# **Audit Division**

The MIT Audit Division delivers audit services through a risk-based program of audit coverage, including process audits, targeted reviews, and advisory services. These efforts, in coordination with the Institute's external auditors, PricewaterhouseCoopers, provide assurance to management and to the Audit Committee of the MIT Corporation that good business practices are adhered to, adequate internal controls are maintained, and assets are properly safeguarded.

The Audit Division's scope of services is equal to the full extent of MIT's auditable activities. Audit resources are prioritized and allocated using a model of risk evaluation for defined entities at the Institute.

The Audit Division is fully attentive to the support and service of its primary customer, the Audit Committee of the Corporation. In accordance with its charter, the Audit Committee meets three times a year. This schedule lends momentum to the Audit Division's goals for monitoring internal controls and supporting the Institute's risk management processes.

Fully staffed, the Audit Division employs 16 professional staff (14.5 full-time equivalents), including the Institute auditor. To meet budgetary goals, the Audit Division's complement of resources has been reduced by one professional full-time equivalent. Additional steps taken to provide budgetary relief include in-sourcing from PricewaterhouseCoopers of audit testing supporting the financial statement audit in exchange for reduced audit fees, rebalancing of resources to accommodate Lincoln Laboratory audit objectives, and establishing an internal desktop support model.

Core resources are organized into three distinct functions, Audit Operations, Lincoln Lab Audit, and the Research Administration Compliance Program (RACP), each managed by an associate director. Resources are allocated and shifted between these functions to meet needs as they evolve. One staff member left the Audit Division in late summer; the position was filled by an individual with a term appointment whose qualifications were an excellent fit for the vacated role.

Audit Operations carries out a priority-based program of audits and reviews to evaluate the effectiveness of management's systems of controls over financial, operational, and compliance risks within the Institute's activities, including information technology controls. This group is directed by the associate director for business and technology audit services.

RACP provides ongoing research administration compliance monitoring and reports to the associate audit director for operational and compliance risk management. RACP's efforts involve two key elements: department-level site visits designed to assess internal controls within the departments, labs, and centers (DLCs) and provide research compliance support to DLC staff, and ongoing compliance monitoring, which includes DLC-level monitoring and Institute-wide reviews. Through delivery of these advisory services, RACP represents an outreach effort to the Institute's numerous and varied DLCs. The relationships developed extend from the schools' assistant deans out through the DLC administrative and support staff. The Audit Division also houses a specialized function called Professional Standards and Strategy, led by an experienced member of the division with the title of associate audit director. Working with the Institute auditor and the audit management team, this function guides the division in setting policy and direction to help us achieve our longterm goal of assuring that MIT's audit function is world class.

Since December 2007, the Institute auditor, jointly with the head of information services and technology, has directed the Program on Personally Identifiable Information, which is designed to address risks associated with personally identifiable information. The program's work is led by an experienced individual, formerly a director in Information Services and Technology (IS&T), with broad knowledge of Institute processes and culture; the program director's work is enhanced by close involvement of senior staff from both the Audit Division and IS&T.

# Accomplishments

## **Audit Operations**

The primary objective of Audit Operations is to perform reviews and evaluations of the Institute's business processes and provide management with assurance that controls are functioning as intended. Accordingly, we strive to perform this work in accordance with the *International Standards for the Professional Practice of Internal Auditing* issued by the Institute of Internal Auditors. These standards require that we maintain independence when conducting our reviews throughout the Institute. This is achieved through an independent reporting line to the Audit Committee of the MIT Corporation, as well as by not assuming operational roles or undertaking responsibility for designing or implementing controls.

