planning	47.041	71,640
CMMI-0926671	A Robust Methodology for the Standoff Condition Assessment of FRP-Retrofit Concrete Systems	47.041	28,089
CMS-0510797	Moisture Affected Debonding in FRP Retrofit Concrete Systems - An Interface Fracture Approach	47.041	12,297
CMS-0540331	DDAS-SMRP: Coordinated Control of Multiple Mobile Observing Platforms for Weather Forecast Improvement	47.041	15,956
CMS-0556211	Collaborative Research: Rational Design of Polymeric Microtruss Structures as Highly-Ordered Multifunctional C	47.041	2,048
CMS-0625635	Collaborative Research: Dynamic Task-Based Coordination of Large Scale Mobile Robotic Networks	47.041	48,350
CTS-0347348	Career: Nanofluidic Molecular Filters	47.041	-13,659
CTS-0506830	NIRT: Integrated Study of Thermoelectric Transport and Energy Conversion in Bismuth-Based Nanowires	47.041	89,492
CTS-0521962	Global Dynamic Optimization	47.041	2,614
DMI-0423484	Product Recycling Systems	47.041	18,345
DMI-0545910	CAREER: Distributed Multi-Agent Control and Optimization: Where Game Theory Meets Network Optimization	47.041	27,709
DMI-0556106	Robust and Adaptive Optimization: a Tractable Approach to Optimization Under Uncertainty	47.041	50,729
DMI-0620304	Processing of Functionally Graded Nanocrystalline Alloys	47.041	13,311

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DMI-0620374	Nanomanufacturing: Co-Assembly of Nanoparticles in Constrained Regions of Space	47.041	-16,014
DMI-0620374	Child account - 6914157	47.041	-50
ECCS-0644245	CAREER: Manipulating Microcomponents for Self-Assembly-Based Manufacturing and Chromatography	47.041	49,170
ECCS-0701623	Data Fusion Architectures	47.041	119,994
ECCS-0705451	Teamwork vs Congestion: The Role of Scale in Large Mobile Networks	47.041	19,376
ECCS-0725555	Collaborative Research: Energy-Efficient Communication with Optimized ECC Decoders: Connecting Algorithms	47.041	28,499
ECCS-0731100	Ultra Sensitive Sensory Materials for Detection of Explosives Vapor	47.041	60,691
ECCS-0745237	CAREER: Practical Algorithms for Next Generation Air Transportation Systems	47.041	15,411
ECCS-0747501	CAREER: Digitally-Assisted Architectures for Next Generation RF Transceivers	47.041	141,381
ECCS-0801549	Control Over Networks	47.041	64,451
ECCS-0823778	Single Photon Detection in the Near and Mid Infrared by Using Superconductive Nanowires	47.041	194,226
ECCS-0823778	Fabricated Equipment - Visible to Near Infrared Optical Setup	47.041	4,072
ECCS-0835623	Collaborative Research CDI-Type II Advanced Theory and Computational Methods for Modular Analysis and De	47.041	25,914
ECCS-0941043	CDI Type I: Collaborative Research: Integration of relational learning with ab-initio methods for prediction of mate	47.041	49,010
ECCS-0968633	Development of Tunable THz Wire Lasers	47.041	26,517
ECCS-1002286	Octave Spanning Gain by Cavity Enhanced Optical Parametric Amplification	47.041	57,794
ECS-0621915	Collaborative Research: Teamwork vs. Congestion: The Role of Scale in Large Mobile Networks	47.041	2,813
ECS-0621922	Optimization and Control of Stochastic Wireless	47.041	23,901
ECS-0625966	DMS-MSPA-Interdisciplinary: Optimum Quantum Error Recovery	47.041	0
EEC-0403903	NIRT: Nanomolecular Interactions of Novel Biological and Synthetic Polyelectrolyte Brushes	47.041	19,084
EEC-0403903	NC State Subcontract - 6896674	47.041	54,893
EEC-0824328	BRIGE: Dynamically Tunable Nanostructured Surfaces for Multiphase Microfluidics	47.041	94,541
EFRI-0735905	EFRI-ARESCI: Theory and Algorithms for Autonomous Reconfigurability of the National Air Transportation Syste	47.041	473,926
EFRI-0735953	EFRI-ARESCI: Controlling the Autonomously Reconfiguring Factory	47.041	471,526
EFRI-0735956	EFRI-ARESCI: Foundations for Reconfigurable and Autonomous Cyber-Physical Systems; Cyber-Cities and Cyl	47.041	473,594
EFRI-0735997	EFRI-CBE: A Multifaceted Approach to the Modeling of Angiogenesis	47.041	159,611
EFRI-0735997	Child Asada - 6915994	47.041	62,568
EFRI-0735997	Child Lauffenburger - 6915994	47.041	70,947
EFRI-0835947	Megretski-EFRI	47.041	3,698
EFRI-0835947	EFRI-COPN: Dynamics of Neural Networks on a Planar Patch-Clamp Array: Training, Identification and Control	47.041	583,452
OCE-0752346	Dynamics of Eddies and Dipoles in the South Atlantic	47.041	129,854
<b>Total for 47.041</b>			<b>6,717,302</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
AST-0506716	Near-Earth Object Reconnaissance and Source Region Analysis	47.049	61,651
AST-0507590	Astrometric Search for Exoplanets	47.049	121,524

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
AST-0607597	CMB and 21 cm Cosmology in the Presence of Foregrounds	47.049	91,162
AST-0607601	Strong Gravitational Lensing of Quasars and the Distribution of Dark Matter in Galaxies	47.049	84,495
AST-0607686	Collaborative Research: PRIMUS, Mapping the Universe at Redshift Unity	47.049	3,855
AST-0619490	FIRE: Development of a Unique Infrared Spectrograph for Magellan	47.049	4,089
AST-0619490	Infrared Spectrometer - Fab. Equipment	47.049	185,604
AST-0647787	REU Site: Astronomy and Atmospheric Science at the mit Haystack Observatory	47.049	81,554
AST-0705058	Collaborative Research: Ultra-Precision Silicon Immersion Gratings for Infrared Spectroscopy	47.049	151,514
AST-0707609	Exploring the Kuiper Belt with the Magellan Telescopes	47.049	166,367
AST-0708106	Collaborative Proposal: Models of the Deep Circulation of Gas Giants: Solar Heating, Convection, and Zonal Flow	47.049	11,543
AST-0708501	New Tests for Dark Energy and Modified Gravity	47.049	137,812
AST-0708534	MSPA-AST: Precision cosmology with galaxies, CMB and 21 cm tomography	47.049	66,134
AST-0747154	CAREER: Building Rocky Planets: From Mercury and Vesta to GL 581C	47.049	18,981
AST-0804311	Collaborative Research Proposal: A Bright, Ultrastable Optical Wavelength Calibrator for Exoplanet and Cosmological	47.049	32,601
AST-0908920	Chemical Abundances in the Intergalactic Medium: Evolution and Constraints on Feedback from Galaxy Formation	47.049	135,133
CHE-0414243	Mini-Protein Scaffolds for Protein Design	47.049	-3,901
CHE-0517786	An investigation into the Fundamental Principles of Plasmasless Si Etching	47.049	-11,165
CHE-0535604	Collaborative Research: Cyberinfrastructure and Research Facilities: Process Informatics for Chemical Reaction	47.049	108,538
CHE-0547877	CAREER: Constrained Density Functional Methods for Accurate Electron Transfer Dynamics	47.049	106,678
CHE-0547905	CAREER: New Methodologies for the Synthesis of Azaheterocycles	47.049	46,376
CHE-0554734	Multiple Metal-Carbon Bonds, Metallacycles and Catalytic Reactions Involving Olefins & Acetylenes	47.049	-4,077
CHE-0556268	Theoretical Studies of Energy Transfer, Relaxation, and Single Molecule Spectroscopy	47.049	-1,720
CHE-0611944	Metal Coordination Compounds as Reporters for Biological NO	47.049	21,382
CHE-0616575	Vibrational Orientational, and Conformational Dynamics of Molecules in Solution	47.049	-35,180
CHE-0616575	Amide I/II Spectroscopy	47.049	115
CHE-0616939	Condensed Matter Coherent Spectroscopy and Control	47.049	223,118
CHE-0714189	Collaborative Research: Jensen Child	47.049	174,397
CHE-0714189	Collaborative Research: High Throughput and Massively Parallel Synthesis of Materials	47.049	296,198
CHE-0714189	Collaborative Research: Bawendi Child	47.049	56,791
CHE-0719157	Early Metal Mediated Chemistry of the Group 15 Elements	47.049	202,045
CHE-0724158	A Convergent Synthesis Approach to the Uranium-Carbon Triple Bond	47.049	99,445
CHE-0749821	Pure Electronic Rydberg Spectroscopy: The Use of Chirped-Pulse Millimeter-Wave and Time-Domain Terahertz	47.049	239,389
CHE-0750234	Fe-mediated C-O Cleavage and C-C Bond Forming Reactions from CO <sub>2</sub> and CO Substrates	47.049	74,392
CHE-0750239	Multielectron Activation of Metal-Halide, Metal-Hydride and Metal-Oxo Bonds	47.049	138,420
CHE-0806266	A New Approach to the Decomposition of Complex Chemical Kinetics	47.049	47,166
CHE-0841187	Multiple Metal-Carbon Bonds, Metallacycles, and Catalytic Reactions Involving Olefins & Acetylenes	47.049	193,436
CHE-0907905	Metal Coordination Compounds as Reporters for Biological NO	47.049	204,004

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
CHE-0911107	Fabricated Equipment - Pump - Probe Optimized Optical Phase - Controlled Interferometer	47.049	17,247
CHE-0911107	Two-dimensional infrared spectroscopy of protein conformational dynamics (M+S)	47.049	15,802
CHE-0911107	Two-dimensional infrared spectroscopy of protein conformational dynamics	47.049	132,939
CHE-0911107	Big Lab Interferometer Fabrication	47.049	31,106
CHE-0946721	Purchase of an X-Ray Diffractometer	47.049	292,250
DMR-0414895	IMR: Development of an Acoustic Phonon Spectroscopy System for Materials Research , Education and Outreach	47.049	-8,040
DMR-0504158	Spin Transport Studies in Band and Interface Tailored Materials: Towards Total Spin Polarization for Spin Electronics	47.049	163,603
DMR-0604430	GOALI: Magneto-optical Materials for Integrated Optical Isolators	47.049	56,208
DMR-0606276	The Ab-initio Prediction of Crystal Structure: Combining Data Mining Ideas with Quantum Mechanics	47.049	118,392
DMR-0645323	CAREER: Structure-Property Relationships for Mixed Ligand Rippled Nanoparticles and their Polymer-Like Assemblies	47.049	26,008
DMR-0701386	Physics of Electron Spins in Quantum Dots	47.049	80,056
DMR-0704197	Advancing the Photophysics of Carbon Nanotubes	47.049	120,625
DMR-0704717	Structure Evolution During Volmer-Weber Growth of Metallic Films and Micro- and Nano-Structures	47.049	111,548
DMR-0705234	Lipodendrisomes: Co-assembly of New Comb-Rod Dendritic Block Copolymers with Lipids for Tailored Functions	47.049	85,152
DMR-0705255	Frustrated Quantum Magnetism in Insulators and Metals	47.049	91,797
DMR-0706078	Physical Properties of Strongly Correlated Quantum Liquids	47.049	111,127
DMR-0706408	Organizing and Optimizing Electronic Materials with Liquid Crystals	47.049	231,177
DMR-0709557	Materials World Network: Magnetic Properties of Mesoscopic Multilayer Rings	47.049	77,548
DMR-0745555	CAREER: Semiconductor Nanowires: Structure-Property Relationships and Applications in Nanophotonics and Nanoelectronics	47.049	142,599
DMR-0803315	Constrained Fluctuations	47.049	39,525
DMR-0804040	Physics of Strong Disorder and Correlation	47.049	91,150
DMR-0804449	Periodic Polymeric Materials: Deaf and Blind Structures	47.049	158,761
DMR-0814575	Acquisition of Pulsed Laser Deposition System for Multicomponent and Multilayer Oxides and Student Training	47.049	-13,750
DMR-0819762	CMSE - Initiative 2 - Shim	47.049	16,835
DMR-0819762	CMSE - Initiative 2 - Chu	47.049	11,466
DMR-0819762	CMSE - Initiative 1 - Bawendi	47.049	6,057
DMR-0819762	MRSEC Supplement - NSF MRF	47.049	65,053
DMR-0819762	CMSE - Major Equipment	47.049	528,948
DMR-0819762	CMSE - MRSEC Administration	47.049	193,935
DMR-0819762	CMSE - MRSEC Day Camp	47.049	19,818
DMR-0819762	CMSE - IRG-3 - Fink	47.049	5,147
DMR-0819762	CMSE - IRG-3 - Ippen	47.049	60,016
DMR-0819762	CMSE - SEED - Kong	47.049	48,182
DMR-0819762	CMSE - Initiative 2 - Hudson	47.049	47,034
DMR-0819762	MRSEC Supplement - Reconfigurable Array Magnetic Automata	47.049	25,876
DMR-0819762	CMSE - MRSEC Special Projects	47.049	28,865

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DMR-0819762	CMSE MRSEC Grant Supplement - MRSEC Web Site	47.049	63,840
DMR-0819762	CMSE - IRG-1 - Belcher	47.049	32,144
DMR-0819762	CMSE - Initiative 1 - Irvine	47.049	38,722
DMR-0819762	CMSE - IRG-2 Boyce	47.049	53,721
DMR-0819762	CMSE - IRG-2 Ortiz	47.049	167,676
DMR-0819762	CMSE - MRSEC Education Support	47.049	170,176
DMR-0819762	CMSE - IRG-2 Van Vliet	47.049	117,580
DMR-0819762	CMSE - Initiative 2 - Lee	47.049	78,800
DMR-0819762	CMSE - SEED- Beach	47.049	76,912
DMR-0819762	CMSE - IRG-1 - Shao-Horn	47.049	76,712
DMR-0819762	CMSE - MRSEC Undergrad/REU	47.049	82,905
DMR-0819762	CMSE - IRG-2 Buehler	47.049	72,349
DMR-0819762	CMSE - IRG-3 - Joannopoulos	47.049	69,488
DMR-0819762	CMSE - SEED - Gradecak	47.049	66,210
DMR-0819762	CMSE - IRG-3 - Johnson	47.049	66,117
DMR-0819762	CMSE - IRG-1 - Marzari	47.049	69,983
DMR-0819762	CMSE - Initiative 2 - Nocera	47.049	120,970
DMR-0819762	CMSE - Initiative 1 - Stellacci	47.049	83,002
DMR-0819762	CMSE - SEED- Gedik	47.049	86,786
DMR-0819762	CMSE - Initiative 1 - Rubner	47.049	117,400
DMR-0819762	CMSE - IRG-1 - Hamad-Schifferli	47.049	95,552
DMR-0819762	CMSE - IRG-2 Hammond	47.049	90,562
DMR-0819762	CMSE - IRG-2 Cohen	47.049	83,882
DMR-0819762	CMSE - IRG-1 - Ceder	47.049	33,823
DMR-0819762	CMSE - IRG-1 - Thompson	47.049	90,464
DMR-0819762	CMSE - SEED - Jarillo-Herrer	47.049	88,877
DMR-0819762	CMSE - IRG-3 - Soljacic	47.049	87,525
DMR-0845287	CAREER: Exploration of novel quantum phenomena and relativistic-like quantum dynamics in graphene nanoele	47.049	132,648
DMR-0845358	CAREER: Understanding the Chemical Vapor Deposition Synthesis of Graphene Science, Application and Educat	47.049	76,001
DMR-0849278	SGER: Spin-transfer-torque devices based on magnetostatically-coupled sub-50nm structures	47.049	142,138
DMR-0904400	Disentangling Pseudogap from Superconductivity in the Cuprates by Scanning Tunneling Microscopy	47.049	52,157
DMR-0906838	Surface Modification and Bioconjugation of Gold Nanorods	47.049	96,133
DMR-0934312	Collaborative Research: EAGER Non-Homogeneous Flow Fields in Nonlinear Rheology: A Challenge to Current	47.049	2,631
DMS-0243345	Geometric Methods In Representation Theory	47.049	0
DMS-0306519	Homotopy Theory And Applications	47.049	1,525
DMS-0408993	Traces, Singularities and K-Theory	47.049	9,557



## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DMS-0504847	Tensor Categories, Dynamical R-matrices and Double Hecke Algebras	47.049	134,403
DMS-0530851	CMG: Understanding Ensemble Approaches to Environmental Data Assimilation	47.049	174,356
DMS-0545904	CAREER: Cohomological Methods in Algebraic Geometry and Number Theory	47.049	81,180
DMS-0546209	CAREER: Algebraic Combinatorics and its Applications	47.049	111,079
DMS-0600148	Lefschetz Fibrations in Symplectic topology and Applications to Mirror Symmetry	47.049	109,280
DMS-0602678	Advances in the Theory of Dispersive Equations	47.049	53,675
DMS-0604416	Nonlinear Wave Dynamics in Fluid Flows	47.049	85,739
DMS-0604423	Studies in Algebraic Combinatorics	47.049	166,386
DMS-0605100	Local and global methods in homotopy theory	47.049	60,580
DMS-0606629	Geometric Analysis: Minimal Surfaces, Geometric Flows, and Function Theory	47.049	111,520
DMS-0608306	Algorithms for Applied Multivariate Statistical Analysis	47.049	15,310
DMS-0625234	Affine Flag Varieties and Quantization in Positive Characteristic	47.049	16,323
DMS-0652529	FRG Collaborative Research Combinatorial Representation Theory, Multiple Dirichlet Series, and Moments of L-1	47.049	22,613
DMS-0652620	FRG: Collaborative Research: Homological Mirror Symmetry and its Applications	47.049	137,559
DMS-0652630	FRG Collaborative Research Homological Mirror Symmetry and its Applications	47.049	57,434
DMS-0701162	Functional Inequalities in Global Analysis and Non-Commutative Geometry	47.049	37,194
DMS-0702438	Multiple Dirichlet Series with Applications to Automorphic Representation Theory	47.049	66,412
DMS-0702492	Pseudo-Relativistic Nonlinear Schroedinger Equations	47.049	45,433
DMS-0703937	New Challenges in Aggregation Kinetics	47.049	35,273
DMS-0706967	Floor Theories in Symplectic Geometry and Low Dimensional Topology	47.049	130,522
DMS-0706976	Geometric and Algebraic Structures in the Group of Hamiltonian Diffeomorphisms	47.049	22,037
DMS-0707641	Mathematical Modeling of Induced-Charge Electrokinetics	47.049	94,085
DMS-0724778	Collaborative Research: Multi-Scale (Wave Equation) Tomographic Imaging with US Array Waveform Data	47.049	135,741
DMS-0732175	Collaborative Research: Algorithms for Near-Optimal Multistage Decision-Making under Uncertainty: Online Lear	47.049	83,039
DMS-0732334	MSPA-MCS: Learning to Rank	47.049	73,051
DMS-0757207	FRG: Collaborative Research: Semidefinite Optimization and Convex Algebraic Geometry	47.049	69,068
DMS-0757765	Investigations in the areas of Sphere Packing and the Arithmetic of K3 Surfaces	47.049	54,815
DMS-0758197	Applications of the Relative Trace Formula in Higher Rank	47.049	39,737
DMS-0758262	Mathematical Sciences Geometric Methods in the Representation Theory of Affine Hecke Algebras, Finite Reduc	47.049	111,994
DMS-0805807	Gauge Theory Symplectic Geometry and Fibered Three-Manifolds	47.049	16,772
DMS-0805834	Parabolic Differential Equations and the Geometry of Manifolds	47.049	37,371
DMS-0805841	Low Dimensional Topology and Gauge Theory	47.049	132,676
DMS-0807330	Collaborative Research: Time-Dependent and Inhomogeneous Flows of Entangled Polymeric and Micellar Netw	47.049	42,713
DMS-0813648	Capturing subgrid structures with level set methods	47.049	164,249
DMS-0841321	Rational points on varieties in families, and countable unions of varieties over countable fields	47.049	74,770
DMS-0844185	CAREER: Multiple Dirichlet Series, Automorphic Forms, and Combinatorial Representation Theory	47.049	24,389

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
DMS-0848804	Collaborative Research: Cognitive Rhythms Collaborative - Boyden	47.049	31,031
DMS-0848804	Collaborative Research: Cognitive Rhythms Collaborative - Moore	47.049	7,197
DMS-0848804	Collaborative Research: Cognitive Rhythms Collaborative - Graybiel	47.049	48,136
DMS-0854764	FRG: Collaborative Research: Quantum Cohomology, Quantized Algebraic Varieties, and Representation Theory	47.049	166,034
DMS-0854774	FRG: Collaborative Research: Mean curvature flow as a tool in low dimensional topology	47.049	20,141
DMS-0854877	FRG: Collaborative Research: Characters, Liftings, and Types: Investigations in P-Adic	47.049	38,773
DMS-0900524	Microlocal analysis in nonlinear PDE and PDE on manifolds	47.049	55,523
DMS-0900996	Algebraic Structures Arising in Physics	47.049	122,691
DMS-0901005	Automata in Geometric Groups, Combinatorics, and Logic	47.049	46,568
DMS-0905950	Collaborative Research: Homotopy Theory: Applications and New Dimensions	47.049	262,103
DMS-0906038	Non-variational Plateau problems in geometry and general relativity	47.049	42,436
DMS-0907955	The stability of hydraulic jumps: analysis, computation, and experiment	47.049	119,641
DMS-0908122	Nonlinear Wave Propagation in Fluid Flows	47.049	9,061
DMS-0930146	Mathematical Modeling of Rechargeable Batteries	47.049	41,793
DMS-0934689	CMG Collaborative Research: Imaging Magnetization Distributions in Geological Samples	47.049	134,464
DMS-0943787	EMSW21-RTG: Geometry and Topology	47.049	1,782
DMS-0946296	CAREER: Random Surfaces and Conformal Probability	47.049	69,769
DMS-0952486	CAREER: Lattices and Sphere Packings, Arithmetic Geometry and Computational Number Theory	47.049	195
DMS-0969470	Geometric methods in local and global representation theory	47.049	9,308
DMS-1005944	Compacifications, resolution and differential equations	47.049	18,973
DMS-1017062	Collaborative Research: Wave Computations in Phase-Space	47.049	1,287
PHY-0449884	Career: Beyond Gravitational Wave Detection	47.049	53,625
PHY-0457264	Development of Technologies for Sub-Quantum-Noise-Limited Gravitational-Wave Interferometers	47.049	-1,564
PHY-0457451	Atom Optics and Interferometry with Cold Atoms	47.049	-8
PHY-0503076	Fabrication: Fermi 1	47.049	85,159
PHY-0503076	Fabrication: Fermi 2	47.049	-1,756
PHY-0503076	A Program in Ultra-Low Temperature Atomic Physics	47.049	146,453
PHY-0548484	The Relationship Between Spatial Nuclear Organization and Stochastic Gene Expression	47.049	410,577
PHY-0551153	Fabrication: Cold Atom Apparatus	47.049	207,183
PHY-0551153	CUA-Harvard University Subaward	47.049	202,620
PHY-0551153	CUA-W. Ketterle	47.049	186,209
PHY-0551153	Center for Ultracold Atoms	47.049	-2,447
PHY-0551153	CUA-V. Vuletic	47.049	109,895
PHY-0551153	Fabrication: Ion Trap Apparatus	47.049	115,019
PHY-0551153	Fabrication: Cold Atom Apparatus	47.049	92,144
PHY-0551153	CUA-Visitor Project	47.049	33,774

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Contract Number	Government Contract Title	CFDA#	FY Expenses
PHY-0551153	CUA - Seminar	47.049	51,724
PHY-0551153	CUA-I. Chuang	47.049	52,075
PHY-0551153	Wellesley College Sub	47.049	35,183
PHY-0551153	CUA-Core Project	47.049	77,968
PHY-0555509	Nonclassical Atom and Light Sources for Measurements Below the Standard Quantum Limit	47.049	-11,333
PHY-0555509	Fabrication: Microchip-Cavity System for Trapping Ultracold Atoms	47.049	1,273
PHY-0600465	Research in Theoretical Elementary Particle Physics	47.049	155,294
PHY-0613734	Laboratory Studies of Spontaneous Reconnection and Intermittent Plasma Objects	47.049	70,053
PHY-0653414	Fabrication: Microchip Ion Trap Array for Quantum Simulation	47.049	4,361
PHY-0653414	Fabrication: Cryogenic UHV Ion Trap System	47.049	633
PHY-0653414	Surface-Electrode Ion Lattices for Quantum Information Science	47.049	116,975
PHY-0653456	Fabricated Equipment: dark Matter Detection Apparatus	47.049	61,321
PHY-0653456	Dark Matter & Neutron Detector Testing System Fabrication	47.049	26,393
PHY-0653456	Dark Matter Test Detector Fabrication	47.049	2,233
PHY-0653456	Collaborative Research: Developing new readout methods for dark matter detectors with directional sensitivity	47.049	46,212
PHY-0653514	Strongly Interacting Quantum Mixtures of Ultracold Atoms	47.049	96,567
PHY-0758188	Quantum effects in radiation-pressure-dominated optomechanical systems	47.049	253,160
PHY-0758188	Fabricated Equipment: Quantum radiation Pressure Pathfinder	47.049	37,702
PHY-0847342	CAREER: Increasing the Dark Matter Science Reach of the SuperCDMS Experiment	47.049	299,611
<b>Total for 47.049</b>			<b>16,644,861</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
DBI-0640709	OpenWetWare: A Collaborative Tool for Biological Knowledge Management and Dissemination	47.074	162,353
DBI-0644282	CAREER Comparative Genomics and Biological Signal discovery in the Human Genome	47.074	70,635
DBI-0649879	IDBR: Microscale Continuous Culture Bioreactor Array	47.074	71,419
DBI-0649879	Fabricated Equipment - Bench Top Meter with Micro-Electrodes	47.074	4,577
DBI-0649879	Fabrication: Microfluidic Turbidostat	47.074	5,241
DBI-0754339	Fabricated Equipment-Feedback OCT System	47.074	-25,637
DBI-0754339	Fabricated Equipment - Digital Phase Conjugation System	47.074	14,739
DBI-0754339	IDBR: Field-Based Tomographic Microscopy Instruments	47.074	173,283
DBI-0754662	Collaborative Research: IDBR: VoxNet- A Deployable Bioacoustic Sensor Network	47.074	12,681
DBI-0821391	MRI: Acquisition of Computing Equipment for Research and Education in Computational Biology	47.074	33,843
DBI-0852654	IDBR: Development of an Iso-dielectric Separation System for Large-Scale Quantitative Cell Screens	47.074	130,006
DEB-0918333	MSB: Genomics of Ecologically Defined Bacterial Populations	47.074	434,514
DEB-0936234	Assembling the Tree of Life: Can Phylogenomics Resolve Deep Phylogeny?	47.074	176,940
IOS-0824373	Collaborative Research: The Hemo-Neural Hypothesis	47.074	75,146

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
MCB-0347203	CAREER: Analysis of the Coiled-coil Interactome	47.074	14,878
MCB-0348001	A Genomics-Enabled Microbial Observatory in the Monterey Bay National Marine Sanctuary	47.074	17,980
MCB-05443833	Crystallographic Snapshots of Adenosyl Radical Enzymes	47.074	20,132
MCB-0616323	Localization and Characterization of the FE(II) Oxidase Complex from Rhodospseudomonas palustris TIE-1	47.074	38,376
MCB-0643745	Career: ClpXP Machinery Studies at the Single-Molecule Level	47.074	142,156
MCB-0719120	Combinatorial Biosynthesis of New Alkaloids in Periwinkle	47.074	31,836
MCB-0719344	rE.coli -Recoding the E.coli Genome	47.074	77,099
MCB-0744483	Collaborative Research: Lanthanide Binding Tags: Biophysical Tools for Investigating Protein Structure and Function	47.074	73,400
MCB-0745638	CAREER: The Structure of Collagen and Collagenolysis	47.074	105,351
MCB-0844442	Career Dissecting the Molecular Determinants of Specificity in Two Component Signal Transduction Systems	47.074	133,118
MCB-0950233	Coiled-coil modules for molecular engineering and synthetic biology	47.074	49,483
MCB-0968682	CAREER: Artificial Pattern Formation with Synthetic Gene Networks	47.074	93,205

**Total for 47.074**

**2,136,750**

Contract Number	Government Contract Title	CFDA#	FY Expenses
ACI-0325297	ITR: A Language, Compilers and Tools for the Streaming	47.070	84,549
ANI-0225660	IRIS: Balakrishnan	47.070	680
ANI-0225660	IRIS: Kaashoek	47.070	19,208
ANI-0225660	ITR 01-149 Robust Large-Scale Distributed Systems	47.070	27,082
ANI-0238028	CAREER: A Robust Fully Decentralized Read/Write File System	47.070	18,466
CCF-0325774	ITR: Collaborative Research: New Approaches to Experimental Design and Statistical Analysis of Genomic and Signal Processing	47.070	386
CCF-0347395	CAREER: Towards Unified Theory of Wireless Communications	47.070	21,155
CCF-0347776	CAREER: Fundamental Research in Geometric Folding	47.070	64,604
CCF-0447561	Career: Transient Signal Processing for Realistic Imagery	47.070	92,059
CCF-0514167	Learning Fourier Coefficients: Theory and Application	47.070	-4,790
CCF-0515109	Coding for Multimedia Sources and Sensor Data: New Theory, Algorithms, and Applications	47.070	-789
CCF-0515122	Theory and Design for Rateless Codes for Wireless Communication	47.070	19,353
CCF-0541164	Generating High-Quality Complex Digital Systems from High-Level Specifications	47.070	131,288
CCF-0541183	Deep and Scalable Software Checking	47.070	62,428
CCF-0541209	CPA: Practical Cached-Oblivious B-Trees	47.070	21,103
CCF-0541227	Acquisition and Modeling of Non-Rigid Shape and Deformation	47.070	14,102
CCF-0541319	Collaborative research: Programmable Microfluidics: A Universal Substrate for Biological Computing	47.070	26,618
CCF-0621511	HECURA: Microdata Storage Systems for High-End Computing	47.070	158,332
CCF-0621897	BIC: Biologically-Inspired Robust Space/Time Programming of Sensor/Actuator Ensembles	47.070	1,466
CCF-0635191	Collaborative Research: MIMO Networking: From Principles to Protocols	47.070	124,072
CCF-0635286	Applied Algorithms: Tech Transfer from the Algorithms Toolbox	47.070	59,006

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Contract Number	Government Contract Title	CFDA#	FY Expenses
CCF-0635297	Program Obfuscation: Foundations and Applications	47.070	59,435
CCF-0643836	CAREER: Acquisition, Approximation, and Compression - An Integrated Study	47.070	102,199
CCF-0702295	Electron Mediated Quantum Computing with Nuclear Spins	47.070	84,176
CCF-0702670	Extending the Power and Applicability of the Timed Input/Output Automata Framework	47.070	74,131
CCF-0726514	Theoretical Foundations for Reliable Computing in Unreliable Mobile ad Hoc Networks	47.070	38,377
CCF-0726648	Collaborative Research: EMT: Novel Operations, Circuit Optimization, and Technology Evaluation for Large-Scale	47.070	59,649
CCF-0728554	Collaborative Research: Flow Level Models and the Design of Flow-Aware Networks	47.070	93,537
CCF-0728645	Fast Approximate Algorithms for Wireless Sensor Networks	47.070	23,929
CCF-0728645	Rubinfield Child	47.070	72,543
CCF-0728645	Katabi Child	47.070	53,501
CCF-0729011	New Handles on Program Correctness	47.070	2,033
CCF-0729069	Compressing Unordered Data: Theory, Algorithms, and Applications	47.070	127,002
CCF-0810888	G&V: Physically Valid Simulation of Active Human Motion	47.070	90,894
CCF-0811397	CCF-CPA: Automatic Parallelization Using Semantic Commutativity Analysis	47.070	147,460
CCF-0811696	CPA-CPL: A Hardware-Design Inspired Methodology for Parallel Programming	47.070	226,938
CCF-0811724	CPA-CSA-T: ATAC: Enhancing Multicore Programmability Through All-to-All Computing	47.070	191,650
CCF-0811724	Child - Kimerling	47.070	100,758
CCF-0829421	EMT/QIS: Physics Based Approaches to Quantum Algorithms	47.070	137,994
CCF-0829672	Invariance in property Testing	47.070	90,488
CCF-0829878	Polyhedral Techniques for the Design of Approximation Algorithms	47.070	80,816
CCF-0829893	EMT/MISC: Collaborative Research: Harnessing Statistical Physics for Computing and Communication	47.070	52,403
CCF-0830100	Information Theory with Directions: Geometric Structure and Coordinates on the Space of Probability	47.070	37,332
CCF-0832234	Jalalabad Fab Lab	47.070	105
CCF-0832997	Petabricks: CSAIL	47.070	119,319
CCF-0832997	Petabricks: A Language and Compiler for Scalability and Robustness	47.070	28,654
CCF-0836720	Collaborative Research: CDI-Type II: Discovery of Succinct Dynamical Relationships in Large Scale Biological D:	47.070	249,655
CCF-0843915	CAREER: Geometric Techniques for Algorithm Design	47.070	59,392
CCF-0904305	GIF: Medium Collaborative Research Understanding and Managing Interference in Communications Networks	47.070	59,160
CCF-0904598	SHF: Medium: Collaborative Research: Throughput -Driven Multi-Core Architecture and a Compilation System	47.070	54,322
CCF-0905244	SHF: medium: Exposing and Eliminating Errors at Component Boundaries	47.070	146,404
CCF-0915155	AF: Small: Logic and Computational Complexity	47.070	151,259
CCF-0937832	Collaborative Research: Programming Models and Storage System for High Performance Computation with Man	47.070	29,038
CCF-0937860	HECURA: Collaborative: Multidimensional and String Indexes for Streaming	47.070	82,516
CCF-0953960	CAREER: Towards a Constructive Theory of Networked Interactions	47.070	11,479
CCF-1008324	Collaborative Research: Enabling technology for On Chip networks	47.070	12,777
CCF-1008325	NSF Collaborative Research: CPA-CSA: CMP Architectures with Global Communication	47.070	15,056

