Office of Sponsored Programs

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 to assist departments, laboratories and centers (DLCs) in preparing and reviewing proposals to ensure adherence to sponsor requirements and compliance with Institute and sponsor policies. OSP also aids DLCs in the following activities:

- Review and negotiation of agreements that support MIT's research community, including sponsored research agreements, nondisclosure agreements, subaward agreements to other institutions and organizations, unfunded collaboration agreements, consortia agreements, and other agreements that sustain MIT's research efforts
- Post-award administration to assist DLCs in meeting MIT's and sponsors' 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 down 1.2% to \$720 million, compared with \$728 million in FY2016.
- Federal research expenditures were down 3.3%, while non-federal expenditures were up 2.8%.
- Lincoln Laboratory research expenditures increased by 4.8% to \$971 million.
- Campus and Lincoln Laboratory combined research volume was up 2.2% to \$1.691 billion.

Other Sponsored Activities and Instruction Expenditures

Other sponsored activities (OSA) included conference grants, instruction awards such as fellowships, and awards for institution building, particularly with MIT's large international

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sponsors. These expenditures are in addition to the research expenditures reported above and in the so-called Brown Book of the Office of the Vice President for Finance.

- On- and off-campus OSA expenditures totaled \$129 million, which was down 1.2% compared with FY2016.
- Campus research and OSA (exclusive of Lincoln Laboratory) totaled \$848 million in FY2016.
- Other sponsored activities account for more than 15% of total sponsored volume.

Proposal, Award, and Subaward Activity

- Proposals submitted: 3,047 (up 6% from FY2016)
- Federal proposals: 1,823 (includes 609 federal flow—up 10% from FY2016)
- Nonfederal proposals: 1,224 (steady from FY2016)
- New awards: 1,102 (up 9% from FY2016)
- Federal awards: 625 (up 3% from FY2016)
- Nonfederal awards: 476 (up 17% from FY2016)

Advocacy and Education

MIT Washington Office and Vice President for Research

OSP assisted in several efforts by the MIT Washington Office and the Office of the Vice President for Research to educate federal representatives regarding facilities and administrative (F&A) costs and their importance to the research enterprise. These included developing budget analyses of the impacts of F&A costs on MIT budgets, scenario analyses of budgets with sponsor constraints, and assisting with interviews with the press.

In addition, OSP has been closely monitoring the federal budget process and provided several models of potential budget cuts based on the Heritage Foundation Blueprint, as well as the administration's budget proposal and House and Senate appropriations bills. OSP staff prepared presentations and other materials for the vice president for research to assist in MIT's efforts to advocate for research funding.

Council on Governmental Relations

MIT continued to participate in various data collection and advocacy efforts, through the Council on Governmental Relations, that are related to troublesome areas of the Uniform Guidance, including overly burdensome procurement requirements, cost-sharing requirements, and cuts in facilities and administrative costs. OSP continues to push for delays in, or the elimination of, procurement requirements that would put significant burden on MIT researchers. In addition, the current subrecipient monitoring requirements compel OSP to scrutinize and document the performance of peer institutions on an annual basis, which OSP considers a waste of time and effort. OSP is

working hard to get these burdensome and unhelpful requirements removed from the federal grant regulations.

Institute-Wide Committees

Research Administration Coordinating Council

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

Key Work and Accomplishments in FY2017

Under the direction of RACC's executive sponsors—VPR and VPF—the council's work plan has focused on a set of longer-term strategic initiatives, with the goal of creating excellence in research administration. For the past several years, RACC has focused on supporting the implementation of some key new systems—Kuali Coeus over fiscal years 2014–2016 and Buy to Pay over fiscal years 2016–2017. Over the past year, RACC has begun to shift its focus away from the implementation of large systems projects and toward finding ways to improve support and resources for research administrators. This includes a new focus on the research administrator user experience; the development of additional tools and resources to support proposal preparation, cost sharing, and other processes; and additional training and career development opportunities.