Audit Operations substantially completed its fiscal 2010 audit plan as of June 30, 2010. The 2010 audit plan comprised 36 internal audit/advisory engagements of various Institute business processes. Throughout the plan year, we adjust our portfolio of engagements to address the current environment and shifting risk priorities of the Institute. Audit Operations engagements (excluding our work at Lincoln Lab) completed within the 2010 audit plan included the following:

- *Process reviews:* Reviews of the Institute's vendor records management process, controls over the handling of maintenance and repairs, accounting controls over dining services, faculty summer salary payment and compliance processes, controls over subawards, and other Institute business processes.
- *Targeted reviews:* These included reviews of expenditure areas for potential cost savings opportunities, such as internal food expenditures, outsourced vendor payments/contracts, and direct payment and reimbursement of phone and cable costs. Also reviewed were application controls in two administrative systems, WebSIS and Kerberos, and access controls over critical transactions performed in SAP (System Applications and Products). One investigation into potential employee malfeasance was performed, at management's request.
- *Advisory reviews:* Our focus in 2010 included cost reviews for the various capital construction projects, participation in and review of the findings of a peer review of the Institute's Environmental Health and Safety Management System, and

assistance to a Media Lab team in allocating prize money received from the Defense Advanced Research Projects Agency for the "red balloons" competition.

A landmark event for the Audit Division was completion of an audit of the Singapore-MIT Alliance for Research and Technology, which commenced with a review of expenditures on campus billed to Singapore and concluded with an on-site review of expenditures in Singapore. This audit set the foundation for understanding business issues and communication challenges associated with "offshore" settings and collaborations, which will be essential as MIT's global engagement evolves.

#### Lincoln Lab Audit

FY2010 was the second year of an established audit function for Lincoln Laboratory. The associate audit director with oversight responsibility for this program developed a proposed multiyear audit plan for the lab, and identified resources within the Audit Operations group to help execute the first year's objectives. A full audit of property at the lab was performed. In addition, relationship building with senior lab administration continued; a long-term process redesign initiative being undertaken by senior management in finance and information technology is providing a catalyst for audit's advisory involvement in lab business processes. As 2010 comes to a close, the Audit Division is setting the foundation for work on conflict-of-interest disclosures in collaboration with management and providing a link to the campus-based initiative to establish an anonymous reporting hotline.

#### **Research Administration Compliance Program**

The RACP site visit program completed 12 visits during FY2010, which represents coverage of 20% of MIT's on-campus federal expenditures. Since the inception of this program in 2005, a total of 74 visits have been made. The FY2010 site visits represent the second cycle of the RACP site visit program. This program continues to provide on-site assistance to the Institute's DLCs relative to current compliance issues. Observations made and data collected through this program are provided to assistant deans and others to provide useful information on common trends, issues, and practices within the DLCs and to influence pathways to improved compliance in areas where desired targets are not being met. Overall, the program has accomplished its primary goals of achieving brisk coverage of DLC compliance and providing support for DLC control structures.

In addition to the site visits, RACP worked with the Office of Sponsored Programs to obtain documentation and gain an understanding of the overall process of quarterly reporting on the use of American Recovery and Reinvestment Act funds to ascertain the Institute's compliance with the federal requirements.

#### **Professional Development**

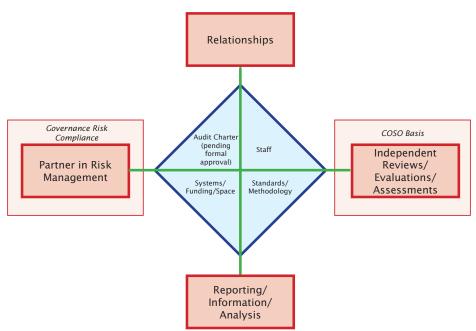
#### Promotion

In early 2010, we announced the promotion of Martha Jane Gagnon to associate audit director. This step recognized her role in establishing an audit presence at Lincoln Lab, as well as her ongoing commitment to increasing the professionalism of the MIT Audit Division as it strives toward world-class status.