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Contract Number	Government Contract Title	CFDA#	FY Expenses
CCR-0325401	ITR: Collaborative Research: Efficient Resource Management for Controlled Mobility Wireless Networks	47.070	7,520
CCR-0326277	NSF/ITR: Lynch	47.070	-217
CCR-0326277	ITR: Simplifying Design and Analysis of Cryptographic Protocols	47.070	3,100
CNS-0428107	ITR: Collaborative: Byzantine Fault Tolerance for Large-Scale, High Performance Distributed Storage Systems	47.070	101,730
CNS-0448287	Career: Adaptive Reliable and Self-Managed Networks	47.070	81,126
CNS-0509261	NSF: CSR-EHS: A General, Efficient and Robust Platform for Enabling Control Applications in Sensor Networks	47.070	-3,197
CNS-0509415	CSR-SMA: Modular Pluggable Program Analyses	47.070	79,304
CNS-0519997	NeTS-NBD: Pricing, Shaping and Aggregation of Traffic in Broadband Access Networks	47.070	-145
CNS-0520032	NeTS-NOSS: WaveScope---An Adaptive Wireless Sensor Network System for High Rate Data-Rate Applications	47.070	146,953
CNS-0540186	DDAs TMRP Terascale Algorithms for Dynamic Data Inversion and Sensor	47.070	-308
CNS-0540248	DDAS Child - Marshall	47.070	2,223
CNS-0540248	DDAS-TMRP: Planet-in-a-Bottle: A Numerical Fluid-Laboratory System	47.070	-26
CNS-0540259	DDAS-SMRP: Data Assimilation by Field Alignment	47.070	109,411
CNS-0546590	CAREER: Implementable Network Algorithms via Randomization, Belief Propagation, and Heavy Traffic	47.070	91,699
CNS-0614414	CSR--EHS: Collaborative Research: Verification of Probabilistic Hybrid Systems: Stability and Beyond	47.070	23,596
CNS-0615215	CSR-AES: Feedback-Driven Adaptive Multithreading	47.070	35,078
CNS-0626781	NETS-NBD: Architecture for Fast Reconfigurable WDM-based Networks	47.070	110,007
CNS-0626800	NeTS-FIND: Future Optical Network Architectures	47.070	50,494
CNS-0627021	Fabricated Equipment - Wireless Test Bed	47.070	46,025
CNS-0627021	NeTS:NBD: XORs in the Air: Medard Child	47.070	38,059
CNS-0627021	NeTS:NBD: XORs in the Air: Practical Wireless Network Coding	47.070	252,370
CNS-0627065	NeTS-FIND: User Information Architecture	47.070	-6,928
CNS-0707612	CRI: CRID: - Development of Alloy Tools, Technology and Materials	47.070	33,313
CNS-0708375	CRI: CRD Development of Linguinal Home Activity Datasets as a Shared Resource	47.070	174,865
CNS-0715397	CSR-EHS: Virtual Node Abstraction Layers for Designing Embedded Systems	47.070	92,357
CNS-0715680	CT-ISG: Applications and Evolution of Trusted Platform Module Technology	47.070	245,103
CNS-0716273	Collaborative Research CT-T Towards a More Accountable Internet	47.070	82,967
CNS-0719753	CSR-AES: User Support Software for a Fresh Breeze Computer System	47.070	128,322
CNS-0720029	CSR-PDOS: ISG: Collaborative Research: Building Distributed, Wide-area Applications Using WheelFS.	47.070	68,646
CNS-0720079	CSR-CSI: XStream, a Distributed Stream Processor for Heterogeneous Sensor Systems	47.070	148,390
CNS-0721702	NeTS-WN: Bit-Switched Wireless Networks	47.070	104,760
CNS-0721702	Fabricated Equipment - Airblue Network	47.070	7,655
CNS-0751316	SGER: Explorations in Fine-Grained Security for Host and Network Applications	47.070	28,484
CNS-0808907	SGER- Cryptographic Techniques for Trustworthy Computation in Faulty and Non-Confining Execution Environm	47.070	130,293
CNS-0830961	NECO Cross-Layer Survivability in WDM-based Networks	47.070	87,449
CNS-0831442	CT-M: Theory and Practice of Accountable Systems	47.070	285,229

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
CNS-0831660	NeTS-NEDG: Adaptive Wideband Networks for the Multimedia Home	47.070	13,503
CNS-0834239	CSR-DMSS,SM:Aeolus:Secure Support for Preserving Confidentiality and Integrity in a Distributed Environment	47.070	110,959
CNS-0834415	CSR-PSCE,SM:An Operating System for Multi-Core Processors	47.070	102,672
CNS-0836555	Future Innovative Network Design (FIND) Architecture Planning and Coordination	47.070	124,684
CNS-0915629	NeTS: Small: KPBase: Core of the Knowledge Place for Network Management	47.070	83,337
CNS-0931550	CPS:Medium: Vehicular Cyber-Physical Systems	47.070	138,253
CNS-0940520	Collaborative Research: BPC-DP: A Cultural Shift in Computer Science: Introducing Computatin through E-Textil	47.070	2,537
IIS-0347631	CAREER: Statistical Learning Theory for Natural Language Processing: Theory, Algorithms, and Representation	47.070	45,068
IIS-0426838	Fabricated Equipment: Testbed-Ground and Water Operations	47.070	1,378
IIS-0426838	ITR: Collaborative Research: -(NHS+ASE)-(int+dmcl): Networks of Robots and Sensors for First Responders	47.070	91,952
IIS-0438153	Designing Software to Reduce Operator Error	47.070	-1,367
IIS-0438897	SoD Collaborative Research: Constraint-Based Architecture Evaluation	47.070	3,766
IIS-0447800	Career:End-user Programming for Web Automation and Visualization	47.070	132,025
IIS-0448124	Career: MACAQUE - Managing Ambiguity and Complexity in Acquisitional Query Environments	47.070	27,614
IIS-0448168	Career: Content and Cohesion Models with Applications to Text Summarization and Natural Language Generati	47.070	53,078
IIS-0513755	Fabricated Equipment: Computational Tools for Modeling Herds	47.070	4,044
IIS-0513755	SEI: Collaborative Research: Computational Tools for Managing Herds	47.070	59,834
IIS-0515869	Remote Detection of Psychological Stress (JHAPL_FY05_090)	47.070	1,341
IIS-0524481	CT-T: Transparent Accountable Datamining Initiative (TAMI)	47.070	56,933
IIS-0546262	CAREER: Categorization and Identification of Visual Scenes	47.070	92,193
IIS-0546467	Career: Model Probability Planning for Mobile Robots	47.070	154,471
IIS-0642971	CAREER: Computational Modeling of Spatial Activation Patterns in fMRI	47.070	151,698
IIS-0704424	III-COR - ChunkyStore: Physical Database Design for Next-Generation Databases	47.070	193,505
IIS-0705647	HCC: Collaborative Research: Social-Emotional Technologies for Autism Spectrum Disorders	47.070	211,647
IIS-0711069	HCC: Protocols for Negotiating Complex Contracts	47.070	160,344
IIS-0711891	III-COR: Collaborative Research: The Morpheus Data Transformation Management System	47.070	9,409
IIS-0712012	RI: Robot Manipulation Under Uncertainty	47.070	227,383
IIS-0712793	Child - Miller	47.070	67,129
IIS-0712793	III-COR: Data Homesteading: Tools to Let Scientific Users Harvest, Husband, and Share Structured Information	47.070	92,460
IIS-0746194	CAREER: Machine Learning Control of Underactuated Mechanical Systems	47.070	135,247
IIS-0747120	CAREER: Integrated System for Object and Scene Recognition	47.070	75,864
IIS-0827483	Collaborative proposal: Object and action recognition in time sequences of images: computational neuroscience	47.070	65,565
IIS-0835445	SGER: Reconstructing the Towers of Babel: Cross-Lingual Language Learning	47.070	45,171
IIS-0835652	CDI-Type II: Exploiting Collective Human Knowledge to understand and Evolve Complex Networked Systems	47.070	96,938
IIS-0835652	Katabi-Child	47.070	183,718
IIS-0844013	Collaborative Research: A Comparative Study of Approaches to Cluster-Based Large Scale Data Analysis	47.070	31,279

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
IIS-0848727	2009 SIGMOD Programming Contest	47.070	12,678
IIS-0855773	Collaborative Major Computation Textiles as Materials for Creativity: Participatory Design Communities in Alters Kanwisher Child	47.070	68,711
IIS-0904625	Finding Structure in the Space of Activation Profiles in fMRI	47.070	57,728
IIS-0904625	RI:Small:Randomized Feedback Motion Planning with Computational Lyapunov Certificates	47.070	245,147
IIS-0915148	RI:Small: Statistical machine translation through a tree adjoining grammar with flexible parsing operations	47.070	59,061
IIS-0915176		47.070	18,744
<b>Total for 47.070</b>			<b>10,200,166</b>
Contract Number	Government Contract Title	CFDA#	FY Expenses
AGS-0733510	Solar Maximum Studies at the Millstone Hill Observatory	47.050	2,088,769
AGS-0733510	Fabricated Equipment: UHF Radar Receiver	47.050	7,686
AGS-0733510	Fabricated Equipment: Millstone Hill UHF Radar Exciter	47.050	7,675
AGS-0808831	Stratosphere-Troposphere Interactions	47.050	32,950
AGS-0940685	Collaborative Research: Intermittent Turbulence Study of Space Plasmas Using ROMA and DSRG	47.050	7,404
ATM-0337298	Wideband Analysis of Sources and Structures of the Earth-Ionosphere Waveguide	47.050	2,202
ATM-0443451	Collaborative Research: Linkages in Winter-Time Climate Variability and the Basis for Climate Predictability in N	47.050	-492
ATM-0449793	Collaborative Research: Is Deforestation Changing the Hydrologic Climate and Vegetation Dynamics of the Ame	47.050	67,963
ATM-0528227	Collab Resrch: Characterization of Sources & Processess of Organic Fine Particulate Matter in Mexico City	47.050	50,233
ATM-0630690	Collaborative Research: Global Aspects of Tropical Cyclogenesis	47.050	39,209
ATM-0637400	Collaborative Research: Theory and Numerical Simulations of Intermittent Turbulence in Geospace	47.050	64,831
ATM-0734806	Collaborative Research: West African Mesoscale Convective Systems and their Interactions with the Synoptic Er	47.050	130,245
EAR-0003571	Collaborative Research in Eastern Tibet: Evolution and Dynamics of the Crust, Mantle, and Surface Topography	47.050	26,310
EAR-0003571	Proposal for Collaborative Research in Eastern Tibet: Evolution and Dynamics of the Crust, Mantle, and Surface	47.050	-1,708
EAR-0409373	Collaborative Research: Multi-disciplinary Experiments for Dynamic Understanding of Subduction under the Aeg	47.050	155,465
EAR-0409373	Off Campus Account: Collaborative Research: Multi-disciplinary Experiments for Dynamic Understanding of Sub	47.050	91,787
EAR-0409564	Collaborative Research: Constraining Mantle Rheology, Mantle Flow, and Crust-Mantle Coupling Beneath New Zi	47.050	94
EAR-0420592	Dynamical Change in Global Biogeochemical Cycles Accompanying Early Animal Evolution	47.050	287,191
EAR-0451802	The Earth Time Network: Developing an Infrastructure for High-Resolution Calibration of Earth History	47.050	106,052
EAR-0507486	Collaboration Research Understanding the Causes of Continental Intraplate Tectonism A Case Study	47.050	66,589
EAR-0509658	Thermally-Driven Exchange Flows in Regions of Vegetation	47.050	143,429
EAR-0510412	Dislocation Creep in Calcite Rocks with Evolving Microstructure	47.050	159,058
EAR-0510591	Collaborative Research: Linking Deep and Shallow Crustal Processes in a Continental Arc, North Cascades Wa	47.050	21,677
EAR-0510750	Groundwater Dynamics and Arsenic Contamination in the Ganges Delta: Irrigated Agriculture Subsurface Chemi	47.050	3,223
EAR-0537377	Integrated Tectonic and Paleomagnetic Study of the Early Cenozoic Roation and Extrusion of Asian Crust Arounc	47.050	599
EAR-0538179	Experimental Investigations on the Role of H2O in Magmatic Processes	47.050	47,284
EAR-0544996	Collaborative Research: Earthscope integrated investigation of Cascadia subduction zone tremor, structure and f	47.050	49,242



## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
EAR-0548706	Fabricated Equipment - Hydrologic Sampling Station	47.050	7,367
EAR-0548706	Collaborative Research: Saltwater & Freshwater Fluxes Through Coastal Aquifers: Multiple Time Scales of Terrestrial and Understanding Geochemical Heterogeneity in the Hawaiian Plume: Spatial and Temporal Geochronology	47.050	107,111
EAR-0607895	Defining and Understanding Geochemical Heterogeneity in the Hawaiian Plume: Spatial and Temporal Geochronology	47.050	46
EAR-0609617	Deformation Mechanics of an Asperity Under Hydrothermal Conditions	47.050	192,971
EAR-0609730	Deciphering the Dynamics of Continental Deformation in the Arabia-Eurasia Collision Zone	47.050	163,796
EAR-0609905	Collaborative Research: Lower Crustal Flow, Shallow Fabric Development, and Carton Assembly - East Athabasca	47.050	14,051
EAR-0635702	Collaborative Research: Active rifting Along the Red Sea, Afar Triple Junction & Main Ethiopian Rift: Implications	47.050	138,295
EAR-0638634	Collaborative Research: Calibrating Rates and Duration for Isotopic Variability During the Early Cambrian Radiation	47.050	24,452
EAR-0642550	Collaborative Research: Co-Organization of River Basin Geomorphology and Vegetation	47.050	7,896
EAR-0643158	Collaborative Research: High Resolution Calibration of the Maastrichtian to Paleocene of the Western U.S.: Integrated	47.050	45,588
EAR-0653037	Collaborative Research: CSEDI Grand Challenge for Experimental Study of Plastic Deformation Under Deep Earth	47.050	40,198
EAR-0711139	Microstructure of Marble: Comparison of Dislocation and Grain Structure Produced in Natural and Laboratory Deformation	47.050	75,059
EAR-0720253	Collab Res: Testing Orbital Forcing of Terrestrial Greenhouse Climate U/Pb Zircon Geochronology from the Eocene	47.050	71,343
EAR-0738352	Predicting In-Canopy Velocity and Retention Time of Aquatic Canopies	47.050	34,244
EAR-0738352	Fabricated Equipment: Predicting In-Canopy Velocity and Retention Time of Aquatic Canopies	47.050	15,456
EAR-0738655	Equation of State and Phase Boundary of Post-Perovskite	47.050	31,618
EAR-0745624	Strain Rates and Tectonic Processes in the Track Of The Yellowstone Hotspot and Northern Basin and Range	47.050	13,315
EAR-0746205	Collaborative Research: Thermal Evolution of North American Lower Crust U-Pb Thermochronological Constraints	47.050	49,162
EAR-0754205	Collaborative Research: Lithosphere Removal: The Sierra Nevada as the Prototype of a Fundamental Process in	47.050	79,218
EAR-0757871	Collaborative Research: Multi-Scale Analysis of Mantle Discontinuities Using Inverse Scattering of SS Waves and	47.050	118,000
EAR-0807475	Collaborative Research: The Siberian Traps and the End-Permian Extinction: Coincidence and Causality	47.050	97,420
EAR-0807476	Collaborative Research: The Siberian Traps and the End-Permian Extinction: Coincidence and Causality	47.050	13,415
EAR-0807585	Off Campus: Collaborative Research: The Siberian Traps and the End-Permian Extinction: Coincidence and Causality	47.050	1,373
EAR-0807585	Collaborative Research: The Siberian Traps and the End-Permian Extinction: Coincidence and Causality	47.050	359,115
EAR-0810244	Did Impact-Generated Field Magnetize the Rocks of Vredefort?	47.050	29,367
EAR-0824398	SGER: Hydrology of Water Pools Near African Villages	47.050	48,795
EAR-0838488	Off Campus: Present-Day Kinematics and Dynamics of The Eastern Mediterranean	47.050	63,634
EAR-0838488	Present-Day Kinematics and Dynamics of The Eastern Mediterranean	47.050	56,698
EAR-0841161	Acquisition of An Electron Microprobe for the MIT User Community	47.050	338,519
EAR-0930166	Collaborative Research: Analytical Techniques and Software: Development of CyberInfrastructure to Support Large	47.050	4,027
EAR-0944122	Understanding the Complexity of The 660-km Seismic Discontinuity	47.050	76,514
EAR-0946280	Environmental Determinants of Malaria Transmission in Africa: Hydrology of water Pools Near Villages	47.050	3,681
EAR-0946634	Collaborative Research: Simultaneous Inversions of GPS Time Series for Kinematics and Transients in Cascadia	47.050	7,991
EAR-0948388	Collaborative Research: tectonic links, magma fluxes, and single mineral geochemistry in plutonic magmatic systems	47.050	2,553
EAR-0951672	Field and numerical studies of self-organization in high-order drainage networks	47.050	11,530
EAR-0951901	Collaborative Research: Multiscale travel time tomography of Earth's mantle to 1000 km depth beneath the western	47.050	13,276

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
OCE-0425150	Collaborative Research: CLIMODE	47.050	160,640
OCE-0425602	The Ecology of Prochlorococcus	47.050	84,955
OCE-0452410	Collab. Res: Microbiology and Biogeochemistry of Autotrophic Microbes in the Subsurface at Hydrothermal Vents	47.050	-0
OCE-0452787	Collaborative Research: Melt Transport and Mechanical Properties in Partially Molten Peridotites	47.050	20,199
OCE-0520075	Collaborative Research: NeTS-NOSS: Networking the Digital Ocean	47.050	-546
OCE-0525974	Ocean Circulation, Lateral Transfers of Nutrients, and the Air-Sea Flux of CO2	47.050	24,175
OCE-0530867	Collaborative Research: CMG: Uncertainty Quantification in Geophysical State Estimation	47.050	19,697
OCE-0612143	Collaboration Research: Interaction of Eddies with Mixed Layers	47.050	1,700
OCE-0645529	CAREER: From the Lab to the Ocean: Experimental Modeling for Internal Tide Generation by Topography	47.050	41,000
OCE-0645936	Beyond the Instrumental Record: The Case of Circulation at the Last Glacial Maximum	47.050	179,664
OCE-0647446	Spatial and Temporal variability of Pb, Fe, Zn and their Stable Isotope Ratios in the Tropical and Subtropical Atlantic	47.050	171,832
OCE-0727914	Spatial and Temporal Patterns of Magmatism in the Oman Ophiolite: Constraints from High-Precision U-Pb Geochronology and Geochemical Studies of Recently Dredged Basalt from the Ninetyeast Ridge: Testing the I	47.050	83,372
OCE-0744641	CAREER: Motility of Marine Bacteria: Observing, Modeling, Teaching and Playing	47.050	198,447
OCE-0751358	Mass Exchange Between Flexible Submerged Canopies and Adjacent Open Water	47.050	42,949
OCE-0751358	Fabricated Equipment: Mass Exchange Between Flexible Submerged Canopies and Adjacent Open Water	47.050	3,826
OCE-0751409	GEOTRACES-Intercalibration Studies of Contamination-Prone Trace Element Isotopes	47.050	95,746
OCE-0753126	NSF Collaborative Research: Multiple Sulphur Isotope Tracers of the Subsurface Biosphere	47.050	90
OCE-0821574	MRI: Development of A System for Continuously Monitoring Fish Population and Behavior over Continental Shelf	47.050	1,493,437
OCE-0824783	Collaborative Research: Fast Spin Up of Ocean General Circulation Models Using Newton-Krylov Methods	47.050	25,105
OCE-0825147	Geochronological and Geochemical Studies of Recently Dredged Basalt from the Ninetyeast Ridge: Testing the I	47.050	216,433
OCE-0825376	Collaborative Research Critical Layers and Isopycnal Mixing in the Southern Ocean	47.050	210,036
OCE-0849233	Collaborative Research: Quantifying The Kinetic Energy Pathways To Dissipation in The World Ocean	47.050	42,921
OCE-0849940	Cyanobacterial hopanoids: Function, Natural Distribution and Significance in the Marine Geologic Record.	47.050	146,649
OCE-0926204	Collaborative Research: Management and Logistics Operations for the U.S. GEOTRACES Zonal North Atlantic	47.050	2,532
OCE-0930866	Collaborative Research ETBC: Combined Experimental and Theoretical Study of the Physical Mechanisms Under	47.050	54,330
OCE-0960826	Collaborative Research: Impact of Bottom Boundary Layer Drag and Topographic Wave Drag on the Eddying Ge	47.050	16,316
OCE-0961713	Collaborative Research: The Physics and Statistics of Global Sea Level Change	47.050	11,009
<b>Total for 47.050</b>			<b>9,358,576</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
BCS-0518157	Understanding Visual Clutter	47.075	6,357
BCS-0640097	Computational Models and Psychological Studies of Feedback in Visual Object Recognition Tasks	47.075	256,968
BCS-0640097	Computational Models and Psychological Studies of Feedback - E. Miller	47.075	41,124
BCS-0643054	Collaborative Research: Prosodic Categories of American English in Form and Function	47.075	2,502
BCS-0827094	Collaborative Research: Dynamics of Initial Trust and Cooperation: The Role of Embodied Emotion Cues	47.075	39,679
BCS-0842782	Collaborative Research: Global Measures of Tonal Alignment in a Level-Based Theory of Intonational Phonology	47.075	14,097

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Contract Number	Government Contract Title	CFDA#	FY Expenses
BCS-0922263	MRI: Acquisition of Magnetoencephalography (MEG) Scanner for Brain Research at MIT	47.075	1,675,390
SBE-0965364	Collaborative Research: New Methods to Enhance Our Understanding of the Diversity of Science	47.075	19,306
SES-0240817	Collaborative Research: Developing Diverse Leadership for Engineering	47.075	20,004
SES-0527660	DRU: Dynamic Modeling of System Safety to Manage Risk and Enable Internal and External Cross-Stakeholder.	47.075	208,536
SES-0535780	What is the Place of Safety in Science: An Experiment in Group Ethnography	47.075	-1
SES-0550431	Collaborative Research: The American Mass Public in the 1930s and 1940s	47.075	8,319
SES-0551244	Cryptographic Game Theory	47.075	-27
SES-0551299	Collaborative Research: From Micro Frictions to Macro Frictions and Back	47.075	35,403
SES-0617441	Collaborative Research: Primary Elections for U.S. State and Federal Offices: A Comprehensive Database and Unemployment	47.075	72,963
SES-0617744		47.075	27,192
SES-0617836	Estimation with Many Instruments	47.075	44,167
SES-0620207	Consequences of Subjective Value in Negotiations	47.075	51,630
SES-0648741	Intertemporal Aspects of Optimal Income Taxation	47.075	10,846
SES-0721112	Collaborative Research Economies with Dispersed Information: Welfare, Policy and Application	47.075	14,900
SES-0729361	AOC: An Analytic Framework for Political and Social Change: Conflict, Beliefs, and Dynamics	47.075	81,588
SES-0729361	NSF Dahleh Child Account	47.075	95,629
SES-0729361	NSF Shah Child Account	47.075	2,075
SES-0729361	NSF Ozdaglar Child Account	47.075	19,387
SES-0752823	Collaborative Research: Research on Distributional and Quantile Methods in Econometrics	47.075	77,667
SES-0752935	Collaborative Research Social Networks and the Diffusion of Microfinance	47.075	12,574
SES-0825915	An Improved Model of Endogenous Technical Change Considering Uncertain R&D Returns and Uncertain Clima	47.075	154,496
<b>Total for 47.075</b>			<b>2,992,770</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
AGS-0959280	ARRA - MRI-R2: Development and Deployment of Automated Continuous Wave Quantum Cascade Laser Instru	47.082	2,013
AST-0905592	ARRA - Collaborative Research: An Ultrastable Blue Astro Comb for Exoplanet and Cosmology Research	47.082	252,303
AST-0905592	ARRA - Fabricated Equipment - Astro - Comb	47.082	247,496
AST-0908848	ARRA - Combined Digitizer and Correlation - Fabrication	47.082	35,608
AST-0908848	ARRA - Collaborative Research: Probing dark matter, dark energy & inflation with 21 cm tomography	47.082	84,642
AST-0908884	ARRA - Low-Frequency Radio Transient Science with the MWA	47.082	23,923
ATM-0842751	ARRA - Merging of Observations and Models for the Earth's Schumann Resonances	47.082	153,110
ATM-0844620	ARRA - CAREER Three-Dimensional Onset and Evolution of Spontaneous Reconnection	47.082	132,196
ATM-0844620	ARRA - Fab Eq - Reconnection Drive	47.082	2,858
ATM-0850639	ARRA - Collaborative Research Environmental control of Tropical Cyclone Activity	47.082	33,237
ATM-0852384	ARRA - Transport in Baroclinic Flows	47.082	140,756
ATM-0856093	ARRA - Studies of Plasmasphere Boundary Layer with a Distributed Array of Radio Instruments	47.082	93,386

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Contract Number	Government Contract Title	CFDA#	FY Expenses
ATM-0952853	ARRA - The Millstone Geospace Science Center	47.082	266,826
BGS-0844472	ARRA - Collaborative Research: Bayesian Cue Integration in Probability-Sensitive Language Processing	47.082	84,030
CBET-0854026	ARRA - Science and Engineering of Ion Concentration Polarization and Enhanced Electrokinetic Flow	47.082	213,001
CBET-0854230	ARRA - Fabricated Equipment - Thermally Driven Wedge	47.082	6,443
CBET-0854230	ARRA - Propulsion Through Diffusion	47.082	79,603
CBET-0941312	ARRA - CDI: Type I: Geometric Algorithms for Staged Nanomanufacturing	47.082	15,293
CCF-0844626	ARRA - CAREER: Efficient Computation in the Physical World	47.082	193,456
CMMI-0900255	ARRA - Linguistics-based preference information modeling for design decision-making	47.082	25,943
CNS-0915164	ARRA - CSR:Small: CoreTime:Dynamic Computation Migration for Multicore System Software	47.082	86,643
CNS-0915988	ARRA - NeTS: Small Collaborative Research: Effective Control of Wireless Networks Via Topology Adaptation a	47.082	50,252
DMR-0845296	ARRA - Fabricated Equipment: Ultra-fast, spin-sensitive pump-probe spectrometer	47.082	10,309
DMR-0845296	ARRA - CAREER: Non-equilibrium Dynamics in Cuprate Superconductors Studied by Coherent Ultrafast Spectro	47.082	47,106
DMR-0855402	ARRA - Quantifying Material Microstructures with Quaternions	47.082	90,105
DMR-0906931	ARRA - Collaborative Research: Development of an Additive Selection Criteria based on Interface Complexions	47.082	50,727
DMR-0908627	ARRA - Materials World Network: In-situ Investigation of Model Multi-component Catalyst Systems	47.082	89,478
DMS-0844188	ARRA - CAREER: The Symplectic Category, Floer Field Theory, and Relations to Gauge Theory and Topology	47.082	31,759
DMS-0853488	ARRA - FRG: Collaborative Research: Mathematical Modeling of Rechargeable Batteries	47.082	143,409
DMS-0900233	ARRA - Heisenberg and Weil representations in noncommutative geometry	47.082	55,828
DMS-0900907	ARRA - W-algebras and Algebraic Group Actions	47.082	36,294
DMS-0948071	ARRA - FRG: Collaborative Research: Mathematical Modeling of Rechargeable Batteries	47.082	175,833
EAR-0843358	ARRA - Microbial Structures in Neoproterozoic Cap Carbonates	47.082	139,424
EAR-0910618	ARRA - Structure and Deformation of the Crust and Upper Mantle Beneath SE Tibet	47.082	130,287
EAR-0910644	ARRA - The Dynamics of Mantle-Melt Extractions Systems: A field and Theoretical Approach	47.082	81,884
EAR-0910721	ARRA - New Theory and Methods for Rainfall Extremes	47.082	27,516
EAR-0931839	ARRA - Acquisition of a Thermal Ionization Mass Spectrometer For EARTHTIME	47.082	261,495
ECCS-0844994	ARRA - CAREER: Circuit and System Techniques for High-Throughput, Energy-efficient Silicon Photonic Interco	47.082	80,362
ECCS-0846628	ARRA - CAREER: Terahertz Electronics based on Nitride Nanowire Transistors	47.082	106,228
ECCS-0853470	ARRA - Fabricated Equipment - Micro-manipulator system for Terahertz Quantum - Cascade Laser Assembly	47.082	3,566
ECCS-0853470	ARRA - High Temperature Terahertz Quantum Cascade Lasers	47.082	204,388
ECCS-0900901	ARRA - Quantum Limits to Timing Jitter in Femtosecond Lasers	47.082	167,056
ECCS-0901034	ARRA - Cooperative Tracking in Harsh Environments: Statistical Framework and Network Experimentation	47.082	160,434
ECCS-0901394	ARRA - Integrated Actuation, Alignment, and Latching for Assembled 3D MEMS	47.082	93,520
ECCS-0925147	ARRA - Collaborative Research: Stacked Controlled-Cell Power Conversion Architecture for Grid-Connected Ph	47.082	60,654
OCE-0926197	ARRA - Lead and Lead Isotopes Sample Collection and Analysis for the U.S. GEOTRACES Zonal North Atlantic	47.082	76,584
OCE-0926372	ARRA - Collaborative Research: Were protists the beginning of the end for stromatolites?	47.082	130,589
OCE-0940422	ARRA - Collaborative Research: Microfluidic Assessment of Chemotaxis Towards Different Inorganic and Organic	47.082	35,705

## Appendix A-1 - Detail Massachusetts Institute of Technology Federal Research Support - On Campus Fiscal 2010 Expenditures

Contract Number	Government Contract Title	CFDA#	FY Expenses
OCI-0904338	ARRA - Petascale Artic, Atlantic and Antarctic Virtual Experiment	47.082	66,439
OCI-0926191	ARRA - Cloud-computing infrastructure and technology for education (C.I.T.E)	47.082	132,433
OCI-0943139	ARRA - VOSS: Empirical Analysis of Large-Scale Argumentation	47.082	12,076
PHY-0847843	ARRA - Neutrino Physics Off-Campus	47.082	233,745
PHY-0847843	ARRA - Neutrino Physics at MIT	47.082	139,534
PHY-0847843	ARRA - Fabricated Equipment Double Chooz Detector Slow Monitor Units	47.082	31,195
PHY-0847843	ARRA - Fabricated Equipment Micro Boone HV?Signal Feed Through Panel & Read out	47.082	1,323
PHY-0855052	ARRA - Atomic Ensembles Entangled by Light for Measurements Below the Standard Quantum Limit	47.082	55,561
PHY-0959057	ARRA - MRI-R2: Laser Acquisition and Modernization Program (LAMP) for Quantum Science and Engineering	47.082	36,524
	<b>Total for 47.082</b>		<b>5,422,388</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
OCI-0753324	CI-TEAM Implementation Project - Experimental Development	47.080	6,811
OCI-0753324	CI-TEAM Implementation Project - The iLab Network: Broadening Access to Hands-on STEM Learning via Re	47.080	449,699
	<b>Total for 47.080</b>		<b>456,510</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
ANT-0538454	Studies of Physical Biogeochemical Interactions in the Southern Ocean	47.078	46,980
ANT-0739726	Collaborative Research: High Precision U-Pb Geochronology of the Jurassic Ferrar Large Igneous Province, Ar	47.078	27,144
ARC-0531119	Collab Resrch: Synthesis of Artic System Carbon Cycle Research Thru Model-Data Fusion Studies Using Atmos	47.078	7,840
ARC-0804150	Collaborative Proposal AOMIP Synthesis and Integration Activities to Improve Models and Reduce Uncertainties	47.078	35,661
ARC-0806228	Collaborative Research: TransArctic Paleoclimate of the Eocene	47.078	29,566
ARC-0806229	Collaborative Research: The Role of Microbial Food Webs in Carbon Fluxes and Shelf-Basin Exchange in the Ar	47.078	21,062
ARC-0934404	CMG Collaborative Research: Enabling Ice Sheet Sensitivity and Stability Analysis with a large-scale higher-orde	47.078	44,766
	<b>Total for 47.078</b>		<b>213,021</b>

Contract Number	Government Contract Title	CFDA#	FY Expenses
DRL-0744213	CAREER: Curiosity, exploratory play, and the foundations of scientific inquiry	47.076	195,400
DRL-0917442	Mass Extinction: A Curated Game	47.076	214,921
DUE-0618483	Exploiting Laboratory Experiments in the Teaching of Meteorology, Oceanography and Climate: Phase II	47.076	88,799
DUE-0618558	Force Field: E&M Visualization for Introductory Physics	47.076	36,925
	<b>Total for 47.076</b>		<b>536,045</b>
	<b>Total for NSF</b>		<b>54,678,389</b>
			<b>51,678,390</b>

**Appendix A-1 - Detail  
Massachusetts Institute of Technology  
Federal Research Support - On Campus  
Fiscal 2010 Expenditures**

<b>Total for National Science Foundation</b>	<b>54,678,389</b>
<b>Total On Campus Federal Research Support</b>	<b>350,365,321</b>

**Appendix A-2 Detail  
Massachusetts Institute of Technology  
Schedule of Federal Expenditures - Lincoln Laboratory  
By Sponsor & Contract - FY 2010**

<u>Sponsor</u>	<u>Program</u>	<u>Program Name</u>	<u>Total</u>
<b>DIRECT AWARDS</b>			
<b><u>DEPARTMENT OF DEFENSE</u></b>			
<b>AIR FORCE</b>			
FA8721-05-C-0002	Various		251,337,728
<b>ARMY</b>			
FA8721-05-C-0002	Various		50,124,758
<b>MDA</b>			
FA8721-05-C-0002	Various		78,331,823
<b>DARPA</b>			
FA8721-05-C-0002	Various		23,476,533
<b>NAVY</b>			
FA8721-05-C-0002	Various		36,920,268
<b>NSA</b>			
FA8721-05-C-0002	Various		7,396,092
<b>OTHER DOD</b>			
FA8721-05-C-0002	Various		142,699,497
<b>CLASSIFIED</b>			
FA8721-05-C-0002	Various		72,009,781
<i>Total Department Of Defense</i>			<b>\$ 662,296,480</b>
<b><u>NON-DEPARTMENT OF DEFENSE</u></b>			
<b>FAA</b>			
FA8721-05-C-0002	Various		39,142,073
<b>NASA-Prime</b>			
FA8721-05-C-0002	Various		24,111,902
<b>NOAA</b>			
FA8721-05-C-0002	Various		5,355,872
<b>DOE</b>			
FA8721-05-C-0002	Various		458,972
<b>DHS</b>			
FA8721-05-C-0002	Various		13,258,028
<b><u>OTHER CLASSIFIED</u></b>			
FA8721-05-C-0002	1846		\$ 934,239
FA8721-05-C-0002	10035		1,723,885
FA8721-05-C-0002	10044		150,901
FA8721-05-C-0002	10084		4,183
FA8721-05-C-0002	10086		11,780
FA8721-05-C-0002	10094		10,628
FA8721-05-C-0002	10097		3,614
FA8721-05-C-0002	10119		1,181,556
FA8721-05-C-0002	10131		490,747
FA8721-05-C-0002	10142		<u>839,459</u>
<i>Total Other Classified</i>			<b>\$ 5,350,992</b>
<b>Total Direct Awards</b>			<b>\$ 749,974,319</b>

**Appendix A-2 Detail**  
**Massachusetts Institute of Technology**  
**Schedule of Federal Expenditures - Lincoln Laboratory**  
**By Sponsor & Contract - FY 2010**

<u>Sponsor</u>	<u>Federal Contract Number</u>	<u>Program Name</u>	<u>Total</u>
<b>PASSTHROUGH AWARDS</b>			
Research Corporation of the University of Hawaii	FA9451-06-2-0338	OTA Dev. & Device Processing	\$ 695,361
California Association for Research in Astronomy (CARA)	AST 0132798	Adv Adaptive Optics	203,344
Dartmouth College	2006-CS-001-000001-02	SCADA Vulnerabilities & Infrs	23,705
University Corporation for Atmospheric Research (UCAR)	NN07CN14A	Oceanic Weather Diagnosis	43,893
Analytic Services Homeland Security Institute (ANSER)	W81XWH-04-D-0011	ANSER	55,062
Harvard University	3U54 AI057159-6S1	ARRA - PANACEA Antiviral Therapeutics	303,890
Homeland Security and Analysis Institute	HSHQDC-09-D-0003	HSSAI Collaboration	4,620
<b><i>Total Passthrough Awards</i></b>			<b>\$ 1,329,875</b>
<b>Total Federal Expenditures</b>			<b>\$ <u>751,304,193</u></b>



**Appendix A-3 - Detail  
Massachusetts Institute of Technology  
Federal Research Support - Passthrough - On Campus  
Fiscal 2010 Expenditures**

**Luna Innovations, Inc.**

<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	4,535
		<b>Total for 81.049</b>		<b>4,535</b>
		<b>Total for Luna Innovations, Inc.</b>		<b>4,535</b>

