Office of the Vice Chancellor President's Report 2022-2023

Executive Summary

The mission of the <u>Office of the Vice Chancellor</u> (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.

Priorities and Progress

OVC's <u>strategic priorities</u> have shifted and become further refined since the organization's inception in 2017. Given changes in the student life and learning landscape (such as the unionization of MIT graduate students) and new ways of working (such as FlexWork), we have strived to remain nimble and collaborative, within OVC and with MIT partners more broadly, to advance our goals. A few highlights are outlined below.

Graduate Student Unionization

The <u>MIT Graduate Student Union</u> (GSU) voted to unionize in April 2022. During AY2023, the GSU, which represents 3,800 RAs, TAs, and Instructor-Gs, engaged with MIT in 26 bargaining sessions.

Timeline

- Negotiations began in mid-September 2022.
- The MIT bargaining team was well supported and well-prepared, with a Faculty Advisory Committee; weekly updates to the Deans Group; and engagement with teams from across MIT.
- Negotiations were paused on May 4, 2023 for a GSU vote.
- The GSU rejected the proposed MIT contract on May 18, 2023.
- Negotiations resumed in earnest in July 2023.

(<u>Note</u>: Information about the state of unionization, including the specifics of a future agreement, will have changed since the publication of this document. Visit <u>https://grad-union.mit.edu</u> for the latest updates.)

Undergraduate Advising

The need to improve undergraduate advising has been singled out in numerous reports, memos, and pilots over the past three decades. More recently, <u>Task Force 2021 and Beyond</u> took the next step, calling for a four-year implementation plan to improve undergraduate advising. A central component of the plan is the creation of a center for undergraduate advising.

In January 2023, <u>Diep Luu joined the Institute</u> as the inaugural director of the Undergraduate Advising Center (UAC) and associate dean in the OVC, providing strategic direction, planning, and management in the launch of the Center. The UAC will include the Office of the First Year and provide input on all aspects of advising and mentoring for undergraduate students working closely with faculty, department administrators, and other campus advisors across MIT to enhance student success. The goal is to ensure that all of our undergraduates are given what the chancellor calls the "whole student" experience and are well supported, both academically and personally, throughout their time at the Institute.

Diversity, Equity, and Inclusion

In the fall of 2022, MIT released a new <u>strategic action plan for belonging</u>, <u>achievement</u>, <u>and</u> <u>composition</u>. OVC has been actively engaged in a local planning effort, including mapping out the Institute commitments that fall within our purview. OVC has responsibility for, or is significantly implicated in, 18 of the 52 commitments in the Institute's strategic action plan.

In addition to the planning at the local and Institute levels, this summer the Supreme Court overturned more than 40 years of precedent and disallowed the use of race conscious admissions programs.

The experience of state university systems where race conscious admissions programs had been banned in the past—like California and Michigan—showed that after their bans, student body diversity was significantly reduced (especially at more selective campuses). This was caused not just by the restrictions placed on their selection processes, but because fewer underrepresented students of color applied to their schools—perhaps feeling like they had less of a chance of admission, that schools didn't want them, or that there would not be a welcoming community on those campuses.

We are planning to do what is under our control to minimize such impacts by increasing our outreach and our support for current students.

Visiting Committee

OVC hosted the MIT Corporation Visiting Committee over two days in late April. Topics included an overview of the state of the OVC; grad unionization; admissions and financial aid, and enhancing the undergraduate experience through the new Undergraduate Advising Center, experiential learning opportunities, and a focus on diversity, equity, and inclusion. In addition, the Committee held closed meeting sessions with representatives from the undergraduate and graduate student body and—new this year—with OVC staff.

Organizational Change: FlexWork and Space Allocation

Flex Work

OVC conducted a survey on FlexWork in February 2023, with a participation rate of 66.4% (203 staff out of 306).

Key Takeaways

- Over 50% of staff are on hybrid formal arrangements; about 30% are hybrid flex. Less than 10% are remote primary and less than 7% are primarily in the office.
- Slightly more than 70% of staff are in the office 2-3 days weekly.
- Staff reported high rates of satisfaction (93% indicated FlexWork works "extremely well" or "somewhat well.") About 10% disagreed, noting that technology, connection to colleagues, and connection to MIT remain challenges.
- Staff reported that what they like most about FlexWork is the reduced burden of commuting, and overall flexibility. Many staff indicated that FlexWork has led to greater productivity, greater work/life balance, and a greater sense of well-being. What staff like least about FlexWork is loss of community and connection with colleagues.

Space Allocation

Given the success and broad adoption of FlexWork, OVC's space needs have changed. According to the 2022 Quality of Life Survey, the majority of OVC staff are on campus between one and three days a week. Under the leadership of OVC Chief of Staff Kate Trimble, a space planning working group was tasked with evaluating our current space, with three goals in mind:

- 1. Identify space for the new Undergraduate Advising Center.
- 2. Optimize the use of space to best meet the needs of staff and students.
- 3. Experiment with new arrangements while preserving flexibility to modify them as needed.

The most significant proposed change is creating a student services hub in Building 11 which will house the UAC, the Office of the First Year, UROP, a satellite office for Student Financial Services (which will move to Building E-17), and OVC reservable offices. In addition, a portion of Career Advising & Professional Development staff will move from Building E-17 to Building 7. Renovations to Building 11 have begun, with a target completion date of fall 2024.

Office Updates

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Teaching + Learning Lab
Undergraduate Advising Center
Concourse
Experimental Study Group
Terrascope

OVC Headquarters (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 and Space Management
- Cross-Functional Team Oversight

Staffing

Diep Luu was hired as the associate dean and inaugural director of the <u>Undergraduate Advising</u> <u>Center</u>. (See the Executive Summary.)

Senior Associate Dean and Director of the Office of Graduate Education <u>Blanche Staton retired</u> after over 25 years of service at MIT. OVC launched a national search for Staton's successor, with assistance from the firm of Isaacson and Miller.

Key Accomplishments

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

- Ran leadership team meetings, all-staff meetings, and an in-person leadership team retreat.
- Organized a productive and successful Visiting Committee meeting.
- Held community-building events, to foster connections among OVC offices in our new flex-work environment.
- The director of HR taught Search Inside Yourself: Mindfulness-based Emotional Intelligence for Leaders.
- Collaborated on implementing relevant aspects of the MIT Strategic Plan for Belonging, Achievement, and Composition.
- Produced internal communications, including e-letters, to keep the OVC community upto-date about priorities and accomplishments and assisted in the development of the Chancellor's "Whole Student" messaging platform for raising visibility and for use in fundraising activities.

Affirmative Action Goals and Successes

The OVC staff, which is 66.1% women and 36% 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 all but one of its placement goals for minorities. 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, 2022 – June 30, 2023, of all new OVC hires 81.5% are women and 50% are minorities. During the same period, OVC promoted 27 staff members: 77.8% are women and 37% are minorities.

Awards / Recognitions

For the first time this year, the <u>2023 Infinite Mile Awards</u> were held on two separate dates: one for the ceremony (which was in-person and also on Zoom) and one for a staff celebratory luncheon.

Looking Ahead

- Once the MIT and the MIT-GSU achieve a collective bargaining agreement (CBA), working with DLCs to understand and implement the significant changes needed for how we manage our graduate educational and research programs.
- In light of the SCOTUS ruling that prohibits use of race in admissions, we will focus on following the law while continuing MIT's commitment to our decades-long efforts to welcome a student body that is both unparalleled in its academic excellence and vibrantly diverse.
- Continuing to refine/update our FlexWork and space processes and policies to best meet the needs of our staff as well as those we serve.
- Partnering with the chancellor to socialize her "Whole Student" platform and collaborating on key fundraising efforts.
- Continuing to build out the Undergraduate Advising Center.
- Strengthening our relationship with our graduate students in light of unionization, supporting the Graduate Student Council's Priorities, and doubling down on efforts to highlight resources that support life and learning.