# Training

We emphasize professional development by all of our staff. Members of the audit staff find opportunities for training in their discipline and affiliate with industry peers through conferences, seminars, and group meetings. Peer-group affiliation was an important theme in 2010. The Institute auditor is a member of the "Little 10+" association of Ivy League and other peer institutions, which meets semiannually. The seventh annual meeting of the manager-level group representing the same Little 10+ institutions took place in October 2009, paving the way for future intercollegiate collaboration among audit groups. In addition, information technology (IT) staff representing the same group of institutions convened this year. A newly formed user group for the Audit Division's administrative software (Pentana Audit Work System) held its inaugural meeting early in the year; the group, comprising five universities, plans to convene biannually. These meetings each provided a forum for exchanging ideas and determining approaches to common problem areas.

In February, audit management hosted one and a half days of training for Audit Division staff on techniques for increased audit efficiency and adding value. This training was the culmination of a multi-year internal project undertaken by members of the division to enhance audit methodologies and the use of automation in audit processes to gain efficiencies and effectiveness. In addition to conducting training to reinforce the use of these enhanced tools, we unveiled a new vision for the future of the Audit Division, "MIT Audit Division 2020".



MIT Audit Division 2020

Michael Bowers continues another two-year term as Audit Committee chair of the Association of College and University Auditors.

In March, Deborah Fisher participated with an elite team of peers in performing a quality assurance review of California Institute of Technology's Audit and Institutional Compliance Services.

## **Presentations at Industry Conferences and Other Venues**

Members of the MIT Audit Division are frequent contributors to industry conferences, as follows.

- In August, Vesna Zaccheo and Michael Bowers presented at the MIS Training Institute's Audit World 2009 conference on "Successful Integrated Auditing." The presentation emphasized the importance of integrating reviews of technologybased controls into audits of business processes.
- In September, Michael Bowers presented at the annual conference of the Association of College and University Auditors on "Developing a Successful Integrated Audit Approach."
- Throughout the year, Allison Dolan (program director for the initiative to protect personally identifiable information) was a frequent presenter at meetings, workshops, and conferences on the techniques employed at MIT to mitigate the risks associated with business use of private and sensitive personal information. The National Association of College and University Business Officers presentation, done jointly with the Institute auditor and a representative from the Office of the General Counsel, resulted in an invitation to the presenters to write an article for *Business Officer*, to be published in fall 2010.

# **Related Initiatives and Administrative Matters**

# Program on Personally Identifiable Information and Written Information Security Program

The Program on Personally Identifiable Information (PII), whose goal was to examine and promote mitigation of risk associated with obtaining and maintaining Social Security numbers of staff, students, alumni, and others, concluded in March 2010. The program was launched in December 2007 under the joint guidance of the then vice president for information services and technology and the Institute auditor, the initiative's cosponsors. Program methodology included outreach, process analysis, change management, benchmarking, and development of guidelines and best practices. Employing a risk-mitigation framework focused on minimizing the collection of Social Security numbers, minimizing "touch points" (individuals with access), protecting Social Security numbers in the custody of MIT's systems and operations, and securely destroying records containing Social Security numbers when no longer needed, this program reduced the Institute's exposure to malicious or inadvertent loss or compromise of legally protected personal information.

Throughout the year, in parallel with PII, the requirements of new Massachusetts regulations to protect personal information were addressed. Significant advantages were derived from leveraging the work of PII and the knowledge of the program's director. Data had been gathered on where and how Social Security numbers (and other legally protected personal data) were being used and what business processes still required the use of this information. Additionally, a cross-functional group of individuals with backgrounds in the areas of data privacy and security was in place and working with key business process owners, particularly in the central finance, human resources, and

undergraduate student areas. Among other requirements, the Massachusetts regulations required the development of a Written Information Security Program (WISP). The cross-functional group drafted policy and procedures for the collection, protection, storage, and destruction of the regulated personal information and then vetted the proposed WISP with the business process owners. In parallel, staff in IS&T were working on an implementation plan and support model for the technical tools defined in the program.