**Aurora Flight Sciences Corporation**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919387	NNX09CF53P	Multi-Robot Planetary Exploration Comman	43.CCC	49,995
6919825	FA9550-09-C-0128	Bayesian-Based Multi-Fidelity Multi-Disc	43.CCC	45,992
6921662	AGREEMENT DATED 3/30/10	Spheres Mosr Rendezvous & Docking With O	43.CCC	28,005
6922047	AFS08-0672	Sbir: A Robust Flare Planning Logic For	43.CCC	12,741
		<b>Total for 43.CCC</b>		<b>136,733</b>

**Aurora Flight Sciences Corporation**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916874	AGMT DTD 11/12/07	Integrated Visual And Inertial Sensor In	12.CCC	2,362
6918257	AFS08-1778	Low Design Impact Inspection Vehicle (Li	12.CCC	45,508
6918559	AFS08-1778	Fabricated Equipment	12.CCC	4,578
6918857	AFS09-0058	Ops-Users Phase Ii	12.CCC	82,925
6918874	AGMT DTD 10/1/08	Spheres-F6 Continuation Of Supplemental	12.CCC	-6,673
6918953	AFS09-0058	Ops-Users Phase Ii	12.CCC	96,115
6919159	AGMT DTD 10/1/08	Fabricated Equipment - 6918874	12.CCC	-44
6921009	AFS09-1297	Spheres Fault Detection And Reconfigurat	12.CCC	20,071
6921664	AGRMT DATED 3/30/10	Micro-Sized Microwave Atmospheric Satell	12.CCC	13,423
		<b>Total for 12.CCC</b>		<b>258,264</b>

**Aurora Flight Sciences Corporation**

<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	81,257
		<b>Total for 43.000</b>		<b>81,257</b>
		<b>Total for Aurora Flight Sciences Corporation</b>		<b>476,254</b>

**Harvard University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920484	083109	R. A. Support For Chester Chu	81.049	7,694

**Appendix A-3 - Detail  
 Massachusetts Institute of Technology  
 Federal Research Support - Passthrough - On Campus  
 Fiscal 2010 Expenditures**

<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	62,953
		<b>Total for 81,049</b>		<b>70,646</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920516	3640304	R. A. Support For Scott Sanders	47.046	7,694
6922033	033110 - CHU	R. A. Support For Chester Chu	47.046	23,533
		<b>Total for 47,046</b>		<b>31,227</b>
<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	8,379
		<b>Total for 93,389</b>		<b>8,379</b>
<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	17,614
		<b>Total for 93,855</b>		<b>17,614</b>
<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	60,388
		<b>Total for 12,910</b>		<b>60,388</b>
<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	100,983
6915782	SUBAWARD NO. 133486-09	Muri - Fy07 Quantum Simulations Of Conde	12.800	289,886
6915914	SUBAWARD NO. 133486-09	Child - M. Zwiertein	12.800	168,340
6916411	SUBAWARD NO. 133486-08	Fabrication: Cold Atom Machine	12.800	14,992
6917810	SUBAWARD NO. 133486-08	Fabrication: Cold Atom Quantum Simulator	12.800	54,133
6919366	SUBAWARD NO. 133473-01	Fabricated Equipment - Optical Fiber-Bas	12.800	35,783
		<b>Total for 12,800</b>		<b>664,117</b>
<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	74,971
6914401	#123365	Science Of Nanoscale Systems And Their D	47.049	101,174
6914402	#123365	Science Of Nanoscale Systems And Their D	47.049	78,267
		<b>Total for 47,049</b>		<b>254,412</b>

**Appendix A-3 - Detail  
Massachusetts Institute of Technology  
Federal Research Support - Passthrough - On Campus  
Fiscal 2010 Expenditures**

<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	26,083
		<b>Total for 93.310</b>		<b>26,083</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6775100	PO# DEAS7071965	R.A Support For J. Yoon	12.431	-992
		<b>Total for 12.431</b>		<b>-992</b>
		<b>Total for Harvard University</b>		<b>1,131,875</b>

**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	95,662
		<b>Total for 12.CCC</b>		<b>95,662</b>
		<b>Total for Evolved Machines Federal Contracting, Inc.</b>		<b>95,662</b>

**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	133,745
6899029	PO 3078313	Ultra-Low Jitter Femtosecond Fiber Laser	12.CCC	5,693
6914807	PO 3114736	Carbon Nanotube Chemo-Resistive Sensors	12.CCC	961
6914893	PO 3115647	Electromagnetic Systems Initiative	12.CCC	45,244
6915173	PO NO. 3119471	Efficient Mid-Wave Infrared Lasers (Emil	12.CCC	-23,240
6916706	PO 7000018116	Prediction Economies For Intent Determin	12.CCC	85,437
6916969	PO 700023564	Bonded-Water Process For Optimized Apd S	12.CCC	18,574
6917052	PO 7000025443	Microcombustor For Compact Thermoelectri	12.CCC	64,189
6917166	PO #7000027767	Ionospheric Variation Studies Using Sate	12.CCC	126,950
6917241	PO 7000029124	Enzyme Design And Synthesis	12.CCC	57,393
6917242	PO 7000030742	Map And Route Optimization For 3D Graph	12.CCC	4,346
6917259	PO NO. 7000031361	Campus/Lincoln Photonics Initiative	12.CCC	214,378
6917309	PO 7000031920	The Electromagnetic Systems Initiative	12.CCC	4,961
6917336	PO 7000032361	Signal Processing Research	12.CCC	71,330
6917337	PO 7000031370	Efficient Mid-Wave Infrared Lasers (Emil	12.CCC	7,917
6917393	PO #7000033990	Support Of The Radio Communication Link	12.CCC	-587
6917574	PO 7000036309	Readout And Fabrication Technology For S	12.CCC	54,543
6917694	PO 7000037905	Perching Control For Fixed-Wing Uavs	12.CCC	-626

## Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2010 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917724	PO 7000038334	Agile Robotics For Logistics	12.CCC	1,759,984
6917756	PO 7000038334	Agile Robotics For Logistics	12.CCC	22,067
6917757	PO 7000038334	Agile Robotics For Logistics	12.CCC	266,576
6917758	PO 7000038334	Agile Robotics For Logistics	12.CCC	212,335
6917848	700039951	Decision Modeling Research Initiative	12.CCC	61,619
6917858	PO #7000035313	Ballistic Missile Defense Decision Suppo	12.CCC	76,590
6917865	PO 7000040387	Program 2209-9442: Novel Nanoparticles F	12.CCC	23,669
6917912	PO #7000042456	Real-Time Target Tracking Using Sensors	12.CCC	15,099
6918159	PO 7000038334	Fabricated Equipment - Autonomous Forkli	12.CCC	329,272
6918240	PO 7000038334	Agile Robotics For Logistics (How)	12.CCC	177,784
6918382	PO 7000048838	Dynamically Composable Systems	12.CCC	10,924
6918655	PO #7000049785	Engineering Support To The Lincoln Labor	12.CCC	1,175
6918711	PO #7000051321	Applying Natural Language Processing (NI	12.CCC	10,424
6919021	PO 7000058918	Future Collision Avoidance	12.CCC	111,707
6919075	PO NO. 7000058284	Network Coding - A Taxonomy Of Benefits	12.CCC	84,964
6919091	PO 7000060285	Information Access For Multi-Sensor Deci	12.CCC	47,021
6919099	7000061095	Opto-Nanomechanical Self-Adaptive Photon	12.CCC	31,181
6919237	PO #7000049785	1247-112 Husir Network, Admin, Mgmt	12.CCC	3,012
6919238	PO #7000049785	1247-21 Husir Reqs & Specs	12.CCC	59,727
6919239	PO #7000049785	1800-12 Ssa Admin Proj & Network	12.CCC	25,225
6919240	PO #7000049785	1800-212 Ssa Sys Eng Common	12.CCC	16,832
6919241	PO #7000049785	1800-213 Ssa Sys Eng Mhr	12.CCC	130,349
6919242	PO #7000049785	1800-214 Ssa Sys Eng Lrir	12.CCC	154,306
6919243	PO #7000049785	1800-215 Ssa Sys Eng Hax	12.CCC	73,739
6919244	PO #7000049785	1800-542 Ssa Mission Exec Analysis	12.CCC	53,059
6919245	PO #7000049785	10102-14 Debris Data Collection	12.CCC	48,200
6919246	PO #7000049785	331-8301 Firepond Optics	12.CCC	17,573
6919335	PO #7000051321	Fabricated Equipment: Scalable Neural S	12.CCC	-4,742
6919347	PO #7000066344	Support Of The Radio Communication Link	12.CCC	346,749
6919364	PO 7000025443	Fabricated Equipment	12.CCC	1,092
6919398	PO 7000067500	Program 2209-9448: Magneto-Optical Mater	12.CCC	113,286
6919413	PO 7000062628	Experimental Evaluation Of A Genetic Alg	12.CCC	94,319
6919414	PO 7000062627	A Multi-Objective Algorithm For Embedded	12.CCC	93,320
6919415	PO 7000063327	Dynamically Composable Systems	12.CCC	144,446
6919418	PO #7000069779	Uhf Radar Cross-Section Measurements	12.CCC	24,738
6919437	PO 7000067512	Development Of Improved Bacteria For Bio	12.CCC	23,052
6919498	7000067510	Ultrabroadband Em Field Generation From	12.CCC	22,944
6919573	7000071107	A New Power Amplifier Architecture For H	12.CCC	112,648
6919574	7000071110	Space Systems Engineering Academy Pilot	12.CCC	62,291

## Appendix A-3 - Detail Massachusetts Institute of Technology Federal Research Support - Passthrough - On Campus Fiscal 2010 Expenditures

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919575	PO#7000071099	Micro-Optic Beam Steering And Focusing E	12.CCC	1,573
6919602	PO 7000071111	Sparse Random Matrix Models Exploration	12.CCC	43,386
6919627	PO 7000074040	Data Integration	12.CCC	35,000
6919645	PO #7000049785	Twir Through-Wall Imaging Radar	12.CCC	536
6919653	PO 7000074210	Joint Position-Amplitude Modeling For Co	12.CCC	26,256
6919729	PO#7000075443	Microcol, A MemS-Based Chemical Oxygen	12.CCC	189,029
6919750	PO 7000074667	Variability Compensation Techniques For	12.CCC	65,844
6919752	7000071112	Characterization Of Micromilling For Rap	12.CCC	64,176
6919781	PO 7000077806	Information Access For Multi-Sensor Deci	12.CCC	214,414
6919799	7000077786	Superconducting Nanowire Single-Photon D	12.CCC	114,265
6919832	7000077762	Completion Of Radiometer System On Upgra	12.CCC	176,119
6919982	PO #7000079784	Optimization Of Airport Configurations	12.CCC	104,756
6920361	PO 7000082206	Demonstration Of Reduced Surface Emissio	12.CCC	48,399
6920444	PO # 7000084371	Airborne Sensing Platform For High Preci	12.CCC	111,187
6920456	700083323	Broadband Mid-Ir Frequency Combs	12.CCC	135,482
6920775	7000087748	Architecture Study Of Defense Communicat	12.CCC	99,785
6920852	PO # 7000084371	Airborne Sensing Platform For High Preci	12.CCC	38,011
6920894	7000091260	Spacecraft Engineering Research (Ser)	12.CCC	20,000
6920982	7000092117	Precision, Monolithic Flexure Mechanisms	12.CCC	57,563
6921075	7000092977	Compact Power-Efficient High-Performance	12.CCC	20,000
6921158	7000093904	Task Planning For Sensor-Based, Multi-Ua	12.CCC	36,110
6921163	7000095032	SI-LI Biophotonics Collaboration	12.CCC	47,251
6921192	PO 7000095897	Program 2209-3066: Campus Collaboration:	12.CCC	5,502
6921235	PO #7000095663	Engineering Support To The Lincoln Labor	12.CCC	13
6921236	PO #7000095663	Husir Proj, Network, Admin Mgmt 1247-11	12.CCC	8,216
6921237	PO #7000095663	Ssa Admin Proj & Network 1800-12	12.CCC	80,540
6921238	PO #7000095663	Ssa Sys Eng Common 1800-212	12.CCC	4,292
6921239	PO #7000095663	Ssa Sys Eng Mhr 1800-213	12.CCC	388,814
6921240	PO #7000095663	Ssa Sys Eng Lrir 1800-214	12.CCC	272,695
6921241	PO #7000095663	Ssa Sys Eng Hax 1800-215	12.CCC	216,138
6921242	PO #7000095663	Ssa Mission Execution Analysis 1800-542	12.CCC	99,379
6921243	PO #7000095663	Debris Data Collection 10102-14	12.CCC	64,762
6921244	PO #7000095663	Firepond Optics 331-83032	12.CCC	9,961
6921246	PO #7000095663	Integration & Testing 1247-25	12.CCC	316,373
6921250	PO #7000095663	Test Stand 1015-3	12.CCC	29,144
6921261	PO #7000066344	Fab Equip - Communication Link	12.CCC	31,856
6921557	PO #7000100934	Managing Alternative Energy Projects: Te	12.CCC	44,012
6921635	PO #7000105486	Characterizing Coherence In Long-Lived S	12.CCC	107,251
6921652	PO #7000105211	Exploratory Development Of Gan Silicon P	12.CCC	37,208

**Appendix A-3 - Detail  
 Massachusetts Institute of Technology  
 Federal Research Support - Passthrough - On Campus  
 Fiscal 2010 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921674	PO 70000106869	Target Tracking With Constraints	12.CCC	30,717
6921720	PO #7000107287	Development Of Control Algorithm And Imp	12.CCC	23,790
6921897	7000077762	Fabrication - Radiometer Pointing System	12.CCC	24,949
6921970	7000114032	Bio-Inspired Cellular Systems	12.CCC	7,148
6922011	7000114035	Nanofluidic Dna Ruler	12.CCC	3,681
		<b>Total for 12.CCC</b>		<b>9,185,344</b>
<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 (Idst)	12.910	50,002
		<b>Total for 12.910</b>		<b>50,002</b>
		<b>Total for Lincoln Laboratory</b>		<b>9,235,346</b>

**Brigham & Women's Hospital**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918871	103891	Neuroimaging Analysis Center	93.389	-551
6919911	103891	Neuroimaging Analysis Center	93.389	96,457
6920969	SUBAWARD U41RR019703	Image Guided Therapy Center	93.389	54,287
6921995	103891	Neuroimaging Analysis Center	93.389	13,634
		<b>Total for 93.389</b>		<b>163,827</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916811	U54-LM008748-04	Informatics For Integrating Biology And	93.879	-0
6916815	U54-LM008748-04	Berger - Child Account	93.879	-56
6916816	U54-LM008748-04	Mirny - Child Account	93.879	-445
6917752	103441-1 (PRIME U54LM008748)	Child Account: Plenge Genotyping: Inform	93.879	1,702
6918790	U54-LM008748-05	Informatics For Integrating Biology And	93.879	32,915
6918791	U54-LM008748-05	Child - Berger	93.879	-41
6918792	U54-LM008748-05	Child - Mirny	93.879	13,807
6919188	U54-LM008748-06	Informatics For Integrating Biology And	93.879	154,769
6919481	5-U54-LM008748-05	Informatics For Integrating Biology And	93.879	30,249
6921151	U54-LM008748-06	Berger Child I2E2 Year Vi	93.879	52,256
6921446	5-U54-LM008748-06	Informatics For Integrating Biology And	93.879	18,301
		<b>Total for 93.879</b>		<b>303,459</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917231	SUBAWARD NO. PS #103040-1	Microfluidic Platform For Genetic Guidan	93.310	608
6921384	LETTER AGREEMENT 1-27-10	Letter Agreement: Philip Rolfe	93.310	79,615
		<b>Total for 93.310</b>		<b>80,224</b>
<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	60,964
		<b>Total for 93.701</b>		<b>60,964</b>
<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	8,065
		<b>Total for 93.847</b>		<b>8,065</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915123	5-U01-GM076603-03	Integrated Genomic Analysis Of A Drosoph	93.859	2,538
6920593	5-U01-GM076603-04	Integrated Genomic Analysis Of A Drosoph	93.859	19,205
		<b>Total for 93.859</b>		<b>21,743</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918607	BWH #149881/766321	National Alliance For Medical Image Comp	93.286	44,596
6920815	BWH #149881/766321	National Alliance For Medical Image Comp	93.286	166,866
		<b>Total for 93.286</b>		<b>211,462</b>
<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	68,691
		<b>Total for 12.420</b>		<b>68,691</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919103	103996	Spore In Skin Cancer (Project 2)	93.397	-3,473
		<b>Total for 93.397</b>		<b>-3,473</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919046	103275	Pathobiology Of Nephrolithiasis	93.849	-0
		<b>Total for 93.849</b>		<b>-0</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917349	103101	Improving Health Outcomes Through Comput	93.347	-29
		<b>Total for 93.347</b>		<b>-29</b>
		<b>Total for Brigham &amp; Women's Hospital</b>		<b>914,933</b>

**MIT - Internal Cost Sharing**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921981	SUBAWARD 0000687120	C/S - Love / 6921854	93.855	1,798
		<b>Total for 93.855</b>		<b>1,798</b>
6921917	AGREEMENT DATED 5/4/10	C/S - Tannenbaum 6921821	93.113	2,605
		<b>Total for undefined</b>		<b>2,605</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921379	10030434	Design Of Peptide Entry Inhibitors & Del	93.701	3,776
		<b>Total for 93.701</b>		<b>3,776</b>
		<b>Total for MIT - Internal Cost Sharing</b>		<b>8,178</b>

**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>
6914813	SUBC. NO. 48004-001-07	Supercritical Co2 Materials & Computabil	81.CCC	273
6915929	SUBCONTRACT: 55550-001-07	Engineering Design Of Subsystems For The	81.CCC	34,442
6918244	SUBCONTRACT: 67870-001-08	Lanl/Mit Science Algorithms And Methods	81.CCC	211,848
6919303	SUBCONTRACT: 72297-001-09: TASK 1	Task 1: Lanl Ldrd-Dr Project Enhanced Ra	81.CCC	172,174
6919324	SUBCONTRACT: 71784-001-09	Ionospheric Modeling Component For Match	81.CCC	31,839
6920237	68238-001-09	Implosion Dynamics And Symmetry From Pro	81.CCC	26,773
6920437	SUBCONTRACT: 78966-001-09	Miniboone Neutrino Experiment	81.CCC	73,218
6920708	SUBCONTRACT: 72297-001-09: TASK 2	Task 2: Extreme Environment-Tolerant Mat	81.CCC	185,045
6921950	85554-001-10	Conceptual Design For The Construction O	81.CCC	27,414
		<b>Total for 81.CCC</b>		<b>763,026</b>
		<b>Total for Los Alamos National Security, L.L.C.</b>		<b>763,026</b>

**Johns Hopkins University**



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<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	55,802
		<b>Total for 12.CCC</b>		<b>55,802</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917996	P02000-336980	Clinical & Translational Science	93.389	30,915
6919711	2000336980	Clinical And Translational Science Award	93.389	143,517
6921948	2000336980	Clinical And Translational Science Award	93.389	10,216
		<b>Total for 93.389</b>		<b>184,648</b>

<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	39,055
6893471	SUB UNDER NIH PRIME	Development And Evaluation Of Biomarkers	93.113	313
6893472	SUB UNDER NIH PRIME	Development And Evaluation Of Biomarkers	93.113	2,142
6918308	SUB UNDER NIH PRIME 2-P01-ES006052	Molecular Biomarkers For Environmental T	93.113	357,734
6918309	SUB UNDER NIH PRIME 2-P01-ES006052	Child - Wogan 6918308	93.113	238,303
6921821	AGREEMENT DATED 5/4/10	Accelerator Mass Spectrometry Technology	93.113	16,801
		<b>Total for 93.113</b>		<b>654,348</b>

<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	272,548
6914100	SUBAWARD AGMT. NO. 8607-62303	Child Account For Chiang C. Mei	12.300	112,965
6919234	CONTRACT NO. 957722	Concealable Biometric Sensors For Covert	12.300	90,865
		<b>Total for 12.300</b>		<b>476,378</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918381	SUBAWARD NO. 2000452253	Genome-Wide Association Analysis In Esse	93.837	246,088
		<b>Total for 93.837</b>		<b>246,088</b>
		<b>Total for Johns Hopkins University</b>		<b>1,617,263</b>

**Northwestern University**

<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
		<b>Total for 11.609</b>		<b>8,643</b>

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<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	66,336
		<b>Total for 12.431</b>		<b>66,336</b>
		<b>Total for Northwestern University</b>		<b>74,979</b>

**Harvard Medical School**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917950	CIMIT NO. 08-204	Cimit: Proof Of Principle	12.CCC	7,910
		<b>Total for 12.CCC</b>		<b>7,910</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917815	149734.386545.0123	Clinical Translational Science Award (Ct	93.389	-901
6919606	149734.386545.0223	Clinical Translational Science Award (Ct	93.389	489,094
6921232	027343-386541.02120	Xouttb-A Low-Cost, Incentive-Abased, The	93.389	8,742
6921904	149734.386545.0323	Clinical Translational Science Award (Ct	93.389	73,324
		<b>Total for 93.389</b>		<b>570,259</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914733	148827-0002	Associating Genetic Variation To Resist	93.855	1,224
		<b>Total for 93.855</b>		<b>1,224</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915179	PO #07SB06917	R. A. Support For Kwonmoo Lee	93.000	49,390
6921126	011510-SHPUNT	R. A. Support For A. Shpunt	93.000	6,641
		<b>Total for 93.000</b>		<b>56,031</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6896426	SUBAWARD 148801-0002	A Whole Genome Admixture Scan For Multip	93.853	46,759
		<b>Total for 93.853</b>		<b>46,759</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920785	150754.0002	ARRA - Preventing The Incidentalome	93.701	59,566
		<b>Total for 93.701</b>		<b>59,566</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918245	149581-0302	The Role Of Cdk5 In The Dna Damage Respo	93.866	48,803
6920218	149581-0402	The Role Of Cdk5 In The Dna Damage Respo	93.866	212,175
		<b>Total for 93.866</b>		<b>260,978</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920000	SUB HMS: 5T32HL07623	Training Program In Molecular Hematology	93.856	8,770
		<b>Total for 93.856</b>		<b>8,770</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917645	149718-0603	Natural Product-Like Libraries For Cance	93.395	-178
6917646	149718-0602	Chemical Tools For Biological Approaches	93.395	-1,646
		<b>Total for 93.395</b>		<b>-1,823</b>
		<b>Total for Harvard Medical School</b>		<b>1,009,672</b>

**University of Chicago**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919694	SUB 34588-06	A Cis Regulatory Map Of The Drosophila Ge	93.172	114,046
6921898	SUB 34588-06	A Cis Regulatory Map Of The Drosophila Ge	93.172	26,932
		<b>Total for 93.172</b>		<b>140,978</b>
<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	51,588
		<b>Total for 47.049</b>		<b>51,588</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919345	36984-3	Cd8 & T Cells And Immunological Tumor Re	93.396	26,203
6919346	36984-3	Cd8 & T Cells And Immunological Tumor Re	93.396	23,114
		<b>Total for 93.396</b>		<b>49,317</b>
		<b>Total for University of Chicago</b>		<b>241,883</b>

**Sri International**

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<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	3,506
		<b>Total for 12.CCC</b>		<b>3,506</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898666	SUBCONTRACT NO. 03-000215	Cognitive Assistant That Learns And Obse	12.910	-9
6898668	SUBCONTRACT NO. 03-000215	Cognitive Assistant That Learns And Obse	12.910	-40
6914740	SUBCONTRACT NO. 03-000215	Calo Year 4 - Task 8 - Darrell	12.910	-9,333
6920650	27-001343	Base Period	12.910	204,807
6921888	SUBCONTRACT NO. 27-001343	Option 1 - Phase 2	12.910	4,216
		<b>Total for 12.910</b>		<b>199,642</b>
<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	33,160
		<b>Total for 12.351</b>		<b>33,160</b>
<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	120,812
		<b>Total for 47.050</b>		<b>120,812</b>
		<b>Total for Sri International</b>		<b>357,120</b>
<b>University of Michigan</b>				
<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	114
		<b>Total for 47.070</b>		<b>114</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899708	SUBCONTRACT NO. F015535	University Consortium On Low Temperature	81.117	-551
6921585	SUBCONTRACT NO. 3001396971	A University Consortium On High Pressure	81.117	58,963
		<b>Total for 81.117</b>		<b>58,412</b>
<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	229,471
6919174	SUBCONTRACT NO. 3001117357	C2Uav Human Supervisor Control Extension	12.800	15,229

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920740	SUBCONTRACT NO. 3001117357	C2Uav Human Supervisor Control Extension	12.800	50,776
		<b>Total for 12.800</b>		<b>295,476</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914524	SUBAWARD # 3000768367	Soil Moisture Smart Sensor Web Using Dat	43.000	99,889
6921217	3001431889	Ground Network Design And Dynamic Operat	43.000	35,089
		<b>Total for 43.000</b>		<b>134,977</b>
<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	46,585
		<b>Total for 47.041</b>		<b>46,585</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918385	F015193	National Center For Biomedical Knowledge	93.279	6,576
		<b>Total for 93.279</b>		<b>6,576</b>
		<b>Total for University of Michigan</b>		<b>542,142</b>
<b>University of New Hampshire</b>				
<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	21,109
		<b>Total for 43.CCC</b>		<b>21,109</b>
<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	34,139
		<b>Total for 11.472</b>		<b>34,139</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917698	SUB. NO. 08-097/UNDER NOAA NA06NMF4720095	The Development And Demonstration Of Ac	11.455	15,036
		<b>Total for 11.455</b>		<b>15,036</b>
		<b>Total for University of New Hampshire</b>		<b>70,284</b>

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**SURA / Jefferson Lab**

<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	12,277
		<b>Total for 81.049</b>		<b>12,277</b>
<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	10,005
6916716	PO #07-P2191	Pre-Operational Testing And Mapping Of Q	81.CCC	12,672
6919439	JSA-06-C2694	Fabricated Equipment-Jlab Compton Chican	81.CCC	174,052
		<b>Total for 81.CCC</b>		<b>196,729</b>
		<b>Total for SURA / Jefferson Lab</b>		<b>209,006</b>

**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	82,258
6921374	4400352761	Next Generation Data Interoperability St	12.CCC	121,171
6921856	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	24,525
6921857	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	4,516
6921858	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	77,660
6921859	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	67,138
6921860	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	7,635
6921861	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	7,635
6921862	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	124,121
6921864	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	7,635
6921865	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	6,360
6921866	PO NO. 4400354854	Integrated Standoff Inspection System (I	12.CCC	7,635
		<b>Total for 12.CCC</b>		<b>538,290</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917342	PO 4422067911	Sords Program	97.CCC	54,840
		<b>Total for 97.CCC</b>		<b>54,840</b>
		<b>Total for Raytheon Company</b>		<b>593,130</b>

**Fred Hutchinson Cancer Research Center**

**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>
6921854	SUBAWARD 0000687120	Integrated Single-Cell Assays For Multid	93.855	17,423
		<b>Total for 93.855</b>		<b>17,423</b>
		<b>Total for Fred Hutchinson Cancer Research Center</b>		<b>17,423</b>

**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	100,804
		<b>Total for 12.CCC</b>		<b>100,804</b>
		<b>Total for APIC Corporation</b>		<b>100,804</b>

**Battelle Energy Alliance, LLC**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917237	AMD #005 TO RELEASE #00002 UNDER MASTER CONTRACT #00042439	Idaho National Lab Nuc Admin Tasks	81.CCC	18,123
6917389	0000063 RELEASE 00025 UNDER BLANKET MASTER	Degradation Investigation Of Solid Oxide	81.CCC	10,450
6917887	CONTRACT #00000063, RLSE NO. 00027	Environmental Effects Of Crack Growth In	81.CCC	47,147
6918903	CONTRACT #00000063, RLSE NO. 00022	Environmental Effects On Crack Growth In	81.CCC	82,070
6919066	AMENDMENT 4 TO RELEASE 00001 UNDER BLANKET MASTER 00042439	Cont. Development Of An Academic Center	81.CCC	42,304
6919145	RELEASE #000029/CONTRACT#00000063AMD. 001	Collaboration On The Nuclear Fuel Cycle	81.CCC	1,628
6919187	CONTRACT #00000063, RLSE NO. 00031	A Strategy To Tightly Couple Neutronics	81.CCC	38,238
6919210	CONTRACT #00000063, RLSE NO. 00027	Fabricated Equipment: Dc Potential Drop	81.CCC	-4,261
6919845	RELEASE #000032/CONTRACT#00000063AMD. 001	Innovative Fuel Configurations To Improv	81.CCC	75,000
6919980	CONTRACT #00000063, RLSE NO. 00034	Air Ingress Modeling Of Mitigation Syste	81.CCC	29,824
6920548	RELEASE #000033/CONTRACT#00000063	-09-095:Heterogeneous Recycling In Fast	81.CCC	82,372
6920549	RELEASE #000035/CONTRACT#00000063	Millimeter-Wave Thermal Analysis Develop	81.CCC	75,457
6920791	RELEASE #000029/CONTRACT#00000063AMD. 002	Collaboration On The Nuclear Fuel Cycle	81.CCC	115,483
6920887	AMENDMENT 5 TO RELEASE 00001 UNDER BLANKET MASTER 00042439	Cont. Development Of An Academic Center	81.CCC	58,681
6921082	CONTRACT 00000063 / RELEASE #36	Feasibility Study For Leu Conversion Of	81.CCC	9,265
6921372	CNTR # 00000063, RLSE 00039	Degradation Investigation Of Solid Oxide	81.CCC	14,729

**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>
6921373	CONTRACT 00000063, RELEASE 00037	Environmental Effects Of Crack Growth In	81.CCC	82,414
6921396	CNTR # 00000063, RLSE 00040	Hybrid Systems For Process Integration A	81.CCC	62,530
6921609	RELEASE #000038/CONTRACT#000000063	Chair The Institute Advisory Board For T	81.CCC	31,470
6921700	RELEASE NO. 00041 UNDER 00000063	Literature Review: Molten Bromide Salt S	81.CCC	15,260
6921784	CONTRACT 00000063, RELEASE 00037	Environmental Effects Of Crack Growth In	81.CCC	19,698
		<b>Total for 81.CCC</b>		<b>907,883</b>
		<b>Total for Battelle Energy Alliance, LLC</b>		<b>907,883</b>

**Harvard School of Public Health**

<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	93.000	30,906
		<b>Total for 93.000</b>		<b>30,906</b>

<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	90,822
6921270	5-P01-TP000307-02	Linking Assessment And Measurement To Ph	93.930	197,166
		<b>Total for 93.930</b>		<b>287,989</b>
		<b>Total for Harvard School of Public Health</b>		<b>318,895</b>

**Ferro Solutions, Inc.**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921765	SBIR AGMNT DATED 4/15/10	Phase I Sbir: Wireless Optical Neuromodu	93.CCC	2,784
		<b>Total for 93.CCC</b>		<b>2,784</b>
		<b>Total for Ferro Solutions, Inc.</b>		<b>2,784</b>

**Boston University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897601	GC189257NGA	Project Management	43.CCC	-578
6897602	GC189257NGA	Systems Engineering	43.CCC	39,908
6897603	GC189257NGA	Instrument Development	43.CCC	436
6917890	PO NO. GC202749NGA	A Sounding Rocker Measurement Of D/H Rat	43.CCC	70,556
6918980	SUBCONTRACT NO. GC204036 NGA	Phase B: Radiation Belt Storm Probes - E	43.CCC	78,373
		<b>Total for 43.CCC</b>		<b>188,693</b>



**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>
6917294	MC521017-B-AJ	Genetics In Immune-Mediated Diseases - L	93.855	731
		<b>Total for 93.855</b>		<b>731</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897103	LTR. AWARD GC-187353NGA	Neural Basis Of Learning In The Primate	47.075	164,855
6921761	LTR. AWARD GC-208001NGA	Slc Center: Celest: A Center For Learnin	47.075	10,390
		<b>Total for 47.075</b>		<b>175,246</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920709	SUBAWARD NO. GC2066679NGC	Crcns: Gamma Rythms And Cell Assemblies	93.853	125,942
		<b>Total for 93.853</b>		<b>125,942</b>
<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	52,287
		<b>Total for 12.800</b>		<b>52,287</b>
<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	301,986
		<b>Total for 43.000</b>		<b>301,986</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919961	NO. GC206380NGC	Image-Guided Intracardiac Beating Heart	93.837	53,124
		<b>Total for 93.837</b>		<b>53,124</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918900	GC204284NGC	Complex Chemotypes: Discovery, Methodolo	93.859	90,554
6919846	GC204284NGC	Fabricated Equipment	93.859	10,574
6920835	GC207223NGC	Complex Chemotypes: Discovery, Methodolo	93.859	170,724
6920891	GC207223NGC	Fab Eq - Photochemical Microreactor	93.859	24,999
		<b>Total for 93.859</b>		<b>296,850</b>
<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	51,341

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919266	3436-5	Genetic Admixture Study Of U Ferine Fibr	93.864	5,367
6919393	3428-5	Hla Region Genetics And Siz In U. S. Blac	93.864	3,554
		<b>Total for 93.864</b>		<b>8,921</b>
		<b>Total for Boston University</b>		<b>1,255,122</b>

				<b>51,341</b>
		<b>Total for 93.173</b>		

**Science Applications International Corporation**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917235	P010002476	Otoacoustic Emission (Oae) Testing	12.CCC	42,958
6920843	P010026512	Otoacoustic Emission (Oae) Testing	12.CCC	16,897
6921716	P010040434	Identifying Individual Susceptibility To	12.CCC	1,726
		<b>Total for 12.CCC</b>		<b>61,581</b>
		<b>Total for Science Applications International Corporation</b>		<b>61,581</b>

**Harvard College Observatory**

<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	51,986
		<b>Total for 11.609</b>		<b>51,986</b>

<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	52,646
6919427	131225-02	Fabrication: Yb-Fiber Amplifier	43.000	18,291
		<b>Total for 43.000</b>		<b>70,937</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916680	R21EB007486-01A1	Development Of Hyperpolarized Silico-Nan	93.286	6,223
		<b>Total for 93.286</b>		<b>6,223</b>
		<b>Total for Harvard College Observatory</b>		<b>129,145</b>

**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	54,528

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 Massachusetts Institute of Technology  
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**54,528**  
**54,528**

**Total for 12.CCC**  
**Total for Nitronex Corporation**

**CalTech - Jet Propulsion Lab**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6857100	CONTRACT # 1205624	Global Oceans Dynamic And Transports	43.CCC	144
6915824	RSA NO. 1309053	Intense Photometry Of The Exotic Exoplan	43.CCC	36,511
6915897	SUBCONTRACT NO. 1308253	Characterizing Hot Jupiter Transiting Ex	43.CCC	645
6916689	RSA NO. 1315544	Target Of Opportunity: New Transitioning	43.CCC	36,573
6917338	SUBCONTRACT NO. 1332802	Lunar Surface Robotic Exploration	43.CCC	47,840
6917472	SUBCONTRACT NO. 1335484	Soil Moisture Mission Science And Produc	43.CCC	65,381
6917734	RSA NO. 1339324	Consequences Of Tidal Heating On The Int	43.CCC	-35
6917781	RSA NO. 1339320	Systems Architecture For Control Authori	43.CCC	17,096
6918004	1344343	A Long Life Thermal Architecture Of Robo	43.CCC	3,355
6918043	RSA NO. 1343195	Science Proposal: A Search For Water On	43.CCC	22,776
6918724	RSA NO. 1343201	Direct Observations Of Clouds On Brown D	43.CCC	108
6918872	RSA NO. 1360267	New Transiting Exoplanets: Targets Of O	43.CCC	79,040
6919109	RSA NO. 1365748	Spitzer Ddt Proposal 495: Confirming The	43.CCC	13,986
6919270	RSA NO. 1367398	Detecting The Transits Of Nearby Super-E	43.CCC	4,568
6919276	RSA NO. 1370612	Compliant Task Execution And Learning Fo	43.CCC	12,513
6919652	RSA NO. 1376303	Exoplanet Hht-P.11B Secondary Transit Ob	43.CCC	14,460
6919743	RSA NO. 1370612	Fabricated Equipment - Whole Body Roboti	43.CCC	56,600
6919934	RSA NO. 1379869	Confirmation And Characterization Of Kep	43.CCC	12,450
6920079	SUBCONTRACT 1379501	Operator Interface And Control Software	43.CCC	77,525
6920968	RSA NO. 1388735	The Spin-Orbit Angles In Four Exoplaneta	43.CCC	13,623
6921595	RSA NO. 1399497	Improving The Modeling Of Arctic Sea-Ice	43.CCC	31,118
6921663	RSA NO. 1399494	An Ultra-Low-Power Digital Correlator Fo	43.CCC	3,576
<b>Total for 43.CCC</b>				<b>549,853</b>

