Office of Sponsored Programs

Mission and Functions

The mission of the Office of Sponsored Programs (OSP) is to assist the MIT research community in securing sponsored research funding and administering those funds in a manner consistent with the mission and goals of the Institute. Our aim is to make the administration of these funds as easy and efficient as possible. The primary functions of the office are:

- Assist departments, labs, and centers (DLCs) in the preparation of proposals

- Proposal review to ensure adherence to sponsor requirements and compliance with Institute and sponsor policies

- Review and negotiate agreements that support MIT's research community, including sponsored research agreements, non-disclosure agreements, subaward agreements to other institutions and organizations, unfunded collaboration agreements, consortia agreements, and other agreements that sustain MIT's research efforts

- Conduct post-award administration to assist DLCs in meeting MIT and sponsor requirements in carrying out sponsored programs

- Calculation, audit defense, and negotiation of MIT's facilities and administrative and employee benefit rates

- Development and maintenance of Kuali Coeus, a grants management system that supports the Institute's policies and management of sponsored agreements as well as Institute reporting needs

- Development and delivery of training programs on research administration policies and procedures

- Implementation of processes and systems for the administration of the Institute's conflict of interest policies

Sponsored Programs Statistics

Research Expenditures

- On- and off-campus research expenditure volume (exclusive of Lincoln Laboratory) was up 4.5% to $728 million compared to $697 million in FY2015

- Federal research expenditures are up 3.6%, while non-federal expenditures are up 6.3%

- Lincoln Laboratory research expenditures increased by 4.1% to $927 million

- Campus and Lincoln Laboratory combined research volume is up 4.2% to $1.654 billion

Other Sponsored Activities and Instruction Expenditures

Other sponsored activities (OSA) include conference grants and instruction awards, such as fellowships, and awards for institution building, particularly with our large international sponsors. These expenditures are in addition to the research expenditures reported above and in the "Brown Book."

- On- and off-campus OSA expenditures totaled $130 million, which is down 9.7% compared to FY2015

- Campus research and OSA (exclusive of Lincoln Laboratory) totaled $858 million in FY2015

- Other sponsored activities account for over 15% of total sponsored volume

Proposal, Award and Subaward Activity

- Proposals submitted: 2,871 (up 9% from FY2015)
  - Federal proposals: 1,652 (includes 575 federal flow, steady from FY2015)
  - Non-federal proposals: 1,219 (up 25% from FY2015)
- New Awards: 1,013 (up 4% from FY2015)
  - Federal awards: 605 (steady from FY2015)
  - Non-federal awards: 408 (up 10% from FY2015)

Advocacy and Education

US Department of State: Directorate of Defense Trade Controls

OSP successfully hosted a visit from the Directorate of Defense Trade Controls (DDTC) to MIT's campus and Lincoln Laboratory. Representatives from OSP, Lincoln Laboratory, and IS&T educated State Department personnel on the university environment and how MIT complies with Export Controls while operating in a fundamental research open culture.

Government Accountability Office

The cross-functional Uniform Guidance (UG) Project team, including representatives from OSP, Vice President for Research (VPR), Vice President for Finance (VPF), and internal audit hosted a visit from the Government Accountability Office (GAO), giving a number of presentations on issues addressed in OMB's Uniform Guidance. The GAO report has recently been issued.

Council on Governmental Relations

In addition to the GAO visit noted above, the UG Project team also participated in data collection and advocacy efforts through the Council on Governmental Relations (COGR) related to troublesome areas of the UG, including overly burdensome procurement requirements, cost share requirements, and cuts in F&A. We continue to push for delays or the elimination of procurement requirements that would put significant burden on

our researchers. In addition, the current sub-recipient monitoring requirements compel us to scrutinize and document the performance of our peer institutions on an annual basis, which we consider a waste of time and effort. OSP is working hard to get these burdensome and unhelpful requirements removed from the UG.