In activities and accomplishments during FY2017, the Research Administration Coordinating Council:

- Worked with VPF to support planning, development, and implementation of the Buy-to-Pay project, which was successfully completed during FY2017.
- Collaborated with VPF to help address the problem of unexpensed travel costs and to support the planning and implementation of the new policy on expensing costs charged to MIT-sponsored travel cards.
- Relaunched the project to improve the cost-sharing process and reporting, which
 had been put on hold because of technical issues. RACC made a case for starting
 work on the project again and received support from the Administrative Systems
 Steering Committee and IT Governance Council for funding to make the needed
 changes to SAP and to support the development of the necessary reports to
 accomplish RACC's objectives.
- Continued to monitor and oversee the compliance of the quarterly salary certification process, with continued success. Over the past year, RACC has continued to move away from proxy certification toward direct certification

by principal investigators, with 70% of the electronic DACCA distributions by account (a monthly consolidated salary expense report) being directly certified in FY2017. During the spring of 2017, RACC reviewed and updated the Salary Certification Policy and made a few small changes to reflect the flexibility allowed under Uniform Guidance.

- Worked with OSP to further refine the Sponsored Projects Administration curriculum for training and educating research administrators on key issues in research and sponsored programs.
- Worked with VPR to support the launch of a Proposal Preparer's Project and Working Group. The group has made excellent progress since it was launched and RACC expects to have new resources available in the fall of 2017.

International Coordinating Committee

The International Coordinating Committee is a cross-functional committee co-chaired by the director of OSP and the director of the Office of Major Agreements; it is sponsored by Associate Provost for International Affairs Richard Lester and Executive Vice President and Treasurer Israel Ruiz. The ICC was launched in winter 2012 with three goals:

- To support the negotiation of international sponsored programs
- To identify, improve, and resolve issues related to MIT policy and procedures that prevent the smooth operation of international activities
- To coordinate with the International Advisory Committee and its co-chairs to support the academic interests of the faculty related to international activities

Key International Coordinating Committee accomplishments in FY2017 included:

- Launching a cultural training tool (GlobeSmart) to help equip the MIT community to be knowledgeable about cultural differences and to plan for successful interactions with international collaborators
- Piloting an international people placement process to provide a single point
 of contact for resources related to employee benefits, taxes, export control,
 information technology, and visas when an MIT project must be supported by
 someone working abroad
- Strengthening the ICC website with new content on safety and security; the information and resources help MIT travelers understand and prepare for risk and access assistance while traveling outside the United States
- Organizing learning series for members of the ICC Policies and Procedures Coordinating Group, with overviews of individual MIT international programs that highlight operational challenges and best practices
- Delivering multiple information sessions on a variety of topics, including cultural awareness, sending students abroad, and international safety and security

Office of Sponsored Programs Accomplishments

Training and Outreach

OSP is continuously engaged in outreach and educational activities to support faculty and administrators in securing and managing sponsored funding in accordance with sponsor and MIT requirements.

To assess the effectiveness of OSP's efforts to improve its communications and transparency regarding operations processes to the MIT research community over the past several years, the office conducted a short survey, sent to members of the Research Administrators' listserve, in January 2017. The results of the survey are being used to help OSP prioritize process improvement projects and to assist the office in developing a comprehensive communications strategy in FY2018.

The Sponsored Projects Administration's 24-member cohort successfully completed the program of 31 topics presented by more than 40 experts, including 19 from OSP.

- 90% of the participants' managers affirmed that, following the Sponsored
 Projects Administration program, their staff member demonstrated new skills or
 knowledge, or both, on the job.
- New topics led by DLC experts to promote best practice methodologies in research administration included "Proposal Submission Best Practices" and "Budget Forecasting Tools: Demo and Discussion."
- Personal response devices were used to collect immediate feedback about participants' understanding of topics so points of confusion could be addressed quickly.
- Slack, a team collaboration tool, was configured for the cohort and used to foster community building and resource sharing.

Kuali Coeus proposal development hands-on training (six hours in length) was delivered to 90 primarily newly hired administrators. The training highlights policy in the use of OSP's grants management system. Kuali Coeus "lunch and learns" were offered on a quarterly basis, with topics ranging from financial conflicts of interest to budget hierarchies.

OSP hosted a forum on the federal research budget. David Goldston, director of MIT's Washington office, discussed the federal budget, cuts to discretionary spending, and the budget approval process.

OSP's conflict of interest (COI) officer conducted numerous outreach efforts to faculty, department heads, school deans, and administrative officers on conflict of interest issues and processes through presentations, one-on-one meetings, and in-person training sessions. Existing training classes are being updated and two new classes were created to increase the learning and teaching opportunities around conflict of interest policies and their impact on MIT research and entrepreneurial activities.

