# Vice President for Human Resources and Equal Opportunity Officer

# **Human Resources Department**

The Human Resources Department (HR) strives to make the Institute the employer of choice for highly effective workers by ensuring that HR practices and programs foster an environment in which people can flourish while supporting MIT's mission.

HR facilitates the fair treatment of employees with respect to hiring, pay rates, promotion, job assignments, training, leaves of absence, and benefits. We work to:

- Attract, retain, manage, and grow the talent the Institute needs
- Promote the continued development and expansion of skills, knowledge, and performance
- Help MIT students, faculty, staff, and their families integrate work, family, and personal life
- Support MIT's commitment to link its strategic direction with its employees' career development
- Provide work-related training opportunities
- Serve as internal consultants to help MIT and its departments, laboratories, and centers plan for and implement change
- Build programs to recognize individuals and teams for exceptional contributions to their offices, departments, and schools
- Encourage all members of the community to recognize the achievements of others, foster an environment of shared commitment and success, and acknowledge that each individual can make a difference
- Build and maintain successful employer-employee relationships within MIT, promote positive relations between the Institute and its unions and unionized employees, and help prevent and resolve workplace problems

The May 2006 retirement of Laura Avakian, vice president for human resources, creates a unique challenge for the department and for MIT in the months ahead. HR services were significantly expanded and improved during her six-year tenure at MIT.

Those accomplishments include creating Staffing Services, implementing the Rewards and Recognition program, expanding child care and other family-related services, cosponsoring the HR-Payroll Project, and introducing a variety of systems for tracking data and streamlining transactions. Avakian was also instrumental in initiating HR Partners, starting Career Planning at MIT, implementing MIT's Leader to Leader program, and inaugurating a Staff Diversity Council. She also achieved multi-year contracts with MIT's various unions, moved health insurance products into a self-insured mode, created a new classification system for support staff, and clarified

guidelines for salary administration. In sum, Avakian professionalized HR services at MIT so that the personnel department could truly earn the name Human Resources. As of June 1, 2006, Human Resources included 51 administrative staff members and 17 support staff. Demographics are shown below.

Administrative females	82% (42)
Administrative minorities	19% (10)
Support staff females	76% (13)

Support staff remales 76% (13) Support staff minorities 29% (5)

Highlights and accomplishments of the 2005–2006 academic year are detailed in the sections that follow. For more information about the Human Resources Department, visit http://web.mit.edu/hr/.

## **Benefits Office**

The Benefits Office is organized into four functional areas: the health and welfare team, led by Shawn Foley; the retirement team, led by Ellen Weiss; the disabilities service and medical leave team, led by Barbara Roberts and Salome Heyward; and the Center for Work, Family, and Personal Life, comanaged by Rae Simpson and Kathy Simons. The Benefits Office is responsible for the design, delivery, and communication of MIT's benefits, policies, and programs. The office also ensures compliance with all internal and external regulatory requirements.

In April 2006, Tricia Fay joined HR as the new director of benefits. Also this year, the health and welfare team welcomed Dilly Wilson and Elizabeth Parr, and Binna Choi joined the Center for Work, Family, and Personal Life.

# **Health and Welfare**

During the calendar year 2006 open enrollment period, online use of our employee self-service application increased by 40 percent compared to 2005. Benefits administrators were therefore able to spend less time on data entry and more time counseling employees. Approximately 10,000 employees are eligible for benefits. Of those, 88 percent participate in medical plans, 85 percent in dental plans, 20 percent in flexible spending accounts, and 8 percent in the long-term care plan.

In response to the Medicare Modernization Act of 2003, the health and welfare team implemented the Medicare Part D program for MIT's Medicare Supplemental Plans prescription drug coverage. As of June 1, 2006, 4,000 MIT retirees had elected to continue to participate in MIT's plans, enabling MIT to receive a subsidy from the Center for Medicare Services.

SAP Payroll software was integrated with existing SAP HR and Benefits functionality. The benefits team audited all related systems, data, and interfaces to ensure a smooth conversion and uninterrupted customer service for the community.

#### Retirement

The retirement team oversees the ongoing administration of the Institute's retirement programs. During the past year, retirement team members met with and counseled approximately 1,200 employees, including 200 participants who began receiving benefits.

In December 2005, the Pension Calculator was introduced. This new online retirement tool allows employees to customize their pension projections for the MIT Basic Retirement Plan and project their future MIT Supplemental 401(k) Plan balances. For the plan year that ended December 31, 2005, annual Basic Retirement Plan statements were provided to employees online through the Pension Calculator. Approximately 600 employees without computer access continue to receive paper statements.

To meet the ongoing need for retirement planning and investment education and to encourage participation in the 401(k) plan, the office sponsored a 401(k) Investment Fair in fall 2005. The fair, which was attended by more than 600 MIT employees, included presentations on "Understanding the MIT Retirement Plans," "Basics of Investing," "Strategies for Estate Planning," "Women and Investing," and "Saving for Retirement." In addition, workshops were offered on campus and at Lincoln Laboratory each calendar quarter and during the Independent Activities Period.

The retirement team hosted two Retiree Days this year, and 220 employees—all 55 years or older and with 10 or more years of service—participated. Sessions included "Making Sense of Social Security," "MIT Retirement Plans," "MIT Health and Welfare Benefits," and "Investment Strategies for Retirement."

In fiscal year 2006, the retirement office continued to work with Workforce and Career Planning on two programs presented on campus and at Lincoln Laboratory—"Shifting Gears: Transitions for Mid-life and Beyond" (an interactive planning series for employees age 50 or older) and "Managing Across Generations" (an interactive session for those who manage employees in multiple generations).

## **Disabilities Service and Medical Leaves**

The disabilities service and medical leaves team continued to focus on improving the management of employees' medical leaves, conducting a complete review of the Institute's leave policies and procedures pursuant to Section 4.0 of the Personnel Policy Manual. In January 2005, the team submitted recommendations to the vice president for human resources in the following policy areas: extended sick leave, medical certification requirements, unpaid leave and leave substitution, leave administration, and maternity leave. The team is working on strategies for implementing the recommended policy changes. In addition, the office helped the Department of Facilities modify its leave and attendance procedures.

A number of administrative improvements were implemented for the long-term disability and workers' compensation programs. With respect to long-term disability, efforts were directed at cost-reduction and included standardizing accounting reconciliation procedures, monitoring Social Security offsets, and augmenting case

processing and appeals procedures. In regards to workers' compensation, we partnered with MIT Medical to resolve problems regarding the utilization review procedures, and we assisted the Environment, Health, and Safety Office (EHS) in improving the online supervisory incident report for Occupational Safety and Health Administration reporting.

The office finished installing a database to track student contacts and accommodations and updated the student website. We continued efforts to increase access to technology by working with OpenCourseWare to develop a web accessibility policy and provided guidance to the Information Services and Technology (IS&T) podcast team. The office also funded the installation of assistive listening devices in four lecture halls and worked with EHS to develop a centralized emergency plan for individuals with disabilities. In addition, the office awarded the first Bulova Fund assistance grant to a student with disabilities.

# Center for Work, Family, and Personal Life

The center works to enrich the creativity and productivity of MIT's faculty, staff, and students by supporting the broad diversity of family structures and life experiences represented within the MIT community. The center seeks to accomplish its mission through a combination of direct and indirect services that have the highest standards and incorporate cutting-edge knowledge of the field. The center works actively to contribute to MIT's reputation as an employer of choice and to serve as a model for other organizations locally, nationally, and internationally.

Our key areas of growth this year are outlined below.

#### Child Care

This past year, all of MIT's child-care programs were consolidated under one umbrella through a contract with Bright Horizons. The center continued to work on the development and integration of the new child-care system.

With the launch of a new website this spring, all child-care programs are now collected on the center's site under the same name, Technology Children's Centers (TCC), including the former Lincoln Laboratory Children's Center (LINCC) in Lexington, now known as TCC at Lincoln Laboratory. The new website is richer and easier to use, with separate navigation for prospective parents, enrolled families, MIT administrators, job seekers, and volunteers.

At the request of the Provost's Office, on July 1 the center introduced new eligibility guidelines for child-care scholarship recipients. Changes include a new work/study requirement for spouses and partners that has reduced the number of eligible student applicants. For the first time we've met the needs of all qualified student families enrolled in MIT child-care centers.

In an effort to address the needs of those families who no longer qualify for scholarship assistance, in August the center launched a pilot cooperative child-care program at Westgate. Parents can receive discounted tuition in exchange for volunteering in the

classroom. The program filled quickly and was very well received; the co-op will be continued at Westgate next year.

Working with the Child Care Advisory Committee, the center designed and hosted a Child Care Visiting Committee of four academics and early childhood professionals from the Boston area. The professionals spent two days visiting MIT's child-care centers and meeting with child-care staff, parents, and advisory committee members. The committee will complete and distribute a child-care report and recommendations based on the visiting committee's findings this fall.

# Council on Family and Work

Suzanne Flynn, professor of linguistics and second language acquisition, became the new faculty cochair of the council in February 2006, joining staff cochair Rae Simpson, comanager of the center. The council focused its efforts on conducting a broad, informal assessment of community needs in the work-life area, meeting with key members of senior administration, faculty leaders, and others to develop an action plan for 2006–2007. The council also facilitated the creation of a backup child-care and elder-care benefit and an enhanced faculty website, which is under construction. The council's website was launched, expanded, and updated. The council also recommended the creation of an adoption benefit, which is under consideration by senior administration. The council is staffed by the center's administrator of child-care services.

# Young Adult Development Initiative

As an outgrowth of a project on student mental health coordinated by MIT Medical, the center launched an initiative to gather and analyze research on young adult development, including brain development, and to disseminate key findings within MIT and nationally. The literature identifies a number of major milestones that occur between the ages of 18 and 25 that have significant implications for those who are advising, parenting, counseling, mentoring, and teaching undergraduate and graduate students. Conference presentations were given on preliminary findings, and a grant was received from the Lord Foundation to expand this project, in particular to develop materials that will be useful to MIT administrators and faculty on issues such as mentoring, advising, curriculum development, and career planning.

### Other Projects

**Backup care.** In response to recommendations from the Staff Quality of Life and Faculty Quality of Life committees to support employees with backup child-care arrangements (e.g., needed when a child is mildly ill and a parent must get to work, or when a family's regular child-care or elder-care arrangement has broken down), the center negotiated a contract with Parents in a Pinch Inc. to provide backup child-care and elder-care services for all benefits-eligible employees beginning in July 2006; the program will provide referrals to screened, trained, and experienced child and elder caregivers who can provide short-term care in the employee's or elder's home.

**Web.** Working with Human Resources Information Systems, the center added several new features to its website, including an online registration system for seminars and briefings, an expanded range of child-care information, an overview of resources for breastfeeding mothers, including a listing of rooms set aside for nursing on campus, and a new searchable database of area summer camps and summer programs for teens.

**Media interviews.** Center staff conducted a number of interviews with such national media as the *New York Times, Boston Globe, Chronicle of Higher Education* and *Seattle Times* on issues in which the center has expertise.

**Diversity.** Through seminars and library materials, the center expanded its efforts to address the needs of the rich diversity of people at MIT, whose backgrounds span the spectrum of race, ethnicity, family structure, stage in the life cycle, and socioeconomic status. Seminar attendance increased significantly.

Tricia Fay Director

More information about benefits can be found at http://web.mit.edu/hr/benefits/.

# **Compensation**

Compensation staff continue to provide support and consultative services to managers, directors, and senior leadership. They manage a large volume of highly technical and detailed activity while keeping in view both broad programmatic goals and the overall Human Resources agenda. The year has been marked by the need to satisfy a number of compliance requirements, from planning and implementing Fair Labor Standards Act (FLSA) changes to preparing for two functional audits that occurred simultaneously.

Whereas AY2005 work regarding FLSA updates revolved around educating managers and creating position questionnaires for data collection, this year's initiative has been a labor-intensive review of positions within the first two levels of the administrative salary structure and comparable sponsored research administrative positions (1,000 in total). In some departments, labs, and centers (DLCs), position reviews necessitated discussions and decisions about staffing alternatives and restructuring work. In other DLCs, updating and/or creating single incumbent and generic position descriptions and defining career ladders was central to making progress toward finalizing the review.

Meanwhile, the FLSA Advisory Group (a team of representatives from across the Institute, including others in Human Resources) continued to meet and assess the impact of changing an employee's status from exempt to nonexempt. The group identified key cultural, morale, and budgetary issues for the Institute and effected employees. It assessed options, finalized decisions, and assisted in determining a process for change. Now, as we near the end of this fiscal year, approximately 85 percent of positions have been reviewed. Of those, approximately 5 percent will require a status change; this validates our initial assumption that the Institute classifies positions correctly.

During this fiscal year, Compensation was audited by both the Defense Contract Audit Administration (DCAA) and by the MIT Audit Division. It should be noted that Compensation was last audited by the DCAA in 1999/2000 (prior to MIT's hiring of the current Compensation staff), and several compensation system deficiencies were identified in the areas of job analysis, job evaluation, external equity, and salary structure. Specifically, they cited us for lack of procedures, data, and/or documentation.

In addition to a review of past deficiencies, the current audit encompassed practices associated with the collection and analysis of market data.

Since the earlier audit, Compensation has implemented pay decision guidelines and practices to address prior audit findings and to support good compensation practices. To prepare for this year's audit, Compensation reviewed and updated guidelines, prepared and retrieved supporting data, and created internal audit reports. Coincidently, the MIT Audit Division also scheduled an audit; their focus was on compensation processes. As of this writing, detailed process mapping is under way. Results won't be available until both audits are complete.

In an effort to support a broad range of HR initiatives—from employee training to career planning to affirmative action compliance—Compensation identified 20 job families. Working directly with managers and administrative officers, the staff assigned more than 1,000 job titles to appropriate families, uploaded the data into SAP, developed and circulated a comprehensive Job Family Guide to managers across campus, and incorporated these materials into the Compensation website. They also participated in a team within Human Resources that reviewed, examined, researched, and proposed recommendations in response to the Staff Quality of Life report.

To abide by anti-trust regulations, MIT disbanded its faculty salary survey and, in 2005, participated in a survey coordinated by the Association of American Universities Data Exchange (AAUDE) for the first time. In collaboration with the Data Warehouse, the Office of Institutional Research, and Human Resources Information Systems (HRIS), Compensation obtained and analyzed data, developed new submission reports, and prepared custom results for distribution to each of the five schools. In order to gain market data for other job categories across campus, Compensation participated in 18 external salary surveys and several informal ad hoc surveys conducted by universities, professional associations, and consulting groups from across the country. Compensation also coordinated one customized salary survey. These survey results, together with insights provided through year-round conversations with managers and administrative officers around the Institute, provided a basis for assisting departments with salary offers, resolving internal salary equity issues, preparing review allocation proposals for the MIT Corporation's Salary Subcommittee, and analyzing and compiling data for the Institute's key officials in order to comply with US Treasury Department regulations.