**FY Expenses**  
 332,016  
 1,976  
 20,827

**CFDA #**  
 43.000  
 43.000  
 43.000

**Total for 43.000**

**FY Expenses**  
 332,016  
 1,976  
 20,827

**CFDA #**  
 43.000  
 43.000  
 43.000

**FY Expenses**  
 332,016  
 1,976  
 20,827

**FY Expenses**  
 712

**CFDA #**  
 43.001

**Total for 43.001**

**FY Expenses**  
 712

**CFDA #**  
 43.001

**FY Expenses**  
 712

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Total for CalTech - Jet Propulsion Lab **905,384**

**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	3,580
		<b>Total for 43.CCC</b>		<b>3,580</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919018	AGMT. DTD. 11/15/08	Sky Cowboy	12.CCC	6,154
6920873	AGMT. DATED 10/16/09	Physics-Based Control Technology For Aug	12.CCC	46,000
		<b>Total for 12.CCC</b>		<b>52,154</b>
		<b>Total for Aurora Flight Sciences RDC</b>		<b>55,734</b>

**University of California-Santa Barbara**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899687	KK4103	Icb Task 11 Lauffenburger	12.CCC	-1,069
		<b>Total for 12.CCC</b>		<b>-1,069</b>
<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	79,000
		<b>Total for 12.910</b>		<b>79,000</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917526	KK6142-01	Development Of Cdkd5 Inhibitors - Year 3	93.853	-25,143
6919616	KK6142-03	Development Of Cdkd5 Inhibitors	93.853	177,896
6921655	KK6142-04	Development Of Cdkd5 Inhibitors	93.853	57,426
		<b>Total for 93.853</b>		<b>210,178</b>
<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	44,465
6915363	KK7108	Mine Muri Add On : New Technologies For	12.300	67,240
6917883	KK8152	Muri - Jesus Del Alamo	12.300	66,440
6917884	KK8152	Drift Muri - Tomas Palacios	12.300	124,080
6917885	KK8152	Muri - Carl Thompson	12.300	123,762
		<b>Total for 12.300</b>		<b>425,987</b>

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		<b>Total for University of California-Santa Barbara</b>		<b>714,097</b>
<b>1366 Technologies, Incorporated</b>				
<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 Water: Enabling Terawatt Pho	81.135	93,467
<b>Total for 81.135</b>				<b>93,467</b>
<b>Total for 1366 Technologies, Incorporated</b>				<b>93,467</b>
<b>University of Southern California</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918010	PO 128429 UNDER NRO CONTRACT NO. 06-C-0249	Opera Software Architecture (Osa)	12.CCC	-5,879
6920697	PO 137773 UNDER NRO CONTRACT NO. 06-C-0249	Opera Software Architecture (Osa)	12.CCC	27,860
6921489	P.O. 141193	Neomorphic Visual System For Intellige	12.CCC	69,424
6921551	P.O. 141193	Desimone Child Account	12.CCC	35,419
<b>Total for 12.CCC</b>				<b>126,823</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919458	H40891	A Multiethnic Genome Wide Scan Of Prosta	93.172	72,078
<b>Total for 93.172</b>				<b>72,078</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918062	137768	Neo Vision II - Interim Research	12.910	61,447
<b>Total for 12.910</b>				<b>61,447</b>
<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	84,735
6920504	138802	Antidote: Adaptive Networks For Threat A	12.300	58,346
6921645	138802	Fabricated Equipment: Optically-Guided U	12.300	4,816
<b>Total for 12.300</b>				<b>147,898</b>
<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	96,473
<b>Total for 47.082</b>				<b>96,473</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919219	AGMT. H39747 UNDER 2-R01-EY013516-06	Advanced Imaging For Glaucoma	93.867	34,653
6920886	AGMT. H42864 UNDER 2-R01-EY01356-06	Advanced Imaging For Glaucoma	93.867	127,990
		<b>Total for 93.867</b>		<b>162,643</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915779	PO 119512/EAR-0529922	Collaborative Research: Finite Element M	47.050	991
		<b>Total for 47.050</b>		<b>991</b>
		<b>Total for University of Southern California</b>		<b>668,353</b>

**ERC, Inc.**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920373	RS090696	The Science And Engineering For Preventi	12.CCC	75,000
6920628	RS091114	Spacecraft Engineering Research	12.CCC	284,537
6921454	RS1000052	Development Of Omniphobic Surfaces With	12.CCC	30,570
6921622	RS1000052	Fabricated Equipment - Electrospaying P	12.CCC	4,226
		<b>Total for 12.CCC</b>		<b>394,333</b>
		<b>Total for ERC, Inc.</b>		<b>394,333</b>

**Aerodyne Research Incorporated**

<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	12,869
6921620	ARI10609-1	Fab Equip: Total Gas-Phase Organics Inst	81.049	18,575
		<b>Total for 81.049</b>		<b>31,444</b>
<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	61,455
		<b>Total for 43.CCC</b>		<b>61,455</b>

<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	76,932
6918755	STTR AGMT. DTD 10/16/08	Ultrasound Degulfunization Of Jet Fuel	12.CCC	167,502
6920131	STTR AGMT. DTD 8/7/09	Str: Characterizing Jp-10 High Temperat	12.CCC	55,386
		<b>Total for 12.CCC</b>		<b>299,820</b>

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Total for 12.CCC

299,620

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915988	AR10421-4	Sbir: Phase II - Innovative Aerosol Col	81.064	721
		<b>Total for 81.064</b>		<b>721</b>
		<b>Total for Aerodyne Research Incorporated</b>		<b>393,440</b>

**Massachusetts General Hospital**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917735	SUB UNDER W81XWH-07-2-0011	Mit-Cimit Precision Medical Devices Grad	12.CCC	-7,949
6919612	SUB UNDER DAMD17-02-2-0006-FUND 213621	Mit-Cimit-A Label-Free Viral Detection M	12.CCC	10,920
6919751	FUND 208372	Cimit Neurotechnology Program Leadershi	12.CCC	24,959
6919876	SUB UNDER W81XWH-07-2-0011	Mit-Cimit Operating On The Heart From Wi	12.CCC	17,808
		<b>Total for 12.CCC</b>		<b>45,738</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918870	5-U24-RR021382-05	Morphometry Biomedical Informatics Resea	93.389	57
		<b>Total for 93.389</b>		<b>57</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919410	208781	Acute Hiv Infection: Implications For Va	93.855	-424
		<b>Total for 93.855</b>		<b>-424</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921615	5-R01-HL068011-07	Elliott Greenblatt Off- Campus F&A	93.838	20,640
		<b>Total for undefined</b>		<b>20,640</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899253	VOUCHER 07264162	Research Assistantship For Poe-Jou Chen	93.853	2,509
6917295	SUBAWARD 205852	Multiscale Dynamic Measurements And Mode	93.853	47,562
6918492	5-P50-NS038372-10	The Mgh/Mit Parkinson'S Disease Research	93.853	96,620
6921616	DP10D003646-03	Maryam Modir Shانهchi Support - Off Camp	93.853	20,640
		<b>Total for 93.853</b>		<b>167,331</b>

**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>
6919916	SUBAWARD NO. 206505	A System Neuroscience Approach For The S	93.310	74,557
		<b>Total for 93.310</b>		<b>74,557</b>
<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	72,987
6921274	208557	Functional Spectroscopy With Real-Time F	93.279	28,094
		<b>Total for 93.279</b>		<b>101,082</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917687	205514	A Genome-Wide Association Study For Earl	93.837	11,363
6919496	205514	A Genome-Wide Association Study For Earl	93.837	-546
6921228	R01 HL096576-01	Cluster-Imaging Of Emerging Biomarker Ne	93.837	6,854
		<b>Total for 93.837</b>		<b>17,670</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918437	SUB UDR. R01-DK081457	Metabolic Profiling Of Oxphos Dysfunctio	93.847	51,313
6919519	208375	Metabolomic Predictors Of Insulin Resist	93.847	321,464
		<b>Total for 93.847</b>		<b>372,777</b>
<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	97,044
		<b>Total for 93.859</b>		<b>97,044</b>
<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	194,837
		<b>Total for 93.286</b>		<b>194,837</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918133	5-R01-AG026240-03	Non-Invasive Optical Imaging Of Neuropat	93.866	7,263
6920097	5-R01-AG026240-04	Non-Invasive Optical Imaging Of Neuropat	93.866	120,473
		<b>Total for 93.866</b>		<b>127,736</b>



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<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	420,736
6918459	207607	Probing The Tumor Microenvironment Using	93.395	169,078
		<b>Total for 93.395</b>		<b>589,814</b>
		<b>Total for Massachusetts General Hospital</b>		<b>1,808,856</b>

**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	19,003
		<b>Total for 12.CCC</b>		<b>19,003</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918945	SUBAWARD #158546	Cell Phone Intervention Trial For Young	93.837	224,572
		<b>Total for 93.837</b>		<b>224,572</b>
		<b>Total for Duke University</b>		<b>243,575</b>

**University of California**

<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	71,113
		<b>Total for 81.049</b>		<b>71,113</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895725	KK4103	Icb: Task 2 Electronic Materials - Salar	12.CCC	1
6897374	KK4103	Icb Task 3 Belcher	12.CCC	-163
6897375	KK4103	Icb Task 3 Lauffen/Sorger	12.CCC	-0
6897376	KK4103	Icb Task 4 Belcher	12.CCC	-349
6897377	KK4103	Icb Task 4 Wittrup	12.CCC	99
6914692	KK4103	Icb Task 1 Manalis	12.CCC	1,691
6914763	KK4103	Icb Task 12 Belcher - Spinning And Grow	12.CCC	-4,291
6914764	KK4103	Icb Task 12 Belcher - Virus Engineering	12.CCC	-1,268
6914767	KK4103	Icb Task 14 - Lauffenburger	12.CCC	-20
		<b>Total for 12.CCC</b>		<b>-4,301</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898392	1580 GGH775	Formation And Function Of Prefibrillar Ab	93.853	-1,486
		<b>Total for 93.853</b>		<b>-1,486</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915249	SUBAWARD NO. 1000 G HE149	Cms Tier - 2	47.049	463,163
6915250	SUBAWARD NO. 1000 G HE149	Cms M&O 07 Daq	47.049	201,305
6915251	SUBAWARD NO. 1000 G HE149	Cms M&O 07 Silicon Tracker	47.049	86,282
6916764	SUBAWARD NO. 1000 G HE149	Fabrication: Tier-2 Computing Facility	47.049	141,021
6920136	SUBAWARD NO. 1000 G HE149	Cms Tier - 2 - Off-Campus	47.049	112,079
		<b>Total for 47.049</b>		<b>1,003,850</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895556	KK4103	Institute For Collaborative Biotechnology	12.431	2,300
6895962	KK4103	Icb: Task 2 Electronic Materials - Oper	12.431	-92
6895967	KK4103	Icb: Task 4 Discovery -Operating Expense	12.431	-423
6895968	KK4103	Icb: Task 4 Discovery - Operating Expens	12.431	-1,828
6897872	S0176938	Dawn: Dynamic Ad-Hoc Wireless Networking	12.431	168,286
6897936	KK4103	Institute For Collaborative Biotechnology	12.431	43,083
6919767	KK9151-1	Icb Task 1 Manalis	12.431	253,044
6919782	KK9151-7	Icb Task 7 Administration	12.431	52,101
6919783	KK9151	Icb Task 3 Lauffenburger	12.431	374,155
6919784	KK9151	Icb Task 4.1: Spinning - Belcher	12.431	302,138
6919785	KK9151	Icb Task 4.2: Virus - Belcher	12.431	250,642
6920091	KK9151-13	Icb Task 13 Belcher	12.431	77,404
		<b>Total for 12.431</b>		<b>1,520,809</b>
<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	187,118
		<b>Total for 93.866</b>		<b>187,118</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916829	SUBCONTRACT 4298SC/W81XWH-05-1-0265	Preclinical Mouse Models Of Neurofibroma	12.420	-37
		<b>Total for 12.420</b>		<b>-37</b>
		<b>Total for University of California</b>		<b>2,777,066</b>

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**CREARE, Incorporated**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919435	SUBCONTRACT NO. 52926	Design, Optimization And Non-Fabrication	43.CCC	49,625
6921583	SUBCONTRACT NO. 56533	ARRA - Strr: Design, Optimization And Fabricati	43.CCC	4,385
		<b>Total for 43.CCC</b>		<b>54,010</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920574	SUBCONTRACT NO. 54795	Light Weight Efficient Current Leads For	12.800	39,957
		<b>Total for 12.800</b>		<b>39,957</b>
		<b>Total for CREARE, Incorporated</b>		<b>93,967</b>

**University of Rochester**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897008	PO 412761G	Fusion Science Center For Extreme States	81.049	78,116
6917101	414090-G	National Inertial Confinement Fusion Pr	81.049	477,672
6921558	PO #415023-G, UR ACCOUNT #5-24431	Fusion Science Ceneter For Extreme State	81.049	206,390
		<b>Total for 81.049</b>		<b>762,178</b>

<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	94,236
		<b>Total for 12.300</b>		<b>94,236</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917640	PO #414169-G, UR ACCT #5-28970	The Study Of Luminescent Metal Complexes	47.049	58,594
		<b>Total for 47.049</b>		<b>58,594</b>

<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	233,719
		<b>Total for 12.431</b>		<b>233,719</b>
		<b>Total for University of Rochester</b>		<b>1,148,728</b>

**Rensselaer Polytechnic Institute**

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921173	SUBAWARD A12141	Tms: Defect Modeling Beyond Density Func	81.049	122,995
		<b>Total for 81.049</b>		<b>122,995</b>
<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	40,025
		<b>Total for 12.910</b>		<b>40,025</b>
		<b>Total for Rensselaer Polytechnic Institute</b>		<b>163,020</b>

**Consortium of Ocean Leadership, Inc.**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921493	PO#: 01090130	Preparing The Enosb Software To Be Imple	11.CCC	10,140
		<b>Total for 11.CCC</b>		<b>10,140</b>
		<b>Total for Consortium of Ocean Leadership, Inc.</b>		<b>10,140</b>

**BBN Technologies Corporation**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915796	PO 9500008942	Coherent Control, Characterization And N	12.CCC	3,624
6915797	PO 9500008941	Characterization And Integration Of Flux	12.CCC	-41,063
6916929	PO 9500008393	Option ii - Phase Iii	12.CCC	-439
6919265	PO 9500008393	Option Iii - Phase Iv	12.CCC	149,377
6920544	PO 9500008942	Coherent Control, Characterization And N	12.CCC	62,417
6920572	PO 9500008941	Phase Ii: Characterization And Integrati	12.CCC	407,245
		<b>Total for 12.CCC</b>		<b>581,161</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921483	PO # 9500010219	ARRA - Design Of An Information Substrate For M	47.082	15,327
		<b>Total for 47.082</b>		<b>15,327</b>
		<b>Total for BBN Technologies Corporation</b>		<b>596,488</b>

**University of Arizona**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914344	SUBAWARD NO. Y450777	Optical Holographic Spatial-Spectral Ima	93.394	-48

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<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	173,226
6921480	Y553501	Fabricated Equipment - Confocal Volume H	93.394	6,078
		<b>Total for 93.394</b>		<b>179,257</b>
		<b>Total for University of Arizona</b>		<b>179,257</b>

**University of Washington**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916928	SUBAWARD NO. 464859	The Katrin Neutrino Experiment - Year 2	81.049	3,378
6917196	SUBAWARD NO. 464859	Fabrication: Focal Plane Calibration And	81.049	-18,018
6921349	SUBAWARD NO. 677209	The Katrin Neutrino Experiment	81.049	46,682
6921452	SUBAWARD NO. 677209	Fabricated Equipment - Focal Plane Calib	81.049	24,274
		<b>Total for 81.049</b>		<b>56,317</b>

<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	114,988
		<b>Total for 47.049</b>		<b>114,988</b>

<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	20,021
		<b>Total for 12.431</b>		<b>20,021</b>
		<b>Total for University of Washington</b>		<b>191,325</b>

**University of Connecticut**

<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	98,224
6921256	FRS NO. 525227	Chuang Research	12.800	30,962
6921451	FRS NO. 525227	Fabricated Equipment - Molecular Ion Det	12.800	23,584
		<b>Total for 12.800</b>		<b>152,770</b>

<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	72,934
		<b>Total for 93.701</b>		<b>72,934</b>
		<b>Total for University of Connecticut</b>		<b>225,703</b>

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<b>Orbital Sciences Corporation</b>		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6921450	LETTER DATED 2/9/10	Darpa F6 Value-Centric Design Methodolog	12.CCC	58,917
				<b>Total for 12.CCC</b>		<b>58,917</b>
				<b>Total for Orbital Sciences Corporation</b>		<b>58,917</b>

<b>LongWave Photonics LLC</b>		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6921447	RESEARCH AGMT UNDER NINXLOC71P	Str: Terahertz Quantum Cascade Laser Ba	43.CCC	10,820
				<b>Total for 43.CCC</b>		<b>10,820</b>
				<b>Total for LongWave Photonics LLC</b>		<b>10,820</b>

<b>NEROC</b>		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6899437	NEROC AST-0521233	Development Of A Flexible Wideband Digit	47.049	-81
		6899471	AST-0457585	Mileura Wide-Field Array Science And Tec	47.049	1,287,846
		6899748	AST-0603971	Advanced Correlation Techniques For Next	47.049	29,131
		6899980	AST-0618401	Developmentof A Wideband Digital Spectro	47.049	32,450
		6915784	AST-0705062	Developmentof A Wideband Burst Mode Data	47.049	225,517
		6916834	AST-0722168	Mri: Development Of A Cooled Sapphire O	47.049	184,576
		6918040	AST-0807843	Techniques Of Submm-Vlbi: Observing An E	47.049	178,557
		6918926	AST-0821321	Mri: Acquisition Of An Archive For The M	47.049	75,008
		6919322	AST-0457585	Mileura Wide-Field Array Science And Tec	47.049	73,164
		6920030	AST-0908731	Ultra Wideband Vlbi:Origins Of Extragala	47.049	12,562
		6920133	AST-0905844	Ati: High Sensitivity Vlbi Arrays: Towar	47.049	301,506
		6921429	AST-0722168	Cryogenic Sapphire Oscillator System - F	47.049	87
				<b>Total for 47.049</b>		<b>2,400,322</b>

		<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	296,489
				<b>Total for 47.000</b>		<b>296,489</b>
		6918253	DUE-0817136	Undergraduate Science And Technology Edu	47.076	57,591

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Total for 47.076 **57,591**  
Total for NEROC **2,754,403**

**Smithsonian Inst. - Astrophysical Observatory**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895251	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	146,813
6895252	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	1,077,399
6895253	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	163,932
6895254	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	1,327,531
6895255	SV3-73016	Support Of The Chandra X-Ray Center (Cxc	43.CCC	822,448
6919170	SV9-79008	Professional Services Related To The Tra	43.CCC	41,359
<b>Total for 43.CCC</b>				<b>3,579,482</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917390	GO8-9042B	Following A Blackhole Candidate X-Ray Tr	43.000	12,051
<b>Total for undefined</b>				<b>12,051</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915199	GO7-8039X	Precise Localization Of Neutron Star Sof	43.000	10,162
6915348	GO7-8003C	X-Ray Observations Of Jupiter In Support	43.000	2,689
6915816	GO7-8023B	Deep Chandra Observations Of The Nearest	43.000	254
6915904	GO7-8047B	X-Raying The Faintest Black Hole Binarie	43.000	25,675
6916583	GO7-8049X	From Super Eddington To Zero: Following	43.000	-8
6916867	GO7-8117A	The Definitive Chandra Observations Of N	43.000	25,144
6917212	TM8-9002X	Learning How Globular Cluster Lmxbs And	43.000	950
6917213	TM8-9005X	Extending The Non-Equilibrium Ionization	43.000	11,867
6917214	GO8-9058B	Chandra Observations Of Young, Energetic	43.000	7,196
6917331	GO8-9113B	Surveying X-Ray Jets In Superluminal Bla	43.000	1,307
6917332	GO8-9051X	Precise Localization Of Neutron Star Sof	43.000	384
6917333	GO7-8098B	Microensing Of The Quadruply Lensed Qua	43.000	5,413
6917631	GO8-9019B	Polar Exploration And Coronal Structure	43.000	5,192
6917690	GO8-9036X	Joint Xmm-Newton, Chandra, And Rxtie Obse	43.000	566
6917773	GO8-9047B	Monitoring Observations Of The Galacti	43.000	18,542
6918123	GO8-9044X	Photoionization In The Microquasar Circi	43.000	40,118
6918653	GO9-0119X	The Nature Of Active Nuclei In Radio Gal	43.000	4,655
6918731	GO8-9071X	Measuring The Expansion Rate Of G266.2-1	43.000	21,533
6918837	GO8-9045X	Quasi-Persistent Neutron-Star X-Ray Bina	43.000	4,104
6918902	GO8-9084A	X-Ray Localization Of The Globular Clust	43.000	4,422

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919114	G09-0121A	Completing A Flux-Limited Survey For X-R	43.000	40,078
6919115	G09-0012X	Anomalous Adara: The Spatial And Spectra	43.000	21,409
6919171	AR9-0019X	Galaxy Cluster Scaling Relation Evolutio	43.000	4,908
6919258	G09-0069A	The Spin And Magnetic Moment Of The Neut	43.000	49,755
6919279	G09-0057X	The Cooling Neutron Star In Super-Edding	43.000	53,811
6919581	G09-0025B	Chandra Observation Of A New Galactic Gl	43.000	5,993
6919772	G09-0101X	Multiwavelength Monitoring Of The Spectr	43.000	30,258
6920558	G09-0040X	Precise Localization Of Neutron Star Sof	43.000	4,817
6920568	G09-0054X	Validating Neutron Star Radius Measureme	43.000	31,445
6920772	G09-0153X	Understanding Group Evolution With Chand	43.000	3,290
6920773	G09-0035X	Investigating New Integral Sources With	43.000	9,104
6920972	G00-11001X	The Mechanism Of Jet Formation In Cyg X-	43.000	10,153
6921294	G00-11107X	Search For The Most Luminous Ulxs In Col	43.000	27,201
6921295	G00-11143C	Chandra Observations Of A Complete Sampl	43.000	12,220
6921319	AR0-11005X	The Physical Properties Of Accretion Dis	43.000	50,746
6921403	G00-11126X	Variability And Particle Acceleration In	43.000	6,946
6921424	G00-11060X	Spectroscopy Of The Resurgent Ultracomp	43.000	13,902
		<b>Total for 43.000</b>		<b>566,203</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919112	SV9-79006	The Development Of A Laser-Comb For High	47.000	13,759
		<b>Total for 47.000</b>		<b>13,759</b>
		<b>Total for Smithsonian Inst. - Astrophysical Observatory</b>		<b>4,171,495</b>

**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	54,227
		<b>Total for 81.CCC</b>		<b>54,227</b>
		<b>Total for Brookhaven National Laboratory</b>		<b>54,227</b>

**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	152,418
6919778	N68335-09-C-0590	Real-Time Determination And Prediction O	12.CCC	34,088
6921414	SBIR 1498-1-MIT	Sbir - Dynamic Surface Control For Nauti	12.CCC	2,250
				---



**Appendix A-3 - Detail  
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Total for 12.CCC **188,757**  
 Total for Scientific Systems Company, Incorporated **188,757**

**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	25,000
		<b>Total for 12.CCC</b>		<b>25,000</b>
		<b>Total for UtopiaCompression Corporation</b>		<b>25,000</b>

**Draper Laboratory Incorporated**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917951	PO #SC001-286	Optimization-Based Data Mining In Health	12.CCC	301
6917952	SC001-0000000298	Miniaturized, High-Bandwidth Power Elect	12.CCC	5,140
6917955	SC001-0280	Microengineered Liver Tissue Constructs	12.CCC	3,079
6917956	SC001-0300	Initiated Chemical Vapor Deposition (Icv	12.CCC	2,175
6917991	SC001-285	Tiny Transmission Technologies For Wirel	12.CCC	-1,904
6918030	SC001-0282	Augmenting Human Cognition Through Quest	12.CCC	2,964
6918032	SC001-0288	Multiplexed Microfluidic Platform For Dr	12.CCC	-3,181
6918033	SC001-0281	Lagi Vision-Based Localization Annotatio	12.CCC	1,816
6918206	SC001-0301	Decision Aids For The Qualitative Analys	12.CCC	55
6918233	SC001-0284	Indoor Flight Of Autonomous Uavs	12.CCC	-9,061
6919340	SC001-000000298	Child Account - Mosis Charges	12.CCC	-262
6919762	PO #SC001-383	Optimization-Based Data Mining	12.CCC	99,999
6919775	SC001-369	Augmenting Human Cognition Through Quest	12.CCC	102,018
6919776	SC001-381	Development Of Microfluidic Platform Tec	12.CCC	74,997
6919836	SC001-394	Decision Aids For The Qualitative Analys	12.CCC	102,638
6919841	SC001-366	Generalized Filtering For Navigation	12.CCC	90,053
6919920	SC001-399	Architecture Of Earth Observing Systems	12.CCC	57,948
6919944	SC001-364	Development Of Small, Light Lander/Hoppe	12.CCC	31,676
6921334	SC001-364	Fabricated Equipment - Talaris Lunar Veh	12.CCC	32,316
		<b>Total for 12.CCC</b>		<b>592,767</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920818	SC001-417	Microfluidic 3D Scaffold Assay For Cance	93.396	83,682
		<b>Total for 93.396</b>		<b>83,682</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917252	SC001-268	Development Of Novel Hollow-Core Plastic	12.000	-6,554
		<b>Total for 12.000</b>		<b>-6,554</b>
		<b>Total for Draper Laboratory Incorporated</b>		<b>669,895</b>

**Weill Medical College**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919181	08040560	Design Of Peptide Entry Inhibitors & Del	93.855	83,135
		<b>Total for 93.855</b>		<b>83,135</b>

<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	24,730
		<b>Total for 93.701</b>		<b>24,730</b>
		<b>Total for Weill Medical College</b>		<b>107,865</b>

**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	154,689
		<b>Total for 12.CCC</b>		<b>154,689</b>
		<b>Total for UES, Inc.</b>		<b>154,689</b>

**University of California - Berkeley**

<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	52,147
		<b>Total for 43.CCC</b>		<b>52,147</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898790	SA4995-10929 PO#1-0001099151	Effective Bayesian Transfer Learning	12.CCC	75,612
6914502	SA5413-79952	Uc Berkeley Gsrc Marco - Year 1	12.CCC	8,381
6915765	SA5413-79952	Amarasinghe Child	12.CCC	19,028
		<b>Total for 12.CCC</b>		<b>103,021</b>

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<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	107,517
		<b>Total for 12.910</b>		<b>107,517</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898625	SA4888-10787 PO#1085323	Nets-Nbd: Internet Revolution Through Fi	47.070	177,462
6921266	00006900	Modeling Analysis And Control Of Distrib	47.070	71,180
		<b>Total for 47.070</b>		<b>248,642</b>

<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	109,361
		<b>Total for 12.800</b>		<b>109,361</b>

<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	201,096
6914149	SA5284-11210	Synberc: Child Knight	47.041	195,136
6914151	SA5284-11210	Synberc: Child Rettberg	47.041	294,024
6915191	SA5592-11210	Synberc: Thrust Iv Human Practives, Mod	47.041	45,410
6917043	SA5284-11210	Synberc: Child Kuldell	47.041	28,302
6918846	SUBAWARD NO. 00006178	Center For Scalable And Integrated Nanom	47.041	83,183
6921117	SA5284-11210	Synberc:Synthetic Biology Engineering	47.041	98,676
6921118	SA5284-11210	Synberc:Synthetic Biology Engineering	47.041	114,353
6921229	00006991	Nsec: Center For Scalable & Integrated N	47.041	29,071
6921230	00006934	Nsec: Center For Scalable & Integrated N	47.041	42,768
		<b>Total for 47.041</b>		<b>1,132,020</b>

<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	221,691
6919274	SA5211-11087	Fisher - Child	12.431	253,845
		<b>Total for 12.431</b>		<b>475,536</b>
		<b>Total for University of California - Berkeley</b>		<b>2,228,243</b>

**University of California - San Francisco**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917934	4158SC (AMEND. #4)	A Haplotype Map For Multiple Sclerosis	93.853	2,387

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918670	4714SC	Experimentally Validated Mathematical Mo	93.394	6,792
6921298	4714SC	Experimentally Validated Mathematical Mo	93.394	17,345
		<b>Total for 93.394</b>		<b>24,137</b>
		<b>Total for University of California - San Francisco</b>		<b>26,524</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		Changes Of Land-Cover And Land-Use And G	43.CCC	39,868
		<b>Total for 43.CCC</b>		<b>39,868</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915260	AGREEMENT NO. 4104-16805	3D Photonic-Crystal Chips As Sensor Netw	12.CCC	-77
6918661	AGMT. NO. 4104-23214	Nanoscale Optical Antenna Array For Cont	12.CCC	120,209
		<b>Total for 12.CCC</b>		<b>120,132</b>

**Purdue University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919995	AGMT. NO. 4103-30368	Exploratory Study Of Environmental Effec	93.394	877
		<b>Total for 93.394</b>		<b>877</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918125	SUBAWARD #4101-24873	Polaritronics Platform For Terhertz Signa	47.041	54,231
6921215	SUBAWARD #4101-32475	Non@Mit University Partnership	47.041	174,436
6921296	SUBAWARD #4101-32475	D. Brock Non	47.041	1,443
		<b>Total for 47.041</b>		<b>230,110</b>
		<b>Total for Purdue University</b>		<b>390,987</b>

**Naval Postgraduate School**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919342	N00244-09-1-0064	Dod Cap Funds - Fy09 Appropriation	12.300	454,919
6921254	NN00244-10-1-0023	Application Of Prediction Markets To Cos	12.300	36,341
		<b>Total for 12.300</b>		<b>491,260</b>
		<b>Total for Naval Postgraduate School</b>		<b>491,260</b>

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491,400

TOTAL FOR NAVAL POSTGRADUATE SCHOOL

**Center for Integration of Medicine & Innovative Technol**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917696	SUB UNDER W81XWH-07-2-0011-FUND 205743	Finding Medically Relevant Patterns In L	12.CCC	10,997
6917993	W81XWH-07-2-0011	High Throughput Flow System For The Gene	12.CCC	-8
6921231	W81XWH-07-2-0011 / FUND 215439	Tissue Engineering Therapies For Inhalat	12.CCC	76,805
		<b>Total for 12.CCC</b>		<b>87,794</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918270	W81XWH-07-2-0011	Design Of An Autonomous Brain-Body Inter	12.420	40,269
		<b>Total for 12.420</b>		<b>40,269</b>
		<b>Total for Center for Integration of Medicine &amp; Innovative Technology</b>		<b>128,063</b>

**Dana Farber Cancer Institute**

<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	20,198
		<b>Total for 93.855</b>		<b>20,198</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920872	2835809	ARRA - Hivrad: Structural Approaches To Vaccine	93.701	140,130
		<b>Total for 93.701</b>		<b>140,130</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919087	5-P01-CA117969-04	Project 4: Pancreatic Adenocarcinoma Ce	93.396	185,828
6921216	5-P01-CA117969-05	Project 4: Pancreatic Adenocarcinoma Ce	93.396	109,861
		<b>Total for 93.396</b>		<b>295,689</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916710	1137102	Chemical Biology Of Diabetes-Mootha	93.847	155,856
6916711	1137102	Chemical Biology Of Diabetes-Schreiber	93.847	8,207
		<b>Total for 93.847</b>		<b>164,063</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918910	SUB UNDER 5-R01-CA129435-02	Fine Mapping And Characterization Of The	93.393	9,652
		<b>Total for 93.393</b>		<b>9,652</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916461	5-U54-CA112962-04	Signatures Of Kinase Activation In Cance	93.397	-5,895
6918220	1060007	Modulating Transcription Factor Targets	93.397	50
6918221	1060007	Df/Hcc Spore In Prostate Cancer (Core 2)	93.397	-2,999
6918292	5-U54-CA112962-05	Signatures Of Kinase Activation In Cance	93.397	26,711
		<b>Total for 93.397</b>		<b>17,867</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918219	5-P01-CA092625-08	Molecular Targets Of Germinal Center B C	93.395	8,785
		<b>Total for 93.395</b>		<b>8,785</b>
		<b>Total for Dana Farber Cancer Institute</b>		<b>656,384</b>
<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	34,263
		<b>Total for 12.CCC</b>		<b>34,263</b>
<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	109,587
6899946	FOUNDATION PROJECT #60006916	Willsky - Child	12.800	58,715
		<b>Total for 12.800</b>		<b>168,302</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6921207	PO NO. RF01192687 PROJECT NO. 60023094	Automated, Flexible And Massively Parall	47.041	63,522
		<b>Total for 47.041</b>		<b>63,522</b>
<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	172,862
		<b>Total for 12.431</b>		<b>172,862</b>
		<b>Total for The Ohio State University Foundation</b>		<b>438,949</b>

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**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	12,475
6921202	STTR SUBCONTRACT UNDER DE-SC0003575	ARRA - Str: Nonintrusive Utility Monitoring -	81.049	89,294
		<b>Total for 81.049</b>		<b>101,769</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914441	AGMT DTD 6/8/2006	Advanced Power Monitor	43.CCC	49,324
		<b>Total for 43.CCC</b>		<b>49,324</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915178	AGMT SIGNED 4/1/07	Str Phase II-Hvac Diagnostic Monitoring	47.041	-161
		<b>Total for 47.041</b>		<b>-161</b>
		<b>Total for Nemometrics LLC</b>		<b>150,933</b>

**Carnegie-Mellon University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895401	1010168	A Collaborative Multi-University Researc	12.910	52,825
		<b>Total for 12.910</b>		<b>52,825</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916412	SUBCONTRACT 1121043-197974	Integrating The Local And Global Structu	47.070	-9,046
		<b>Total for 47.070</b>		<b>-9,046</b>

<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	93,996
		<b>Total for 12.300</b>		<b>93,996</b>

<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	72,791
6918905	1150069-218432	Human Automated Planner Interaction For	12.800	84,839
		<b>Total for 12.800</b>		<b>157,630</b>
		<b>Total for Carnegie-Mellon University</b>		<b>295,405</b>

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<b>University of Kentucky</b>					
<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	216,342	
		<b>Total for 93.701</b>		<b>216,342</b>	
<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	168,873	
		<b>Total for 47.041</b>		<b>168,873</b>	
		<b>Total for University of Kentucky</b>		<b>385,215</b>	
<b>University of Utah</b>					
<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	78,407	
		<b>Total for 93.847</b>		<b>78,407</b>	
<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	50,284	
		<b>Total for 12.431</b>		<b>50,284</b>	
		<b>Total for University of Utah</b>		<b>128,691</b>	
<b>Decisive Analytics Corporation</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6921152	W31P4Q-09-C-0041	Probabilistic Logic For Knowledge Repres	12.CCC	30,000	
		<b>Total for 12.CCC</b>		<b>30,000</b>	
		<b>Total for Decisive Analytics Corporation</b>		<b>30,000</b>	
<b>Woods Hole Oceanographic Institute</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6917622	AGMT. NO. A100589	Oxidatively Damaged Nucleic Acids In Mar	93.113	10,417	
		<b>Total for 93.113</b>		<b>10,417</b>	