Admissions Office

The <u>Admissions Office</u> reaffirms our mission and commitment to enrolling a diverse and talented undergraduate student body composed of the world's most intelligent and creative individuals who are a good match for MIT's unique culture and education. At a time of great uncertainty, we uphold our commitment to meritocracy and fair access to the admissions process for students from all backgrounds. We firmly believe that our diverse student body advances the MIT education.

Current Events

We began our preparation for the impending decision on Affirmative Action by the Supreme Court—effectively ending race-conscious admissions practices in higher education. We made small adjustments to some of the essay questions on our application in anticipation of the June outcome, to see if we could learn more about the specific qualities that we look to assess, independent of race or ethnicity. This was also the first admissions cycle since reinstating our testing policy in March 2022. With the return of this policy, we saw a decrease in applications by 20% over last year. However, applications increased by 34% over the 2019–2020 application cycle, the last cycle for which we used standardized testing. Overall, we generated more qualified applicants than before the pandemic and are proud to share that, in this context, we admitted the most diverse class ever at the Institute.

In April, MIT joined 15 institutional peers as a member of the Small Town and Rural Students (STARS) College Network, which will work with high schools and access organizations across the country to widen pathways to higher education for rural and small-town students. The goal is to help these students, who might not otherwise recognize the full range of educational opportunities available to them, find a good fit regardless of whether it is with one of the partner institutions.

We welcomed ~1,000 admitted students in April for Campus Preview Weekend, our admitted student yield program. We also ran a week of virtual programming for parents, so they could learn more about the Institute. Programming included both Chinese and Spanish language sessions and presentations from academic departments, DSL, labs, and residential groups across campus.

Key Accomplishments

- We received 26,914 applications for the first-year class entering in fall 2023. Applications decreased 20% from the AY2022, which we attribute to the reinstatement of our testing requirement. Our applications are 34% higher than pre-pandemic levels.
- We admitted 1,291 students, including 32 from the wait list, representing 4.8% of the applicant pool.
- There are 1,092 students in the enrolling Class of 2027; 11 of those deferred from previous years.

• A total of 1,222 students applied for transfer admission. Of these, 22 were admitted. Of the admitted, one enrolled in spring 2023, 18 are expected to enroll in fall 2023, and two—who were admitted through our MIT-Wellesley double degree program—will enroll in fall 2024. There is also one MIT-Wellesley double degree program student from the prior year's admitted class who will enter this fall.

Class Profile and Commitment to Diversity

- The Class of 2027 reflects MIT's ongoing commitment to the diversity and excellence of our student body. The Class of 2027 is 49% men, 48% women, 4% another gender identity, 18% first generation to college, and 10% international citizens. *Note: 2% did not disclose gender identity.*
- Students come from 49 U.S. states and 59 countries.
- The mean SAT score for first-year students is 751 for evidence-based reading and writing and 788 for math.
- Twenty percent of the class are Pell Grant recipients, up from 18% in 2022.
- MIT continues to partner with QuestBridge, a nonprofit organization that recruits highachieving students from low-income backgrounds. Fifty-one QuestBridge finalists, including 13 Match Scholars, will attend in the fall.
- The Class of 2027 is composed of the following: American Indian/Alaskan Native 2%; Asian American 40%; Black/African American 15%; Hispanic/Latino 16%; Native Hawaiian/Pacific Islander 1%; White/Caucasian 38%. Twenty-nine percent self-reported as an underrepresented minority student. *Note: Students may identify with more than one racial or ethnic group. The percentages reported here do not include the race/ethnicity of international students, although international students are included in the denominator when calculating the percentages.*

Recruitment and Yield Outreach

- In September 2022, 103 students from historically underrepresented and underserved backgrounds participated in our Weekend Immersion in Science and Engineering program, which included application workshops and hands-on programming designed to share more about MIT. Of these participants, more than half enrolled in the Class of 2027.
- We successfully hosted Sin LiMITe and Ebony Affair, targeted spring yield programs for admitted students in April. Ninety-six students participated in Sin LiMITe and 92.7% of those students enrolled. Forty-eight students participated in Ebony Affair and 85.4% enrolled.
- We reinstated our fall recruitment travel with 16 trips covering 26 states. This consisted of high school visits, meetings with community-based organizations, and college fairs. Due to COVID-19, we opted not to offer our large central meeting information sessions.

• Within the first six months of the launch of the STARS Network, we participated in three webinars and hired an Assistant Director for Rural Outreach to serve as the STARS College Network liaison.

Visit Programs

- We offered a hybrid of virtual and on-campus programming, favoring on-campus programs as we scaled up to pre-pandemic capacity.
- We provided 473 on-campus information sessions and/or campus tours attended by over 47,385 visitors. Each session's capacity is up to 200 visitors.
- We scaled back our virtual programs, offering one or two a month through the fall, pausing virtual programming during reading season and the spring semester. In June, we brought back virtual programming for the summer, at a frequency of one per week. Overall, from July 2022 through June 2023, we had a total of 1,684 virtual attendees over 10 sessions.

Educational Council

- The Educational Council team recruited 1,063 new Educational Counselors (ECs), up from 978 the previous year.
- ECs conducted 19,922 interviews, down from 22,643 interviews in AY2022.
- 3,131 ECs submitted interview reports, up from 3,057 ECs in AY2022.

Awards, Recognition, and Staffing

- For AY2023, the Admissions Office had 30 administrative staff, including several shared positions with Student Financial Services, and 11 support staff. Seventy-six percent are women, 22% are men, and 41% are underrepresented minorities (Hispanic, Asian, and Black/African American).
- Ryan Blair won an individual Infinite Mile Award for Serving the Client; Tameika Butler and Jeremy Weprich won a team Infinite Mile Award for Serving the Client.

Looking Ahead

- We will launch the first-year and transfer applications for the upcoming cycle at the end of August. Based on the Supreme Court decision released earlier this summer, which ended race-conscious admissions, we have made updates to the application.
- The 2023–2024 transfer application continues to provide college/university students who have experienced severe educational disruption (e.g., students affected by the war in Ukraine) with the option to apply through either spring or fall entry transfer. This offers students the opportunity to enter MIT at the earliest term possible if admitted. The application also provides a dedicated place for students to share details about their educational disruption.

- We will continue to hold online information sessions for those unable to visit campus.
- In-person fall recruitment travel will resume this September with the inclusion of central meetings. Admissions officers will also continue to visit high schools and community-based organizations.
- We will develop rural and small-town outreach initiatives as part of our commitment to the STARS Network. Potential opportunities include webinar series, fly-in programs, and joint programming with other network schools.

Career Advising & Professional Development

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

Key Accomplishments

- Emphasized career exploration for undergraduates, graduate students, and postdocs through collaborations with partners by showcasing careers, diversifying opportunities, offering shadowing experiences, and providing exploration funding.
- Enhanced career and professional development support of graduate students and postdocs through extending range and reach of programming: Launched PhD and Postdoc Career Night, Power-up My Postdoc series, and "C.H.A.OS.," a PhD individual development tool. Created an asynchronous course and an MIT-specific document library.
- Developed career resources highlighting how identity affects career needs, decisionmaking, and planning.