Compensation administered nine separate salary reviews and merit allocation pools covering 7,400 campus employees and faculty and 2,500 Lincoln Laboratory employees. This was the second year that departments used the SAP Annual Salary Review (ASR) application for salary reviews. In collaboration with the SAP Training Team, Compensation conducted ASR Application refresher courses, updated ASR quick cards used during the training sessions, and added them to the website. In collaboration with members of HRIS, Compensation staff continued to identify SAP enhancements, tested and redesigned compensation-specific Brio Query reports, and documented many new processes.

In the continuing effort to support a successful transition from voucher payroll to the MITemps program, Compensation staff partnered with nextSource and provided shared

oversight for a smooth transition from Veritude. They assisted in ensuring continuity in timekeeping efforts, Institute-wide communications, and on-site representation. During AY2006, 600 MITemp employees were hired for short-term assignments.

Throughout the year, Compensation was involved in discussions regarding position classification and reclassification recommendations, promotions, and market adjustments for multiple job groups across the Institute. They reviewed job content, recommended title and grade alternatives, and continued to create generic titles to enhance benchmarking opportunities. They collected feedback from department managers, Human Resources officers, and assistant deans regarding strategic workforce planning (e.g., recruitment and retention information, including market and compression issues). This comprehensive information was used to determine pay program, interim increase pool, and contingency fund planning. Along with Staffing Services, they spearheaded a collaborative effort to begin an in-depth analysis of turnover metrics, including reasons for leaving, length of service prior to leaving, and replacement costs.

Graphs and charts were prepared to analyze gender and minority equity, internal salary relationships, external market competitiveness, and merit distributions within departments and schools and across the Institute. Increases that were not merit-related were tracked. Outreach was provided to departments in central administration to assist in budget forecasting. To that end, Compensation, Staffing Services, and the Budget Office met quarterly to review the linkages between position management and the budget process. Based on this ongoing collaboration, a more streamlined process for discarding positions was instituted. Because position management is a shared, ongoing responsibility, quarterly meetings will continue in AY2007.

# Barbara Jablon Director

More information about Compensation can be found at http://web.mit.edu/hr/compensation/.

# **Human Resources Information Systems**

Human Resources Information Systems (HRIS) provides business and technical solutions and services to the Human Resources Department and the MIT community. The integration of SAP Payroll with existing SAP HR and Benefits functionality required HRIS to play a significant role in SAP Payroll implementation this year. HRIS responsibilities included delivery of training and communications, interface support, data integrity, documentation, and forms support. HR-Payroll academic and nonacademic forms had to be changed to support payroll functions. Changes to SAP structures brought changes to reports generated from the Data Warehouse in support of the various HR functions.

HRIS continues its work delivering internal institutional reports and functions such as the online and hard-copy telephone directory and executive committee reports. This year brought new reporting and changes to existing mandatory governmental reports for Medicare and Equal Employment Opportunity reporting. HRIS supports other areas of HR in delivery of salary reviews, benefits, and staffing functions. The group supports the Service Center in recording academic appointments.

HRIS led a team that implemented changes to the academic appointment transaction forms in partnership with academic administrators. The forms were changed for increased ease and clarity of use.

HRIS continued providing desktop and technical support for the entire HR staff, including servers, web development, and database applications for the department.

A Filemaker server has been installed to maintain the many databases developed to support HR. Databases include the Employee Orientation for Staffing Services, Employee Relations for Employee Services, R&R Excellent Awards Nominations for Compensation Office, Summer Camps, and Seminar/Workshop Registrations for Center for Work, Family, and Personal Life.

HRIS continues to improve the HR website. A complete redesign was done for the Technology Children's Center and development work has been done on the following websites: Center for Work, Family, and Personal Life, Workforce and Career Planning, Staffing Services, Rewards and Recognition, Compensation, Affirmative Action, and Office of Employee Development.

A significant change this year was the retirement of Claire Paulding, a 34-year employee, who led HRIS. Wayne Turner left IS&T and took on the role of leading HRIS.

Wayne Turner Director

# **Labor and Employee Relations**

The Office of Labor and Employee Relations is responsible for providing high-level human resources consulting to the Institute's departments, labs, and centers for all staff—faculty, administrative, sponsored research, support, and service—regarding a wide variety of employee issues and personnel policies. The office also provides support for employee/faculty appointments, transfers, promotions, annual reviews, and similar changes in employment status. And it handles relations with the Institute's five labor unions.

During 2005–2006, the office filled one vacancy: an administrative assistant transferred into the group from another position in the Human Resources Department, replacing an administrative assistant who had transferred out.

#### **Labor Relations**

The Office of Labor Relations is responsible for negotiating and administering the collective bargaining agreements covering approximately 1,350 MIT employees in five bargaining units. Labor Relations also oversees MIT's representation in grievance arbitrations. In addition, the office provides advice and support to departments, laboratories, and centers on issues that involve union relations, collective bargaining, litigation, and employment policy affecting the unionized staff.

As of June 30, 2006, contracts were in place with the Service Employees' International Union (SEIU) on campus (running until June 2007) and with the SEIU at Lincoln Laboratory (running until June 2008). A three-year contract with the Research, Development, and Technical Employees' Union (RDTEU) was ratified in July 2005 (running until June 2008), and a three-year contract (also running until June 2008) was reached in July 2005 with the Security Officers' Independent Union (SOIU) at Lincoln Laboratory. A three-year agreement with the Campus Police Association was in place until June 2006, although the wage increase for the third year of that agreement (2005–2006) was still being negotiated.

During FY2006, MIT and the RDTEU reached a mediated agreement regarding the inclusion into that union of approximately 50 technical employees working at the Broad Institute. The parties had agreed to mediation in lieu of arbitration in February 2005. A formal agreement was signed in January 2006 with the employees being represented by the RDTEU as of March 2006.

During FY2006, the Office of Labor Relations heard 26 Step Three grievances. In this same period, 24 arbitration hearings were scheduled. However, 10 of the 24 cases will be heard after June 30, 2006. In addition, one case submitted for arbitration has yet to be scheduled. The dispositions of the 14 cases heard are as follows: two cases pending, six cases settled, three withdrawn, two awarded in favor of MIT, and one case initially awarded in favor of the union that was appealed by MIT and subsequently settled by both parties.

The office continues to try to resolve conflicts at an early stage and to consider the concerns of both management and the unions in working toward mutually satisfactory results. A training session for managers working in a union environment was given again during FY2006.

# **Employee Relations**

Human Resources officers (HROs) are assigned to specific schools and organizational areas and serve as the primary point of contact for these client groups. The HROs are responsible for partnering with these groups to understand their business operation as it relates to their human resource needs, and for coordinating other HR services to help them address particular problems and opportunities. In conjunction with Staffing Services, the HROs support departments in reviewing job postings and applicant materials. The HROs also work very closely with Staffing Services on some searches.

A large percentage of HRO time is spent counseling client groups and employees on:

- Policy interpretation
- Conflict resolution
- Compensation (job classification, salary determination, etc.)
- Organizational restructuring
- Discrimination and harassment issues
- Employment-related investigations
- Leaves of absence
- Performance management, including corrective action
- Terminations, including layoffs
- Grievances

The SAP Payroll phase of the HR-Payroll Project continued to be an important focus of Employee Relations this year; staffers worked on issues related to pay, tracking vacation time, and training practitioners in the DLCs. Employee Relations staff also continued to work with Compensation staffers to identify positions at MIT that may be affected by the revision to the Fair Labor Standards Act overtime exemption regulations; substantial progress has been made. Another ongoing project of the Employee Relations group was developing a clearer complaint resolution process for responding to employee concerns and grievances. A review of many personnel policies was also undertaken, some in conjunction with the President's Office.

Various training initiatives were launched or continued (e.g., on writing good position descriptions, on preventing sexual harassment, and on managing in a union environment). Some of these training sessions were open to the community while others took place directly in departments. Trainings typically involve Employee Relations staff plus Organization and Employee Development staff (in the teaching or the development); the sexual harassment training also involves staff in the Senior Counsel's Office and the Ombuds Office. A training course on coaching was provided on site by an outside instructor, and many members of the Employee Relations staff, as well as some other HR professionals across the Institute, participated in this five-week training.

# Marianna Pierce

Director

More information about Labor and Employee Relations can be found at http://web.mit.edu/hr/empservices/.

# **Organization and Employee Development**

Organization and Employee Development (OED) works to advance the organizational effectiveness of MIT and its offices, departments, labs, and centers (DLCs). OED also promotes the professional development of those who work at the Institute. OED provides three major client-focused services: organization development consulting, workforce and career planning, and professional development programs.

# **Organization Development Services**

In FY2006, the organization development (OD) consultants provided a variety of internal consulting services for MIT, its offices, and its DLCs. These projects ranged from multiyear change efforts to onetime retreats. OD consultants collaborate with clients to provide services in managing change, developing teams and leaders, planning and facilitating meetings and retreats, and implementing change-related HR solutions.

A few examples illustrate the range of consulting projects during FY2006:

- Research Administration Improvement Initiative (RAII)—served on RAII
   Steering Committee and co-led the team developing and implementing web-based research administration curriculum (STARweb)
- Dean for Undergraduate Education—designed and implemented a strategic planning process with the dean and began its implementation
- HR-Payroll Project (SAP)—consulted on change management, curriculum development, and communications, including the following:

Training community trainers

Addressing organizational changes created by payroll implementation Coaching coleader of project team

- Department of Biology—in collaboration with the Human Resources officer, worked with the department's administrative staff to develop a performance management process; presented custom performance management training for department's administrative staff
- Sloan School—designed and presented training program on Myers-Briggs Type Indicator for Resource Development and Alumni Association

A few examples of consulting within the Human Resources Department include:

- Coordinating the search process with others for the manager of Workforce and Career Planning
- Designing agendas and facilitating FLSA Advisory Group meetings
- With VP for HR, planning and facilitating meetings to create the 12- to-18-month work plan for HR
- Training HR staff to prepare for Payroll Go-Live

- Facilitating benefits business processes redesign teams and leading a retreat at the request of the new benefits director
- With the director for compensation, helping lead a team within HR to study
  the "Development" section from the Staff Quality of Life report, to assess
  what currently exists at MIT, to identify applicable data, and to provide
  recommendations to the VP for HR about next steps to serve the needs identified
  (many recommendations have been or are in the process of being implemented)

# **Workforce and Career Planning**

FY2006 marked a transition in the emphasis of this office. The manager, Barbara Peacock Coady, retired, and Corvis Catsouphes was hired as the new manager. In the summer of 2005 the Career Planning Office was renamed Workforce and Career Planning. This change signaled a shift in focus toward organizational approaches to talent management and succession planning. Key messages from this shift emphasize:

- The alignment of individual employee interests and skills with Institute needs, goals, and strategies
- A systematic approach to attracting, retaining, and developing employees through workforce assessment and planning
- Multiple strategies for career development

The renewed emphasis on workforce planning meant outreach to generate interest in the following internal consulting services:

- Assessment of organizational challenges and opportunities to determine the skills and knowledge needed in the present and future workforce
- Talent review sessions to determine strengths and gaps in critical job roles
- Development and succession planning to stimulate conversation about assignments, education, training, and peer learning
- Role-specific development programs to build capacity
- Workforce analyses of demographics, promotions, turnover, and retirement to highlight trends in MIT's internal labor market

Career planning services for employees continued in FY2006 in a partially reduced capacity that reflected the shift in the office. These services included individual coaching, career workshops, assessment tools, and the maintenance of a resource lending library.

The commitment to MIT's older workforce (demographically a significant percent of MIT's workforce) continued this year with the provision of planning workshops focused on mid-to-late careers as well as on managing a multigenerational workforce. Follow-up individual career consultations supported transition planning. In the coming year this office will also promote organizational and managerial practices that help MIT take advantage of the many business reasons for utilizing this part of its workforce.

The shift to workforce and career planning also precipitated a reexamination of the Tuition Assistance Benefit. One project under way is a review of the policy, administration, and reimbursement process to determine appropriate services, staffing levels, and business ownership. In addition, this benefit will expand during the coming year with the Academic Council's recent decision that MIT employees be eligible to earn MIT degrees.

# **Professional Development Programs**

During the past year, OED continued to offer professional development courses to members of the MIT community via open enrollment. OED's courses focus on career planning, communicating, managing, leading, working in groups, writing, and presenting. OED also continued to provide training registration services for courses in financial management—offered by CAO—and sponsored research administration—offered by the Office of Sponsored Programs (OSP). In the past year, HR offered 52 courses attended by 656 participants. HR staff taught most of these courses; however, eight staff from different parts of the Institute also taught in HR's professional development programs. OED concentrated its energies this past year on upgrading existing courses in communicating, teambuilding, and leading.

OED continued to offer additional professional development tools through its website. OED's learning topics provide downloadable tools and articles about communicating; designing and facilitating meetings; leading and managing others; and working on teams. Although these tools are intended for members of the MIT community, they are also available to anyone with access to the web. In the past year, OED received numerous requests from individuals around the world to use these tools and articles for organization development and training purposes.

OED also sponsored a train-the-trainer workshop for the instructors of its Project Planning and Organization course and certified one new trainer. OED facilitated the process by which these instructors adapted and updated the course materials to help participants learn.

#### **HR Partners**

OED continued to coordinate a team devoted to fulfilling the professional development role of HR Partners. HR Partners is an Institute-wide group of individuals with human resources responsibilities. HR Partners activities, events, and communications are intended to:

- Keep participants current on HR-related laws, initiatives, practices, and policies
- Create a shared understanding of HR-related Institute guidelines
- Provide the community with professional development opportunities in the HR field
- Identify improvement opportunities through sharing ideas
- Establish more effective communication and working relationships between central HR and the DLCs to meet the needs of the MIT community

During FY2006 HR completed the following HR Partners activities:

- Sponsored an HR Partners Forum on "Using the MIT Personal Assistance Program—When and How" with Jim Chansky, Rita Fischer, and Dawn Metcalf, social workers with the MIT Personal Assistance Program
- Sponsored an HR Partners Forum on "Staff Diversity Efforts—Theory, Practice, and Benefits" with Professor Caesar McDowell and Phil Lima, coordinator of staff diversity initiatives
- Developed the curriculum and sponsored the Lunch & Learn session "Writing Good Position Descriptions"
- Sponsored the Lunch & Learn session "Time Entry and Approval" (HR-Payroll Project)
- Sponsored the Lunch & Learn session "Why Are Medical Leaves So Confusing?"
- Coordinated a focus group with HR Partners members from the DLCs to identify training and information needs

# **Training Alignment Team**

Because the VP for HR is the business process owner for training at MIT, OED undertook many activities this past year to support training Institute-wide. OED continued to facilitate the Training Alignment Team (TAT), an ongoing working group of staff from Audit, CAO, EHS, HR, IS&T, and OSP—all departments that offer Institute-wide, work-related training. TAT's purpose is to align and enable training at MIT for world-class work and is co-led by EHS, HR, and IS&T.

