# Office of the Vice Chancellor President's Report 2019-2020

The mission of the Office of the Vice Chancellor (OVC), led by Vice Chancellor for Undergraduate and Graduate Education Ian A. Waitz, is to advance academic innovation and foster the growth of every MIT student, empowering them to make a positive impact at MIT and beyond.

### **Organizational Changes**

The OVC was created in 2017 through the integration of the former offices of the Dean for Undergraduate Education and Dean for Graduate Education. Most organizational changes were implemented in AY2018 and AY2019, with the exception of one additional change this year: after an Institute-wide strategic planning effort, all programs in the Global Education Office (part of the Office of Experiential Learning) were transferred to the MIT International Science and Technology Initiatives (MISTI) office.

# **Priorities and Progress**

The vice chancellor and his staff continue to make progress towards meeting OVC's <u>strategic priorities</u>. However, due to the disruption caused by the coronavirus pandemic from March 2020 onward, much of our staff's time, effort, and resources have been devoted to helping the Institute manage its response and reconfiguring day-to-day operations to meet the needs of students, faculty, and staff (both remotely and in-person), while keeping in mind safety, health, and well-being. For the purpose this report, we will focus primarily on the progress that has been made on the vice chancellor's three top priorities, rather than our response to the pandemic.

### **Transforming the First-year Undergraduate Experience**

The vice chancellor's efforts to transform the first-year undergraduate experience continued in AY2020 with the implementation of the <a href="Phase II">Phase II</a> educational experiment in the fall of 2019, with the incoming Class of 2023.

The primary goal of the Phase II experiment is to promote greater exploration and discovery of fields, majors, minors, and HASS concentrations in the first-year.

Phase II continues the experimental pass/no record grading experiment begun in <a href="Phase I">Phase I</a>, eliminates Early Sophomore Standing (ESS), and modifies the first-year credit limit. One such modification creates a secondary 9-unit credit limit for "discovery-focused subjects and related approved exceptions." These first-year discovery subjects (FYDs) are 1-3 credits and aim to introduce first-year students to majors, minors, and HASS concentrations without contributing

significantly to their workload. Generally, they fall into three categories: department-focused, interdisciplinary, and co-curricular.

In fall 2019, there were 528 enrollments in 14 FYDs. Based upon student and faculty surveys, the fall FYDs were a mixed success. Many students enjoyed these FYDs and reported that the classes helped them explore majors or careers; others found that even the small time commitment needed to take the classes was cumbersome.

Data collected and analyzed by the OVC was shared with the MIT community and informed Faculty-approved changes to grading options for incoming undergraduates (fall 2021) that are intended to allow more flexibility for exploration and stress reduction across academic years. Additionally, these data are informing continued faculty governance discussions on other potential changes to undergraduate academic policies.

An advising pilot and two First-year Learning Community (FLC) pilots were initiated in AY2020, as well. The advising pilot explores a "network advising" approach, where students are assigned a staff advisor in the Office of the First Year (OFY), a faculty mentor, and a student Associate Advisor.

Two FLCs, Concourse and the Experimental Study Group (ESG,) launched pilots to embed more inspiring learning experiences within the first year. Concourse implemented a new requirement to enable students to explore and reflect upon intellectual events on campus or in the broader community. ESG added in-class projects and replaced final exams with team projects in ESG physics (8.01 and 8.012) and chemistry (5.111). We are still exploring the results and will consider how to integrate these insights into the curriculum where appropriate.

### **Enhancing the Graduate Student Experience**

The <u>Graduate Student Roadmap</u>, developed by OVC in 2018, continues to inform and guide our efforts to improve the graduate student experience. A fundamental premise of this holistic framework is that academic success is closely intertwined with other aspects of graduate student life, including financial security, advising, mental health and well-being, and diversity, equity, and inclusion.

While the roadmap provides a visual conceptualization of our approach, we recognize that OVC does not operate in a vacuum, and that graduate students are supported by a distributed network of many DLCs across MIT. Consequently, we are working to build stronger campus partnerships and leverage existing programming, such as through the MindHandHeart Department Support Project; the Gordon Engineering Leadership (GEL) program; GradSAGE, a graduate student-led advisory group; MIT Residential Life staff, and many others.

Becoming a best-in-class leader in graduate research advising and graduate professional development is one of our most urgent priorities. We are focusing on a strategic effort for advising and mentoring that broadly works to: shift the MIT culture to be more inclusive and

welcoming; encourage greater transparency across departments, including sharing and implementing best practices; develop or expand educational programs in mentoring and experiential learning subjects; and develop frameworks to assess advising and mentoring, including feedback from students.

The financial security of graduate students continues to be a significant issue that we are striving to address. In addition to the AY2020 <u>commitment from each school</u> to help reduce financial insecurity among specific populations of graduate students (namely those on 9-month appointments or with non-resident status), two new funding resources have been created. The <u>Graduate Student Short-term Emergency Fund</u> is designed to assist graduate students by providing support when they need help with unexpected and unavoidable emergency expenses. And <u>Doctoral Student Financial Hardship Funding</u> assists PhD students who face financial hardships arising from special circumstances, including Covid-19, that may impact their long-term academic progress.

OVC has made notable strides in understanding and addressing the unique challenges that graduate students with children face. We have the administration's commitment and School deans' support to implement three of the major recommendations of the final report of the <u>Graduate Family Support Working Group</u>, namely:

- Hiring a designated staff person who will focus on and coordinate communication, outreach, and programs that assist graduate students with children.
- Offering a need-blind grant for PhD and master's students in eligible programs. An
  AY2020 pilot, the MIT Grant for Graduate Students with Children, awards \$2,000-4000
  depending on the number of children students have, for expenses such as child care,
  health care, and housing.
- Capturing data on graduate students with children administratively and centrally, rather than relying on survey data.

Finally, other efforts to improve the graduate experience include:

- New and improved orientation programming in the summer of 2019, as well as expanding orientation programming into the fall semester to engage a larger group of students;
- Investing in diversity, equity, and inclusion through several efforts, including a new training module for incoming students; greater transparency in department-level data on recruitment, admissions, and yield; adopting new policies and practices for fellowships; and meeting regularly with the Graduate Students of Color Advisory Group and the GSC Committee on Diversity, Equity, and Inclusion;
- Providing greater access to professional development and experiential learning opportunities through internships.

#### **Leading and Managing the OVC to Optimize Services and Programs**

Now that OVC is now in its third year, all of our functional organizational changes have been implemented and we have begun to hit our stride.

In a continuing effort to optimize our programs and services, the OVC Leadership Team agreed in 2019 to conduct ongoing, office-based comprehensive work prioritization evaluations. These efforts aim to make room for innovation while ensuring that critical work functions are still performed at a high level. The coronavirus pandemic has also led us to re-examine how we perform our work and has already introduced greater efficiencies and new ways to work in a remote environment.

Other notable accomplishments this year led by the vice chancellor include continued All Hands meetings (now virtual); more frequent meetings of the OVC leadership team; the creation of the 8 AM Covid-19 Response Call (attended by 200 staff, faculty, and students across the Institute); and support of staff-led efforts such as the Wellness Committee.

### OVC Response to the Coronavirus Pandemic

Staff from across OVC have significant roles in the Institute's response to the pandemic from March through the end of the AY2020 reporting period and beyond, from overall strategic planning for the summer and fall to working tirelessly to adapt our operations to a remote environment. A few examples include:

- The Academic Continuity Working Group, led by Vice Chancellor Waitz
- Teaching and Learning Lab: Developing the <u>Teach Remote site</u> and ongoing curricular support for faculty; a <u>Learn Remote</u> site was also developed for students
- Admissions Office: <u>Virtual Campus Preview Weekend</u> for admitted undergraduates
- OVC and DSL: Student Success Coaching Program
- Office of Graduate Education and the Graduate Student Council: <u>Virtual Graduate</u>
   Orientation
- Office of the First Year (and others): Optimizing the first-year student experience
- Office of Experiential Learning: Creating and supporting summer and fall remote experiential learning opportunities
- The Covid-19 Testing and Compliance team, led by Vice Chancellor Waitz.
- <u>Team 2020</u>, led by Interim Deputy Executive Vice President Anthony Sharon and Vice Chancellor Waitz, which examined options and made recommendations for AY2021
- Daily 8 a.m. Covid-19 Calls, led by Vice Chancellor Waitz and comprised of over 150 faculty, senior leadership, and staff.

OVC will continue to work diligently to provide the best possible remote programs and services for students, faculty, and staff until we can all safely return to campus.

# Office Updates

OVC HQ	6
Office of Admissions	8
Career Advising & Professional Development	12
Office of Experiential Learning	15
D-Lab	16
Edgerton Center	19
Priscilla King Gray Public Service Center	22
Undergraduate Research Opportunities Program	24
Office of the First Year	26
Concourse	27
Experimental Study Group	28
Terrascope	31
Office of Graduate Education	33
International Students Office	39
Office of Minority Education	43
Registrar's Office	45
Reserve Officer Training Corps—Air Force	48
Reserve Officer Training Corps—Army	50
Reserve Officer Training Corps—Navy	52
Student Financial Services	53
Teaching + Learning Lab	56

# **OVC Headquarters (OVC HQ)**

OVC HQ provides foundational support to OVC staff, enabling them to fulfill the organization's mission. The OVC HQ delivers administrative and operational support across the organization in the following areas:

- Human Resources
- Finance
- Communications
- Desktop Support (shared with DSL)
- Project Management
- Cross-Functional Team Oversight

During AY2020, Samantha DuBrown joined the OVC staff in the role of human resources business partner, working particularly closely with Student Financial Services. In addition, OVC prepared for two major retirements: Director of Finance and Administration Jeanne Hillery and Registrar and Senior Associate Dean Mary Callahan.

### **Cross-functional Teams**

Several cross-functional teams and working groups continued to advance the vice chancellor's charge in AY2020. Their progress is monitored by OVC HQ and they include:

- Curricular Practical Training (CPT) Working Group
- Data Survey Administration across Chancellor's Area
- Wellness Committee
- Designing Solutions for Doctoral Students in Financial Distress
- First Generation Low Income Working Group
- Interactive Mental Health Training for Graduate Students
- Graduate Advising
- Undergraduate Advising
- Interphase EDGE online (Office of Minority Education-led)
- Visiting Student Enrollment Management Group

Several cross-functional teams concluded their work and submitted final reports, including Career Explorations, Graduate Professional Development, Learning Management System, International Students of Color, and the Data/Survey Team.

### Key Accomplishments

In addition to helping advance the vice chancellor's key priorities (discussed above), the OVC HQ team:

- Ran and refined leadership team meetings, all-staff meetings, retreats, and other programmatic events to build staff community
- Supported staff during the work-from-home transition due to Covid-19
- Continued to enhance internal communications and wellness

### Affirmative Action Goals and Successes

The OVC staff, which is 65.7% women and 32.1% minority, is one of the most diverse organizational units at MIT, with an ongoing commitment to developing a workforce that reflects the rich diversity of the communities we serve. The OVC Leadership Team is expected to show leadership in the area of diversity, equity and inclusion. Every OVC employee shares responsibility for fostering an inclusive work environment in which all employees may do their best work.

As a result of the efforts of the leadership team and hiring managers throughout the organization, OVC succeeded this year in attracting and hiring underrepresented minorities and women to fill open positions across the division. This year, OVC met all of its placement goals for women and minorities across every job category. MIT does not presently have a good way to accurately capture the representation of individuals with disabilities or qualified veterans in our population, making it difficult to measure whether we are meeting or making adequate progress towards our affirmative action goals in these areas.

For the period July 1, 2019 – June 30, 2020, 73% of all new OVC hires were women and 42.3% were minorities. During the same period, OVC promoted 19 staff members: 52.6% were women and 42.1% were minorities.

### Awards / Recognitions

Infinite Mile Awards

# Looking Ahead

- Focus on implementation of the key priorities
- Impact and action tracking
- Efficiency / alignment with revised goals
- Integration of Institute-wide DEI effort
- Transition to higher density campus spring and fall 2021

#### Office of Admissions

The Massachusetts Institute of Technology upholds a commitment to meritocracy and fair access to the admissions process for students from all backgrounds. With that in mind, the <a href="Office of Admissions">Office of Admissions</a> enrolls a diverse and talented undergraduate student body composed of some of the world's most intelligent and creative individuals interested in an education centered on science and technology.

#### **Current Events**

The 2020 academic year was an unprecedented one, not only for MIT but also for higher education as a whole. The novel coronavirus, Covid-19, reached the U.S. near the end of the admissions cycle. Our last day in the office was March 13, the day before we released our Regular Action decisions.

We admitted a slightly higher number of students in anticipation of a decreased yield, due to the uncertain impact of an online Campus Preview Weekend (CPW). We transitioned all oncampus yield events to virtual events—CPW, Ebony Affair, Sin LiMITe. CPW became a monthlong experience and we saw overwhelming support and participation from our students and campus partners. As a result, on May 1, yield was better than expected with 1,162 students out of 1,457 choosing to attend MIT.