Notable Statistics

- Conducted 13,756 non-unique student, alumni, and postdoctoral engagements through:
 - 6,033 career, distinguished fellowships, and prehealth advising sessions, a decrease of 2% from AY2022;
 - 4,888 attendees at 192 career, graduate professional development, distinguished fellowships, and prehealth advising events, an increase of 9% from AY2022;
 - 2,835 attendees at 103 CAPD employer engagement events and programs, an increase of 63% in attendees and 37% in events.
- Submitted 66 prehealth committee letters and prepared 44 distinguished fellowship endorsements.
- 339 first-year students attended targeted events (up 60% from AY2022) and 437 firstyears engaged in career appointments (down 25% from AY2022).
- For 2022 graduates, 94.3% of bachelor's, 98.5% of master's, and 98.4% of PhD graduates seeking immediate employment reported obtaining a job within three months of graduation. Reported median salaries:
 - o \$110,000 (SB)
 - \$120,000 (MS)
 - \$135,000 (MEng)
 - \$170,000 (MBA)
 - \$62,000 (doctoral, postdoctoral positions)
 - \$135,000 (doctoral, other positions)

• Through continual content updates and structural improvements to the CAPD website, increased users by 93.65%, sessions by 90.31%, and pageviews by 69.7% from AY2022.

Prehealth Advising

- 72 students and alumni applied to medical school in the 2022 cycle (18 undergraduates, three graduate students, and 51 alumni), with a 74% acceptance rate.
- Taught Careers in Medicine class to 16 students featuring medical professionals from diverse specialties.
- Partnered with UMass Medical School to offer fully-subscribed Medical Interpreting Course, including three different language coaches.
- Piloted clinical research externship opportunity in collaboration with Mass General Hospital and Brigham and Women's Hospital.

Career Services

- Guided second annual fall and IAP Career Exploration Series. Collaborated with 10 DLCs and 17 external partners for 71 events attended by 1,806 attendees.
- Sourced 67 IAP micro-internships for 86 students.
- Provided Career Exploration Fellowship funding, supporting undergraduates in domestic underfunded summer experiences within underrepresented industries.
- Piloted Graduate Student Career Exploration grant, supporting graduate students in domestic underfunded IAP internships.
- Added 3,814 new employers (18% growth; total: 24,783) in the MIT Handshake system
- Hosted four career fairs. Collaborated with peer schools to host Engineering Career Fair Collaborative and Ivy+ Just in Time Career Fair.
- Employer Connection Program featured 20 employers representing seven industries.
- Promoted pay equity through programming, resources, and research coordinated by the Pay Equity Working Group.

Distinguished Fellowships

Supported 324 non-unique applications and 39 winners from MIT, including:

- **Fulbright** (13): J Lainie Beauchemin, Shelly Ben-David, Victor Damptey, Maggie Freeman, Jola Idowu, Nathan Liang, Liam Ludington, Rachana Madhukara, Mercy Oladipo, Erica Santana, Sophia Sonnert, Michael Sutton, and Veronica Will
- Gates (1): Aviva Intveld
- Knight Hennessy (3): Bhav Jain, Pam Stark, and Sreya Vangara
- Marshall (2): Rachel Chae, Sihao Huang
- Mitchell (1): Teresa Gao
- Quad (5): Udochukwu Eze, William Rodriguez, Yotaro Sueoka, Sreya Vangara, and Jacob White

- Rhodes (3): Jack Cook, Matthew Kearney, Jupneet Singh
- Schwarzman (3): Sara V. Fernandez, Amanda Hu, and Brigette Wang
- **Soros** (6): Desmond Edwards, Kat Kajderowicz, Adriana Liimakka, Vaibhav Mohanty, Steven Truong, and Shomik Verma
- Truman (1): Malhaar Agrawal
- Udall (1): Anushree Chaudhuri

Graduate Student Professional Development

- Developed curricular structure for a research mentoring certificate program by recruiting facilitators now trained by the Center for the Improvement of Mentored Experiences in Research.
- Designed grant writing training certificate program structured to incorporate Institute expertise and leverage authoritative facilitators to offer rigorous, progressive training.
- Contributed to the work of the Institute-wide Committee on Graduate Student Professional Development through research and dialogue with academic and administrative departments, graduate students, senior leadership, and alumni.
- Strengthened partnerships with co-curricular offices. Drew upon partnerships to offer the Faculty Job Search Series, Spilling the Tea, the Research Slam, and communication workshops.
- Provided continuing mentoring and support through the alumni-led Mentoring Circles for Graduate Students of Color.

Awards / Recognition

- Two staff served in leadership roles for professional associations and/or presented in regional or national conferences.
- Nine staff participated in OVC/Institute-wide committees.
- Kendel Jester received an Infinite Mile Award.

Looking Ahead

• **Central Hub for Career Development:** Increase career resources with campus partners and provide data to inform programs about career paths/opportunities for their constituents.

Diversity Initiatives: Continue efforts to support identity by providing programming and resources on finding inclusive work environments. Promote affinity/identity pages, increase awareness of tailored opportunities, connect with campus groups, and present diverse alumni in programming.

• **Employer Engagement:** Enhance on-campus employer engagement by bringing back inperson recruiting and company presentations. Identify student career exploration opportunities with companies who have altered their on-campus recruiting strategy. • Graduate Student Professional Development and Career Exploration: Launch certificate programs for grant-writing training and research mentoring. Further effort towards creating an Institute-wide PD requirement. Continue legacy of Path of Professorship and Graduate Women of Excellence programs as we integrate them into CAPD's portfolio.

Office of Experiential Learning

The <u>Office of Experiential Learning</u> (OEL) works to organize, amplify, and accelerate the practice and impact of experiential learning for MIT students. OEL is home to four experiential learning centers and programs — <u>MIT D-Lab</u>, the <u>Edgerton Center</u>, <u>PKG Center</u>, and <u>UROP</u> — but collaborates and coordinates with experiential learning programs across the Institute, including MISTI, Project Manus, CAPD, GEL, Terrascope, ESI, and many more.

Social Impact Experiential Learning Opportunities (ELOs)

OEL piloted a new Social Impact ELO RFP process to fund the creation of high-quality undergraduate experiential learning opportunities focused on social and environmental impact. In the initial year, we received 20 proposals and funded eight of them, awarding \$491, to support up to 112 student experiences.

Data for DEI Initiative

Over the past year, OEL has collected participation data and program information from dozens of experiential learning programs across MIT and has convened focus groups with students to begin to understand their perceptions of experiential learning. Analysis of the data is ongoing and will inform efforts to make experiential learning more inclusive and accessible to students.

EL+ Community

OEL continues to convene and expand an experiential learning community of practice, through monthly meetings focused on learning outcomes, evaluation, travel, social impact and sustainability topics, and other strategies and ideas for making experiential learning at MIT more effective.

EL Student Ambassadors

OEL launched a student ambassador program, hiring 11 undergraduate students to advise their peers about experiential learning, serve on panels, and share student perspectives with OEL.

IAP Mini-grants

In partnership with the Morningside Academy for Design and the MIT Climate Nucleus, OEL launched a mini-grant program to support the creation of IAP activities. All current MIT students and employees were encouraged to apply, and of the 119 proposals received, 59 were awarded funding.

D-Lab

Celebrating 20 Years

To celebrate our first two decades, <u>D-Lab</u> welcomed hundreds of attendees to MIT for a daylong program in October. Students, alumni, international partners, faculty, and staff participated in panel discussions, hands-on activities, student presentations, and lively conversations about biomass fuels, gender and development, evaporative cooling, lean research, humanitarian innovation, participatory design, and more.

