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 grant and contract 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.

Research Volume

For FY2004, the total volume of sponsored research performed at MIT (excluding Lincoln Laboratory) was $533,969,162. This represents an increase of $62.2 million or 7.5 percent in total volume compared with the FY2003 volume of $471.8 million. The breakdown by sponsor is shown in the table below.

| Campus research volume by sponsor (in thousands of dollars), 2000–2004 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                                 | 1999 | 2000 | 2001 | 2002\(^a\) | 2003\(^a\) | 2004\(^a\) |
| Federal                         |      |      |      |            |            |            |
| DHHS\(^b\)                      | 58,246 | 65,905 | 69,539 | 83,517 | 74,806 | 93,254 | 81,837 | 159,029 | 141,015 |
| DOE\(^b\)                       | 63,138 | 57,000 | 57,780 | 65,455 | 59,658 | 65,175 | 59,210 | 69,183 | 63,936 |
| DOD\(^b\)                       | 65,718 | 65,686 | 60,971 | 80,377 | 60,117 | 85,866 | 62,904 | 86,811 | 61,146 |
| NSF\(^b\)                       | 35,352 | 35,669 | 37,520 | 52,612 | 44,878 | 57,695 | 48,804 | 65,443 | 54,406 |
| NASA\(^b\)                      | 27,301 | 22,734 | 18,592 | 34,326 | 25,119 | 35,735 | 26,252 | 31,442 | 21,949 |
| Other                           | 7,409 | 6,753 | 6,777 | 12,143 | 11,562 | 13,172 | 12,452 | 12,250 | 10,765 |
| Subtotal                        | 257,164 | 253,747 | 251,179 | 328,430 | 276,140 | 350,897 | 291,459 | 424,158 | 353,217 |
| Non-federal                     |      |      |      |            |            |            |
| Industry                        | 74,325 | 73,609 | 92,036 | 77,684 | 91,261 | 73,265 | 89,105 | 68,038 | 82,895 |
| Non-profit                      | 42,214 | 50,970 | 55,588 | 25,593 | 59,824 | 34,275 | 73,916 | 27,112 | 78,744 |
| Other                           | 2,344 | 5,662 | 8,620 | 7,476 | 11,958 | 13,138 | 17,275 | 14,661 | 19,113 |
| Subtotal                        | 118,883 | 130,241 | 156,244 | 119,458 | 171,748 | 120,858 | 180,296 | 109,811 | 180,752 |
| Total                           | 376,047 | 383,988 | 407,424 | 439,184 | 439,184 | 471,755 | 471,755 | 533,969 | 533,969 |

\(^a\) Beginning with FY2002, we are showing expenditures in two ways: (a) from the original source (i.e., if funds were federal in origin but flowed down through another entity, such as industry or another university, to MIT, and (b) from the entity that made the actual award to MIT (called the “proximate sponsor”).

\(^b\) 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
Perhaps the most striking item in this table is that the increase in research expenditures in FY2004 was over $62 million and that increase was accompanied by significantly complex proposal development, review, and submission (primarily the increased use by federal agencies of electronic submission requirements) and the increase in issues related to terms and conditions of awards in order to negotiate agreements that complied with Institute policies. Both of these issues are discussed further in this report.

**Compliance Issues**

The most significant compliance issue for MIT this past year resulted from a Defense Contract Audit Agency (DCAA) audit report on how MIT handled its payroll certification process. Although all issues were satisfactorily resolved, MIT did decide to embark in spring 2004 on a robust educational and training program covering administrative personnel in all academic and administrative units. In addition, the Institute is funding the creation of a Research Compliance Administration Program, jointly staffed by Audit and OSP. Activities include the development of a comprehensive compliance program, including the initial development of a web-based compliance program covering fundamental concepts of research compliance—administrative, programmatic, and fiscal. The web-based program is scheduled for rollout in FY2005.
In addition, the past year has seen the continued close scrutiny by federal agencies (particularly the National Institutes of Health [NIH]) on the issue of compliance. New requirements have been implemented, designed to protect humans as subjects, particularly requirements concerning the disclosure by investigators of certain financial information in human subjects Informed Consent forms. The government is now requiring that the human subjects protocol form include the formal description of the work to be undertaken by including the requisite portions of the formally approved research proposal as a part of the protocol application itself.

MIT commented on NIH–proposed regulations on misconduct in science, particularly with regard to the inclusion of the previously proposed RCR requirements. If adopted as written, the Institute will have to implement more formalized compliance education programs for faculty and other researchers.

**Costing Issues**

The Institute addressed a variety of costing issues during the past fiscal year, ranging from audit issues, new MIT programmatic initiatives, and the negotiation of Facilities and Administrative (F&A) rates for future years. Items of particular interest are described below.

