

Dean for Graduate Education

The Office of the Dean for Graduate Education (ODGE) is an Institute-wide support and referral office for the graduate community at MIT that advocates broadly for graduate education. Because MIT maintains a decentralized graduate educational structure, ODGE works collaboratively across the Institute with numerous administrative offices, schools and academic departments, individual faculty and students, and various committees. ODGE also works with other units in the areas of diversity, personal support, community-building, collating and disseminating best practices, Institute-wide data collection and analysis, endowed and external fellowships, graduate admissions administration, international student advising, professional development, policies and procedures, and academic performance. ODGE is comprised of the Office of the Dean for Graduate Education Headquarters, the International Students Office (ISO), and the Graduate Student Council (GSC).

The mission of ODGE is to support and serve individual graduate students, programs, and schools to make graduate education at MIT empowering, exciting, holistic, and transformative. We envision a graduate community of scholars whose members are intellectually and socially engaged, valued, interactive, and connected to resources, information, each other, the Institute, the nation, and the world. The strategic plan of ODGE is organized around five key themes: supporting educational innovation and excellence; competitiveness in graduate funding; administration and policy; diversity and climate; and the holistic graduate student experience.

Office of the Dean for Graduate Education Headquarters

Leveraging the efforts of a small office with a staff of 12, ODGE Headquarters accomplishes its goals by working collaboratively with others. This entails key partnerships with the Office of the Dean for Undergraduate Education, the Division for Student Life, the Office of Resource Development, the Alumni Association, the Office of the Provost, the Ombuds Office, MIT Medical, the Office of Institutional Research, and MIT's academic departments and schools.

The dean for graduate education leads ODGE in its mission and areas of responsibility, providing a voice for the graduate community that can speak to the senior administration. In addition, the office provides centralized services to the student body with regard to personal support and advising, diversity recruitment and retention, policy administration, student status changes, financial support, recruitment efforts, professional development, and various programs to support the graduate community.

International Students Office

The mission of the ISO is to help international students at MIT fulfill their academic goals. It does so by providing services and support programs to help with the adjustment to a new academic and cultural environment, to maintain their legal status in the US, and to promote students' (and their dependents') interactions with and integration into the MIT community. In addition, staff members interface with all MIT offices, advocating for community awareness of issues relevant to MIT's international student population.

Graduate Student Council

The GSC works to enhance graduate students' experience at MIT by reflecting the concerns and promoting the general welfare of the graduate student body, creating new programs and initiatives to provide opportunities for growth and interaction, and communicating with MIT administration and faculty members on behalf of graduate students. These goals are accomplished through a structure of elected student representatives, standing committees, and officers. The GSC is supported by two ODGE staff members.

Theme One: Supporting Educational Innovation and Excellence

As the central administrative office for MIT's decentralized graduate enterprise, ODGE strives to support innovation and excellence in graduate education and foster information exchange and best practices among graduate programs. The future of graduate education has evolved beyond the generation of frontier knowledge to include the understanding of new knowledge in a broader context and the development of skills with which to apply new knowledge for the benefit of humanity. ODGE contributes to these challenges through work on various committees, supporting new educational initiatives, and highlighting graduate students' accomplishments.

ODGE maintains membership on a number of Institute committees, such as the Committee on Graduate Programs (CGP) and the MIT Council on Educational Technology (MITCET). ODGE also sponsors a variety of ad hoc committees. The dean for graduate education served on the MIT Task Force on the Future of Education. ODGE sponsors monthly roundtables of the graduate administrators from each department and program, and supports the CGP (for example, by maintaining Graduate Policies and Procedures) and the Graduate Academic Performance Group, which is chaired by the dean. Dean Ortiz serves on the Committee on Research and Information of the Council for Graduate Schools, and he presented a session, "The Role of MOOCs (Massive Open Online Courses) in Graduate Education," in the council's summer workshop.

The GSC's Academics, Research, and Careers (ARC) committee provides substantial programming for MIT graduate students in the area of educational excellence. These efforts are described fully under Theme Five: Holistic Graduate Student Experience, below.

Graduate Program Assessment

Beginning in spring 2013, ODGE led a process that enabled each academic department and graduate program to develop, discuss, and review student learning goals and assessment methodologies. Multiple meetings were convened by the dean for graduate education with the director of the Office of Institutional Research, the director of the Teaching and Learning Laboratory, the chair of the Committee on Graduate Programs, and the heads of all the graduate programs to discuss the fundamentals and the value of establishing program learning objectives and assessment plans. Current literature in this area was cited and discussed. The graduate programs were asked to include three components—goals, data, and action—in their learning assessment plans, as follows:

1. Goals: How do you define a successful student? Programs were asked to consider what students should know by the end of their degree programs, including, for example, proficiencies, expectations, and aspirations.
2. Data: How do you know if students meet your definition of success? Programs were asked to consider how they would know if students met their definition of success by determining what systematic evidence (direct and indirect) they would gather or request from the Office of Institutional Research and analyze annually to see if students were achieving their learning goals.
3. Action: How do you use what you have learned? Programs were asked to create a closed feedback loop so that the data-driven findings would be used to make decisions about continuous improvement, facilitate determination of best practices, and assist with strategic planning.

The learning objectives and assessment plans were expected to reflect the many distinctive disciplinary cultures and processes of MIT's departments, programs, and schools. Departments were encouraged to make use of data already collected and were provided with examples of additional available data. Examples were provided in the form of direct measures (e.g., grades, qualifying examination performance data, thesis examination grades, and research presentations) and indirect measures (e.g., survey data, exit interviews, course evaluations, time-to-degree data, awards and honors) that demonstrate strengths in measuring learning and identify any weaknesses. A summary of the most currently available types of data on doctoral outcomes was provided to graduate programs and the MIT community in an article written by the dean for graduate education, "Doctoral Education Outcomes and Impact," in the MIT Faculty Newsletter, Vol. XXVI No. 2, November/December 2013.

All departments and graduate programs submitted initial drafts of their learning assessment plans in October 2013. The dean for graduate education, the director of the Office of Institutional Research, the director of the Teaching and Learning Laboratory, and the chair of the Committee on Graduate Programs reviewed the draft plans, distributed the drafts to all graduate programs with a summary document highlighting best practices, and provided feedback to the programs on the drafts. Final learning assessment plans were submitted by all departments and graduate programs to the dean for graduate education in January 2014 and have been posted on a wiki for graduate programs to access.

Feedback on the results of the process were found by the graduate programs to be extremely useful and positive. The learning goals reported by doctoral programs and research-based master's degree programs placed emphasis on the deep mastery of specialized disciplinary knowledge and on the acquisition, organization, utilization, and dissemination of knowledge in each discipline. Many doctoral programs also cited the ability to generate original knowledge, to think critically, and to synthesize disparate knowledge; to identify and pursue significant research topics; and to make significant contributions to the field by the publication of research findings. Similarly, professional master's degree programs (e.g., master's degree in business administration, master's degree in city planning, master's degree in architecture) involved the application or transmission of existing knowledge or the development of new applications of knowledge within the field.

A number of programs also defined practical goals, such as the ability to use basic software tools common in the profession and the ability to identify the costs of, and mechanisms for, executing research projects, as well as project evaluation. Some philosophical goals came forward: students were expected to understand the policy and conceptual level of a project, and to display knowledge of the academic and professional context of the field, keeping current on advances.

Graduate programs also almost universally emphasized the acquisition of professional skills. Many cited effective communication, in both written and oral forms, as critical. Other expectations included the ability to work confidently, both independently and in teams, and to resolve conflicts. Many programs drew explicit attention to a demonstration of ethics.

To evaluate whether a student has met the definition of success, departments articulated the systematic evidence they collected. Many of these measures were direct, meaning that they were objective measures demonstrating competency in specific areas. Broadly cited measures included coursework grades, qualifying examination performance data, thesis grades (including written and oral components), and research presentations. In addition, departments considered the existence of published work, whether or not a student had presented a paper at a major conference, and the successful completion of relevant training modules.

A variety of indirect measures were also used to measure student learning and to demonstrate strengths and identify weaknesses in a program's curriculum and structure. The most broadly cited indirect measure was survey data, particularly student exit surveys, but also a recent survey of graduate alumni. Other measures include participation and performance in teaching (measured through course evaluations), time-to-degree data, the quality and impact of papers that were published or presented, and awards and honors. Some cited a town hall format that allowed them to collect feedback from students during the course of the academic year. In some departments, staff are in contact with employers and are able to collect information on how well prepared a former student was for the work at hand.

MIT departments use this wealth of data in a variety of ways. Individual student data, in particular the direct measures listed above, are used to give feedback to each student, guiding his or her academic path and at times indicating that improvement is needed. Most departments described the student advising system as it is now, sometimes including multiple advisors as well as thesis committees and administrators; in some cases, mentoring seminars or individual development plans may be added as additional guidance about graduate school and career goals. Some departments mandated a minimum number of advising meetings. These current advising systems are proactive, helping the students to do their best. In the event that improvement is needed, formal structures include letters from the advisor or thesis committee as well as a dean's warning—a notification of probationary status issued by the Graduate Academic Performance Group setting forth clear academic expectations. To reward exceptional performance, some departments also give awards and prizes.

On the level of each program as a whole, departments routinely draw on indirect measures. Numerous departments review survey data every two years, usually before a Visiting Committee meeting; a summary of the data highlights strengths and weaknesses and offers proposals for change. Visiting Committee feedback is also considered. Departments that hold town halls as a subjective measure have used information gained there as the basis for refining such program elements as first-year classes, and for establishing or refining requirements.

As a result of the learning assessment process, numerous departments have become more deliberate around best practices and strategic planning. One department drew on input from both faculty and the graduate student officers to propose a new model for continuous evaluation of student performance via multiple committee meetings. Another department is planning a more formal and comprehensive approach to collect data on student publications. A third is planning more and earlier feedback around a research assistantship program, as well as improved accounting for uneven faculty workload in supervising theses. In professional development, other graduate programs have designated advisors to oversee career development and job searches, have proposed a new workshop on ethics, and will provide additional support for students in proposal writing.

Support for Interdisciplinary Initiatives

MIT students have a constant hunger for learning about their peers' research and for interdisciplinary interactions. Through the Graduate Student Life Grants (described under Theme Five: Holistic Graduate Student Experience, below) and other funding for community programming, ODGE has been pleased to support initiatives that foster connections and the exchange of ideas across departments, including:

- The MIT-China Innovation and Entrepreneurship Forum (MIT-CHIEF), a conference and high-profile platform for intellectual exchange to foster deeper and broader collaboration between China and the US in technology, innovation, and entrepreneurship. Topics included "Emerging Technologies and the Future," which touched on such disparate technologies as solar power, the internet, and nano-materials; "Health Care and Biotechnology," "Social Responsibilities and Innovations," and "Start-up Development."
- The Public Service Center led MIT IDEAS Global Challenge, an annual invention and entrepreneurship competition that awards up to \$10,000 per team for innovative service projects that positively affect underserved communities. Interdisciplinary teams are composed of students and community partners, who tackle problems related to clean water, energy, environment, and health and medical challenges.
- The MIT-Imperial College London Global Fellows Program, an intensive workshop for doctoral students designed to help them develop the professional skills required to create and sustain successful international and interdisciplinary research collaborations.
- MIT TechLink, a networking organization that fosters cross-disciplinary collaboration among MIT's graduate student communities.

- A retreat for the interdisciplinary doctoral Program in Microbiology.
- The Committee for Scholarly Interactions, run by officers of the Sidney Pacific Graduate residence, is charged with “the promotion and facilitation of scholarly, cross-departmental, and intellectual interactions among members.” Traditionally, this responsibility has been fulfilled by organizing the MIT Presidential Fellows/Sidney Pacific Lecture Series, which consists of five lectures total in the spring and fall, with funding from the Society of Presidential Fellows. The interactive lectures, followed by more intimate discussions, are intended to showcase high-profile speakers from a wide variety of backgrounds and fields of expertise. They help to enhance a sense of community and facilitate nontraditional interactions between faculty and graduate students, as well as unique interaction opportunities among the graduate students themselves. This past year the speakers were Eric Lander, “Reading the Human Genome”; Robert Langer, “Biomaterials and Biotechnology”; Scott Aaronson, “Quantum Computing and the Limits of Efficient Computation”; Daron Acemoglu, “Why Nations Fail”; and Sara Seager, “Exoplanets and the Real Search for Alien Life.”
- Open Style Lab, a project in which three-person teams of MIT students engineer fashion and clothing solutions for people with specific medical conditions.
- SciEx, a student video competition advertising exciting research going on at MIT.
- Teaching MIT to Code and Collaborate, an offering by the Sloan Coder Club that provides programming crash courses for the MIT community.
- Applied Physics Club, a meet-up group and seminar series for students from various departments who are interested in applied physics.