During the past year, TAT sponsored four project teams focused on specific goals to align and enable training at MIT. Each project team comprised staff from TAT's member groups.

- One team consolidated two separate contracts into one MIT contract with an
  outside service provider for web-based training courses. This unified contract
  now provides end-users with a cohesive, unified point of entry to web-based
  training courses.
- Another team completed a survey of end-user input to identify the training delivery methods that members of the MIT community consider to be most effective. TAT will use the findings from this survey, compiled with additional research, to create guidelines to help trainers and content owners at MIT make decisions about how to most effectively and efficiently deliver training.
- A third team completed matrices that map the skills, knowledge, and abilities for targeted job tasks with learning opportunities at MIT. The focus of the matrices is job tasks within the targeted areas of financial administration, human resources, and sponsored research administration.
- Following last year's highly successful workshop about developing effective training, TAT initiated Training Partners at MIT, a project to build community and provide professional development opportunities for people at MIT involved in training. Through Training Partners, TAT plans to offer a series of professional

development workshops and support a virtual community to enhance the quality and professionalism of training at MIT.

Through an effort to align training registration practices that provide a consistent and enhanced end-user experience, TAT continued to sponsor the TEM User Group, an ongoing group of training registrars from around the Institute who use the Training and Events Management (TEM) module of SAP. OED collaborates with IS&T to coordinate and facilitate the TEM User Group, which shares best practices, solves problems, and receives updates about TEM.

#### Leader to Leader

Leader to Leader (L2L) merges all three functions of OED. A 12-month program spanning two fiscal years, it began its fourth round in FY2006. The current class has 20 members from throughout the Institute. L2L has six goals:

- To ensure the stewardship of MIT, its mission and values
- To support, develop, and enhance world-class leadership for MIT
- To develop flexible, creative, strategic thinkers who anticipate and manage change successfully at MIT
- To build strong, lasting bridges across the Institute
- To nurture a culture of development for each participant and for others at MIT
- To create a group of peers who serve as resources to each other beyond the program

To accomplish these goals, participants create individual development plans, attend two full-day workshops about every six weeks, receive executive coaching between these sessions, and apply what they've learned to work in their own areas as well as to L2L projects. Those who teach in the program include MIT faculty, MIT's senior leaders, and graduates of L2L.

Upgrades in this year's program include training L2L alumni to be executive coaches for L2L-2006 fellows, using L2L alumni as process coaches for the project teams, having L2L alumni sponsor the projects, "MIT-izing" the multi-rater feedback tool about leadership competencies, and finding more ways to involve the L2L fellows' managers in the program.

FY2006 also found the L2L alumni initiative gaining momentum. Among its many activities, one first-time event this group held was a retreat at Endicott House to refresh skills and learn more about the distributed leadership model taught in the Sloan School of Management.

# Margaret Ann Gray Director

More information about Organization and Employee Development can be found at http://web.mit.edu/hr/oed/.

# **Rewards and Recognition**

MIT's Rewards and Recognition Program has completed its sixth fiscal year. This year, efforts were made to refresh and renew the MIT Excellence Awards and local programs of the Infinite Mile and Appreciation Awards.

On average in FY2006, groups on main campus used 50 percent of their budget allocation for Infinite Mile Awards (cash awards), and the rest on awards ceremonies, group events, and on-the-spot Appreciation Awards. At Lincoln Lab, 100 percent of the money was spent on Appreciation Awards and group and team-based celebrations.

The program continues to consist of three equally important components, the Infinite Mile Awards, the Appreciation Awards, and the MIT Excellence Awards.

The Infinite Mile Awards, administered at the local/departmental level, are typically cash awards for teams and individuals presented bi-annually or annually in a formal ceremony. The event and award categories are customized by the department according to its culture, values, and goals.

Significant changes and enhancements were made to several of the local programs this year. Among these were a shared awards ceremony by the Alumni Association and Resource Development to emphasize the collaborative nature of their work; redefined award criteria in Human Resources and IS&T; and a change of venue for the Offices of the Provost and Vice President for Research to make the event more inclusive of their community. A total of 165 awards were presented to employees on main campus, including members of the administrative, support, service, sponsored research, faculty and other academic staffs. Eighty-one percent of these awards were given to individuals and 19 percent to teams. At Lincoln Lab, nine Lincoln Team Awards were presented in August 2005, recognizing more than 900 employees.

The Appreciation Awards, designed and administered at the local/department level, are frequent, on-the-spot "thank yous" among managers and colleagues within and outside a department. Most areas recognized staff by presenting small gifts to individuals and providing luncheons or other events for groups. This recognition was often publicly acknowledged through department newsletters, websites, and announcements at staff meetings. Several groups revised their programs to address feedback and maintain employee engagement; these included the Office of the Dean for Student Life, Human Resources, Academic Media Productions, and the Computer Science and Artificial Intelligence Lab. More than 2,000 staff from main campus and Lincoln Lab received some form of informal recognition via the Appreciation Awards during the fiscal year.

The MIT Excellence Awards, administered by HR, are cash awards presented in six categories of achievement at an annual Institute-wide celebration. The 2006 MIT Excellence Awards ceremony was held March 1, 2006, at Kresge Auditorium. Several enhancements were made to the program, including announcing award recipients in advance, which greatly increased attendance from 2005. Also, for the first time, MIT's senior officers read the citations for awardees, creating a heightened role for the Institute's leadership. Award categories were revised for clarity and specificity.

Additionally, a new category, "Unsung Hero," was added to raise awareness that the awards are intended to recognize members of the MIT community regardless of the level or scope of their positions. More than 80 nominations were received; 14 individuals and five teams were recognized. Award recipients represented administrative, support, service, technical and sponsored research staff, and a wide variety of departments, labs, and centers across main campus and at Lincoln Lab.

The program administrator position has made it possible to provide ongoing assistance in the design and revision of customized Infinite Mile and Appreciation Awards programs. Program redesigns were initiated and/or facilitated in five of the 22 Rewards and Recognition groups this year. Approximately 100 managers and supervisors were trained on the manager's role in employee recognition. Financial processing and record keeping for the program continue to be refined as a result of greater communication and collaboration with the Controller's Accounting Office (CAO).

# Kande Culver Program Administrator

More information about the Rewards and Recognition Program can be found at http://web.mit.edu/hr/rewards/.

# Staff Diversity, Affirmative Action, and Equal Employment Opportunity Management

# **Outreach to Minority Professionals and Recruitment**

This year the Staff Diversity, Affirmative Action, and Equal Employment Opportunity Management team worked to strengthen its relationships with minority professional organizations to continue the recent increase in the diversity of job candidate pools. Through these efforts, the team is enhancing the Institute's visibility as an employer and is reaching previously untapped sources of diverse candidates. The dramatic increase (72 percent) over the last 3.5 years in representation of minorities in our applicant pools for administrative and support staff positions is evidence of the efficacy of these efforts.

Key elements in this outreach effort in 2005–2006 were the following team activities:

• Commitment to becoming a founding sponsor of Conexión, a new leadership development program for mid-career Latino professionals that is built on a cohort model similar to MIT's Leader to Leader Program. Conexión participants and their volunteer mentors (Greater Boston business leaders) used campus facilities for monthly meetings and training sessions. These sessions included content provided by members of the Sloan School faculty. The sponsorship and presence of Conexión on campus provided opportunities for MIT hiring managers from IS&T and Resource Development to interact with emerging Boston-area Latino leaders, introduce MIT departments and hiring needs, and tap into networks of minority professional talent. The team looks forward to continuing its relationship with this program.

Hosting the National Black MBA Association's (NBMBAA) sixth annual Boston
Diversity Networking Event and Career Fair at the MIT Faculty Club. With other
members of the Boston Consortium for Higher Education, the team persuaded
NBMBAA of the importance of holding this high-profile event on the MIT
campus to raise awareness among black accounting and finance professionals of
career opportunities at MIT and other colleges and universities. Hiring managers
from numerous departments, including CAO, the Office of the Dean for
Undergraduate Education (DUE), IS&T, and Sloan, attended this event and were
able to tap into this network of minority professional talent.

The team will continue its outreach to the minority professional community. Planning meetings are scheduled for early 2006–2007 with leaders of Latino Professional Network, National Association of Asian American Professionals, and the National Association of Black Accountants.

Despite the increased representation of minorities in MIT's applicant pools, women applicants remain underrepresented. In 2006–2007 the team will focus on efforts like its current outreach to the MBA program at Simmons College to rectify this situation.

The team's other proactive diversity recruitment efforts included continued participation in the Massachusetts Rehabilitation Commission's employer advisory board and interviewing program, cosponsorship (with the Boston Consortium for Higher Education) of Partnership Inc.'s Career Connection program (an effort to encourage graduating minority college students to seek career opportunities in the Boston area), and a targeted advertisement or "branding" campaign in local minority news and business publications to raise awareness of career opportunities at MIT.

The team also worked with the Sloan School, the Office of the Dean for Student Life, DUE, CAO, Resource Development, the Alumni Association, and the Office of Finance to schedule informational interviews to introduce minority professionals to MIT and its operations. Approximately 20 leaders within each of these areas made themselves available for the informational interviews.

# **Minority Staff Development and Recognition**

This year the team facilitated MIT's recommitment to development programs offered by Partnership Inc. and to the recognition program offered by the Black Achievers branch of the Boston YMCA. Although no MIT staff members participated in these programs in 2004–2005, four administrative staff members participated this year in Partnership's Boston Fellows Program for mid-career professionals, one support staff member participated in Partnership's Boston Associates Program for early-career professionals, and one administrative staff member was recognized as an MIT/YMCA Black Achiever.

# **Council on Staff Diversity**

This year the council clarified its purpose as an advisory body on diversity-related issues and focused on two projects: providing content for HR's October 2005 forum on workplace diversity and thoroughly reviewing the Serious Search process. Recommendations regarding the Serious Search process will be delivered in early 2006–2007.

# Compliance

During 2005–2006 the US Department of Labor issued a series of new, comprehensive regulations regarding affirmative action data collection and compensation analysis. The team began working with the HR Compensation Office, Office of the Senior Counsel, Provost's Office, assistant deans, and hiring managers to ensure compliance with these new requirements.

# Philip Lima

# **Coordinator of Staff Diversity Initiatives**

More information about Staff Diversity, Affirmative Action, and Equal Employment Opportunity Management can be found at http://web.mit.edu/hr/aa/.

# **Staffing Services**

Staffing Services provides services for applicants, hiring managers, and new employees. Our goal is to ensure that the hiring process is efficient and responsive and that the orientation process for new employees is welcoming and informative. Through ongoing networking and outreach efforts, we recruit a well-qualified and diverse applicant pool by building the external community's awareness of MIT as an inclusive workplace and an employer of choice. Our close collaboration with the coordinator of diversity initiatives supports these efforts.

In early February 2006, the Office for Federal Contract Compliance issued new guidelines to better define an applicant in light of changing technology, including internet recruiting. We reviewed MIT's hiring processes and related systems to ensure we are meeting our obligation to solicit race and gender data from all applicants.

In consultation with the coordinator of diversity initiatives, we agreed that every individual considered for any position should apply through our applicant tracking system. By doing so, the individual becomes appropriately identified as an applicant and is reported as such. The system allows us to solicit race and gender information (voluntarily) from all applicants as they apply for positions. The information is collected and reported in the aggregate and supports our affirmative action reporting and planning responsibilities. With the coordinator of diversity initiatives, we continue to reach out to hiring managers to ensure they are aware of their obligation to solicit race and gender data from anyone they consider for an open position.

In addition to tracking required applicant data, we have leveraged our applicant tracking system's technology to help us manage the increasing volume of job postings and applicants. Over the past year, we utilized our applicant tracking system's electronic prescreening process to help us screen the qualifications of approximately 7,000 applicants for more than 200 jobs. In addition, the applicant tracking system supported the automatic forwarding of more than 30,000 resumes to hiring managers.

Staffing Services specialists oversee and monitor these electronic processes but also add value by working directly with hiring managers who want assistance. They provide outreach and sourcing recommendations, screen resumes, prescreen candidates by phone, develop appropriate interview questions, interview and assess candidates, close candidates, and prepare for new employees.

During AY2006, we posted and recruited for more jobs than we have in prior years; we also filled more jobs than we have in prior years. In AY2005, we created 899 new postings and filled 709 positions; this year, we created 923 new postings and filled 776 new positions. Throughout the year, we carried between 250 and 260 open positions. Typically, one-third of our posted jobs are research-related and one-third are administrative staff vacancies. Support staff postings usually comprise about one-quarter or less of total open positions.

The number of new employees we invited to the weekly orientation also increased in AY2006. Over the past year, we sent welcome packets to more than 1,000 new employees, notified their managers of their new employee's orientation date, and facilitated more than 50 orientation meetings. For the first time, we also delivered several special orientation sessions for new custodians on the night shift. Evaluations from all of our orientation attendees continue to be positive.

The administration of our New Employee Orientation Program includes supporting our cadre of eight facilitators and representatives from Benefits and from MIT Medical, room and technology setup for 53 people each week, and tracking invitees and reviewing their feedback. Based on this data, we regularly revise and update the material to ensure the information we share with our new employees is accurate and up-to-date. This year, for example, we updated the video to include a welcome from President Susan Hockfield, and we enhanced the SAP Employee Self-Service module as part the SAP Payroll implementation. Recognizing the value of this program but also the significant resources it takes to sustain it, we will continue to consider other delivery methods and options for orienting new employees.

Staffing Services continues to strengthen MIT's relationship with our temporary help vendor partners (PSG and Hollister) and with nextSource. A staffing representative attends the quarterly review meetings with Procurement to share hiring issues or concerns with each of these vendors. We are working with our vendors to create a database of temps who have MIT or related experience in certain offices or systems such as SAP.

In early AY2006, we selected a new vendor for our recruitment advertising account. Until this year, there had never been a formal request-for-proposal process for selecting a vendor. We worked closely with Procurement to manage the selection process. We invited representatives from the Broad Institute, the Department of Facilities, and MIT Medical to participate in the selection process. We selected Buyer Advertising as our new vendor-partner based on their significant expertise in recruitment advertising with other higher education clients. Staffing Services and Buyer recently sponsored a first meeting with hiring managers to discuss current trends in recruiting, the Boston labor market,

and how DLCs might reduce their recruiting costs by collaborating with each other to purchase posting contracts with some of the internet job boards.

We expect to launch an upgraded Staffing Services website in July 2006. MIT's website continues to be identified by 38 percent of our candidates as their primary source for learning about MIT jobs. Many of these candidates come through the BostonWorks website. We have a yearly contract with BostonWorks to "wrap" our jobs into their site three times a week. The cost is shared among the DLCs.