We kept the wait list active later than normal, releasing it in late July, after extending the deadline for students to request a gap year. Because 91 students took a gap year, fewer than expected, we didn't admit anyone off the wait list.

All on-campus recruitment programs transitioned to a virtual model; we cancelled all staff travel and hosted several virtual events in their place.

We implemented changes to our testing requirements for the AY2021 cycle. SAT Subject Tests will no longer be considered and we expanded the number of English language proficiency exams we will accept. We made a temporary change to the AY2021 testing policy by suspending our requirement for SAT/ACT scores because of Covid-19. We are also thinking through how we will assess students' readiness for MIT without subject tests, and in many cases, SAT/ACT scores or spring junior year grades.

In collaboration with CUAFA, we finalized a report on the benefits of student body diversity and the need for us to consider race as one of many factors in order to achieve a diverse student body.

### Key Accomplishments

- We received 20,075 applications for the first-year class entering in the fall of 2020, down 5.8% compared to last year.
- Admitted students totaled 1,457 representing 7.3% of the applicant pool.
- Women make up 49% of the first-year class, tying the Class of 2022 for the largest percentage of women.
- There are 1,071 students in the enrolling class, for a yield of 73.5%. An unprecedented 91 students deferred enrollment until 2021, given the ongoing pandemic. We were not able to admit any students off of the wait list.
- A total of 740 students applied for transfer admission. Of those, 23 were admitted. Of the 23 admitted, 19 are expected to enroll and two are taking a gap year. There is one Wellesley 3:2 student who will also take a gap semester until spring of 2021.
- We have almost completed our Slate implementation (a comprehensive CRM database and application review portal). The entire admissions process will be tracked through the system: from prospect identification and outreach, inbound inquiries, application submissions, alumni interviewing, to application review and decision notification.
- We developed a new virtual visit program that includes a new presentation with admissions officers, student led "tours," and a choose-your-own-adventure component.
- With less than a month to prepare, we transitioned Campus Preview Weekend to a fully online, virtual experience and expanded our activities to run for the entire month of April.

### Class Profile and Commitment to Diversity

- The composition of the Class of 2024 reflects MIT's ongoing commitment to the diversity and excellence of our student body. Of the first-year students entering in 2020, 49% are women, 18% are first generation to college, and 10% are international.
- Students come from all 50 U.S. states and 50 countries. 90% of the incoming class have been leaders of an organization (president, captain, etc.) and 38% have founded an organization or business.
- The mean SAT score for first-year students is 750 for evidence-based reading and writing and 789 for math. The reading score is the highest mean ever for an incoming class.
- Twenty percent of the class are Pell Grant recipients, versus 19% the previous year.
- MIT continues to partner with QuestBridge, a nonprofit organization that recruits highachieving students from low-income backgrounds. Eighty-eight QuestBridge finalists will attend in the fall, down from 96 for the previous class.
- Enrolling students who are U.S. citizens or permanent residents are asked to self-identify race/ethnicity within categories established by the U.S. Department of Education. The Class of 2024 is composed of the following groups: American Indian/Alaskan Native 2%; Asian American 42%; Black/African American 11%; Hispanic/Latinx 14%; Native Hawaiian/Pacific Islander 1%; White/Caucasian 39%.

Twenty-six percent self-reported as an underrepresented minority student. *Note:* Students may identify with more than one racial or ethnic group. International students do not report race or ethnicity; however, they are included when calculating percentages of the class as a whole.

#### Recruitment Travel and Outreach

- Prior to the pandemic, we conducted over 70 U.S. information sessions, travelling to 33 states plus Washington, D.C., and Puerto Rico. Of those, 55 were MIT-only, 15 were with our CMPY partners (Pomona, CalTech, and Yale), and four were virtual recruitment events in the southwest region.
- International recruitment travel included Barbados, Jamaica, St. Lucia, Guyana, the United Kingdom, Senegal, Rwanda, Kenya, Tanzania, Zimbabwe, Swaziland, and South Africa.

### **Visit Programs**

- Over 27,000 visitors (11,633 prospective students) participated in information sessions.
   Due to the pandemic, there was no programming for March, April, and May. Virtual sessions began in June.
- We provided 1,552 tours to prospective families; this includes one month of virtual tours.
- Campus Preview Weekend was transformed into a month of virtual events. The
  community planned 409 Zoom events, 1,215 students logged into the virtual event
  platform, 1,095 were paired with an MIT pen pal, and an additional 526 logged into the
  CPW Discord server.

#### **Educational Council**

- The Educational Council Office increased the number of alumni interviewers to 6,042.
- A total of 14,366 interviews were conducted.
- We began the transition of the EC interview portal into Slate.
- Our Educational Counselors include members from the classes of 1941–2019, with 31% of the volunteers hailing from the last 10 graduating classes.

### Awards, Recognitions, and Staffing

- For the 2020 academic year, the admissions office was composed of 26 administrative staff positions, including several shared positions with Student Financial Services, and nine support staff positions. Sixty-three percent were women, 37% were men, and 43% were underrepresented minorities (Hispanic, Asian, and Black/African American).
- DJ Rock and Chris Peterson were awarded the Infinite Mile Award. DJ for their diversity and inclusion work and Chris for his innovation and creativity.

# Looking Ahead

- The Admissions Office is actively preparing to move to the new Kendall Square office space.
- We are planning our visit and information session transition to the new Visitor Center in Kendall Square, once we are past the pandemic and can welcome visitors to campus again.
- We will conduct a search for the director of selection as current director, Emily Sheldon, will be leaving MIT after 14 years with the office.
- We are preparing for a fully virtual fall with regard to recruitment and applicant interviews for the Class of 2025.

### **Career Advising & Professional Development**

The mission of <u>Career Advising & Professional Development</u> (CAPD) is to empower students, postdocs, and alumni to explore their life and career goals by helping them develop core competencies and build professional networks. We engage students and alumni in self-discovery to craft lives that are intellectually challenging, personally enriching, and of service to the world.

### **Key Accomplishments**

- Handshake: Implemented MIT's Handshake career management platform, and increased the diversity and number of opportunities in all majors and disciplines. Nearly 70% of undergraduates activated their Handshake profile.
- Enhanced Student Communication and CAPD Branding: Conducted a large-scale branding and messaging campaign to increase brand awareness.
- Professional Development (PD) & Graduate Student Programming: Collaborated across campus to host workshops and programming. Submitted graduate student professional development report and piloted a program for graduate students of color.
- **Diversity of Opportunities & Career Portal Development:** Completed Career Exploration Committee Report led by Professor Dave Darmofal. Enhanced career exploration at MIT by developing a career portal that centralizes opportunities, events, and programs.
- Career Exploration Continued pilots of Designing Your Life (DYL), Infinite Careers, MIT Future (Me in the Future) and created First Year Discovery Course: Careers in Medicine.
- Integrated MIT Student Voice in our Work: Launched a Peer Career Advisor program, created first-year student advisory board, and piloted Student Voice Newsletter.

#### **Notable Statistics**

- Conducted 11,386 MIT (non-unique) student, alumni, and postdoctoral engagements through 5,616 career, distinguished fellowship, prehealth advising and online sessions; 3,956 attendees at 208 workshops, presentations, employer events, and information sessions; 1,706 recruitment interviews and 108 student attendees to site visits. CAPD submitted 72 Prehealth Committee Letters and 50 Distinguished Fellowship Endorsement Letters.
- Expanded outreach and programming to first-year undergraduate students.
  - First-year attendance at events grew by over 9% from 1,148 (AY2018) to 1,260 (AY2019)
  - 388 stayed connected through our newsletter from AY2019 (25% increase).
  - o 20 first-year students participated in Prehealth Pre-Orientation Program.
  - o 11 students participated in Careers in Medicine class with a reported 18% increase of confidence in pursuing a career that impacts healthcare.
- For the Class of 2019, 91% of bachelor's, 84% of master's, and 86% of PhD graduates seeking employment reported obtaining a job within three months of graduation (among those seeking immediate employment). Reported median salaries were \$90,000

for SB; \$97,500 for MS; \$115,000 for MEng, and \$140,000 for MBA. Reported doctoral median salaries were \$58,000 for postdoctoral positions and \$125,000 for other positions.

### **Prehealth Advising**

- Eighty-eight students and alumni applied to medical school in the 2019 cycle (33 undergraduates, 4 graduate students, and 51 alumni), with an 84% acceptance rate.
- MIT Harvard Medical School MD-PhD Mentoring Program had 10 participants.
- Eighty applicants for the shadowing program; 17 students participated due to the pandemic.

#### Career Services

- Completed 467 Quick Queries in the fall of 2019.
- Career Exploration Pilots continued for the third year:
  - Two DYL mini-courses and 3 workshops were offered with 51 attendees.
  - o Infinite Careers Series had 119 attendees at eight alumni speaker events and a student alumni mixer. 99% of students were satisfied with program content.
  - O CAPD and the Fall Career Fair Committee coordinated MIT Future events to kickstart career exploration for first-year undergraduates with 1,145 attendees.
- Hosted 103 employers conducting 1,706 on-campus interviews and 5,298 employers in Handshake posted 28,054 jobs. Of these 5,298 employers, 4,500 advertised opportunities to MIT students for the first time this year.
- The Employer Connection Program had 19 employers.

### Distinguished Fellowships

- Distinguished Fellowships supported 274 non-unique applications. There were 29 winners from MIT including:
  - O Rhodes (5): Ali Daher, Claire Halloran, Billy Anderson Woltz, Francisca Vasconcelos, Megan Yamoah
  - O Marshall (3): Francisca Vasconcelos, Steven Truong, Talya Klinger
  - O Schwarzman (7): Mariam Dogar, Jessica Quaye, Adedoyin Olateru-Olagbegi, Jessica Wang, Sarah McMillian, Megan Yamoah, and Loewen Cavill.
  - O Churchill (1): Mehtaab Sawhney
  - O Fulbright (10): Sandra Walter, Srimayi Tenali, William Pinney, Talia Khan, Anshula Gandhi, Booker Schelhaas, Christien Williams, Ivy Li, Kendi Hu, Max Kessler
  - O Gates (3): Charlotte Minsky, Lyndie Mitchell Zollinger
- For the Soros Fellowships for New Americans, 10 MIT students and alumni are among the 30 award recipients.

### Awards / Recognition

- Seven staff served in leadership roles for professional associations and/or presented in regional and national conferences.
- Thirteen staff participated in OVC/Institute-Wide Committees.
- Tamara Menghi and Eric Pavesic were recipients of OVC Infinite Mile Awards. Deborah Liverman received the MIT Excellence Award. Kim Benard received the Billard Award.

# Looking Ahead

- **CAPD Website:** Revamp the CAPD website to increase target audience visits and engagement.
- Pay Equity: Continue to lead efforts to close the pay gap and develop pay equity resources.
- **Virtual Office:** Develop new programming and resources by virtualizing our services. Enhance collaborations to engage graduate programs and employers virtually.
- **Downturn in Economy**: Pilot support groups and develop resources to assist in transitions and maximize summer experiences.
- Career Exploration Report Recommendations: Implement changes to the Fall Career Fair including diversity in employment opportunities and broaden MIT's Handshake system to include other academic and administrative centers.
- Improve Advising Experience for Select Student Populations: Adapt programs and services to better support needs of first-generation and low-income students and undergraduate and graduate students of color as they explore careers, fellowships, graduate and medical school processes and reduce barriers to these pathways.
- Strengthen Internal Partnerships: Provide greater access to diverse career, education, and professional development opportunities for students through the creation of the MIT Career Advisors Network.

### Office of Experiential Learning

The Office of Experiential Learning (OEL) works to organize, amplify, and accelerate the practice and impact of experiential learning for MIT students—bringing the spirit of Mens et Manus to life. OEL is home to four experiential learning centers and programs—D-Lab, the Edgerton Center, PKG Public Service Center, and UROP—but collaborates and coordinates with experiential learning programs across the Institute including MISTI, the Innovation Initiative, CAPD, GEL, NEET, Terrascope, and many more.

OEL had much to celebrate in AY2020, including the hire of Jill Bassett, the new director and associate dean for the PKG Center in September 2019; the 50<sup>th</sup> anniversary of UROP's founding; and the launch of a new course on experiential ethics in the summer of 2020.

The "Expanding the Global Classroom" planning process (co-chaired by OEL Director Kate Trimble and Senior Associate Dean and April Julich-Perez of MISTI) concluded in summer 2019. This Institute-wide strategic planning effort resulted in the transfer of programs from the Global Education Office (GEO) to MISTI in order to improve student outcomes, enhance MIT's global portfolio, and realize operational efficiencies.

Finally, as the pandemic forced students off-campus and staff and faculty to remote work arrangements, OEL worked to convert experiential learning opportunities to a virtual or remote format and to ensure that students could access meaningful and funded opportunities in the spring and summer of 2020.

The four OEL programs' submissions to the President's Report are included below.