ODGE also supports new collaborations. Dean Ortiz spoke at a meeting of the Sloan School of Management’s Dean’s Student Advisory Council. This led to a number of joint discussions between ODGE, GSC, the Sloan School’s Student Senate, and the OneMIT subcommittee of the Sloan’s Student Advisory Council. A plan has been made to pursue new initiatives that foster cross-school interactions, including the formation of a joint Sloan School–Techlink–GSC subcommittee that will carry forward these initiatives in the upcoming academic year.

Sponsorship of Initiatives for Innovation in Graduate Education

ODGE co-sponsored a new graduate MITx course in the Department of Physics, 8.851 Effective Field Theory. Developed by professor Ian Stewart, this is the first online advanced graduate class offered by the Physics Department. It puts pressure on the EdX platform to improve how MIT offers advanced physics graduate classes and to develop capabilities that other departments will need to teach advanced subjects in the future. As a component of the course, students research a topic of their own and then videorecord themselves giving 40-minute presentations that are evaluated by their peers, learning as much from evaluating presentations made by others as they do from preparing their own. The best presentations are permanently archived as part of the course.

Scholarly Communications

The GSC continued to team up with the Writing and Communication Center and Community Wellness at MIT Medical to offer the popular Dissertation Boot Camp three times this year. The Dissertation Boot Camp provides a focused environment and additional support for graduate students to work on their theses and build healthy writing habits. As in past years, ODGE provided support for the Writing and Communication Center to stay open over the summer. The Center's summer hours are a very cost-effective way to provide needed help, such as professional advice about writing or oral presentation, to post-doctoral associates and to undergraduate and graduate students..

Committee on Student Entrepreneurship

The dean for graduate education, together with the dean for undergraduate education, the vice president for research, and the associate provost, created a Committee on Student Entrepreneurship (CSE) that was charged with the tasks of examining several different factors, guidelines, and issues directly related to the overall environment of student entrepreneurship at MIT. The CSE was co-chaired by Anantha Chandrakasan, department head and Keithley professor of electrical engineering, and Yoel Fink, director of the research laboratory of electronics and professor of materials sciences and electrical engineering and computer science, and began its work in April 2012. First, it was asked to examine and analyze then-current MIT policies and procedures related to student involvement, commercialization activities, and conflicts of interest and of commitment. Second, keeping fairness and protection of students and faculty a foremost concern, the committee was to draft changes in, and propose recommendations for, those policies and procedures. Third, it was to summarize its findings and recommendations and create a "frequently asked questions" document to clarify MIT's guidelines for pursuing student entrepreneurship while at the Institute.

The committee, comprised of several faculty members, two students, and one staff member, examined the appropriate materials and policies in a series of meetings and then presented its findings to the Dean's Group. The committee drafted a set of guiding principles by which decisions should be made, including the following:

1. MIT sees its primary mission as providing high-quality research and education.
2. The sanctity of the student–advisor relationship should not be compromised.
3. MIT's primary obligation to students is a high-quality education and the opportunity to engage in research.
4. The application of research to practical problems of interest to society is one of MIT's primary obligations to society.
5. MIT embraces entrepreneurship by faculty and students as a primary means of bringing the fruits of MIT research and creativity to the benefit of society. MIT would like to proactively encourage its students and faculty to participate in entrepreneurial activities as a means to translate MIT research into forms that can directly benefit society.

The committee stressed the importance of preparing students for the application of MIT's research to the practical needs of society; for example, explaining patent applications and joint options to license. However, the committee recommended that these activities should stop short of incorporating a commercial entity of students with their faculty supervisor to avoid conflicts of interest and commitment. The committee supported the formation of a centralized MIT function charged with interpreting policy as it applies to conflicts of interest to help ensure uniform application of conflict of interest policies across laboratories and departments.

Highlighting Graduate Student Accomplishments

ODGE has increased the number of stories on its News & Video webpage about student accomplishments, including recent graduate student publications, students who have won fellowships and awards, students who have started companies, and students who are giving back to the community. These news items total nearly 50 for the past year. In addition, news items on accomplishments may be found for alumni of ODGE's MIT Summer Research Program, as well as alumni of the Hugh Hampton Young Fellowship. ODGE also led a process for departments to nominate noteworthy graduate students to the MIT News Office for consideration as the subject of a profile story; 10 such students were selected.

Support for Sharing Best Practices

ODGE supports a monthly Graduate Administrators Roundtable luncheon, which had a wide variety of speakers in 2013–2014:

- Professor Christine Ortiz, dean for graduate education, spoke on graduate program goals and learning assessment plans;
- Tasha Coppett, assistant director of off-campus and graduate housing;
- Representatives from the Working Group on International Student Support led a discussion about the experience of MIT international students and how MIT can support their needs;
- Lucy Walsh, director of finance, MIT Medical;
- Kwadwo Poku, recruitment and alumni manager, Legatum Center for Development and Entrepreneurship;
- Dr. Anne Copeland, founder and executive director of the Interchange Institute, made a presentation titled "Challenges Facing the International Newcomer to MIT"; and
- Mark DiVincenzo, deputy general counsel; Kate McCarthy, senior program manager and victim advocate; Sarah Rankin, Title IX investigator; and Jason McKnight, assistant dean for graduate education, spoke on the obligations of MIT under Title IX and the Campus Sexual Violence Elimination (SaVE) Act.

Theme Two: Competitiveness in Graduate Funding

ODGE has responsibility for administering external, endowed, diversity, and MIT presidential fellowships (the latter in collaboration with the Office of the Provost). Fellowships are attractive because they allow students to concentrate on their research and education, and to select the research areas they are most passionate about. This intellectual freedom and support is critical in recruiting the brightest, most diverse students from around the world. ODGE also participates in reviewing the graduate student cost of living survey and setting graduate stipend guidelines.

Fellowships

ODGE worked closely with department administrators to identify best practices in fellowship administration; these will be disseminated to the departments and used to streamline existing internal processes in the coming academic year. Identifying new fellowship opportunities and improving the dissemination of these and existing fellowship opportunities to students and administrators through a wider array of communication avenues have also been priorities. Eighty-four fellowship opportunities were sent to the graduate community and approximately 10 opportunities were added to the ODGE fellowship website. The manager of graduate fellowships undertook the following activities this year:

- Held a department informational meeting with Biological Engineering;
- Participated in a fellowships panel for the Institute for Medical Engineering and Science, Harvard–MIT Health Sciences and Technology Program;
- Hosted an information session for the new National Science Foundation (NSF) Graduate Research Fellowship Program’s Graduate Research Opportunities Worldwide program in association with the US Agency for International Development (USAID);
- Spoke with international students associated with the MIT Summer Research Program (MSRP);
- Made a presentation to students in the Amgen Undergraduate Research Opportunities Program Scholars program;
- Sat on an orientation panel for incoming graduate students from India; and
- Coordinated and hosted a visit from Michele Lezama, executive director of the National Consortium for Graduate Degrees for Minorities in Science and Engineering (GEM).

Increases were observed in external fellowships promoted and administered by ODGE, including NSF Graduate Research Fellowships, Hertz Fellowships, National Defense Science and Engineering Graduate Fellowships, the MIT-China Scholarship Council (CSC) Fellowship, and the Howard Hughes Medical Institute International Graduate Fellowships. For the first time in ODGE’s records, an MIT student won the Dolores Zohrab Liebmann Fund Fellowship. The Regeneron Prize for Creative Innovation for Graduate Students was identified as a new award opportunity, and nominations were coordinated; MIT graduate student Cody Gilleland from the Department of Electrical Engineering and Computer Science (EECS) was named the first recipient of the award

in 2013. MIT has partnered with the Ellen MacArthur Foundation to take part in the annual Schmidt-MacArthur Fellowship, a graduate fellowship on the circular economy for design, engineering, and business students. (The circular economy refers to an industrial economy that is restorative by intention; aims to rely on renewable energy; minimizes, tracks, and hopefully eliminates the use of toxic chemicals; and eradicates waste through careful design.) An internal competition and nomination process were held that resulted in three MIT graduate students and faculty mentors being awarded this prestigious fellowship.

In FY2014, ODGE administered 746 internal and external graduate fellowships, for a total of \$36.4 million. This was an increase of 25 students and \$800,000 from FY2013.

International

ODGE has increased efforts to promote the endowed fellowship of the Arab Republic of Egypt through advertisements, networking with currently supported fellows, direct contacts with universities in Egypt, and hosting webinars. One webinar with students from the American University in Cairo attracted more than 200 participants. MIT's Egyptian Student Association also collaborated on recruitment opportunities, posting marketing materials on the association's Facebook page that were shared more than 300 times. In 2013–2014, there were seven endowed fellowships of the Arab Republic of Egypt, up from six the previous year. Among external fellowships, the Howard Hughes Medical Institute had six international PhD fellows for FY2014; these fellowships resulted from a faculty review and support process for nominees followed by ODGE nominations. For FY2015, this number will increase to nine, with five new students earning the award (10 were nominated). The manager of graduate fellowships worked closely with CSC to facilitate this joint fellowship and streamline communications and administration; he also took steps to reach out and assist CSC fellows in their transition to MIT. MIT has awarded CSC fellowships to four students for the 2013–2014 year. They include two doctoral degree students from the Department of Nuclear Science and Engineering and two master's degree students, one from Comparative Media Studies and one from the School of Architecture and Planning. The Vietnam Education Foundation provided one fellowship to a doctoral student in the Department of Mechanical Engineering.

Internal

MIT Presidential Fellowship awards were given to 114 fellows, with a total disbursement amount of \$7.3 million. Presidential fellows are selected by the MIT president and provost from a pool of candidates nominated by the School deans, as well as the heads of departments and interdisciplinary programs. The Wellington and Irene Loh Fund Fellowship has been added to ODGE's competitive internal fellowships, which provided \$2.2 million in support to a total of 38 students. Efforts to increase the visibility of the Hugh Hampton Young Memorial Fund internal competitive fellowship continued in FY2014. ODGE has added 12 news stories highlighting former and current fellows since FY2014. ODGE has committed to a total of six Hugh Hampton Young Fellows for the 2014–2015 year.

In FY2014, ODGE provided fellowships support totaling \$2 million to 54 students from 20 departments and programs whose goal was to enhance diversity in all five schools.

External

During FY2014, ODGE processed a total of 487 external competitive fellowships that offered a total amount of \$23 million; there were 17 more external competitive fellowships than in FY2013. The NSF Graduate Research Fellowship saw an increase of tenure fellows from 335 for FY2013 to 360 for FY2014. Hertz Fellowship awardees increased to 25 for FY2014 from 17 in FY2013, and National Defense Science and Engineering Graduate Fellowships increased from 71 in FY2013 to 79 students for FY2014.

Fellowships earned by ODGE nomination include the Dolores Zohrab Liebmann Fund Fellowship, the Intel US PhD Fellowship, the Tokyo Institute of Technology International Research Opportunities Program, an Honorable Mention award for the Regeneron Prize for Creative Innovation (\$10,000) and two awards from the Schmidt-MacArthur Fellowship for the Circular Economy (a newly coordinated agreement with MIT that offers \$22,300 for student and advisor each). In addition, two MIT graduate students were nominated and selected to attend the 2013 Lindau Nobel Laureate Meeting and three MIT graduate students were selected to attend the Singapore National Research Foundation's (NRF) Global Young Scientists Summit.

Cost of Living

Since 2003, the GSC has partnered with ODGE to analyze graduate student living costs. The guiding principle behind the GSC stipend recommendation is not to improve graduate students' financial positions, but rather to maintain existing graduate student standards of living, accounting for expenditures and inflation. We determine expenditures using a cost of living survey conducted in collaboration with the MIT Office of Institutional Research in the Office of the Provost. Aggregate non-housing inflation is determined using regional inflation rates for non-housing expenditures, as given by the US Consumer Price Index (CPI). Housing inflation is estimated using MIT Off-Campus Housing Office and Cambridge Community Development Department (CDD) data on average asking rents in the micro-regions in Cambridge and Somerville where most graduate students reside.