OSP's export control officer met with several key DLCs this year (the Media Lab's Camera Culture Group, Aeronautics and Astronautics' STAR Laboratory, the MIT Kavli Institute for Astrophysics and Space Research, Haystack Observatory, the International Students Office, and Information Systems and Technology) to review export control programs in process and deliver remedial training in the case of export control incidents. The officer also met with groups such as the Technology Licensing Office and the Singapore–MIT Alliance for Research and Technology (SMART) that have special international interactions. More than 300 MIT individuals received in-person export control training during this period.

A fundamentals training series, focusing on MIT's policies and procedures for sponsored projects, was offered in collaboration with VPF to 76 MIT employees.

Manufacturing USA Program

In academic year 2017, MIT expanded its participation in the Manufacturing USA Program (formerly known as the Institutes for Manufacturing Innovation). This program brings together participants from industry, academia, and the federal entities, creating linked manufacturing innovation institutes to increase US manufacturing competitiveness and promote the nation's manufacturing research and development infrastructure.

OSP continued work started in FY2016 to establish one of the first institutes in this program, Advanced Functional Fabrics of America (AFFOA), which opened its doors in Cambridge, MA, in June 2017. Including AFFOA, MIT is now participating in 10 of the 14 established institutes. This is a large effort on MIT's part, and it called for an extensive amount of administrative and financial support. OSP provided advice and support to the MIT teams regarding proposals, membership agreements, conflict of interest management, cost sharing, agreements and structures for participation in leadership roles, and other administrative aspects of participation.

Key accomplishments in FY2017 included:

- Negotiating membership agreements with winning institutions for AIM (Associated Industries of Massachusetts), LIFT (Lightweight Innovations for Tomorrow), and NextFlex
- Initiating negotiating agreements for the REMADE Institute (Reducing Embodied-Energy and Decreasing Emissions), SMART, ARM (Advanced Robotics for Manufacturing), RAPID Manufacturing Institute, and the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL)
- Developing extensive cost-sharing plans for each, including seconding MIT staff to NIIMBL
- Assisting with administrative aspects of the AFFOA project, including drafting the membership agreement for AFFOA members (there are more than 100 members to date) and identifying consultants to provide temporary policy support

Kuali Coeus

Kuali Coeus is MIT's enterprise-wide, cradle-to-grave, electronic research administration system. OSP implemented Kuali Coeus in May 2015 and now completes regular updates every other month (or as needed). In FY2017, OSP's Kuali Coeus team focused their efforts on two projects:

- Developing a custom Award Budget solution to meet the needs of MIT
- Collaborating with Kuali Coeus and four other partner institutions (Boston University, Colorado State University, the University of Maryland Baltimore, and the University of Arizona) to introduce cost-sharing fields in Proposal Development to match what is available in Institute Proposal and Award.

Process Improvements

OSP is continually evaluating and, when possible, modifying its operational processes to provide the best possible tools and services to principal investigators and research administrators, and to balance the workload of the OSP staff in the face of increasing demand. In FY2017, the office focused on the following activities:

- Where Is It Award Report—OSP expanded its award-tracking efforts this year
 to include all negotiations in progress. OSP also mapped system touchpoints to
 develop a more detailed Where Is It report that shows the progress of all awards
 in-house and obstacles that must be resolved to activate an account. The Where
 Is It Award Report enables more proactive communication about the status of
 awards in setup or negotiation, particularly about compliance holds that could
 delay activation.
- OSP Service Tracker—The OSP Service Tracker is a system that organizes and records all post-award service requests from DLCs. OSP launched and completed Pilot Phase I (with three DLCs) and Phase II (with eight additional DLCs). Both active and historical requests are now accessible and transferable among all of a participating DLC's administrators and the full OSP Grant and Contract team.
- Doing more with less—Sponsored research volume is increasing. DLC staff
 turnover means more OSP time is needed to train staff, and changes in MIT's
 sponsored portfolio to more high-touch sponsors stress OSP's already lean
 system. OSP continues to revise its processes with an eye toward eliminating
 what's least essential and enabling faculty members and DLCs to take risks and
 responsibilities. Examples include:
 - Developing Federal Acquisition Regulations tools that save contract administrators' time reviewing federal contract terms
 - Eliminating unnecessary international reviews of proposals by VPR
 - Increasing use of the research administrator listserve to provide just-in-time information on solicitations and updated checklists in advance of sponsors' proposal deadlines

Receipt Characterization Group (with VPF, the Office of General Counsel, and the
Office of Resource Development): The group, which brought several new members
on board last year, advises principal investigators and DLCs on the borderline
cases that can arise in how MIT treats the different types of funds it receives.