Staffing Services continues to share some responsibility for position management with Compensation and the Budget Office. During the past year, we met regularly with members of Compensation and the Budget Office to clarify roles and responsibilities around position management and the budget forecasting process. On a quarterly basis, members of the Staffing and Compensation teams research and review the administrative departments' list of positions and update SAP position data accordingly.

Over the past several months, we have been working with coordinators of the New England Higher Education Recruitment Consortium and with HRIS director Wayne Turner to ensure that MIT has a presence on this new site. We have engaged Buyer Advertising, our new advertising agency, to provide a daily extract of our jobs to this website, which will include posted jobs from many of the regional colleges and universities. MIT faculty jobs will also be posted on this site through the Provost's Office.

# Wendy Williams Director

More information about Staffing Services can be found online at http://web.mit.edu/hr/staffing/.

# **MIT Medical Department**

### **Mission Statement**

The mission of MIT Medical is to promote wellness and to provide health care for the diverse needs of the Institute community. Our efforts on behalf of healthful living support effective learning and research.

#### **Cornerstones**

- Patient care. Deliver accessible, high quality, culturally sensitive, personalized
  health care to students, faculty, employees, affiliates, dependents, and retirees
  utilizing the most appropriate medical and information technology.
- Health promotion. Work in collaboration with departments, labs, centers, groups, and individuals to identify and achieve health promotion goals.
- **Health policy.** Provide expert consultation to the Institute about health and health policy issues in support of the overall mission of MIT.
- **Resources.** Use the resources of the Institute effectively and efficiently.

MIT Medical adopted the above revised mission statement and cornerstones in May 2006. We developed the new mission statement after a comprehensive internal review of the Medical Department's clinical services, operations, and finances, as well as an assessment of the needs of the MIT community. The report from the Task Force on Medical Care for the MIT Community was a tremendous help to us in better understanding the community's desires and expectations. The new mission statement will help inform decision-making in the department's ongoing comprehensive strategic planning process. Strategic planning and implementation of specFific initiatives will continue into FY2007 and beyond. We plan to disseminate news about our new mission statement, goals, and initiatives to the MIT community in early FY2007.

# **FY2006 Highlights**

It has been a busy year for inspections. Every three years, a team of surveyors from the Joint Commission for the Accreditation of Health Care Organizations (JCAHO) visits the Medical Department to review the care we provide. We are happy to report that we received JCAHO's Gold Seal of Approval and were reaccredited last fall for another three years with no recommendations for improvement. The department was complimented on its advanced electronic health record systems and effective coordination of care.

The laboratory, which is surveyed every two years by the College of American Pathologists, successfully completed its reaccreditation process, and the Radiology Department underwent its annual review by the Department of Public Health and the US Food and Drug Administration to receive its relicensure in mammography.

MIT Medical continues to be at the forefront in the use of electronic medical records. TouchWorks, our electronic medical record system, was expanded this year to include additional clinical departments and new functions. Usage of our Patient Online (POL) personal health management tool continues to grow rapidly.

A reorganization of the finance area and the hiring of Margaret Meehan as finance director (reporting to the medical director) have improved accounting methods, enhanced reporting and data analysis capabilities and strengthened the department's relationship with the MIT Office of Finance.

MIT Medical clinicians and staff, including staff from the Center for Health Promotion and Wellness (CPHW), have continued to expand outreach to and collaboration with many MIT groups, departments, and community members. Notable examples this past year included: emergency preparedness planning with the MIT Emergency Operations Center; partnering with students and many campus groups to earn the American Heart Association designation as a Heartsafe Community; implementation of the Violence Against Women Act (VAWA) grant; the successful growth of the getfit@mit fitness program; and the development of the Mental Health Crisis Response Team.

#### **Clinical Services**

### **Visits**

A total of 126,661 visits to the MIT Medical Department were recorded in FY2006. Approximately 5,800 of these visits were to our Lexington health care facility on the campus of Lincoln Laboratory, where adult medicine and pediatric services are available. The following table gives a breakdown of the groups served.

	FY2006	Visits to	the	Medical	<b>Department</b>
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Groups Served	Number of Visits
Students	51,242
Faculty and staff	66,140
Retirees and family	9,279
Total	126,661

# After Hours Service—David Shein, MD, Chief

The After Hours Service provides care to the MIT community during nights, weekends, and MIT holidays. Services are provided primarily in the urgent care area, with the After Hours Service also providing in-house physician coverage for MIT Medical's Inpatient Unit. Clinical staffing is organized to be both care-effective and cost-effective. MIT Medical staff physicians and 10 to 15 contract physicians provide physician staffing. Most of the contract physicians are also employed as residents, fellows, or junior faculty at area teaching hospitals. After Hours physicians are primarily trained in internal medicine. We have had limited success increasing the relative proportion of physicians trained in family practice or internal medicine plus pediatrics. The vast majority of daytime hours during weekends and holidays are staffed with a physician and/or advanced practice clinician (nurse practitioner or physician assistant) trained in the care of adults plus infants and children.

The After Hours Service maintains important links to campus resources, including the MIT Student Ambulance Service, the dean on call, and the MIT Mental Health Service. After Hours clinicians are also aware of student health insurance coverage and issues. The goal is to maximize the availability of the services we can provide on campus and to help address students' financial concerns when care is needed outside MIT Medical.

**After Hours Service** 

Clinician	Number of Visits
Physician	4,754
Advance practice clinician	1,267
Total	6,021

# Dental Service—Grace M. Collura, DMD, Chief

FY2006 was a year of significant change and transition for the Dental Service. The service was reorganized to ensure continued delivery of high quality, comprehensive, cost-effective, and easily accessible dental care to the MIT community. Visits increased from approximately 11,000 in FY2005 to approximately 11,700 in FY2006.

Personnel changes included the appointment of Dr. Grace M. Collura as chief in November. As chief, she has focused on reviewing and adjusting, where necessary, the scope and range of services provided. Goals set for FY2007 include planning the implementation of a dental software system.

Dr. Gretchen Ghent was hired in February as a full-time general dentist. The addition of Dr. Ghent has allowed the Dental Service to handle more visits and expand the number of dental procedures offered. These include Invisalign (invisible braces), orthodontic retainers, occlusal guards for the prevention of headaches, and preventative resin restorations (white fillings). With the addition of Dr. Ekaterina Antonellou (a crown and bridge specialist) to our staff late last fiscal year, the Dental Service now has the ability to provide full-mouth rehabilitation on site at MIT. These changes have resulted in an increase in patient satisfaction and productivity for the Dental Service. Dr. Tannaz Shapurian's periodontal practice continues to grow, offering the latest treatments for bone grafts, gum grafts, and implant placement.

The Dental Service also continues to serve as a resource for dental education and preprofessional advising within the MIT community. Dr. Catherine Wang and Dr. Ghent have joined Dr. Edward Seldin as preprofessional advisors for MIT students. In addition, our clinicians have been working closely with CHPW on various oral and overall health topics that affect MIT students. Dr. Collura has been an active participant in the Health and Wellness Fair since her employment began at MIT six years ago.

# Eye Service—Robert Gross, OD, Chief

The Eye Service continues to provide comprehensive optometric and ophthalmologic services to the MIT community. Visits numbered approximately 9,500 in FY2006. Access to care remains excellent with same-day appointments available for urgent visits and a two-week wait typical for routine care. Clinical encounters are now included in TouchWorks, the department's electronic medical record, resulting in less paper chart handling (chart pulls) and increased efficiency.

The ongoing performance improvement initiative in which diabetic patients are encouraged to have annual eye exams continues to pay dividends. The current compliance rate of 78 percent is well above the national average. A new project designed to improve communication between Eye Service providers and outside consultants is off to a very good start. Problem areas were identified and addressed, and compliance improved from 90 percent to 100 percent over the past nine months.

The contact lens service remains extremely successful in a very competitive market. This past year has seen a marked increase in the use of silicon hydrogel lenses. We evaluate

each new product as it becomes available and add lenses to our inventory that we think offer patients the best vision, comfort, and eye health.

MIT Optical, our full-service optical store, enjoyed another successful year. Greater visibility, careful fiscal management, and the expert staff were all contributing factors.

Eye Service personnel continue to serve as an important resource for the MIT community. During FY2006, various members gave lectures during the Independent Activities Period (IAP); provided instruction to students from the Harvard-MIT Division of Health, Sciences, and Technology (HST); participated in health fairs; and acted as eye health advisors for various departments throughout MIT.

Plans for FY2007 include the purchase of new digital instrumentation to aid in the care of our patients. A new digital retina camera has been selected, and the procurement process is in place. This device will aid in diagnosis, improve documentation, and serve as a tool for patient education. Additionally, we are looking at evolving technologies to aid in the diagnosis and management of glaucoma. A comprehensive literature search is under way to determine which of the competing instruments would offer the most benefit to our providers and ultimately our patients.

# Inpatient Unit-William Ruth, MD, Chief

The Inpatient Unit (IPU) is a licensed 14-bed hospital facility, accredited by the JCAHO and located in Building E23. The IPU provides a valuable and well-appreciated service to the MIT community, allowing on-campus hospital care for students, MIT Health Plan members, and retirees with clinical problems that do not require the intensive care of a major hospital. A cadre of dedicated nurses staffs this unit, which also has comprehensive physician coverage, including an on-site nightly physician. Services provided include general medical care, postoperative care, hospice care, and provision of intravenous fluids.

Inpatient	Unit A	Activity	during	FY2006
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Service	Number
Admissions	371
Inpatient days	1,256
Average length of stay	3-4 days
Transient visits (< 24 hours)	534
Total utilization	1,790 patient days

# Internal Medicine Service—David V. Diamond, MD, Chief

The goal of the Internal Medicine Service is to provide the best direct care to our patients and to coordinate the overall management of both illness care and health promotion to our community. In addition, individual members of our service provide clinical and organizational leadership and consultation both within the Medical Department and

to the greater MIT community. Our primary focus during FY2006 has been to improve access to care while monitoring and ensuring the quality of services rendered.

More than 21,000 clinical visits were made with the 11 physicians in the Internal Medicine Service during FY2006. Of these patient visits, 40 percent were made by students, 48 percent by women, and the average age of patients seen was 40 years old. In addition, reflecting the central role of our electronic health record system, more than 50,000 health care—related electronic tasks were completed. Of these tasks, 2 percent were patient-initiated, secure, email encounters made possible by our POL portal. In the last quarter of FY2006, this proportion was increasing monthly as more clinicians and patients joined the system.

Quality measures have also been tabulated for calendar year 2005.

# Quality Metrics for Calendar Year 2005\*

Parameter	% of Target or Eligible Patients
Documentation	
Timely completion of notes and review of laboratory tests	97%
Health maintenance	
Mammograms	96%
Prostate specific antigen (PSA)	88%
Cervical cancer screening (PAP)	81%
Chronic disease management	
Cholesterol testing in patients with heart disease	92%
Diabetes control monitoring (HGB A1c)	92%

<sup>\*</sup> These data are part of a clinician 'Dashboard' that is being further developed to identify areas for individual and system improvements, even though our results already exceed published clinical practice quality levels. In addition, we anticipate that in FY2007 the next version of our TouchWorks electronic medical-record software will incorporate improved functionality, making automated and timely health alerts and reports to clinicians and patients a reality.

In addition to their direct-care responsibilities, physicians in the Internal Medicine Service continue to play important roles in the activities of the MIT Medical Department (After Hours Service, Inpatient Unit, and Clinical Research Center), and several members serve on various Institute committees, including the Committee on Use of Humans as Experimental Subjects, Committee on Bio-Safety, Animal Care Committee, Emergency Operations Committee, and Ergonomic Committee.

In response to recommendations from the Task Force on Medical Care for the MIT Community, we have planned several initiatives for FY2007 and beyond that are designed to improve access to primary care. These include: 1) hiring two new internists to help us improve access, diversity, and choice, and to address women's health issues; 2) hiring a family practice physician for our Lexington site to provide more continuity

in the delivery of both pediatric and adult medical care; 3) hiring permanent physician staff to deliver the core of our After Hours Service to provide better continuity and more community sensitive care; and 4) expanding our use of electronic communication with patients via our POL program.

In collaboration with the Harvard School of Public Health and faculty from the Children's Hospital Informatics Program, we are involved in a research study of an electronic personal health record system, initially called PING (Personal Internetworked Notary and Guardian), but now named IndivoHealth. This study will offer MIT volunteers the chance to have their own portable, permanent, Internet-based health records. We will use this health record as a platform to deliver health alerts, reminders, and condition-specific education. In addition, with the patient's permission, the record will be accessible, as needed for care, to clinicians in health care settings outside MIT.

In FY2006 some physician staff changes occurred in the medical specialty areas. These included the departure of Drs. Pamela Strumpf, Daihung Vu Do, and Felix Kuo, and the arrival of Drs. Caroline Levine and Lori Brightman in dermatology and the addition of Dr. Shawn Ferullo in sports medicine. All staffing changes have been due to personal and career choices on the part of the clinicians and not due to job performance issues.

# Mental Health Service—Alan E. Siegel, EdD, Chief

In FY2006, the Mental Health Service continued to increase clinical productivity, expand the range of its services and provide more active outreach to the MIT community.

In FY2006, there was an overall increase of 10 percent in the number of students seen and the number of visits. The largest increase was in visits by graduate students. The number of health plan members and employees seen remained the same as in past years, with a slight increase in the number of visits as compared to the previous year. We expanded the group therapy program and saw an increase in the number of people participating in groups. There was an 87 percent increase in the number of group visits for graduate students. The short-term skill building groups grew in attendance, and we added a new group for students with eating problems. Two new workshops, one on procrastination and one on test anxiety, were very well received. Female postdocs participated in a new support group. Another new group called New Life After Mid Life was offered for employees and faculty. All staff continue to exceed established expectations for clinical sessions.

This was also a productive year for new initiatives. To simplify and expedite effective referrals to outside clinicians, outpatient referral coordinators were identified. A work group was formed to consider options for expanding mental health services for health plan members.

The American Foundation for Suicide Prevention project was finalized and received Institutional Review Board approval. This online suicide and depression-screening project is set to begin in fall 2006. Adapt@MIT, a project that will adapt the successful Air Force suicide prevention program to a college setting, received funding. This funding

will allow many groups within the Institute to participate in a multiuniversity training program scheduled for fall 2006.

The Mental Health Service made the transition to the TouchWorks electronic medical-record system this year, allowing more consistent documentation across providers. TouchWorks' remote access capability also allows staff on call to access important clinical information.

Also this year, the Child/Adolescent Psychiatry Consult/Liaison program was reformatted to 10-week cycles. This program brings child/adolescent fellows (MDs fully trained in adult psychiatry) from Harvard Medical School (HMS)/Cambridge Health Alliance to MIT Medical to provide service and to learn. The child/adolescent fellows are based in the Pediatric Service and are supervised by Mental Health Service psychiatrists. They provide psychiatric consultation to patients in the pediatric setting.