This year, the estimate made based on the CPI and cost of living survey data was that the non-housing expense increase was 1.75% for on-campus students and 1.91% for off-campus students. From CCD and MIT Off-Campus Housing Office data, the housing cost increase was estimated to be 3.5% on average for on-campus students and 8.7% on average for off-campus students. With housing consisting of approximately 53% of graduate student expenditures on average, the total cost increase is 2.68% for on-campus students and 5.46% for off-campus students. The GSC requested a 4.47% increase from the MIT Dean's Group; the actual average increase received was 4%. In addition to the GSC recommendation, the Dean's Group must also take into consideration future funding source availability, equity with faculty, staff, and post-doctoral associate wage increases, and MIT's ability to compete for top talent with peer institutions.

Theme Three: Administration and Policy

This year, ODGE made strides on the strategic priorities that were defined for 2013–2014 with feedback from our collaborators. We examined strategic overlap and synergies with the Division of Student Life as well as the Office of the Dean for Undergraduate Education, both through widely attended meetings with staff and through a small working group. ODGE met once in 2013–2014 with its Faculty Advisory Board, gaining valuable feedback on ongoing initiatives. In January 2014, we sent the Advisory Board and the MIT community an update from the Office of the Dean for Graduate Education and an infographic of our strategic achievements in the 2013 calendar year.

Staffing Changes

Sylvia Hiestand served her first year in the new permanent international student advisor position. Due to her expertise in international student visa and support issues, she has become a tremendous resource for other international student advisors as they deal with complicated visa cases.

A search was carried out in FY2014 to fill the position of assistant dean for graduate education. This position will be filled starting in September 2014 by Ebony Hearn, currently program director of the Diversity Initiative at the Broad Institute. A former MIT undergraduate who began her connection to ODGE during those years, Ebony has worked closely with MIT over the past several years, as Broad summer program students have engaged with MSRP students. She has also participated in many aspects of programs offered through the MIT Office of Engineering Outreach Programs. Ebony received a bachelor of science degree in chemical engineering from MIT in 2001; in 2004, she obtained a master's degree in education in teaching and curriculum from Harvard University.

Monica Orta left the position of assistant director of MSRP and Diversity Initiatives to pursue another professional opportunity at the Media Lab. The new assistant dean will lead the search for her replacement. Cammi Valdez, a recent science PhD from Harvard University, has joined ODGE as the temporary MIT summer research program manager for the summer of 2014.

A position for a senior administrative assistant in graduate admissions was transferred to ODGE from the Office of Admissions as of July 1, 2014. In preparation, a search was carried out in FY2014 that resulted in the hiring of Robert Cummings, previously graduate program assistant in the Department of Brain and Cognitive Sciences (BCS). Robert had been graduate program assistant in BCS since 2011; there, he managed graduate applications using GradApply, provided support to the graduate admissions committees as well as to prospective students, organized events, scheduled students and faculty interviews, approved the weekly undergraduate payroll, and maintained student records and admission databases.

Space Changes

The administrative officer had worked to assess ODGE space needs and priorities in FY2013. This resulted in the renovation of the space used by ODGE Headquarters,

which concluded in July 2013, and of the ODGE satellite offices in Building 35, which concluded in January 2014. There are plans to move the ISO to Building E39 to relieve long-standing space crowding; this is to take place in the fall.

Staff Professional Development

As part of its strategic plan, ODGE continued to focus on the professional development of the staff. We took advantage of professional development programs offered on campus as well as online programs (i.e., webinars) and invited speakers at all-staff meetings to talk on topics related to ODGE business. Topics of talks at all-staff meetings have included the mission and scope of the Office of Digital Learning, given by Sanjay Sarma, director of digital learning and professor of mechanical engineering; diversity and inclusion initiatives that are under the direction of Ed Bertschinger, the new Institute community and equity officer; the implications of the ruling in Fisher v. University of Texas for our work, given by Mark DiVincenzo, deputy general counsel; community service opportunities for MIT graduate students, summarized by Sally Susnowitz, director of the MIT Public Service Center; and a talk on, and laboratory tour of, the work of professor Seth Teller's research group on humanoid robots.

The ODGE management team and Sara Regan, founder of Common Focus Consulting, worked together to organize a half-day "Strengths Finder Workshop" retreat for all ODGE staff on February 28, 2014, at MIT's Endicott House. The stated goals of the retreat were to:

- Recognize and share top five strengths of each ODGE staff member;
- Reflect on the way how strengths can be utilized to improve the way ODGE team works together;
- Discuss how strengths of staff members can be utilized to overcome the challenges ODGE and some subgroups (ISO and Headquarters) are facing; and
- Provide opportunities for the staff to socialize and get to know each other better.

The agenda included a welcome and remarks from the dean; a "stand up if you always..." activity; the introduction of the "strengths finder" model; a writing activity; the sharing of strengths profiles in small groups; the introduction of the concept of four domains of leadership; a presentation of the ODGE team profile; partnering discussions; and a wrap-up of the day. Sara came back to an all-staff meeting in April for a follow-up.

Conferences attended by staff members this year included a program called "Massachusetts Steps Up: Key Sexual and Domestic Violence Issues for College Administrators" at Brandeis University (September 2013), the SUNAPSIS Users Conference (October 2013), the National Black Doctoral Network Conference on Scholarship Service and Community (October 2013), the Mental Health Conference at Boston College for Higher Education Professionals (November 2013), the Student Affairs Administrators in Higher Education (NASPA) conference, "Trends and Issues in Graduate Student Mental Health" (November 2013), the Council of Graduate Schools Annual Conference (December 2013) and the Council for the Advancement and Support of Education Conference (January 2014). Staff also attended the Ivy Plus Conference for International Offices, the American College Personnel Association Conference,

the Conference on Supporting Students with Dietary Needs in a Dynamic Higher Ed Environment, and the American College Personnel Administrators–College Student Educators International Annual Convention, which all took place in March 2014. Staff members also went to the National NAFSA Conference (May 2014), to the Bridgewater State University Diversity Conference, and to the so-called Drive-In Conferences.

Additional professional development for various individual staff members included a number of workshops, including Communicating with Influence; the NAFSA (Association of International Educators) Region XI Spring Immigration Workshop; Situational Leadership; Performance Development – Manager’s Role; and Eastern Association of College, Addressing Sexual Violence, Dating Abuse, and Stalking on Campus: A Symposium for Middlesex Country Colleges and Universities (a symposium at Boston College in February 2014); the Office of Undergraduate Advising and Academic Programming Professional Development Series, College Mental Health and Student Hospitalizations, and the University Business Officers (EACUBO) Annual Workshop. Several staff members attended a suicide prevention training (Question, Persuade, and Refer) sponsored by the Division of Student Life and Community Wellness in September 2013, as well as Managing Your Development and Career at MIT, sponsored by Human Resources at MIT. Web-based trainings included sessions on On-line Registration; Exploring Title IX Implications on the Graduate and Professional Student Experience; Beyond the ADA: Inclusive Policy and Practice for Students with Disabilities in Higher Education; the NSF’s Graduate Research Fellowship Program application; a webinar on the NSF’s Graduate Research Opportunities Worldwide program, in association with USAID; a GEM training webinar for Verification Day; a webinar on CGS’s new GradSense website; and the Principal Investigators Association’s webinar on the NSF’s Graduate Research Fellowship Program.

Two staff members were trained as facilitators and in that capacity attended the MIT–Imperial Global Fellows program in June 2014 in London, UK. One staff member was a participant in the Associates Program of The Partnership, Inc., during calendar year 2013. The program included monthly sessions on topics such as personal leadership skills, discovering your personal brand, best practices for being mentored, understanding organizational culture, and negotiating and resolving conflict. An ISO staff member practiced public speaking skills through presentations on job searching for international students, work authorizations for international students, and J-1 student visas. An ODGE Headquarters staff member gained grant-writing experience through preparing a collaborative grant proposal with Hampton University. Another ISO staff member attended notary public training and was certified.

Finally, as part of ongoing professional development, the dean and staff members serve throughout the year on the following committees:

- Advisory Board to the Office of Multicultural Programs in Division of Student Life
- Commencement Committee (CC)
- Committee on Discipline
- Committee on Graduate Programs

- Committee on Race and Diversity
- Committee on Student Life
- Department of Athletics, Physical Education & Recreation Advisory Board
- Faculty Advisory Committee for the MIT Office of Minority Education
- Graduate Academic Performance Group
- Graduate Student Housing Working Group (Ad Hoc) Graduate Student Housing Working Group
- International Advisory Committee
- Risk Management Council
- Working Group on International Student Support (WGISS)
- MIT Task Force on the Future of Education
- Student and Affiliates Health Advisory Committee
- Student Systems Steering Committee
- Enrollment Management Group
- Title IX Working Group

Rewards and Recognition

This was the second year of the ODGE rewards and recognition program (Spot Awards). A total of 50 awards were given. The nominator shares the intent of recognition with the nominee's manager and presents the award. Spot Award recipients are recognized at monthly all staff meetings. What is new this year is that every quarter we draw a name from the pool of nominators and give a Spot Award to the lucky nominator. The goal is to encourage staff members to appreciate excellent work and thoughtful acts of others by nominating them for the ODGE Spot Award.

This year Betsy Granese, administrative assistant, and Imani Ivery, financial and event assistant, were awarded an Infinite Mile Award in recognition of their commitment and support for the Graduate Student Council as a collaborative team. Jason McKnight, assistant dean for graduate education, also received an Infinite Mile Award. Jason's numerous contributions to ODGE included the design of the Graduate Student Support Database, collecting data to assess the support needs of graduate students, facilitating discussions and planning for staff professional development, serving on committees, and serving as speaker at retreats and meetings.

Government Compliance

The ISO is responsible for, and ensures the Institute's compliance with, the regulations of the US Department of Homeland Security (DHS) and the US Department of State (DOS) governing MIT students who are foreign nationals.

In October 2013, MIT submitted for redesignation of the Institute's J-1 Student Program with the Academic and Government Programs Division of the Department of State. This

required a lengthy data gathering process that is mandated by DOS every two to three years, involving data on the approximately 600 MIT students, dependents, and alumni that are under MIT's legal sponsorship (J-1 or J-2 status).

In December 2013, the Student Exchange Visitor Program (SEVP) in Washington, DC, conducted an out-of-cycle review of MIT's Master of Finance Program. ISO responded within three weeks with documentation of course catalog information, detailed descriptions of the program, and statements of academic viability. In March 2014, ISO responded to a request from SEVP to complete government form information for MIT's School Accreditation and Recognition Project #1407-03, which was completed within 10 days.

There continued to be a steady increase in the number of administrative review security checks for MIT student visa applicants in "sensitive fields" throughout academic year 2014. There had been more than 60 in AY2013 and nearly 80 in AY2014. DHS and DOS remain extremely concerned about technology transfer as a matter of national security. ISO staff was able to provide advising support to students and faculty as they progressed through these sensitive and often lengthy procedures.

Developing Digital Systems

SUNAPSIS

ISO's database of record, SUNAPSIS, continues to function relatively smoothly as it interfaces with the Student and Exchange Visitor Information System (a DOS database) and MIT's IT systems. SUNAPSIS 3.0 was deployed in October 2013, fundamentally changing ISO business practices and making ISO more efficient; specifically, SUNAPSIS has made MIT's international admissions processing completely digital.

ISO successfully completed the student file digitation process, including the archived paper files of international alumni that had been stored for three years after graduation (as is required by DHS). More than 20,000 international student e-files have been created to date.

Improving Graduate Admissions

During the 2013–2014 academic year, the Committee on Graduate Admissions, chaired by professor Leslie Kolodziejski, completed the final year of its three-year task of providing oversight for the transition to the online application platform GradApply. EECS professors Frans Kaashoek and Robert Morris, and research scientist Dorothy Curtis of the Computer Science and Artificial Intelligence Laboratory, the team who developed GradApply, have transitioned 34 programs to using GradApply. This represents every MIT graduate program except the Sloan School of Management's Supply Chain Strategy and Management Program, and the Systems Design and Management master's degree program that is jointly offered by the School of Engineering and the Sloan School, with a total of 15,692 applications.