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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>
6915384	AGMT. NO. A100529	Muri: Underwater Acoustic Propagation An	12.300	29,789
6915781	AGMT. NO. A100537	Full-Scale Measurement And Prediction Of	12.300	31,029
6915893	AGMT. NO. A100529	A. Baggeroer Child	12.300	89,813
6921145	AGMT. NO. A100529	G. Wormell Child	12.300	98,039
		<b>Total for 12.300</b>		<b>248,671</b>

<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	59,111
		<b>Total for 47.050</b>		<b>59,111</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899353	A100462	Seasonal Forcing Of Submarine Groundwater	11.417	149
		<b>Total for 11.417</b>		<b>149</b>
		<b>Total for Woods Hole Oceanographic Institute</b>		<b>318,348</b>

**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	264,348
		<b>Total for 12.CCC</b>		<b>264,348</b>
		<b>Total for Logos Technologies, Inc.</b>		<b>264,348</b>

**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	58,259
		<b>Total for 43.CCC</b>		<b>58,259</b>
		<b>Total for Florida Institute of Technology</b>		<b>58,259</b>

**Princeton University**

<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 Comb	81.049	163,638
		<b>Total for 81.049</b>		<b>163,638</b>

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<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	90,399
		<b>Total for 12.910</b>		<b>90,399</b>
<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	73,368
6915084	00000917	Optimal Asset Distribution For Environme	12.300	92,000
6919867	00000917	Navigation And Autonomy For Cooperative	12.300	44,344
		<b>Total for 12.300</b>		<b>209,712</b>
<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	151,112
		<b>Total for 12.800</b>		<b>151,112</b>
<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	102,307
		<b>Total for 12.431</b>		<b>102,307</b>
		<b>Total for Princeton University</b>		<b>717,168</b>
<b>Beth Israel Hospital</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917911	2-P01-CA089021-07	The Role Of Pten And The P13K Pathway In	93.396	-177
		<b>Total for 93.396</b>		<b>-177</b>
<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	20,651
6921073	1-R18-HS017907-02	Optimizing Safety In Ambulatory Procedur	93.226	44,896
		<b>Total for 93.226</b>		<b>65,547</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918597	1-U01-EB008577-02	Research Resource For Complex Physiologi	93.286	-7,465
6920168	1-U01-EB008577-03	Research Resource For Complex Physiologi	93.286	421,934
		<b>Total for 93.286</b>		<b>414,469</b>

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6918035	SUB UDR. 5-R01-DK015681-35S1	GI Mucosal Barrier In Health & Surgical	93.848	-34
6918144	BILLING AGREEMENT	GI Mucosal Barrier In Health & Surgical	93.848	-44
		<b>Total for 93.848</b>		<b>-79</b>
		<b>Total for Beth Israel Hospital</b>		<b>479,760</b>

**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	5,096
6917123	HST-GO-11165.01-A	The Radius Of The Super-Neptune Hd 14902	43.000	-806
6917391	HST-GO-11014.03	Primordial Formation Of Close Binaries I	43.000	21,855
6917658	HST-GO-11136.05-A	Resolving Ultracool Astrophysics With Br	43.000	561
6920970	HST-AR-11252.04-A	Ultraluminous X-Ray Sources In Elliptica	43.000	3,349
6920971	HST-GO-111838.01-A	Completing A Flux-Limited Survey For X-R	43.000	38,798
6921065	HST-GO-11730.01	Continued Proper Motions Of The Magellan	43.000	3,492
		<b>Total for 43.000</b>		<b>72,385</b>
		<b>Total for Space Telescope Science Institute</b>		<b>72,385</b>

**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	5,757
		<b>Total for 12.CCC</b>		<b>5,757</b>
		<b>Total for NanoLab, Inc.</b>		<b>5,757</b>

**Princeton Plasma Physics Laboratory**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919107	SUBCONTRACT NO. S008528F	Feasibility Study For Employing High Tem	81.CCC	9,971
6920926	SUBCONTRACT NO. S009248-F	Pertaining To Fatigue And Fracture Analy	81.CCC	47,274
6921056	SUBCONTRACT NO. S009403-F	Feasibility Study For Employing High Tem	81.CCC	38,445
		<b>Total for 81.CCC</b>		<b>95,690</b>
		<b>Total for Princeton Plasma Physics Laboratory</b>		<b>95,690</b>

**Brown University**

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915712	SUBAWARD 00000091; P.O. #P995458	Reduced Basis Approximation And A Poster	12.800	52,689
6916449	PO #P996642	Biologically Inspired Flight For Micro A	12.800	215,829
6920882	00000272	Multi-Scale Fusion Of Information For Un	12.800	101,831
6920918	00000272	Willcox Child Account	12.800	64,227
		<b>Total for 12.800</b>		<b>434,575</b>
<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	84,095
		<b>Total for 93.839</b>		<b>84,095</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916927	SUBAWARD 00000127; PO #P997629	The Lithosphere-Asthenosphere Boundary:	47.050	82,731
		<b>Total for 47.050</b>		<b>82,731</b>
<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	129,961
		<b>Total for 93.865</b>		<b>129,961</b>
		<b>Total for Brown University</b>		<b>731,362</b>
<b>University of North Carolina-Chapel Hill</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918972	5-50741	Bioengineering Partnership To Improve Ch	93.114	76,783
6921047	5-50741	Bioengineering Partnership To Improve Ch	93.114	66,349
		<b>Total for 93.114</b>		<b>143,132</b>
		<b>Total for University of North Carolina-Chapel Hill</b>		<b>143,132</b>
<b>Burke Medical Research Institute</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897416	CO197723786	Hudraulic Actuation System For Wrist Rob	93.CCC	-1,804
		<b>Total for 93.CCC</b>		<b>-1,804</b>

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<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	66,181
		<b>Total for 93.701</b>		<b>66,181</b>
		<b>Total for Burke Medical Research Institute</b>		<b>64,377</b>

**Research Foundation S.U.N.Y.**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918142	SUBAWARD 1071393-1-46659	Molecular Toxicology Of Dna Adducts - Pr	93.113	-118
6921013	1078897-2-50158	Molecular Toxicology Of Dna Adducts - Pr	93.113	28,246
		<b>Total for 93.113</b>		<b>28,128</b>
		<b>Total for Research Foundation S.U.N.Y.</b>		<b>28,128</b>

**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	269,302
6895310	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	157,065
6895311	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	38,658
6895312	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	42,894
6895313	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	98,004
6895314	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	247,006
6895316	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	145,532
6895319	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	63,087
6895320	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	124,369
6895321	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	12,919
6895322	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	15,000
6895323	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	7,300
6895324	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	630,505
6895325	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	326,902
6895326	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	102,762
6895327	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	51,295
6895328	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	15,000
6895329	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	917,467
6895330	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	216,409
6895331	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	58,671
6895332	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	6,500

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895333	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	15,000
6897721	NO. 2003-MT-887	Focus Center On Nano-Scale Technology -	12.CCC	52,357
6914385	NO. 2003-MT-887	Ucsd Subcontract	12.CCC	153,044
6914386	NO. 2003-MT-887	Uiuc Subcontract	12.CCC	129,969
6914387	NO. 2003-MT-887	Ut Dallas Subcontract	12.CCC	103,782
6914391	NO. 2003-MT-887	Focus Center On Nano-Scale Technology	12.CCC	18,421
6920986	NO. 2009-MT-2051	Cornell University	12.CCC	144,455
6920988	NO. 2009-MT-2051	Penn State	12.CCC	34,459
6920989	NO. 2009-MT-2051	University Of Pennsylvania	12.CCC	68,119
6920990	NO. 2009-MT-2051	Purdue University	12.CCC	241,072
6920991	NO. 2009-MT-2051	Stanford University	12.CCC	331,733
6920992	NO. 2009-MT-2051	Suny Albany	12.CCC	39,445
6920993	NO. 2009-MT-2051	University Of California Berkeley	12.CCC	364,726
6920994	NO. 2009-MT-2051	University Of California San Diego	12.CCC	113,883
6920995	NO. 2009-MT-2051	University Of Illinois Chicago	12.CCC	86,674
6920996	NO. 2009-MT-2051	University Of Massachusetts	12.CCC	7,006
6920998	NO. 2009-MT-2051	University Of Texas Dallas	12.CCC	93,273
6921000	NO. 2009-MT-2051	Antoniadis	12.CCC	128,702
6921001	NO. 2009-MT-2051	Bulovic	12.CCC	94,492
6921002	NO. 2009-MT-2051	Dealamo	12.CCC	107,445
6921003	NO. 2009-MT-2051	Fitzgerald	12.CCC	149,203
6921004	NO. 2009-MT-2051	Hoyt	12.CCC	149,581
6921005	NO. 2009-MT-2051	Jing Kong	12.CCC	40,781
6921006	NO. 2009-MT-2051	Tomas Palacios	12.CCC	42,090
6921010	NO. 2009-MT-2051	Dana Weinstein	12.CCC	42,620
6921011	NO. 2009-MT-2051	Program Admin	12.CCC	214,347
		<b>Total for 12.CCC</b>		<b>6,513,324</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914384	NO. 2003-MT-887	Umass Subcontract	12.910	79,996
		<b>Total for 12.910</b>		<b>79,996</b>
		<b>Total for Microelectronics Advanced Research Corp.</b>		<b>6,593,320</b>

**InfoScitex Corporation**

<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	221,902
		<b>Total for 93.837</b>		<b>221,902</b>

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<b>Baylor College of Medicine</b>		<b>Total for InfoScitex Corporation</b>		<b>221,902</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918740	SA01301	Advanced Displays For Efficient Training	43.000	133,762
6918750	SA01302	Modeling And Mitigating Spatial Disorien	43.000	42,611
6919644	NBPF 02001	Validation Of Assessment Tests And Count	43.000	197,612
6920189	SA01301	Advanced Displays For Efficient Training	43.000	263,475
6920196	SA01302	Modeling And Mitigating Spatial Disorien	43.000	98,690
6920367	HFP02001	Human Automation Interactions And Perfor	43.000	177,833
6920583	HFP00003	Thermal Control During Astronaut Travers	43.000	77,455
		<b>Total for 43.000</b>		<b>991,438</b>
<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	71,276
		<b>Total for 93.701</b>		<b>71,276</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918831	22599- PRIME 5-PN2-EY016525-05	Center For Protein Folding Machinery	93.867	99,003
6918839	22599- PRIME 5-PN2-EY016525-05	Center For Protein Folding Machinery	93.867	11,318
6920952	SHOPPING CART NO. 101140603 - PRIME 5-PN2-EY016525-06 - PO 5600503246	Center For Protein Folding Machinery	93.867	231,668
6920980	SHOPPING CART NO. 101140603 - PRIME 5-PN2-EY016525-06	Center For Protein Folding Machinery - G	93.867	53,308
		<b>Total for 93.867</b>		<b>395,296</b>
<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	34,801
		<b>Total for 93.848</b>		<b>34,801</b>
		<b>Total for Baylor College of Medicine</b>		<b>1,492,811</b>
<b>University of Louisville Research Foundation</b>				
<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	13,736
		<b>Total for 47.041</b>		<b>13,736</b>

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6920973	SUBAWARD NO. ULRF 09-0532-01	Enhancement Of Exciton Dissociation In	47.000	16,167
		<b>Total for 47.000</b>		<b>16,167</b>
		<b>Total for University of Louisville Research Foundation</b>		<b>29,903</b>

**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	34,662
		<b>Total for 43.CCC</b>		<b>34,662</b>
		<b>Total for ExplorationWorks</b>		<b>34,662</b>

**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	109,320
		<b>Total for 47.070</b>		<b>109,320</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916475	0000221214	Candidate Gene Studies Of Obesity Guided	93.848	34,981
6919746	TBD	Candidate Gene Studies Of Obesity Guided	93.848	-16,599
		<b>Total for 93.848</b>		<b>18,383</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915863	5-R01-CA109467-05	Genomic Analysis Of Medulloblastomas	93.395	-1,661
		<b>Total for 93.395</b>		<b>-1,661</b>
		<b>Total for Children's Hospital Boston</b>		<b>126,041</b>

**University of Minnesota**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917008	X5336545105	Radiation Belt Storm Probe Efw Project	43.CCC	1,628
		<b>Total for 43.CCC</b>		<b>1,628</b>



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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>
6915122	B6367592202	Candidate Pathway Genetic Analysis In Hu	93.837	4,051
		<b>Total for 93.837</b>		<b>4,051</b>
<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	52,321
		<b>Total for 12.351</b>		<b>52,321</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6896659	T4146359101	Wheat Stem Rust Fungus Genome Sequencing	47.074	-772
		<b>Total for 47.074</b>		<b>-772</b>
		<b>Total for University of Minnesota</b>		<b>57,227</b>

**National Academy of Sciences**

<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	248,586
		<b>Total for 20.200</b>		<b>248,586</b>
		<b>Total for National Academy of Sciences</b>		<b>248,586</b>

**Columbia University**

<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	10,399
		<b>Total for 47.082</b>		<b>10,399</b>
<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	69,798
6917022	5-32460	Mouse Models Of Gastric Cancer	93.393	32,560
		<b>Total for 93.393</b>		<b>102,359</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918386	5-67471	Nation Center: Multi-Scale Study-Cellula	93.390	4,252
		<b>Total for 93.390</b>		<b>4,252</b>
		<b>Total for Columbia University</b>		<b>117,010</b>

**Appendix A-3 - Detail  
Massachusetts Institute of Technology  
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<b>University of Massachusetts</b>		<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	80,593
				<b>Total for 93.701</b>		<b>80,593</b>
		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6916777	SUBAWARD NO. 08.004588-A00	Interactive Vision Tools To Interact And	47.074	134,980
				<b>Total for 47.074</b>		<b>134,980</b>
				<b>Total for University of Massachusetts</b>		<b>215,573</b>

**Stanford University**

		<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	127,136
				<b>Total for 43.CCC</b>		<b>127,136</b>
		<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
		6920770	24147600-43152-A	Nano Structured Thermomechanical Interfa	12.300	14,980
				<b>Total for 12.300</b>		<b>14,980</b>
		<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	143,318
				<b>Total for 47.041</b>		<b>143,318</b>

		<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	148,301
		6920898	18870740-37362-C	Medard - Capacity, Cooperation, & Optimiz	12.630	114,884
		6920900	18870740-37362-C	Shah - Capacity, Cooperation, & Optimiza	12.630	37,160
		6920901	18870740-37362-C	Zheng - Capacity, Cooperation, & Optimiz	12.630	64,989
				<b>Total for 12.630</b>		<b>365,334</b>
		<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	283,221
				<b>Total for 12.431</b>		<b>283,221</b>

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		Total for Stanford University		933,991
<b>Symmetricom, Inc.</b>				
<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	169,317
6920881	PO EA39380BV	Fabricated Equipment - Miniature Cold-At	12.CCC	21,773
<b>Total for 12.CCC</b>				<b>191,089</b>
<b>Total for Symmetricom, Inc.</b>				<b>191,089</b>
 <b>Rehabilitation Institute of Chicago</b>				
<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	71,324
<b>Total for 12.42</b>				<b>71,324</b>
<b>Total for Rehabilitation Institute of Chicago</b>				<b>71,324</b>
 <b>Mayo Clinic Rochester</b>				
<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 Accu	93.286	8,683
<b>Total for 93.286</b>				<b>8,683</b>
<b>Total for Mayo Clinic Rochester</b>				<b>8,683</b>
 <b>J. David Gladstone Institutes</b>				
<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	6,121
<b>Total for 93.837</b>				<b>6,121</b>
<b>Total for J. David Gladstone Institutes</b>				<b>6,121</b>
 <b>Vanderbilt University</b>				
<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	41,469
<b>Total for 93.393</b>				<b>41,469</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915924	VUMC33408-R-1	Physical Activity Energy Expenditure And	93.848	-3,497
		<b>Total for 93.848</b>		<b>-3,497</b>
		<b>Total for Vanderbilt University</b>		<b>37,972</b>

**Temple University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920819	238899	Evaluation Of Cartilage Tissue Engineeri	93.846	21,303
		<b>Total for 93.846</b>		<b>21,303</b>
		<b>Total for Temple University</b>		<b>21,303</b>

**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	36,612
		<b>Total for 93.859</b>		<b>36,612</b>
		<b>Total for Texas A &amp; M</b>		<b>43,182</b>

**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	42,581
		<b>Total for 12.CCC</b>		<b>42,581</b>
		<b>Total for Weston Geophysical Corporation</b>		<b>136,791</b>

**Research Foundation of SUNY-Albany**

<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	94,210
		<b>Total for 81.CCC</b>		<b>94,210</b>

**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>
6920792	09-18	Rna Modifications As Biomarkers Of Envir	93.113	190,457
		<b>Total for 93.113</b>		<b>190,457</b>
<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	115,342
6919155	SUBCONTRACT AGMT. #08-58	Nri/Index Program: Supplemental Project	11.CCC	127,999
6919724	SUBCONTRACT AGMT. #08-58	Index Program: Supplemental Projects	11.CCC	2,595
6919725	SUBCONTRACT AGMT. #08-58	Index Program: Supplemental Projects	11.CCC	66,589
6919726	SUBCONTRACT AGMT. #08-58	Index Program: Supplemental Projects	11.CCC	47,290
		<b>Total for 11.CCC</b>		<b>363,469</b>
		<b>Total for Research Foundation of SUNY-Albany</b>		<b>553,926</b>

**The Wellcome Trust**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919195	SUBAWARD 0244-05	Integrated Human Genome Annotation: Gene	93.172	54,810
6920790	SUBAWARD 0244-05	Integrated Human Genome Annotation: Gene	93.172	149,422
		<b>Total for 93.172</b>		<b>204,232</b>
		<b>Total for The Wellcome Trust</b>		<b>204,232</b>

**Lawrence Berkeley National Laboratory**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6893506	PO 6806960	High Capacity , Stable Cathode Materials	81.CCC	431,525
6899207	SUBCONTRACT NO. 6804921	Tem And Alm Studies Of Nanoparticle Coat	81.CCC	320,007
6917334	SUBCONTRACT NO. 6838062	Molecular Determinants Of Community Acti	81.CCC	24,607
6918866	SUBCONTRACT NO. 6864973	Application Of Microearthquake (Mfq) Mon	81.CCC	725
6920789	SUBCONTRACT NO. 6896518	Center For Nanoscale Control Of Geologic	81.CCC	54,234
		<b>Total for 81.CCC</b>		<b>831,098</b>
		<b>Total for Lawrence Berkeley National Laboratory</b>		<b>831,098</b>

**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	237,697

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Total for 93.310  
Total for Rockefeller University  
**237,697**  
**237,697**

**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	22,440
		<b>Total for 43.000</b>		<b>22,440</b>
		<b>Total for Atmospheric and Environmental Research, Incorporated</b>		<b>22,440</b>

**The Scripps Research Institute**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918747	PO #5-21068	Bioinformatics Core	93.859	162,184
6920767	PO #5-21189	Bioinformatics Core	93.859	873,034
		<b>Total for 93.859</b>		<b>1,035,218</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917785	PO 10285732 PRIME FA8718-07-C-0005	Extracting Short Period Surface Waveform	12.000	21,262
		<b>Total for 12.000</b>		<b>21,262</b>
		<b>Total for The Scripps Research Institute</b>		<b>1,056,481</b>

**Georgia Institute of Technology**

<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	83,544
		<b>Total for 43.CCC</b>		<b>83,544</b>

<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	26,104
6920742	R0897-G15	Game Theoretic Learning For Distributed	12.300	72,416
		<b>Total for 12.300</b>		<b>98,520</b>

<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	40,557
6920503	R6756-G2	Muri-09: Distributed Learning And Inform	12.800	17,624
6920755	R6756-G2	Muri-09: Distributed Learning And Inform	12.800	104,016

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Total for 12.800 **162,198**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917107	SUBGRANT NO. R8722-G1	Integration And Use Of Apmt Environmenta	43.000	4,243
6918603	R9710-G1	Impact Of Degraded Environment On Airspa	43.000	144,045
		<b>Total for 43.000</b>		<b>148,288</b>

<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	53,656
		<b>Total for 47.041</b>		<b>53,656</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918825	R7747-G8 (YR2)	Nanomedicine Center For Nucleoprotein Ma	93.867	93,102
6920707	R7747-G8 YEAR 4	Nanomedicine Center For Nucleoprotein Ma	93.867	195,759
		<b>Total for 93.867</b>		<b>288,862</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895204	E-16-V91-G1	Sensor Design For Active Vision Control	12.630	-2,993
		<b>Total for 12.630</b>		<b>-2,993</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6896667	E-21-6RT-G2	Muri: Human Signatures For Personnel Det	12.431	85,267
6918210	D5802-G2	Integrated Optics Technology For Ion Tra	12.431	146,342
		<b>Total for 12.431</b>		<b>231,609</b>
		<b>Total for Georgia Institute of Technology</b>		<b>1,063,684</b>

**Florida State University Foundation, Incorporated**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917412	SUBAWARD NO. R00907	Electric Ship Systems Research And Devel	12.CCC	-1,967
6917413	SUBAWARD NO. R00907	Task 3.4 Slip Ring Motors For Ship Propu	12.CCC	69,473
6917414	SUBAWARD NO. R00907	Task 3.5 Electric Distribution Systems S	12.CCC	111,487
6917415	SUBAWARD NO. R00907	Task 3.5 Electric Distribution Systems S	12.CCC	73,127
6917416	SUBAWARD NO. R00907	Task 3.6 Control And Protection Systems	12.CCC	95,869
6917417	SUBAWARD NO. R00907	Task 3.7 Research Integration And Techno	12.CCC	125,262
6917497	SUBAWARD NO. R00907	Esrdc Integration And Technology	12.CCC	107,879

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917498	SUBAWARD NO. R00907	Esrdc Board	12.CCC	91,475
6920750	SUBAWARD NO. R00907	Fabricated Equipment - Hydrokinetic Turb	12.CCC	19,232
		<b>Total for 12.CCC</b>		<b>691,837</b>
<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	1,397
		<b>Total for 12.300</b>		<b>1,397</b>
		<b>Total for Florida State University Foundation, Incorporated</b>		<b>693,234</b>

**L3 Communications**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919111	SUBCONTRACT #M152981	Advanced Technology Demonstration For Ra	97.CCC	129,643
6920745	SUBCONTRACT #M152981	Phase II: Advanced Technology Demonstrat	97.CCC	497,852
		<b>Total for 97.CCC</b>		<b>627,494</b>
		<b>Total for L3 Communications</b>		<b>627,494</b>

**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	159,418
6918762	PO#50905 NOSTRA:54931	Str: Nostra: Power System Condition Mon	12.CCC	113,298
6919184	PO 48486	Fabricated Equipment-Darpa Chembots	12.CCC	6,539
6920705	PO 48486	Kim Child Account	12.CCC	120,040
		<b>Total for 12.CCC</b>		<b>399,294</b>
		<b>Total for IRobot Corporation</b>		<b>399,294</b>

**Q-Peak, Inc.**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920673	STTR AGREEMENT DTD 09/25/09	Str: Mid-Ir Precision Frequency Comb	12.CCC	26,361
		<b>Total for 12.CCC</b>		<b>26,361</b>
		<b>Total for Q-Peak, Inc.</b>		<b>26,361</b>

**University of Wisconsin**



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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916839	SUBAWARD NO. 046H653	Regional Scale Differential Time Methods	81.049	44,200
		<b>Total for 81.049</b>		<b>44,200</b>
<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	32,615
		<b>Total for 47.049</b>		<b>32,615</b>
<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	87,105
		<b>Total for 93.859</b>		<b>87,105</b>
		<b>Total for University of Wisconsin</b>		<b>163,921</b>

**Verenium Biofuel Corporation**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916899	PO 11983	Improvements In Ethanologenic Escherichi	81.087	468,109
6920641	PO 11983	Fab Eq - Detection Stand	81.087	19,781
		<b>Total for 81.087</b>		<b>487,889</b>
		<b>Total for Verenium Biofuel Corporation</b>		<b>487,889</b>

**Case Western University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916405	RES502670	Mouse Genetic Resources For Multigenetic	93.389	22,422
		<b>Total for 93.389</b>		<b>22,422</b>
<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	76,033
		<b>Total for 47.070</b>		<b>76,033</b>
<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	150,073
		<b>Total for 93.394</b>		<b>150,073</b>

**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>
6920637	RES504358; PARENT RES109575	Investigating The Early Embryonic Murine	93.837	43,459
		<b>Total for 93.837</b>		<b>43,459</b>
		<b>Total for Case Western University</b>		<b>291,986</b>

**Tufts University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918999	SUNCONTRACT UNDER NNX09AM636	Lunar Volatiles And Magma Ocean Differen	43.000	9,776
		<b>Total for 43.000</b>		<b>9,776</b>
<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	193,744
		<b>Total for 93.396</b>		<b>193,744</b>
		<b>Total for Tufts University</b>		<b>203,520</b>

**DRS Sensors & Targeting Systems, Inc**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920519	PC# S9-9004723	Modeling Of Nanowire Arrays For Quantum	12.910	30,385
		<b>Total for 12.910</b>		<b>30,385</b>
		<b>Total for DRS Sensors &amp; Targeting Systems, Inc</b>		<b>30,385</b>

**Apeak, Inc.**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920517	AGMT. DATED 09/08/09	Visible To Shortwave Infrared Solid Stat	12.CCC	20,000
		<b>Total for 12.CCC</b>		<b>20,000</b>
		<b>Total for Apeak, Inc.</b>		<b>20,000</b>

**University of California-San Diego**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918847	PO #10291048	Life At The Interface: Biocomotion Nea	47.041	17,181
		<b>Total for 47.041</b>		<b>17,181</b>

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899853	PO #10261302	Center For Nanotechnology For Treatment,	93.399	7,482
6918906	PO #10261302-004	Center For Nanotechnology For Treatment,	93.399	9,374
6920513	PO #10261302-005	Center For Nanotechnology For Treatment,	93.399	91,041
		<b>Total for 93.399</b>		<b>107,897</b>
		<b>Total for University of California-San Diego</b>		<b>125,077</b>

**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	71,675
		<b>Total for 12.CCC</b>		<b>71,675</b>

<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	172,052
		<b>Total for 12.431</b>		<b>172,052</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920502	R01-EB008396-01A1	Engineering Multicellular Tissue Structu	93.286	226,406
		<b>Total for 93.286</b>		<b>226,406</b>
		<b>Total for University of Pennsylvania</b>		<b>470,134</b>

**The Research Foundation - Stony Brook University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920499	51055	Northeastern Chemical Energy Storage Cen	81.049	49,259
		<b>Total for 81.049</b>		<b>49,259</b>
		<b>Total for The Research Foundation - Stony Brook University</b>		<b>49,259</b>

**University of Virginia**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918483	GC11729.131123	Cell Migration Consortium	93.000	9,266
6918712	GC11729.131123	Griffith Child - 6918483	93.000	63,345
6920440	GC11893.133556	Cell Migration Consortium	93.000	128,872
6920481	GC11893.133556	Griffith Child - 6920440	93.000	142,896
				<b>244,379</b>

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		<b>Total for 93.000</b>		<b>344,378</b>
<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	237,236
		<b>Total for 12.300</b>		<b>237,236</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918135	GC11729.131120	Cell Migration Consortium	93.821	11,807
6918606	GC11729.131130	Cell Migration Consortium: Mouse Genetic	93.821	258
6920126	GC11893.133553	Cell Migration Consortium	93.821	165,897
		<b>Total for 93.821</b>		<b>177,962</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919564	GG11182-132793	Genetically Encoded, Targeted, Amplifiab	12.420	123,375
		<b>Total for 12.420</b>		<b>123,375</b>
		<b>Total for University of Virginia</b>		<b>882,951</b>
<b>Universidad Central del Caribe</b>				
<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	72,678
		<b>Total for 93.853</b>		<b>72,678</b>
		<b>Total for Universidad Central del Caribe</b>		<b>72,678</b>
<b>Carnegie Institution of Washington</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6920454	SUBCONTRACT NO. DTM-325-1018	Messenger Discovery Mission To Mercury	43.CCC	35,305
		<b>Total for 43.CCC</b>		<b>35,305</b>
		<b>Total for Carnegie Institution of Washington</b>		<b>35,305</b>
<b>Mount Sinai Medical Center</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918611	MSSM 0254-7831-4609	Neural Substrates Of Appetitive Behavior	93.242	41,793
6920429	MSSM 0254-7832-4609	Neural Substrates Of Appetitive Behavior	93.242	77,238
		<b>Total for 93.242</b>		<b>119,031</b>

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		<b>Total for Mount Sinai Medical Center</b>	<b>119,031</b>
<b>Alliance for Sustainable Energy, LLC</b>			
<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
			<b>157,124</b>
<b>Total for 81.087</b>			<b>157,124</b>
<b>Total for Alliance for Sustainable Energy, LLC</b>			<b>157,124</b>
<b>Indiana University</b>			
<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
			<b>51,263</b>
<b>Total for 47.070</b>			<b>51,263</b>
<b>Total for Indiana University</b>			<b>51,263</b>
<b>Haskins Laboratories</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6918231	CONSORTIUM AGMT. UNDER NIH R01-DC008780	Variability And Error In Speech Producti	93.173
			<b>19,056</b>
6920368	CONSORTIUM AGMT. UNDER NIH R01-DC008780	Variability And Error In Speech Producti	93.173
			<b>22,436</b>
<b>Total for 93.173</b>			<b>41,491</b>
<b>Total for Haskins Laboratories</b>			<b>41,491</b>
<b>Busek Company, Incorporated</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6919893	AGMT DATED 6/15/09	Strr Phase 1-Cold Cathode For High Power	12.CCC
6920225	FA9550-09-C-0179	Fabrication Of High Density Electroscopy	12.CCC
			<b>56,500</b>
			<b>46,553</b>
<b>Total for 12.CCC</b>			<b>103,053</b>
<b>Total for Busek Company, Incorporated</b>			<b>103,053</b>
<b>Broad Institute</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6920188	SUBAWARD NO: 7215110-5500000188	High-Throughput Sequencing Of Chromatic	93.172
			<b>8,188</b>

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Total for 93.172 **8,188**  
 Total for Broad Institute **8,188**

<b>Harris Corporation</b>		<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>			
6916803	SUBCONTRACT A000044006	Quantum Sensor Program	12.CCC	14,898
6920183	A000110991	Quantum Sensor Program	12.CCC	180,460
		<b>Total for 12.CCC</b>		<b>195,358</b>
		<b>Total for Harris Corporation</b>		<b>195,358</b>

<b>ICX Nomadics</b>		<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>			
6919941	NOM-1605-003	Analyte Responsive Microcantilever Senso	12.CCC	75,419
6920181	NOM-1605-003	Analyte Responsive Microcantilever Senso	12.CCC	75,000
		<b>Total for 12.CCC</b>		<b>150,419</b>
		<b>Total for ICX Nomadics</b>		<b>150,419</b>

<b>Defense Research Associates, Incorporated</b>		<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>			
6919190	SUBCONTRACT MIT-1118	Plus Flight Dynamics Testing	12.CCC	14,301
6919459	SUBCONTRACT MIT-1118-B	Rotary Wing Demonstration Of Power Line	12.CCC	90,455
6919748	SUBCONTRACT MIT-1118-B	Child-Roy	12.CCC	16,835
6920161	SUBCONTRACT MIT-1118-B	Fabricated Equipment - Autonomous Helico	12.CCC	23,644
		<b>Total for 12.CCC</b>		<b>145,235</b>
		<b>Total for Defense Research Associates, Incorporated</b>		<b>145,235</b>

<b>Advanced Cooling Technologies, Inc.</b>		<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>			
6920142	AGMT. DTD. 6/22/09	Die Level Thermal Storage For Temperatur	12.CCC	50,000
		<b>Total for 12.CCC</b>		<b>50,000</b>
		<b>Total for Advanced Cooling Technologies, Inc.</b>		<b>50,000</b>

**Nano-C Inc.**

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<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	90,364
		<b>Total for 47.082</b>		<b>90,364</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898427	AGMT. DTD. 7/1/05	Stir Phase II: Commercial Combustion Syn	47.041	1,242
		<b>Total for 47.041</b>		<b>1,242</b>
		<b>Total for Nano-C Inc.</b>		<b>91,606</b>

**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	199,898
6919308	T09-6200-MIT	Hover And Transition Flight Analysis Of	43.CCC	30,900
6920069	C09-2665-MIT	Safety Assessment Methods For Certificat	43.CCC	403
		<b>Total for 43.CCC</b>		<b>231,201</b>
		<b>Total for National Institute of Aerospace</b>		<b>231,201</b>

**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	83,734
		<b>Total for 12.CCC</b>		<b>83,734</b>
		<b>Total for Teledyne Scientific &amp; Imaging LLC</b>		<b>83,734</b>

**University of Wisconsin-Madison**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6896433	A867064/UW #144-MR56	Muri: The Nanophysics Of Electron Emiss	12.800	-124
6919979	SUBAWARD 124K784	Basic Studies Of Disributed Limiters Fo	12.800	286,479
		<b>Total for 12.800</b>		<b>286,355</b>
<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	13,800
6918295	036D282	Basis Grant - Ifmr Expenses	98.002	130,866
6918296	036D282	Basis Grant - Harvard Expenses	98.002	6,720
		<b>Total for 98.002</b>		<b>151,386</b>

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Total for 98.002  
Total for University of Wisconsin-Madison

<b>University of California-Riverside</b>		<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
<u>WBS #</u>	<u>Contract Number</u>			
6919960	S-000354	Casimir Force Neutralization And Dynamic	12.910	147,047
		<b>Total for 12.910</b>		<b>147,047</b>
<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	97,574
		<b>Total for 12.300</b>		<b>97,574</b>
<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	27,556
		<b>Total for 47.041</b>		<b>27,556</b>
		<b>Total for University of California-Riverside</b>		<b>272,177</b>

**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	16,998
		<b>Total for 47.070</b>		<b>16,998</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915480	SUB UNDER NNJ04HF79G	The Influence Of Rotational Cues On Huma	43.000	-8,940
		<b>Total for 43.000</b>		<b>-8,940</b>
<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	179,022
6918861	PO F272662/2-R01-DC005755-06A1	Bilateral Cochlear Implants: Physiology	93.173	34,244
6919942	R01-DC004158-08	Decoding Gravicaptors, Sensory And Non-S	93.173	8,939
		<b>Total for 93.173</b>		<b>222,206</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916827	AGMT. UNDER W81XWH-07-1-0671	A Novel Retinal Prosthesis That Is Modul	12.420	23,311





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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919838	SUBCONTRACT # 0488-1411	Fab. Equip: Sociometric Badge System	12.CCC	18,595
		<b>Total for 12.CCC</b>		<b>94,467</b>
		<b>Total for Aptima, Inc.</b>		<b>94,467</b>

**Physical Sciences, Incorporated**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919826	SC49378-1626	Spir: Suraface Plasmon Enhanced Optical	12.CCC	136,548
		<b>Total for 12.CCC</b>		<b>136,548</b>
		<b>Total for Physical Sciences, Incorporated</b>		<b>136,548</b>

**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	176,026
		<b>Total for 97.CCC</b>		<b>176,026</b>
		<b>Total for Radiation Monitoring Devices</b>		<b>176,026</b>

**Rutgers University**

<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	563,748
6918003	00003418/4-29429/10578	Bioactive Polymer Scaffolds For Repair O	12.420	161,474
6919730	00003418/4-29429/10578	Afirm: Langer Ear Project	12.420	207,840
6919731	00003418/4-29429/10578	Afirm: Griffith X-Project-Design, Select	12.420	56,616
		<b>Total for 12.420</b>		<b>989,678</b>
		<b>Total for Rutgers University</b>		<b>989,678</b>