The Mental Health Service staff were extensively involved with the MIT community in FY2006. The Mental Health Crisis Response Team was developed, so that mental health services could be effectively delivered to our community in times of a campus emergency or tragedy. Clinicians presented programs in dorms, living groups, and other student settings through Student Health Advisory Council (SHAC) panels and other student gatherings. Consultation was expanded to academic departments, with particular emphasis on outreach to the lesbian, gay, bisexual, and transgendered (LGBT) community. A new brochure, "For MIT Faculty: How to Help Students in Distress" was developed and distributed to all faculty, departmental administrators, and other departments in the community that regularly engage with students.

Finally, we completed a revision of the Mental Health Risk Assessment Tool and several important new protocols and policies were finalized. These include: Crisis Intervention Protocol; Mental Health: Residential and Department Referral Policy for Urgent Referrals; Inpatient Continuity of Mental Health Care Policy; Termination/Transfer Policy; Mental Health-Nightline Contact Policy.

# Nursing Services—Kristine Ruzycki, APRN, BC, Chief

Adult and family nurse practitioners (NP), certified nurse midwives (CNM), psychiatric clinical nurse specialists (PCNS), and registered nurses (RN) in both the Inpatient Unit (IPU) and the ambulatory setting provide nursing care to the MIT community.

# **Primary Care**

NPs in the Internal Medicine (IM), Urgent Care and Pediatric Service provide comprehensive primary care to patients with acute and chronic illnesses or injuries, educate patients in health promotion and disease prevention, and work in collaboration with internal medicine, pediatric and family medicine physicians. The internal medicine, urgent care and pediatric advance practice clinicians provided a total of 26,111 patient visits in FY2006. This is an increase of 1,553 patient visits from FY2005.

For the first time in the history of the MIT Medical Department, three NPs were presented to the Medical Staff Credentialing Committee and designated as primary care

providers (PCP). This credentialing allows patients to designate an NP rather than a physician as their PCP. The three NPs designated were: Pat Bartels, clinical coordinator for the Pediatrics Service; Janice McDonough, nursing supervisor for the Internal Medicine Service; and Deborah Sigman, clinical coordinator for Lincoln Lab.

Pat Bartels acted as the coordinator and principal investigator for the joint MIT Medical-Blue Cross Blue Shield *Prevention and Treatment of Overweight Children* study.

Staffing the Urgent Care Service continued to be challenging due to the small pool of available NPs that are trained to care for both children and adults. Jan Pueblo, NP and clinical coordinator for urgent care, successfully recruited three additional per diem family NPs with extensive adult and pediatric experience. All three have been oriented and are working to help meet the after hours, weekend, and holiday coverage needs.

# Specialty and Sub-Specialty Care

NPs, PCNSs, and CNMs provide consultation; specialty and subspecialty assessments and care; group and individual counseling/therapy; special medical screening and surveillance; sports medicine; and community outreach to patients in dermatology, occupational health, orthopedics, mental health, and obstetrics and gynecology (OB/GYN). The advanced practice specialty nurses provided a total of 11,031 patient visits this past year—an increase of 613 patient visits over FY2005.

Marsha Gilmore, RN, PCNS, came on board in January 2006 to replace Daniele Webster, RN, CNS, who resigned in December 2005. Gilmore was hired to work every other weekend to cover mental health call duty and to be on campus during weekend hours.

Anthony Pasqualone, NP in orthopedics, serves in the Army Reserve as a lieutenant colonel and was called to active duty in June 2006. He will be gone from his position for 15 months. Recruitment for at least a temporary replacement will be undertaken in the first quarter of FY2007.

Jacqueline Sherry, NP in occupational/employee health and in infection control, participated in the animal laboratory's successful Association for Assessment and Accreditation of Laboratory Animal Care International accreditation visit in October 2005. Sherry was responsible for ensuring that the animal handlers met all medical requirements for working with animals used in experiments.

CNMs Marcia Snyder, Deb Gowen, and Mary Culliton attended 38 deliveries through FY2006. This constituted 22 percent of the total OB/GYN Service births for the year.

## Inpatient Care

RNs in the IPU cared for a variety of patients, including students, health plan members, and retirees. Medical conditions ranged from alcohol intoxication to postoperative care to end-of-life care. The IPU is staffed by RNs 24 hours a day, seven days a week. The number and scope of transient patient visits increased during FY2006. These visits involved lengths of stay that ranged from a few minutes to several hours and usually involved nursing care such as intravenous hydration, antibiotic therapy, or special medication infusions. Along with caring for the IPU patients, night nurses provided

nursing triage from 11 pm to 7 am for the After Hours Service. In this role, they make telephone and on-site assessments of patients and work with the after hours physician to provide urgent care.

For the first time, the IPU closed for a two-week period during the December holidays. This accomplished two goals. First, the abatement of asbestos from old flooring and the laying of new flooring in both the nursing unit and the elevator lobby were completed. Second, IPU staff were able to use vacation time during the holiday season without creating a need for per diem coverage during this historically very low census time.

The IPU nurse manager, Cathleen Dwyer, in addition to her IPU duties and responsibilities, continued into her second consecutive year as one of the two patient advocates.

Difficulty in recruiting and filling vacant RN positions led to a market analysis of RN salaries. A proposal was submitted to Compensation for a market adjustment for the RNs based on years experience as well as service. After some negotiations, the proposal was accepted and a market adjustment was made to RN salaries in February 2006.

#### Minor Procedure Room

Linda Pascuito, RN, with backup by the IPU nurse manager, staffs the minor procedure room. During this past year, 764 procedures were performed in the minor procedure room that were scheduled and assisted by the RN. This is an increase of 109 procedures over FY2005.

# **Ambulatory Nursing**

RNs provide nursing care to patients in internal medicine, medical specialties, urgent care, pediatrics, and obstetrics and gynecology. These RNs provide many patient services, such as telephone and on-site patient triage, immunization administration, blood pressure monitoring, diabetic teaching, wound care, ear irrigations, health promotion and disease prevention teaching, medication inhaler instruction, allergy immunotherapy injections and monitoring, suture and staple removals, phlebotomy, IV insertions, provider assistance with special procedures, monitoring of providers tasks, providing test results to patients, managing the anticoagulation program, and coordinating other special projects, programs and/or services. Ambulatory nurses provided a total of 8,458 patient visits in FY2006. This is an increase of 1,172 patient visits over FY2005.

Two additional RNs were hired to incorporate triage nursing in all of the IM clusters.

Two of the IM triage nurses and one of the IM NPs have become certified in anticoagulation therapy. They manage approximately 130 patients in the anticoagulation program. The third triage nurse is presently enrolled in the anticoagulation course and will become certified during the first quarter of FY2007.

Allergy immunotherapy activities continued with no change in volume during FY2006. At the Cambridge and Lexington locations, a total of 150 distinct patients are receiving immunotherapy injections for allergies. The production of allergy extracts

was outsourced to a private company—ensuring consistent, accurate formulation of the extracts and alleviating the pharmacy of this very labor-intensive activity.

The urgent care nurse coordinator and the chief of nursing worked together to develop a nursing triage model that would employ two triage nurses at peak patient times. This new model has been deployed, and patients are now triaged more efficiently. These RNs also monitor patients in the waiting room—ensuring a safer patient environment and efficient patient flow through the Urgent Care Service.

A pediatric triage nurse position that was approved in FY2005 was filled by Mary Guanci, RN, in August 2005. Guanci has been able to assume responsibility for a large number of patient calls, administer most of the childhood immunizations, and support each of the pediatric providers by checking tasks, processing prescription refills, and providing nursing care to patients. This consistent triage coverage has allowed Pat Bartels, NP and clinical coordinator for pediatrics, to increase hospital newborn rounds from two days per week to three days per week. She also now has more clinical time available to see her pediatric patients and build her primary care practice.

# **Nursing Service Ambulatory Patient Visit Statistics**

Service	Number of Nursing Visits	Nursing Visits as a % of Total Visits to Each Service
Internal medicine		
Cambridge	17,340	48%
Lexington	3,856	82%
Urgent care/AHS	9,635	59%
Pediatrics		
Cambridge	2,598	43%
Lexington	866	68%
Obstetrics/gynecology	3,075	42%
Mental health	2,513	15%
Orthopedics	1,751	37%
Dermatology	2,870	53%
Occupational health	1,120	100%
Total	45,624	46%

# **Ongoing Challenges**

In the face of the continuing national nursing shortage and fierce competition from large local medical centers offering higher RN and NP salaries and annual raises, it will continue to be a challenge to recruit for vacant positions and maintain nursing salaries that are competitive. Nursing Services will continue to monitor and work on this ongoing issue with Human Resources and Compensation.

# Obstetrics and Gynecology Service—Chana S. Wasserman, MD, Chief

In FY2006, we created a new look for the Obstetrics and Gynecology (OB/GYN) Service, moving to newly renovated space on the fourth floor of Building E23. In addition to improved lighting, appearance, and decor, the advantages of this new space include an additional exam room and a larger colposcopy/procedure room. The new space offers a wheelchair-accessible privacy area at the front desk for patients who prefer to make appointments, schedule tests, or speak with the secretaries in an area sheltered from other patients in the waiting room.

Our staff worked hard to keep up with the continued demand for our services. We had 7,355 patient visits in FY2006. This represents 562 (8 percent) more patient visits than in FY2005, a sign of our increased productivity.

# Obstetric and Gynecology Service Visit, Surgery, and Delivery Statistics

Service	Number or %
Outpatient visits	7,355
Gynecologic Surgeries	
Major	16
Minor	18
Missed abortion	4
Loop electrosurgical excision procedure (in office)	5
Deliveries	155
Normal spontaneous vaginal delivery, including vaginal birth after cesarean (VBAC)	101
Vacuum assisted	14
Low forceps vaginal delivery	1
Cesarean section	39
Primary	34
Repeat	5
Operative vaginal delivery rate	7.1%
Cesarean section rate	25%
Primary	22%
Repeat	3%
Successful VBAC rate (denominator is successful plus failed VBACs)	66.7% (2/3)

We welcomed Katie Alves, our newest medical assistant. Alves and our other two medical assistants have been cross-trained to perform secretarial functions. In addition to the three medical assistants, we have two secretaries, a nurse coordinator/triage nurse, three rotating/part-time certified nurse midwives, one part-time nurse practitioner, one part-time physician assistant, and one part-time and two full-time physicians.

At Mount Auburn Hospital, we continue to work collaboratively with several other OB/GYN and midwifery practices, known collectively as the Gold Group.

Our practitioners participate in community activities, including preprofessional advising, working with HMS and HST medical students at Mount Auburn Hospital and MIT, and supervising residents at the Brigham and Women's Gynecology Clinic. Our providers also participate actively on MIT departmental committees and initiatives as well as on Mount Auburn Hospital committees.

# Pediatric Service—Jocelyn O. Joseph, MD, MPH, Chief

The summer is always a bittersweet time for the Pediatric Service. We say good-bye to our student MIT families and wish them good luck while we welcome and begin to establish relationships with new families from around the world. We see a 45 percent turnover in children under the age of 2; most are the children of graduate students!

Like our families, our staff come and go. The department was excited to welcome Ingrid Henar, MD, MPH, on January 16, 2006. Originally from Suriname, Dr. Henar earned her medical degree at Anton de Korn University there. She went on to complete her residency in pediatrics at Children's Medical Center in Stony Brook, NY, and a fellowship in ambulatory and community pediatrics at Children's Hospital in Pittsburgh, PA. She also earned a master's degree in community health services at the University of Pittsburgh School of Public Health. She is board certified in pediatric and adolescent medicine. Also in January, we bid farewell to one of our secretaries, Jeanne Hogman. She retired on January 27 after more than 10 years of service. She was a bright star in pediatrics, and we will miss her smile and her creativity. In late spring we replaced a clinical assistant, who transferred elsewhere in the department, as well as a part-time secretary.

Our yearlong collaboration with Blue Cross Blue Shield on the *Prevention and Treatment of Overweight Children* study has come to an end. We continue, however, to routinely identify children overweight or at risk for overweight. Led by Pat Bartels, RN, NP, we have been counseling and encouraging families to adopt a 5-2-1 Jump Up and Go lifestyle—five fruits and vegetables a day, less than two hours of TV or computer screen time a day, one hour of exercise a day and less than one sugary drink a day. We also successfully arranged for the MIT Health Plan to fully cover a visit to Foundations Family Nutrition. In FY2007, we look forward to working with the getfit@mit program to encourage children and families to get plenty of exercise.

We continue to be active in the community and serve as mentors to nursing and medical students. We are consultants to the MIT Day Camp as well as to the child-care centers on campus.

Performance improvement activities have provided feedback, helping us maintain our excellent care: improving flu shot rates for asthmatics and children with chronic diseases, ensuring adequate immunization rates, and striving to identify and provide counseling to children—and parents—at risk for overweight.

#### **Student Health Services**

For well over 100 years MIT has provided health care for its students. Student health care and wellness promotion are critical missions for the Medical Department. The department is organized to provide care where and when needed. There is no specific student portal for accessing care or advice. We do, however, work diligently to find and adapt student-friendly, student-focused pathways to care.

To manage this important component of our practice, Kristine Ruzycki was appointed director of student health during FY2006. A number of her activities are listed below.

- Development, implementation and chairing of monthly Student Health Clinical Advisory Committee meetings
- Membership and attendance at the monthly dean for student life meeting
- Project manager for the Boston Medical Center/MIT Medical/Department of Athletics, Physical Education, and Recreation (DAPER) Sports Medicine Fellow Educational agreement
- Committee on Academic Performance medical liaison/contact for students with medical conditions
- Medical contact for parents concerned about their students health and well-being
- Medical liaison with student housing, physical education, and student dining services
- Participation in Campus Preview Weekend and freshman orientation
- Ongoing interactions with Student Health Advisory Committee and MedLinks emergency medical service
- Member of the Student Early Warning Group

## Surgical Services—Lawrence Geoghegan, MD, Chief

# **General Surgery**

The general surgery service saw more than 1,100 clinic visits this year. Major elective and emergency surgery is performed at Mount Auburn Hospital and at Massachusetts General Hospital. This past year we utilized an innovative technique in the care of decubitus ulcer. An undergraduate paraplegic with a life-threatening decubitus ulcer was treated with a portable vacuum device that controlled his sepsis and allowed him to complete his studies. This was made possible through a combined team approach involving plastic and general surgery, inpatient and outpatient nursing, and the company that developed the vacuum device.

Another important advance in the care of our patients is the advent of new magnetic resonance imaging software that aids in the diagnosis of breast disease not visualized on routine mammography.

## Urology

The Urology Service saw more than 1,000 clinic patients this year. A new state-of-theart operating suite at Mount Auburn Hospital has facilitated nerve-sparing surgery treatment for our patients with prostate cancer. We also have access to new ureteroscopic equipment that allows unparalleled visualization of the upper urinary tracts, facilitating stone manipulation and removal.