The online platform continues to prove useful in collecting and reviewing graduate applications. Most departments have attained some stability in adapting to GradApply,

and the developers continue to accommodate requests for changes to the application. Connectivity issues with the central admissions database, Grade20, have seen significant improvements over the past year. New connections between Grade20 and GradApply now allow departments to view official test scores [Graduate Record Examination (GRE) and Test of English as a Foreign Language (TOEFL)] and MIT identification numbers directly on each application. Future GradApply goals will continue to improve documentation, provide greater administrative support to users, enhance visual aesthetics, and improve the user interface.

The graduate admissions database, Grade20, has also been improved. Departments can now search for GRE and TOEFL test scores in a central location, increasing efficiency and removing the need for paper score reports. Goals for the next academic year include improving connectivity by reducing the amount of digital errors that occur during data transfer between websites. Additional efforts will review how departments download and integrate data into their own internal databases, with the hope of providing a central source for downloading application data.

The Committee on Graduate Admissions will be replaced by a new committee, the Graduate Admissions Team, that will provide oversight for all graduate admissions components. The Graduate Admissions Team will operate under ODGE and incorporate members from several departments affiliated with admissions.

Outsourcing of the Graduate Student Dental Plan

This past year, ODGE outsourced the administration of the graduate student dental plan to Crosby Benefit Systems (Crosby) to increase effectiveness and efficiency. Crosby now handles enrollment, record maintenance, billing, the transfer of collected fees to Delta Dental, and customer service pertaining to enrollment, billing, and updates (such as address changes). Delta Dental issues subscriber ID cards and provides customer service on coverage-related questions. MIT remains the official administrator of the Delta Dental PPO Value plan and manages direct communication with graduate students at MIT regarding the plan policies and procedures. Overall, the transition process went extremely well. It was beneficial to have the administration of the plan handled by Crosby staff with specialized training, expertise, and resources in this area and who were able to ensure compliance with recent laws and regulations. Currently, there are 900 subscribers to the Delta Dental PPO Value Plan, an increase of 48% from last year. This is primarily because of a reminder, prompted by an interim enrollment report sent to us by Crosby, that was sent to graduate students in September 2013. Before outsourcing, there were inaccuracies in the enrollment data prepared by Delta Dental and inconsistencies between those data and the roster of eligible MIT graduate students that took a significant amount of ODGE staff time to reconcile. This year, the roster prepared by Crosby was accurate. ODGE received inquiries from fewer than 20 students, and they were generally trivial, a significant decrease in customer service demand relative to the past year. Crosby has submitted to ODGE a detailed assessment of the program as it stands and has planned a number of improvements for next year, including improving initial pre-enrollment communications, increasing the clarity of information on the credit card payment option, and resolving confusion over entering Social Security numbers—all relatively minor issues.

Graduate Student Council Advocacy for Graduate Students

GSC advocacy this year primarily consisted of two kinds: on-campus advocacy, working closely with the MIT administration, and outward advocacy, focused on bringing pertinent graduate student issues to state and national attention. Primary on-campus advocacy topics included long-term planning for graduate student housing, a graduate student cost-of-living analysis and stipend increase recommendation, transportation options for graduate students, increased support for MIT students living at the Woods Hole Oceanographic Institute, and the Chancellor Search Advisory Cabinet. State and national advocacy focused on graduate student debt and on visas and paths toward citizenship for international advanced degree holders looking to start companies in the US.

Graduate Housing

With off-campus rents rising significantly in recent years compared with the average graduate stipend increase (Figure 1), and with significant demand for on-campus housing, the GSC worked closely with the administration to identify graduate housing needs and make recommendations on how those needs could best be addressed.

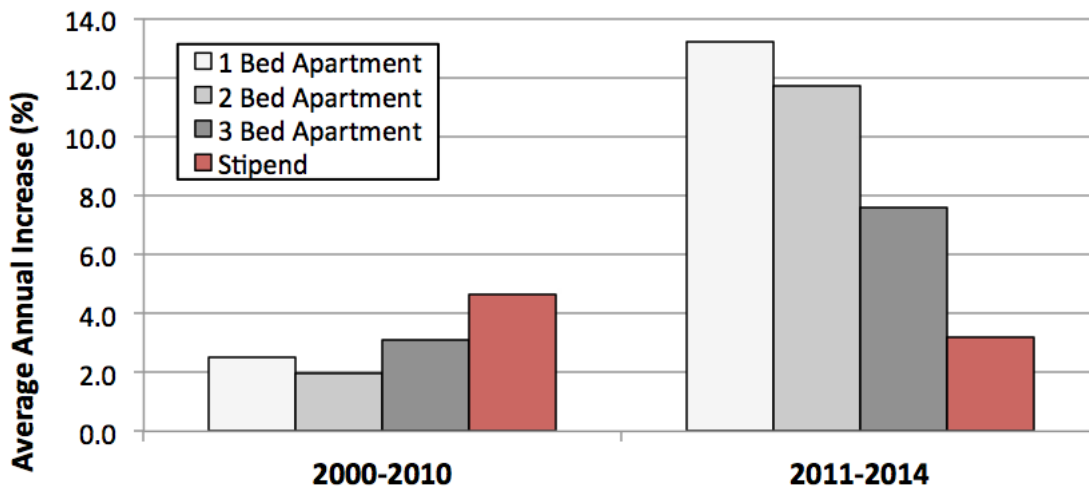


Figure 1. Stipend vs. rent increase of one-, two-, and three-bedroom apartments from 2000–2001 and 2011–2014

Much of the work was conducted in connection with the Graduate Housing Task Force, which consisted of student, faculty, administrative, and local area government representatives. The primary recommendation from the task force was that MIT should to add 500 to 600 additional on-campus beds to the graduate housing stock to meet current unmet demand. It was also recommended that “swing space” housing be provided to meet housing needs during the renovation of existing graduate and undergraduate dormitories and that the swing space should then become permanent graduate dormitories once renovations have been completed. A final report by the task force also noted a need to focus on the special needs of international students and of graduate students with families. In a closely related effort, the GSC also served on the East Campus Steering Committee, which was tasked with developing a recommendation for the long-term redevelopment of East Campus. The GSC worked closely with residents of the East Campus community and East Campus Steering Committee

members to make sure that East Campus housing concerns were understood and taken into account in the long-term planning process. Finally, the GSC wrote an article in the MIT Faculty Newsletter to provide a student perspective of cost of living and housing challenges and to make a case for the recommendation for 500 to 600 additional graduate housing units made in the Graduate Housing Task Force's report.

Transportation

Transportation is related to housing, and the GSC was active in addressing transportation challenges faced by students who do not live near regular transportation options. In fall 2013, MIT Transportation and Parking instituted a pilot shuttle program for Somerville in response advocacy by the GSC Transportation Subcommittee. The subcommittee's research had found that a significant number of MIT graduate students living in Somerville do not have access to safe transportation options at night. The pilot shuttle ran from September 2013 through January 2014, during which time usage statistics were gathered to gauge the effectiveness and impact of the new shuttle. The data obtained revealed interesting results, part of which appear in Figure 2. The existing lines, Cambridge West and Cambridge East (routes in blue and red, respectively, in Figure 2), had the most overall ridership; however, most riders took the shuttles to locations that were relatively close and accessible to campus. In contrast, although ridership on the new Somerville line was lower in absolute terms, the line appeared to be more effective in that a greater number of passengers took the shuttle to stops that were farther away from campus and less accessible by other transportation options. A full report on the Somerville shuttle line was delivered to top MIT administration.

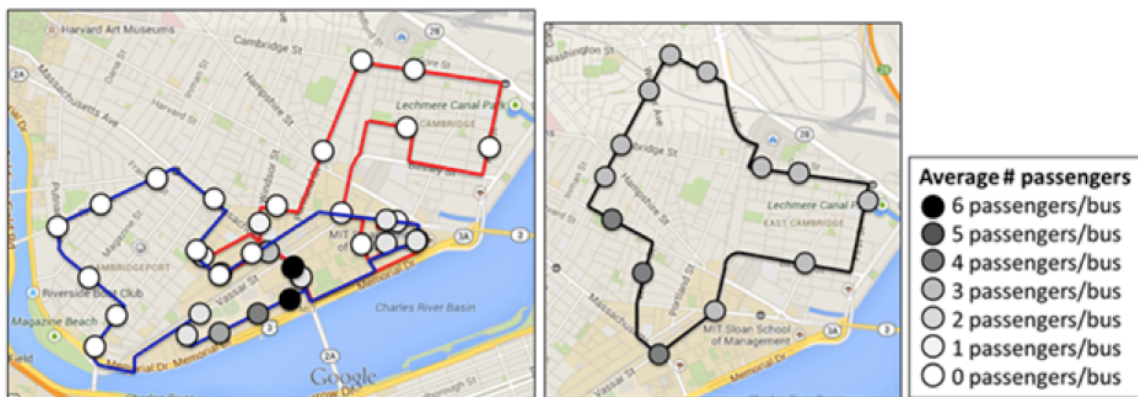


Figure 2. Comparison of ridership between existing shuttle lines (Cambridge West and East) and the pilot Somerville Safe Ride shuttle.

In addition to the Somerville shuttle, the GSC also continued to support a shuttle to Costco.

Chancellor Search Advisory Cabinet

As chancellor Eric Grimson moved to a new role as chancellor for academic advancement, the GSC played a significant role in advising President Reif during MIT's search for a new chancellor. To support this effort, a Chancellor Search Advisory Cabinet (CSAC), comprising four graduate students and four undergraduate students, was charged to advise President Reif on qualities and decision factors to consider in selecting the next chancellor. The CSAC conducted an Institute-wide survey, interviewed

students, faculty, and staff, and wrote a report for President Reif that described key qualities and priorities to look for in a chancellor. CSAC met a number of times with President Reif to discuss its findings and recommendations. After the selection of professor Cynthia Barnhart as chancellor, CSAC was asked to stay on as the renamed Chancellor Transition Advisory Cabinet to assist Chancellor Barnhart in understanding student needs during the transition.

Graduate Student Council Resourcing and Information

Crucial to this year's vision of embracing the special innovative and entrepreneurial culture that defines MIT, and of enabling the GSC to empower students to take ownership of the student life experience, the GSC made significant strides in providing additional resource support and tools to student groups and the student body at large. Most notable were the new programs and resources that were established by revising the GSC budget in response to a record Fall Career Fair budget surplus and the expansion of GSC marketing capabilities into social media and targeted email advertising.

Career Fair Surplus and Budget Rescope

Revenue from the 2013 Fall Career Fair was originally projected to be \$240,000, but ended up at about \$420,000 (47% higher than in 2012). As a result, the GSC budget underwent a substantial rescoping and revision. The surplus was allocated according to these principles:

- The surplus is owned by the MIT graduate student body,
- Ideas should be solicited from the entire student body,
- The decision making and allocation processes should be transparent, and
- The focus should be on creating the maximum impact for the greatest number of students.

In general, considerations were made of how best to expand underfunded programs and to explore new funding opportunities, with an emphasis on ideas that would have lasting impact. Funding ideas were submitted to the GSC through the General Council, email submissions, MIT administration offices (ODGE, Division for Student Life), and Facebook. The officers reviewed the ideas submitted with the Executive Committee and the Executive Committee approved the initial rescoped budget. The ideas were evaluated based on the criteria of leadership bandwidth to carry out an idea, timeframe feasibility on whether the activity was something that could happen during the current physical year, and whether the idea was something for which a longer-term fund could be established (as was the case, e.g., for the backup childcare program fund passed in 2012–2013). A comprehensive report of all ideas submitted and the decision making process was delivered to the General Council. Final allocation decisions were made by the General Council in accordance with GSC bylaws. All ideas that were not funded were passed on to the 2014–2015 Executive Committee for consideration for funding in the upcoming year.

Out of the rescoped and revised budget, the Funding Board's allotment was increased by \$40,000 and a number of funds were established, including a service fund and a sustainability fund. The service fund was created in collaboration with the MIT

Public Service Center with the goal of enabling graduate students to make service and outreach an integral part of the graduate experience. The fund provided small grants to student organizations and individual students to carry out local community service and outreach projects. Initial projects that were funded include funding for the Black Graduate Student Association to develop science, technology, engineering, and mathematics (STEM) teaching kits and teaching tools to teach math and science at underprivileged Boston public schools, funding for the Sidney Pacific graduate community to organize cooking events at the Cambridge and Somerville Program for Alcohol and Drug Rehabilitation shelter, and funding for the MIT Energy Leaders of Tomorrow Program to host an educational and outreach workshop in collaboration with Teach for America to educate high school students on energy-related challenges.