Institute-Wide Committees

Research Administration Coordinating Council

The Research Administration Coordinating Council (RACC) is an institute-wide coordinating and advisory committee on research administration and compliance sponsored jointly by VPR and VPF. It is composed of high-level representatives from key central administrative units and the offices of the Provost, VPR and school deans. It was launched in March 2009 to support coordination among key offices involved in research and sponsored programs administration and to provide ongoing review of research and sponsored programs administration policies, systems, and business practices and processes to improve the way the Institute manages sponsored funding.

Under the direction of RACC's Executive Sponsors, VPR and VPF, our work plan focuses on a set of longer-term strategic initiatives with the overarching goal of creating excellence in research administration over a period of three to five years. In FY2014, we launched the Research Administration Strategic Plan and Roadmap, which outlined the plans for four key initiatives: Kuali Coeus, Effort Reporting (ER), Management and Sponsor Reporting, and Best Practices in Financial Management for research Administration. The fourth initiative includes the further support of the reporting and forecasting process for research, a refining of the Sponsored Projects Administration (SPA) Training Program (SPA) and improvements to the Financial Review and Control Process (FRC). This effort also includes the MIT implementation of the Uniform Guidance, which replaces OMB Circulars A21, A-110, and A-133, and focuses on strengthening internal controls and enhancing the stewardship of federal resources. Key RACC Accomplishments in FY2016 include:

- Completed the initial work plan to implement Uniform Guidance (2 CFR 200) that included the updating and documentation of MIT policies in support of a strong internal control environment

- Worked with OSP to address issues with the implementation of the Kuali Coeus project

- Worked with OSP to refine the SPA curriculum for training and educating research administrators on key issues in research and sponsored programs

- Worked with VPF to implement the updated Financial Review and Control (FRC) tool including improvements to the FRC process

- Worked with VPF to support the development and implementation planning for Procurement Buy-to-Pay Project

- Launched a research reporting effort to provide commitment information to DLCs in support of account management pending the development of a

reporting tool; supported the effort to develop the new SANDI report (work will continue in 2016 and 2017)

- Launched the cost sharing working group to improve the cost sharing process and reporting (work will continue in 2016–17)

- Continued to monitor and oversee the compliance of the quarterly salary certification process; MIT has maintained a record of 100 percent timely certification since RACC assumed oversight of the process in September 2009

International Coordinating Committee

The International Coordinating Committee (ICC) is a cross-functional committee co-chaired by the Director of OSP and the Director of the Office of Major Agreements (OMA), and sponsored by Associate Provost for International Affairs Richard Lester, Vice President for Research Maria Zuber, Executive Vice President and Treasurer Israel Ruiz, and General Council Mark DiVincenzo. The ICC was launched in winter 2012 with three goals: support the negotiation of international sponsored programs; identify, improve, and resolve issues related to MIT policy and procedures that prevent the smooth operation of international activities; and coordinate with the International Advisory Committee and its co-chairs to support the academic interest of the faculty related to international activities. Key ICC Accomplishments in FY2016 include:

- Supported the Office of the Provost in developing MIT's International Strategic Plan, including developing presentations for the campus, attending numerous sessions with faculty, and gathering and analyzing data on MIT's global engagements from approximately 15 offices and departments across MIT.

- Launched MIT International, including developing the framework for this new entity to support MIT's international engagements. This was a large undertaking that included several offices around campus, such as OMA, VPF, OGC, OSP, and others.

- Launched MIT Hong Kong, a new entity under MIT International that is focused on fundraising, education, and other MIT activities taking place in Hong Kong. The new entity now has two employees engaged in these activities. As noted above, this has been a complex undertaking that involved several offices around campus, including OMA, VPF, OGC, the Recording Secretary, and others.

- Developed and launched a cultural training tool, GlobeSmart, to help equip the MIT community with knowledge about cultural differences, and to plan for successful interactions with our international collaborators.

- Delivered multiple information sessions to the MIT community on a variety of topics, including cultural awareness, sending students abroad, international safety and security, and tax support for international students and scholars.