In a letter to D-Lab congratulating the program on its 20th anniversary, then-MIT President L.Rafael Reif wrote, "From its pioneering development efforts in Haiti to new evaporative cooling devices for safer food storage, D-Lab has tapped into the power of design to make a more equitable world. I am deeply grateful to Amy [Smith, founding director] and the D-Lab community."

MIT D-Lab Academics

Under the leadership of Professor and D-Lab Faculty Academic Director Maria Yang, and D-Lab Associate Director of Academics Libby Hsu, D-Lab offered 14 subjects this past year with 181 students enrolled. Fourteen students worked with staff on research projects in Cambridge and abroad through MIT's Undergraduate Research Opportunities Program.

D-Lab Subjects Offered During AY2023

- 11.025/11.472(G)/EC.701/EC.781(G) D-Lab: Development
- EC.703/EC.783(G) Entrepreneurship for the Idealist (new)
- 2.651/EC.711/EC.791(G) Introduction to Energy in Global Development
- 2.652/EC.712/EC.782(G) Applications of Energy in Global Development
- 4.411/EC.713J D-Lab: Schools Building Technology Laboratory
- 11.474(G)/EC.715 D-Lab: Water, Sanitation, Hygiene
- EC.718/EC.798(G)/WGS.277 D-Lab: Gender and Development
- EC.719/EC.789(G) Water, Climate Change, and Health
- 2.722J/EC.720 D-Lab: Design
- EC.725 D-Lab: Leadership in Design
- EC.729/2.729/EC.797(G)/2.78(G) Design for Scale
- MAS.665/15.375/EC.731J Global Ventures
- 2.00C/1.016J/EC.746J Terrascope: Design for Complex Environmental Issues
- EC.S02 (IAP) Build Your Own Bicycle

Student Projects and Fieldwork

Coursework that's grounded in real challenges is central to experiential learning, and our students worked in 54 teams with international community partners in the following countries: Bangladesh, Bolivia, Botswana, Brazil, Cameroon, Colombia, Ghana, Hong Kong, India, Kenya,

Mali, Mexico, Morocco, Navajo Nation, Nepal, Nicaragua, Sierra Leone, South Africa, Turkey, Uganda, Ukraine, and the United States.

With the easing of Covid-19 restrictions, we were able to increase student fieldwork this year. Forty-three students traveled on mentored trips to Bolivia, Brazil, Cameroon, Colombia, Ghana, Kenya, Mexico, and Morocco, to work with community partners on projects initiated in their classes.

MIT D-Lab Research and Practice

Research and Practice programs at D-Lab continue to give form and substance to our international impact and the D-Lab student experience. Our research arm is led by Professor Kim Vandiver who serves as D-Lab faculty director of research, and Associate Director of Research Kendra Leith. Lecturer and Inclusive Economies Specialist Libby McDonald heads the practice team.

The D-Lab Research and Practice teams work on multiple long-term projects while advancing approaches to research developed at D-Lab, such as lean research, and methodologies for community engagement, such as participatory design and creative capacity building.

Sample Research and Practice Programs in AY2023

- **ASPIRE**: A five-year program creating a replicable model for Latin American universities and their collaborators to respond to local and regional development needs. Funded by USAID with MIT D-Lab, MIT MechE, Universidad del Valle de Guatemala, and the Guatemalan Exporters Association.
- **Biomass Fuels & Cookstoves:** D-Lab's oldest research group working with biochar producers around the world and testing briquettes at D-Lab's Burn Lab.
- **Evaporative Cooling for Vegetable Preservation**: Eight-year-old program that recently launched the open-source design for a forced-air evaporative cooler built in a used shipping container.
- **Humanitarian Innovation:** With programs in Rhino Refugee Camp in Northern Uganda, communities in South Sudan, and in Athens, Greece where they have been working with unaccompanied refugee minors and women since 2016.
- Inclusive Economies: Working with artisanal and small-scale miners in Colombia with a current focus on environmental justice and the development of a gender-sensitive formalization process for women miners.
- **MIT D-Lab | CITE:** USAID-funded evaluation projects since 2012, this year focusing on bicycle use and access in Africa.

Selected AY2023 MIT D-Lab Publications

• The MIT D-Lab Participation Toolkit: A Suite of Tools for Understanding, Characterizing, and Implementing Participation in Development and Humanitarian Contexts - Apr 25, 2023 | Amy Smith, Martha Thompson

- Access to Affordable Bicycles in Africa: Final Report Mar 31, 2023 | Dan Frey et al
- Clay Pot Cooler Training in Mali: Outcomes & Impacts Oct 17, 2022 | Laura Mogannam et al
- *Rehabilitating Goldenberry Production in the Ecuadorian Andes with Regenerative* Agriculture - Aug 08, 2022 | Elizabeth Hoffecker and Eunhae Lee
- CSIS Panel Proceedings: Transformation Through Humanitarian Innovation and Private Sector Engagement Jul 19, 2022 | Amy Smith
- Handbook of Innovation and Appropriate Technologies for International Development 2002 | Multiple D-Lab contributing chapter authors | Edward Elgar Publishing

Looking Forward

As we look ahead to the next decade of D-Lab, we will continue to prepare our students to be good global citizens and effective change-makers, serve as a hub for equitable design at MIT, and ensure that our research and practice teams achieve significant and sustained impact on development outcomes abroad.

Edgerton Center

Founded in 1992, the <u>Edgerton Center</u> honors the late Professor Harold "Doc" Edgerton and his experiential approach to education. We continue his legacy by empowering students pursuing hands-on projects and inventions.

The Center offers high-speed photography and engineering courses, supports 15+ student clubs and teams, manages four student machine shops and makerspaces, runs a year-round K-12 outreach program, and offers a range of K-12 teacher professional development workshops. We also support the broader Institute, assisting 25+ other departments, labs, and centers engaged in our experiential learning model.

Current Goals, Objectives, and Priorities

Open to any MIT student, we continue to distinguish ourselves with both entry-level and advanced trainings and a vibrant community of makers. In alignment with <u>MIT's Strategic Action</u> <u>Plan for Belonging, Achievement, and Composition</u>, we are fostering connections with under-resourced demographics at MIT and around the world.

Key Accomplishments

Academics

- Assisted the research of 17 faculty in eight departments by advising them on high-speed photography and by loaning them high-speed imaging equipment. Supported four subjects with high-speed imaging needs and consulted with personnel at Lincoln Lab, the Media Lab, and the MIT Museum on high-speed imaging.
- Completed the Alumni Class Funds project "Light, Sound, and Electronics: Enhancing Self-Efficacy Through Hands-on, Project-Based Residential Education" resulting in the transition of the 6.2020/EC.072 Electronics Project Lab course to a flipped classroom.
- Dr. Elizabeth Cavicci (instructor) and students Hillary Diane Andales '23 and Riley S. Moeykens '24 published "<u>New methodological approaches toward implementing HPS in</u> <u>physics education: The landscape of physics education</u>," in *The International Handbook* of Physics Education Research: Physics Education Research Special Topics.
- Doubled the enrollment in 6.9030 Strobe Project Lab, from the pandemic lows.

Student Maker Activities

- Friday night maker sessions drew 17 classes and 300+ participants over Independent Activities Period.
- Soft opening of the 6C Electronics Lab welcomed about 20 frequent users.

Supporting Hands-on Student Clubs and Teams

- Hosted our second annual <u>clubs and teams showcase</u> featuring 11 teams, up from seven the previous year.
- <u>The Solar Electric Vehicle Team Won First Place</u> at the 2022 American Solar Challenge for the second year in a row.
- <u>Arcturus</u> earned First Place Design Overall at the RoboBoat 2023 competition in their second year.
- <u>Cindy Alejandra Heredia</u>'s journey, from repairing car radios in Laredo, Texas, to leading the MIT Driverless Team, was highlighted in MIT News.
- Launched a Communications Working group for the media leads of student teams, increasing team social media promotion and inter-team communications.
- Welcomed two new student teams: Make it to Break it (record-breaking club), and First Nations Launch (a rocket team using indigenous science and methodologies.)