Social Media Expansion

Under the leadership of the GSC secretary, GSC launched an extensive social media campaign that included creating a GCS Facebook page and expanding the use of the GSC Twitter account. By the end of the academic year, Facebook membership topped 1,000 followers and all major GSC events were on Twitter. To help with marketing strategy, the Anno (a weekly announcement e-mail) was overhauled and moved to an email content management platform that provides data analytics on email campaign effectiveness. From this we learned that the Anno has an average readership of 40%, which is twice the industry average of 20%. The GSC also published three editions of *The Graduate*: one on orientation, one on reentry, and one on health and wellness.

Other Resource Support

The GSC worked with campus dining services to improve the Muddy Charles Pub. The Muddy Mondays series, a sponsored series of cultural activities produced by cultural groups, was expanded. The Muddy Charles matches group contributions to an event in a five-to-one ratio. The pub's Board of Governors also started work on numerous capital improvements. It is currently in the midst of a large renovation project to redecorate the pub (including refinishing all the tables) and to redo the flooring. Muddy Charles staff also volunteered for a fundraiser in honor of officer Sean Collier and raised more than \$3,000 to sponsor a recruit at the Lowell Police Academy in memory of Officer Collier. Other areas of support for students and student groups include a membership-sharing program so that students can shop at Costco, development of a new online platform to manage the Funding Board and fund allocations, and a complete renovation of the GSC office space, creating a place where all members of the GSC can gather and work.

Graduate Student Council Internal Structure and Operations

The overall internal structure and operations of the GSC remained largely unchanged from 2013–2014. In accordance with its constitution and bylaws, the GSC is led by a team of officers, consisting of a president, vice president, secretary, and treasurer. The GSC has an Executive Committee that oversees the bulk of GSC operations through a committee structure. Standing committees of the GSC include the Activities Committee, Academics, Research, and Careers Committee, Housing and Community Affairs Committee, and the Orientation Committee. In addition, numerous subcommittees carry out specific functions within the committees. These include Grad Gala, Ski Trip, Arts,

Coffee Hour, Grad Rat, Housing, Transportation, Families, Off-Campus, Sustainability, and Legislative Action subcommittees. In general, we estimate approximately 200 students volunteered or took on leadership roles in the past year.

The GSC also focused on working closely with the MIT administration on a number of key committees. Most notable were the Graduate Housing Working Group, East Campus Steering Committee, Presidential Advisory Committee, and Chancellor Search Advisory Committee. The GSC also sought out, vetted, and recommended more than 30 individuals to serve on approximately 30 other Institute and faculty committees over the course of the year.

Legislative Outreach

The GSC Legislative Action Subcommittee was very active this year, drafting and passing a new legislative platform for the GSC in the General Council and reaching out on significant state and national issues that affect graduate students. The new legislative action platform addressed students' rights and diversity, higher education funding, research and development funding, international student issues, and promoting science. The GSC took part in two trips to Washington, DC, as part of the National Association of Graduate and Professional Students' Legislative Action Days program. During these trips, the GSC advocated for federal policy that would address exorbitant graduate student debt levels and for immigration reform to address the lack of work and citizenship pathways for advanced-degree graduates who want to start companies in the US on graduation. Outreach activities in Washington, DC, included visits with the offices of US Senators and members of the House of Representatives, including senators Warren (D-MA), Markey (D-MA), Kirk (R-IL), Durbin (D-IL), Klobuchar (D-MN), Franken (D-MN), Bennet (D-Colorado), M. Udall (D-CO), T. Udall (D-NM), and Heinrich (D-NM), and representatives Capuano (D-MA7), Clark (D-MA5), Tsongas (D-MA3), and Tipton (R-CO3). The GSC also visited staff of the House Judiciary Committee to discuss progress in immigration policy, and, for the first time, the GSC engaged with MIT's Washington, DC, office, and laid the groundwork for collaboration on future visits. Perhaps most significant, the GSC Legislative Action Subcommittee published an op-ed article in the March 21, 2014, issue of *Science*, called "U.S. Policy Impedes Innovators."

Theme Four: Diversity and Climate

MIT continually strives to advance a culture of diversity and inclusion, and to ensure that MIT's graduate student population reflects the diverse talent of our nation. MIT's students come from a wide variety of backgrounds and countries. In academic year 2014, 3,244 international students (both graduate and undergraduate, as the ISO serves both) were enrolled from 115 countries, reflecting an increase of 77 from AY2013. More than 700 spouses and children accompanied our international students, with nearly all entering the US under MIT's legal sponsorship. Through the ISO, we implement programming to support a positive climate for MIT's international students.

ODGE serves as a catalyst for attracting a more diverse graduate student body from within the US to all of MIT's graduate academic programs, and provides students with various forms of support so that they are academically successful. ODGE's recruitment and retention efforts and initiatives focus on underrepresented minority students (e.g.,

African American, Native American, and Hispanic students). ODGE also has programs to support women, first-generation college students, and students from small colleges.

Underrepresented Minority Efforts

We in ODGE are guided by the 2004 faculty resolution that called for MIT to increase the percentage of underrepresented minority graduate students by a factor of three within a decade. Since 2004, we have made a number of strides toward reaching the goal in that resolution. The number of applications to graduate school from underrepresented minority students has increased steadily, totaling 1,218 applications in 2013, an increase of 113%. This increase in applications has led to a corresponding rise in the total number of underrepresented minority graduate students who are enrolled in MIT's graduate programs. In 2013, 263 from underrepresented minority groups were admitted across the Institute and 174 chose to attend MIT (a 66% yield). The number of students enrolling has increased by 37% since 2004. To support MIT's departments in their efforts to recruit the best candidates, in FY2014 ODGE provided fellowships support totaling \$2 million to 54 students from 20 departments and programs whose goal was to enhance diversity in all five schools.

ODGE's continuing strategy consists of two parts: partnering with academic departments to improve the quality of recruiting and mentoring, and developing programs operated by ODGE to support diversity at MIT. Continuing on this course allows us to build on our work and evaluate its success.

A key mechanism for recruiting applicants from underserved and underrepresented groups and for engaging departments and programs is the MIT Summer Research Program (details below). ODGE plays a critical role in organizing MIT's presence at national recruiting conferences such as the Annual Biomedical Research Conference for Minority Students, the National Society of Black Engineers, the Society for the Advancement of Chicanos and Native Americans in Science, the American Indian Science and Engineering Society, the Emerging Researchers National Conference in Science, Technology, Engineering and Mathematics, and the Society of Hispanic Professional Engineers. In preparation for these conferences, ODGE trains students and staff to best represent the Institute as a whole, as well as specific academic departments. A proven mechanism for retention is the Power Lunch series, a monthly series of luncheon seminars designed to promote the academic, professional, and personal development of graduate students from underrepresented groups.

CONVERGE

CONVERGE aims to increase the presence of underrepresented and underserved students in MIT's graduate programs. This graduate preview weekend seeks not only to encourage the highest caliber students to apply to MIT, but also to shift the perception, which some potential students have, of MIT as a cold and unwelcoming place in which they cannot flourish. Since 2004, CONVERGE has brought nearly 200 students to campus.

In 2012, participants for CONVERGE were chosen via a nomination process; in 2013, the formal application process was reopened. We received 64 applications and admitted

16 participants whose interests ranged across the Schools of Architecture and Planning, Engineering, and Science. As in previous years, CONVERGE 2013 comprised sessions that would aid students in creating a competitive application to MIT; give them a greater understanding of the breadth of research that is conducted at the Institute; and provide a sense of what the MIT community is truly like. To provide individual feedback, each participant was matched with an MIT community member (e.g., staff member, graduate student, or postdoctoral associate) who offered tailored insight into that student's statement of purpose (SOP). Participants indicated that the SOP feedback session was one of the most valuable components of the weekend.

Graduate administrators across the Institute were invaluable partners in choosing participants, as well as in designing department visits that would best meet the needs of each student. In particular, the Department of Aeronautics and Astronautics was highly committed to leveraging CONVERGE as a pipeline for its graduate program. Of the three CONVERGE participants who expressed an interest in the Aeronautics and Astronautics Department, one decided to apply to the department, was offered admission, and will enroll in fall 2014. Overall, 12 participants were eligible to apply to MIT and 11 indicated that they would, with the 14th participant choosing to take a year off before applying to graduate school. Two students were admitted to MIT—one in the Biology Department and one in Aeronautics and Astronautics, as noted above. The remaining four students were juniors; two of them are participating in MIT summer programs, namely the MIT Summer Research Program and the Lincoln Laboratories Summer Research Program.

MIT Summer Research Program

The MIT Summer Research Program (MSRP) continues to be MIT's largest summer research program. It also serves as a tool for recruiting underrepresented minority students to MIT, affording the hosting research laboratories the benefit of increased diversity during the summer, while increasing awareness of, and access to, graduate education for participating students and serving as a national pipeline for talent.

MSRP's mission is to promote the value of graduate education, to improve the research enterprise through increased diversity, and to prepare and recruit the best and brightest for graduate education at MIT. Since its inception, MSRP has seen more than 90% of program participants go on to pursue advanced degrees at institutions of higher learning. For academic year 2014–2015, MIT departments admitted eight former MSRP interns; five accepted the offer and will begin their program in September.

In 2014, 35 interns conducted research in 10 different departments. Eight new laboratories hosted MSRP students, joining the more than 270 faculty members who have been key to the program's success since it began. In addition to serving as research mentors, these professors participate in intern selection, match interns with projects, and counsel students on their academic opportunities.

MSRP is committed to fortifying and growing its collaborations with academic departments throughout the Institute. MSRP continues to work closely with the Mathematics Department, which, despite a loss in funding, is committed to securing

research spots for two interns each year, with a faculty mentor and direct supervisor for each. Additionally, MSRP is in the second year of its partnership with the Department of Mechanical Engineering. The Department of Mechanical Engineering will financially support up to four MSRP interns. If more than four students are admitted to MSRP to work in Mechanical Engineering, MSRP will financially support these additional students. Mechanical Engineering will host two or three lunches for any interns interested in the department in 2014. The lunches will provide a platform to discuss the specifics of applying to and succeeding in Mechanical Engineering at MIT. In 2013, these sessions were greatly advantageous to interns—they spent additional time with the department’s faculty and graduate students and were able to garner critical insights and feedback through these interactions.

External partnerships are equally important as they serve as a pipeline to our programs. MSRP’s relationship with the Synthetic Biology Engineering Research Center at the University of California, Berkeley, resulted in ODGE’s participation at the workshop, *Is a PhD for Me?*, hosted at Agnes Scott College. This session provided underrepresented students with the opportunity to learn about the reality and attainability of graduate school.

Grad Catalyst

The Grad Catalyst, formerly the Graduate School Clinic, has an interactive format that allows session participants to engage with MIT graduate students. Session topics include tools for applying to graduate school, tips on obtaining funding, advice on selecting a school and advisor, and much other key information. In addition to helping students individually, the Grad Catalyst develops and strengthens relationships with institutions that serve members of minority groups, thereby enlarging MIT’s underrepresented minority applicant pool.

During the past academic year, ODGE conducted a total of 12 Grad Catalyst sessions for the following institutions:

- University of Miami
- Florida International University
- University of Puerto Rico, Rio Piedras
- Louisiana State University
- Hampton University
- Tufts University
- Howard University
- University of North Carolina, Charlotte
- Agnes Scott College
- Suffolk University
- MIT

At MIT, sessions were conducted for undergraduates in the Chocolate City residence as well as for participants of the Interphase program.

To expand the program's reach, we hosted the first Virtual Grad Catalyst session in March 2014. Harvey Mudd College (HMC) in Claremont, California, served as the primary hosting site. HMC's Office of Institutional Diversity invited 35 students to watch the presentation together in a classroom. Additionally, invitations to participate were publicized widely, with a focus on California schools. MIT's Academic Media Production Services (AMPS) managed the webcasting services. AMPS developed a site for students to view the webcast and they also handled the controls for the presentation recording and slides. The site consisted of a video feed and a Twitter feed that featured any questions posed during the session. During the one-hour session, the graduate student presenters answered the questions that came in via Twitter and email. After the session, students and administrators stayed online and took questions for an additional hour.