**Brookhaven Science Associates, LLC**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6896966	81840	Mit Atlas Muon Subsystem	81.CCC	3,154
6916676	125898	Polarized Electron Source Research And D	81.CCC	466
6917879	135819	Development Of Low Mass Detector Modules	81.CCC	251,691
6918383	137005	Construction Of The Forward Gem Tracker	81.CCC	418,480
6919358	125898	Fabricated Equipment-Bnl Polarized Elect	81.CCC	28,131

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919664	137005	Fabricated Equipment-Star Forward Gem Tr	81.CCC	111,088
		<b>Total for 81.CCC</b>		<b>813,011</b>
		<b>Total for Brookhaven Science Associates, LLC</b>		<b>813,011</b>

**Whitehead Institute/Biomedical Research**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919634	#11-1511-0602	Transcriptional Regulatory Network In Lv	93.172	298,631
		<b>Total for 93.172</b>		<b>298,631</b>
6915728	12-4000-0502	Deconstructing Prior Biogenesis, Elimina	12.420	-925
		<b>Total for 12.420</b>		<b>-925</b>
		<b>Total for Whitehead Institute/Biomedical Research</b>		<b>297,706</b>

**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	74,454
		<b>Total for 12.CCC</b>		<b>74,454</b>
		<b>Total for Battelle-Research Triangle Park</b>		<b>74,454</b>

**West Virginia University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919571	SUBCONTRACT NUMBER 06-743	Lon-Term Environmental And Economic Impa	81.089	21,510
		<b>Total for 81.089</b>		<b>21,510</b>
		<b>Total for West Virginia University</b>		<b>21,510</b>

**University of Colorado**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899232	SPO #0000059778	Thermospheric Oxygen Mapper	43.002	40,901
6919457	154-5647	Lunar University Node For Astrophysics R	43.002	17,140
		<b>Total for 43.002</b>		<b>58,041</b>

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 Massachusetts Institute of Technology  
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Total for University of Colorado **58,041**

**UChicago Argonne, LLC**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917311	8F-01101	Feasibility Study For Leu Conversion Of	81.CCC	-0
6919456	9F-30982	Feasibility Study For Leu Conversion Of	81.CCC	343,062
		<b>Total for 81.CCC</b>		<b>343,062</b>
		<b>Total for UChicago Argonne, LLC</b>		<b>343,062</b>

**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	798
		<b>Total for 12.CCC</b>		<b>798</b>
		<b>Total for Perceptronics Solutions, Incorporated</b>		<b>798</b>

**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	158,093
		<b>Total for 12.CCC</b>		<b>158,093</b>
		<b>Total for Magnolia Optical Technologies, Inc.</b>		<b>158,093</b>

**Sensis Seagull Technology Center**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6919359	PO# 16032	Advanced Vehicle Concepts And Implicatio	43.CCC	149,633
		<b>Total for 43.CCC</b>		<b>149,633</b>
		<b>Total for Sensis Seagull Technology Center</b>		<b>149,633</b>

**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	91,785
		<b>Total for 93.867</b>		<b>91,785</b>
		<b>Total for Joslin Diabetes Center</b>		<b>91,785</b>

**Appendix A-3 - Detail**  
**Massachusetts Institute of Technology**  
**Federal Research Support - Passthrough - On Campus**  
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<b>The Boeing Company</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6917222	PO 208542	Acoustic Assessment Of Very Quiet Hybrid	43.CCC	726	
6919199	PO 208542	Acoustic Assessment Of Very Quiet Hybrid	43.CCC	111,692	
		<b>Total for 43.CCC</b>		<b>112,417</b>	
		<b>Total for The Boeing Company</b>		<b>112,417</b>	
<b>University of Hawaii</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6919104	Z881346	Whole Genome Scan For Modifier Genes In	93.393	-275	
		<b>Total for 93.393</b>		<b>-275</b>	
<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	336,072	
6914650	Z792093-06	C-More Child - Delong	47.074	279,659	
6914651	Z792093-06	C-More Child - Boyle	47.074	91,158	
		<b>Total for 47.074</b>		<b>706,889</b>	
		<b>Total for University of Hawaii</b>		<b>706,614</b>	
<b>Pennsylvania State University</b>					
<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	686,470	
		<b>Total for 43.CCC</b>		<b>686,470</b>	
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6919102	S08-23	Uuv Mounted Gamma Ray Generator For Acti	12.CCC	93	
		<b>Total for 12.CCC</b>		<b>93</b>	
<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	33,447	
		<b>Total for 47.041</b>		<b>33,447</b>	
		<b>Total for Pennsylvania State University</b>		<b>720,009</b>	

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<b>Raydiance, Inc.</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6919098	AGMT DTD 12/8/08	Str Phase II: High Energy, Low Loss Fib	12.CCC	76,453	
		<b>Total for 12.CCC</b>		<b>76,453</b>	
		<b>Total for Raydiance, Inc.</b>		<b>76,453</b>	
<b>Metis Design Corp.</b>					
<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	27,215	
		<b>Total for 12.CCC</b>		<b>27,215</b>	
		<b>Total for Metis Design Corp.</b>		<b>27,215</b>	
<b>Cedars-Sinai Medical Center</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6919063	PO #571323	Continuation Of The Inflammatory Bowel D	93.848	14	
		<b>Total for 93.848</b>		<b>14</b>	
		<b>Total for Cedars-Sinai Medical Center</b>		<b>14</b>	
<b>Rush University Medical Center</b>					
<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	24,203	
6918754	2-P01-AG009466-17	Anatomic, Physiologic And Cognitive Path	93.866	45,598	
6919062	5-R01-AG030146-02	Genetic Epidemiology Of Cognitive Declin	93.866	-75,644	
		<b>Total for 93.866</b>		<b>-5,843</b>	
		<b>Total for Rush University Medical Center</b>		<b>-5,843</b>	
<b>SAIC-Frederick, Inc.</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6917290	28XS139	Initiative For Chemical Genetics	93.CCC	-3,952	
6919053	28XS139	Administration	93.CCC	10,319	
6919055	28XS139	Follow-Up Chemistry	93.CCC	29,091	
6919057	28XS139	Computational Research	93.CCC	20,643	
6919058	28XS139	Follow-Up Biology	93.CCC	-1,478	

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Total for 93.CCC **54,623**  
Total for SAIC-Frederick, Inc. **54,623**

**California Institute of Technology**

<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	126,821
<b>Total for 12.300</b>				<b>126,821</b>

<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	68,718
6304200	PC045667	Detector Length Control Design	47.049	20,194
6304300	PC045667	Laboratory Operations	47.049	3,063
6760400	PC045667	Stochastic Forces S&W	47.049	-1,260
6917531	SUBAWARD NO. 75ADV-1085563	C.O.40.M.Laa Core Optics - Salaries And	47.049	27,214
6917533	SUBAWARD NO. 75ADV-1085563	Fm.40.M.Laa Facilities Modifications - S	47.049	11,647
6917535	SUBAWARD NO. 75ADV-1085563	Project Management - Salaries And Wages	47.049	359,799
6917537	SUBAWARD NO. 75ADV-1085563	System Engineering - Salaries And Wages	47.049	-1,688
6917538	SUBAWARD NO. 75ADV-1085563	Systems Engineering - Other	47.049	27
6917539	SUBAWARD NO. 75ADV-1085563	St.12.M.Laa Seismic Lead - Salaries And	47.049	152,785
6917541	SUBAWARD NO. 75ADV-1085563	Seismic Fabrication - Salaries And Wages	47.049	535,966
6917543	SUBAWARD NO. 75ADV-1085563	Su.40.C.Laa Suspensions Assembly - Salar	47.049	-15,200
6918488	SUBAWARD #68D-1086050	Powering The Planet: A Chemical Bonding	47.049	876,679
6918489	SUBAWARD #68D-1086050	Powering The Planet: A Chemical Bonding	47.049	244,008
6918490	SUBAWARD #68D-1086050	Powering The Planet: A Chemical Bonding	47.049	95,240
6918865	SUBAWARD #68D-1086050	Powering The Planet: A Chemical Bonding	47.049	123,958
6918882	SUBAWARD NO. 75-1086390	Ligo Operations: Detector Alignment Desi	47.049	819,857
6918883	SUBAWARD NO. 75-1086390	Ligo Operations: Detector Length Control	47.049	492,011
6918884	SUBAWARD NO. 75-1086390	Ligo Operations: Laboratory Operations	47.049	570,180
6918885	SUBAWARD NO. 75-1086390	Ligo Operations:Project Management	47.049	170,656
6918886	SUBAWARD NO. 75-1086390	Ligo Operations: Project Administration	47.049	96,375
6918887	SUBAWARD NO. 75-1086390	Ligo Operations: General Computing Supp	47.049	739,345
6918889	SUBAWARD NO. 75-1086390	Ligo Operations: Stochastic Forces S&W	47.049	470,316
6918890	SUBAWARD NO. 75-1086390	Ligo Operations: Fabrication - Adaptive	47.049	2,206
6918891	SUBAWARD NO. 75-1086390	Ligo Operations: Adaptive Optics S&W	47.049	15
6919000	SUBAWARD NO. 75ADV-1085563	Advanced Ligo Coc Management (Core Optic	47.049	-11,140
<b>Total for 47.049</b>				<b>5,850,966</b>

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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>
6899771	SUBAWARD NO. 102-1080673	Specification, Design And Verification O	12.000	165,194
		<b>Total for 12.000</b>		<b>165,194</b>
		<b>Total for California Institute of Technology</b>		<b>6,142,981</b>

**BAE Systems National Security Solution, Inc**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914937	SUBCONTRACT 063282	Video Analysis And Content Extraction (V	12.CCC	2
6915912	066915	Distrutive Technologys (Dmt)	12.CCC	54,379
6916804	069145	Intrinsically Assurable Mobile Network	12.CCC	69,274
6917551	SUBCONTRACT 060786	Phase Ii Cbrmanet: Control-Based Mobile A	12.CCC	1,076
6918070	SUBCONTRACT 063282 SLIN 0002	Video Analysis And Content Extraction (V	12.CCC	32,495
6918076	SUBCONTRACT 063282 SLIN 0002	Fisher Child - Video Analysis And Conten	12.CCC	-11,011
6918669	073692	Video And Image Retrieval And Analysis T	12.CCC	133,529
6918795	069145	Principless For Intrinsically Assurable	12.CCC	2,577
6918998	066915	Bae Seedling	12.CCC	201,481
		<b>Total for 12.CCC</b>		<b>483,802</b>
		<b>Total for BAE Systems National Security Solution, Inc</b>		<b>483,802</b>

**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	120,963
		<b>Total for 97.061</b>		<b>120,963</b>
		<b>Total for Stevens Institute of Technology</b>		<b>120,963</b>

**Boston University Medical Campus**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918951	3376-5	Genome-Wide Association Study Of Cardiac	93.837	12,508
		<b>Total for 93.837</b>		<b>12,508</b>
		<b>Total for Boston University Medical Campus</b>		<b>12,508</b>

**Boston College**



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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918950	SUBAGNT #5001251-2	Center For Retirement Research	96.007	9,331
		<b>Total for 96.007</b>		<b>9,331</b>
		<b>Total for Boston College</b>		<b>9,331</b>

**Montreal Heart Institute**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918946	064869-0812-B	Identification Of The Ibd Genes On Chrom	93.848	43,245
		<b>Total for 93.848</b>		<b>43,245</b>
		<b>Total for Montreal Heart Institute</b>		<b>43,245</b>

**University of Texas - Austin**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918867	UTA08.950	The Interface Of Infrast, Markets, & Nat	47.041	158,035
		<b>Total for 47.041</b>		<b>158,035</b>

<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	86,940
		<b>Total for 12.630</b>		<b>86,940</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914675	SUBAWARD UTA06-845	Net: Mechanisms Leading To Co-Existence	81.089	261,999
		<b>Total for 81.089</b>		<b>261,999</b>
		<b>Total for University of Texas - Austin</b>		<b>506,973</b>

**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	22,537
		<b>Total for 93.839</b>		<b>22,537</b>
		<b>Total for Genetix Pharmaceuticals</b>		<b>22,537</b>

**University of Illinois-Urbana Champaign**

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918707	SUBAWARD NO. 2008-02016-3; GRANT CODE A3718	Uic Muri: Passive And Active Control Of	12.800	145,339
		<b>Total for 12.800</b>		<b>145,339</b>
<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	77,700
		<b>Total for 47.041</b>		<b>77,700</b>
		<b>Total for University of Illinois-Urbana Champaign</b>		<b>223,038</b>

**Arizona State University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918706	SUBAWARD 09-048	Sger: Creativity In It Research Organiz	47.070	8,936
		<b>Total for 47.070</b>		<b>8,936</b>
		<b>Total for Arizona State University</b>		<b>8,936</b>

**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	375,619
6918584	AGMT. DTD. 8/15/08	Squishbot (Soft Quietshape-Shifting Robo	12.CCC	67,599
6918704	AGMT. DTD. 8/15/08	Squishbot (Soft Quietshape-Shifting Robo	12.CCC	33,776
		<b>Total for 12.CCC</b>		<b>476,994</b>
		<b>Total for Boston Dynamics, Incorporated</b>		<b>476,994</b>

**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	77,878
		<b>Total for 12.CCC</b>		<b>77,878</b>
		<b>Total for Applied Physics Lab of John Hopkins</b>		<b>77,878</b>

**Saint Louis University**

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918648	AGMT DTD 6/1/08 UNDER PRIME AWARD NO. 5R01DK074515-02	Role Of Hcv Sequence Variation In Liver	93.848	-2,428

Total for 93.848      **-2,428**  
 Total for Saint Louis University      **-2,428**

**Albert Einstein College**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918484	9-526-2968	Massively Parallel Sequencing Technologi	93.172	-647
		<b>Total for 93.172</b>		<b>-647</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918643	9-526-2961	Aliphatic Amines In Uremia	93.847	1,489
		<b>Total for 93.847</b>		<b>1,489</b>
		<b>Total for Albert Einstein College</b>		<b>842</b>

**UNAVCO**

<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	94,734
		<b>Total for 47.000</b>		<b>119,484</b>

<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	123,819
		<b>Total for 47.050</b>		<b>123,819</b>
		<b>Total for UNAVCO</b>		<b>243,303</b>

**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	287,131
		<b>Total for 12.431</b>		<b>287,131</b>
		<b>Total for University of California - Santa Cruz</b>		<b>287,131</b>

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**Mayflower Communications Company**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918605	MCCI-SC-2834-041	Spir Phase 1: Robust Assured Paradigm For	12.CCC	4,485
		<b>Total for 12.CCC</b>		<b>4,485</b>
		<b>Total for Mayflower Communications Company</b>		<b>4,485</b>

**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	127,625
6918602	AGMT. DTD. 9/5/08	Str: Efficient Stochastic Mobility Pred	12.CCC	199,879
		<b>Total for 12.CCC</b>		<b>327,505</b>
		<b>Total for Quantum Signal LLC</b>		<b>327,505</b>

**DSO National Laboratories**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918487	SUBAWARD #DSOC007283	Transfer Learning For Adaptive Informati	12.910	125,633
		<b>Total for 12.910</b>		<b>125,633</b>
		<b>Total for DSO National Laboratories</b>		<b>125,633</b>

**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	146,145
		<b>Total for 81.CCC</b>		<b>146,145</b>
		<b>Total for New England Research, Inc.</b>		<b>146,145</b>

**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	77,169
		<b>Total for 93.855</b>		<b>77,169</b>
		<b>Total for Microbiotix, Inc</b>		<b>77,169</b>

**Tufts Medical Center**

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<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	42,581
		<b>Total for 93.837</b>		<b>42,581</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918264	5-R01-DK072497-04	Gpcr Variants As Genetic Determinants Of	93.848	-5,638
		<b>Total for 93.848</b>		<b>-5,638</b>
		<b>Total for Tufts Medical Center</b>		<b>36,943</b>

**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	70,615
		<b>Total for 12.300</b>		<b>70,615</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6896558	183	Phosphotyrosyl Proteins In Insulin Rec	93.847	589
		<b>Total for 93.847</b>		<b>589</b>
		<b>Total for Dartmouth College</b>		<b>71,204</b>

**Gas Equipment Engineering Corporation**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6918102	AGMT DTD 6/1/08	Collaboration Between Geeco And The Mit	81.049	11,844
		<b>Total for 81.049</b>		<b>11,844</b>
		<b>Total for Gas Equipment Engineering Corporation</b>		<b>11,844</b>

**Aerospace Corporation**

<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	164,958
		<b>Total for 43.CCC</b>		<b>164,958</b>
		<b>Total for Aerospace Corporation</b>		<b>164,958</b>

**Auburn University**

**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>
6917989	SUB AGREEMENT NO. 08-SFWS-209365.MIT	Land Use-Ecosystem-Climate Interactions	43.000	33,894
		<b>Total for 43.000</b>		<b>33,894</b>
		<b>Total for Auburn University</b>		<b>33,894</b>

**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	185
6917821	AGMT. DTD. 5/19/08	Chun: Design And Manufacturing Of Dual A	81.087	37,301
		<b>Total for 81.087</b>		<b>37,487</b>
		<b>Total for Soliant Energy</b>		<b>37,487</b>

**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	64,214
6917796	SUBAWARD UDR. 5-R01-CA132091-03	Targeted Nanoparticle Dna Therapy For Ov	93.395	99,740
		<b>Total for 93.395</b>		<b>163,954</b>
		<b>Total for Lankenau Institute for Medical Research</b>		<b>163,954</b>

**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	12,887
		<b>Total for 93.867</b>		<b>12,887</b>
<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	46,153
		<b>Total for 93.859</b>		<b>46,153</b>
		<b>Total for University of Pittsburgh</b>		<b>59,040</b>

**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	126,385
		<b>Total for 47.049</b>		<b>126,385</b>

**Appendix A-3 - Detail  
 Massachusetts Institute of Technology  
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Total for 47.049  
 Total for Cornell University  
**126,385**  
**126,385**

**University of Texas - Houston**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917359	0005624B	Genome-Wide Association For Loci Influen	93.837	246,207
<b>Total for 93.837</b>				<b>246,207</b>
<b>Total for University of Texas - Houston</b>				<b>246,207</b>

**Marine Biological Laboratory**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917316	MBL SUBAWARD 33435	Cohh Pilot Project Phase I- Using Signat	47.000	814
<b>Total for 47.000</b>				<b>814</b>
<b>Total for Marine Biological Laboratory</b>				<b>814</b>

**Rite-Solutions**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915356	RS07-100	Combat Systems Of The Future	12.CCC	4,928
6917308	RS08-101/TASK 001	Hsi Design Environment	12.CCC	21,972
<b>Total for 12.CCC</b>				<b>26,900</b>
<b>Total for Rite-Solutions</b>				<b>26,900</b>

**University of Berne**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917263	AGMT DTD 2/13/08 PRIME 2-R02-AR052766-01A1	Functional Tissue Engineering Of Musculo	93.846	42,492
<b>Total for 93.846</b>				<b>42,492</b>
<b>Total for University of Berne</b>				<b>42,492</b>

**Rhode Island Hospital**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6917228	701-1457	Biomarker For Hepatocellular Carcinoma	93.394	91,032
<b>Total for 93.394</b>				<b>91,032</b>

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		Total for Rhode Island Hospital	91,032
<b>CSSI, Incorporated</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6917209	ACRP A002-07-02	Task Order 010	20.CCC
		Total for 20.CCC	27,236
		Total for CSSI, Incorporated	27,236
<b>University of Illinois</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6917203	2007-02206-01/GCA4399	Capitalizing On Research On Animal And H	12.300
		Total for 12.300	312,883
		Total for University of Illinois	312,883
<b>Kulite Semiconductor Products</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6917199	AWARD DATED 2/1/08	Development Of Fully Integrated Miniatur	43.CCC
		Total for 43.CCC	26,181
		Total for Kulite Semiconductor Products	26,181
<b>Battelle-Pacific Northwest Laboratories</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6917183	58612	Dhs Centers Science In Middle School Ste	81.CCC
		Total for 81.CCC	17
		Total for Battelle-Pacific Northwest Laboratories	17
<b>Terahertz Technologies, LLC</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6917165	STTR-PHASE I RES. AGMT. 1/1/08	Str Phase I: Innovative Source Of Terah	47.045
		Total for 47.045	6,491
		Total for Terahertz Technologies, LLC	6,491



**Appendix A-3 - Detail  
 Massachusetts Institute of Technology  
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<b>SimBiotic Software</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6917105	PURCHASE ORDER NO. 741	Evo Beaker Ii: Assessing Simulations For	47.076	26,058	
		<b>Total for 47.076</b>		<b>26,058</b>	
		<b>Total for SimBiotic Software</b>		<b>26,058</b>	
<b>Agiltron Incorporated</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6917025	NASA 89811I	Sbir: Nano-Enabled Low Cost High Perform	43.CCC	50,904	
		<b>Total for 43.CCC</b>		<b>50,904</b>	
		<b>Total for Agiltron Incorporated</b>		<b>50,904</b>	
<b>Missouri Botanical Garden</b>					
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6917023	RES. AGMT. DTD. 2/28/08	Lions: Local Investigations Of Natural S	47.076	11,431	
		<b>Total for 47.076</b>		<b>11,431</b>	
		<b>Total for Missouri Botanical Garden</b>		<b>11,431</b>	
<b>Museum of Science - Boston</b>					
<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	20,214	
		<b>Total for 47.076</b>		<b>20,214</b>	
		<b>Total for Museum of Science - Boston</b>		<b>20,214</b>	
<b>University of Maryland</b>					
<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	81,741	
		<b>Total for 43.CCC</b>		<b>81,741</b>	
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>	
6915219	SUBAWARD #Z913701	Computer Science Futures: Engaging Youn	12.910	25,628	
6915353	SUBAWARD #Z913701	Computer Science Futures: Deb Roy Child	12.910	79,606	

**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>
6915354	SUBAWARD #Z913701	Computer Science Futures: Sam Madden Ch	12.910	29,668
		<b>Total for 12.910</b>		<b>134,903</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914613	SUBAWARD #Z627303	Dynamic, Stochastic Models For Managing	43.000	50,093
		<b>Total for 43.000</b>		<b>50,093</b>
		<b>Total for University of Maryland</b>		<b>266,736</b>
<b>Dynamet Technology, Inc.</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916573	PO 10596-0708	Sbir: Novel Titanium Tantalum Materials	47.CCC	24,897
		<b>Total for 47.CCC</b>		<b>24,897</b>
		<b>Total for Dynamet Technology, Inc.</b>		<b>24,897</b>
<b>Oklahoma Medical Research Foundation</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6916555	SUB UNDER 7-R01-AR043274-12	Gene Mapping In Women With Systemic Lupu	93.846	-4,352
		<b>Total for 93.846</b>		<b>-4,352</b>
		<b>Total for Oklahoma Medical Research Foundation</b>		<b>-4,352</b>
<b>SAIC Telcordia Technologies, Incorporated</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915989	PO 20004617	Nicecap	12.CCC	12,141
		<b>Total for 12.CCC</b>		<b>12,141</b>
		<b>Total for SAIC Telcordia Technologies, Incorporated</b>		<b>12,141</b>
<b>Maricopa County Community College District</b>				
<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	18,417
		<b>Total for 47.076</b>		<b>18,417</b>
		<b>Total for Maricopa County Community College</b>		<b>18,417</b>

**Appendix A-3 - Detail  
 Massachusetts Institute of Technology  
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		District		
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
<b>DuPont Engineering Research &amp; Technology</b>				
6915890	SUBCONTRACT LOX 511748	Gan And Cdse Nanocrystal-Based And Biote	12.CCC	-5,032
		<b>Total for 12.CCC</b>		<b>-5,032</b>
		<b>Total for DuPont Engineering Research &amp; Technology</b>		<b>-5,032</b>
<b>Payload Systems, Incorporated</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915737	AGMT. DTD. 6/1/07	Rule-Based Analytic Asset Management For	43.CCC	5,420
		<b>Total for 43.CCC</b>		<b>5,420</b>
		<b>Total for Payload Systems, Incorporated</b>		<b>5,420</b>
<b>Electric Power Research Institute</b>				
<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	56,643
6915347	EP-P22706/C11057	West Coast Regional Carbon Sequestration	81.089	86,415
		<b>Total for 81.089</b>		<b>143,057</b>
		<b>Total for Electric Power Research Institute</b>		<b>143,057</b>
<b>Texas Engineering Experiment Station</b>				
<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	13,072
		<b>Total for 93.853</b>		<b>13,072</b>
		<b>Total for Texas Engineering Experiment Station</b>		<b>13,072</b>
<b>National Jewish Medical Research Center</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6915120	22090402	Shared Genetic Susceptibility In Cbd And	93.838	49,619
		<b>Total for 93.838</b>		<b>49,619</b>
		<b>Total for National Jewish Medical Research Center</b>		<b>49,619</b>

**Appendix A-3 - Detail  
Massachusetts Institute of Technology  
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Fiscal 2010 Expenditures**

<b>The University of Central Florida</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6914909	61038032	Nasa Project Plan Green Task Order No. 1	43.CCC
		<b>Total for 43.CCC</b>	<b>70,056</b>
		<b>Total for The University of Central Florida</b>	<b>70,056</b>
<b>A123 Systems, Inc.</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6914891	SUBCONTRACT UNDER DOE PRIME COOPERATIVE AGMT. DE-FC26-05NT42403	Thermodynamic Modeling, X-Ray And Neutro	81.CCC
		<b>Total for 81.CCC</b>	<b>119,693</b>
		<b>Total for A123 Systems, Inc.</b>	<b>119,693</b>
<b>Institute of Global Environment &amp; Society</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6914745	SUB. AGMT. BTWN MIT & IGES DTD 12/13/06	Waternet: The Nasa Water Solutions Netwo	43.CCC
		<b>Total for 43.CCC</b>	<b>24,591</b>
		<b>Total for Institute of Global Environment &amp; Society</b>	<b>24,591</b>
<b>University of California/Davis</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6914503	SUBAWARD NO. SUB 0600176	Institute For Quantum Simulations Of Mat	81.049
		<b>Total for 81.049</b>	<b>174,597</b>
		<b>Total for University of California/Davis</b>	<b>174,597</b>
<b>Lehigh Univeristy</b>			
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>
6914501	541352-8001	Nirt-Goali: Solution Based Dispersion,	47.041
		<b>Total for 47.041</b>	<b>42,041</b>
		<b>Total for Lehigh Univeristy</b>	<b>42,041</b>
<b>Ohio State University</b>			

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<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914481	P.O. #RF01069408, PROJECT NO. 60002999	Massively Parallel Positioning Of Dip-Pe	47.041	9,373
		<b>Total for 47.041</b>		<b>9,373</b>
		<b>Total for Ohio State University</b>		<b>9,373</b>
<b>Clemson University</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898531	SUB 05-01-SR121	Fundamental Studies In Syngas Premixed C	81.089	68,657
		<b>Total for 81.089</b>		<b>68,657</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6914465	1078-7558-219-2005662	Material And Manufacturing Technology De	81.113	-13,471
		<b>Total for 81.113</b>		<b>-13,471</b>
		<b>Total for Clemson University</b>		<b>55,186</b>
<b>Universal Technology Corporation</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6912935	09-S568-060-01-C1	Ultra-High Energy Density Nanomaterials	12.CCC	136,303
		<b>Total for 12.CCC</b>		<b>136,303</b>
		<b>Total for Universal Technology Corporation</b>		<b>136,303</b>
<b>Universal Technical Resource Services, Inc. (UTRS)</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899746	CONTRACT NO. S69034 EA-7	A New Environmentally Sound Technology F	12.CCC	1,587
		<b>Total for 12.CCC</b>		<b>1,587</b>
		<b>Total for Universal Technical Resource Services, Inc. (UTRS)</b>		<b>1,587</b>
<b>George Washington University</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899675	SUBAWARD NO. 06-S34	Microwave Losses And Interactions In Pat	47.041	536
		<b>Total for 47.041</b>		<b>536</b>
		<b>Total for George Washington University</b>		<b>536</b>

**Appendix A-3 - Detail**  
**Massachusetts Institute of Technology**  
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**UT- Battelle LLC**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899431	SUBCONTRACT NO. 4000049393	Improvement Of Internal Combustion Engin	81.CCC	-39
6899538	SUBCONTRACT NO. 4000048870	1.5.2.1.1 Task 2 Personnel	81.CCC	53,802
6899539	SUBCONTRACT NO. 4000048870	1.5.2.1.1 Task 2 Operations	81.CCC	2,078
6899541	SUBCONTRACT NO. 4000048870	1.5.2.1.2 Task 3 Personnel	81.CCC	122,995
6899542	SUBCONTRACT NO. 4000048870	1.5.2.1.2 Task 3 Operations	81.CCC	2,833
6899584	SUBCONTRACT NO. 4000049393	Lubrication And Aftertreatment	81.CCC	24,531
<b>Total for 81.CCC</b>				<b>206,199</b>
<b>Total for UT- Battelle LLC</b>				<b>206,199</b>

**Booz, Allen and Hamilton**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897328	82200CBS10/B26305-4792	Cabig - Genepattern	93.CCC	61,740
6899433	82200CBS10/B27755000201040001051	Cabig - Genepattern/Task Order 4	93.CCC	6,754
<b>Total for 93.CCC</b>				<b>68,494</b>
<b>Total for Booz, Allen and Hamilton</b>				<b>68,494</b>

**Kent State University**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6899110	442197-P060507	NsdI Materials Digital Library Pathway:	47.076	177,262
<b>Total for 47.076</b>				<b>177,262</b>
<b>Total for Kent State University</b>				<b>177,262</b>

**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	47,183
<b>Total for 12.CCC</b>				<b>47,183</b>
<b>Total for Triquint Semiconductor, LP</b>				<b>47,183</b>

**University of North Carolina at Charlotte**

**Appendix A-3 - Detail  
 Massachusetts Institute of Technology  
 Federal Research Support - Passthrough - On Campus  
 Fiscal 2010 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898583	2975-05-02055	Nirt: Nanometrology For Nanoscale Scien	47.041	18,041
6898648	2975-05-02055	Nirt: Nanometrology For Nanoscale Scien	47.041	27,247
		<b>Total for 47.041</b>		<b>45,288</b>
		<b>Total for University of North Carolina at Charlotte</b>		<b>45,288</b>

**QuesTek Innovations LLC**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6898303	PO NO. 05-195	Dynamic Microstructure Design Consortium	12.CCC	56,463
		<b>Total for 12.CCC</b>		<b>56,463</b>
		<b>Total for QuesTek Innovations LLC</b>		<b>56,463</b>

**American Association of Retired Persons**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6897354	PO #10050754	National Older Driver Safety: A Researc	20.CCC	146,833
		<b>Total for 20.CCC</b>		<b>146,833</b>
		<b>Total for American Association of Retired Persons</b>		<b>146,833</b>

**Newton Scientific, Incorporated**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6896931	RESEARCH AGREEMENT	Tritium Ams Analysis Of Cancer Biomarker	93.393	-1,186
		<b>Total for 93.393</b>		<b>-1,186</b>
		<b>Total for Newton Scientific, Incorporated</b>		<b>-1,186</b>

**Cambridge Systematics**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6895716	CS AGREEMENT 7214	Ngsim: Task Order G.1 - Prototype Model	20.CCC	812
		<b>Total for 20.CCC</b>		<b>812</b>
		<b>Total for Cambridge Systematics</b>		<b>812</b>

**Southwest Research Institute**

**Appendix A-3 - Detail**  
**Massachusetts Institute of Technology**  
**Federal Research Support - Passthrough - On Campus**  
**Fiscal 2010 Expenditures**

<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	4,567
		<b>Total for 43.CCC</b>		<b>4,567</b>
		<b>Total for Southwest Research Institute</b>		<b>4,567</b>

**Alion Science and Technology**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6892326	TASK AREA 5 SUBTASK 1	Advanced Decision Architectures Collabor	12.CCC	62,117
		<b>Total for 12.CCC</b>		<b>62,117</b>
		<b>Total for Alion Science and Technology</b>		<b>62,117</b>

**Lowell Observatory**

<u>WBS #</u>	<u>Contract Number</u>	<u>WBS Title</u>	<u>CFDA #</u>	<u>FY Expenses</u>
6666200	PO 24081/PRIME NAS2-97-001	Sofia Instrument Development And Operati	43.CCC	121,195
		<b>Total for 43.CCC</b>		<b>121,195</b>
		<b>Total for Lowell Observatory</b>		<b>121,195</b>

**Total Passthrough 87,505,774**



**Appendix B - Detail  
 Massachusetts Institute of Technology  
 Federal Non Research Support - On Campus  
 Fiscal 2010 Expenditures**

**Department of Education**

**U.S. Department of Education**

<u>Contract Number</u> P047A080317-10	<u>Contract Title</u> TRIO - Upward Bound	<u>Cfdano</u> 84.047A	<u>FY Expenses</u> 366,343
<b>Total for 84.047A</b>			<b>366,343</b>
<u>Contract Number</u> Q184H090103	<u>Contract Title</u> Comprehensive, Campus/Community-Based Approach to Reducing Alcohol-Related Violence Among Fraternity and Sorority Students	<u>Cfdano</u> 84.184H	<u>FY Expenses</u> 57,528
<b>Total for 84.184H</b>			<b>57,528</b>
<u>Contract Number</u> P170B060010	<u>Contract Title</u> Javits Fellowship: Frank	<u>Cfdano</u> 84.170B	<u>FY Expenses</u> 44,437
<u>Contract Number</u> P170B070010-09	<u>Contract Title</u> Javits Fellowship: Spinak	<u>Cfdano</u> 84.170B	<u>FY Expenses</u> 41,937
<b>Total for 84.170B</b>			<b>86,374</b>
<u>Contract Number</u> P017A080083	<u>Contract Title</u> Visualizing Cultures: Exploring the History and Cultures of Asia Through Visuals	<u>Cfdano</u> 84.170	<u>FY Expenses</u> 183,589
<u>Contract Number</u> P170B050025	<u>Contract Title</u> Javits Fellowships: Kinman	<u>Cfdano</u> 84.170	<u>FY Expenses</u> 66,666
<b>Total for 84.170</b>			<b>250,255</b>
<b>Total for U.S. Department of Education</b>			<b>760,499</b>
<b>Total for Department of Education</b>			<b>760,499</b>

**Nat'l Aero & Space Administration**

**NASA - Goddard Space Flight Center**

<u>Contract Number</u> NING05GK67G	<u>Contract Title</u> Massachusetts Space Grant Consortium	<u>Cfdano</u> 43.CCC	<u>FY Expenses</u> 683,020
<b>Total for 43.CCC</b>			<b>683,020</b>
<u>Contract Number</u> NNX07A019H	<u>Contract Title</u> GSRP Fellow: Mark Avnet	<u>Cfdano</u> 43.000	<u>FY Expenses</u> 726
<u>Contract Number</u> NNX08BA18H	<u>Contract Title</u> Moon Mystery: Investigating the Source of Ancient Lunar Rock Magnetization - GFP for S. Tikoo	<u>Cfdano</u> 43.000	<u>FY Expenses</u> 27,598
<u>Contract Number</u> NNX09AF65G	<u>Contract Title</u> CDIO in Aerospace Engineering Education	<u>Cfdano</u> 43.000	<u>FY Expenses</u> 236,876

**Appendix B - Detail  
 Massachusetts Institute of Technology  
 Federal Non Research Support - On Campus  
 Fiscal 2010 Expenditures**

<u>Contract Number</u> NNX09AQ87H	<u>Contract Title</u> Conditions of Early Solar Systems Volcanism - GFP for M. Krawczynski	<u>Cfdano</u> 43,000	<u>FY Expenses</u> 29,133
	<b>Total for 43,000</b>		<b>294,332</b>
	<b>Total for NASA - Goddard Space Flight Center</b>		<b>977,352</b>