K-12 Outreach

- Dr. Amanda Mayer and Dr. Kathleen Vandiver developed a new biotechnology curriculum booklet for the MIT Edgerton Center DNA and Protein Set.
- Our K-12 program served 2,217 K-12 students in AY2023, up from 1,444 in AY2022 and 607 in AY2021
- 110 students from 11 different schools participated in a hackathon we hosted at the University Polytechnique de Catalonia (UPC Barcelona).

Supporting the Institute

- Hosted 40 students from the Office of Minority Education Interphase program, providing them with a 6-week, collaborative, project-based introduction to engineering.
- Ran a facilities audit of our spaces to better learn how we can serve students with cognitive and physical disabilities.
- Launched an event series with grant support from the <u>Institute Community and Equity</u> <u>Office</u> (ICEO) to welcome diverse demographics at the Edgerton Center.

Administrative Initiatives

New Equipment

• With Lemelson Grant funds, we purchased a <u>Bambu Labs X1 Carbon</u> 3D printer for our Makerlodge in 4-409, increasing our capacity for 3D printing.

Data/Statistics

This year we served approximately 3,733 students, including 1,216 MIT students, and 2,897 K-12 students. Additionally, 100 teachers attended our professional development workshops.

Over 400 MIT students have been trained and have access to our makerspaces.

Fundraising

- After raising \$1.5M to build the Electronics Lab in 6C, we are turning our goal to raising operating funds for the shops and labs. The latest annual appeal secured a \$100,000 donation over 5 years.
- In its seventh year participating in the 24-Hour Challenge, the Edgerton Center raised \$50,000 from over 200 donors and an alumnus matching grant.

Personnel

- Associate Director Dr. James Bales was promoted from Instructor to Principal Lecturer.
- The Edgerton Center welcomed a new administrative assistant, Marvelin Higginbottom.
- Our long-time administrative officer <u>Sandra Lipnoski</u> went from full to part time.

Teaching and Curriculum

The Edgerton Center offers many subjects under EC course numbers. They include Strobe Project Lab, hands-on electronics, physics education, as well as all subjects offered by the D-Lab program.

Next Year's Goals

- Train teachers at local deaf schools with our life science curriculum.
- Introduce more students to the 6C Electronics Lab.
- Collaborate with local Spanish teachers to develop collaborative lessons.
- Further expand enrollment in Strobe Project L.

Priscilla King Gray Public Service Center

The <u>PKG Public Service Center</u> taps and expands MIT students' unique skills and interests to prepare them to explore and address complex social and environmental challenges. MIT has a vital role to play in equipping students to be civically prepared and create solutions to build a better world, and the PKG Center does just that.

Key Accomplishments and Statistics

The PKG Center continued redesigning and expanding our programs in response to growing student and community partner demand. We offered rigorous, academically-aligned experiential learning focused on climate, health equity, technology for social good, and racial justice. Achievements include:

- 300+ students participated in immersive PKG-led social impact experiences, with many more participating in briefer offerings.
- Awarded \$900k+ in direct student funding for stipends and project support.
- Connected students with 160+ organizations locally, nationally, and globally.
- Further expanded our flagship <u>Social Impact Internship program</u>, which pairs undergrads with nonprofits, government, social enterprises, and corporations to build capacity and bolster technical capabilities while engaging students in challenging social impact issues in real-world settings.
 - Student demand was higher than the number of opportunities we could support. We funded one in three students in the summer and one in five students over IAP. In all, 99% of interns indicated that they gained professional knowledge and skills that will be beneficial in their future careers.
 - Among host organizations, 100% are interested in hosting students again. We have a wait list of community partners who would like to host MIT student interns.
- Offered our fourth year of <u>academic courses</u>:
 - SP.256 Informed Philanthropy in Theory and Action. This year, the class was open to MIT students, staff, and alumni.
 - Collaborated with EECS on the course <u>6.900 Engineering for Impact</u>,
- Our 22nd annual IDEAS Social Innovation Challenge <u>awarded over \$80K in funding to 18</u> <u>finalist teams</u> solving complex social/environmental challenges through social responsibility and equity lenses. IDEAS is MIT's sole student-focused social entrepreneurship program, and more than 50% of teams are still active today.
- PKG Fellowships supported 44 students nationally and globally during IAP and the summer to develop and implement complex projects in collaboration with social impact organizations and community members. The program collaborated with GovLab and MISTI on a <u>new Governance Innovation Research Fellowship</u>.
- Hired talented new team members to assess, further integrate, and refresh our offerings, including:

- A Social Impact Living Learning (SILL) program that provided housing, community, and programming for students engaged in social impact experiential learning opportunities. Demand was high for the program: we funded one in three students.
- A new PKG FPOP focused on social innovation and entrepreneurship.
- Continued purposeful integration of social and racial justice into our student programming and staff learning sessions, aligned with ICEO.
- Celebrated Priscilla King Gray's (1933-2023) contributions to the MIT Community.
- Finalized processes with Office of General Counsel (OGC) that removed barriers to partnering with grassroots/minority-led organizations to further PKG and ICEO priorities, while balancing OGC policies.
- Created a policy with OGC and Student Support Services that enables undocumented students to participate in and receive funding from PKG programs.
- Led non-partisan voter registration and civic engagement integration on behalf of MIT's ALL IN Campus Democracy challenge.

Awards and Recognitions

- We recognized students through the Priscilla King Gray Award for Public Service: <u>Wilhem Hector '25</u>, <u>Cecilé Sadler (G)</u>, and <u>Kelsey Merrill (G)</u>.
- We awarded the Paul Gray Faculty Award for Public Service to Lydia Bourouiba, PhD.
- PKG Fellow Matt Kearney '23 and PKG Fellow and PKG Social Impact Intern Jupneet Singh '23 were named <u>Rhodes Scholars</u>.
- Four PKG-affiliated students were named <u>Fulbright Scholars</u>: SP.256 participant and cohort team-lead Victor Damptey '23, PKG Federal Work-Study Student Jola Idowu '23, PKG Social Impact Intern Nathan Liang '21, and ESG-PKG Fellow and IDEAS Awardee Mercy Oladipo '23.
- PKG Social Impact Intern Aviva Intveld '23, was named a Gates Cambridge Scholar.
- PKG Social Impact Intern Bhav Jain '23, was named a Knight-Hennessy Scholar.
- The PKG Center's Program Administrator for Social Impact Internships and Employment, Julie Uva, received OVC's Infinite Mile Award for Collaboration & Communication and MIT's Laya Wiesner Community Award.
- We received a number of major gifts from alumni and supporters.
- The PKG Center was featured during the CDC Annual Meeting Reception + Dinner.

Looking Ahead

PKG Center AY2024 goals center around:

- Office operations and data optimization.
- Programming:
 - <u>Student-facing</u>: Program portfolio refreshment, alignment, and integration, while continuing to advance anti-racism efforts and MIT's strategic direction. This includes expanding our climate and health equity programs, creating indigenous

student-centered programming with MIT Solve, and launching SP. 259 Social Justice Pathways at MIT and Beyond.