**Negotiation of Rates**

MIT successfully completed negotiations with our cognizant federal agencies, DCAA and the Office of Naval Research (ONR), to establish F&A rates on a fixed-with-carryforward basis for fiscal year 2005 at 60 percent of Modified Total Direct Cost. The 2005 rate is the same as the 2004 rate.
Employee benefit (EB) rates have been established for fiscal year 2005. Unlike F&A rates, MIT is experiencing a dramatic increase in EB rates due primarily to the impact of diminishing investment gains on our pension assets and the escalation of health insurance costs. EB rates for on-campus programs increased to 25 percent of salaries in 2005 compared to 23 percent in 2004, and they will increase again in 2006.

**Other Costing Activities**

OSP played a major role in the evaluation and formation of the Broad Institute (BI). The Cost Analysis staff performed extensive modeling of the financial impact of the BI on MIT, developed costing strategies for incorporating the BI into MIT, and successfully negotiated several BI-related issues with the cognizant federal agencies, DCAA and ONR. OSP’s director played a key role in the formulation and negotiation of agreements with founding partners of the Broad Institute: the Broad Foundation, Harvard University, and the Whitehead Institute.

OSP has developed and the Institute has issued a written policy governing the operation of service centers at MIT. Service centers are facilities within MIT that are established to provide goods and services to departments, laboratories, and centers (DLCs) and pass on the cost of the goods or services by charging rates, or user fees. Because service center charges are frequently made to federal grants and contracts, federal costing regulations play an important role in the operation of service centers. Furthermore, service centers represent a major use of Institute resources, and Institute policies and procedures governing the operation of these centers are necessary to ensure that these resources are used effectively and the centers are run in accordance with sound business practices. The policy and procedures specify tolerance levels for carryforwards of balances between fiscal years where appropriate.

**Export Control Laws and Related Issues**

Export control laws, federal laws implemented both by the Department of Commerce through its Export Administration Regulations and the Department of State through its International Traffic in Arms Regulations have been in existence for more than 20 years. However, in the last two years the regulations have become more prominent, and scrutiny concerning the level of compliance with these regulations has heightened. In the case of academic or research institutions, there is a protection from applying the regulations for fundamental research, the results of which are or are about to be publicly available; and in some cases, they are ordinarily publicly available. When these conditions do not exist—and the technology itself or information about the technology is on one of the controlled lists administered by Commerce or State—then institutions are required to seek licenses to disseminate the technology outside the country or, as in many cases, to foreign nationals located within the United States. OSP is the focal point for compliance with the regulations and is responsible for ensuring, to the maximum extent possible, that the Institute does not accept contract and grant awards with restrictions that would destroy the fundamental research protection currently afforded to institutions of higher learning in this country. MIT is developing guidelines for
researchers explaining the process for compliance with the export control regulations, and a draft of that policy guidance is currently available on the MIT OSP home page.

In August 2003, the OSP director was asked to chair a Council on Governmental Relations–Association of American Universities (COGR–AAU) task force on “troublesome clauses.” These are clauses primarily focused on publication restrictions or restrictions on the use of foreign nationals, which would obliterate the fundamental research protection currently available under NSDD-189. The task force report shows the extent to which 20 major research universities have received these “troublesome clauses” in research awards and the ensuing negotiations required with the sponsor.

An additional issue has come to the forefront in a related area: the Department of the Treasury’s Office of Foreign Asset Control regulations on embargoes to certain countries. Under these regulations, a license may be required to travel to certain embargoed countries (e.g., Cuba) or restrictions may be imposed on providing “assets” (not only cash, but information) to an embargoed country (e.g., Iran).

OSP has continued to negotiate hundreds of awards annually that contain these difficult clauses, the acceptance of which would have been against the Institute’s policy. In all but a very few cases, the Institute has been successful in working cooperatively with sponsors to craft language that addresses agency concerns and, at the same time, is in compliance with these Institute policies. Over the last year or so, however, there has been a marked increase in the number of proposed awards that include language that MIT cannot accept. The majority of these clauses appear in awards with certain Department of Defense (DOD) and Department of Energy (DOE) installations, security agencies (NSA, NRO, etc.), and the Federal Aviation Administration.

**Administrative Theme Initiatives**

**Internal OSP Initiatives**

**Client Orientation**

OSP has continued to develop the program that it offers each semester to the Institute community. This program covers a range of general federal topics (policies and procedures, applicable circulars, F&A and EB costs) as well as a cradle-to-grave summary of how to manage a research award. We have added additional basic guidance on proposal preparation and review as well as post-award–sponsored program administration to the OSP web site. In addition, OSP has begun regular meetings with clients to supplement the sporadic visits and presentations made in the past. Implementation of the web-based human subjects training course with its automated recording in the Warehouse of persons who have successfully completed the training has expedited the processing of NIH research proposals. We have initiated a secure web-based financial conflict of interest reporting system that is the Institute’s standard and required process effective July 1, 2004. In another area, the Cost Analysis Office has been working with the appropriate units to review the allocation account process and set annual allocation rates for each unit, subject to review by ONR.
OSP continues to serve as the Institute’s point of contact for each new federal electronic proposal system as it is implemented. We investigate the new system, explain it to the MIT DLC client users/proposers, and see them through the process to ensure proposal accuracy and, thus, the highest likelihood of funding. In the past year this has involved new electronic systems from NIH (e-SNAP), NASA, DOE, and DOD. Further, we continue to perfect our COEUS electronic proposal submission system that will provide a single face to our client DLCs while allowing submission to the multitude of federal sponsors.