Key OSP Accomplishments in FY2016

Advanced Functional Fabrics of America

MIT applied for and won the competition for the Advanced Functional Fabrics Institute as part of the US Federal Institutes for Manufacturing Innovation (IMI) initiative. The IMI program is designed to accelerate US advanced manufacturing. Working together, there are more than a dozen nodes meant to improve US competitiveness across as many sectors. MIT has been a part of several winning teams across the country competing for various IMIs. In this case, MIT chose to submit a proposal to lead one of these IMI initiatives. MIT's proposal—Advanced Functional Fabrics of America (AFFOA)—won, and is now in the process of standing up a new public-private partnership with a mission to enable a manufacturing-based revolution by transforming traditional fibers, yarns, and fabrics into highly sophisticated, integrated, and networked devices and systems.

In FY2016, MIT submitted the proposal, established the entity, and negotiated the award with the DOD and began renovations for a new AFFOA headquarters in Cambridge. AFFOA funding includes $75M in federal funding and more than $200M in cost share from state governments, universities, and industry. AFFOA, with the support of MIT, is now in the process of establishing its organization, hiring staff, signing consortium members, awarding funds to carry out projects, and moving towards an independent operating entity. Numerous OSP staff have been deeply involved in AFFOA activities from the start and are contributing to its success.

Kuali Coeus

Kuali Coeus (KC) is an enterprise-wide, cradle-to-grave electronic system that is the result of the partnership between the Kuali Foundation and Coeus Consortium and it is based on Coeus functionality developed at MIT. It was implemented at MIT in the final months of FY2015. In FY2016, OSP's KC team focused its efforts on completing the rollout and shakeout of KC, (including a mini-upgrade in February 2016 that featured major improvements to system performance, bug fixes, and enhancements). It also focused on delivering numerous training classes and programs, which are detailed under the Training and Outreach section below. The perseverance and dedication of the KC Help Desk team was exemplary during the transition from Coeus to KC, so much so that they received MIT's prestigious Infinite Mile Award.

Principal Investigator Survey on Administrative Burden

In the spring of 2015, OSP, working closely with the VPR, sent a survey to all active MIT Principal Investigators (PIs) to learn about the most frustrating aspects of securing and managing research funding at MIT. The survey received 174 responses (19%). In early FY2016, the results of the survey were analyzed and posted to the OSP website. In addition, the team posted results on the OSP website along with resources already available to address certain issues shared the data with key stakeholders from VPR, VPF, and RACC. It also formed focus groups of key PIs and members of VPF, OSP, and IS&T to brainstorm short- and long-term solutions to the biggest pain points for the PIs, as indicated by the survey data.

Process Improvements

We are continually evaluating and, when possible, modifying our operational processes to provide the best possible tools and services to our PIs and research administrators. We also apply these practices toward balancing the workload of our staff in the face of increasing demand. In FY2016, the following efforts reflected these practices.

Awards and Receipts

Reengineering Award Project

The Reengineering Award Project included multiple improvements to OSP's methods for handling an award from the moment it arrives in OSP until it is fully established in SAP. The effort was aimed at improving transparency and taking the lowest value, time-consuming work out of new account creation. The project's highlights include an Awards-in-Progress report that shows, at-a-glance, awards that have arrived in OSP and the days to account setup; a streamlined award input form that includes reduced terms choices, as well as updated KC award templates; a Data Plus Pilot Project to take additional work out of award input and improve turnaround time (there was also subsequent hiring of Data Plus temp to perform award entry); the production of summaries of standard sponsor terms to ease award management by DLCs/PIs; and key fields for liaisons to review to minimize high-risk errors.

Doing More with Less

Among the many demands of OSP, sponsored volume is increasing, DLC staff turnover means more OSP time needed to train staff, and changes in MIT's sponsored portfolio to more high-touch sponsors puts stress on our already lean system. OSP continues to revise its processes with an eye toward eliminating what's "least essential" and enabling faculty/DLCs to take risks and assume responsibilities. Examples of process improvement include the revision of NSF proposal review to emphasize DLCs use of the checklist; the elimination of overlap with Sponsored Accounting's role in collections and payment verification; the development of template budget justifications for DLCs for non-research proposals; and most significantly the posting of the Subrecipient Certification Information Page on the OSP website to reduce the administrative burden of filling out certification questionnaires from institutions that subaward to MIT.