- <u>Faculty-serving</u>: Exploring and developing a new line of business that provides technical assistance to faculty who want to integrate community-engaged learning into courses.
- **MIT alignment and communications**: Positioning PKG as an effective implementation, planning, and delivery partner across the Institute for community-informed, social impact expertise by:
 - developing strategic and mutually-beneficial partnerships with additional DLCs such as ICEO and J-PAL to support student social impact work. Current collaborations with MISTI, Morningside Academy, Climate Nucleus, GovLab, SERC, the Washington DC Program, MIT Amazon Science Hub, and others extend our reach to students and communities.
 - infusing the values of IDEAS Social Innovation Challenge into MIT's innovation and entrepreneurship student ecosystem to realize our vision for making social innovation synonymous with being an innovator or entrepreneur at MIT.

Undergraduate Research Opportunities Program

Established in 1969, the <u>Undergraduate Research Opportunities Program</u> (UROP) endures as MIT's premier experiential learning program, promoting faculty-undergraduate collaboration at the forefront of research in all disciplines.

The UROP Office directs all program operations, policies, and central resources. Staff oversee the review and approval of ~6,000 projects yearly, fund allocation (~\$7M annually), and manage statistical reporting via a comprehensive records system. Throughout the year, the UROP Office offers expansive programming, advocacy, and support for students, faculty, and DLCs. Staff also partner with MIT development officers on fundraising efforts.

Notable AY2023 Data/Statistics

- A total of 93% of 2023 first-undergraduate degree recipients participated in UROP at least once. Of those participants, 65% were first-year undergraduates (Class of 2026).
- In all, 59% of MIT's undergraduate population (64% of undergraduate women and 54% of undergraduate men) participated, and 58% of MIT faculty mentored UROPs.
- The Institute committed \$14,885,316 to undergraduates engaged in UROP, with \$7,685,823 (52%) allocated directly from the UROP Office.
- A total of 82% of UROP projects were paid, 16% were undertaken for academic credit, and 2% were conducted as volunteers.

Key Accomplishments

- Introduced an annual IAP UROP funding cycle specifically for first-year students seeking early engagement in research.
- Hosted more than 40 workshops and networking events, some in collaboration with OEL, OFY, OME, CAPD, Communication Labs, and DLCs. Attendance at these events surpassed expectations, particularly our IAP UROP Showcase with 250 students attending to learn about available research opportunities from DLC representatives.
- Collaborated with the Office of Experiential Learning on a social impact experiential learning initiative, allocating \$150,000 in UROP-office funds to specifically support socially-conscious summer UROP projects.

Awards / Recognitions

2023 Outstanding UROP Mentor Awards Recipients

- Prof. Navid Azizan, mechanical engineering
- Prof. Basima Tewfik, Sloan School of Management
- Halie Olson PhD '23, brain and cognitive sciences
- Kathryn Yammine, chemistry graduate student

2023 Outstanding UROP Student Award Recipients

- First-Year Undergraduate: Sarah Cao '26, UROP in the Media Lab
- School of Architecture + Planning: Vainavi Mukkamala '23, UROP in the Media Lab
- **School of Engineering:** Sophia W. Chen '23, UROP in biological engineering, and Elaine Siyu Liu '24, UROP in electrical engineering and computer science
- School of Humanities, Arts + Social Sciences: Rhea Bhattacharjee '25, UROP in history
- School of Science: Owen Dugan '25, UROP in physics and Atharv Oak '23, UROP in biology/Whitehead Institute
- Schwarzman College of Computing: Boris Velasevic '23, UROP in the Institute for Data, Systems, and Society
- Sloan School of Management: Tianyuan Zheng '23

Looking Ahead

- Launch a UROP Peer Mentor/Ambassador program in which students with in-the-lab and discipline-specific experience assist staff with programming and outreach to expand UROP's reach.
- Work with Institute partners on developing strategies and resources to further promote UROP as a viable mechanism for undergraduates to pursue climate-related research.

Office of Graduate Education

Supporting Educational Innovation and Excellence

This year, the <u>Office of Graduate Education</u> (OGE) recognized 41 <u>Graduate Women of</u> <u>Excellence</u> in May for peer leadership; dedication to improving the graduate student experience; providing thoughtful, constructive feedback; and catalyzing change.

OGE partnered with the Graduate Student Council and the Division of Student Life on graduate orientation process updates. Students received online materials immediately following the April 15 reply deadline, rather than in June. Additionally, we supported IS&T in adding graduate student onboarding tasks to the Atlas app.

The 2022 <u>Path of Professorship</u> (PoP) workshop welcomed 45 PhD students and 22 postdoctoral scholars identifying as women, nonbinary, and gender diverse across 20 departments. In all, 38 faculty members presented from MIT and other institutions. Going forward, Career Advising & Professional Development will lead PoP.

Graduate Funding

Students completed 2,540 sessions covering many financial literacy topics on the iGrad platform. OGE offered eight events on topics like fellowships and investing; the most popular session was NSF-GRFP.

OGE administered fellowships (internal and external) for ~1,200 graduate students. A total of \$208,000 was awarded in special case fellowships, driven by GradSupport.

MIT remains of the three largest National Science Foundation's Graduate Research Fellowship (NSF-GRFP) cohorts (644, 2.5% increase from last year), breaking records for total fellows and maintaining the number of new recipients (152, 7% market share).

OGE, OVC, VPF, VPR, and the Provost completed a 2 ½-year audit of the NSF-GRFP program by the NSF's Office of the Inspector General, improving implementation of policies and procedures to ensure guideline compliance and improve fellow experience. The OGE will hire a Fellowship Administrator dedicated to NSF-GRFP management.

MIT maintained some of the largest university cohorts of National Defense Science and Engineering Graduate Fellows (N=44), Department of Energy Computation Graduate Fellowships (N=15), and Hertz Foundation Fellowships (N=25).

OGE provided over 60 Vice Chancellor's Inclusive Excellence Awards totaling over \$4.5M to underrepresented minority students across five schools, and 21 general and special case fellowship awards totaling over \$1M.

Administration and Policy

Senior Associate Dean Blanche Staton retired in June and the OVC conducted a search for her successor.

Over AY2023, the Undergraduate Special Student Program welcomed 27 undergraduate students from partner institutions in China, up by +42% from AY2020 due to MIT's pandemic-related suspension of the AY2021 program. MIT renewed program agreements for select partner institutions through spring 2024.

Graduate Admissions

Roughly 11% of applicants were admitted to the Institute; 3,926 offers were made from 34,690 applications, and 2,306 admitted students matriculated (59% yield). The number of admission offers (+0.6%) has remained steady, while the volume of applications has risen slightly (+2.3%). Subsequently, the proportion of applicants admitted declined slightly from 12% in 2022.

With OVC and IS&T, OGE continued supporting transition to the Slate admissions system, with 11 departments adopting the platform this year and 12 scheduled for next year.

Building and Sustaining Diversity

OGE partnered with the <u>University of Southern California's (USC) Equity in Graduate Education</u> <u>Consortium</u> to increase diversity in our graduate student body's composition by identifying common barriers to equity in graduate admissions. USC provided workshops on strategies for equity-based holistic admissions. Future extensions will train OGE staff facilitators and offer practical workshops to MIT departments.

Graduate Admissions staff reviewed 1,732 Application Fee Waiver requests from diverse applicants (+35% year over year) and granted 1,032 waivers (+15% year over year) across 40 different departmental programs. Requests came from applicants in 79 countries (including the USA), with the volume of international applicant requests doubling.