In addition to the 35 students who participated together from HMC, the virtual session received 85 unique visits, totaling 120 participants. These users spanned several countries around the world, including the US, the UK, Colombia, and Ireland.

Overall, the outcomes of the Virtual Grad Catalyst sessions were positive. The webcast was viewed by people around the world and received positive reviews from the Harvey Mudd College students. Moving forward, there are plans to organize many more virtual sessions, using the lessons learned from the first session as a guide.

We continue to work on the online tool that will accompany the Virtual Grad Catalyst sessions. This tool will give us greater information about the types of students who use the service, and will provide users with the ability to keep track of their goals and progress. The complexity of the online resource has slowed its development. However, we aim to launch the online tool during the fall 2014 recruitment season.

The Grad Catalyst is an effective method for community building among the underrepresented minority graduate students at MIT. Each year, the Graduate Community Fellows who coordinate the program lead a training that prepares graduate students to host Grad Catalyst sessions. The Grad Catalyst follows an apprentice model in which trained graduate students help novice presenters learn how to host a session. This structure helps us develop our materials through the advantage of various student perspectives.

Getting Ready for Advanced Degrees Laboratory

The National Consortium for Graduate Degrees for Minorities in Engineering and Science, Inc. (GEM) hosts the Getting Ready for Advanced Degrees (GRAD) Lab, a one-day event that provides students who are members of underrepresented minorities with detailed information about the benefits of the research enterprise and about how to apply to graduate programs and fellowships. In October 2013, ODGE supported MIT's participation in GRAD Lab. Approximately 100 student participants heard from a range of speakers, including current graduate students, faculty, senior industry managers,

and senior academic administrators. Sessions included presentations on topics that ranged from being successful in graduate school to understanding the fellowship application process.

Ivy Plus Symposium: Strength Through Diversity

The Ivy Plus Symposium began at the University of Pennsylvania in October 2012. A national symposium was seen as an effective and efficient way to meet a significant number of talented students and to give these students the opportunity to interact with representatives from the nation's top institutions, all at one event. The second Ivy Plus Symposium was hosted by MIT and Harvard in March 2014. At the second event, the targeted disciplines were expanded beyond STEM to include the humanities and social sciences. This wider range allowed the possibility of recruitment to additional departments at MIT and broadened the scope of program directors and students who participated. The symposium serves as a platform for participating institutions to foster and nurture relationships with academic programs that can provide access to many talented students, instead of having to recruit candidates one at a time.

The 2014 Ivy Plus Symposium was attended by 129 students from the following schools:

- Brown University
- Columbia University
- Cornell University
- Dartmouth College
- Harvard University
- MIT
- New York University
- Princeton University
- Stanford University
- University of Chicago
- University of Pennsylvania
- Yale University

Forty-eight faculty members from these institutions united in Cambridge to present their work to participants. Other highlights of the symposium included alumni, career, and graduate student panels; talks by the graduate school deans of Harvard and MIT; and addresses by President Faust of Harvard and President Reif of MIT. Additionally, students participated in a poster presentation where their work was judged and they were given feedback by faculty, administrators, and other students from the participating schools.

Committed to Caring

In spring 2014, ODGE created and launched the Committed to Caring campaign. We invited graduate students to nominate MIT faculty members who should be recognized

as being “committed to caring.” The overall purposes for this campaign are to recognize and celebrate examples of positive character in our community, and to reinforce the kind of behavior that can serve as a gold standard for everyone. A group of six graduate students who have worked with ODGE as Graduate Community Fellows, or with diversity programming in general, were invited to serve on the selection committee that made recommendations to ODGE.

In the few weeks students had to submit their nominations, we received more than 80 nominations for 41 different faculty members. Such a positive response has led to the expansion of the campaign. Moving forward, ODGE will honor two faculty members each month, throughout the upcoming year, resulting in 24 honorees total. Honorees will be featured on the ODGE website as well as on posters that highlight their caring actions. The first two faculty members, professor John Belcher and professor Kay Tye, were recognized and featured in June.

International Climate Efforts

International Orientation

The ISO is solely responsible for international freshman orientation (IFO) activities. Although only 10% of the undergraduates at MIT in academic year 2014 were international, they often require ISO advice and services at a disproportionate rate compared with international graduate students. In academic year 2013, international freshman orientation activities were enhanced to ensure extra support for incoming international undergraduate students. Critical information was conveyed in the orientation sessions on banking, loans, financial aid, and immigration, and in the presentation from the Medical Center. The student coordinators and the mentors made presentations on cultural adjustment and life at MIT and gave the freshmen the opportunity to connect with and learn from the upperclassmen.

Jane Dunphy, director of English as a Second Language in the Department of Global Studies and Languages at MIT, offered a presentation on academic integrity. Sylvia Hiestand, from ISO, augmented the “USA 101” session with a riveting discussion of cultural shock and the stages of adjustment to a new cultural environment. Repeating last year’s success, the student coordinators and the mentors held a scavenger hunt and a dinner-and-movie night, among many other social, bonding, and welcoming activities. These activities offer a refreshing complement to the more serious issues addressed in IFO, such as immigration regulations, academic integrity, and sexual harassment.

Student mentors also organized airport pickups starting the week before IFO and were present to meet every international freshman who expressed a need to be met. Overall, international freshman orientation offered international students a very warm welcome and a joyous and informative introduction to campus.

New Walk-in Service

ISO established a permanent appointment walk-in service for international students in spring 2014. The service has been very popular with students, supporting the goal of more immediate access to ISO immigration and advising services. The program also

provided the ISO receptionist with a resource to offer students when ISO advisors' appointment schedules are fully booked during the busiest periods of the year.

International Teas

In academic year 2014, ISO sponsored what has now become an annual Halloween Tea in October 2013. More than 200 students and staff attended, many in full costume. Such events were originally funded by seed money from international alumnus Roger Jeanty '72. ISO must now find new revenue sources to support more of these entertaining cultural events.

Kailath International Student Fund

The Kailath International Student Fund, established in 2002 by a generous endowment from professor George Verghese and Dr. Ann Kailath, provides support for special ISO programming that would not otherwise be possible. In AY2014, Kailath funds have supported, among many other events, a three-week-long ISO Haven that offered treats and hot cider for students to enjoy during examinations and end-of-term academic work, a Valentine's Day celebration, and a festive graduation day Open House in the ISO for graduating international students and their family members.

Working Group on International Student Support

This past year, ODGE convened and chaired an Institute-wide Working Group on International Student Support that focused on understanding the climate for international students and their evolving needs, finding the resources that are available and their current organizational structure, and developing best practices for creating a welcoming climate and ensuring cultural sensitivity. MIT's international students contribute in an astonishing number of ways to the innovation, culture, and fabric of MIT—for example, by serving as officers in a residence or the student government, designing projects to improve the quality of life in communities through public service activities connected to their thesis research, and by participating in the more than 60 active student-led international and cultural groups that organize cultural and social events, professional development, and entrepreneurship workshops.

MIT has experienced a 30% increase in the international student population over the past decade, to 3,244 students enrolled in fall 2013 from 112 countries (approximately 29% of the total student population). The large increase in the international student population at MIT has brought to the forefront these students' special support needs. They often need help with cultural acclimation, in understanding the unique aspects of US academic programs and with written and oral English language proficiency. There is a need to provide information on healthcare and insurance and US medical conventions, and also to offer personal support for students whose home countries are undergoing political unrest, natural disasters, and other events and circumstances that can make an international student's situation unique. In many cases, such issues are closely related to advising the student on his or her immigration status. MIT also has a growing number of US citizens and US permanent residents who have never lived in the US, and MIT also has a number of students who are undocumented.

To remain a world-class university, MIT must ensure that it is providing sufficient support for international students, consistent with our mission: “to develop in each member of the MIT community the ability and passion to work wisely, creatively, and effectively for the betterment of humankind.” Currently, ODGE Headquarters, ISO under ODGE, Student Support Services under the Office of the Dean for Undergraduate Education, and MIT Mental Health and Counseling in MIT Medical are the primary sources of support for international students. In this context, the Working Group on International Student Support was charged to review existing quality of life survey data; conduct outreach to a number of groups; discuss the types of specialized support international students need and the most appropriate points of first contact; discuss coordination among service providers’ offices and whether different organizational structures, staffing, and resources would be advantageous; collate a list of available support programs and support structures; recognize and exchange best practices for cultural sensitivity; and identify recommendations to enhance the educational experience of international students at MIT.

The working group met eight times during the 2013–2014 academic year and carried out extensive research, including analysis of the 2013 Student Quality of Life Survey, peer benchmarking, organizing student focus groups and open student forums, and holding meetings with the undergraduate and graduate administrators, the chaplains, and the student leaders of a few of the largest international student groups. Dr. Anne Copeland, a licensed psychologist specializing in cultural acclimation, also gave a presentation to the working group. Through this research and outreach, the working group reaffirmed that MIT has a rich and effectively distributed web of student support resources with multiple points of entry and professional staff that care deeply for the well-being of our students.

International students, like students from the US, report MIT to be intellectually stimulating, safe, collaborative, friendly, exhilarating, embracing of diversity, and a place that promotes learning. However, international students, both graduate and undergraduate, do report feeling more stressed because of cultural acclimation issues on their transition to MIT. International undergraduate and graduate women were identified as being especially vulnerable to isolation. Concern was raised in the outreach sessions regarding those who come from countries with small numbers of enrolled students and those who come from underrepresented groups. Concerns regarding the shortcomings of a single compressed orientation period in which international students are overwhelmed with, and can absorb, relatively little information, particularly about support resources, were cited repeatedly. Peer benchmarking revealed that the University of Pennsylvania and Princeton University have well-developed, distributed cultural acclimation programming for international students throughout the entire academic year, in addition to during orientation, and that Yale University, Princeton University, and Stanford University have dedicated international centers. Outreach additionally emphasized that immigration (visa) restrictions prevent international students from participating in many paid educational activities, which results in a significant detrimental and discriminatory impact. MIT’s rich distributed web of student support resources could benefit from increased coordination and education on international cultural sensitivity. The point was also made that international students face additional barriers to using support resources because of cultural aspects (e.g., unfamiliarity, privacy concerns, stigma).

To address these findings, the Working Group on International Student Support offers nine recommendations that it believes will ease international students' cultural acclimation and slow the escalation of such negative effects as anxiety, isolation, stress, depression, academic issues, and crisis situations. These are:

- Publicize dedicated resources for international students, ensure culturally sensitive perspectives, and facilitate communications between international students of the same country;
- Review and improve international student participation in co-curricular and extra-curricular activities;
- Update the mission of the ISO and create a staff position dedicated to cultural acclimation and cultural-climate programming for international students;
- Enhance orientation with international specific content; develop a first-year international student "reorientation" and dedicated residential support for first-year international undergraduates;
- Reduce perceived barriers to student support resources that are specific to international students;
- Explore opportunities to provide more educational and learning-based activities for international student spouses;
- Increase cultural sensitivity and awareness of the experiences unique to international students among staff and faculty;
- Facilitate interactions and coordination among international student groups; and
- Enhance financial literacy for incoming international graduate students and establish and disseminate best practices in financial support for international students.

The working group suggests that there be pilot programs and assessment plans for all these recommendations.

Participating in the National Conversation

Christine Ortiz, dean for graduate education, served on the Council for Graduate Schools' Diversity and Inclusion Committee this past year, as well as on the GEM board. Dean Ortiz also contributed to various pipeline efforts by speaking on the benefits of graduate education at events including an NSF Partnership for Research and Education in Materials workshop; an EECS Rising Stars Workshop; a Sigma Phi Epsilon fraternity meeting; the MSRP closing reception; and E2@MIT, a one-week summer residential program at MIT designed to expose high-achieving high school juniors around the nation to the STEM fields. She also shared her background with future members of the professoriate at the NextProf Workshop at the University of Michigan and the Society of Hispanic Professional Engineers Conference through her talk, "A Path to the Professorship: Personal Experiences in Academia"; spoke to the NSF–Materials Research Society Partnership for Research and Education in Materials on "A Pathway To and Through Graduate School." At the Future Faculty Workshop Panel, Dean Ortiz described the successful development program "The Path to Professorship" (details below).

