

Office of Sponsored Programs

The mission of the Office of Sponsored Programs (OSP) is to conduct the centrally organized administrative, business, and financial functions related to award administration and to assist faculty, principal investigators, and their administrators in the identification of resources for and the management of individual sponsored projects consistent both with MIT's academic and research policies and with the stewardship requirements of and obligations to external sponsors. The primary functions are the following:

- Proposal review to ensure adherence to sponsor requirements and compliance with Institute policies
- Review and negotiation of agreements, including outgoing subawards, to ensure consistency with (1) the Institute's corporate charter and status as a tax exempt educational institution and (2) compliance with Institute academic and research policies such as those relating to freedom to disseminate research results, access for all foreign faculty, staff, students to MIT'S educational and research activities, control of intellectual property, and full cost reimbursement
- Post-award administration when necessary to provide assistance to departments, labs, and centers (DLCs) in meeting MIT and sponsor requirements
- Calculation, audit defense, and negotiation of MIT's Facilities and Administrative and Employee Benefit Rates

Research Volume

The MIT total research volume (expenditures) for FY2005, excluding Lincoln Laboratory, was \$567,424,000, which represents a 6.3 percent increase over FY2004. The primary reason for this increase is that 2005 is the first year to reflect a full fiscal year's volume for the Broad Institute, which became part of MIT in October of 2003. The volume breakdown by major sponsor is shown in the table on the next page.

A Year of Transition for OSP

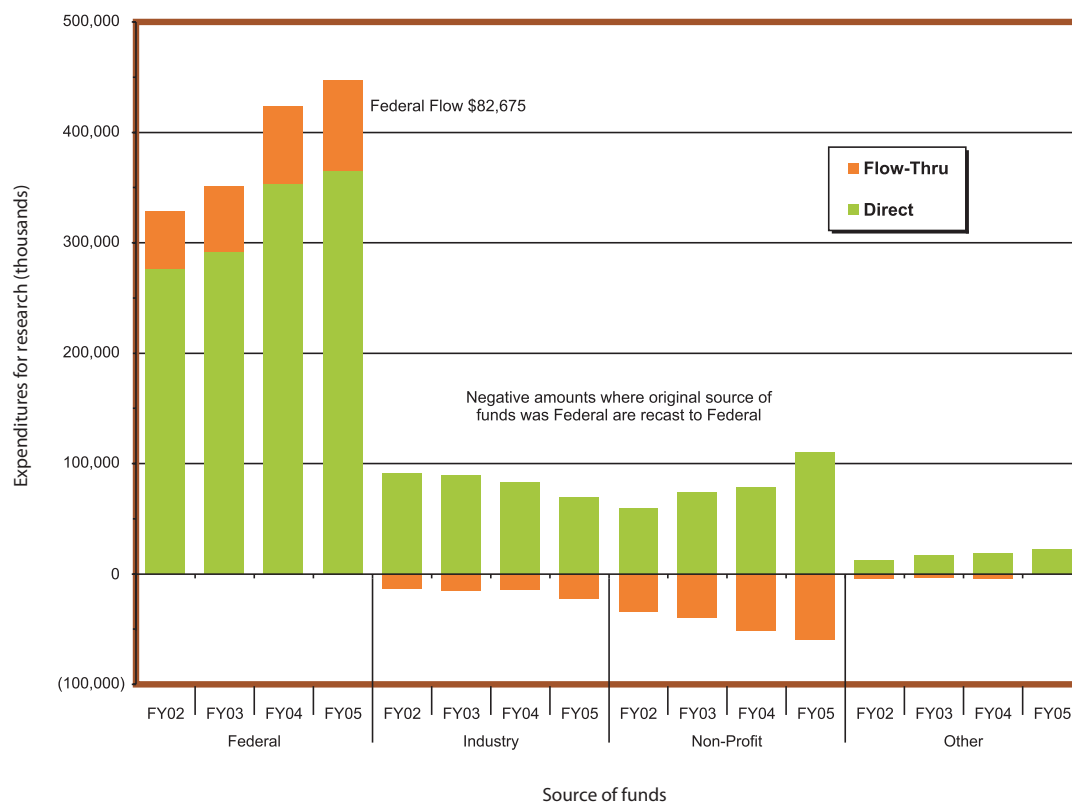
Fiscal year 2005 was a year of great change and transition for OSP. Julie Norris retired as director of OSP after an extraordinary 10-year career at MIT. Patrick Fitzgerald, formerly MIT director of cost analysis, became the new OSP director on October 1, 2004. The year also marked the retirement of two other longtime employees: Charlotte Morse and Tom Henneberry. With the departure of 10 additional staff members—including one assistant director—OSP experienced unprecedented turnover and faced a challenging succession to new leadership. The contract administration staff, OSP's primary point of contact for DLCs, was particularly hard hit, with an attrition rate of greater than 50 percent. A combination of two internal promotions to manager level plus 10 new hires replaced the departing employees. In addition, two newly created positions (assistant director of compliance and industrial agreements contract administrator) were filled with new hires to OSP.