# Orthopedics

Several personnel changes have occurred in the orthopedic service this year. Dr. Ronald Geiger continues to provide clinic coverage but no longer performs surgery. Anthony Pasqualone, NP, was called to active duty in Iraq with his National Guard unit. He handled more than 1,800 clinic visits this year. Dr. Elliot Thrasher continued performing major joint replacement surgery and general orthopedics. Dr. Thomas Burke specializes in shoulder surgery and general orthopedics. Drs. Ferullo and Geiger will increase their clinic time to compensate for the absence of Pasqualone.

# Otolaryngology

The otolaryngology/head and neck surgery service continues to provide state-of-the-art treatment and diagnosis of ear, nose, and throat disorders. This includes a focus on minimally invasive procedures for sinus disease with access to image guidance technology, powered instrumentation, and training in the latest balloon sinus dilatation. The three surgeons are senior members of the active medical staffs at Mount Auburn Hospital and Massachusetts Eye and Ear Infirmary.

#### **Administrative Activities**

The release of the report of the Task Force on Medical Care for the MIT Community has and will be a tremendous help to us in better understanding the community's desires and expectations of the Medical Department. We continue to work collaboratively with the clinical and financial areas of the department as well as with key partners within the Institute to define and implement programs and systems to meet the needs of our patients and clinicians.

# Information Systems and Medical Records—Shelagh Joyce, Director

Major advancements and technology changes have occurred in health care in the past 10 years. Many of these changes have affected the daily workflows and practice of ambulatory care. Other changes, affecting the delivery of inpatient care, contribute to safe, effective, and high-quality patient outcomes. During the course of the past year, resources were deployed to update and reorient the Medical Department Information Systems (IS) strategic plan. More than 40 clinical and administrative staff participated in the process. Four major initiatives were identified and prioritized—data quality; training and education; clinical and financial reporting; and the electronic medical record. These initiatives are spearheaded by working sponsors and their teams. Segments of these IS initiatives contribute in various ways to the overall strategic initiatives of the department. IS works closely with the Institute's Information Services and Technology (IS&T) resources to ensure collaboration and synchronization where possible and

appropriate. Medical IS works to ensure that we can utilize present and future infrastructure technologies that MIT will be deploying.

The Medical Department continues to be at the forefront of electronic medical record (EMR) utilization. At this time, only 17 percent of organizations delivering health care in the US use electronic medical records. In the department, laboratory order entry and online prescribing have been mandatory for more than a full year, and we have seen the utilization rate for both these workflows increase significantly—from 70 percent to over 90 percent. Radiology online ordering was implemented in the past year, and utilization is at 95 percent. This past year the Mental Health Service also started using EMR to document its patient interactions.

Paper chart handling rates (pulls) continue to plummet. Over the past four years, appointment-related pulls have decreased by 65 percent and non-appointment-related pulls have decreased 82 percent. This has allowed us to decrease our staff in medical records through attrition and to deploy members of the medical records area to learn new skills.

A key component of the Medical Department's e-health initiatives, the Patient Online (POL) portal—a secure, personal, health management tool—is being used more by both providers and patients. There are more than 4,000 active POL accounts. Clinical and support staff teams are collaborating on recommending "best practice" workflows. This will help facilitate departmental team coverage for POL activities. This past year we introduced a new POL function—the ability to request prescription renewals online. The pediatric clinicians are now using POL to communicate with age-appropriate patients and parents.

A new component of the department's business interruption plan, the storage area network (SAN), has come online. In addition to achieving faster and more incremental backups, SAN has been used for application development and implementation testing. These capabilities have improved software testing scenarios and minimized downtime during upgrades. A second SAN will be deployed in 2007 to augment our off-site business capabilities.

The Health Information Committee and the medical records manager revamped the process for auditing medical records. This has resulted in clinician peer-to-peer reviews and self-education. The revised workflow has demonstrated to the clinicians how and where they can improve their patient documentation. Reports have also been developed to monitor clinician compliance with timely documentation of the patient encounter and final note signoff.

As we approach FY2007, major initiatives include a migration of the practice management system and the EMR platform to true web infrastructures, a reexamination of the health care software market as we approach the end of our 10-year contract term with IDX Systems Corporation, and implementation of new laboratory, radiology, and dental systems.

## Operations—Deborah Friscino, Director

#### Strategic Look at Access

In response to issues raised in the report of the Task Force on Medical Care for the MIT Community, as well as through direct patient feedback, we are examining access to clinical services within the Medical Department. Understanding the importance of timely patient-clinician communication and knowing that scheduling appointments in a number of services can take some time, we are working to identify ways for patients to connect with their clinicians more easily. We are currently recruiting additional physicians for Lexington, and for internal medicine and orthopedics.

Internally, we have looked at ways to improve other systems that support access. As mentioned above, use of Patient Online is expanding. The process for ordering tests and for processing referrals to outside providers is now electronic and designed to work more quickly. Workflow between triage nurses, nurse practitioners, and physicians is being evaluated continually to improve the coordination of patient care. New systems are in place for travel visits and flu vaccine clinics.

We have made progress improving access at other locations as well. Arrangements are under way with a number of ambulatory testing facilities in the area to allow patients to have some procedures, such as colonoscopies, in a timely, convenient manner. This will also offer both patients and clinicians additional specialty services and some alternative locations for these procedures.

The effect of these improvements continues to be monitored closely and regularly to assure we are meeting our goal of matching patient needs and clinician availability in a fiscally responsible manner.

## **Emergency Preparedness**

The federal government chose Boston as one of 21 US cities to participate in an emergency preparedness pilot program called the Cities Readiness Initiative. For this initiative, members of the Medical Department worked with the MIT Emergency Operations Center and people from around the Institute to develop and test a plan that will enable us to distribute medications or immunizations to the entire MIT community within 48 hours of a decision to do so. The successful drill, which was supported by the departments of public health (DPH) in both Cambridge and Boston, was the first "live" drill of this nature in the state.

Work on preparedness did not end there. We continue to work with others on plans for health-related emergencies such as avian flu, and we participate in the Hospital Operations Group of the Cambridge DPH that coordinates both local and national drills through the Office of Homeland Security. We voluntarily participate in additional drills to test our procedures, operations, and staff so that we will be as prepared as possible should an actual emergency occur.

### Regulatory Reviews

Every three years, a team of surveyors from the Joint Commission for the Accreditation of Health Care Organizations visits the Medical Department to review the care we

provide. We are happy to report that we were reaccredited last fall for another three years with no significant findings.

The laboratory, which is surveyed every two years by the College of American Pathologists, successfully completed its reaccreditation process as well. Shortly after that inspection, the Radiology Department underwent its annual review by the Department of Public Health and FDA, receiving relicensure in mammography.

### New Systems to Support Patient Care

Equipment has been introduced in a number of areas to improve patient care. Radiology, in conjunction with Information Systems, is poised to install equipment that will allow us to use digital radiography to capture X-rays that can be read in real time by off-site radiologists. The lab introduced point-of-care testing for some blood tests, which provides nurses in the anticoagulation clinic with results in minutes. Pediatrics, in conjunction with an audiologist, introduced new equipment for hearing screening tests. This technology provides reliable results without requiring children to communicate verbally. It can be used in very young, as well as non-English-speaking children.

Collaboration between ancillary services and clinicians has improved. X-ray technicians have set up a patient callback system with clinicians that results in a shorter turnaround time for patients needing follow-up for abnormal results. Pharmacists are certified to dispense the morning-after pill directly to patients through an approved protocol without a separate visit to a physician or nurse practitioner. Some pharmacists are also certified to administer immunizations as part of our annual flu vaccination program.

#### Renovations

Considerable work on the MIT Medical building occurred this year. The OB/GYN Service has a new location on the fourth floor with much-needed upgrades to both offices and exam rooms. The new space provides improved lighting and a better workflow for staff. Patients have greater privacy and a more accommodating waiting area.

Work is under way to increase clinical space for mental health clinicians, create a separate area for the Spouses&Partners@MIT program, and consolidate administrative and financial staff areas. As this work is completed, other areas in the building will be evaluated to identify renovations that will increase efficient use of the space.

## Marketing and Communications-Maryann Wattendorf, Manager

#### getfit@mit

MIT Medical communications staff members worked with staff from the Center for Health Promotion and Wellness, MIT Health Plans, IS&T's web consulting services, and DAPER to develop and implement the second annual getfit@mit fitness challenge. The program is designed to improve the health and fitness of the MIT community.

Getfit@mit 2006 included a more robust partnership with DAPER, allowing the program to offer more events, as well as discounted memberships to the Zesiger Sports and Fitness Center (Z Center). This year, getfit@mit had 18 fitness-related events for

participants, including yoga classes, ice-skating at the Johnson Athletic Center, walks through campus tunnels and along the Charles River, and volleyball at the Z Center. Organizers also sponsored two nutrition-oriented talks on campus.

Program participation increased by 50 percent this year; more than 1,800 community members registered, both on the MIT campus and at Lincoln Lab. For the first time, teams from Draper Laboratory and Haystack Observatory participated. Survey results from program participants indicate strong support from the MIT community for continuing the program next year. Some sample comments:

"This program is the best thing since sliced bread. Since I joined last year, I have lost 60 pounds over the course of 14 months. I also have the same workout buddy I had last year, so we make sure that our workouts stay on track. Thanks!"

"This was really fun. The weekly goals helped me beat my usual winter exercise slump, and not only do I feel awesome, but I plan to continue and increase my exercise! Thanks!"

"Everything is great! Keep up the good work. Each year, I see enhancements to getfit, which makes it fun and exciting to look forward to. It's a good incentive to get exercising—which is just the kick I need!"

"Great program! I think it's a great way to get people thinking about their well-being and making it a priority at MIT. Oftentimes we are so busy here that the health of individuals are easily overlooked. I liked that I was able to take time in my day for my well-being."

## Website Updates

MIT Medical's community health advice column, "Ask Lucy," was moved from the biannual <code>health@mit</code> newsletter to a new home linked to the MIT Medical website home page, <a href="http://web.mit.edu/medical/">http://web.mit.edu/medical/</a>. This move allowed us to increase the column's visibility and to publish questions and answers more frequently—every three weeks instead of twice a year.

The MIT Medical communications team worked with clinical experts and the MIT website home-page team to design and develop content for the MIT pandemic influenza website at http://web.mit.edu/fluinfo/. This site will serve as a central information source for the MIT community, providing information about the status of pandemic influenza threats and advice about personal and community preparedness.

#### **Publications and Advertising**

The MIT Medical newsletter, *health@mit*, featured stories on the new diet and exercise guidelines from the US Department of Agriculture, getfit@mit, and MIT Medical's Pediatric Service participation in a Blue Cross Blue Shield study of childhood obesity.

The communications group supported the community outreach efforts of the Mental Health Service by producing advertising and posters addressing students' questions and concerns and promoting available services. Advertising ran regularly in the *Tech,* and posters were distributed throughout living areas.

Working with the Mental Health Service, the communications team also produced a new brochure for MIT faculty, *How to Help Students in Distress* (http://web.mit.edu/medical/pdf/faculty\_brochure.pdf). The publication was mailed to all faculty members and deans early in the spring term with a cover letter from Mental Health Service chief Alan Siegel and a supply of resource cards.

In the fall of 2005, we mailed a new welcome letter and information/tip sheet to parents of all freshmen. This mailing was designed to introduce parents to the services at MIT Medical, provide them with appropriate contacts should they have concerns, and prepare them to advise their students about how best to seek health care at MIT.

Working with the MIT health plans staff, the communications team designed new brochures for the Student and Affiliate Health Plans. The new brochures, to be used during the summer of 2006, are designed to improve usability and provide more information about using the services of MIT Medical. All new students and affiliates will receive these revised brochures.

## Finance-Margaret Meehan, Director

During FY2006, collaborations were established and relationships strengthened. Within the Medical Department, the Executive Committee of the Medical Staff and the Medical Management Board are playing a more active role in fiscal management. Strong working relationships with the Institute Office of Finance, Controller's Office and the Office of Budget Operations have enabled MIT Medical to make decisions from a global perspective aligned with MIT's philosophy and priorities. In addition to these activities, finance staff have continued to build analytic and reporting capabilities and have implemented operational and customer service improvements.

## **Medical Practice Financial Services**

#### Reporting

Financial Services continuously strives to ensure that the appropriate data are accessible when needed. For example, clinical capacity and financial planning are done most precisely by using "relative value units" (RVUs) to measure productivity. This year, Financial Services incorporated the consideration of RVU data into the department's analytic capabilities. MIT Medical Department management decisions also require a "lines of business" perspective. Using lines of business analyses (employee health plans, student health plans, retirees, etc), costs and sources of support are clearly identified, deepening the understanding of the departmental and institutional implications of a particular decision. This approach has become integral to regular reporting and financial modeling.

#### Billing

Operational improvements in billing, focused on optimizing revenue and improving customer service, were implemented in FY2006. Specifically, patient registration processes were modified to enable the capture of better demographic information.

Accurate demographic information boosts collections and facilitates efficient provider outreach to patients. Another initiative was a shift of the point of collection for items typically not covered by insurance, such as orthotics and contact lenses. Formerly, patients were billed for these items after receipt; the process redesign allows for payment collection before receipt of items. In addition to reaping the benefits of decreased bad debt and a shorter revenue cycle, the new process addresses MIT's request to decrease the volume of departmental uncollected self-pay charges transferring to the bursar and SAP systems. Billing staff continue to train providers in correct coding with the goal of increasing levels of compliance and enhancing data quality. In FY2006, billing staff regularly reviewed fee schedules and made necessary adjustments to ensure that the services provided by MIT Medical were equitably compensated.

#### Asset Management

A capital funding mechanism and process was established in FY2006 with a Capital Management Committee formed to support the process. The committee's charge is to manage the department's assets, identify the most appropriate equipment and plan for the financing of investments. The committee is composed of MIT Medical staff from several clinical and administrative areas.

#### **MIT Health Plans**

As stewards of the employee and student health plans, the finance staff regularly seek opportunities to provide the most appropriate and cost-effective coverage. They work to ensure coverage is tailored to the diverse MIT community and is in keeping with MIT Human Resources health care benefit philosophy. Additionally, staff strive to maintain the high level of customer service as a hallmark of the plans. The following accomplishments promote those goals.

#### Enrollment and Billing Enhancement.

Enrollment and billing information has been migrated from an MIT application (the MIT Student Information System) to an MIT Medical application. Because key patient information now resides in an MIT Medical application, staff have more control over the data and are able to manage the database more effectively. These changes improve customer service by shortening patient inquiry and data change response times.

## Regulatory Changes

The student health plans operate under state regulations titled Qualifying Student Health Insurance Programs (QSHIP). This year, several changes were mandated, the most significant of which was the discontinuance of the acceptance of non-US-based insurance as an alternative to MIT-sponsored insurance. The health plan staff have strived and will continue to strive to implement these changes with minimal impact to students and the Institute from customer service and financial perspectives.