**NASA - Johnson Space Center**

<u>Contract Number</u> NNX10AC35A	<u>Contract Title</u> Enhanced Planetary Surface Eva Mobility - GFP for J. Kaderka	<u>Cfdano</u> 43,000	<u>FY Expenses</u> 31,290
	<b>Total for 43,000</b>		<b>31,290</b>
	<b>Total for NASA - Johnson Space Center</b>		<b>31,290</b>
	<b>Total for Nat'l Aero &amp; Space Administration</b>		<b>1,008,642</b>

**National Science Foundation**

**NSF**

<u>Contract Number</u> AGS-0733510	<u>Contract Title</u> Participant Costs	<u>Cfdano</u> 47,050	<u>FY Expenses</u> 21
EAR-0451802	The Earth Time Network: Developing an Infrastructure for High-Resolution Calibration of Earth History-Workshop	47,050	28,344
EAR-0807585	Workshop: The Siberian Traps and the End-Permian Extinction: Coincidence and Casualty	47,050	20,135
OCE-0645529	NSF CAREER: Discovery Science	47,050	7,872
OCE-0910306	IAPSO 2009 Travel Grant	47,050	3,211
	<b>Total for 47,050</b>		<b>59,583</b>

<u>Contract Number</u> CBET-0755825	<u>Contract Title</u> REU Supplement	<u>Cfdano</u> 47,041	<u>FY Expenses</u> 2,739
CBET-0809084	6TH JAPAN-US JOINT SEMINAR -Nanoscale Transport Phenomena - Science and Engineering	47,041	-1,818
CBET-0812804	Collaborative Research: International Nanofluid Properties Benchmark Exercise (INPBE)	47,041	11,902
CMMI-0910903	Student Travel to 53rd International Conference on Electron, Ion and Photon-Beam Technology and Nanofabrication	47,041	10,000

**Appendix B - Detail  
Massachusetts Institute of Technology  
Federal Non Research Support - On Campus  
Fiscal 2010 Expenditures**

<u>Contract Number</u> CMMI-0926349	<u>Contract Title</u> Preparing Cities for Climate Change: An International Comparative Assessment of Urban Adaptation Planning	<u>Cfdano</u> 47.041	<u>FY Expenses</u> 4,953
ECCS-0956244	Workshop on LIDS 2010: Paths Ahead in the Science of Information and Decision Systems To Be Held at MIT Stata Center on November 11-13, 2009	47.041	28,145
EEC-0609299	BBSI HST-MGH Summer Institute for Biomedical Optics	47.041	127,077
	<b>Total for 47.041</b>		<b>182,999</b>
<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> 18,675
CNS-0831612	GOALI-FIND: Optical Flow Switched Core Networks - PDF to be determined	47.070	48,158
CNS-0849483	Workshop: FIND Student Collaboration Meeting	47.070	-520
CNS-0939080	Workshop: NSF FIND Workshop	47.070	5,172
CNS-1000965	Workshop Future Internet Architecture Summit	47.070	358,304
DMS-0902649	Combinatorics of Quantum Groups - PDF P. Tingley	47.070	2,500
IIS-0740093	Workshop on The Living Heritage of Artificial Intelligence	47.070	20,435
IIS-0943412	Human-Environment Mobile-Based Interactions	47.070	48,194
SES-0940663	EC-US Task Force on Biotechnology Research Workshop - A Global Look at Women's Leadership in Biotechnology Research	47.070	15,532
	<b>Total for 47.070</b>		<b>516,450</b>
<u>Contract Number</u> OISE-0623565	<u>Contract Title</u> IRES: US-India Research Experience for Global Scientists and Engineers	<u>Cfdano</u> 47.079	<u>FY Expenses</u> 35,673
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	6,338
OISE-0941547	US-India Workshop: Distributed Development of the Principles and Applications of Digital Fabrication	47.079	29,339
	<b>Total for 47.079</b>		<b>71,350</b>
<u>Contract Number</u> AST-0647787	<u>Contract Title</u> REU - Students	<u>Cfdano</u> 47.049	<u>FY Expenses</u> 57,231
AST-0647787	REU - Teachers	47.049	25,629
AST-0747154	Participant Costs Child Account: CAREER: Building Rocky Planets: From Mercury and Vesta to GL 581C	47.049	3,840
DMR-0819762	MRSEC - Education Director's Networking Mtg Boston November 30, 2009	47.049	3,216

**Appendix B - Detail**  
**Massachusetts Institute of Technology**  
**Federal Non Research Support - On Campus**  
**Fiscal 2010 Expenditures**

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
DMR-0819762	Supplement for MRSEC Director's Meeting - Participant Travel	47.049	1,426
DMS - 0703501	Postdoctoral Research Fellowship - B. Webster	47.049	1,125
DMS - 0903008	Postdoctoral Research Fellowship - L. Chumakova	47.049	1,667
DMS-0652630	FRG Collaborative Research Homological Mirror Symmetry and Its Applications	47.049	60,337
DMS-0703567	Postdoctoral Research Fellowship - S. Assaf	47.049	1,500
DMS-0703691	Postdoctoral Fellow: Gregg Musiker	47.049	2,086
DMS-0739255	Image Statistics in Digital Forensics-PDF-K. Johnson	47.049	45,179
DMS-0749377	Conference Proposal - MIT Women in Mathematics: A Celebration	47.049	1,362
DMS-0803064	Postdoctoral Fellow: L. Levine	47.049	1,500
DMS-0803077	NSF Mathematical Sciences Fellowship-J. Taylor	47.049	378
DMS-0803083	Reduced Dimension Modeling of Slurry Flow in Peristaltic Pumping-PDF for J. Kao	47.049	1,035
DMS-0805638	Conference Proposal Talbot Workshops 2008-2010	47.049	12,887
DMS-0854764	FRG: Collaborative Research: Quantum Cohomology, Quantized Algebraic Varieties, and Representation Theory (budget revision)	47.049	29,662
DMS-0904858	Conference Proposal: Current and Classical Themes in Homotopy Theory	47.049	25,000
DMS-0928515	Conference: Perspectives in Mathematics and Physics	47.049	4,815
DMS-0935974	Conference: The Interplay of Algebra and Geometry	47.049	35,752
DMS-0943108	Summer workshop on Homotopy Theory; Cambridge, MA	47.049	5,834
PHY-0551153	CUA-Support for TOPS Program	47.049	100,136
PHY-0653514	REU Supplement Strongly Interacting Quantum Mixtures of Ultracold Atoms	47.049	953
PHY-0757931	Physics Problems to Tutor Generic Expertise	47.049	70,558
PHY-0934502	Financial Assistance for the CYGNUS 2009 Conference on Directional Dark Matter Detection	47.049	2,901
<b>Total for 47.049</b>			<b>496,009</b>
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
BCS-0643054	REU Child	47.075	18,886
BCS-0726806	Doctoral Dissertation for Charuleka Varadharajan	47.075	1,153
BCS-0746251	Doctoral Dissertation Research: Empirical Studies and Probabilistic Models of Word Segmentation and Word Learning - Graduate Fellowship for M. Frank	47.075	161
BCS-0816923	Grad Fellow - J. Coon: Doctoral Dissertation Research: Ergativity and Constituent Order in Chol	47.075	9,135

**Appendix B - Detail  
Massachusetts Institute of Technology  
Federal Non Research Support - On Campus  
Fiscal 2010 Expenditures**

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
BCS-0841282	Workshop of Formal Approaches to Maya Linguistics	47.075	15,631
BCS-0950219	Doctoral Dissertation Research: Acceptability Judgements and Laryngeal Phonotactics - GF for Gillian Gallagher	47.075	3,581
BCS-0951620	Workshop on Rich Grammars From Poor Inputs	47.075	12,745
MCB-0745638	REU Child	47.075	7,756
SES-0819397	Doctoral Dissertation Research: From Consent to Enforceability: The Effects of Form-Adhesive Contracts on Social...-Graduate Fellowship for Zev Eigen	47.075	909
SES-0822876	Doctoral Dissertation Research: Accounting for Taste, Regulating Food Labeling during the Nutrition Transition - Grad Fellowship for X. Frollich	47.075	6,033
SES-0822948	Doctoral Dissertation Research: Training Pilots, Crafting Moderns: A Comparative History of Aviation and Subjectivity... - Grad Fellow - C. Jeon	47.075	8,225
SES-0847853	Doctoral Dissertation Research: Crafting Life: A Sensory Ethnography of Constructive Biologies - GF for Hannah Roosth	47.075	1,100
SES-0850414	Doctoral Dissertation Research in DRMS: Boundedly Optimal Sampling for Decisions Under Uncertainty-Grad Fellowship for Edward Vul	47.075	17,318
SES-0920870	Doctoral Dissertation Research: Accessing the State: Local Governance & Public Goods in Rural India - GFP for G. Kruks-Wisner	47.075	11,924
SES-0956692	Doctoral Dissertation Research: When Worlds Collide: Terrestrial Places and Outer Spaces - GF for L. Messeri	47.075	8,433
<b>Total for 47.075</b>			<b>122,991</b>
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
CHE-0936816	ARRA - Cobalt-Based Water Oxidation Catalyst Formation at Metal Electrode Interfaces and Incorporation of Catalyst with Photoanode Materials	47.082	78,266
DBI-0905968	ARRA - Postdoctoral Research Fellowships in Biology for FY 2009	47.082	4,699
DGE-0946798	ARRA - Graduate Research Fellowship Program - '09-'10	47.082	858,500
<b>Total for 47.082</b>			<b>941,465</b>
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
DBI-0649152	REU Site: Biological Engineering Research Experience for Undergraduates (BE REU)	47.074	41,228
DBI-0804231	NSF minority Postdoctoral Fellowship for 2008-P. Weiland	47.074	5,054
DBI-0905973	Non-Coding RNA's Direct Epigenetic - PDF L. Goff	47.074	4,688
DBI-1005055	REU Site: Biological Engineering Research Experience for Undergraduates (BE REU)	47.074	52,757
<b>Total for 47.074</b>			<b>103,727</b>

**Appendix B - Detail  
 Massachusetts Institute of Technology  
 Federal Non Research Support - On Campus  
 Fiscal 2010 Expenditures**

**Total for NSF** 103,121  
**2,494,573**  
**Total for National Science Foundation** 2,494,573

**Miscellaneous Federal Govt.**

**Higher Education for Development**

<u>Contract Number</u> SUB UNDER AFC A 00 0E 00007	<u>Contract Title</u> Creating an Internet-Based Commons for Engineering Education in West Africa	<u>Cfdano</u> 98.012	<u>FY Expenses</u> 46,160
<b>Total for 98.012</b>			<b>46,160</b>
<b>Total for Higher Education for Development</b>			<b>46,160</b>

**Institute of Museum and Library Services**

<u>Contract Number</u> LG-06-06-0062	<u>Contract Title</u> FACADE: Future-Proofing Architectural Computer-Aided Design	<u>Cfdano</u> 45.312	<u>FY Expenses</u> -52
<b>Total for 45.312</b>			<b>-52</b>
<b>Total for Institute of Museum and Library Services</b>			<b>-52</b>

**National Endowment For The Arts**

<u>Contract Number</u> GRANT NO. 08-4400-7066	<u>Contract Title</u> Kenneth Noland Conservation	<u>Cfdano</u> 45.024	<u>FY Expenses</u> 30,000
<u>Contract Number</u> GRANT NO. 10-4400-7028	<u>Contract Title</u> Tavares Strachan Exhibition with Catalogue	<u>Cfdano</u> 45.024	<u>FY Expenses</u> 4,138
<b>Total for 45.024</b>			<b>34,138</b>
<b>Total for National Endowment For The Arts</b>			<b>34,138</b>

**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> 43,667
<u>Contract Number</u> HM1582-09-1-0025	<u>Contract Title</u> FY 09 DNI Postdoctoral Program -Dev and Application of Novel Molecular Wires	<u>Cfdano</u> 12.630	<u>FY Expenses</u> 81,070
<b>Total for 12.630</b>			<b>124,737</b>
<b>Total for National Geospatial Intelligence Agency</b>			<b>124,737</b>

**Sandia National Laboratories**

**Appendix B - Detail  
 Massachusetts Institute of Technology  
 Federal Non Research Support - On Campus  
 Fiscal 2010 Expenditures**

<u>Contract Number</u> PO 885049	<u>Contract Title</u> Sandia Fellowship-Thomas	<u>Cfdano</u> 81.CCC	<u>FY Expenses</u> 51,291
			<b>51,291</b>
			<b>51,291</b>

**Total for 81.CCC**  
**Total for Sandia National Laboratories**

**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> 83,994
<u>Contract Number</u> NA090AR4170009	<u>Contract Title</u> Abigail Franklin MITSG Knauss Fellowship 2009	<u>Cfdano</u> 11.417	<u>FY Expenses</u> 25,846
			<b>109,839</b>
			<b>109,839</b>

**Total for 11.417**  
**Total for U.S. Department of Commerce - NOAA**

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

<u>Contract Number</u> 70NANB10H094	<u>Contract Title</u> 2010 Surf Summer Program- Lemanski	<u>Cfdano</u> 11.609	<u>FY Expenses</u> 4,500
<u>Contract Number</u> SB134109SE0438	<u>Contract Title</u> 59th CIRP General Assembly	<u>Cfdano</u> 11.609	<u>FY Expenses</u> 15,000
			<b>19,500</b>
			<b>19,500</b>

**Total for 11.609**  
**Total for U.S. Department of Commerce-NIST (Natl Inst of Stand & Tech)**

**U.S. Department of HUD**

<u>Contract Number</u> COPC-MA05-646	<u>Contract Title</u> MIT-Lawrence Community Outreach Partership Center	<u>Cfdano</u> 14.511	<u>FY Expenses</u> -2,250
			<b>-2,250</b>
			<b>-2,250</b>

**Total for 14.511**  
**Total for U.S. Department of HUD**

**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> 13,454
<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> 47,595
			<b>61,049</b>
			<b>61,049</b>

**Total for 16.525**  
**Total for U.S. Department of Justice**

**U.S. Department of Transportation**

**Appendix B - Detail  
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<u>Contract Number</u> DDEGRD-09-X-00458	<u>Contract Title</u> Eisenhower Graduate Fellowship: T. Shephard - OHTA	<u>Cfdano</u> 20.215	<u>FY Expenses</u> 1,500
<b>Total for 20.215</b>			
<u>Contract Number</u> DTRS 99-G-0001	<u>Contract Title</u> UTC: OECD Symposium	<u>Cfdano</u> 20.701	<u>FY Expenses</u> 2,721
<u>Contract Number</u> DTRS99-G-0001	<u>Contract Title</u> CUTC Conference - UTC 13	<u>Cfdano</u> 20.701	<u>FY Expenses</u> 21,145
<b>Total for 20.701</b>			
<b>Total for U.S. Department of Transportation</b>			
<b>25,366</b>			

**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> 38,351
<u>Contract Number</u> FP-91690801-0	<u>Contract Title</u> Graduate Fellow: Hanan Karam	<u>Cfdano</u> 66.514	<u>FY Expenses</u> 14,270
<b>Total for 66.514</b>			
<b>Total for U.S. Environmental Protection Agency</b>			
<b>52,621</b>			

**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> 165,773
<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	<u>FY Expenses</u> 115,348
<b>Total for 77.CCC</b>			
<b>Total for U.S. Nuclear Regulatory Commission</b>			
<b>281,121</b>			
<b>Total for Miscellaneous Federal Govt.</b>			
<b>803,521</b>			

**Department of Energy**

<u>Contract Number</u> DE-SC0000604	<u>Contract Title</u> Time-Resolved Vibrational Spectroscopy Conference	<u>Cfdano</u> 81.049	<u>FY Expenses</u> 7,000
<b>Total for 81.049</b>			
<b>Total for DOE - Chicago</b>			
<b>7,000</b>			

**DOE - Idaho Falls**

<b>7,000</b>			
<b>Total for DOE - Chicago</b>			
<b>7,000</b>			



**Appendix B - Detail  
Massachusetts Institute of Technology  
Federal Non Research Support - On Campus  
Fiscal 2010 Expenditures**

<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> 99,999
			<b>99,999</b>
			<b>99,999</b>
	<b>Total for 81.121</b>		
	<b>Total for DOE - Idaho Falls</b>		

**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> 100,000
			<b>100,000</b>
	<b>Total for 81.117</b>		
	<b>Total for DOE-Golden Colorado</b>		<b>100,000</b>

**DOE-NETL**

<u>Contract Number</u> DE-FG26-08NTO3145	<u>Contract Title</u> The US DOE/MIT Innovation Acceleration Competition	<u>Cfdano</u> 81.114	<u>FY Expenses</u> 25,462
			<b>25,462</b>
	<b>Total for 81.114</b>		
	<b>Total for DOE-NETL</b>		<b>25,462</b>
	<b>Total for Department of Energy</b>		<b>232,461</b>

**Dept. of Health and Human Services**

**NIH**

<u>Contract Number</u> 1-F31-NS061625-01A1	<u>Contract Title</u> Modulation of Neural Representation & Perception - G F for D. Pritchett	<u>Cfdano</u> 93.853	<u>FY Expenses</u> 39,152
1-F31-NS069510-01	Molecular Regulation of Experience-Dependent Synapse - GF for J. Leslie	93.853	34,248
1-F32-NS063694-01A2	Testing the Hemo-Neural Hypothesis - PDF - D. Vierling-Claassen	93.853	21,312
1-F32-NS064750-01A1	Molecular Mechanisms - PDF for Richard Cho	93.853	48,828
1-F32-NS068020-01	The Role of Sirt1 in Neonatal Hypoxic Ischemic Brain Injury - PDF for A. Vaughn	93.853	12,669
1-R13-NS065552-01	Theoretical Ideas in Motor Systems Neuroscience: Capacity for Falsification	93.853	-8,863
5-F30-NS057899-03	Molecular Mechanisms of Visual Thalamic Dev-Graduate Fellow - Horng	93.853	42,601
	<b>Total for 93.853</b>		<b>189,947</b>

<u>Contract Number</u> 1-F32-GM082031-01	<u>Contract Title</u> Postdoctoral Fellow: Z. Tonzetich	<u>Cfdano</u> 93.859	<u>FY Expenses</u> 52,147
1-F32-GM084624-01	Crosslinking Ribonucleotide Reductase Subunits-PDF R. Kelley	93.859	37,262

**Appendix B - Detail**  
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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdao</u>	<u>FY Expenses</u>
1-F32-GM086004-01	A Functional Genomic Analysis-PDF for M. Stczynski	93.859	-1,699
1-F32-GM087028-01A1	Bioconjugation & Self-Assembly of Carbon nanotubes - PDF D. Chenoweth	93.859	48,103
1-F32-GM087034-01A1	Kinetics of Radical Initiation in the Ribonucleotide Reductase Holoenzyme - PDF for P. Holder	93.859	49,542
1-F32-GM087072-01	Regulation of DnaA and replication initiation in Bacillus subtilis - PDF, Richard Weart	93.859	27,334
1-F32-GM087872-02	A Total Synthesis of Gambierol Using an Epoxide-Opening Cascade Approach - PDF for Denise Colby	93.859	44,832
1-F32-GM088931-01	Shape Shifting Phosphines in Transition Metal Catalysis - PDF for Thomas Maimone	93.859	35,985
1-F32-GM089050-01	Molecular Basis for Priming of the Neutrophil DNADPH Oxidase in Trauma and Sepsis - PDF for A. Hsu	93.859	44,400
1-F32-GM090486-01	Structural Studies of Ribonucleotide Reductase - PDF - N. Ando	93.859	23,229
1-F32-GM093408-01	Regulation of DNA Application - PDF for H. Merrikh.	93.859	14,795
1-F32-GM093532-01	Palladium-Catalyzed Enantioselective Amination - PDF. A. Parsons	93.859	9,156
1-R 13-GM090632-01	2nd US-Canada Winter School on Biomolecular Solid State NMR	93.859	4,961
5-F31-GM081916-03	Elucidating the Role of mal1 in Cell Cycle Control -Grad Fellow-Cruz	93.859	38,615
5-F32-GM078966-03	Postdoctoral Fellow: B. Minesinger	93.859	7,238
5-F32-GM079885-02	Regulation of the E. coli Y-Family - PDF for J. Foti	93.859	48,383
5-F32-GM080060-03	Postdoctoral Fellow: J. Rosenthal	93.859	32,618
5-F32-GM080866-03	Water Oxidization in Synthetic Heme - PDF for A. Radosevich	93.859	41,078
5-F32-GM080966-03	Postdoctoral Fellow: S. Rifkin	93.859	11,075
5-F32-GM082067-03	Postdoctoral Fellow: P. Li	93.859	34,069
5-F32-GM082081-02	Models of the Oxygen-Evolving Complex-PDF for J. Melnick	93.859	14,185
5-F32-GM083472-03	Mesenchymal Stem Cell Behavior-PDF.S. Peyton	93.859	47,670
5-F32-GM084564-03	Evaluating Aspects of O2-Activation by Bacterial Multicomponent Monooxygenase-PDF for R. Behan	93.859	45,729
5-F32-GM084640-02	Ecological Fitness of Vibrios -PDF for H. Wildschutte	93.859	49,182
5-F32-GM085909-02	Design, Synthesis& Application of a Real-time MAPK Activity Sensor - PDF for C. Stains	93.859	48,799
5-F32-GM085930-02	Fluorescence Sensing of NO: Development of Reversible Sensor Using Fe (III) - PDF for M. Pluth	93.859	37,949

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F32-GM086040-02	Nucleophilic Planar-Chiral Heterocycles for Activatin of Electrophilic Halogens - PDF for Justin Mohr	93.859	43,552
5-F32-GM086044-02	Synthesis of Novel Macrocyclic-Containing Polymers as Protease Sensors-PDF for Mindy Levine	93.859	47,501
5-F32-GM087032-02	Enzymes of the Vinca Alkaloids - PDF for A. Usera	93.859	47,161
5-F32-GM087100-02	Elucidating Cofactor-Biosynthesis- PDF for C. Shih	93.859	42,578
5-F32-GM087889-02	Asymmetric, Phosphine-Catalyzed Syntheses - PDF J. Murphy	93.859	40,098
5-F32-GM080794-02	Probing the Glycan Biosynthetic Machinery of Campylobacter Jejuni PDF for Jerry Troutman	93.859	50,260
<b>Total for 93.859</b>			<b>1,117,788</b>
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F31-EY020057-01	Unsupervised neuronal and perceptual learning of invariant object representation - GF for N. Li	93.867	19,740
1-F32-EY0 20066-01	The Role of MicroRNAs - PDF - N. Mellios	93.867	21,999
1-F32-EY019609-01	The Neural Organization of Face and Object Patches - PDF E. Issa	93.867	41,434
1-F32-EY020157-01	Updating Location Information across Object and Eye Movements - PDF - J. Gollumb	93.867	25,734
5-F32-EY016982-02	Postdoctoral Fellow: G. Alvarez	93.867	57
5-F32-EY017243-02	Postdoctoral Fellow: R. Mao	93.867	1,918
5-F32-EY017263-03	Postdoctoral Fellow: A. Bhakar	93.867	408
5-F32-EY018063-03	Postdoctoral Fellow: N. Rust	93.867	621
5-F32-EY018993-03	PDF for J. Cromer-Comparison of Frontal Cortex and Straitum During Visual Categorization	93.867	57,209
5-F32-EY019228-02	Causal Perceptual Processing - PDF for P. Battaglia	93.867	44,895
<b>Total for 93.867</b>			<b>214,017</b>
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-EB009969-01	Near-IR Fluorescence Sensors-D. Buccella	93.286	40,687
1-F32-EB011580-01	Understanding Biocompatibility - PDF - K Brattie	93.286	22,337
5-F32-EB009291-02	Self-Organized Tissue Microvasculature - PDF, D. Wood	93.286	45,197
5-P41-EB002026-34	Harvard/MIT Center for Magnetic Resonance: 2010 WINTER SCHOOL	93.286	10,002
<b>Total for 93.286</b>			<b>118,223</b>

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<u>Contract Number</u> 1-F32-AI082928-01	<u>Contract Title</u> ARRA - Master Regulators of Transcription in the C. Crescentus Cell Cycle	<u>Cfdano</u> 93.701	<u>FY Expenses</u> 33,017
1-F32-AI082929-01	ARRA - Defining AAA+ Enzyme Function in Bacterial Secretion	93.701	38,540
	<b>Total for 93.701</b>		<b>71,557</b>
<u>Contract Number</u> 5-F32-AR055438-03	<u>Contract Title</u> Postdoctoral Fellow: A. Jaklenec	<u>Cfdano</u> 93.846	<u>FY Expenses</u> 52,408
5-F32-AR056567-02	Development of Biodegradable Scaffolds for Stem Cell-based Tissue Reneneration - PDF for F. Yang	93.846	6,883
	<b>Total for 93.846</b>		<b>59,291</b>
<u>Contract Number</u> 1-F32-HD061180-O1A1	<u>Contract Title</u> Neural Correlates of Orthographic and Phonological Processing - PDF for Marianna Eddy	<u>Cfdano</u> 93.865	<u>FY Expenses</u> 21,038
5-F32-HD059302-02	Neural Substate of Language and Social Cognition - PDF for E. Redcay	93.865	45,793
	<b>Total for 93.865</b>		<b>66,831</b>
<u>Contract Number</u> 1-F32-HG005192-01	<u>Contract Title</u> Analysis and Integration of Expression Patterns in Embryonic Regulatory networks - PDF for C. Bristow	<u>Cfdano</u> 93.172	<u>FY Expenses</u> 34,204
	<b>Total for 93.172</b>		<b>34,204</b>
<u>Contract Number</u> 5-F31-AI080286-02	<u>Contract Title</u> Role of Cytokines in the Persistence of Tolerized T Cells - Grad Fellow- M. Olurinde	<u>Cfdano</u> 93.855	<u>FY Expenses</u> 34,052
5-F32-AI074245-03	DegS Protease and Initiation of the Envelope-stress Response - PDF for J. Sohn	93.855	51,599
	<b>Total for 93.855</b>		<b>85,651</b>
<u>Contract Number</u> 5-F32-MH081507-03	<u>Contract Title</u> PDF-S. Brincat-Prefrontal and Temporal Lobe	<u>Cfdano</u> 93.242	<u>FY Expenses</u> 45,003
	<b>Total for 93.242</b>		<b>45,003</b>
<u>Contract Number</u> 5-F32-DK076284-03	<u>Contract Title</u> Postdoctoral Fellow: R. Dowell	<u>Cfdano</u> 93.848	<u>FY Expenses</u> 8,707
	<b>Total for 93.848</b>		<b>8,707</b>
<u>Contract Number</u> 5-F32-MH084488-02	<u>Contract Title</u> Rumination, Arousal and Cognition in Depression - PDF F. Polli	<u>Cfdano</u> 93.282	<u>FY Expenses</u> 50,053
5-F32-MH085454-02	Ensemble Recording in Corticostriatal Pathways-PDF for K. Smith	93.282	45,240
	<b>Total for 93.282</b>		<b>95,293</b>

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<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
1-F32-CA139902-01	In vivo Characterization of MicroRNA Regulation - PDF for Jesse Zamudio	93.398	34,003
1-F32-CA142144-01	Roles of Rho Proteins During Stages: PDF - J - Lamar	93.398	9,840
1-F32-CA142150-01	Modelling BRaf-dependent Thyroid Cancer in the Mouse - PDF for D. McFadden	93.398	42,960
5-F32-CA132358-03	SIRT1 Attenuates Beta-Catenin Mediated Tumorigenesis - PDF for E. Bell	93.398	46,873
	<b>Total for 93.398</b>		<b>133,676</b>
<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
5-F31-GM072116-03	Predoctoral Fellow: Melva James	93.880	1,058
	<b>Total for 93.880</b>		<b>1,058</b>
	<b>Total for NIH</b>		<b>2,241,245</b>
	<b>Total for Dept. of Health and Human Services</b>		<b>2,241,245</b>

**Department of Defense**

**Air Force Office of Scientific Research - AFOSR**

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
FA9550-09-1-0473	The Fourteenth International Meeting on Time-Resolved Vibrational Spectroscopy (TRVS XIV)	12.800	7,500
FA9550-09-1-0498	DOD Cap Funds - FY10 Appropriations - Dahleh	12.800	29,815
	<b>Total for 12.800</b>		<b>37,315</b>
	<b>Total for Air Force Office of Scientific Research - AFOSR</b>		<b>37,315</b>

**Army Research Office**

<u>Contract Number</u>	<u>Contract Title</u>	<u>Cfdano</u>	<u>FY Expenses</u>
W911NF-08-1-0210	2009 CONFERENCE ON FIELD AND SERVICE ROBOTICS, FSR '09	12.431	25,840
W911NF-09-1-0381	Challenges in Information Evaluation and Extraction in Distributed Sensing Systems	12.431	25,167
W911NF-09-1-0412	DoD Cap Funds -YF 10 Appropriation - Dahleh	12.431	26,699
	<b>Total for 12.431</b>		<b>77,706</b>
	<b>Total for Army Research Office</b>		<b>77,706</b>

**Defense Threat Reduction Agency**

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<u>Contract Number</u> HDTRA1-09-1-0042	<u>Contract Title</u> Frontier Studies of Single Stage Superconducting Cyclotron-Based Primary Accelerators - Supplement to Year Two for USPAS	<u>Cfdano</u> 12.351	<u>FY Expenses</u> 10,000
<b>Total for 12.351</b>			<b>10,000</b>
<b>Total for Defense Threat Reduction Agency</b>			
			<b>10,000</b>
<b>Navy - ONR</b>			
<u>Contract Number</u> N00014-08-1-1035	<u>Contract Title</u> October 25, 2008 Meeting: Recent Trends and Advances in Underwater Acoustics and Signal Processing	<u>Cfdano</u> 12.300	<u>FY Expenses</u> 577
<u>Contract Number</u> N00014-08-1-1097	<u>Contract Title</u> Physical and Interdisciplinary Regional Ocean Dynamics and Modeling Systems	12.300	6,050
<b>Total for 12.300</b>			<b>6,627</b>
<b>Total for Navy - ONR</b>			<b>6,627</b>
<b>U.S. Army Medical Research and Material Command</b>			
<u>Contract Number</u> W81XWH-06-1-0789	<u>Contract Title</u> Graduate Fellowship: R. Sastry	<u>Cfdano</u> 12.420	<u>FY Expenses</u> 6,441
<u>Contract Number</u> W81XWH-08-1-0298	<u>Contract Title</u> Signature and Mechanism of the Epithelial-to-Mesenchymal Transition-Grad Fellow for J. Kah	12.420	29,997
<u>Contract Number</u> W81XWH-08-1-0788	<u>Contract Title</u> Identification of a Putative Metastasis-Grad Fellow for S. Valastyan	12.420	30,513
<u>Contract Number</u> W81XWH-10-1-0040	<u>Contract Title</u> Systems Analysis of Cell Invasion - PDF - S.Alford	12.420	31,416
<b>Total for 12.420</b>			<b>98,367</b>
<b>Total for U.S. Army Medical Research and Material Command</b>			<b>98,367</b>
<b>Total for Department of Defense</b>			<b>230,014</b>
<b>Total Federal Non-Research Support</b>			<b>7,770,955</b>

**Appendix C - Detail  
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**American Society/Engineering Education**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2291100	LETTER DATED 8/11/99	Ndseg Fellowship Program	12.300	3,106,161
		<b>Total for 12.300</b>		<b>3,106,161</b>
		<b>Total for American Society/Engineering Education</b>		<b>3,106,161</b>

**Battelle-Pacific Northwest Laboratories**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2742764	92922	Nw12 Nuclear Reactor Lab - Irradiator	81.CCC	384,978
2742986	94749	Nw12 Nuclear Reactor Lab: Reactor Projec	81.CCC	1,239,424
		<b>Total for 81.CCC</b>		<b>1,624,402</b>
		<b>Total for Battelle-Pacific Northwest Laboratories</b>		<b>1,624,402</b>

**Baylor College of Medicine**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2741558	EO01001	Graduate Education Program In In Space L	43.000	-490
2742136	SA01701	Bioastronautics Flight Opportunities	43.000	20,491
2742358	SA01701	Team Leader Funding - Senorimotor Adapla	43.000	73,093
2742579	EO01001	Graduate Education Program In In Space L	43.000	187,300
2743521	SA01701	Team Leader Funding - Senorimotor Adapla	43.000	194
		<b>Total for 43.000</b>		<b>280,588</b>
		<b>Total for Baylor College of Medicine</b>		<b>280,588</b>

**Brigham & Women's Hospital**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2388208	104821	ARRA - Supplemental Fellowship Support - Gf H.	47.082	6,840
		<b>Total for 47.082</b>		<b>6,840</b>
		<b>Total for Brigham &amp; Women's Hospital</b>		<b>6,840</b>

**CalTech - Jet Propulsion Lab**

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<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2743257	1399500	Castor Nanostaellite - Space Systems Eng	43.CCC	2,637
		<b>Total for undefined</b>		<b>2,637</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2742800	1370615	Space Systems Product Development: Educa	43.CCC	20,000
		<b>Total for 43.CCC</b>		<b>20,000</b>
		<b>Total for CalTech - Jet Propulsion Lab</b>		<b>22,637</b>

**Computing Research Association**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2388145	CIF-237	Computing Innovation Fellows Project - P	47.070	67,642
		<b>Total for 47.070</b>		<b>67,642</b>
		<b>Total for Computing Research Association</b>		<b>67,642</b>

**Consortium for Oceanographic Research & Education (Core)**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2741899	UNDER NA07SEC4690001	Blue Lobster Bowl	11.431	15,775
		<b>Total for 11.431</b>		<b>15,775</b>
		<b>Total for Consortium for Oceanographic Research &amp; Education (Core)</b>		<b>15,775</b>

**Draper Laboratory Incorporated**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2741335	P0001-0001011468	Draper Fellow: K. Shank Military	12.CCC	3,126
2741338	P0001-0001010785	Draper Fellow: T. Savoie	12.CCC	-11
2741340	P0001-0001010767	Draper Fellow: E. Swan	12.CCC	-11
2741342	P0001-0001011350	Draper Fellow: J. Jeon	12.CCC	-0
2742401	P00001-0001013519	Draper Fellow - E. Cook	12.CCC	48,812
2742402	P00001-0001013509	Draper Fellow - J. Agte, Usaf	12.CCC	19,323
2742403	P00001-0001013506	Draper Fellow - N. Lowry	12.CCC	48,812