Research Volume by Sponsor, 2002–2005 (in thousands of dollars)

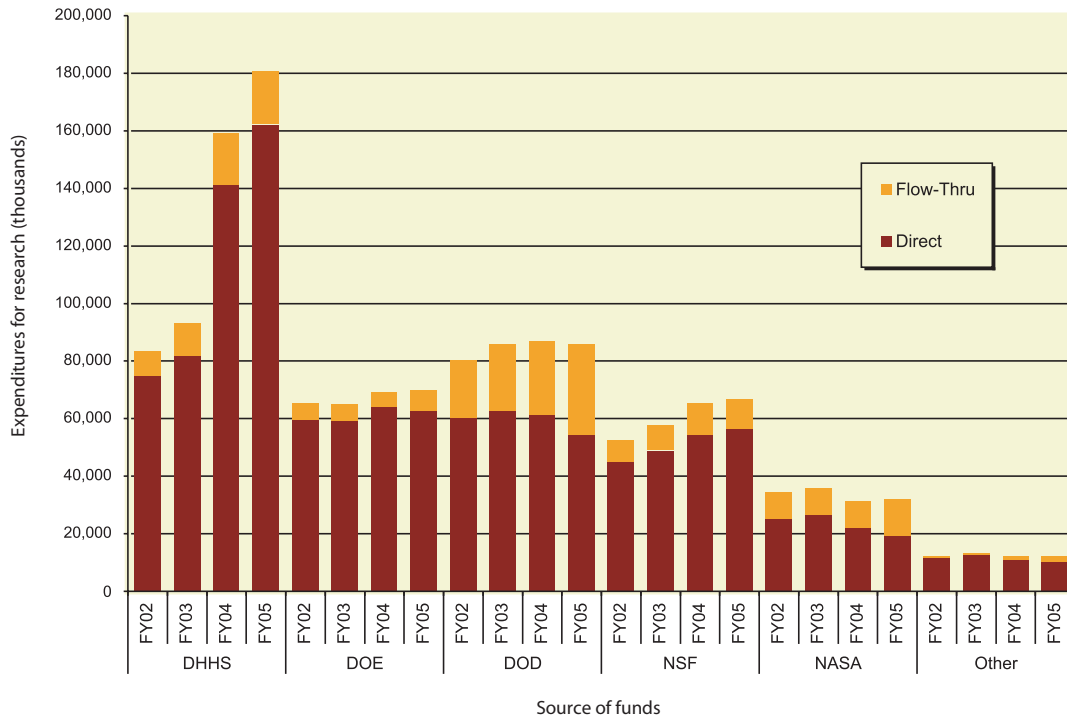
	2002		2003		2004		2005	
	Original source	Proximate source	Original source	Proximate source	Original source	Proximate source	Original source	Proximate source
Federal								
DHHS	83,517	74,806	93,254	81,837	159,029	141,015	180,682	162,170
DOE	65,455	59,658	65,175	59,210	69,183	63,936	69,927	62,722
DOD	80,377	60,117	85,866	62,904	86,811	61,146	85,866	54,403
NSF	52,612	44,878	57,695	48,804	65,443	54,406	66,686	56,206
NASA	34,326	25,119	35,735	26,252	31,442	21,949	32,170	19,258
Other	12,143	11,562	13,172	12,452	12,250	10,765	12,267	10,164
Subtotal	328,430	276,140	350,897	291,459	424,158	353,217	447,598	364,923
Nonfederal								
Industry	77,684	91,261	73,265	89,105	68,038	82,895	47,196	69,789
Nonprofit	25,593	59,824	34,275	73,916	27,112	78,744	50,409	110,442
Other	7,476	11,958	13,318	17,275	14,661	19,113	22,221	22,270
Subtotal	110,753	163,043	120,858	180,296	109,811	180,752	119,826	202,501
Total	439,183	439,183	471,755	471,755	533,969	533,969	567,424	567,424