#### MIT D-Lab

Founded in 2002 by Senior Lecturer in Mechanical Engineering Amy Smith, <u>MIT D-Lab</u> works with people around the world to develop and advance collaborative approaches and practical solutions to global poverty challenges. The mission is pursued through an academic program of more than 20 MIT subjects, student research, and fieldwork opportunities; research groups; and fieldwork, community engagement, and training and professional education programs.

D-Lab works with collaborating organizations in communities in two-dozen countries. International collaborators—such as local nongovernmental organizations and social enterprises—define student projects, participate in research, collaborate on the design of technologies, host design summits and trainings, and more.

Over 18 years, D-Lab has developed 25 MIT classes, has enrolled more than 2,900, trained more than 5,000 people worldwide in design or business skills, and reached more than 2.25 million with goods and services.

### **Academics**

Led by D-Lab Faculty Director for Academics, Professor Maria Yang and D-Lab Associate Director for Academics Libby Hsu, D-Lab offered 16 MIT subjects in AY2020. This year saw 274 students enroll in D-Lab classes (an increase of 34, or 19%, over students enrolled in AY2019).

#### **Subjects Offered**

Subjects offered in AY2020 were: Applications of Energy in Global Development; Design for Complex Environmental Issues (Terrascope); Design for Scale, Development Ventures; D-Lab: Design; D-Lab: Development; D-Lab: Education and Learning; Gender and Development; Inclusive Economies; Introduction to Energy in Global Development; D-Lab: Schools; D-Lab: Supply Chains; Water, Sanitation, and Hygiene; Water, Climate Change, & Health; and Humanitarian Innovation. A special one-time subject was offered in the fall.

### **Students and Projects**

D-Lab students worked in teams on 53 projects with community partners in 19 countries including Botswana, Brazil, Colombia, East Timor, Egypt, Ghana, Greece, India, Indonesia, Jordan, Kenya, Malaysia, Mexico, Nepal, Nigeria, Rwanda, Thailand, Uganda, and the United States – Puerto Rico and other areas. Over the Independent Activities Period, D-Lab students traveled to Botswana, Brazil, Colombia, Greece, India, Kenya, Mexico, Peru, and Uganda.

# **Covid-19: Move to Online Education Spring 2020**

In March, MIT transitioned all classes to online. A survey of students and instructors showed that 74 percent of D-Lab students rated their satisfaction with the transition to virtual learning at a 7 or above on a 10-point scale. D-Lab students also reported that instructors' accessibility and ongoing support were key resources during this unprecedented semester.

#### Research

D-Lab's research team is led by Faculty Director for Research Dan Frey and Associate Director for Research Kendra Leith and receives funding from sources including the United States Agency for International Development (USAID), the National Science Foundation, Santander Foundation, the Abdul Latif Jameel Water and Food Systems Lab (J-WAFS), and individual donors. The primary areas of D-Lab research during AY2020 are well represented in this partial list of publications:

- Assessment of Potential Opportunities for Use of Digital Payments for Smallholder Farmers in Guatemala's Western Highlands, Cauam Cardoso and Jonars Spielberg - May 02, 2020
- Characterization of aggregate behaviors of torrefied biomass as a function of reaction severity, Meredith Barre1, Kevin S. Kunga, Sonal K.Thenganea, Vidyut Mohan, Daniel Sweeney, Ahmed F. Ghoniem February 03, 2020
- Evaluation of Low-Cost Evaporative Cooling Technologies for Improved Vegetable
   Storage in Mali, Takemore Chagomoka, Ousmane Sanogo, Eric Verploegen October 15,
   2019
- Exploring Fairness in Machine Learning for International Development, Yazeed Awwad, Richard Fletcher, Daniel Frey, Amit Gandhi, Maryam Najafian, Mike Teodorescu - March 02, 2020
- Seeds of Silicon: Internet of Things for Smallholder Agriculture, Anish Paul Antony, Jennifer Lu, Daniel Sweeney, August 26, 2019

### Covid19: MIT D-Lab Research

While travel was suspended, D-Lab researchers' close ties to the communities where they work eased the transition to online communication and transference of some research activities to on-site collaborators.

### **Innovation Practice**

The third pillar of D-Lab, Innovation Practice, currently headed by Associate Director for Innovation Practice Laura Budzyna, was formed in spring 2017 to develop, advance, and apply participatory innovation as a methodology for tackling poverty challenges.

### **Highlights**

- The D-Lab Scale-Ups Fellowship worked with East African local founders and in April, the program established a Bridge Fund to help fellows past and present to meet the challenges created by the Covid-19 crisis.
- The Humanitarian Innovation Program continued its multiyear collaboration with refugee NGO Faros in Athens, Greece; made an exploratory visit to Kutupalong Refugee

- Camp, Bangladesh; and continued work on a Co-Creation Toolkit. In response to Covid-19, the team pivoted to online and app-based programs.
- The Inclusive Regional Economies Program team ran multiple design workshops with small scale Colombian miners. In response to the Covid-19, the team developed "TeleCCB" – workshops delivered via cellphones. In June, the program launched a new initiative to address gender-based violence in mining communities.
- The Practical Impact Alliance (PIA), organized a co-design summit in Uganda for PIA members, D-Lab, and the local community to address barriers to scale for entrepreneurs in East Africa. This year PIA wound down its activities in favor of Professional Education as a strategy to reach professionals with D-Lab methodologies.

### **Edgerton Center**

The <u>Edgerton Center</u> upholds the legacy of Harold "Doc" Edgerton – inventor, entrepreneur, explorer, and MIT professor – by promoting hands-on and project-based learning; offering subjects in engineering and imaging; supporting student clubs and teams; managing student machine shops; upholding MIT's expertise in high-speed and scientific imaging; and offering a year-round K-12 program. This report reflects in-person activity through the beginning of March and remote activity through June, when the Covid-19 pandemic forced the MIT community to evacuate. Courses moved online, all competitions were cancelled, and our K-12 programs ground to a halt.

### Key Accomplishments

#### **Clubs and Teams**

The Edgerton Center provides the infrastructure that approximately 350 students rely on when undertaking engineering projects of significant scope.

- With the forced Covid-19 delay, the MIT Rocket team chose to focus on their engineering processes and team building. The team, however, still has plans to travel to the Mojave Desert in January 2021 to launch a two-stage rocket that can cross the Kármán Line, the recognized boundary of space.
- The MIT Motorsports team achieved success in March with their battery-powered Formulastyle race car, when they were able to test drive the vehicle.

# Student Machine Shops (6C-006A, N51-1st flr, N52-3rd flr, 4-409)

In the 10,000 sq. ft. of staff-supervised shop space facilities, MIT students have the opportunity to learn how to design, build, and manufacture.

- After 21 years in Building 44, the Edgerton Student Shop moved from to Building 6C. The
  celebration was covered in an MIT News story: <u>Edgerton Center celebrates reopening of
  its student shop in Building 6C.</u>
- Graduate student Jack Montgomery, who studies pathogen transmission in <u>Associate Professor Lydia Bourouiba's Lab</u>, used the Edgerton Student Shop to fabricate components for experiments to study how sneezes spread diseases. Montgomery called the Edgerton Student Shop "the most valuable maker space on campus," and acknowledged the expertise of our shop manager Mark Belanger.

### Subjects

The Edgerton Center is the administrative home for subjects offered by the Edgerton Center and D-Lab.

- During AY2020, 462 students participated in 53 for-credit subjects, ranging from Edgerton's iconic Strobe Project Lab, through D-Lab offerings, to student-initiated UROPs and independent projects.
- Edgerton Center Associate Director Jim Bales improvised to keep his students engaged in the remote 6.070, Electronics Project Lab by shipping equipment to students. "It is almost like having a piece of the lab at home," said master's student Kevin Yu in <u>MIT Technology Review</u>.

### K-12 Programs

With the benefit of little or no fee to participate, the Edgerton Center's K-12 programs execute the Institute's larger goals of creating educational opportunities for students from *all* backgrounds and removing barriers to participation. Highlights:

- Now in its 23rd year, the Edgerton Center offers daily, no cost, three-hour, project-based lessons in science and engineering for 4th through 8th-grade students. Our Covid-shortened year served 1,747 students from public, private, and home schools in Greater-Boston and nearby New England states.
- The Greater Lawrence Technical School's (GLTS) STEAM Innovation Program collaboration with the Edgerton Center completed its third year.
- Now in its third year, GLTS and Advanced Functional Fabrics of America (AFFOA) collaborated with the Edgerton Center to continue curriculum development to promote workforce learning in Advanced Functional Fibers, introducing a knitting curriculum.
- The summer Engineering Design Workshop for high-school studentsmoved online with two topic-based sessions and one two-week session in team-led design challenges. Over 60 students in the US and Europe participated. About half received tuition abatements.
- 147 K-12 educators from across New England participated in 28 professional development workshops integrating maker activities into K-12 curricula.
- Instructors traveled to the Mustakis Foundation in Recoleta, Chile for workshops, funded by a grant from the Abdul Latif Jameel World Education Lab (JWEL). Edgerton Center instructor Ed Moriarty traveled to Ferrara, Italy, and Barcelona, Spain, with MIT's Global Teaching Lab.
- Edgerton Center instructors facilitated remote workshops with our patented DNA and protein modeling sets in the <u>LEAH-Knox Scholars Program</u>, a science program for disadvantaged and under-represented high-school students. Accompanying teacher training materials for the sets were also completed.

### **Fundraising**

Over 200 gifts were received during the 24-Hour Challenge in March. Students and parents were intentionally not solicited given the timing.

# **Looking Ahead**

The current pandemic has had a dramatic effect on the Edgerton Center's core business — experiential learning. For years, we have provided our student teams with authentic, project-based experiences that prepare our students for leadership positions when they graduate. For the next year, we must find new ways to accomplish the same goals with much less face-to-face contact. We must also look for ways redress imbalances across race and class for MIT students and for the K-12 communities with which we engage.

### **Priscilla King Gray Public Service Center**

The <u>Priscilla King Gray Public Service Center</u> (PKG Center) taps and expands MIT students' unique skills and interests to prepare them to explore and address complex social and environmental challenges. In the 2020 academic year, many of these challenges took on new weight in the face of the public health and civil rights crises taking place across the U.S. and around the world. Though the PKG Center's spring programming was deeply impacted by the Covid-19 pandemic, staff rose to the challenge, rapidly expanding or modifying existing programs and developing new summer opportunities for students to invest in social change and innovation at a time when contributing to the social good is especially important.

# Key Accomplishments

In fall of 2019, the PKG Center onboarded a new associate dean and director, Jill Bassett. Bassett brings a wealth of executive, policy, and community engagement experience in higher education, government, and health and human services.

Throughout the Covid-19 crisis, PKG sustained strong student enrollment across regular programs as well as adapted much of our programming to take place online during the pandemic. Some notable points include:

- In fall of 2019, the PKG Center offered its first for-credit course, Transforming Good Intentions Into Good Outcomes, which ranked first in its category in MIT Discover Course evaluations.
- A total of 49 PKG Fellows worked in over 28 countries on public service projects around the world over summer 2019 and IAP 2020.
- IDEAS, MIT's annual social innovation competition, virtualized its <u>Innovation Showcase</u> and Awards, conducting the final round of judging via Zoom and celebrating 2020 grantees through a Facebook live-stream
- In spring 2020, PKG rapidly expanded and implemented new social impact internship opportunities to connect MIT students with paid, remote work on challenges like <u>Covid-19 relief</u> and <u>Diversity</u>, <u>Equity & Inclusion</u>. The Center also welcomed Julie Uva as program administrator of social impact employment, to oversee our federal work-study and social impact internship programs.
- Scaling up our Social Impact Internship program was urgently prioritized when the
  Covid-19 pandemic brought two crises to the forefront: community and government
  agencies were (and continue to be) quickly strained, and many MIT students discovered
  their scheduled internships were cancelled. In response, the PKG Center rapidly sourced
  100+ remote undergraduate internships to provide vital support to community
  organizations.

Thanks in part to rapid program virtualization and adaptation, over 2,000 MIT undergraduate and graduate students engaged with the PKG Center in the 2020 academic year. The PKG Center relied on an established network of government and community partnerships to create new opportunities and to meet the swiftly evolving needs of these partners by pairing them with MIT students eager to support these communities in unprecedented times.

### **Awards and Recognitions**

The PKG Center was awarded a number of significant grants, including continued support from the Bose Corporation, and a new partnership with Acumen and the Rockefeller Foundation supporting the IDEAS program. The Center also received a number of individual gifts from alumni and supporters of public service. PKG staff member Sarah Bouchard, assistant dean of community-based programs, was awarded the MIT Excellence Award.

Additionally, the Center recognized two students for excellence in public service with the Priscilla King Gray Award for Public Service this spring: sophomore <u>Kiara Wahnschafft</u> and graduate student <u>Seamus Lombardo</u>. The Center also recognized Dr. Elsa Olivetti of the Department of Materials Science and Engineering as the winner of its third Paul Gray Faculty Award for Public Service.