Other Operations

Cost Analysis and Audit Support

In February 2017, the Office of Cost Analysis concluded negotiations with the Office of Naval Research, establishing fixed facilities and administrative rates for FY2017 at 54.7% on-campus and 6.0% off-campus, to be applied to a modified total direct cost base. These rates were set well below calculated F&A rates to reflect repayment to the federal government of F&A over-recoveries from prior years. Full repayment of the F&A carryforward is expected to be accomplished over the next few years.

In addition, in May 2016, MIT negotiated fixed employee benefits 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 employee benefits carryforward is liquidated.

Throughout FY2017, 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 OMB Circular A-133 (Single Audit Act)
- Sponsor-driven, program-specific audits

Compliance

Conflict of Interest

OSP undertook a review of research activities to ensure that the office is in compliance with both MIT's policy on conflicts of interest and each sponsor's policy. In FY2017, related activities included:

 OSP's COI officer and senior director served on the Engine working group on conflicts of interest, helping to identify opportunities for greater flexibility in current institutional policies in order to accommodate and be more responsive to the changing needs of MIT's innovation and entrepreneurial initiatives. • The COI officer led development of a new MIT community COI portal (to be launched in fall 2017) in response to the greater need for self-service guidance on common conflict of interest issues for both faculty and administrative staff. This portal is designed to be a centralized repository of conflict of interest guidance documents, reporting tools, and resources designed to increase education in and the understanding and application of COI policy across the Institute. The portal will ultimately help reduce administrative burden for faculty and staff. The conflict of interest portal also meets one of the recommendations of the Engine Working Group—to "increase community understanding of MIT's COI processes and policies."

Export Controls

OSP also undertook a review of research and education activities to ensure that researchers and MIT comply with federal export policies. In FY2017, key accomplishments included:

- Conducting successful in-person training to more than 10 MIT groups involved with export controls; working with principal investigators to develop new technology control plans when such a plan was necessary for their research; performing an annual review of all campus technology control plans.
- Reducing the amount of controlled material on campus by 30%—and, in consultation with the Information Systems and Technology Security Support team, devising options to help principal investigators in secure handling of restricted data and software.
- In consultation with the VPF Property Office, offering principal investigators options to dispose legally of export-controlled material.
- Supporting VPF and the Office of Environmental Health and Safety in the
 ongoing implementation of a shipping software system that helps members of
 the MIT community make international shipments and reduces MIT's exposure
 to export control violations.
- Working with the Office of General Counsel to ensure that MIT's online and professional education courses comply with US Department of the Treasury country sanctions.

Outside Professional Activities

The Office of the Provost is responsible for the implementation of MIT's policy and procedure on outside professional activities. OSP continues to work with the provost, the president, and the 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 in these reports of higher quality and meaning, so that they will be more useful to department heads when they are called upon to provide guidance and feedback to faculty regarding matters having to do with outside professional activity.

Research Volume

The MIT total research volume (expenditures) for FY2017, excluding Lincoln Laboratory, was \$719.5 million, which represents a decrease of 1.2% from FY2016. The volume breakdown by major sponsor for the past five years is shown in the table below.