Receipt Characterization Group

The Receipt Characterization Group (with OGC, VPF, and Office of Resource Development) developed a guidance matrix to standardize how MIT treats the different types of funds it receives. In this effort it frequently advises PIs and DLCs on the borderline cases that arise.

Non-Federal Negotiations

OSP implemented a structured participation in multiple periodic staff meetings within TLO in order to more tightly align and coordinate the efforts and understanding between the two departments. OSP also began tracking anticipated award dollars, TLO Officer names, and anticipated deadlines for signature. This was meant to manage priorities, assert more control over the negotiation process, and give visibility.

Subawards

OSP implemented a corrective action plan to address a control deficiency related to subrecipient monitoring, resulting in a much-improved process for assessing the risk associated with A-133 organizations specifically. OSP also developed management plans and standardized practices for managing MIT subrecipients deemed "less than low risk" (UG compliance). Additionally, OSP implemented new closeout procedures, significantly reducing the closeout backlog and virtually eliminating any impact on the VPF's closeout of prime awards.

Data and Reporting

Developed Administrative Quality and Five-Day Waiver dashboards in Cognos for use by Schools and departments in monitoring compliance to internal proposal quality and deadline standards. The expected rollout of this project is August 2016.

Training and Outreach

Virtually all areas within OSP include outreach and educational activities for the MIT community to help faculty and administrators propose, accept, and manage their sponsored funding in accordance with the sponsors and MIT's requirements. Below are some key areas of focus for 2016.

- Sponsored Projects Administration (SPA) concluded its second run as an annual program with greater focus on DLC best practices. AO/FO co-presenters brought experiential knowledge to topics challenging to DLC staff. Ninety percent of managers affirm their staff has greater knowledge of internal and external policies impacting research administration from completing the 2015–2016 session. This program involves over 40 presenters across campus, including over a dozen presenters from OSP.

- Seven OSP staff presented the Fundamentals Training Series, designed to orient MIT new hires to research administration policies and processes. This year, 78 MIT employees attended.

- OSP delivered 13 hands-on Kuali Coeus training courses to instruct 105 people in the use of the grants management system. KC Lunch & Learns were offered on a monthly basis for MIT employees throughout the year.

- OSP delivered several forums to provide the MIT community with information related to new regulations and trends in research administration. This year OSP delivered the following presentations:

  o Issuing and Managing Subawards—Changes you should know about!, which presented the implementation of UG for subawards, as well as new functionality for subawards in KC and the new subawards website;

  o Timely Closeouts of Federal Awards, which was presented by OSP and VPF to communicate the emphasis UG has placed on timely closeout of federal awards, and on the review the collaborative process; and

  o Kuali Coeus Update, which presented enhancements and resolved issues delivered in the campus release of Kuali Coeus 1511.

- The OSP conflict of interest (COI) officer conducted numerous outreach efforts to faculty, department heads, school deans, and administrative officers on COI issues and processes through presentations, one-on-one meetings, and in-person training sessions.

- The OSP export control officer met with several key DLCs this year to review export control programs in process. This effort was also addressed through the rollout of e-ship Global.

- The OSP assistant director of non-federal agreements delivered numerous outreach presentations to prospective and new industrial sponsors to educate these entities on sponsored research and contract negotiation issues and processes before they engaged in the process.

Other OSP Operations

Cost Analysis and Audit Support

In April 2016, the Office of Cost Analysis concluded negotiations with the Office of Naval Research establishing fixed Facilities and Administrative (F&A) rates for FY2016 at 56% on campus and 5.2% off campus applied to a Modified Total Direct Cost base. These rates are set well below calculated F&A rates to reflect the repayment to the federal government of F&A over-recoveries from prior years. Full repayment of the F&A carryforward is expected over the next few years.

In addition, in May 2016, MIT negotiated fixed employee benefits (EB) rates for FY2016 of 23% on campus, 20% off campus, and 8.5% for part-time employees, and also fixed rates for FY2017 of 25% on campus, 22% off campus, and 8% for part-time employees. Rates are expected to remain fairly constant over the next few years as the EB carryforward is liquidated.