# **Looking Ahead**

In the 2021 academic year, the PKG Center will continue building on remote internship and fellowship opportunities for undergraduate and graduate students at MIT to engage in meaningful public service. We hope to maintain a strong virtual presence through ongoing workshops and events held via Zoom. Our cross-Institute workshop series, <u>Get Good Stuff Done</u>, will continue into the fall and spring semesters as a way of pooling and amplifying public service resources available within MIT circles.

We are also implementing new programming for the Experiential Learning Opportunities guarantee around civic engagement and remote immersion opportunities as well as introducing the incoming MIT Class of 2024 to the Center's resources and programming.

Having had to cancel <u>PKG Spring Break</u> 2020 due to Covid-19 and campus closures, we hope to modify this program for 2021 to connect students with a variety of nonprofit, government, and community partners working on the front lines to advance issues in Climate Change and Health.

### **Undergraduate Research Opportunities Program**

The <u>Undergraduate Research Opportunities Program</u> (UROP) remains MIT's chief exponent of experiential learning, promoting faculty-undergraduate collaboration at the forefront of research in all disciplines. Each year, nearly 60% of undergraduates participate, with approximately 60% of the faculty active as supervisors and mentors.

The UROP Office directs all program operations, resources and policy. Staff oversee final approval of ~6,000 projects yearly, funds allocation (~\$5M annually), and manage statistical reporting via a comprehensive participation system of record. Throughout the year, the UROP Office offers expansive programming, advocacy, and support for students, faculty, and DLCs, and supports Institute fundraising efforts.

### Notable Data/Statistics

- 92% of 2020 first-undergraduate degree recipients participated in UROP at least once.
- 57% of undergraduates took part in UROP summer 2019-spring 2020, with 62% of undergraduate women and 52% of undergraduate men participating. Sixty percent of MIT faculty mentored at least one UROP during this period.
- In all, 69% of first-year students (Class of 2023) participated during AY2020 and summer 2020, compared to 64% of Class of 2022 students in AY2019 and summer 2019.
- A total of 78% of UROP projects were conducted for pay, with the remainder conducted for academic credit (19%) or as volunteer (3%).
- The Institute committed \$11,007,853 to undergraduates engaged in UROP, with \$5,850,613 (53%) allocated directly from the UROP Office.

### Key Accomplishments

- Marked UROP's 50<sup>th</sup> anniversary by releasing a video documentary and a print "impact" report featuring student profiles and highlighting UROP's influence on academic and career trajectories. Programming included panels and a poster session offered during Family Weekend.
- Addressed longstanding challenges in securing signed MIT Intellectual Property and Inventions Agreement (IPIA) from undergraduates. UROP system functionality now ensures all undergraduates sign the IPIA form before initiating a UROP project (beginning IAP 2020).
- Partnered with the Graduate Student Council on mentoring-skills programs, expanding offerings to include condensed one-hour sessions for reaching larger cohorts of graduate student UROP mentors.
- Offered customized workshops to increase engagement among specific student populations, including first-year, underrepresented minority, first-generation, and returning students.
- With the March campus departure of students due to Covid-19, developed and implemented processes to secure faculty approval for ~1,800 on-campus UROP students

to continue work virtually. Overall, more than 90% of spring projects received faculty approval to continue remotely.

# Awards / Recognitions

# **2020 Outstanding UROP Mentor Awards Recipients**

- Prof. Yufei Zhao Mathematics
- Alexander Amini Graduate Student, Electrical Engineering and Computer Science
- Carmelo Ignaccolo Graduate Student, Urban Studies and Planning

# **Looking Ahead**

- Launch fall 2020 initiative providing funded UROP for first-year students, with a suite of virtual exploration programming on making remote connections, honing professional skills, and maximizing research experiences.
- Further extend mentorship skill-development programming for graduate students.
- Partner with the Office of Experiential Learning on efforts promoting UROP as a means for leveraging the new experiential learning guarantee.
- Expand programs and resources for students interested in research, particularly underrepresented minority and first-generation populations (in collaboration with OFY, OME, CAPD, Comm Labs and DLCs).

#### Office of First Year

The mission of the Office of the First Year (OFY) is to provide excellent services and programs that catalyze student exploration and promote the academic success and personal development of undergraduates. These programs enrich and support undergraduate education at the Institute, including:

- First Year programming (e.g., Orientation, FPOPs Faculty Engagement)
- First Year Advising (e.g., Choice of Major, Transfers)
- Committee on Academic Performance (CAP)
- First Generation Programming

# Notable Data/Statistics

- A total of 85% of the Class of 2023 was advised by faculty and 15% was mentored (primary advisor was staff) by faculty during their first year at MIT.
- In the fall 2019 semester, 7% of the Class of 2023 was flagged; 83% of flagged students recovered and passed their flagged subjects. Due to the timing of the Covid-19 pandemic, no fifth week flags were issued in the spring 2020 semester.
- In all, 616 first-year students participated in an FPOP.

# Key Accomplishments

- The elimination of sophomore standing allowed for consistency of year-long advising for the Class of 2023 cohort.
- FLIPOP was established, an FPOP for first-generation low income students.
- New social media platforms were established and successful in promoting events and building community.
- Despite Covid-19, all members of the Class of 2024 completed the process of declaring a major or undesignated.

# Awards / Recognitions

### **2020 First Year Student Award Recipients**

- Paige Forester Athletics/Women's
- Kenneth Wei Athletics/Men's
- Stuti Khandwala Research
- Jake Sonandres Service

### **2020 Outstanding Associate Advisor Awards**

- Karna Morey '21 Seminar Advising
- Pooja Reddy '20 Traditional Advising

#### Concourse

<u>Concourse</u> is a first-year learning community of students and instructors dedicated to exploring foundational questions at the heart of humanistic inquiry and the relationship of these questions to the remainder of their MIT education. Our curriculum covers the science core (mathematics, physics, and chemistry), offers a foundational humanities course, and integrates both the sciences and humanities into a larger context in the program's weekly first-year advising seminar.

# Key Accomplishments

- Received renewal for our annual T.W. Smith award, which helps fund upper-level seminars and educational experiences outside of the classroom, such as our joint venture with the history department to send students to Ancient Rome/Greece, as well as our annual curriculum-planning retreat.
- Awarded Alumni Class funds for Dr. Elizabeth Vogel Taylor's project "Increasing the Exposure of Organic Chemistry Students to the Work of Female and Minority Researchers."
- Continued to use our spring seminar, CC.011: Thinking Across the Disciplines, to expose our first-year students to a diverse range of faculty at MIT.
- Continued to work with OVC on improving the first-year experience; developed an
  exploration-themed pilot which was incorporated into our fall seminar, with plans to
  expand in Spring of 2021.

### Notable Statistics/Data

- Fall first-year enrollment at fifth week: 49
- Spring first-year enrollment at fifth week: 46
- We employed 31 upper-level Concourse alumni as tutors, TAs, office workers, and graders.

### **Experimental Study Group**

The <u>Experimental Study Group</u> (ESG) builds a learning community through small-group, discussion-based, experiential instruction in biology, chemistry, math, physics, and humanities; weekly lunches; group study sessions; outings; and other opportunities to gather as a community.

#### *Initiatives*

### **OVC First-Year Experimentation Pilot Project**

With financial support from OVC, ESG experimented with innovations in the physics and chemistry GIR curricula. Collaborative hands-on, projects replaced selected exams in physics and chemistry. Students engaged in "real-world" learning, often associated with UROP activities, and applied their learning to project-based activities. Physics final exams were replaced with projects, allowing students to demonstrate command of the discipline to their classmates. Chemistry students engaged in poster sessions, gaining experience in the research and presentation of their ideas in meaningful ways. Students overwhelmingly expressed enthusiasm for the pilot, as these quotes indicate:

- I learned a lot from the final projects. Thanks to the 8.01 project, I got a summer UROP.
- I really liked the project-based approach in chemistry & physics. I was able to apply knowledge amassed from the entire semester and synthesize it into a project that I would remember far longer than a final exam. For a final exam, students will just cram the material and forget it soon enough, especially for GIRs that may not exactly fit their interests. With the projects, I could connect the information learned with a project I found fun and interesting.
- The pilot gave us a greater balance between theory and practical experience that many introductory classes at MIT lack. It's one thing to learn the equations and theory behind the physics we learn. Once you have to apply knowledge to make something actually work, you gain a deeper understanding of the material.

### **ESG Seminars**

- Fifteen seminars offered by staff, students, alumni, and guest lecturers
- Six new seminars: ES.S70: Spaces of the Imagination (Bettina McGimsey, Graham Ramsay); ES.S10: The Future of Food Security (Azzo Séguin '20); ES.S30: Airplanes and Airlines (Dongjoon Lee '21); ES.S70: WHERE IS EVERYBODY? Arguments For and Against the Existence of Extraterrestrial Civilizations (Wade Roush PhD '94, Paola Rebusco); ES.S91: Building the Beloved Community (Thea Keith-Lucas, Shannon Schmidt); ES.92: Authenticity (Lee Perlman)

### **Covid-19 Response**

• Reached out to all ESG students to offer support as they made the transition off campus.

- Sent first-years and seniors a care package (50th anniversary t-shirt, pen, and booklet).
- Coached first-year and upper-level ESGers throughout the spring.

### **ESG 50<sup>th</sup> Anniversary Celebration**

- Intended to showcase how ESG creates a learning community, the ESG Day of Learning celebration plans included the premiere of the ESG documentary Experimental and experiential learning sessions to be held in student-designed spaces at the Samberg Center.
- All events, including an anniversary party, were postponed/cancelled.

### The Educational Justice Initiative

- With Massachusetts Prison Education Consortium, developing a statewide educational pipeline for incarcerated individuals.
- Engaged system-involved teenagers through a summer program of college-level discourse, exposing them to academic pathways beyond high school.
- At President Reif's suggestion, provided hardware donated by MIT to 19 state prisoneducation departments and two incubator sites.
- With the Maine Department of Corrections, studied how tablet-based learning systems access affects disciplinary and educational outcomes.
- Offered inside/out classes, allowing MIT students to study with incarcerated individuals.
   Documented by WGBH in <u>Redemption: MIT's Prison Education Program</u>, which won a New England Emmy Award in June 2020.

### **Awards**

- Raquel Garcia '22: Peter and Sharon Fiekowsky (PSF) Community Service Award
- Samuel Solomon '20: PSF Excellence in Teaching Award
- Seniors Luke Bordonaro, Talya Klinger, Seeta Patel, Azzo Seguin, Chase Vogeli: PSF Distinguished Teaching Awards
- Patti Christie and Nick Boekelheide: Alumni Class Funds grant to develop videotaped Guided Learning Demonstrations (GLDs) for first-year chemistry courses.

### Students

- Total of 56 in the Class of 2023
- Of those, 68% are female, 28% are underrepresented minorities, and 13% are international students (Dominican Republic, Japan, Kenya, Ukraine, UAE, UK, Vietnam).
- We had 61 undergraduate TAs in the fall and 50 in the spring, providing academic support, while learning teaching and leadership skills.

# **Looking Ahead**

- Expansion of pilot project continues through spring 2022 with biology exams to be replaced with projects.
- Chemistry GIR GLDs will be developed.
- To enhance remote learning, we will offer more sections resulting in smaller classes; increase instructional hours vis-a-vis p-set hours; further incorporate project-based learning; develop ways to assess collaborative group work; send remote experiment kits; and use available technology to strengthen our remote community.

### **Terrascope**

<u>Terrascope</u> is based on the idea that first-year MIT students are ready to take control of their own education to tackle big, important problems. Every year, in hands-on, project-based classes, students take charge to develop solutions to sustainability-related problems, drawing on diverse perspectives, interdisciplinary research, and a supportive community. Terrascopers bond in common space on campus and over meals, advising, and a field experience.