### Strategic Retreat

With goals of identifying ways to provide better customer service and to pinpoint operational issues, the Health Plans staff held a retreat that was attended by a cross section of MIT Medical staff. Issues under discussion and for which next steps were identified included assessing whether the current staffing model is optimal, automating

part of the enrollment process, and modifying benefit design around referrals, benefit exceptions, and the benefits period.

## Performance Improvement—Ruth Fishbein, Manager

Establishing metrics for quality and finding ways to improve and enhance the care delivered to the MIT community is an ongoing challenge. Increased resources have been allotted to these endeavors, and while some clear improvements have been made, platforms for continuing the improvement process are still being established.

The MIT Medical Department Performance Improvement Program performs the following functions:

- Establishes quality of care and patient safety as the highest priorities
- Defines the elements of quality—safety, effectiveness, patient-centeredness, timeliness, efficiency, and equity
- Evaluates performance, measures the process and outcome of clinical and administrative activities, identifies areas for improvement, and takes steps to enhance performance
- Encourages the involvement of all staff at all levels of MIT Medical in these activities

## Priority areas for FY2006:

- Collaboration, communication, and coordination of care
- Patient safety
- Clinical quality management
- Successful JCAHO Accreditation

#### FY2006 Results

## Collaboration, Communication, and Coordination of Care

The Kenneth G. Schwartz Center Communications Skills Grant, received in June 2006, helped us develop and implement a program to promote effective patient-provider communication. The program, which will be implemented in FY2007, will include: patient and clinical provider involvement in project development and implementation; a quasi-experimental design with intervention and nonintervention comparison groups; a continuous improvement model of assessment and training (repeating cycles of plan, do, study, act) starting with internal medicine clinical providers; intervention group training; faculty training for two clinical providers; timely feedback to providers; and development of a model that is transferable to other ambulatory clinical settings at MIT Medical and in the larger community.

The adoption of electronic medical records (EMRs) have improved patient care, communication, and coordination. Achievements include:

- Mental Health service migration to EMR—September 2005
- Voice recognition dictation service—97 percent complete
- Migration from phone to desktop dictation—75 percent complete, resulting in reduced clinical provider dictation time
- Enhanced remote access
- Problem list populated in approximately 100 percent of all patient records
  - More than 99 percent of all dictated clinical notes in record within less than five business days
  - 90 percent of all prescriptions are electronic
- More than 95 percent of radiology orders are electronic
- More than 95 percent of lab orders are electronic
- Paper record pulls reduced from 151,000 in 2002 to 33,500 in 2006

A pilot disease management program was implemented for patients with diabetes. The program initially focused on assisting 30 patients with diabetes to achieve a level of health and wellness and, in particular, get the best possible control of their blood sugar to reduce the risk of medical complications. Future added services of this program might include assistance with medical appointments, education and supervision of glucose monitoring, assistance with understanding and organizing medication regimens, and other health maintenance activities.

Communication was enhanced between specialists and primary care providers. For example, OB/GYN tracked 100 percent of internal referrals and 95 percent of external referrals.

The Referral Process Improvement Team simplified and automated the system for external patient referrals.

- Approximately 95 percent of referral decisions are communicated to the patient in less than 5 business days.
- FAQs for students and health plan members posted on MIT Medical Internet site.
- FAQs for clinical providers posted on MIT Medical intranet site.
- Significant improvement in clinical provider and support staff satisfaction with process.

## Patient Safety

Failure Modes and Effects Analysis (FMEA) focused on identifying and reducing potential errors associated with the electronic prescription refill/renewal system. A team

was established in May 2006 to identify potential and actual risks and to recommend interventions.

FMEA focused on reducing potential risks in the communication of critical lab values. All critical results (100 percent) were called directly to provider. And, efforts continue to increase the timeliness of getting critical lab values report to the clinical provider; times are less than or equal to 15 minutes.

In regards to medication safety, the past year focused on making the transition to electronic prescribing. As of June 30, 2006, 90 percent all prescriptions are handled electronically.

Other key activities related to patient safety include:

- Annual safety training (October/November 2005)
- Safety and risk management orientation for all new employees
- Incident reporting had no sentinel events in FY2006—the program focuses on developing a blame-free and safe environment to support incident reporting
- Active patient advocate program
- Collaboration with Controlled Risk Insurance Company/Risk Management Foundation (malpractice insurance carrier)
- Clinical Care Evaluation Program/Peer Review:
  - External experts case reviews: 2
  - External expert mentors: 1
  - Clinical education programs, including monthly morbidity and mortality conferences

### Clinical Quality Management

A model clinical dashboard was developed for internal medicine physicians that includes data on demographics, volume, utilization, and clinical performance (prevention and disease management). Following testing, the model will be rolled out for pediatric and OB/GYN services.

#### Sample Service-Specific Performance Improvement Activities

The Pediatrics Service participated in a statewide childhood obesity project to intervene with children identified as obese or at risk for obesity.

The Mental Health Service implemented a Crisis Intervention Response Team protocol to respond to campus emergencies.

The Inpatient Unit implemented a medication reconciliation process for patient safety. Patient Satisfaction

MIT Medical continues to use the services of Press Ganey, a national patient satisfaction survey company, to monitor patient satisfaction. Aggregate survey results inform service and system development. Individual provider data is used to inform annual performance evaluations. Aggregate data reports are provided to individual clinical providers and service chiefs at least twice a year.

## Joint Commission for the Accreditation of Healthcare Organizations Accreditation

MIT Medical was surveyed by JCAHO in October 2005. Results: No recommendations for improvement. The department was complimented on its advanced electronic health record systems and effective coordination of care.

## Clinical Director for Campus Life-Maryanne Kirkbride, MS/MBA

The academic year 2005–2006 was the fourth year of this unique position in college health, and the role has continued to evolve. The first year was characterized by developing an understanding of MIT, including building relationships with a broad array of health-related stakeholders. The second year involved strengthening the visibility and impact of our excellent health promotion team at the Center for Health Promotion and Wellness. The third year began the exploration into what an optimally healthy MIT might look like and included meaningful and visionary conversations with key opinion leaders inside and outside the Medical Department. This past year was focused on a "mind and hand" approach to analyzing available research, current industry programs, and the powerful health-related norms and practices of our many MIT communities. The result was a discussion document that describes the need, proposes a unique model for community health, and reviews the potential benefits to health, learning, research, and our financial bottom line.

To continue to demonstrate the success of a collaborative approach to community health, the clinical director for campus life partnered with students committed to public access defibrillation. In late January, the American Heart Association designated MIT as a Heartsafe Community.

The story of the Heartsafe designation is really many stories.

It is the story of another MIT first—the first college in the country to be awarded this designation.

It is the story of how the vision of a hard-working engineering student, then alumnus, ignited fellow students, alumni, faculty, and staff around the goal of ready access to lifesaving care on campus. It is the story of how young alumni are giving back to MIT—even before they are capable of financial contributions.

It is the story of the power of community building—between MIT–Emergency Medical Support (MIT-EMS), Interfraternity Council, MIT American Red Cross Team and Network (ARCTAN), the Department of Facilities, MIT Medical, MIT Police, IS&T, the Environment, Health, and Safety Office, Department of Student Life, Campus Activities Complex, Human Resources, the Information Center, Sodexho, the Alumni Association,

DAPER, and others. It is the story of a collaboration so strong that in almost every meeting partners offered more than what was asked of them.

It is the story of thinking big—envisioning and then creating a cardiopulmonary resuscitation (CPR) event so large it had to be held in La Sala de Puerto Rico—99 people in one event, with more than 20 volunteer instructors (mostly students).

It represents the best of MIT, figuring out what the important problems are, getting the right people together, finding workable and practical solutions, and getting the job done without fanfare.

The Heartsafe award was built on the collaboration that created MIT-EMS. The highlights of MIT-EMS this year include the success of the first chief NOT to be a founder. In most organizations, transition to nonfounder leadership can be challenging. In this case, Rachel Williams, a junior in chemical engineering began as a novice but quickly set a vision of team-based collaborative leadership. The service flourished, making hundreds of calls, hosting the National Collegiate EMS Foundation annual conference, participating with the Office of Community Development and Substance Abuse (CDSA) in lowering barriers to calling for help in drinking cases and working hard to create a partnership with ARCTAN to achieve the Heartsafe College designation.

#### **Center for Health Promotion and Wellness**

The Center for Health Promotion and Wellness (CHPW) of the MIT Medical Department supports the individual and communal practice of healthful living through evidence-based programming that empowers MIT community members to use the information and skills necessary to adopt and maintain healthy behaviors, attitudes, and lifestyles.

CHPW works collaboratively with students, staff, and faculty to create a safe and caring environment committed to the academic, research, and community goals of the Institute. The long-term vision of the center is to contribute to the measurable improvement of the health of the campus community and its members.

While the CHPW is a service of the Medical Department, we appreciate the substantial support of the dean for student life and the generous collaboration of all the departments in the Division of Student Life (DSL).

## **CPHW Overview in Numbers and Narrative**

#### Numbers

1,216	Number of MedLink-to-student interactions this academic year
1,000	Number of copies of MITOasis: Relaxation for Busy People CDs distributed
300	Number of students who received a flu shot at the MedLinks-sponsored flu shot clinic at the Stratton Student Center
300	Percent increase in screenings at Depression Screening Day 2005 over prior year
190	Number of students participating in programs around alcohol, drugs, and violence

- Number of "Study Break ToolKits" created on Stress, Sleep, and Nutrition
- Number of community members participating in our CPR or first aid classes
- 35 Percent more residences with a MedLink representative

#### Narrative

*On the relaxation line,* 253-CALM: "Just writing because I tried 253-CALM for the first time last night (I was really stressed out about something and couldn't sleep). It's awesome. I just left a bunch of the little cards [with the phone number] outside my door to share the wealth."

On the health and nutrition presentation to athletes: "The most practical and sound advice I have ever heard. The commonsense approach makes the information accessible in a very real way. The balanced view is sensible and refreshing considering the extreme dieting plans with which the athletes are bombarded every day."

On health promotion support: "I greatly appreciate what the health education department has done for me. I met with several other people ... but only [the health educator] was able to provide me with the information I needed. When I head off to medical school at Stanford next week, I will miss having you on campus."

On working with Residential Life Programs to support students following a student incident: "On behalf of the office, thanks for coordinating with MedLinks and for all your time and effort this weekend. Your great outreach means so much during this difficult time."

On CPR/first aid class: "All in all, it was one of the most positive experiences I've had at MIT"; "Yesterday's class was challenging, highly informative, and an interesting adventure into an important and difficult subject"; and "Teaching skills are excellent, using many different techniques to get the critical points across—very effective."

### **CPHW Leadership and Management**

Key accomplishments this year:

- Held a strategic planning retreat to promote intraoffice coordination, reassess campus health promotion needs, and set priorities.
- Provided leadership to a broad team of staff, students, and community agency experts to bring MIT Medical's clinical sexual assault care policies up to best practice standard.
- Used a staff vacancy to retool a health educator position to focus on the health promotion needs of employees (on campus and at Lincoln Lab) and graduate students.
- Health Education Library was very active, about 41 books, videos, DVDs checked out each month – extra copies of sensitive-topic materials distributed through health educators. Title list made available to clinicians on the electronic medical record.

• Championed the inclusion of student-specific guidelines defining sexual assault behavior into the DSL student handbook for the 2006-2007 academic year.

In addition, CPHW increased its effectiveness by consultation and coordination with DSL. Examples include:

- Working with Campus Dining to coauthor a nutrition white paper and to create a series of brochures called "Eating Healthy at MIT"
- Collaborating with DAPER to form a curriculum development team and advisory board for a health and wellness course offered to undergraduates for credit (a pilot program is planned for IAP 2007)
- Critical Incident Stress Management assistance
- Development of "When Coaching Gets Personal" training for DAPER coaches
- Collaborator and wellness content provider for dean-on-call system
- Collaboration with the FSILG office on a variety of topics for FSILG students.
- Collaboration with CDSA and the Fraternities, Sororities, and Independent Living Groups to create a CPR training program to be offered by Heartsafe students (staff from CHPW will work with student instructors to create and implement a mini curriculum on knowing when to call for help around alcohol and other emergency situations)
- Collaboration with the CDSA around alcohol and other drugs in a variety of programs

## **Chronic Disease Prevention**

Helping people live to 80 to get that Nobel Prize, not die at 50 of heart disease.

#### CPR and First Aid Training

Staff successfully completed the science update for American Heart Association instructors on basic life support using the 2005 guidelines for CPR and emergency cardiovascular care.

Two of each of the following courses were offered to the MIT community this year: Basic First Aid, First Aid with Adult CPR, Heartsaver AED (Adult CPR), and Child and Infant CPR. The Heartsaver course introduced the use of the automated external defibrillator (AED). These American Heart Association classes spend time educating participants on the most common causes of life-threatening emergencies in adult and pediatric populations. Time is spent on prevention and risk factors, as well as on lifesaving skills.

Fifty-four members of the MIT community were trained in CPR and/or first aid. More than 50 new MedLinks were trained in first aid, CPR, and AED use. More than 20 existing MedLinks received a refresher course in first aid, CPR, and AED use. And, six members of the urgent care support staff received Heartsaver AED training.

In addition, our office collaborated with Heartsafe to coordinate a mass CPR training at MIT on February 13. More than 110 students and staff were trained in CPR and AED use at one time.

#### Wellness Classes/IAP

Eighteen IAP sessions were held on wellness with an average of 20 participants per session. There were approximately 360 participants in total. Wellness classes were also offered in the fall, winter, spring, and summer. Each session was 10 weeks long and there were approximately six classes per session, with approximately 12 participants per class.

In addition, parenting classes continued to be offered on a weekly basis. Childbirth preparation and infant care classes were offered every month. And, health lectures were offered on campus and at Lincoln Lab at the rate of one per month.

## getfit@mit

Our office provided health promotion content to the getfit team, which won an MIT Excellence Award.

### **Nutrition**

## Eating Healthy@MIT means eating for academic and physical performance.

Improving the nutrition of the MIT community continues to be a CHPW priority. Good nutrition allows for improved concentration and academic success, strengthens immune systems, maximizes athletic ability, and reduces the risk of illness and disease. Our approach to addressing this issue is three-pronged: identification of high-risk populations, development of programming and materials to increase awareness, and environmental assessment and change.

Health educator Julie Banda serves as a member of the Campus Dining Board representing CHPW and MIT Medical. In spring 2006 she spoke to board members and to Dean Larry Benedict on the current state of nutrition at MIT and reviewed our community-based response.