Throughout FY2016, the Office of Cost Analysis was also engaged in supporting routine and targeted audits of MIT's research programs and associated costs, conducted by the Defense Contract Audit Agency, individual sponsors, and PricewaterhouseCoopers, the Institute's independent auditors. Specific areas of audit focus included: forward pricing rate proposals; actual incurred cost submissions; space functionalization; cost accounting standards; compliance with the OMB circular a-133 (single audit act); and sponsor-driven, program-specific audits.

Compliance

Conflict of Interest

OSP conducted a review of research activities to ensure that it is in compliance with MIT's and sponsors' COI policies. In FY2016, OSP furthered discussions on issues identified in the COI/OPA risk matrix summary of 2015. This was done with the Faculty Policy Committee, chaired by Professor Krishna Rajagopal. VPR and the provost plan to assemble a committee to look into proposed policy clarifications. The director of OSP and the COI officer will participate in moving discussions forward. Policy changes will impact new COI + OPA merged module design. In addition to this work, a team was

assembled to map out the technical needs of the integrated COI + OPA reporting module to reduce administrative burden on faculty. The team is headed by the COI officer and head of the OSP Kuali Coeus team.

Export Controls

OSP reviewed research and education activities to ensure that researchers and MIT comply with federal export policies. Key accomplishments for FY2016 included hosting a two-day State Department visit, as described above to educate federal employees on how export controls are managed at educational institutions. This visit received a positive response from the State Department. Additional accomplishments included the initiation of an annual review of all Campus Technology Control Plans. In consultation with MIT IT Security, this review included the development of options to help PIs in secure handling of restricted data and software. Other FY2016 highlights involved the support of EHS and VPF in the ongoing implementation of a shipping software system, which helps members of the MIT community make international shipments and reduces MIT's exposure to export control violations. OSP also conducted investigations as required for possible disclosures of restricted material and information.

Outside Professional Activities

The Office of the Provost is responsible for the implementation of MIT's OPA policy and procedure. OSP continues to work with the Offices of the Provost, President, and Vice President for Research to gather requirements for improvements to the online reporting tool for faculty, and creating more flexibility in generating reports for use by department heads. These interactions are critical to making the information gathered in these reports of a higher quality and meaning, and more useful to department heads when they are called upon to provide guidance and feedback to faculty regarding OPA matters.

Research Volume

The MIT total research volume (expenditures) for FY2016, excluding Lincoln Laboratory, was $728 million, which represents an increase of 4.5% from FY2015. The volume breakdown by major sponsor is shown below.

Table 1. Research expenditures by sponsor (in thousands of dollars), FY2012–FY2016.*

	2012		2013		2014		2015		2016	
	Original Source	Proximate Source	Original Source	Proximate Source	Original Source	Proximate Source	Original Source	Proximate Source	Original Source	Proximate Source
DHHS	133,687	116,148	119,908	100,926	115,146	97,471	116,462	97,975	113,522	95,227
DOE	90,940	78,734	88,988	72,699	88,502	73,510	81,528	67,187	84,419	72,180
DOD	117,502	71,350	127,967	90,810	121,815	93,750	125,854	95,669	131,624	100,554
NSF	81,487	65,217	79,255	63,198	79,145	63,522	78,953	62,364	82,161	66,668
NASA	30,204	20,447	29,835	20,977	33,030	25,254	41,740	33,080	49,664	40,476
Other	18,762	12,810	19,993	13,445	17,590	13,577	15,435	12,572	15,738	13,411
Subtotal	472,582	364,706	465,946	362,055	455,228	367,084	459,972	368,847	477,128	388,516
Industry	107,365	133,499	105,882	127,673	110,720	127,005	119,060	133,499	128,309	140,772
Non-profit	51,506	125,375	59,601	133,679	72,648	138,070	78,845	147,445	84,015	150,543
Other**	49,626	57,499	42,919	50,941	39,815	46,252	39,015	47,101	38,661	48,282
Subtotal	208,497	316,373	208,402	312,293	223,183	311,327	236,920	328,045	250,985	339,597
TOTAL	681,079	681,079	674,348	674,348	678,411	678,411	696,891	696,891	728,113	728,113

Note: Original Source includes expenditures on awards directly from US government agencies plus expenditures at MIT through subawards. For example, if we receive Department of Health and Human Services (DHHS) funds via a subaward from Princeton University, we would count it as DHHS funding under Original Source column, and Nonprofit under Proximate Source. Therefore, to understand the true amount of federal funding, look under the Original Source column.