# Key Accomplishments

- In the fall course 12.000 Solving Complex Problems, students developed plans to make recovery from storms in Puerto Rico faster, more equitable, and more resilient. They presented to a panel of local and national experts. Later, Elmer Roman, secretary of the Puerto Rican Department of Public Safety, and Ottmar Chávez, head of recovery, proposed in-person discussions during the Terrascope Field Experience (cancelled due to the pandemic).
- In the IAP course SP.361 Majors and Careers through a Terrascope Lens, nine alumni worked with students and made themselves available for continued mentoring. Students reported feeling less pressure to choose the "right" major or career, empowered to be guided by their experiences and enthusiasms.
- The major accomplishment of the spring was successfully transitioning two teamoriented, project-based classes to remote learning. Students reported significant satisfaction. Comments include:
  - This was the one class that made me feel like a part of the MIT community again.
     There was an incredibly strong sense of community.
  - The brainstorm sessions that we would have in class or especially out of class were very unique and valuable learning environments for me. Those moments really felt like what I imagined MIT would be like—a group of students sitting together and bringing their own individual ideas and knowledge to the table to collaborate and come up with a new idea to solve a real problem.
- In 2.00C/1.016/EC.746 Design for Complex Environmental Issues, students worked with partners in Puerto Rico. Products included a rapid-deployment emergency shelter, a compact water-decontamination system, and systems for connecting deaf citizens with emergency workers. Two projects continue beyond the semester, including collaboration with community partners. This year also marked the beginning of a new partnership with Beaver Works, with emphasis on hands-on design and fabrication.
- In SP.360 Terrascope Radio, students developed programs related to their experiences in the pandemic: a radio-drama/science-fiction story about friendship in a time of distancing, and vignettes on expressions of love and kindness during crisis.
- Terrascope built on its strengths with increased participation in co-curricular events, intramural sports, and Terrascope physical education classes. We maintained an active, participatory community during the remote spring and throughout the summer, holding

- virtual lunches and staff- and student-led activities, and establishing new modes of communication.
- Terrascope continues to raise funds in partnership with the Alumni Association (e.g. 24-Hour Challenge, email solicitations) and the average number of donors and gift totals remain at the increased levels seen the past two years. To explore alternative sources of funding beyond alumni support, Terrascope is actively engaging with Resource Development. Terrascope also continues to pursue funding opportunities jointly with PKG as a part of the larger partnership (see below).
- This marked the second implementation year of a long-term partnership between
  Terrascope and the PKG Public Service Center. (See PKG report for details.) This year,
  joint research by Terrascope and PKG staff led to the development of highly relevant
  partnerships and the continued deep involvement of Terrascope students in projects in
  both Puerto Rico and the Navajo Nation.
- Terrascope staff contributed to Institute efforts to adapt to pandemic-related circumstances. Staff facilitated planning sessions for the 2021 academic year and served on working groups to create summer and fall employment opportunities for MIT students, increase students' engagement with experiential learning and prepare for remote learning. Terrascope students tested dozens of whiteboarding and classroomsimulation platforms and created documentation for distribution across the Institute.

### Notable Statistics/Data

• Fall enrollment remains high: this year had the second-highest enrollment since the transition to a new director. Spring enrollment has been more consistent over the last three years, in part due to the partnerships with Course 2, D-Lab, and Beaver Works.

# **Awards and Recognition**

 Terrascope is recognized across campus for work beyond student-centered learning experiences and sustainability education to first-year students. In particular, Terrascope has played important roles in assisting other units of MIT as they develop responses to the current crisis (see above), and Terrascope's director co-chaired MIT's Sustainability Leadership Committee.

### **Looking Ahead**

- Terrascope continues to build strong partnerships on campus, in particular with the MIT Environmental Solutions Initiative (ESI), the PKG Center, the Office of Minority Education, the Department of Mechanical Engineering, D-Lab, Beaver Works and the Office of Sustainability, in addition to remaining involved in broader efforts to improve the first-year experience.
- Terrascope will continue to develop a robust fundraising and alumni engagement strategy to ensure the sustainability of its spring break field experience and to build community among its alumni.

#### Office of Graduate Education

The Office of Graduate Education (OGE) supports, consults, and collaborates with graduate students, faculty, and other community members on the stewardship of policies and procedures; the promotion of student financial well-being; the enhancement of the graduate personal support network; and the cultivation of an inclusive and diverse community.

### Supporting Educational Innovation and Excellence

The <u>Committed to Caring</u> program held its biennial selection round and announced a new slate of <u>12 faculty honorees</u>. In fall 2019, the OGE and Associate Provost Tim Jamison launched a pilot Faculty Peer Mentorship Program, which aimed for pairs to connect regularly throughout the year to support mentoring relationships with graduate students and postdocs. Ten entering untenured faculty members were matched with a previous Committed to Caring honorees. Central support included a kickoff gathering and email outreach throughout the year.

The fall 2019 Path of Professorship workshop saw strong participation by 47 graduate student and 22 postdoctoral women across 17 departments in the schools of Engineering, Science, Sloan, and Architecture and Planning. Twenty-six faculty members from MIT and other institutions shared a wealth of knowledge on diverse topics.

# **Graduate Funding**

For FY2020, the OGE administered fellowships for roughly 1,000 graduate students, both external opportunities and internal fellowships including the Presidential Fellowships, OGE Competitive, and those opportunities that support diversity, and special cases. OGE ran a successful graduate student survey to collect data on its fellowship efforts (1,157 responses; 15% response rate). A fellowship program assistant was hired to work on fellowship administration and related programming. Surmounting challenges faced by Covid-19, a team from across the OVC reviewed over 200 nominations and successfully made selections for the 46 OGE's competitive fellowships. MIT continued to have the second highest number of NSF Graduate Research Fellowship recipients in the country (554), and makes up the largest university cohort of National Defense Science and Engineering Graduate Fellows (39); Department of Energy's Computation Graduate Fellowship (24), and Hertz Foundation Fellowships (17).

The OGE offered a series of eight workshops on topics such as budgeting, investing, and retirement. The online financial literacy platform, iGrad (co-sponsored by OGE and the MIT Federal Credit Union) saw an increase in active users from 1,738 to 2,012. A website section on Transitioning out of Graduate School was added, and the financial literacy section was expanded and updated. The Director of Graduate Fellowships conducted workshops and outreach on applying to graduate fellowships for both general student audiences and for specific groups/departments, reaching over 800 students.

The OGE continued to provide emergency financial assistance during the past year to individual graduate students who experienced one-time, non-recurring financial emergencies, including unexpected and unavoidable expenses, once other resources have been exhausted. This assistance was formalized as the Graduate Student Short-Term Emergency Fund with applications reviewed by an OGE team. This year saw a large increase in funds awarded due to the financial impacts of Covid-19 on students. Over 200 students were assisted, in addition to approximately 100 students who were provided financial assistance related to campus dedensification.

In early summer a new pilot process was launched, in collaboration with the OVC headquarters staff, Student Financial Services, and school dean's offices, to assess the financial stability of students who apply for nonresident status (n=149 in AY2020).

The MIT Grant for Graduate Students with Children was established as a pilot program as a need-blind grant for Ph.D. and eligible master's students whose children live with them. The grant may be used to cover expenses such as child care, health care, and housing. While it does not cover the bulk of child care expenses, it is intended to help alleviate some of the financial hardship student parents face while allowing them flexibility. The first funds will be distributed in October 2020.

### **Administration and Policy**

The second year of the Parental Leave policy saw a total of 6 applications from birth and non-birth parents, down by 11 from last year. The drop may be due in part to Covid-19 campus dedensification in mid-March.

Of the 30,681 applications for graduate study in 2020, 4,413 (14%) offers of admission were made. Of those, 2,290 (52%) students matriculated into advanced-degree programs. The steady climb in applications likely relates to the continued strength of MIT's graduate programs.

In April 2020, the MIT Undergraduate Special Student program was suspended for the 2020-21 academic year due to the ongoing Covid-19 pandemic.

In the spring 2019, the OGE engaged external partner Campus Labs as a consultant to advise on improving assessment of OGE programs, particularly GradDiversity and GradSupport. Campus Labs conducted a deep dive into these two areas in the summer of 2019, and offered their report in early fall 2019. This year, OGE worked to implement the recommendations, including clearer definition of goals, streamlining data collection, and refining our assessment plan and practice to have greater integrity and relevance. Campus Labs staff returned in January 2020 to conduct training for OGE team members. In a related effort, OGE worked with IS&T to implement kiosk check-in stands at three office locations (3-138, 35-332 and 35-338). A Qualtrics check-in form will document the nature of foot traffic.

# **Building and Sustaining Diversity**

In June 2020, Director of GradDiversity Gloria Anglòn stepped down; a search will commence for her successor.

### **Increasing Diversity through Outreach and Recruitment**

MIT GradCatalyst, a grad-prep workshop, hosted five sessions this year for approximately 131 prospective graduate students currently enrolled at MIT, Tufts University, Harvard University, University of Miami, Florida International University, Brown University, and Morehouse College, among others. The attendance represents a 162% boost in students reached compared to last year. Additionally, nine grad diversity ambassadors were trained and facilitated the workshops amidst Covid-19.

The Graduate Application Assistance Program matched 15 current MIT graduate students (mentors) with 21 MIT Summer Research Program - General (MSRP) alumni to review the statement of objectives essays and resumes in preparation to submit for MIT graduate programs. MSRP alumni attested the program helped improve their application and increase their interest in applying to graduate school at MIT.

Recruitment travel consisted of eight national and regional diversity STEM conferences and two meetings in collaboration with the Ivy+ Graduate Deans and the Massachusetts Consortium of STEM program. In total, OGE collected 569 prospective graduate students' contact information and shared it with MIT departments for recruitment. A list of 6,253 underrepresented minority and underserved prospective graduate students was curated from the Education Testing Service (ETS) GRE Search and four national partners and digital outreach was conducted.

Graduate Admissions staff reviewed 790 Graduate Application Fee Waiver requests and granted waivers to 615 prospective applicants applying to 33 different departments across the Institute. Applicant waiver requests originated from over 300 undergraduate institutions across the country; 84% were U.S. Citizens and Permanent Residents and 16% were International. The reasons consisted of 49% (n=302) financial hardship, 31% (n=188) other diversity programs, 12% (n=73) MIT-sponsored diversity programs, events or conferences, and 8% (n=51) U.S. Armed Forces Member.

### MIT Summer Research Program - General (MSRP)

In response to the many challenges posed by Covid-19, the traditional nine-week residential MSRP was adapted to a five-week virtual program, coined MSRPx. MSRPx interns engaged in a modified co-curriculum designed to increase competence in the areas of research comprehension and communication, research ethics, research identity, and professional and career development. Unlike the traditional MSRP program, remote research was an optional requirement and allowed MSRPx interns to seek research experiences within and outside MIT. Of the 32 interns, 91% engaged in a remote research experience (81% internal and 10% external to MIT). MSRPx interns showcased their research, scholarship, and creative projects to

the MIT community via five-minute Lightning Talks, hosted on the MIT GradDiversity YouTube Channel.

The admitted intern pool totaled 32 (10% of the applicant pool) who were placed in 17 departments in four schools across the Institute. The composition of the 2020 MSRPx cohort includes 66% who self-identify as U.S. underrepresented minorities, 47% women, 38% Pell-grant recipients, and 13% first generation in their families to graduate from college. In all, 76% earned a cumulative 3.5 GPA or higher, 82% have had prior research experience, 84% are advanced undergraduates (rising seniors), and 35% attend minority-serving institutions.

According to the 2020 exit survey, the interns expressed a considerable 43% increase (from 47% to 90%) in their level of interest in pursuing a doctoral degree after participating in MSRP. With regard to an MIT degree specifically, strong interest remained at 93%.

### **Cultivating a Vibrant and Empowering Community**

The Ignite Community series hosted six events, including two in collaboration with the Office of Multicultural Programs (OMP), Office of Minority Education (OME), Institute Community and Equity Office (ICEO) and the Black Graduate Student Association (BGSA). These included: Graduate Students of Color Welcome; Ignite Your Gratitude with Janhavi Madabushi, Cultivate QTPOC Healing Practice; Ignite Your Black Love, a viewing of the film The Photograph; two virtual community events; the MIT Multicultural Awards Banquet; and MOSIAC, formerly known as the Graduating Minorities Luncheon.

This year, OGE GradDiversity also introduced a new series of informal community gatherings, Spill the Tea. With the assistance of Graduate Community Fellow Darien Williams, GradDiversity hosted three in-person and three virtual teatimes, providing graduate students space to check in with one another as well as to connect with OGE GradDiversity staff.

The <u>Graduate Diversity Ambassadors</u> saw an increase in participation, with 32 students from all five schools receiving training and conducting outreach and recruitment programs.

### University Center of Exemplary Mentoring (UCEM)

In July 2019, Ashley Carpenter became the first academic program coordinator for the University Center for Exemplary Mentoring (UCEM) program at MIT. The program has completed the second year of the Phase II grant (overall year five) from the Alfred P. Sloan Foundation. UCEM brings together four departments (BioE, ChemE, EECS, and MechE), creating a collaborative partnership and a collegial, supportive environment for all participants. This year, the UCEM program added Health Sciences and Technology (HST) starting in AY2021. With the School of Engineering's support, HST is dedicated to fully fund about three scholars per year so as to be identical to all other UCEM departments. This furthers the goal of institutionalizing the UCEM program.

During the 2020 graduate admission cycle, the UCEM program extended 19 Sloan Scholarship Awards. Twelve of these students will enroll in AY2021, with one deferring until AY2022. Cohort

#6 will thus have 11 Sloan Scholarship awardees. We note that Covid-19 may have impacted the admission decisions of some of the UCEM awardees. The six remaining scholarships will be used for the upcoming 2021 admission season as a recruiting tool.

To support the UCEM scholars, the UCEM leadership team implements holistic and rigorous programming for every aspect of our graduate students. UCEM Scholars participated in a robust five-part professional and personal development series that addressed their academic career's varying needs and learned how to navigate their academic milestones successfully. Feedback from program alumni and current students through post-event surveys helped the UCEM Leadership Team develop 23 activities that supported the recruitment, retention, professional development, community, and academic development of our UCEM scholars.