Notes: (1) Original source funding is US government dollars that come to MIT via subaward, from industry, another university, or institution; (2) proximate source funding reflects the entity that actually made the award to MIT.

Expenditures for Research and Source of Funds, Fiscal Years 2002–2005



Expenditures for Research, Direct Federal and Federal Flow-Thru, Fiscal Years 2002–2005



Notes:
 DHHS—Department of Health and Human Services
 DOE—Department of Energy
 DOD—Department of Defense
 NSF—National Science Foundation
 NASA—National Aeronautics and Space Administration

The sheer volume of new employees necessitated innovation to OSP’s traditional one-to-one staff training. In November 2004, we began holding weekly group-training sessions for newly hired and newly promoted staff, as well as for existing staff desiring a “refresher” on a particular topic. To supplement this internal training, OSP subscribed to several distance learning opportunities offered by the National Council of University Research Administrators (NCURA) and the National Academies of Science (NAS) and extended the audience to include interested DLC administrators.

Remarkably, the new employees have proven to be solid performers who have compensated for lack of experience with hard work, dedication, and a commitment to maintaining a high level of service under trying circumstances. The assimilation of so many new staff with great potential bodes well for the future of OSP. However, the successful transition this past year is primarily the result of the extraordinary efforts of a highly experienced, highly competent core of managers in OSP who responded to adversity with renewed dedication and commitment. Pat Greer, deputy director, Tom Duff, associate director, and assistant directors Bill Barrett, John Donahue, Paul Powell, and Steve Dowdy provided leadership and experience when it was most needed. Although turnover in OSP has historically been low, it is inevitable: A core responsibility of the director must be to plan for continued training and development of staff while creating promotional opportunities that provide them a clear career path within OSP or MIT.

Compliance Issues

Research Administration Improvement Initiative

In FY2004 MIT established a program aimed at strengthening the Institute's compliance with federal regulations governing the conduct of research. The Research Administration Compliance Program was a joint effort between OSP and the Internal Audit Division with a focus on the development of training programs for campus administrators and a program for developing tools and techniques to more effectively monitor charges made to sponsored research projects. During FY2005 it became clear that campus-wide compliance required the full participation and support of the academic community in partnership with MIT's central administration. Through collaboration between academic and central administrators, under the leadership of the provost, the vice president for research (VPR), and the executive vice president (EVP), the Research Administration Improvement Initiative (RAII) was conceived. The goal of the RAII is to improve the effectiveness and efficiency of research administration activities at MIT. A steering committee of 16 campus administrators, cochaired by Patrick Fitzgerald, director of OSP, and Ron Hasseltine, assistant dean for the School of Science, determines the activities and priorities of the RAII, in consultation with the sponsors (the provost, VPR, and EVP) and a Faculty Advisory Committee chaired by Karen Gleason.

The scope of the RAII will encompass four major areas: (1) job roles and responsibilities and organizational structure; (2) policies and processes; (3) training; and (4) information technology (IT) tools and applications. The steering committee, with advice from the faculty advisory group, will organize subteams to deal with specific activities and objectives. At the end of FY2005, two subteams had been formed: A team chaired by Marilyn Smith, Office of the VPR's special project director, was exploring effective organizational models for the conduct of research administration; and a second team, cochaired by Eileen Nielsen, OSP assistant director of compliance, and Judith Stein, Human Resources organization development consultant, was formed to develop an online basic training curriculum for administrators of research (i.e., STAR).