DOE = Department of Energy; DOD = Department of Defense; NSF = National Science Foundation; NASA = National Aeronautics and Space Administration.

*Totals exclude Lincoln Laboratory.
**Includes State, Local, and Foreign Governments, MIT Internal and Lincoln Laboratory.

Other Sponsored Activities and Instruction Volume

Other Sponsored Activities includes grants and contracts from sponsors for non-research activities, such as conference awards. It also includes instruction awards, such as fellowships and institution building activities.

Table 2. Non-Research* expenditures by sponsor (in thousands of dollars), FY2011–FY2015**

	2012		2013		2014		2015		2016	
	Original Source	Proximate Source	Original Source	Proximate Source	Original Source	Proximate Source	Original Source	Proximate Source	Original Source	Proximate Source
DHHS	9,391	9,335	11,133	10,969	-463	-594	2,524	2,204	2,265	2,091
DOE	735	389	817	351	921	450	537	325	687	664
DOD	4,278	275	4,694	239	5,186	294	5,465	255	5,016	119
NSF	17,300	16,459	18,119	17,447	18,180	18,063	17,315	17,148	15,413	15,297
NASA	2,162	1,599	2,619	1,700	2,777	2,079	2,840	2,103	2,752	2,096
Other	1,497	1,207	1,422	983	3,816	2,712	3,885	3,431	3,989	3,427
Subtotal	35,363	29,264	38,804	31,689	30,416	23,004	32,566	25,465	30,120	23,695
Industry	17,961	18,570	22,006	22,647	30,158	30,626	34,464	34,713	35,798	35,668
Non-profit	43,371	48,831	67,522	73,937	74,548	81,475	67,630	74,129	55,538	62,032
Other***	6,509	6,539	5,966	6,025	10,770	10,788	9,580	9,932	8,805	8,866
Subtotal	67,841	73,940	95,494	102,609	115,476	122,889	111,674	118,775	100,141	106,566
TOTAL	103,204	103,204	134,298	134,298	145,893	145,893	144,240	144,240	130,261	130,261

Note: Original Source includes expenditures on awards directly from US government agencies plus expenditures at MIT through subawards. For example, if we receive Department of Health and Human Services (DHHS) funds via a subaward from Princeton University, we would count it as DHHS funding under Original Source column, and Nonprofit under Proximate Source. Therefore, to understand the true amount of federal funding, look under the Original Source column.

DOE = Department of Energy; DOD = Department of Defense; NSF = National Science Foundation; NASA = National Aeronautics and Space Administration.

*Includes WBS accounts 2000000-5999999, excluding Student Services activity type, plus ARRA construction grants.
**Totals exclude Lincoln Laboratory.
*** Includes State, Local, and Foreign Governments; MIT Internal and Lincoln Laboratory.

OSP Operating Statistics

Table 3. Office of Sponsored Programs Key Operating Statistics for FY2012–FY2016

	FY2012	FY2013	FY2014	FY2015	FY2016
New proposals	2,533	2,510	2,574	2,631	2,871
New awards	1029	969	954	977	1013
New Subawards issued	177	229	247	211	238
Subaward invoices processed	2,915	2,986	3,114	3,419	3,695
Sponsor Approved Budgets Entered**	N/A	N/A	N/A	2,662	10,564
Coeus/KC award transactions	N/A	34,246	36,260	31,762	26,349***
ARRA expenditures*	41,078,559	27,426,528	5,389,670	1,053,013	0
Coeus help-desk tickets	2,779	4,033	3,506	4,666	4,808

*Includes fellowships, IPAs, instruction, and construction
**Budget versions created in FY2015 (matching, not cancelled or rejected).
***Does not include KC TNM Transactions.

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