# Climate and Community

Eight new Graduate Student Life Grants (GSLGs) were awarded to projects that focused on enhancing advising relationships between faculty and students, under a special call for proposals. Projects included an anti-racist workshop for students and faculty in the Department of Urban Studies and Planning; a faculty-student Friday evening maker series; a student-faculty lunch series in the Department of Earth Atmospheric and Planetary Sciences; and a creative contest in the Department of Architecture that solicited designs for a scarf that was then produced and available a reduced cost for their department community.

The OGE provided financial support for a wide range of graduate student-centered activities through an ongoing request-for-funds process. Examples include a mindset lecture series at Ashdown, kick-start funds for new Latinx Grad Students Association, support for programming of Graduate Women at MIT (GWAMIT), and a continuation of long-standing funding to support grad-focused events by the List Center.

The Graduate Community Fellows (GCF) program has grown to 30 fellows working in OVC and offices across the Institute. A new position was approved for a fellow to work with the Graduate Student Council's Diversity, Equity, and Inclusion committee, in partnership with Institutional Research, on surveys of the graduate student population.

## Holistic Support of Graduate Students

Staffing changes occurred in the OGE GradSupport team: Assistant Dean Jason McKnight stepped down; Suraiya Baluch was promoted to associate dean; and Assistant Dean Cathleen Collins joined the team reporting to Dean Baluch.

In partnership with Title IX office, OGE administered the mandatory online Sexual Assault Prevention for Graduate Students module for 2,192 students. In June 2020, OGE assumed administrative supervision of the Resources for Easing Friction & Stress (REFS) graduate peer advisor student groups.

OGE, oftentimes in collaboration with the Coordination, Assistance, Response & Education (CARE) team, Student Support Services (S3), and the Title IX office, presented to faculty, students and staff in numerous departments, the SOE Junior Faculty Advising Pilot program, Resources for Easing Friction & Stress (REFS), and the Black Graduate Students Association. Additionally, with colleagues across the Institute, staff presented to department heads, the Writing & Communication Center, and participated in the Graduate Student Council Resource Fair and the Division of Student Life Wellness Fair.

GradSupport staff were recognized with an OVC an Infinite Mile award for Collaboration & Communication.

#### **International Students Office**

The <u>International Students Office</u> (ISO) serves all incoming and currently enrolled international students (graduate, undergraduate, non-degree, and alumni) at the Institute and assists in maintaining their legal status in the United States, provides support for their dependents, and promotes interaction with, and integration into, the MIT community. ISO Staff serves to educate the Institute community on immigration-related regulatory and legislative actions that impact international students' ability to pursue their program of study and training opportunities during and after completion of their degree (up to three years after completion of degree).

#### Key Accomplishments

## ISO Operations Transition, due to Covid-19, to fully Remote Service Offerings

MIT transitioned to fully remote operations outbreak as of March 13, 2020. The ISO continued to offer in-person services until March 19, 2020 in order to assist our international students during this hectic transition to secure necessary travel validation signatures on their visa documents for travel outside of the U.S., pick up documents on file for employment authorizations, review employment applications prior to mailing to U.S. Citizenship and Immigration Services, and processing support letters for government services.

All of the work by ISO Staff over the past two years to expand service operations through our ISO Student Portal (iMIT, powered by Sunapsis) paid immeasurable dividends with the ability to access all student records, and offer all of our services, online. The increased demand for services—including advising requests by phone/Zoom and by email—was challenging and impacted our normal processing timelines early on after the closure, but improved over the course of the spring and summer.

The ISO continued programming outreach through online platforms to newly admitted students, with support from our orientation coordinators, and continued social programming to maintain connections online through the spring and summer – including ISO Zoom Noon Breaks, Meet & Greets, the Language Conversation Exchange programs, and <a href="How To Adult Spring Series">How To Adult Spring Series</a>, just to name a few programs. ISO transitioned our Employment Information Sessions to an online format and participated in many academic program Town Hall events for both new and continuing students.

#### **Communication Enhancements**

Throughout the spring and summer 2020, the ISO published an <u>ISO Updates webpage</u> to host all email communications so that students, as well as faculty and staff, could easily access the vital content that was subject to regular changes, based on U.S. Government policies and announcements. The ISO also hosted a series of <u>ISO Virtual Forums</u> for both new and continuing students, to provide interactive updates on government policy concerning immigration and enrollment of international students in the summer and fall 2020.

On July 17, 2020, the ISO launched a newly designed website to provide greater ease of navigation and access to crucial resources and guidance. A special feature of the new website is the Knowledge Base, which allows for categorization and search capacity for a central frequently-asked-questions section that has already earned praise from students.

# Continued Expansion of Internship/Experiential Learning Subjects in Academic Departments – CPT eligibilities

We continue to see an increase in student demand for off-campus experiential learning/internship opportunities with growing support by faculty. The ISO, in coordination with the OVC, established an OVC Cross-Functional Team on Internships/Experiential Learning in the Curriculum to work with academic programs to advocate for the creation of experiential learning opportunities as elective subjects or degree requirements to expand professional development experiences.

Outreach to U.S. Department of State and Congressional Liaisons on Visa Processing Delays
The most significant challenge this year faced by our international student community has been
a series of impacts on visa processing abroad and travel restrictions imposed by the U.S.
Department of State and Executive Orders. Even prior to Covid-19, visa processing delays have
been attributed to extended administrative processing through the U.S. Department of State
and other government security agencies that must be completed before a visa may be issued.
ISO staff continues to support our students through direct advocacy to individual
embassies/consulates, the U.S. Department of State Visa Office, and congressional contacts on
long-pending visa applications for new and continuing students and their family members.

Visa services were suspended at most U.S. Embassies/Consulates due to Covid-19 from February 2020 until July 15, 2020, though many consular posts have not resumed visa processing (including all posts in China). Visa processing and travel was also impacted by a number of Presidential Proclamations/Executive Orders issued by the Trump Administration, that continue to be in effect:

- <u>Presidential Proclamation Suspension of Entry of Certain Students and Researchers in</u>
   F and J status from China effective June 1, 2020
- <u>USDHS Announces Extension of "Non-Essential" Travel Restriction Between Canada-U.S.-Mexico</u> issued April 20, 2020
- United Kingdom and Republic of Ireland added to Europe Travel Restriction to U.S. -March 14, 2020
- Entry to U.S. from Most European Countries Suspended for 30 Days issued March 11, 2020
- <u>Presidential Proclamation Barring Entry to U.S. For Those Who Travel to China Within 14</u>
   <u>days Prior to Arrival to U.S.</u> January 31, 2020
- <u>Presidential Proclamation Expands Travel Ban to 6 New Countries, Previous 7 Countries</u>
   <u>Remain Subject to Restrictions</u> January 31, 2020

# Contributions to Institute Committees and Their Recommendations to the MIT Administration

ISO staff have served on OVC and Institute committees, working groups, and cross-functional teams, including: the Institute Committee on Discipline; the Office of Vice Chancellor Leadership Team; OVC Values Working Group; OVC Council on Diversity and Inclusion; International Students of Color Orientation and Onboarding Team; MIT Tax Workshops; MIT OME Mentor Advocate Program; Housing Extension Committee; Redesigning Important Programs and Events for a Virtual or Hybrid World; working groups on MIT academic and program planning, supporting Institute advising initiatives, remote online coursework, and pursuit of teaching/research appointments from abroad.

## Notable Statistics / Data

## International Student Enrollment (snapshot fall 2019)

- International student community: from 125 countries, including U.S.
- Undergraduate = 458 (10.06% of total MIT undergraduate enrollment)
- Graduate = 2,874 (41.95% of total MIT graduate enrollment)
- Non-Degree
  - Special undergraduate and graduate) = 56
  - Visiting Students (full year total) = 1,029

# Post-Degree Employment (on MIT student visa sponsorship – snapshot fall 2019)

- F-1 Optional Practical Training/STEM OPT = 1,343
  - F-1 Optional Practical Training = 744
  - o F-1 STEM Optional Practical Training = 599
- J-1 Academic Training = 43

## ISO Walk-In/Appointment Service Usage

		Part Year		<u>Notes</u>
<u>Fiscal</u>		(to March	<u>Full Year</u>	
<u>Year</u>	Date Range	<u>19)</u>	<u>Total</u>	
FY2020	07/01/2019-03/19/2020	9,444		ISO closed due to Covid-19 on 03/19/2020.
FY2019	07/01/2018-06/30/2019	9,187	13,489	implementation of expanded ISO website and iMIT service options to reduce in-person submission requirements.
FY2018	07/01/2017-06/30/2018	9,741	15,116	Executive Orders/Presidential Proclamations, updated Travel Ban, new US visa application procedures, increase in STEM OPT use.
FY2017	07/01/2016-06/30/2017	8,174	13,660	Presidential Executive Orders, changes in DHS and DOS policy; ISO move to E18-219 on 11/01/2016.
FY2016	07/01/2015-06/30/2016	7,742	11,454	Increased ISO website resources; increase CPT/OPT/STEM OPT. New ISO Director, David Elwell, begins 8/31/2015.

## **Awards and Recognition**

- Promotion of Cedrick Boursiquot from SEVIS Administrator & Data Analyst to SEVIS
   Manager & Data Analyst, coordinating all data and database functions through Sunapsis
   (iMIT) and integration with IS&T student data systems.
- Hiring of Ashlee Andrews as the ISO Visiting Student Program manager and advisor. Ashlee began at the ISO on February 15, 2020.
- David Elwell, ISO associate dean and director, was awarded the MIT OVC Infinite Mile Award for "Collaboration and Communication" in May 2020.

## **Looking Ahead**

- New search/hiring of assistant director of operations and advising to be completed in fall 2020.
- Implementation of Sunapsis Mobile Application for increased student service access and timely data reporting.
- Continued enhancement of service and support options through current and new ISO remote/online resources.
- Implementation of new visiting student program policies after resumption of program following Covid-19 limitations.
- Review and re-allocation of advising cohorts to manage ever-growing workload of ISO advisors.

Advocacy on Visa Processing and Protecting Experiential Learning for International Students
The ISO will continue its strong partnership with MIT Government Relations and the MIT

Washington Office in advocacy for legislation, policy changes, and agency accountability in support of our international students in areas including duration of status for F and J visa holders, H-1B status, and curricular-based internships or post-degree training in their field of study. These components are crucial for recruitment, enrollment retention, and professional development of our international students.

## Office of Minority Education

The Office of Minority Education (OME) promotes academic excellence, builds strong communities, and develops professional mindsets among students of underrepresented minority (URM) groups, with the ultimate goal of developing leaders in the academy, industry, and society. The OME supports MIT's\* academic mission, while also serving the nation's need to increase the number of URM students pursuing careers in STEM disciplines.

## Key Accomplishments

- The OME's newest signature program, The Standard, focuses on enhancing the overall success of undergraduate Men of Color. We now have 55 first- and second-year students in the program. In October 2020, approximately 20 young men will be inducted.
- The OME and the Office of Digital Learning entered the third phase of our pilot, Interphase EDGEx (IPx). However, due to Covid-19, Interphase transitioned to a completely online program for 88 scholars. We offered four academic classes for elective credit. We also provided virtual opportunities for scholars to build strong connections with their peers. Given that MIT is hybrid this fall, the summer experience helped the scholars prepare for the MIT experience even more than we anticipated. Interphase EDGEx, hybrid online/on-campus program, officially launches next summer.
- In AY2020, there were 1,326 visits to the Talented Scholars Resource Room (TSR^2);
   65% of the visits were from URMs. Over the same period, 44 students participated in Seminar XL (68% URM). Both TSR^2 and Seminar XL pivoted to offer virtual academic services due to Covid-19.
- Momentum collaborated with General Motors and Capital One this year to explore the user experience of people with disabilities in autonomous vehicles and financial security in un/underbanked populations, respectively. Thirty-five (first- and second-year) students enrolled in the IAP course. Companies affiliated with our Industrial Advisory Council for Minority Education (IACME) made six offers (for internships) to six students who participated in the class. Ninety-six percent (n=27; 77% response rate) of participants reported that they gained valuable teamwork skills from their Momentum experience.
- Thirty-three protégés (first-year students) and 33 mentors (MIT faculty, staff, post docs, and graduate students) participated in the OME's Mentor Advocate Partnership (MAP) program.
- Our Industrial Advisory Council recently voted to increase their giving to the OME.
   During the pandemic, industry support remained steady; only two partners took hiatus due to budget constraints.