As a result of these collaborative efforts, MIT had the required WISP in place by the March 1, 2010, effective date. This also marked the official end of PII; the ongoing operational responsibility for WISP resides with the Institute auditor and the head of information services and technology. Since March, there have been a number of communication activities, including incorporating WISP principles into various training programs; formalizing data protection activities in the key business processes, including defining risk reduction work plans; and rolling out IT tools, such as laptop encryption, to the community.

MIT has been seen as a leader in this area of responding to the Massachusetts regulations; members of the working group, including the program director, have been invited to present at several higher education and industry conferences, with very positive feedback in terms of the utility of the information shared.

### **Code of Business Conduct and Institutional Hotline**

Amendments to the US General Services Administration's Federal Acquisition Regulation (FAR) include a requirement for a code of business conduct and ethics to be provided to staff involved in research contracts in excess of \$5 million. To address this requirement, a collaborative working group composed of representatives of the offices of the General Counsel, Vice President for Finance, and Sponsored Programs; the Department of Human Resources; and the Audit Division proposed the adoption of a statement of responsible and ethical conduct at MIT to the Academic Council in February. The statement can be accessed at http://web.mit.edu/conduct/.

Additionally, prompted by the same FAR amendment, the Institute auditor, in collaboration with the above offices and, notably, the Institute's Ombuds Office, launched an initiative to implement an institutional hotline and related awareness program. MIT engaged a vendor, Ethicspoint, to provide web-based and call-in reporting channels and related notification and recordkeeping services. The hotline will go live in early 2011.

### **Involvement in Institute Committees and Collaborations**

The effectiveness of an audit function is greatly enhanced through trusting relationships with administrators at all levels and access to decision-making venues where information and opinions are openly shared. Such opportunities have been abundant in the past year. The Institute auditor and other audit team members contributed and/or were appointed to several standing committees: the Research Administration Coordinating Committee (RACC), the Administrative Systems and Policies Coordinating Council, the Budget and Finance Steering Committee, the Administrators' Advisory Committee II, and the Parking and Transportation Committee (a presidential committee). Audit directors and managers are consulted frequently on control best practices in processes that are under study for streamlining or improvement (for example, travel modernization, electronic requests for payment, certification of effort). Notably, the Institute auditor and two associate directors are part of a team effort to implement metrics for the ongoing measurement and monitoring of the quality of research administration to support a commitment by the vice president for research to the Institute's Sponsored Research Visiting Committee, which reported in November 2009. The MIT Audit Division has found a meaningful place at the table.

# **Current Goals and Objectives**

As the Institute takes on new challenges, the Audit Division's goals are to participate effectively in the evolution of the following areas:

- *MIT's global engagement:* Develop a framework for considerations in audit planning and audit execution; satisfy the Audit Committee's request for information; contribute, through delivery of advisory as well as assurance audit services, to the Institute's control structure in relation to global engagement
- *Digital MIT and Digital Audit:* Integrate changes in business processes into Audit Division services; explore continuous monitoring and continuous auditing opportunities; become an information platform
- *Research enterprise:* In collaboration with RACC, the vice president for research, the Office of Sponsored Programs, and others, develop measures of research administration quality and control structures designed to ensure high-quality administration of research at MIT; work with counterparts in central and academic administration to understand and articulate governance models
- *Audit service improvements:* Prioritize audit services that promote opportunities for increased cost savings, recoveries, or enhanced revenues; continue initiatives to improve the quality of audit services (effectiveness, efficiency, and timeliness) and implement and monitor measurements of quality with world-class status in mind
- *Human capital:* Invest time, if not monetary resources, in the professional development of our staff and advance the division's diversity

These goals are owned principally by the management of the division and are articulated to staff members at division staff meetings, at periodic retreats, and in the conduct of daily work. The goals are also discussed with senior administration and the Audit Committee.

## Deborah L. Fisher Institute Auditor

More information about the MIT Audit Division can be found at http://web.mit.edu/audiv/www/.