The RAII is a unique opportunity to make substantial improvements in how research is administered at MIT. While current planning is focused on a two-year horizon, it is anticipated that the RAII Steering Committee and the collaborative change processes utilized for the RAII will become a standard for dealing with changes in the research administration environment for many years to come.

Payroll Certification

The most significant compliance issue for MIT in 2004 was related to the payroll certification process. A report issued by MIT's federal auditors, the Defense Contract Audit Agency (DCAA), noted problems in how MIT handled its payroll certification process. Although these issues were eventually resolved through a robust educational and training program covering administrative personnel in all academic and administrative units, the issue of payroll certification (or "effort reporting") remains a compliance risk for MIT and all major research institutions. For many years, MIT has required a monthly certification of payroll charges by an individual with "firsthand knowledge" of the employees' activities. The monthly certification was required

in addition to the monthly review of payroll charges and the payroll distribution change process. Coupling these three activities (i.e., review, change, and certification) puts less emphasis on the certification function than if this were a separate process. A policy change was made in 2005 (effective January 1, 2006) to require certification quarterly rather than monthly. This change should significantly reduce the compliance risk by placing greater emphasis on the payroll certification process. Furthermore, the administrative burden that occurs now when departments need to make payroll transfers after the monthly certification will be greatly reduced. Giving departments a fiscal quarter, rather than a month, to make payroll changes before the charges are certified will reduce the burden for both academic departments and central administration.

Costing Issues

Negotiation of Facilities and Administrative and Employee Benefits Rates

MIT successfully completed negotiations with our cognizant federal agencies, DCAA and the Office of Naval Research, to establish Facilities and Administrative (F&A) rates on a fixed-with-carryforward basis for fiscal years 2006 and 2007 at 62 and 65 percent, respectively. It is important to note that MIT's F&A rates for the past two years had been set artificially low (60 percent) in order to pay back accumulated carryforwards to the federal government. Cost inflation combined with sluggish growth in the research modified total direct cost base, used to calculate the rates, necessitated these increases.

Employee Benefits (EB) rates were also established for fiscal year 2006. Cost pressures on these rates, primarily related to market returns and health insurance costs, have moderated. Rates are 27 percent on campus and 25 percent off campus, an increase of 2 rate points over fiscal year 2005.

Other Costing Activities

OSP continued to play a major role in assisting the Broad Institute's (BI) assimilation into MIT, including providing high levels of service in the area of grant/contract administration as well as costing. Costing efforts were primarily related to MIT's obligation to fund the BI administration and communication with federal auditors relative to audits of the Broad Institute Specialized Service Facility. In addition, the OSP director and the assistant director managing the Office of Cost Analysis sit on the Broad Institute Administrative Committee, which includes representatives of the BI, Harvard University, and Harvard Affiliated Hospitals and meets monthly to discuss and resolve issues common to all collaborators.

In FY2004, OSP developed a written Institute policy governing the operation of service centers, and this past year Cost Analysis staff dedicated significant resources to monitoring its implementation. These efforts included development and delivery of a formal training course for administrators of service centers, as well as one-on-one counseling with a number of operating units. In addition, OSP continued to provide a series of training courses on such subjects as allowable/unallowable costs, OMB Circular A-21 and the Cost Accounting Standards, and development of the F&A and EB rates.

Developments in Electronic Research Administration

COEUS

Ten years ago MIT created the COEUS system to assist the Office of Sponsored Programs and DLCs in proposal development and pre- and post-award management. The purpose of the system was to standardize and make more efficient award acquisition and administration for all offices within the Institute. With the introduction in 2005 of its comprehensive proposal development module, COEUS is one of the first cradle-to-grave award management systems in the nation. The software makes it possible to prepare proposals, route them internally to obtain proper approvals, and submit them to sponsors electronically.