Notable Statistics / Data

- From The Standard's end-of-year survey (47% response rate), we learned that 96% of the 26 young men who responded felt a strong sense of community within this newly established community. Ninety-six percent of the same group of young men reported that they would recommend The Standard to other students.
- Laureates and Leaders served 79 students this year. Twenty-four students graduated from the program in June 2020. Of those, 71% planned to enter STEM graduate programs directly following graduation (59% will pursue PhDs in STEM, 18% will pursue MD-combined program, and 23% will pursue a Master/MEng degree). One hundred percent of the seniors shared that they were satisfied with the help and support the program offered.
- The Interphase EDGE Program (IP) generally supports 140 students each year (70 first-year and 70 second-year students) by offering advising and other academic and professional development resources. One indicator of the academic success of Interphase students is fifth-week flags. In fall 2019, 11.6% of the IP 2019 cohort (n=70) received a 5<sup>th</sup> week flag with a solid 75% recovery rate. The flag rate was similar for fall 2018 (11.6%), but the recovery rate for IP students last fall was lower at 63%. The fall 2019 overall flag rate for MIT was 7% with an 83% recovery rate. Due to the pandemic, flag rates were not reported for spring 2020. Of course, many MIT and external environmental factors influence academic outcomes. Interphase is just one factor.
- In AY2020, 44 students participated in Seminar XL. All the students passed the course for which they took a Seminar XL class. The recovery rate for students who took a Seminar XL/LE class in a flagged subject was 100% in the fall (for MIT it was 83%); no flags were issued in the spring (due to Covid-19).
- In AY2020, 93% of students who participated in TSR^2's academic resources passed the class in which they sought assistance.

## Awards / Recognitions

- OME Staff received the MIT Excellence Award for Serving the Client this spring.
- Two Laureates and Leaders students received Schwarzman scholarships.
- Three Laureates and Leaders' students were featured in MIT News:
  - Swarna Jeewajee '20
  - Noopur Ranganathan '21
  - o Adedoyin Olateru-Olagbegi '20

## **Registrar's Office**

The <u>Registrar's Office</u> fosters curricular innovation and educational community-building; ensures the integrity of academic information; and develops and maintains a robust infrastructure that is responsive to the evolving needs of students, faculty, staff, and alumni.

## Key Accomplishments

- The Registrar's Office mobilized quickly to react to the unprecedented Covid-19 disruption and its implications on the Institute. In addition to successfully transitioning to remote work, the office:
  - communicated Covid-related changes efficiently
  - o supplied student academic data which informed Institute decisions
  - set new guidelines for degree completion as well as for the assessment of student outcomes at end of term
  - helped to shape the new Fall 2020 Academic Calendar given the limitations imposed by the pandemic
  - implemented technical changes required by the Emergency Academic
     Regulations team related to grading, subject evaluation surveys, and graduation.
- Developed and implemented the new, condensed spring Academic Calendar, using a yearlong communications strategy.
- Worked closely with the Committees on the Undergraduate Program (CUP), Academic Performance (CAP), and Curricula (CoC) to determine the path for a new undergraduate grading option (Flexible Pass/No Record). This grading option will be implemented starting with first-year students entering in fall 2020 and will eventually phase out the Sophomore Exploratory and Junior/Senior P/D/F options.
- Continued to support Phase One and began to provide support for Phase Two of the
  Experimental Grading Policy to Increase Flexibility for Exploration and Discovery in the
  First Year. This included additional system updates to accommodate the experiment,
  working closely with and providing data to the assessment team, and collaborating with
  the Office of the First Year.
- Beyond those related to experimental grading, implemented a series of complex mandates, including new credit-limit messaging, changes associated with condensing the Academic Calendar, and transcript changes required by ABET.
- Developed and deployed a new pre-requisite report in WebSIS for instructors and administrators.
- Participated in a discovery process to assess IT solutions for a new degree audit program.
- Supported the nominations and awarding of four new MacVicar Fellows. Partnered with the vice chancellor to develop the MacVicar Day symposium, "Learning through Experience: Education for Fulfilling and Engaged Life," which was canceled due to the pandemic.
- Facilitated the following curricular changes:

- Course 3 SB substantial revisions to increase flexibility; revision to minor in Archeology and Materials.
- Course 5 SB revisions to minor in Polymers and Soft Matter.
- Course 10 SB substantial changes to provide greater flexibility; minor changes to 10-B and 10-C; substantial changes to 10-ENG, including name, to bring program into ABET compliance.
- o Course 21-H SB reduced number of required subjects from 14 to 11.
- o Course STS SB reduced number of elective subjects required from five to four.
- Substantial changes to minor in Entrepreneurship and Innovation.
- Minor change to minor in Energy Studies.
- o Substantial changes to minor in Environment and Sustainability.
- Completed the renovation of classrooms 24-112, 24-115, and 24-121 for the start of fall 2019. Began initial renovation efforts of lecture hall 54-100 and classrooms 14N-325 and 24-307.
- Began work on a new 300-seat lecture hall and 60-seat active learning classroom for the Schwarzman College of Computing.
- Adjusted our website in response to accessibility audits.
- Completed an office-wide prioritization exercise, which resulted in a set of recommendations that will inform our decision-making moving forward.

## Notable Statistics / Data

- In the past year, we issued 3,453 digital diplomas; over 90% of May graduates opted in.
- The dynamic nature of MIT's curriculum was illustrated by the addition of 52 subjects and revision to 506 existing subjects. In addition, 25 subjects were removed from the catalog and four were reinstated.
- The CoC, which our office supports, reviewed 227 applications for double majors, eight REST Requirement petitions, and one Institute Laboratory petition.
- The d'Arbeloff Fund and the Alumni Class Funds financed 19 projects, from across the Institute, totaling over \$674,000.
- Subject evaluations were administered as normal for six evaluation windows. This spring, we administered a new subject-specific survey using the online subject evaluation system. In total, 2,131 subjects were evaluated in AY2020 and 2,308 instructors were evaluated in the fall term.

## Awards / Recognitions

 Rosanne Santucci received a 2020 Infinite Mile Award for Collaboration and Communication.

## **Looking Ahead**

• The Covid-19 disruption will continue to require nimble and responsive work from our office, as the Institute's core principles are reexamined, curricular innovation is required, and educational initiatives are approved. We will:

- o implement the system changes needed to accommodate the special fall term grading arrangements due to the Covid-19 disruption.
- support anticipated and unanticipated curricular changes with flexibility and efficiency, while at the same time maintaining the integrity of our position as steward of academic policies and records.
- adjust the subject evaluation questions, policies, and procedures due to the prevalence of remote teaching.
- We will continue to work with the OVC and CUP to support recent changes in grading policies. This will entail collaborating with the assessment teams, updating systems, and communicating clearly to advisors and undergraduates.
- We will make changes to accommodate the Schwarzman College of Computing in our system hierarchies.

## Reserve Officer Training Corps—Air Force

<u>Air Force ROTC Detachment 365</u> seeks to develop leaders of character for tomorrow's Air Force and Space Force. Our staff of five (three active duty officers, one non-commissioned officer and one MIT administrative assistant) trains a growing number of cadets from MIT as well as Harvard, Tufts and Wellesley. Each semester our cadets enroll in an AFROTC-focused academic course (taught by our officer cadre), participate in physical fitness training, organize and execute a weekly Leadership Laboratory, as well as several special events throughout the year. In recognition of our growing enrollment and achievements, MIT continues to provide generous funding which facilitates high-quality, formative opportunities to cadets.

## Key Accomplishments

- We continued our integration and presence in the MIT community. Cadre members led or assisted in leadership training for one of the Sloan IAP courses as well as the Undergraduate Advisors.
- We leveraged MIT relationships and resources to provide unique opportunities for cadets, to include visits from Major General (Ret.) William Rapp, who teaches at Harvard Kennedy School; Lieutenant General (Ret.) Bruce Wright, President of the Air Force Association; Brigadier General (Ret.) Dana Born, Professor at Harvard Kennedy School; and Colonel Christopher Bennett, HQ AFROTC Commander.
- We proudly commissioned 11 new second lieutenants this year. Two were AF
   Distinguished Graduates an honor reserved for the top 15% of graduates in all of
   AFROTC. Three others were selected for prestigious scholarships that will allow them to
   stay at MIT for their first active duty assignment to complete their graduate degrees.
   One will enter the Space Force and be our first lieutenant to do so.
- Our program's enrollment is consistently driven by the award of full-tuition scholarships.
   With a strong recruiting effort, we continue to grow and look forward to our largest class this fall made up of students with both full and partial scholarships.

## Notable Statistics / Data

- Spring 2019 total enrollment was 51; spring 2020 was 72. We are expecting 40+ incoming first-year students this fall, to bring our total enrollment to 99.
- AFROTC scholarships now pour \$3M in undergraduate tuition into our four schools annually.
- In addition to our undergraduates, Det. 365 also serves as the military focal point and administrative oversight/support to ~50 active duty officers pursuing advanced academic degrees at our four schools.

# Awards / Recognitions

• Cadets were recognized with multiple national level awards, including the Sons of the American Revolution and the Military Order of the Purple Heart.

# **Looking Ahead**

- Maj. Jason Heller joined our team this summer and will teach our first and second year classes, as well as serve as our recruiting officer.
- In light of our rapid expansion, we are advocating for a second NCO from ROTC.
- We are excited for a classroom renovation that should take place this year.
- We seek to foster better and more consistent contact with our alumni network.
- We advocate for our cadets to partner with academic faculty on Department of Defense-sanctioned research projects.
- We partner with the Space Force as they mature and bring officers to campus for research and degrees.

## Reserve Officer Training Corps—Army

The mission of the <u>Army Reserve Officers Training Corps</u> (AROTC) is to select, retain, train, and commission cadets from MIT, Harvard, Tufts, Wellesley, Salem State, Gordon, Endicott, and the New England Conservatory in a two, three, or four-year program to prepare them for future leadership roles in the U.S. Army, the nation, and the world. Our vision is to develop agile and adaptive leaders of character who utilize critical and creative thinking skills to solve complex, ambiguous problems.

## **Accomplishments**

Six of the 15 commissioned cadets this spring earned the honor of "Distinguished Military Graduate," placing them in the top 20% of all cadets nationwide. One of the top cadets from this same cohort was awarded a fellowship by the MIT Lincoln Laboratory. He will be completing his researching and graduate degree though the CSA Warrior Scholar Program. Another high-performing cadet in the 2021 cohort has been nominated by MIT for the Rhodes Scholarship. As of May 1, 2020, 81 students were enrolled in the Army ROTC program with \$26 million in scholarships, a notable increase from last year. The Class of 2021 is expected to commission 20 officers, which means we will exceed the Army directed commission mission for the first time in four years.

Year-End Enrollment for Army ROTC, as of May 1, 2020

	Freshmen	Sophomores	Juniors	Seniors	Total
MIT	5	6	7	7	25
Harvard	6	5	8	2	21
Wellesley	1	3	1	1	6
Tufts	4	6	0	3	13
Other Affiliates	3	6	5	2	16
Total	19	26	21	15	81

Our cadets exceeded local, regional, and national averages in nearly all measurable areas at Fort Knox, KY, with 57% of our cadets placing in the top half of their peer group. Several cadets participated in the National Conference on Ethics at West Point and the Army 10-miler in Washington D.C. Over winter break, four cadets completed Air Assault School at Fort Campbell, KY, and four cadets were selected to participate in internships with U.S. Special Operations Command. Another cadet was selected for an internship with Lawrence Livermore National Laboratory. While many summer opportunities were cancelled due to the Covid-19 outbreak, we also had one Cadet shadow an infantry unit at Fort Bragg, and another shadow an aviation unit at Fort Belvoir.

During the fall semester, Army ROTC taught a first-year advising seminar made up entirely of non-cadet MIT students. During IAP, our cadre participated in its 17th consecutive year facilitating a capstone exercise for 90 students in the Sloan School of Management's IAP course

entitled Leadership Lessons Learned from the Military. We have partnered with the MIT football and volleyball teams to host a team leadership workshop in the fall and spring.

# Challenges and Plans for the Future

MIT Army ROTC's continued challenge is to sustain our viability by increasing the number of cadets in the program, especially from MIT. Acceptance rates into MIT for ROTC scholarship applicants have increased in the last three years, which have resulted in much larger incoming and outgoing first-year classes. This bodes extremely well for the continued viability of the MIT Army ROTC Program. The Army ROTC program plans to continue giving back to the MIT community by providing more leadership training opportunities.

## Reserve Officer Training Corps—Navy

The mission of the <u>Navy Reserve Officer Training Corps</u> (NROTC) is to develop our midshipmen into well-rounded leaders by serving with honor, courage, and commitment. On behalf of the Naval Science staff, we would like to thank you for another tremendous year of support and growth for the Naval ROTC program. As we send on 14 graduates from the Class of 2019, we are preparing for a class of 20 incoming students.