Continued positive feedback from DLC clients reinforces the need to deliver services via a mechanism that provides a primary OSP contract administrator contact for each DLC client. Primary client contact is such an important concept in OSP that staff at all levels in our operational teams include some amount of primary contact responsibility in their assignments. Our commitment to strong backup from agency and functional specials and OSP teamwork are key to our success in making this method of service delivery work.

A working group of campus administrators was formed early in FY2004 to finalize the service center policy (mentioned above) and to guide a campuswide implementation of this policy. It is critical to get campus involvement in the process to ensure that the policy is reasonable and enforceable and to gain a “buy-in” from the affected parties.

This year, as in the past seven years, OSP issued its Research Administration booklet in June, addressing key research administration issues important to MIT. Available on OSP’s web site, all sections of the booklet are downloadable for use by the Institute’s administrative and research community.

**Collaboration**

Many of the training courses are being taught in collaboration with personnel from academic units. In other areas, OSP personnel have worked with academic units to use the Systems, Applications, and Products in Data Processing (SAP) in new ways to track and record research activities. In this past year, numerous staff members have continued their roles on the Provost Office’s team for development and implementation of improvements to cost sharing management. In support of these activities, we have held training classes and added additional guidance and training materials to the OSP web site. Personnel from academic units have served as reviewers and collaborators as the MIT electronic proposal initiative has reached rollout stage. During FY2004, OSP has continued to hold a series of sessions to show academic administrators how the COEUS screens can be utilized for simple but sophisticated reporting. COEUS will, in FY2006, become the standard proposal-creation system for the Institute and, in preparation for this, OSP will work more aggressively with units to move toward full COEUS proposal implementation.
Sustainability

One key element for MIT is the growth in volume of its research endeavors. The metrics above show how the research enterprise has grown this past year and its gradual growth over the past several years. OSP has developed, in conjunction with certain federal agencies, mechanisms for electronic receipt of awards (called TS 840s) and streamlined loading of the terms and conditions into COEUS. Along with this growth has come major financial and administrative compliance requirements and, primarily through the efforts of Cost Analysis, MIT has continued to integrate these requirements without disallowed costs or questioned systems.

Accountability

OSP is continuing participation in designing administrative processes that apply the MIT control environment—which sponsors and auditors expect—to new relationships and activities that require unique business approaches. One example of this is the development of a new electronic human subjects management tool in COEUS. Developed by MIT, with support from other institutions that use COEUS as their grants management enterprise system, this allows the management of human subjects protocols in a quickly accessible electronic system. The next step in this development is the creation of an electronic protocol application form for use by academic researchers.

In spring 2003, OSP released MIT’s already noted electronic financial conflict of interest reporting and management system, which became the system of record for MIT as of July 1, 2003, and is mandatory effective August 1, 2004. This system permits faculty and other researchers to create records of companies and activities that meet the federal definitional requirements and update the information in a secure, simple to use, web-based environment.

Professionalism

OSP personnel play an important role in professional associations, including Federal Demonstration Partnership (FDP), National Council of University Research Administrators (NCURA), and the Council on Governmental Relations (COGR). Julie Norris serves as the chair of the FDP Executive Committee, and several other OSP staff, notably Pat Fitzgerald and Steve Dowdy, play prominent roles in the FDP. Patrick Fitzgerald is also currently the president of NCURA. In addition, Julie Norris served as chair of the COGR–AAU task force on troublesome clauses and was a coauthor of COGR’s Export Controls and Universities: Information and Case Studies.

OSP is a national leader in electronic research administration. We were the first institution to receive electronic awards in a standardized format from ONR and we were the first to be able to submit NSF FastLane proposals in an EDI format (fall 2002). We are the only institution invited (June 2004) by Grants.gov to review and provide feedback on the requirements, design, and reference implementation for the applicant System to System interface with Grants.gov. Participation at a senior level in policy initiatives of the federal government, authoring books and book chapters, serving on national panels and on COGR testify to the professionalism of the staff and their involvement in the
important research administration issues being addressed across the country. OSP representatives continue to accept requests for meetings and presentations on our processes and tools.

Julie Norris
Director

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