Recruitment

AY2023 emphasized development of a collaborative, Institute-wide approach to support recruiting underrepresented students. Engaging administrators, faculty, and students across four MIT Schools (SoE, SoS, Sloan, SA+P) and the Schwarzman College of Computing, OGE staff attended 13 national conferences, connecting with ~485 prospective students, and leveraged three national partnerships — the National Consortium of Graduate Engineering Minorities, Ronald E. McNair Postbaccalaureate Achievement Program, and National Name Exchange — to digitally engage over 16,000 diverse prospective students. OGE also hosted 40 TRIO Scholars from Farmingdale State College for a half-day program.

OGE piloted a centralized prospecting tool via Slate, targeted visits to Minority Serving Institutions (MSIs), and advertised in the American Indian Science and Engineering Society (AISES)'s *Winds of Change Magazine*.

With the School of Engineering, OGE developed a virtual Graduate Fair for prospective or latestage graduate students. This three-hour event featured a concurrent session on the MIT Summer Research or Post Doctoral Fellowship for Engineering Excellence programs, and connected students with administrators and students from nine graduate programs in SoE and the Schwarzman College of Computing.

In AY2023, 185 participants attended MIT <u>GradCatalyst</u> sessions; 87% of surveyed attendees indicated that they felt better prepared and confident to navigate the graduate admissions process.

A total of 42 graduate students across five schools participated in recruitment efforts as <u>Graduate Diversity Ambassadors</u> (GDAs). GDAs also assisted yield activities, including creating a Slack channel for admitted students.

MIT Summer Research Program - General (MSRP)

Fully in-person, 84 MSRP interns embedded in 19 departments across five MIT schools. Interns attended lab tours and faculty chats, prepared application materials, and were supported by a network of 67 faculty mentors, 88 research supervisors, 16 pod leaders, three OGE staff, and several Institute-wide organizations.

The 2022 program expanded strategic partnerships with MSIs, adding North Carolina Central University and Howard University to Spelman College, Morehouse College, and the University of Maryland, Baltimore County. The cohort expanded by 8% to 84 interns through SoE's fundraising efforts.

According to the Exit Survey, 84% of interns expressed a strong interest in pursuing a doctoral degree (22% increase from before participation) and 86% indicated an interest in applying to MIT (6% increase).

After the program, 27 SoE interns continued their research remotely through a nine-week virtual research MSRP Fall Extension Program.

Climate, Community, and Student Support

This year, OGE hired the first Program Coordinator for GradSupport to manage the medical leave process and short-term hardship applications, support the REFS (Resources for Easing Friction and Stress) program, and provide overall case management and administrative support. We also created advertising materials to raise GradSupport visibility.

GradSupport responded to 195 Emergency Hardship Requests and funded approximately \$293,000 of the \$732,000 requested; the average award was \$1,500. This year, 20 new REFS were trained, bringing the total to ~95 active REFS. OGE started monthly continuing education sessions for new and current REFS, and created t-shirts, business cards, and office placards to raise visibility.

GradSupport created a Residence Hall Liaison Program, similar to one in Student Mental Health and Counseling. Each GradSupport dean supports two graduate residence halls, serving as point

of contact if house leadership needs advice or has a student in crisis, and working with the house team to organize outreach events.

The <u>Graduate Community Fellows</u> program hired a fellow to work with OGE GradSupport, helping coordinate the training of students joining the REFS program.

Training

One staff member designed and co-led an Academic Council training on bystander intervention with Ombuds and Human Resources, focused on institutional interventions that can reduce the prevalence and likelihood of unwanted behaviors. The well-received workshop was repeated at the Science Council retreat.

GradSupport developed an online training module on **power dynamics** with the Institute Community Equity Office for Institute Discrimination & Harassment Response which all staff, faculty, and third-year and above graduate students may opt to take toward their continuing education requirement.

Students with Children

This year, we have 300-400 student families, 100-125 of which are PhD students. With Spouses & Partners Connect, OGE established a Slack workspace for graduate and postdoc parents and their spouses/partners.

Through the backup childcare program, the OGE subsidized 508 days of childcare for 78 student parents, totaling over \$140,000. Approximately 100 students received Grants for Graduate Students with Children, totaling \$609,000. In addition, \$67,000 was awarded for Childbirth and Parental Accommodation.

International Students Office

The International Students Office (ISO) serves 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 educates 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). ISO services and programs are aim to support students both inside and outside of the classroom, as well as before, during, and after a student's program of study.

Key Accomplishments

MIT Advocacy on Visa Processing Delays

The ISO continues to work closely with many Institute partners to support our new and continuing students as they face inconsistent processing of entry visa applications at U.S. Embassies and Consulates abroad due to lengthy "administrative processing" security review delays. While there continue to be expected delays impacting students from particular countries (China, Iran, Russia), we have seen a rise in delays in other countries. We have also experienced an increase in delays and in visa denials in countries in Africa (highlighted as a national trend in a July 2023 report by published by the Presidents' Alliance on Higher Education and Immigration and Shorelight).

The ISO's advocacy on behalf of our international students, includes outreach to Senator Elizabeth Warren's office and connection with outside immigration attorneys considering legal filings on behalf of continuing students with administrative processing pending longer than six months. The ISO and other MIT offices will continue to advocate, along with national professional associations, for the need for the U.S. Department of State to institute domestic processing of visa renewals to try to limit the negative impact of such visa processing delays faced by students while abroad.

Expansion of Experiential Learning Academic Subjects

ISO continues our work with academic departments to create additional curriculum-based experiential learning/internship opportunities for elective academic credit or required components for all students in the program to complete their degree. A number of programs are exploring utilization of the "Professional Practice" requirement model in Course 6, electrical engineering and computer science, that serves as models for other programs to develop experiential learning components (including in linguistics, mechanical engineering, and biology).

The reason for these efforts is to expand opportunities for F-1 visa students to utilize a curriculum-based employment authorization type that requires such academic credit or requirement (F-1 Curricular Practical Training).

ISO is also working with the MIT Experiential Learning Committee that is exploring the creation of an experiential learning requirement for completion of degree Institute-wide for graduate students.

Canvas E-course for F-1 Optional Practical Training Employment

After launching the Canvas e-course for F-1 Curricular Practical Training Employment in spring 2022, ISO transitioned our in-person/Zoom-facilitated F-1 Optional Practical Training (OPT) information sessions to a Canvas e-course in fall 2022, creating a module-based presentation that is more easily edited as federal regulation or MIT policy develops; is available 24/7 for students (rather than in-person sessions on particular dates); includes quiz functionality to enhance information retention; and verifies students' course completion.

The ISO is currently developing a similar Canvas platform for our new international student immigration orientation session to be implemented in spring 2024.

Restart and Enhancement of the Visiting Student Program – Post-Pandemic

ISO, along with staff from the OVC, the Office of the Vice President for Research, and Information Systems and Technology, developed new operational policy and launched our new visiting student data management portal, concurrent with the resumption of the Visiting Student Program in January 2022. Enhancements to the portal have been undertaken in the past year in response to DLC feedback to better assist in supporting participant quota limitations per School/program; enhance communication prior to and during visits to MIT; updates to mentor/training plans; procedures for Visiting Student appointment extensions; required enrollment in MIT Student Health Insurance Policy; and post-participation evaluations. We are approaching pre-pandemic participation levels and the new policies and portal have been essential in better meeting the needs of our visiting student participants and host DLCs.

Staffing Update

The ISO hired two new international student advisors (one a new position, one a backfill based on a promotion of a current ISO staff member) during this past year.

- Reiko Ohmura began in January 2023 (over 15 years of advising experience, most recently at the Fletcher School at Tufts University).
- Christine Xiong began in March 2023 (over five years of advising experience, most recently at Boston University).