Theme Five: Holistic Graduate Student Experience

Personal support, access to resources, work-life balance, and community are increasingly important to the academic, professional, and personal success of today's graduate students. Further, in addition to creating knowledge at the frontiers of each field, today's graduate students also need the ability to recognize what this new knowledge means in a broader context—and they must possess a more extensive skill set than formerly if they are to act on it for the benefit of humanity. Therefore, professional and personal development is needed to prepare graduate students for a range of career paths.

Orientation and Mentorship

The GSC Orientation Committee built on the success of the GSC in recent years in putting together one of the largest student-organized graduate orientations in the country. Over two weeks, orientation consisted of more than 60 events that offered incoming students the opportunity to get acclimated to MIT, understand the resources that are available for support, make friends, and have fun. Following the vision that President Reif set forth in his inaugural speech for MIT to be a place that is open to, and supportive of, all members of the community, the theme for orientation was “OneMIT.” Primary orientation events consisted of “Grad School 101” and “Grad School 102,” which provided information on graduate life at MIT; the presidential address, in which President Reif welcomed the incoming class and participated in a fireside chat; a Boston Harbor dance party cruise; a family carnival for graduate students with children; an international student mixer; a banquet by TechLink to enable cross-disciplinary engagement; and a number of barbecues and other outings. To support its activities, the orientation team secured the sponsorship of campus businesses, including Grad Rat and the MIT Coop. Grad Rat hosted an unveiling of the new Grad Rat ring that was open to all graduate students; the Coop offered free T-shirts for all incoming students.

Personal Support and Advising

The area of graduate student support and advising witnessed a surge this past year in direct interactions with faculty, who have reached out for guidance on resources and strategies available to support students who are experiencing some challenge, whether personal or academic. Generally, the faculty member has been the student's thesis advisor, graduate officer, or program head. Senior Associate Dean Staton and Assistant Dean McKnight, the office's key resources in support for graduate students, attributed this to increased efforts by them and by others concerned, such as visits to academic departments and programs to meet with faculty during the previous academic year. There has been a greater sense of partnership between ODGE and the faculty to support the well-being of graduate students.

Although ODGE was proud of the progress made in increasing awareness among faculty of available resources, additional efforts to increase awareness among students and staff were made throughout the year. Staff attended events that targeted students, such as the Active Minds suicide prevention seminar; the Ebony Affair and the Office of Multicultural Programs' retreat, which celebrated diversity and encouraged dialogue on related topics; and the Lavender graduation ceremony and LGBTQ retreat, which celebrated MIT's LGBTQ community and provided opportunities for reflection.

Assistant Dean McKnight worked with the Office of the Division for Student Life on a resource awareness implementation plan and worked with Diversity Initiatives staff in ODGE to plan and implement a dinner to connect students with a range of resources around the Institute. Additionally, Senior Associate Dean Staton hosted small group dinners for students from underrepresented groups. With the goal of introducing staff, especially those who were new either to MIT or to student services, the Division of Student Life hosted a multi-dimensional program where Staton and McKnight made presentations on graduate student life, resources, academics and culture. The hope and expectation is that as connections to, and awareness of, ODGE and other resources increases, those who have experienced benefits will become ambassadors who will extend awareness to others in the graduate community.

Student advising is at the core of ISO's responsibility to MIT's international students and their accompanying dependents. The ISO is the only office on campus with immigration expertise in student regulations. On behalf of MIT, ISO has legal responsibility, and therefore immigration advising responsibility, for most of MIT's international students and their dependents for as long as three years after graduation. The majority of ISO staff time is spent on this critical function. In AY2014, ISO staff had more than 8,000 in-person or phone appointments with currently enrolled students (3,549), their dependents (more than 2,300), incoming students (1,731), and international alumni (more than 600). MIT has legal immigration responsibility for these latter three groups in addition to the currently enrolled international students.

Students come to ISO seeking advice about personal issues, such as cultural adjustment or academic concerns, and worries about family issues and political tensions in their home countries. Any personal issue that affects academic status and life in the US has immigration ramifications for our students and their accompanying dependents. ISO provides a safe, comforting, and culturally sensitive resource. Because interaction with ISO begins long before actual arrival in the US and to MIT, the office is well known to international students, and is very often one of the first places they turn with personal concerns. ISO remains well poised in this regard to refer students to the many other critical advising and counseling resources across campus.

Support Processes and Tools

ODGE's efforts to enhance the infrastructure that supports students have continued through a partnership with the Division of Student Life and the Office of the General Counsel to assess and execute Title IX reporting processes, as well as through a student support database.

ODGE served on the Title IX Working Group, partnering with various offices to create a plan to improve current Title IX and Campus SaVE Act compliance at the graduate student level. The plan was then shared with graduate officers, graduate administrators, and others to foster a collaborative effort. Both online and in-person programming will be offered to all incoming graduate students in September 2014 as ODGE collaborates with academic departments in the implementation of the plan.

The ODGE Student Support Database continues to be integrated into the everyday work flow of the office in an effort to improve services provided to students. The database allows greater communication between staff by capturing interactions with students and the time in which actions are taken. Once populated, ODGE will be able to conduct a more robust assessment of its services in terms of numbers, time line, and outcomes. Training was developed and implemented for staff using the database in October 2013. ODGE continues to work with Departmental Consulting, Analysis, and Development in maintaining the database and plans to integrate it with the Institute petitions database when launched in the upcoming year.

Resource Awareness

Students' awareness of resources continues to be an identified area of improvement. A pilot resource dinner was conducted in April 2014 for first-year graduate students from underrepresented groups. The dinner was intended to connect first-year graduate students with resources on campus that could aid them in their transition to MIT and life on campus. Resources included, but were not limited to, Mental Health and Counseling, the Work Life Center, Housing, and the Martin Trust Center. Feedback from both students and staff from the resources involved was extremely positive. Staff and students spoke to learning more about the resources that sent representatives to the dinner and encouraged the continuation of the program. ODGE is exploring expansion of the program next year. ODGE also partnered with the Division of Student Life this past year to examine current practices in connecting students to resources for emotional well-being and determine recommendations for enhancement. The next year will be spent reviewing the recommendations and exploring implementation.

Graduate Student Life Grants

The Graduate Student Life Grants program is a request-for-proposal process that invites graduate students and others in the MIT community to submit creative ideas for funding. The key criterion is that each proposal offer concrete ideas for enhancing the community life of graduate students. The grants are one of the few sources on campus that will fund the proposal of an individual without requiring affiliation with a student group or department. Although most projects run one to two years, seven proposals have earned some level of ongoing funding, and eight others have become an ongoing part of the Institute through other funding sources.

Of the 24 new proposals submitted in AY2014, 18 were funded. Since the program's inception in 2002, 201 unique projects have been supported. The Graduate Student Life Grants website offers more detail on the funding process, as well as on project descriptions.

Graduate Community Fellows

Graduate Community Fellows work on projects and assignments that enhance the graduate community in unique ways. Each fellow reports to a staff member in ODGE or a partner organization and focuses on a specific project. The typical appointment period is the nine-month academic year, and fellows work an average of 10 hours each week in return for a monthly stipend. This year the program added one new position to support graduate student parents; two other positions were on hiatus because of leadership transitions and job redesign, bringing the total to 13 fellows.

Fellows continued to affect the graduate community by conducting vital work for ODGE in the areas of programs for women, including the “Path of Professorship” workshop and the planning of two summer seminars aimed at helping young graduate women with their networking and professional development; with diversity initiatives, such as Grad Catalyst, holding virtual information workshops on the West Coast, and building stronger connections with MSRP alumni; with the Addir Fellows program, holding in-dorm interfaith dialogues (approximately 11 students attend per dialogue); with the Graduate Student Life Grants program, highlighting graduate student accomplishments; and with graduate student orientation.

Support for Graduate Women

Path of Professorship

The 2013 workshop for graduate and post-doctoral women who are considering academic careers was held on November 15 and 16 at the Microsoft New England Research and Design (NERD) Center. This was the first time we used this venue; we did so because the Faculty Club was closed for renovations. The NERD Center was perfect, with classrooms suited to the typed of interaction and presentations that are critical to the success of the workshop, and equipped with essential audiovisual and other technical support. The major difference was cost—the NERD Center generously gave us the use of the space and equipment free as an expression of good will toward MIT.

The workshop was attended by 42 women who are graduate students, most of whom are within two years of completing their degree, and 21 female postdoctoral associates, primarily from STEM fields. Participation of the postdoctoral attendees was financially supported by the Office of the Vice President for Research. The largest number of postdoctoral participants came from the Department of Biology and the Department of Brain and Cognitive Sciences. The graduate students tended to be from the Departments of Earth, Atmospheric, and Planetary Sciences, Electrical Engineering and Computer Science, and Chemistry. As has been the pattern, there were close to three times as many applicants as the workshop can accommodate.

The one-and-a-half-day workshop offered 10 sessions of at least one hour each that covered topics related to finding one’s place in the academy, getting the right job offer, surviving the first year as a professor, and preparing for tenure. The presenters were 29 women, 27 of whom are faculty (nine were from MIT). Most of the MIT faculty are also MIT alumni. The presenters represented 13 institutions, including large private research firms, small private engineering-centered organizations, small private teaching-focused institutions, and large public research institutions.

A few new elements were added this year, based on responses to earlier sessions and suggestions from planning team members. First, each attendee was given a comprehensive binder of resources on such topics as applying to academic positions, interviewing, networking, balancing career and family, hiring students, post-doctoral associates, and staff to support research needs, funding, and tenure. Some faculty provided resources, other resources came from members of the planning team, and with permission from Northeastern University, some resources came from Northeastern’s Future Faculty Workshop. Second, each attendee was given a list of all participants with

contact information. Previous attendees had suggested this in the interest of facilitating networking with one another and sharing information after the workshop.

After a break of a few years, we were able to bring back Nancy Houfek, an actor and drama coach at Harvard University, to give her communications session on presentations, performing, and speaking. Historically, Nancy has been one of the most dynamic and popular speakers, and such was the case again this year. Many participants indicated that they would have liked her presentation to be longer.

In addition to the workshop sessions, there was a reception where professor Paula Hammond of the Department of Chemical Engineering spoke and shared her personal journey to the professoriate and leadership positions in academia.

The post-workshop survey feedback was overwhelmingly positive and constructive. Many participants appreciated the diversity of fields, experiences, and lifestyles of the speakers and spoke of being inspired, empowered, and more confident after hearing the faculty members' stories.

Attendees described their impressions as follows:

“There is no one right path (to academia), there is only the right path for you.”

“I got so much out of this and feel much better equipped and more confident that I know what I am up against in looking for jobs. I really appreciate being able to meet and interact with women in other departments.”

“It was helpful to hear perspectives from professors at schools that are different from MIT.”

“I liked hearing about the different tips for staying organized and sane, and how to prioritize your worrying.”

“Even though many topics are still far away for me, it was helpful to keep these things in mind and skills to develop in advance of applying.”

“Inspiring, empowering, practical.”

The workshop would not have been the special event it was without the dedication and hard work of the planning team. The five women—three graduate students and two post-doctoral fellows—who worked on this year's event demonstrated leadership, thoughtfulness, attention to detail, and commitment to delivering to their peers the best possible experience. Each year, it is hard to imagine that working with these young women can get any better, and then it does.

Since the workshop, Senior Associate Dean Staton and her Graduate Community Fellows have written a chapter on the workshop for inclusion in a book on similar workshops and programs across the nation. MIT was invited to be a partner on this book project by Catherine Mavriplis, who holds a PhD in Aeronautics and Astronautics from MIT and co-leads FORWARD to Professorship, after which MIT's workshop is modeled.

Reading Group for Graduate Women

The Reading Group for Graduate Women grew out of casual conversations between the senior associate dean and the graduate women of the Chemistry Department in the Cheney Room (an oasis for all women students located in Room 3-310). Since those conversations took place more than 10 years ago, the group has continued to provide an opportunity for women who are graduate students to build friendships, practice English-language skills, improve fluency, and share experiences while reviewing a different book each month.

Feedback from the members of the 2013–2014 group emphasized three themes: the chance to network with women across the Institute, to read a wide range of literature outside their discipline, and to take time out for something that they might not otherwise do, despite good intentions.

“I feel I’ve been able to forge true connections, something that has been difficult in a predominantly male graduate department. My experience at MIT would not have been the same without the awesome women of this reading group.”

“Reading fiction, history, politics and economics...is a refreshing change from reading mathematical research papers...[it] has allowed me to broaden my interests by being exposed to books I wouldn’t have otherwise read.”