Each subset of the student population has its own needs and barriers to optimal nutrition. We developed workshops and materials to address these needs for the following populations:

- Athletes
- Women
- Students not living in a dorm with a mandatory meal plan
- Students living on the east side of campus with limited dining options
- Students needing guidance on how to eat healthfully with little time and money
- Freshmen

- International students
- Graduate students

We have developed nutrition programming for dorms, independent living groups, sororities, student groups, athletic teams, graduate students, and departments/offices. Some of the workshops covered topics such as:

- Eating healthy at MIT
- Healthy cooking
- The language of nutrition
- Portion control
- Eating with no money and no time
- How to prepare and repair for workouts
- Dispelling diet myths
- Finding an eating plan that works for you
- Eating for academic and athletic performance

More than 30 individual consultations addressed nutrition, fitness, and/or healthy eating.

More than 20 programs were offered on nutrition, fitness, and/or healthy eating for residences, academic classes, student groups, and employee groups. Each program produced requests for one-on-one consultations and provided an entryway for identifying unhealthy or high-risk behaviors and attitudes around food. Several students with eating concerns or dysfunctional eating were identified and connected to appropriate resources based on this programming and the subsequent consultations.

Among the programs was one created in collaboration with the graduate student representatives from the Campus Dining Board. A three-part healthy eating series, outlined below, was offered to graduate students and hosted by the Sidney-Pacific Graduate Residence. Planning and preparation included shopping for healthy snacks and common cooking staples. During each session students were able to sample a variety of healthy snacks and recipes.

- 1. "Healthy Eating and Nutrition; Ask a Health Educator" March 20. During this session students were able to sample a variety of healthy snacks and take home healthy grains, cereals, and portable snacks. Special emphasis was given to breaking the myth that it costs more to eat healthy. Participants voted on topics to be addressed at two future sessions.
- 2. "Eating with NO Time and NO Money"—April 13.

- 3. "Eating Healthy at MIT" April 25. Supported by the Graduate Student Council, Residence Life, and Campus Dining. Highlights:
  - Eating Healthy@MIT brochures distributed and reviewed
  - Campus food donations from Steam Café, Shinkansen Japan, Sepal, Anna's Taqueria, Sidney-Pacific Café, and Residential Dining were offered to show options for making healthy choices on campus
  - More than 100 students attended this final event

CHPW partnered with Campus Dining to offer a two-part seminar, "Healthy Cooking for Students—Quick, Cheap, Easy." More than 20 students participated in this course on January 31 and February 2 at the Country Kitchen in Baker Hall. Students were able to sample a variety of healthy snacks and recipes. The seminar emphasized basic cooking skills—shopping, organization, menu preparation, and healthy substitutes for common recipes and foods. Each participant received a copy of the *Healthy College Cookbook*.

CPHW was invited to make a presentation to more than 150 members of the Campus Activities Complex's event planning team on March 9, 2006. Event planners are the menu gatekeepers for many of the snacks, breakfast meetings, bagged lunches, and catered dinners that take place on campus every day. CPHW offered tips on how to utilize the resources and options on campus to help maintain or establish a more balanced and nutrient-rich diet.

CPHW participated in planning sessions with the MIT Medical communications team and Campus Dining to incorporate nutrition messages, materials, and programs into the existing getfit@mit challenge.

- Designed and launched "Eating Healthy @ MIT" brochure series—brochures were designed to help community members navigate dining choices on campus
- Offered a two-part healthy eating series for participants of getfit@mit: "Language of Nutrition," February 9, 2006; and "Eating Well @ MIT," March 16, 2006.

### **Coping and Stress**

Efforts to address eating disorders in FY2006 included:

- Served on DAPER Student, Health, Safety, and Wellness advisory board to develop support for athletes, especially on high-risk teams
- Making Peace with Food therapeutic group was fully enrolled in both fall and spring; participants report positive outcomes
- The Eating Concerns Team developed an online survey tool to evaluate the resources devoted to eating concerns at MIT Medical

"It is evident that the care provided by all of you is appreciated and valuable. I wanted to take a minute to say 'thanks' and to recognize your hard work and patient-centered focus." – feedback from the MIT Medical Performance Improvement team

• New IAP workshop, "Gay, Bi, and Trans Men and Body Image"

Efforts to address stress reduction in FY2006 included:

- 253-CALM: The MIT Relaxation Line—callers are guided through a 2-3 minute relaxation break, emphasizing a variety of techniques designed to promote sleep, reduce test anxiety, and reestablish mental focus. The office distributed more than 4,000 253-CALM business cards across campus.
- *MITOasis* relaxation CDs—1,000 were distributed. And, new for 2006, relaxation audio files were made available for download on the MIT Medical website.
- "Yoga at Your Desk or Lab" workshop emphasizes prevention of shoulder tension, lower back pain, and repetitive strain injury.

In addition, in our continuing effort to "train the-trainers," we provided 180 "Study Break ToolKits" to residential advisors. These focused on three key areas—sleep, stress, and nutrition—with new educational materials and technical assistance provided in each area.

Depression Screening Day was also a success this year. There were 71 participants, a 300 percent increase over the previous year.

## **Conference Presentation**

"Our Stressed Out Students" program was held at the New England College Health Association conference. A repeat session was added to fulfill the high demand for this program. Sample feedback included: "Great ideas—lots to take back to my campus" and "Great program; wonderful overview and great suggestions for incorporating stress management techniques; very creative."

### **Student Health Advisory Committee**

The Student Health Advisory Committee (SHAC) continued its efforts to deepen the student community's understanding of MIT Medical and MIT Medical's understanding of the student community. This year's highlights include:

- Orientation—distributed hundreds of T-shirts listing ways students can use the Medical Department
- Patient-provider communication—continued to work on pilot evaluation project (see Performance Improvement section of this report)
- Sexual assault prevention—students worked in partnership with clinicians to update clinical care guidelines for people presenting with possible sexual assault
- Wellness week—students worked with the Undergraduate Association and with MIT Medical to expand health-related activities

Structurally, SHAC has "right-sized" its membership, and strategically, it is poised to work with the Medical Department to use the 2006 health survey results to create a strategic plan for the health of the undergraduate community.

## Sexual Health, Relationships, Women's Health, and LBGT Issues

- Managed the first year of the Department of Justice Violence Against Women Act (VAWA) grant. Achievements include:
  - Negotiating guidelines for sexual assault to be included in the student handbook with the harassment policy
  - Convening the Community Resource Group to review other campus programs, identify needs, and develop a shared understanding of campus risks and resources
  - Redesigning the freshman orientation program, interviewing program providers (with students), and designing the comprehensive training and review necessary for success
  - Participating in two national seminars for grant recipients, learning quickly from experienced student life, judicial, health, and law enforcement experts
  - Hosting a consultative visit from our program support person from Calcasa
- Worked to provide Mental Health Service staffing during each of three performances of a student production of *The Vagina Monologues*. A sexual health information table was also set up during the "Vagina Fair" before each performance. The cast and crew of the show honored health educator Laura Stuart as a "vagina warrior," someone who has promoted women's health on campus, during their final performance.
- Sigma Kappa (SK) sorority selected health educator Laura Stuart as its faculty
  advisor during the spring term. She conducted a sexual decision-making
  workshop for all 70 Sigma Kappa sisters, wrote a weekly e-mail message to the
  SK list answering sisters' questions about sexual health, and coordinated an endof-year outing for the sorority.
- Began a sexuality library, housed independently from the health promotion library due to its mature content. Written resources are not available on the spot during student consultations about sexuality issues.
- Held more than 40 individual sexuality-related or body art-related consultations via office visits, phone calls, or e-mail.
- Held more than 20 sexuality-related or body-art related programs for residences, academic classes, and student groups.

## **Peer Advocacy—MedLinks**

The MedLinks program continues to be strengthened. First aid, CPR, and AED training have been added, and the accessibility of commonly needed over-the-counter medications and first aid supplies has been improved. The number of MedLink-to-student interactions is up by almost 100 percent again this year.

#### **MedLink Interactions**

Academic Year	Total Interactions
2005–2006	1,216
2004–2005	637
2003–2004	386
2002–2003	152

We have increased our coverage of MIT residences with at least one MedLink by 35 percent; we now have MedLinks in 35 dorms and FSILGs. We will continue to reach out to the FSILGs and work to spread MedLinks within the residences to improve access.

In fall 2006, 52 new members completed more than 25 hours of training. With these additions, the active membership grew to more than 110.

MedLinks was awarded full Association of Student Activities recognition as a sponsored student group, and a new executive committee was elected. Government elections, constitution creation, and a work-equity program for maintaining active status were created. All members must commit at least 10 hours a semester to the program in order to maintain active status (this can be accomplished in a variety of ways).

## Data Collection and Interaction Monitoring

Coordinators and members worked with staff from IS&T to create a database for storing, tracking, and analyzing the data received from members about their interactions. Each MedLink is required to submit an online interaction log each time he or she has an encounter with a fellow student. These interactions can include, but are not limited to, information about resources; listening and support; making available over-the-counter drugs for common aches, pains, and illnesses; aiding in decisions about when to seek medical attention; and providing first aid and supplies.

This demographic information is an untapped resource. The ability to analyze this data would allow for trend analysis, immediate response to illness or injury outbreaks, and a more refined plan for MedLinks and Health Promotion programming, policy development, and budget allocation.

### Resource Binder Updates and Review

Working with the Publishing Services Bureau, we revised and redesigned the *Staying Healthy @ MIT* resource binder. Based on user feedback, the guide was streamlined to include only the most used sections. The redesigned guide will be printed and distributed to MedLinks, graduate resident tutors, resident advisors, resident associate advisors, and others who serve as resources to students in the residences.

In addition, to improve access to this valuable resource, this binder and certain content from the original binder will be made available as separate searchable PDFs. Each will be on the resources section of the MedLinks website.

#### **Continuing Education**

Sessions were coordinated and presented on the following topics:

- Sexual health, with health educator Laura Stuart
- Prescription drug use and abuse, a question and answer session with assistant health educator Chad Waxman and Dr. Simon Lejeune
- MedLinks interaction case review, with members Danny Shen, Natalie Rubinstein, Alma Rico, and Sarah Hopp

In addition, updated first aid, CPR, and AED training was offered for members who have been a part of the program for two years. And all training topics for new members were open to current members to utilize as a refresher course.

### Campus Outreach Events

- Stress LESS packets—May 15, 16 and 17
- NapZone—April 11
- MedLinks and friends charity dating auction—April 20
- "Cover Your Cough" cold and flu prevention campaign—fall and spring
- Send a Smile! October

## Alcohol, Other Drugs, and Violence

Hiring Chad Waxman to be our first assistant health educator focusing on the fraternities, sororities, and independent living groups (FSILG) community strengthened MIT's ability to provide programming at the local level on a variety of health issues. In his first year, Waxman focused on collaborating with the Mental Health Service and the Office of Community Development and Substance Abuse (CDSA) on alcohol and drug programs, and supporting the VAWA grant by exploring student interest in men's violence prevention programming.

#### Violence Prevention

CHPW was a major contributor to the Engagement Conference at Northeastern University, providing time, resources, and money. The purpose of the event was to educate men and get them motivated to help stop sexual violence. One outcome of this conference was the formation of the MIT XY-Coalition, a male student group whose aim is to support and help end sexual violence. The group participated in the Take Back the Night event at MIT.

Two health educators attended three days of mentors in violence prevention (MVP) training. They brought back educational materials that can be adapted to fit MIT students.

Male students from MIT and Harvard collaborated to become educated and talk about sexual violence at the Harvard–MIT Sexual Violence Symposium. The half-day program included exercises and guest speakers.

Roughly 30 members of Delta Tau Delta took part in a one-and-one-half-hour educational program around sexual assault. Use of the MVP curriculum included exercises around "what it means to be a man," "pyramid of violence toward women," and scenarios designed to spur discussion.

#### **Alcohol**

Resident advisors were given information about what to do when they identify student issues related to alcohol, other drugs, and mental health.

In conjunction with the CDSA, we offered an alcohol program at Simmons Hall, training MedLink and EMS students to deliver information about alcohol use and abuse. Students delivered a one-hour presentation for roughly 50 students.

An alcohol program was also offered to roughly 60 members of the Alpha Phi sorority. The 30-minute presentation with a student MedLink centered on alcohol use and abuse.

### Other Drugs

Highlights of this year's accomplishments:

- Graduate resident tutor drug education program—delivered a one-hour presentation about "other drugs" you might see at MIT to roughly 50 graduate resident tutors. Program also addressed how to help students in need.
- MedLinks continuing education session around prescription drug abuse—in conjunction with Dr. Simon Lejeune, a psychiatrist at MIT Medical, provided roughly 20 students with information about the drugs most often abused and about how to help a friend.
- Development of Q&A portion of the MIT Drug Book—in conjunction with Dr. Lejeune, identified 13 common questions MIT students ask about drugs and answered them.
- Tau Epsilon Phi (TEP) Other Drug Program—in conjunction with Dr. Lejeune, provided roughly 15 members of TEP fraternity with information on a variety of drugs, their potential for abuse, and advice on how to help a friend.

For more information about CHPW programs or services, please visit the following websites:

Web Address
http://web.mit.edu/medical/a-center.html
http://web.mit.edu/medical/services/s-consultations.html
http://web.mit.edu/medical/h-library.html
http://web.mit.edu/medlinks/www/index.html
http://web.mit.edu/nh/power/

# **FY2006 Appointments, Promotions, and Terminations**

## **Appointments**

Sara Fuschetto	Administrator of Enrollment	7/18/2005
Chad Waxman	Assistant Health Educator	7/18/2005
Sandra Turner	Triage Nurse	8/15/2005
Mary Guanci	Triage Nurse	8/22/2005
Grace Kim	Psychologist Trainee	9/19/2005
June Cook-Medruga	Nurse	10/15/2005
Peggy Meehan	Director of Finance	11/1/2005
Marsha Gilmore	Clinical Nurse Specialist	1/1/2006
Ingrid Henar	Pediatrician	1/15/2006
Richard Keller	Triage Nurse	2/13/2006
Gretchen Ghent	Dentist	2/21/2006
Kelly Fink	Triage Nurse	3/6/2006
Carol Cormier	Nurse	3/28/2006
Eileen Simpson	Nurse	4/1/2006
Elizabeth Viola-Knowles	Assistant Lab Manager	6/05/2006

## **Promotions**

Grace Collura, DMD Chief of Dental Services 11/1/2005

## **Terminations**

Diane Meitzler	Nurse	7/31/2005
Bonnie Eklund	Family Nurse Practitioner	8/26/2005
Mark Goldstein	Chief of Pediatrics	9/30/2005
Lori Cravatis	Triage Nurse	11/18/2005
Danielle Webster	Clinical Nurse Specialist	1/31/2006
Eileen O'Keefe	Manager of Financial Services	3/3/2006
Nelia Jennings	Assistant Laboratory Manager	4/7/2006
Amy Luebehusen	Family Nurse Practitioner	4/14/2006
Maryann Wattendorf	Marketing Manager	6/30/2006

William Kettyle, MD Medical Director

Annette Jacobs Executive Director

More information about the MIT Medical Department can be found at http://web.mit.edu/medical/.