Until now, COEUS was licensed to institutions for a one-time cost of \$500. The minimal fee was a strategy to maximize utilization of the software by as many institutions as possible. The terms of the license agreement were advantageous for both the licensees and MIT. The low pricing enabled the Institute to achieve unparalleled market penetration, which provided MIT with input from a sizeable user base and ideas to develop new system functionalities. It also provided leverage in negotiations with the federal government regarding data standards and data transmission protocols for research proposals and awards. MIT is now able to influence federal electronic research administration (eRA) initiatives, a position no other institution has. After 10 years, COEUS is the most widely used system of its kind, with 100 licensees and more than 30 active users.

Having achieved such remarkable success developing a comprehensive awards management system with a large user base and influence over federal eRA policy, the time has come for a new model for the continuing support of COEUS. Maintenance and upgrades of other institutions' systems have taken time and resources away from development and training specific to MIT. Beginning with FY2006, increased support will come from COEUS users, thus enabling the system to have long-term sustainability as a *shared* resource rather than an MIT product licensed to other institutions. Fees from members of the new consortium will provide a long-term base of continuing support for COEUS development and end reliance on MIT as the sole source of support for the system.

Federal "Grants.gov" Implementation

Grants.gov, an initiative that will have an unparalleled impact on the grant community, is one of the 24 federal cross-agency e-government projects focused on improving access to services via the internet. Grants.gov is the single access point ("portal") for over 900 grant programs offered by the 26 federal grant-making agencies and allows organizations to electronically find and apply for competitive grant opportunities from all federal grant-making agencies. As the single portal for grant applications, grants.gov

will replace the agency-specific proposal systems that have proliferated in recent years, most notably the National Science Foundation (NSF) “Fastlane” system. Applications to Grants.gov will be submitted electronically by institutions to the single portal, and these applications will be forwarded to the respective agencies.

Over the next several months, MIT expects more and more proposals to be processed via Grants.gov. The Office of Management and Budget (OMB) has instructed all of the grants-making agencies to post, at a minimum, 25 percent of their grant applications to Grants.gov by October 1, 2005. Along with the applications packages, OMB has further provided targets for the actual number of proposals that must be submitted electronically to Grants.gov. For example, the target for the National Institutes of Health (NIH) is 6,000 applications. Other agencies have similar targets depending on the number of applications they receive in any given year. These numbers increase dramatically by May 2006.

There are essentially two options for MIT to submit applications to Grants.gov. One is to submit proposals directly to Grants.gov using COEUS. MIT has worked closely with Grants.gov in what is referred to as a “system-to-system” interface. COEUS can electronically transmit data directly from MIT’s computer system to the Grants.gov system. The second option is the submission of proposals using electronic forms known as “PureEdge.” This second option is problematic for many MIT DLCs because the PureEdge forms are PC-centric and there are no native Macintosh, Linux, or UNIX versions for this proprietary software.

MIT is uniquely positioned to respond to the Grants.gov initiative since the COEUS system is the first system to successfully submit an electronic proposal using the “system-to-system” interface. Because of its substantial functionality, use of the COEUS proposal preparation module requires in-depth training and hands-on experience in order for the administrator to become proficient. During the last quarter of FY2005, OSP provided numerous training opportunities for campus administrators, and this support will continue in the foreseeable future.

Conflict of Interest Module

MIT faculty who submit research proposals to the NIH or the National Science Foundation (NSF) are required to disclose significant financial relationships (income or ownership) in external entities. The disclosure must also indicate whether the financial relationship could result in a conflict of interest (COI) with the proposed research project. In addition to making a disclosure for each proposal, the conflict of interest information must be updated annually for all active proposals and awards.

Prior to FY2005, the COI disclosure was paper based and there was no option for electronic reporting. Submission of paper forms to OSP increased the likelihood that private and highly sensitive information could be accessed by unauthorized individuals. In 2005, the manual process was replaced with an automated process, and faculty are now able to prepare and submit electronically both the proposal-specific disclosure and the annual update. Introduced in August of 2004, the electronic COI system has gained widespread acceptance by faculty in its first year. Recognizing that new systems

require fine-tuning, OSP has solicited input from the campus on what changes could be made to make the use of the COI system more intuitive and user-friendly. Based on this feedback, significant changes have been made to the system and to the instructions since implementation.