#### **Key Accomplishments**

This year, we sent 14 Class of 2020 graduates on to their next journey. We are proud to recognize their outstanding accomplishments and commitment to our program. The graduates and their post-graduation plans are noted below:

- Humberto Caldelas II (MIT) Naval Reactors Engineer
- Kevin Carlson (MIT) Explosive Ordnance Disposal (EOD)
- Devon Goetz (MIT) Explosive Ordnance Disposal (EOD)
- Colt Hermesch (MIT) Submarine Warfare
- Jonathan Ledet (MIT) Naval Aviation
- Warner McGhee (MIT) Submarine Warfare
- Thomas Strei III (MIT) Submarine Warfare
- Andrew Cummings (MIT) Marine Corps
- Elizabeth Herington (Harvard) Surface Warfare/Intelligence Officer
- Cassia Larson (Harvard) Naval Aviation
- Patrick Ramirez (Harvard) Naval Aviation
- Brendan Rodriguez (Harvard) Naval Aviation
- Nathaniel Twining (Harvard) Surface Warfare
- Aidan Schertz (Tufts) Naval Aviation

## Notable Statistics/Data

Our enrollment for fall 2020 showed a continued growth trend, although the numbers as of now are somewhat depressed by gap year requests due to the Covid-19 pandemic:

	Class of 2024	Class of 2023	Class of 2022	Class of 2021
MIT	8	9	4	5
Harvard	10	7	1	2
Tufts	2	1	1	2

## **Notable Recognitions**

We are excited to welcome two number of new staff members to our Naval Science Department: Administrative Assistant II Lisa Breen, and Human Relations Assistant Elaine Tavares.

#### **Student Financial Services**

<u>Student Financial Services</u> (SFS) makes the dream of attending MIT a reality by providing students and families the resources necessary to meet their financial obligations.

## **Transitions**

- SFS was restructured to provide better customer service, increase capacity among teams, and work more efficiently. Reporting lines changed, new positions were created, and internal staff were promoted to meet business needs. Leslie Bridson, director of financial aid, was promoted to a new position, director of student financial services, and now oversees a large portfolio in the office, including financial aid counseling and delivery, customer service, and operations.
- Two new director positions were created, director of student financial operations and director of student financial counseling. The director of operations position was filled in April. We promoted one internal staff to associate director on June 1 and waived the posting requirement to meet critical business needs for a unique position that manages federal aid funds and oversight of all loan processing.
- A new associate director for customer service was hired in November 2019 and a new counselor for customer service in April 2020.
- Edmund Jones was promoted to director of finance and administration for SFS and Admissions, maintaining his role in admissions while overseeing the accounting team in SFS.

#### Administrative Initiatives

## Financial Aid, Loans, and Affordability

- SFS implemented the following policy changes in the 2020 academic year, for incoming students from households with incomes of \$65,000 or less (and typical assets):
  - First Year Grant: Assists with the one-time costs of transitioning from home to college. \$2,000 per year, awarded \$1,000 each semester.
  - Covering health insurance costs for domestic students who do not waive MIT's extended-plan coverage. This policy change extends to each incoming class over the next three years.
- We automated our disbursement process for private-lender loans, shortening the time it takes for loan funds to appear on a student's account.
- We piloted offering a \$500 advance refund to 204 qualifying first-year students to enable necessary purchases before the start of the semester; 106 students took advantage of this opportunity.
- We developed a need-based graduate assistance application, review, and appeals process on behalf of departments for doctoral students experiencing financial hardship.

## **Customer Service, Operations, and Communications**

- In February 2020, we transitioned our customer service email process to a new software system, HelpScout, and added financial aid counselors to the system to improve case tracking, customer service, and collaboration between teams.
- We streamlined the stipend repayment process by allowing students the option of repaying funds via payroll deduction.
- Only one May 2020 commencement degree was held for financial reasons.

## **Response to Covid-19**

- In response to the need for students to vacate campus in March, SFS provided a Covid Grant to undergraduate students as a substitute for the remaining (half-semester) workstudy portion of their financial aid package.
- SFS processed over \$13.7 million in pro-rated, mid-semester refunds to students for more than 3,000 housing charges, 2,200 meal plans, and 11,000 instances of student life fees. We did not readjust students' financial aid awards to reflect the decreased expenses; students were able to see the full amount of the refund regardless of the amount of their financial aid award.
- We offered up to six months' forbearance to loan borrowers and zero percent interest on student loans for up to six months.
- We created an exit counseling video to allow students to complete this federal requirement online instead of in-person. While our 90% completion rate was slightly lower than in FY2019, students reported appreciating the on-demand option. We can now offer both in-person counseling and the video option when we return to campus.
- We partnered with other MIT departments (OGE, UROP, PKG) to provide consolidated employment resources on the SFS website, linking students to available jobs during the pandemic and remote work opportunities, as well as jobs when they return to campus.
- We worked with alternative loan and state grant agencies to shift disbursements from paper checks to electronic transfers for greater efficiency.
- We shifted the MIT Education Loan process from paper to electronic submission to provide flexibility and still allow borrowers to take advantage of this program.

#### **Notable Statistics**

#### **Financial Aid**

- In AY2020, MIT awarded \$137.5 million in need-based institutional grants to 2,724 undergraduates with an average family income of \$112,027. The median grant was \$56,974, or 81% of the cost of tuition, fees, room and board.
- Thirty-three percent of MIT undergraduates received an institutional grant sufficient to allow them to attend the Institute tuition-free. The average total family contribution

- (not including student term-time work) for those receiving an institutional grant was \$17,460.
- Sixty percent of the 4,516 undergraduates received need-based financial aid from the Institute. Nineteen percent received Federal Pell Grants, which are typically awarded to U.S. students with family incomes below \$60,000.
- Sixty-nine percent of undergraduates (3,108 students) earned wages totaling over \$10 million from on-campus employment, and on- and off-campus employment under the Federal Work Study program.
- The percentage of undergraduates taking out loans decreased slightly from 11% in AY2019 to 10% in AY2020. Among seniors graduating in 2020, 78% graduated with no debt. Of those with education debt, median indebtedness at graduation was \$15,614.

## **Customer Service and Operations**

- In FY2020, we answered over 9,460 calls; between February and July 2020, customer service counselors answered over 8,000 emails.
- We processed 267 MIT Education Loans applications, averaging \$9,462 per application, and disbursed over \$2.5 million in funds to MIT-wide staff and faculty.
- Tuition and fees for the Institute totaled \$762 million in AY2020. Graduate tuition and fees were \$455 million or 60% of total tuition. Undergraduate tuition and fees were \$239 million or 31%; and non-degree tuition and fees were \$68 million, just under 9%.

## **Teaching + Learning Lab**

The <u>Teaching + Learning Lab</u> (TLL) partners with MIT educators, staff, and student leaders to create engaging and supportive learning environments. During AY2020, TLL has supported and enhanced the foundational undergraduate experience (especially the first year); collaboratively developed, supported, and assessed academic advising (both graduate and undergraduate), as well as graduate student professional development opportunities around teaching and learning; supported diversity, inclusion, and academic well-being across educational experiences at MIT; and informed policy decisions that impact the educational experiences of undergraduate and graduate students at MIT.

Since the Covid-19 disruption, TLL has also actively supported OVC offices, academic departments, faculty, instructors, and TAs in the transition to remote teaching. The office continues to assist the ongoing institute-wide planning and preparation for an altered teaching and learning environment in fall 2020 (and possibly beyond).

## Key Accomplishments

## **Online Presence**

• Launched a redesigned website showcasing new teaching, research, and evaluation resources, as well as TLL's programs and services.

## **Remote Teaching Support**

- Led the development of the <u>Teach Remote</u> website providing guidance for MIT educators preparing to teach remotely. The office also created a <u>2-week remote</u> <u>teaching check-in guidelines</u> (and form), a subject-specific student survey, and an Institute-wide remote learning survey.
- Developed and offered a series of <u>Get Ready to Teach Remote</u> workshops for remote teaching, spanning EdTech tools and general best practices. The office also provided one-on-one consultations with faculty, instructors, TAs, staff.

## **Support for MIT Educators**

- MITeaches Fostering Inclusion: Launched this series of workshops and activities in August 2020 in partnership with ICEO to support MIT faculty, instructors, and teaching assistants in teaching for equity and academic belonging. An <u>annual report</u> was submitted to the anonymous donor in March 2020.
- New/Junior Faculty Teaching Cohort (SoS): Designed and launched a faculty-focused version of the <u>Kaufman Teaching Certificate Program</u>, serving School of Science faculty during fall 2019.

- Faculty Mentoring Initiative (SoS): Partnered with Tim Jamison, Paula Hammond, and Bruce Birren to design, develop, and deliver a series of workshops for faculty in SoS, focused on best practices in graduate student mentoring.
- Alternatives for the Evaluation of Faculty Contribution to Teaching: Produced an
  overview of practices at other institutions, and compiled a range of alternative options
  for the evaluation of faculty.
- Developed summer programming for graduate students including the <u>Subject Design</u>
   Certificate Program and Teaching Practice Certificate Program.
- <u>Teaching Development Fellows Network (TDFN)</u>: Supported graduate student professional development in teaching and leadership skills. The 11 TD Fellows of AY2020 addressed the teaching needs of peers in their departments, representing 10 different departments and one OVC office.
- <u>Kaufman Teaching Certificate Program</u> (KTCP): Surveyed all KTCP alumni and redesigned the program. Revised workshop topics and assignments to better prepare graduates to develop their own courses, with a sharper focus on the development of a working syllabus and the creation and use of aligned assignments and assessments.

#### **OVC-wide Initiatives**

- First-year Undergraduate Advising: Assisted with the design and launch of a pilot alternative first-year advising model for students of the class of 2023. Analyzed survey results and conducted student and advisor interviews to better understand the impact of the model, and inform first-advising planning.
- Graduate Advising: TLL is working with the Department of Chemical Engineering to
  develop a set of faculty workshops on effective graduate advising and mentoring. TLL
  and OVC staff worked together to identify effective practices at peer institutions, and to
  document past and current practices at MIT. They continue to work with staff from
  across the Institute, and with national experts in graduate student mentoring. It is
  anticipated that the advising program will launch in AY2021 and will eventually be
  expanded to the entire School of Engineering.
- <u>Flipping Failure</u>: Continued campus-wide digital storytelling project to help students build resilience in the face of academic challenges. Launched website in February 2020 with a collection of nine undergraduate and six graduate student video stories (see <u>YouTube channel</u> and <u>annual report</u> submitted to anonymous donor).

# Studies

- A study of how Covid-19 affects the learning and social experiences of undergrads by key demographics. Data collected via student responses to the Institute-wide Remote Learning survey was analyzed to inform the planning and structure of future remote subjects.
- Interview study of the academic well-being of lab-based STEM doctoral students at midpoint of their training. The study explores how the Covid-19 pandemic and inability

- to work in laboratories have affected doctoral students' views of themselves, their research, and the future, as well as their relationships with their research advisor, faculty members, lab colleagues, and others within the MIT community.
- Qualitative Assessment of the 2019-2020 First-Year Experiment CUP. Includes study of the impact of fall 2019 change to P/NR policies and credit limits on students in the class of 2023.

## Notable Statistics / Data

- A total of 326 students applied for, and 100 students enrolled in, the spring 2020 offering of KTCP, which continued through the Covid-19 disruption, moving to Zoom after spring break.
- In all, 325 total students enrolled for TA Days, workshops for new teaching assistants, in AY2020, including 189 students in August 2019 and 136 students January 2020.
- A total of 319 MIT community members registered for the AY2020 <u>TLL Speaker Series</u>, which focused on the theme of the holistic student experience.
- <u>Data Talks</u>, a workshop series focused on topics related to data acquisition and use, drew 384 attendees from the MIT community.

## Awards, Recognition, and Staffing

 In June 2020, TLL hired two MIT graduate students for the summer position of Teaching and learning content writer and two MIT undergraduate students for the summer position of communications assistant. Their contributions have been instrumental to the office's resource development and communications work, with one contract extending beyond August 2020.

## **Looking Ahead**

The transition to remote teaching in the spring and planning and support for teaching in the fall (and beyond) has significantly altered TLL's goals for next year. Supporting faculty, instructors, and TAs in their creation of engaging and meaningful remote learning experiences is our top priority for the next six months to one year.

TLL's pre-pandemic goals for AY2021 and beyond include:

- Continued expansion of the Teaching Development Fellows Network (TDFN) to include more departments across campus. (1-3<sup>+</sup> years)
- Continued development of additional programming to support the professional development of future faculty. (1<sup>+</sup> years)
- Continued development of Train-the-Trainers programs within departments (leveraging the TDF Network) in order to better leverage TLL's expertise and increase the scope of our (TA) trainings and workshops. (2<sup>+</sup> years)

- Continued development of web-based resources on best practices in assessment and evaluation, and teaching and learning for members of the MIT community. (1<sup>+</sup> years)
- Continued organization and delivery of the Data Talks Seminar Series workshops and seminars in a virtual environment, in order to educate and support members of the MIT community in the collection and analysis of administrative data. (1+ years)
- Support for a variety of faculty cohort(s). (1-3+ years)
- With additional funding from the anonymous donor, continued work on the Flipping Failure project and development of additional videos. (1 year)
- Continued dissemination of alternatives for the evaluation of faculty contribution to teaching/education. Support for departments as they select and collect additional forms of evidence and implement alternative forms of evaluation. (1+ years)