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<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2742404	P00001-0001013533	Draper Fellow - D. Butts	12.CCC	48,812
2742405	P00001-0001013534	Draper Fellow - T. Small, Usaf	12.CCC	29,571
2742406	P00001-0001013536	Draper Fellow - R. Owen, Usaf	12.CCC	29,571
2742407	P00001-0001013571	Draper Fellow - K. Kotru	12.CCC	46,228
2742408	P00001-0001013573	Draper Fellow - A. Middleton	12.CCC	46,228
2742409	P00001-0001013587	Draper Fellow - R. Effinger	12.CCC	48,812
2742410	P00001-0001014674	Draper Fellow - C. Han	12.CCC	39,344
2742411	P00001-0001015549	Draper Fellow - S. Nothnagel	12.CCC	19,672
2742422	P00001-0001013586	Draper Fellow - D. Giuliano	12.CCC	46,285
2742423	P00001-0001013581	Draper Fellow - Y. Xu	12.CCC	3,398
2742424	P00001-0001013590	Draper Fellow - A. Deshmane	12.CCC	2,290
2742425	P00001-0001013608	Draper Fellow - J. Marrero	12.CCC	24,261
2742426	P00001-0001013656	Draper Fellow - J. Varsanik	12.CCC	48,812
2742427	P00001-0001013983	Draper Fellow - A. Wooten	12.CCC	43,942
2742431	P00001-0001013601	Draper Fellow - E. Swan	12.CCC	5,006
2742432	P00001-0001013604	Draper Fellow - J. Jeon	12.CCC	43,919
2742433	P00001-0001013609	Draper Fellow - T. Savoie	12.CCC	32,219
2742434	P00001-0001014309	Draper Fellow - J. Norell	12.CCC	39,344
2742435	P00001-0001014424	Draper Fellow - P. Holzer	12.CCC	39,344
2742436	P0001-0001014767	Draper Fellow - N. Inamdar	12.CCC	37,056
2742437	P00001-0001013510	Draper Fellow - A. Snyder, Usaf	12.CCC	29,571
2742438	P00001-0001013589	Draper Fellow - T. Herold, Usaf	12.CCC	29,571
2742439	P00001-0001013588	Draper Fellow - K. Shenk-Kallabis, Usaf	12.CCC	29,571
2742440	P00001-00010134058	Draper Fellow - J. Cates	12.CCC	29,571
2742443	P0001-0001014675	Draper Fellow - C. Ko	12.CCC	37,056
2742446	P00001-0001013574	Draper Fellow - T. Zens	12.CCC	18,534
2742447	P00001-0001013612	Draper Fellow - J. Wang	12.CCC	46,228
2742450	P0001-0001015065	Draper Fellow - E. Lanford	12.CCC	34,768
2742455	P00001-0001013548	Draper Fellow - J. Richards, Army	12.CCC	41,325
2743432	PO 0001-0001016680	Draper Fellow - Lowry	12.CCC	2,553
2743433	PO 0001-0001016640	Draper Fellow - Cook	12.CCC	2,553
2743434	PO 0001-0001016652	Draper Fellow - Han	12.CCC	2,333
2743435	PO 0001-0001016649	Draper Fellow - Nothnagel	12.CCC	2,333
2743436	PO 0001-0001016647	Draper Fellow - Effinger	12.CCC	2,553
2743437	PO 0001-0001016773	Draper Fellow - Middleton	12.CCC	3,681
2743438	PO 0001-0001016770	Draper Fellow - Butts	12.CCC	2,553
2743439	PO 0001-0001016769	Draper Fellow - Kotru	12.CCC	2,333
2743450	PO 0001-0001016679	Draper Fellow - Ko	12.CCC	2,333

**Appendix C - Detail**  
**Massachusetts Institute of Technology**  
**Federal Non-Research Support - Passthrough - On Campus**  
**Fiscal 2010 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2743451	PO 0001-0001016722	Draper Fellow - Inamdar	12.CCC	2,553
2743452	PO 0001-0001016718	Draper Fellow - Norell	12.CCC	2,333
2743453	PO 0001-0001016726	Draper Fellow - Holzer	12.CCC	2,333
2743454	PO 0001-0001016727	Draper Fellow - Jeon	12.CCC	2,553
2743455	PO 0001-0001016651	Draper Fellow - Giuliano	12.CCC	2,556
2743456	PO 0001-0001016648	Draper Fellow - Varsanik	12.CCC	2,556
2743457	PO 0001-0001016724	Draper Fellow - Wooten	12.CCC	2,343
2743463	PO 0001-0001016728	Draper Fellow - Wang	12.CCC	2,333
2743472	PO 0001-0001016784	Draper Fellow - E. Lanford	12.CCC	3,681
<b>Total for 12.CCC</b>				<b>1,136,823</b>
<b>George Washington University</b>				<b>1,136,823</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2739909	07-S09	Department Of Defense National Security	12.000	70,928
<b>Total for 12.000</b>				<b>70,928</b>
<b>George Washington University</b>				<b>70,928</b>
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2387795	LTR. DTD. 11/3/06	Postdoctoral Fellowship: M. Platt	47.041	40
<b>Total for 47.041</b>				<b>40</b>
<b>Georgia Institute of Technology</b>				<b>40</b>

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
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	14,992
2743353	LETTER AGREEMENT 3/30/10	Letter Agreement: Ying Zhang	93.879	2,776
<b>Total for 93.879</b>				<b>33,768</b>
<b>Harvard Medical School</b>				

**Appendix C - Detail  
 Massachusetts Institute of Technology  
 Federal Non-Research Support - Passthrough - On Campus  
 Fiscal 2010 Expenditures**

Total for Harvard Medical School **33,768**

**Higher Education for Development**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2742997	SUB UNDER AEG-A-00-05-00007	Creating An Internet-Based Commons For E	98.012	46,160
		<b>Total for 98.012</b>		<b>46,160</b>

**Total for Higher Education for Development**

**46,160**

**Institute of International Education, Inc.**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2387978	AGREEMENT DATED 6/2/08	Hubert H Humphrey Fellowship Program (Sp	19.CCC	25,506
2388109	AGREEMENT DATED 6/1/09	Hubert H Humphrey Fellowship Program (Sp	19.CCC	143,063
		<b>Total for 19.CCC</b>		<b>168,568</b>

**Total for Institute of International Education, Inc.**

**168,568**

**Krell Institute**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2225900	FELLOWSHIP COMMITMENT	Computational Science Graduate Fellowshi	81.049	4,766
2388139	LTR. DTD. 9/09	Doe Nnsa Stewardship Science Graduate Fe	81.049	959
2388183	LTR. AGREEMENT	Doe Nnsa Stewardship Science Graduate Fe	81.049	265
		<b>Total for 81.049</b>		<b>5,990</b>

**Total for Krell Institute**

**5,990**

**Lincoln Laboratory**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cfdano</u>	<u>Fyld Amount</u>
2743157	7000097584	Suuport Of The Security Studies Program	12.CCC	24,092
		<b>Total for 12.CCC</b>		<b>24,092</b>

**Total for Lincoln Laboratory**

**24,092**

**Maryland Public Television**

**Appendix C - Detail**  
**Massachusetts Institute of Technology**  
**Federal Non-Research Support - Passthrough - On Campus**  
**Fiscal 2010 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fytd Amount</u>
2738616	BPO #R15B7200070	Mpt/Cte Star Schools	84.203	2,314
		<b>Total for 84.203</b>		<b>2,314</b>
		<b>Total for Maryland Public Television</b>		<b>2,314</b>

**Massachusetts General Hospital**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fytd Amount</u>
2388165	MEMORANDUM OF UNDERSTANDING	Mit-Cimit Medical Engineering Fellowship	12.420	59,033
		<b>Total for 12.420</b>		<b>59,033</b>
		<b>Total for Massachusetts General Hospital</b>		<b>59,033</b>

**Missouri Botanical Garden**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fytd Amount</u>
2742101	DRL-0833663/NSF05848MI	Csi: Community Science Investigators	47.076	115,694
		<b>Total for 47.076</b>		<b>115,694</b>
		<b>Total for Missouri Botanical Garden</b>		<b>115,694</b>

**National Academy of Engineering**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fytd Amount</u>
2742734	NAE-P290939	Developing Academic Faculty As Leaders O	47.046	2,500
		<b>Total for 47.046</b>		<b>2,500</b>
		<b>Total for National Academy of Engineering</b>		<b>2,500</b>

**Regional Alliance, TERC**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fytd Amount</u>
2741535	#4193	Ise Project: Kids Survey Network - Educ	47.076	175,266
		<b>Total for 47.076</b>		<b>175,266</b>
		<b>Total for Regional Alliance, TERC</b>		<b>175,266</b>

**Appendix C - Detail  
Massachusetts Institute of Technology  
Federal Non-Research Support - Passthrough - On Campus  
Fiscal 2010 Expenditures**

**Smithsonian Inst. - Astrophysical Observatory**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2739939	GO7-8039X	Kids Question The Cosmos	43.000	14,847
2741118	GO8-9051X	Precise Localization Of Neutron Star Sof	43.000	34,043
2742204	G09-0069A	Building Partnerships Through Kids Captu	43.000	29,673
		<b>Total for 43.000</b>		<b>78,563</b>
		<b>Total for Smithsonian Inst. - Astrophysical Observatory</b>		<b>78,563</b>

**Space Telescope Science Institute**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2388006	HST-HF-01218-01-A	Energy Feedback From Weakly Accreting Su	43.000	23,223
2388193	HST-HF-51241.01-A	Energy Feedback From Weakly Accreting Su	43.000	55,743
		<b>Total for 43.000</b>		<b>78,965</b>
		<b>Total for Space Telescope Science Institute</b>		<b>78,965</b>

**Sri International**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2741133	SUBCONTRACT NO. 59-001315	Participant Costs	47.050	14,739
		<b>Total for 47.050</b>		<b>14,739</b>
		<b>Total for Sri International</b>		<b>14,739</b>

**University of California-San Diego**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2742980	PC# 10298908	National Science Festival	47.076	193,144
		<b>Total for 47.076</b>		<b>193,144</b>
		<b>Total for University of California-San Diego</b>		<b>193,144</b>

**University of Hawaii**

**Appendix C - Detail**  
**Massachusetts Institute of Technology**  
**Federal Non-Research Support - Passthrough - On Campus**  
**Fiscal 2010 Expenditures**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2740906	Z792093-02	Cmore Educational Programs	47.074	1,430
		<b>Total for 47.074</b>		<b>1,430</b>
		<b>Total for University of Hawaii</b>		<b>1,430</b>
<b>University of Massachusetts - Amherst</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2737505	05-003146-E-01	No Longer A Dream Deferred: Greater Ste	47.076	30,927
		<b>Total for 47.076</b>		<b>30,927</b>
		<b>Total for University of Massachusetts - Amherst</b>		<b>30,927</b>
<b>University of North Carolina at Charlotte</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2738327	2975-05-02055	Epo Account	47.041	272
		<b>Total for 47.041</b>		<b>272</b>
		<b>Total for University of North Carolina at Charlotte</b>		<b>272</b>
<b>University of Virginia</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2742312	GA10763-132668	Gi Bill Workshop	47.041	-9
		<b>Total for 47.041</b>		<b>-9</b>
		<b>Total for University of Virginia</b>		<b>-9</b>
<b>University of Washington</b>				
<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2742948	SUBCONTRACT NO. 431135	Center For Enabling New Technologies Thr	47.049	6,500
		<b>Total for 47.049</b>		<b>6,500</b>
		<b>Total for University of Washington</b>		<b>6,500</b>

**Appendix C - Detail**  
**Massachusetts Institute of Technology**  
**Federal Non-Research Support - Passthrough - On Campus**  
**Fiscal 2010 Expenditures**

**University of Wisconsin-Madison**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2738430	SS06002	Augmented Reality Simulation Gamas For M	84.203G	612
<b>Total for 84.203G</b>				<b>612</b>
<b>Total for University of Wisconsin-Madison</b>				<b>612</b>

**Whitehead Institute/Biomedical Research**

<u>WBS #</u>	<u>Contract Number</u>	<u>Wbs Title</u>	<u>Cidano</u>	<u>Fyid Amount</u>
2387653	12-4001-0302	Traineeship: Deconstructing Prion Biogen	12.420	-5,492
<b>Total for 12.420</b>				<b>-5,492</b>
<b>Total for Whitehead Institute/Biomedical Research</b>				<b>-5,492</b>
<b>Total</b>				<b>7,364,871</b>

**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, 2010, and have issued our report thereon dated September 15, 2010. 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

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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 30, 2010.

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, 2010



**Report of Independent Auditors on Compliance with Requirements That Could Have a Direct and Material Effect on Each Major Program (Except Lincoln Labs) 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 Labs, which totaled \$751,304,194 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 Labs under the Institute's major research and development program. Additionally, DCAA tested the Institute's indirect cost rates for the awards within Lincoln Labs. The DCAA's reports on compliance and internal controls are included in the package beginning on page 260.
  - 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 all awards, except those awards at Lincoln Labs (See Item 3a above).

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## **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 could have a direct and material effect on each of its major federal programs for the year ended June 30, 2010, except as described in the first paragraph of this report and 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 251-253). 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 Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the 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 3b 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, 2010. 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 10-1.



### **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 first paragraph of this report and 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 31, 2011

**Massachusetts Institute of Technology**  
**Schedule of Findings and Questioned Costs**  
**Year Ended June 30, 2010**

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**Section I Summary of PwC's Results<sup>1</sup>**

**Financial Statements**

Type of auditor's report issued Unqualified

Internal control over financial reporting

Material weakness(es) identified  Yes  No

Significant deficiency (ies) identified that are not considered to be material weaknesses  Yes  None Reported

Noncompliance material to financial statements noted?  Yes  No

**Federal Awards**

Internal control over major programs

Material weakness (es) identified?  Yes  No

Significant deficiency (ies) identified that are not considered to be material weaknesses?  Yes  None Reported

Type of auditor's report issued on compliance for major programs PwC Report - page 247 Unqualified

Any audit findings disclosed that are required to be reported in accordance with section 510(a) of OMB Circular A-133?  Yes  No

Identification of major programs

**CFDA Number**

Various  
 Various  
 47.082

**Name of Federal Program or Cluster**

Student Financial Assistance Cluster,  
 Research & Development Cluster  
 National Science Foundation Fellowships

Dollar threshold used to distinguish between Type A and Type B programs \$3,836,127

Auditee qualifies as a low-risk auditee?  Yes  No

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<sup>1</sup> 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 Labs 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, 2010**

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**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 in on page 247 of the package, as required to be reported by Circular A-133, Section 510.

**Research and Development Cluster - on-campus**

**Finding No. 10-1**  
**Compliance Requirements: Reporting (L)**

<b>Federal Programs Involved</b>	<b>Federal CFDA Number</b>	<b>Award Number/Days Late</b>	<b>Award Year</b>
National Institutes of Health	93.286	1-R03-EB008673-01 (4 days )	8/1/2008 - 4/30/2010
US Geological Survey	15.CCC	08WRSA0634- (15 days)	5/8/2009 - 4/30/2010
National Institutes of Health	93.242	1-T32-MH082718-01A - (35 days )	7/2/2009 - 6/30/2010
National Institutes of Health	93.859	2-P50-GM068762-06 - (88 days )	9/1/2008 - 8/31/2009

**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 41 reports, across multiple agencies: sixteen closeout reports and 25 reports for other reporting, including quarterly reports, for testing of the MIT on-campus R&D cluster.

We noted that for four out of the sixteen closeout reports, the reports were not filed by the due dates. The reports were filed four, fifteen, 35, and 88 days late, respectively.

None of the selected 25 reports for other 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.



**Massachusetts Institute of Technology**  
**Schedule of Findings and Questioned Costs**  
**Year Ended June 30, 2010**

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**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.

**Recommendation**

As noted in the prior year DCAA report, 17 out of 25 reports were filed late. In 2010, the number of late reports has declined significantly as a result of the corrective action plan implemented in 2010. We recommend that the Institute continue to identify the causes of the late reports and determine what changes are necessary to sustain this improved 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, 2010**

---

See the Institute's Schedule of Prior Audit Findings, beginning on page 255 of the package.



**Office of Sponsored Programs**

Phone 617.324.9022  
Fax 617.253.4734  
Email mchristy@mit.edu

March 14, 2011

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 2010 A-133 audit of MIT. MIT management's response and corrective action plans appear below.

**10-1. 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 a dramatic improvement in compliance with reporting requirements in fiscal year 2010 over fiscal year 2009 when a sampling revealed 68% late financial reports. However, we recognize that filing even 10% of reports late, as was the case in fiscal year 2010, is unacceptable. While our interim financial reporting remains timely, maintaining 100% compliance with final financial reporting has presented challenges.

We have recently hired a new Manager of Sponsored Accounting and a new Staff Accountant to work on Federal sponsored financial reporting in an effort to enhance our processes and work toward 100% compliance with reporting requirements. We are also working to analyze root causes of late financial reports in order to correct the underlying deficiencies that lead to untimely financial reports.

Finally, we have recently launched a pilot program with a subset of departments to provide pre-audit checklist information to operating units 90 days in advance of award expiration. Our goal is to raise awareness of the importance of timely financial closeout and reporting and to give MIT administrators the opportunity to address issues well in advance of award expiration, facilitating timely closeout and reporting.

**Issue Coordinator:** Robin Elices, Senior Director, Office of the Vice President for Finance  
**Completion Date:** June 2011

Sincerely,



Michelle D. Christy  
Director of Sponsored Programs

Cc: M. Barone, Interim Controller  
R. Elices, Sr. Director, Office of the Vice President for Finance  
D. Fisher, Institute Auditor

Reference: DCAA Audit Report # 2171-2009G10110001

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**

*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. No further action deemed necessary.*

Issue Coordinator - Robin Elices, Senior Director, Office of the Vice President for Finance

Completion Date - July 2010 (FY 2011)

### **09-B. Rental Costs – Constructive Cost of Ownership**

*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.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

### **09-C. Assignable Square Footage – Landau Building**

*Corrective Action was taken --- space was adjusted in MIT's cost model to reflect the audit identified portion of room 66-157 used for instruction purposes.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - March 2010

### **09-D. Legal Fees – In Excess of Contract**

*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. No further action is deemed necessary.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - N/A

**09-E. Legal Fees – MIT’s Boathouse**

*Corrective Action was taken --- MIT will continue to screen all external legal bills for allocability to research.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-F. Legal Fees – Duplicate Unallowable Entry**

*Corrective Action was taken --- The duplicate entry was the result of human error and was removed from MIT’s cost model.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**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.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-H. Internal Lawyers – General Counsel Office**

*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. Discussions are on-going.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - N/A

**09-I. Severance Costs**

*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.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-J. Professional Services Costs - Huron**

*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.*

Issue Coordinator - Robin Elices, Senior Director, Office of the Vice President for Finance

Completion Date - June 2010

**09-K. Insurance Premiums – MIT Flying Club**

*Corrective Action was taken --- MIT will take steps to ensure that this cost is excluded from all future cost submissions.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-L. Moving Expenses**

*Corrective Action was taken --- MIT will continue to carefully screen expenses in Senior Officers' accounts.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-M. Software Depreciation Costs**

*Corrective Action was taken --- These costs were included in MIT's cost submission in error. The Office of Cost Analysis will review the annual software depreciation schedule with the Property Office to ensure that double charging does not happen in the future.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-N. Indirect Travel – First Class Airfare**

*Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-O. Indirect Travel – Hotel Room**

*Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-P. Indirect Travel – Out of Period Costs**

*Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-Q. Indirect Travel – Former Employee**

*Corrective Action was taken --- MIT will continue to diligently screen all travel costs for allowability.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-R. Professional Services Costs – DOS Software**

*Corrective Action was taken --- MIT will continue to screen new accounts for allocability to research.*

Issue Coordinator - John Donahue, Associate Director of Sponsored Programs

Completion Date - November 2010 (submission of the FY 2010 Incurred Cost Study)

**09-S. MIT's Unallowable Analysis**

*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.*

Issue Coordinator - Robin Elices, Senior Director, Office of the Vice President for Finance

Completion Date - June 2010

**Direct Costs**

**09-T. Non-Reimbursable Expense (Prime Contractor – Microelectronics Advance Research Corp. – Award No. 2003-MT-887)**

*MIT does not concur with the questioned costs as the costs were included in the budget and prior approval was obtained. 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 10-1 for update on current year results.*

Issue Coordinator - Robin Elices, Senior Director, Office of the Vice President for Finance

Completion Date - June 2010

# Defense Contract Audit Agency



United States  
Department of Defense



March 29, 2011

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, 2010

## **AUDIT REPORT NO. 2171-2010F10110001**

### 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)  
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**AUDITEE:** MIT Lincoln Laboratory  
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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, 2010. 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) 2010 incurred costs. MIT LL's FY end is September 30. However, we audited the cited period to coincide with MIT's FY 2010 since MIT LL participates in MIT's indirect rates. The purpose of the audit was to determine the allowability and allocability of direct costs and indirect costs for the period ended June 30, 2010.

The proposal and compliance with the requirements of laws, regulations, and contracts 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, and contracts 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.

## Audit Report No. 2171-2010F10110001

- Activities allowed or unallowed
- Allowable cost/cost principles
- Cash management
- Davis-Bacon Act
- 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, 2010. However, the results of our auditing procedures disclosed instances of noncompliance with those requirements of allowable costs/cost principles 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:** We questioned \$88,221 of direct costs proposed under government contracts. Details of our questioned 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 16 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 for FYE June 30, 2010 are as follows:

<u>Indirect Category</u>	<u>FY 10 Negotiated Fixed Indirect Rates</u>	<u>Allocation Base</u>
Facilities & Administrative (F&A) Rate – Off Campus	6.5%	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	10.5%	d

Allocation Bases:

- (a) Modified Total Direct Cost (MTDC), as defined in OMB Circular A-21, consisting 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. 2171-2010F10110001**

- (b) The MIT Off-campus salary base consists of salaries and wages of all full time non-student MIT employees charged to MIT research Off-campus accounts and Lincoln Laboratory.
- (c) The MIT salary base consists of salaries and wages of all part time employees and non-registered MIT students (on and off campus)
- (d) The MIT Vacation Leave Off campus salary base 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	99.77%	0.23%	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 16, 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* is a control deficiency, or combination of control deficiencies, that adversely affects the entity's ability to administer a federal program such that there is more than a remote likelihood that noncompliance with a type of compliance requirement of a federal program that is more than inconsequential will not be prevented or detected by the entity's internal control.

**Audit Report No. 2171-2010F10110001**

A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that material noncompliance with a type of compliance requirement of a federal program will not be prevented or detected by the entity's internal control.

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 17. Our audit disclosed that MIT LL adequately presented the status of its corrective action taken. However, since the corrective action associated with audit findings 09-CC (Subrecipient Monitoring) and 09-DD (Subcontract Quick Closeout Procedures) was not taken until FY 2011, we are unable to comment at this time on the effectiveness of MIT LL's corrective measures. Additional audit procedures will be performed as part of the FY 2011 A-133 audit to test the effectiveness of these new measures. As a result, these audit findings are still considered open until we have had the opportunity to test the new measures.

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 8, 2011. MIT LL's current corrective action plan, which addresses each audit finding, is included as Appendix 4, page 19. 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 24, 2011.

## 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, 2010 were \$751 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.

In September of 2003, MIT LL began implementing modules of the SAP R/3 Management/Financial System. SAP R/3 is a modular business application software system designed for open system based on the client/server network architecture. The modules are integrated and they provide real time enterprise information system processing.

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



**Audit Report No. 2171-2010F10110001**

- 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 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**

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General information on audit matters is available at <http://www.dcaa.mil/>.

**AUDIT REPORT AUTHORIZED BY:**

  
JOHN F. GAY  
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**AUDIT REPORT DISTRIBUTION**

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**INDEX OF APENDIXES**  
MIT Lincoln Laboratory  
For the Year Ended June 30, 2010

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**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**

MIT Lincoln Laboratory  
For the Year Ended June 30, 2010

**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:

\$3,836,127
-------------

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, 2010

**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>	Schedule of <u>Expenditures of</u> <u>Federal Awards</u>	<u>Questioned</u> <u>Costs</u>	<u>Difference</u>	<u>Reference</u>
Total Salaries & Wages	\$265,426,795	\$36,089	\$265,390,706	Note 10-A
Material & Services	180,046,252	106,637	179,939,615	Note 10-C
Other Direct Charges	35,119	-	35,119	
Equipment Under \$3,000	8,240,350	-	8,240,350	
Equipment Over \$3,000	60,807,083	-	60,807,083	
Equipment Rental	2,212,349	-	2,212,349	
Subcontracts < \$25K	2,537,898	-	2,537,898	
Subcontracts > \$25K	57,062,603	-	57,062,603	
Plant & Operations	50,494,865	(106,637)	50,601,502	Note 10-C
Travel	14,500,427	-	14,500,427	
Employee Benefits	78,816,161	45,201	78,770,960	Note 10-B
Indirect Expense	31,128,158	6,931	31,121,227	Note 10-C
Prior Year Adjustments	(3,866)	-	(3,866)	
<b>Total</b>	<b>\$751,304,194</b>	<b>\$88,221</b>	<b>\$751,215,973</b>	

**EXPLANATORY NOTES**

10-A. Severance Pay

a. Condition:

During FY 2010, four Lincoln Laboratory employees were paid \$193,254 in severance pay. However, the employees were only entitled to \$161,806 in severance pay in accordance with MIT's Personnel Policy Manual. Consequently, we are questioning the excess severance costs of \$31,448 as unallowable costs per OMB A-21, Section J.10.h.(4) *Severance Pay* and MIT's Personnel Policy Manual, Section 6.2.4 *Layoff for Lack of Work or Funds, Period of Notice*. The \$31,448 in questioned costs is before the application of MIT's FY 2010 Part Time Employees (Pension Ineligible) Employee Benefits (EB) rate of 8.0 percent and MIT's Off Campus Facilities and Administrative (F&A) rate of 6.5 percent. The total questioned costs after

the application of the FY 2010 EB and F&A rates are \$36,172. Approximately \$36,089 of this amount is directly allocable to Federal Government awards.

b. Criteria:

OMB A-21, Section J.10.h.(1) Severance Pay states "*..Costs of severance pay are allowable only to the extent that such payments are required by law, by employer-employee agreement, by established policy that constitutes in effect an implied agreement on the institution's part, or by circumstances of the particular employment.*" Furthermore, Section J.10.h.(4) states "*..Costs incurred in excess of the institution's normal severance pay policy applicable to all persons employed by the institution upon termination of employment are unallowable.*"

Although MIT LL does not have a specific set of procedures for severance pay, they do however have a policy for "Layoff for Lack of Work or Funds". Since this is the policy that MIT LL has used in prior years to calculate unallowable severance costs, it represents an implied agreement on the institution's part. Under that policy, Administrative Staff and Sponsored Research Staff with five or more years of service will be given a period of notice (compensation) of "*3 months plus 1 additional week for each year of service (or major portion thereof) over 5 years*". This is the policy that we used to calculate the excess unallowable severance costs

c. Recommendation:

We recommend that MIT LL treat the excessive (unallowable) severance costs in the same manner as in prior years and transfer the costs to an unallowable account.

d. MIT LL's Reaction:

MIT LL concurs with the questioned cost. The questioned costs of \$36,089 were written off on journal voucher SA100395772 dated March 15, 2011.

10-B. Employee Benefits

a. Condition:

During FY 2010, six employees received severance pay of \$189,067. However the severance was incorrectly burdened with MIT's FY 2010 Off Campus Full Time EB rate of 30.5 percent instead of the correct Part Time Employees (Pension Ineligible) EB rate of 8.0 percent. Therefore, we are questioning the excess EB burden of \$42,540 (22.5 percent times \$189,067). Total questioned cost after the application of MIT's FY 2010 F&A rate of 6.5 percent is \$45,305. Approximately \$45,201 of this amount is directly allocable to Federal Government awards.

b. Criteria:

We are questioning these costs on the basis that Lincoln Lab did not apply the employee benefit rate in accordance with the MIT/Lincoln Laboratory FY 2010 ONR Negotiated Agreement Letter for Fixed Employee Benefit Rates dated July 27, 2009.

c. Recommendation:

We recommend that MIT LL issue an adjusting journal entry to correct the EB and F&A over allocations.

d. MIT LL's Reaction:

MIT LL concurs and will write off the questioned costs with a journal voucher.

10-C. Building Capitalization

a. Condition:

MIT LL improperly classified \$106,883 in building architectural and engineering design costs relating to a building improvement project as material and service (M&S) costs.

Building 1718 is currently undergoing building renovations. Construction costs for the building were correctly charged to Plant and Operations. However, the associated architectural and engineering design and construction support service costs for the renovation 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.

M&S costs are burdened with Facilities and Administrative (F&A) costs whereas Plant and Operations are not. Consequently, the building costs of \$106,883 that were misclassified as M&S costs were incorrectly burdened with \$6,947 of F&A costs. Approximately \$6,931 of this amount is directly allocable to Federal Government awards. Below is a summary of the misclassified costs and questioned F&A burden.

<u>Vendor</u>	<u>P.O. No.</u>	<u>Item</u>	<u>P.O. Amount</u>	<u>Claimed FY 2010</u>	<u>Gov't Percentage 99.77%</u>
Payette Associates Inc.	7000092668	Building Architectural & Engineering Design	\$578,297	\$106,883	\$106,637
FY 2010 F&A Rate				6.50%	6.50%
Questioned FY 2010 F&A				\$6,947	\$6,931

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. MIT LL’s Reaction:

MIT LL concurs and will reclassify the architectural and engineering design costs as building plant and operations.



**ALLOWABLE COST BY FEDERAL AWARD**

MIT Lincoln Laboratory

For the Year Ended June 30, 2010

Program	Sponsor	Federal Award No.	Sub Award No.	FY 2010 Expenditures	Questioned Costs	Difference
					Audit Findings 10-A, 10-B, 10-C	
Multiple	Multiple	FA8721-05-C-0002	N/A	\$ 749,974,319	\$ 88,065	\$ 749,886,254
200051	Research Corporation of the University of Hawaii	FA9451-06-2-0338	N/A	695,361	82	695,279
200045	California Association for Research in Astronomy	AST 0132798	C33002T	203,344	24	203,320
200054	Dartmouth College	2006-CS-001-000001-02	5-36425.5710	23,705	3	23,702
200070	University Corporation for Atmospheric Research	NN07CN14A	S08-62186	43,893	5	43,888
200078	Analytic Services Homeland Security Institute	W81XWH-04-D-0011	S-07-026-MLL	55,062	6	55,056
200088	Harvard University	3U54 A1057159-6S1	149061.0735	303,890	36	303,854
200089	Homeland Security and Analysis Institute	HSHQDC-09-D-0003	N/A	4,620	-	4,620
				<u>\$ 751,304,194</u>	<u>\$ 88,221</u>	<u>\$ 751,215,973</u>

See the Schedule of Findings and Questioned Costs (Appendix 1) for details regarding audit findings 10-A, 10-B and 10-C.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
LINCOLN LABORATORY

244 WOOD STREET  
LEXINGTON, MASSACHUSETTS 02420-9108

28 February 2011

Area Code 781  
981-8302

Defense Contract Audit Agency  
101 Merrimac Street, Suite 820A  
Boston, MA 02114-4719

Attention: Mr. John F. Gay

Subject: Schedule of Prior Audit Findings – FY2009 A-133 Audit

Dear Mr. Gay,

The following is Lincoln Laboratory's response to the subject inquiry:

DCAA Audit Report No. 02171-2009F10110001

**09-AA. Severance Pay**

Action Taken

Based on the ACO's ruling, MIT Lincoln Laboratory's Financial Services Department has written off questioned costs of \$39,788 on journal voucher SA100389431, dated 01/14/2011.

**09-BB. Conference Expenses**

Action Taken

MIT Lincoln Laboratory's Financial Services Department agreed with the DCAA finding and immediately implemented corrective actions in its month end closing process to review and report on the four cost elements which had been improperly filtered out of the Schedule of Federal Awards.

**09-CC. Non-Compliance with OMB Circular A-133 Compliance Requirement M – Subrecipient Monitoring**

Action Taken

Effective March 2011, the MIT Lincoln Laboratory Contract Services Department has revised part 4.8 of its Policies and Procedures to specifically require the following:

For the monitoring of non-profit sub-awards, the Laboratory will document the results of the subrecipient's OMB Circular A-133 audits for the years of the subrecipient's period of performance.

For for-profit subawards, and as set forth in subaward clause FAR 52.216-7, the Laboratory will exercise reasonable efforts to obtain copies of DCAA final year-end incurred cost audits. If such audits are not available to the Laboratory, reasonable efforts to obtain a signed Indirect Cost Rate Agreement letter and a Schedule of Allowable Costs by Subcontract for the years of the for-profit subrecipient's period of performance will be made and the contract will be documented accordingly. As necessary, the assistance of the ACO will be requested to either (a) obtain copies of these audits and/or rate agreement letter and Schedule of Allowable costs; or (b), the ACO will provide a summary of the report findings.

**09-DD. Non-Compliance with FAR 42.708 Quick Closeout Procedures**

Action Taken

Effective March 2011, the MIT Lincoln Laboratory Contract Services Department (CSD) has revised Section 4.8 of the CSD Policies and Procedures Manual to require improved documentation of all closeouts using Quick Closeout Procedures. Specifically, files will be documented to establish that the conditions of FAR 72.708 apply. In addition, negotiations using Quick Closeout Procedures will conform to the guidance set forth in DCAA Audit Manual 6-1010 and DCMA FAR 42.7 class deviations, inclusive of class deviations to FAR 42.703-1(b); FAR 42.703-1(c)(2); and FAR 42.708(a)(2).

Sincerely,



Patricia O'Riordan  
Department Head  
Financial Services

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
LINCOLN LABORATORY  
244 WOOD STREET  
LEXINGTON, MASSACHUSETTS 02420-9108

Area Code 781  
981-8302

March 25, 2011

Defense Contract Audit Agency  
495 Summer St., Suite 336  
Boston, MA 02210-2192

Attention: Mr. John F. Gay

Subject: Response to DCAA Audit Report 2171-2010F10110001 Draft

Dear Mr. Gay:

The following is Lincoln Laboratory's response to the subject inquiry:

10-A. Severance Pay

a. Condition:

During FY 2010, four Lincoln Laboratory employees were paid \$193,254 in severance pay. However, the employees were only entitled to \$161,806 in severance pay in accordance with MIT's Personnel Policy Manual. Consequently, we are questioning the excess severance costs of \$31,448 as unallowable costs per OMB A-21, Section J.10.h.(4) *Severance Pay* and MIT's Personnel Policy Manual, Section 6.2.4 *Layoff for Lack of Work or Funds, Period of Notice*. The \$31,448 in questioned costs is before the application of MIT's FY 2010 Part Time Employees (Pension Ineligible) Employee Benefits (EB) rate of 8.0 percent and MIT's Off Campus Facilities and Administrative (F&A) rate of 6.5 percent. The total questioned costs after the application of the FY 2010 EB and F&A rates are \$36,172. Approximately \$36,089 of this amount is directly allocable to Federal Government awards.

b. Criteria:

OMB A-21, Section J.10.h.(1) *Severance Pay* states "*..Costs of severance pay are allowable only to the extent that such payments are required by law, by employer-employee agreement, by established policy that constitutes in effect an implied agreement on the institution's part, or by circumstances of the particular employment.*" Furthermore, Section J.10.h.(4) states "*..Costs incurred in excess of the institution's normal severance pay policy applicable to all persons employed by the institution upon termination of employment are unallowable.*"

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c. Recommendation:

We recommend that MIT LL treat the excessive (unallowable) severance costs in the same manner as in prior years and transfer the costs to an unallowable account.

d. MIT LL's Reaction:

MIT LL concurs with the DCAA recommendation. The questioned costs of \$36,089 were written off by journal voucher SA100395772 dated March 15, 2011.

10-B. Employee Benefits

a. Condition:

During FY 2010, six employees received severance pay of \$189,067. However the severance was incorrectly burdened with MIT's FY 2010 Off Campus Full Time EB rate of 30.5 percent instead of the correct Part Time Employees (Pension Ineligible) EB rate of 8.0 percent. Therefore, we are questioning the excess EB burden of \$42,540 (22.5% times \$189,067). Total questioned cost after the application of MIT's FY 2010 F&A rate of 6.5% is \$45,305. Approximately \$45,201 of this amount is directly allocable to Federal Government awards.

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c. Recommendation:

We recommend that MIT LL issue an adjusting journal entry to correct the EB and F&A over allocations.

d. MIT LL's Reaction:

MIT LL concurs with the DCAA recommendation. The questioned costs of \$45,201 will be written off by journal voucher.

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a. Condition:

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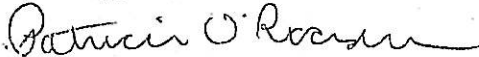
c. Recommendation:

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 will reclassify the architectural and engineering design costs as building plant and operations.

Sincerely,



Patricia O'Riordan  
Financial Services Department Head