“I love how it gives me motivation to read in my spare time, since that’s something I would otherwise always mean to do but never get around to...[it] forces me to make time for one of my favorite hobbies!”

With a consistent student interest and manageable attendance of 15–20 women each month—and subsequently ODGE’s commitment to sponsor it—the Reading Group for Graduate Women remains strong.

Graduate Women’s Group

The Graduate Women’s Group, which welcomes all graduate women, continued to meet monthly, convening more than 50 women from various departments who gathered to share and discuss experiences, information, challenges, interests, and issues. ODGE partnered again with the Division of Student Life and with Community Wellness at MIT Medical to support this group, with a representative from each partner office present to answer questions, schedule private individual meetings, and increase the women’s awareness of resources and opportunities for professional and personal development. On a few occasions, a representative from the Office of Violence Prevention and Response was invited to discuss strategies for preventing sexual assault, to make the resources available to victims better known, and to promote candid conversations about fears and concerns.

Healthy Living Guide for Women by Women

In summer 2013, the two Graduate Community Fellows who worked on programs for women with Senior Associate Dean Staton completed a multi-year project to offer a

healthy living guide to entering graduate women students as a gift from ODGE and from current graduate women at MIT. The book evolved over a few years from a book of recipes to a guide that encourages and enables graduate women to think holistically about their wellbeing and to take small practical steps that can make a tremendous difference. The booklet includes sections on eating healthy, brain food, late night eating, staying active, sports nutrition, shopping for groceries, exercising at MIT, keeping a healthy mind, and recipes by graduate women students.

The guide, *Mens et Manus et Salus*, was first distributed at the welcome reception sponsored by Graduate Women at MIT for new graduate women in the fall of 2013. Since that distribution, the document has been added to ODGE's website to make it accessible to all graduate students and departments.

Woods Hole Oceanographic Institute Student Support

Working closely with ODGE, the GSC helped to address a number of student life challenges faced by MIT students in the MIT–Woods Hole Oceanographic Institute (WHOI) joint program who are living permanently at Woods Hole. Working with the WHOI Student Association, the GSC identified the need for additional funding to support student life activities at Woods Hole and obtained \$2,000 a year for student life programming from the Department of Earth, Atmospheric, and Planetary Sciences. In addition, the GSC supported ODGE in supplying the WHOI Student Association with \$10,000 a year from student life fees to enable programming at Woods Hole, because many resources that student life fees pay for (such as the facilities of the Department of Athletics, Physical Education, and Recreation) are on main campus and unavailable.

Professional Development

ODGE has sought to provide high-quality professional development activities for graduate students. In fall 2013, the dean shared with faculty and graduate students the report of the Task Force on Graduate Student Professional Development that had completed its work in spring 2013. ODGE efforts include targeted support for local events such as the Graduate Women at MIT leadership conference and the MIT-CHIEF Entrepreneurship Conference, as well as prestigious international conferences and workshops. Examples of workshops include the Annual Lindau Nobel Laureate Meeting in Germany (two students); the MIT–Imperial Global Fellows Transferable Skills Conference (Cambridge, MA, and London, UK) (20 students); and the National Research Foundation of Singapore international summit, “Global Young Scientists Summit @ One-North: An International Meeting of Bright Young Researchers, Nobel Laureates and Eminent Scientific Leaders.” This year, ODGE sponsored the Rising Stars Workshop of EECS, where Dean Ortiz spoke. A nomination process was held to select students to attend the Fifth Annual WomenSphere Emerging Leaders Global Summit in January 2014 at Columbia University; six students attended after an internal competition. The summit brought together leaders and innovators from all over the globe to collaborate, learn, and discuss world issues around this year's theme: “The Next Generation of Women Leaders Creating the Future.” The dean also addressed “The Benefits of Global Experience” to graduate student professional and personal development in a November 2013 letter to all MIT graduate students in the Graduate Student Digest.

In October 2013, four African American graduate students were sponsored by ODGE and accompanied by Senior Associate Dean Staton to attend the inaugural Black Doctoral Network Conference in Philadelphia. One of the founding members of the conference is MIT PhD alumna Julianne Malveaux. This three-day conference provided an opportunity for these MIT students to engage with other black doctoral students from across the nation and abroad, representing diverse disciplines. Additionally, they met, engaged with, and heard from diverse faculty members on topics ranging from how to secure and maintain healthy mentorships, to inequalities in urban education, to how to get from dissertation to book and postdoctoral post to a tenured professorship. The MIT graduate students were delighted to spend time together and share this experience, which they found deeply inspiring. It was the first time in their doctoral career that they had been surrounded by so many encouraging individuals who looked like them and who were scholars, chief executive officers, inventors, and members of elite academic institutions. One student decided that he wanted to be a presenter at a future conference, and subsequently submitted an abstract, which has been accepted for the fall conference in 2014.

Graduate Student Council Programs

The GSC Academic, Research, and Careers Committee led numerous events aimed at supporting students in their academic and research work at MIT and at helping students prepare for future careers. ARC's activities included two Dissertation Boot Camps in collaboration with MIT libraries. One boot camp was held in the summer of 2013 and the other was held in spring 2014. The boot camps provided quiet areas and snacks for students over a two-week period to allow them to make significant uninterrupted progress on their dissertations. ARC also partnered with the MIT Alumni Association to host a Tech Reunion at the Media Lab for students and MIT alumni where 20 graduate students presented current research topics. Graduate Women at MIT continued to be very active in carrying out the Orientation Women's Welcome Lunch, the Leadership Conference (featuring a keynote speech by ZIPCar founder Robin Chase), and the spring Empowerment Conference.

One significant improvement ARC made this year was to expand its professional development series. Events over the course of the year included a panel discussion on how to find a good postdoctoral associate, a panel discussion on how to publish in peer-reviewed journals, an information session, in collaboration with the Global Education and Career Development office, on how to manage one's online social media presence (LinkedIn, Facebook, and so on), a biotechnology career panel, a data scientists career panel, a panel by recent MIT alumni working in consulting on how to move from doing doctoral work to working in business, a panel on transferable skills that are needed for success in academia, an information session on how to write a science blog, a panel on how to find a job in academia, and a panel on how to move from a PhD to running a start-up. Most of the events in the series reported attendance of roughly 100 students.

In addition to expanding its professional development series, ARC also successfully implemented two additional programs: the Faculty Dinner Series and Pitch Your PhD. The Faculty Dinner Series was implemented in response to student feedback and quality-of-life survey data that revealed a desire by students to have more personal

interaction with, and mentorship by, MIT professors. The Faculty Dinner Series brought together small groups of students (approximately 10 to 12) to have dinner with a distinguished member of the MIT faculty to talk about life and career. Pitch Your PhD was a new, large event aimed at encouraging PhD students to learn how to communicate their doctoral work to a nonexpert or general audience. Participants were given five minutes to explain their doctoral work to an audience of nonexperts; then they received feedback on how to improve their presentations.

Professional Development Video Portal

ODGE's Professional Development Video Portal, which gives students open access to a comprehensive video library of professional and personal development content, was reorganized this year to align with the professional development skill categories defined by the Task Force on Professional Development. This allowed videos to be added in the newly defined categories of critical thinking and teaching, coaching, and mentoring.

MIT-Imperial Global Fellows Summer Program

ODGE and the dean for undergraduate education cosponsored a fourth MIT-Imperial Global Fellows Program in June 2014, an intensive four-day workshop on an introduction to the importance and the development of transferable skills. The workshop was organized by the Global Education and Career Development office and the Imperial College of London. The program accepted 20 PhD students from Imperial College London and 20 from MIT; the workshop took place at Easthampstead Park, England. Through the plenary sessions, the small-group collaborative exercises, and time for feedback and reflection, participants developed the professional skills required to launch and manage a successful research career, with an emphasis on creating and sustaining successful international research collaborations. This year two ODGE employees participated as co-facilitators for the small groups, teaming up with facilitators from Imperial; two Global Education and Career Development staff members facilitated as well.

Participating in the Institute and National Conversation on Graduate Education

This past year, Dean Ortiz participated in the MIT Alumni Association broadcast panel, "Impact of Service Projects on the Graduate Educational Experience." She also participated in the panel hosted by the Council of Graduate Schools New Deans Institute, "Political Engagement to Promote Graduate Education."

International Programs

International Freshman Mentor Program

The International Freshman Mentor Program, currently in its 17th year, is a mainstay of freshman international orientation. This program matches incoming international freshmen with international upperclassmen long before their arrival in the US. Strong bonds develop between the younger student and his or her mentor, beginning with email correspondence while the student is still at home and continuing with airport pick-ups and many year-long mentor-organized activities. This mentor program is staffed and organized entirely by volunteer students, who bring tremendous enthusiasm and creativity to the program.

Host to International Students Program

The Host to International Students Program has remained vital in providing new students with supportive emotional and social ties to MIT community members and their families. More than 200 students and MIT community members participated in this hosting program in academic year 2014. With limited resources in both funding and staff time, this program currently is available only to international undergraduate students.

Childcare for Graduate Students

With the support of ODGE, the MIT Work Life Center, and the provost, the GSC helped start a pilot program to provide backup childcare for graduate student families. Operated by Parents in a Pinch, the program pays for up to 10 hours of backup childcare per graduate student family per year. Rollout of the program included extensive advertising on part of the GSC and Work Life Center as well as an article announcing the program in *The Tech*. Statistics gathered from the pilot program showed that 20% of graduate students with families registered for the program and that program utilization was 20% higher than had been predicted. As a result of the success of the pilot, the program was adopted as a permanent line in the ODGE budget starting in fall 2014.

Support for Student Group Activities

ODGE is pleased to contribute financial support for many student group activities. Substantial annual funding is provided annually to Assisting Recurring Cultural and Diversity Events (ARCADE), which in turn funds many individual events, and to the Sidney/Pacific–Ashdown brunch series. Other annual funding supports orientation programs, such as GSC’s Grad School 101, International Students Orientation, and the India pre-orientation program. Additional support this year went to the family groups at Eastgate and Westgate for community yoga classes, music classes for children, and a family garden party. Funding was provided for the GSC Housing and Community Affairs Family Child Care Initiatives to assess the need for and propose child-care program options for MIT graduate students with children. ODGE-sponsored activities include the student-led Science Policy Initiative’s Science Policy Bootcamp, which introduces graduate students in science and engineering to the nuts and bolts of science policy, and Congressional Visits Day. During Congressional Visits Day, graduate students discuss with their representatives and senators the importance of the nation’s investment in science, engineering, and technology in promoting long-term innovation and prosperity. They also discuss the local and national effects of these programs and their significance to students and researchers working on federally funded research projects.

ODGE continued to support conferences such as the MIT-CHIEF Conference 2013 and the MIT–Imperial Transferable Skills Conference 2014. ODGE also provided funding support for graduate students to attend conferences, including the Annual Lindau Meeting, the WomenSphere Conference in New York, and the Advancing Science Serving Society Catalyzing Advocacy in Science and Engineering Workshop in Washington, DC. ODGE is also committed to supporting professional development programs for graduate students organized by MIT’s Global Education and Career Development and contributes to the annual membership of MIT’s Graduate Consortium in Women’s Studies.

A number of activities were undertaken with the goal of offering more student activities and interactions with the MIT Cambridge campus for MIT–WHOI Joint Program students. ODGE provided funding to support the WHOI student life programs; deans Ortiz and Staton spent an entire day at WHOI, making connections and plans with graduate students, staff, and faculty; and a connection was made to the Teaching and Learning Laboratory, which has reached out to coordinate enhanced teacher training. ODGE supported MIT's Global Education and Career Development regarding local professional and career development activities for WHOI students. ODGE also piloted an effort to live-stream one of its on-campus professional development events for the benefit of students at WHOI and of other off-campus viewers. Through the Funding Board, GSC has sponsored a summer barbecue and remote professional development seminar in coordination with ODGE.

The Graduate Student Council is the main financial support tool of graduate student programmatic life at MIT, through the GSC's constitutionally mandated Funding Board, which is charged with distributing student fees to student groups in a fair, democratic, and transparent manner. This year, the GSC Funding Board disbursed \$207,000 through standard student group allocations; this was a 10% increase, made possible by higher-than-expected GSC profits from the Fall Career Fair. In addition to the funding provided through the Funding Board, GSC's ARC committee provided \$23,000 in travel grants for graduate students to attend conferences around the world.

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