Research expenditures by sponsor (in thousands of dollars), FY2013-FY2017.*

	FY2013 original source	FY2013 proximate source	FY2014 original source	FY2014 proximate source	FY2015 original source	FY2015 proximate source	FY2016 original source	FY2016 proximate source	FY2017 original source	FY2017 proximate source
Federal: DHHS	119,908	100,926	115,075	97,491	116,469	97,975	113,522	95,227	111,835	92,947
Federal: DOE	88,988	72,699	88,451	73,510	81,528	67,187	84,419	72,180	82,157	66,761
Federal: DOD	127,967	90,810	122,761	93,729	125,854	95,669	131,624	100,554	130,372	97,003
Federal: NSF	79,255	63,198	78,979	63,522	78,953	62,364	82,161	66,668	80,410	66,780
Federal: NASA	29,835	20,977	32,063	25,513	41,740	33,080	49,664	40,476	39,809	31,410
Federal: Other	9,994	13,445	17,611	13,597	15,435	12,572	15,738	13,411	17,043	12,249
Federal subtotal	465,947	362,055	454,939	367,362	459,979	368,847	477,129	388,516	461,626	367,150
Nonfederal: Industry	106,448	127,673	112,379	128,010	119,238	133,677	128,309	140,772	132,915	148,119
Nonfederal: Nonprofit	58,227	133,679	72,117	137,162	78,667	147,267	84,015	150,543	86,752	157,478
Nonfederal: Other**	43,727	50,941	38,717	45,875	39,007	47,101	38,661	48,282	38,213	46,759
Nonfederal subtotal	208,402	312,293	223,183	311,047	236,912	328,045	250,985	339,597	257,880	352,356
Total	674,348	674,348	678,411	678,409	696,891	696,892	728,113	728,113	719,506	719,506

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

Other Sponsored Activities and Instruction Volume

The category of other sponsored activities includes grants and contracts from sponsors for non-research activities, such as conference awards, instruction awards (such as fellowships) and institution-building activities. Figures for such non-research expenditures appear in the following table.

^{*}Totals exclude Lincoln Laboratory.

^{**}Includes state, local, and foreign governments, MIT internal, and Lincoln Laboratory.

Non-research* expenditures by sponsor (thousands of dollars), FY2013-FY2017**

	FY2013 original source	FY2013 proximate source	FY2014 original source	FY2014 proximate source	FY2015 original source	FY2015 proximate source	FY2016 original source	FY2016 proximate source	FY2017 original ssource	FY2017 proximate source
Federal: DHHS	11,133	10,969	-463	-594	2,524	2,204	2,265	2,091	2,234	2,092
Federal: DOE	817	351	921	450	537	325	687	664	508	413
Federal: DOD	4,694	239	5,323	294	5,465	255	5,016	119	4,791	144
Federal: NSF	18,119	17,447	18,180	18,063	17,315	17,148	15,413	15,297	14,336	14,137
Federal: NASA	2,619	1,700	2,639	2,079	2,840	2,103	2,752	2,096	3,089	2,193
Federal: Other	1,422	983	3,816	2,712	3,885	3,431	3,987	3,427	3,844	3,514
Federal subtotal	38,804	31,689	30,416	23,004	32,566	25,465	30,120	23,695	28,802	22,493
Nonfederal: Industry	22,052	22,647	31,146	31,614	34,464	34,713	35,798	35,668	42,958	42,970
Nonfederal: Nonprofit	67,476	73,937	74,352	81,396	67,630	74,129	55,538	62,032	45,770	52,055
Nonfederal: Other***	5,966	6,025	9,978	9,879	9,580	9,932	8,805	8,866	11,129	11,141
Nonfederal subtotal	95,494	102,609	115,476	122,889	111,674	118,775	100,141	106,566	99,857	106,166
Total	134,298	134,298	145,893	145,893	144,240	144,240	130,261	130,261	128,659	128,659

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.

Operating Statistics

Office of Sponsored Programs Key Operating Statistics for FY2013-FY2017

	FY2013	FY2014	FY2015	FY2016	FY2017
New proposals	2,510	2,574	2,631	2,871	3,047
New awards	969	954	977	1012	1,101
New subawards issued	229	247	210	237	198
Subaward invoices processed	2,986	3,114	3,415	3,639	3,503
Sponsor-approved budgets entered**	N/A	N/A	2,662	10,564	9,956
Coeus/KC award transactions	34,246	36,260	31,762	26,349***	24,039***
ARRA expenditures***	27,426,528	5,389,670	1,053,013	0	0
Kuali Coeus help-desk tickets	4,033	3,506	4,664	4,808	4,282

^{*}Budget versions created (matching, not canceled or rejected).

Michelle D. Christy

Director, Office of Sponsored Programs

^{*} Includes WBS accounts 2000000-5999999, excluding the Student Services activity type, plus ARRA construction grants.

^{**}Totals exclude Lincoln Laboratory.

^{***} Includes state, local, and foreign governments, MIT internal, and Lincoln Laboratory.

^{**}Does not include KC TNM transactions.

^{***}Includes fellowships, IPAs, instruction, and construction.