National Policy Impacting Research Administration

“Troublesome Clauses”

In the aftermath of the 9/11 tragedy, MIT, like other universities, continues to encounter contractual provisions that would restrict the dissemination of research results and/or prohibit foreign nationals from participating in research programs. These restrictive clauses have now been commonly referred to as “troublesome clauses.” In most cases, these clauses appear in awards from the departments of Defense and Transportation, security agencies, industry (using federal funding), and most recently the Office of Homeland Security. OSP has adopted the negotiating strategy of working in a constructive fashion with our sponsors to hopefully come up with a solution that satisfies and addresses the concerns of both sides. We (OSP) at the outset of negotiations try to delineate our position clearly and make it known that we will not deviate from our established policies on these two very important areas. In parallel with these negotiations, we always keep the principal investigators and senior administration informed as to the status of our negotiations. In most cases, we are able to work out a mutually acceptable resolution; however, sometimes a protracted period of negotiation is required. Unfortunately, there have been a few situations where a compromise was not reached and awards were turned down. Our success rate in negotiating resolutions is due in large part to MIT’s faculty and senior administration who are resolute in their determination to not compromise our well-established principles and policies in these very important areas.

Export Control Laws and Related Issues

There has been a significant increase in the dialogue with both the departments of Commerce and of State. In 2004 the Offices of Inspectors General submitted reports to Congress summarizing a multiagency audit of the handling of export control issues by a sample of research institutions with particular attention paid to “deemed exports” (i.e., transferring technological know-how to foreign nationals in campus research laboratories). In March 2005, the Commerce Department’s Bureau of Industry and Security proposed two rule changes in the Federal Register which, if implemented, could have a major impact on research institutions. In brief, the proposed rule changes relate to the definition of “use technology” and the use of a foreign national’s country of birth as criterion for deemed export license requirements versus a foreign national’s most recent country of citizenship or permanent residency. In July 2005, the Department of Defense (DOD) followed suit with a proposed new export control compliance clause that encompasses deemed exports and includes a requirement for access control plans to export-controlled information and technology for foreign nationals. The government intent of all these proposed rules is to deny individuals from “countries of concern” access to equipment and know-how that could have military applications.

The DOD proposal would apply only to research done under contracts that universities receive from the agency either directly or as subcontracts from industry. The Commerce-proposed rules would impact a wider range of research. However, the university community feels the DOD proposal is stricter and more far reaching than the requirements the Commerce Department is proposing. For instance, the DOD proposal makes no reference to provisions in existing laws that exempt fundamental research from restrictions on dissemination of research results. Under both the DOD and Commerce proposals, universities would face the difficult choice of substantially altering the normal open campus environment to comply with the requirements or rejecting research funding under certain circumstances. It should be noted that under both proposals, foreign nationals could still work on research programs. However, their universities would need to obtain separate licenses for each researcher and each type of equipment. This obviously would be a time-consuming and expensive proposition. MIT, of course, will be providing an Institutional response to the proposed rules. Individual faculty members have been encouraged to do the same.

Recognizing that the subject of export controls is complex and evolving, OSP has embarked on several new means to deliver information to the community. To oversee this effort, we have hired an assistant director for compliance. During the past year, we have made use of several different media to deliver export control training, including live broadcasts made available on MIT cable TV and webcasts sponsored by NCURA and NAS, respectively.

OSP Staff Involvement on National Level

We recognize the need to continue the longstanding tradition and obligation to actively participate in national organizations such as the Council on Government Relations, the Federal Demonstration Partnership, and NCURA. Several of the senior OSP staff are chairs of various committees that are part of these organizations. Our staff are also frequently called on to make presentations or be panelists at different venues.

Patrick Fitzgerald
Director

More information about the Office of Sponsored Programs can be found online at <http://web.mit.edu/osp/www/>.