Notable Statistics / Data

International Student Enrollment (snapshot fall 2022) *Total Countries Represented at MIT (fall 2022) = 137 plus the U.S.*

Degree Level	International	US Citizen	US Perm Resident	Total	% of Total
Undergraduate	513	3980	162	4655	11.02%

Graduate	2952	3943	211	7106	41.54%
Special – UG	19	0	0	19	100.00%
Special – G	40	71	4	115	34.78%
Exchange/Visiting	g 584	1605	21	2210	26.43%
Total	4108	9599	398	14105	29.12%

Post-Completion Students with ISO work authorization

Type of Work Authorization	Visa Type	International
Optional Practical Training	F-1	656
STEM Extension for Optional Practical Training	F-1	715
Academic Training	J-1	46
Total		1407

Note: These statistics include the total number of post-completion work authorization applications between October 2021 and October 2022.

Direct Advising Contacts with Students

Calendar Year	Advisor Correspondence	Alert/E- Form/Auto Correspondence	Combined Total
2018	15824	44192	60016
2019	15172	50558	65730
2020	28958	52773	81731
2021	32339	69158	101497
2022	30121	60765	90886

Advisor Correspondence includes in-person and online meetings with students.

Looking Ahead

- Implementation of Synapsis Mobile application.
- Assessment of online information/orientation sessions to determine if they are meeting the needs of students and how to adjust offerings of live and online sessions.
- In collaboration with the Office of the First Year, undertake an assessment of the New International Undergraduate Orientation Program.
- Review of ISO Advisor Point-of-Contact cohort assignments.
- Expansion of online resources providing perspective of international student usage and access of ISO and other MIT campus services (e.g., MIT Medical, MIT Student Mental Health and Counseling, Student Financial Services, etc.).
- Review, assessment, and adjustment of ISO advising policies/practices to be in line with MIT Graduate Student Union contract.
- Add survey questionnaire link on all document processing in iMIT to be included in all "approved" eforms completed for students to obtain feedback on service.

Office of Minority Education

The <u>Office of Minority Education</u> (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. Over the last year, the OME has transitioned back to in-person programming, while also providing remote options to accommodate the needs of all of our students. We have focused our efforts on not only running programming, but also taking extra steps to support students as they navigated relearning the expectations of in-person academic spaces.

Key Accomplishments

- The BAMIT Community Advancement Program Fund (BCAP) provides financial support for students pursuing public service projects over IAP and/or summer. BCAP funded four projects in AY2023, and we have funded 19 projects since IAP 2020.
- The OME soft-launched a new undergraduate women of color program this spring called The Creative Regal Women of kNowledge (The CRWN). To date, we've had interest from over 100 undergraduate women of color. The CRWN's mission is to inspire undergraduate women of color to move confidently as visionaries, grounded in excellence, empathy, and support for one another. The first cohort will begin in the fall.
- The OME admitted *50 scholars into the Interphase EDGE (IP) 2023 summer on-campus cohort, and 20 scholars into the Interphase EDGEx (IPx) hybrid cohort. The IPx scholars participated in the summer portion of the program remotely for the first six weeks, and then came to campus for the last two weeks. IPx is the pilot extension of the Interphase EDGE (IP) on-campus program. All scholars participated in a hands-on, project-based curriculum that is designed to help prepare them for the pace, rigor, and culture of the Institute. Our goal is to foster community, expose them to key academic concepts, and introduce them to the various resources and opportunities at MIT. We also advised 170 Interphase EDGE (first/second year) scholars during the past academic year. *Please note that due to limited staffing, we only admitted 70 scholars total this year. We fully anticipate admitting at least 90 scholars into the program next summer.
- Sixty protégés (first-year students) and 60 mentors (MIT faculty, staff, post docs, and graduate students) participated in the OME's Mentor Advocate Partnership (MAP) program. These connections were enhanced, and made easier to build, by the option to meet either virtually or in person.
- The Laureates and Leaders (L&L) program, focused on preparing students to pursue either a PhD or MD/PhD, inducted 35 students to form the L&L Class of 2025.
- The Standard, which focuses on enhancing the success of undergraduate men of color, inducted its largest cohort ever of 28 men of color. We had a total of over 65 participants (across all four years). Over 55 students have graduated from The Standard as of June 2023.

• The Talented Scholars Resource Room (TSR^2) offers both virtual and in-person support. This hybrid format continues to cater to the comfort levels of all students interested in using the services. Our academic support resources (p-set nights, exam reviews, and one-on-one assistance) were used 738 times in AY2023. This number is slightly lower than previous semesters; we attribute this to a late start in the spring. Student interest in the TSR^2 remains high. Going forward, we expect to hire enough facilitators (i.e., tutors) to start offering services shortly after the fall semester begins.

Notable Statistics / Data

- As part of our evaluation process, we conducted the mid-summer survey during Interphase EDGE/x's summer halfway point. The survey gathered feedback from two cohorts: the on-campus cohort (IP) and the virtual cohort (IPx). We received an 80% (n=40) response rate from the IP cohort and 75% (n=15) from IPx. Students were asked to evaluate their academic skills and reflect on their Interphase summer experiences. The findings revealed that 75% of IP scholars and 93% of IPx scholars believe the summer programming effectively prepares them for the rigorous demands of MIT. Moreover, an overwhelming 95% of IPx students and 93% of IP students responded positively, expressing that they feel accepted for who they are while participating in the program.
- Laureates and Leaders served 75 students this year. Twenty-three graduated from the program in June 2023. Of those, 78% planned to enter STEM graduate programs directly following graduation (73% will pursue doctoral studies and 5% will pursue a Master's/MEng degree). Of the 5%, all students plan to pursue a doctoral degree after graduating with their Master's/MEng degree. A full 100% of graduating students reported the program met their needs in assisting with the graduate school application process.
- From The Standard's end-of-year survey we learned that, out of the students who completed the survey, 100% felt a strong sense of community within the program. Additionally, 100% reported that they would recommend The Standard to other students. The program was also featured on the MIT News, <u>The Standard</u>.

Awards / Recognitions

- Students profiled by MIT News:
 - Laureates & Leaders: <u>Myles Noel '24; Nicole Harris '24; Victor Damptey '23;</u> <u>Amelia Dogan '23</u>
 - The Standard: David Spicer '23; Austen Roberson '23; Myles Noel '24
- Students receiving fellowships/awards (MIT News):
 - <u>Victor Damptey '23 Fulbright fellowships</u>
 - Mercy Oladipo '23 Fulbright fellowships
 - <u>Desmond Edwards '22(Alumni) Paul and Daisy Soros Fellowships for New</u> <u>Americans</u>

Registrar's Office

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

Key Accomplishments

- Partnered with IS&T and our provider Parchment to streamline the system and improve the interface for ordering paper and electronic transcripts.
- Participated in MIT's Gender Identity Initiative (GII) by introducing the Legal Sex Marker Change Form and by creating new fields in the Student Biographic Record to allow students to make changes to their legal or preferred names.
- Worked with faculty committees on high-profile curricular changes including:
 - o a new major in Climate System Science and Engineering (1-12).
 - the restructuring of the Theater Arts major.
 - o a change to the subject numbering system in Philosophy (24-1).
 - new SM and MASc degrees in Music Technology and Computation (MTM).
- Updated guidelines for the review of digital content in subject proposals (CoC Guidelines, Section 9.2).
- Continued to partner with Institute Events, IS&T, and Student Life to build new ticketing, regalia, and reporting processes for MIT's Commencement ceremonies.
- Refined our service delivery modes by expanding the use of the ServiceNow Customer Relationship Management (CRM) tool and by developing a <u>contact form</u> for our website.
- In partnership with the Vice Chancellor, supported the nomination process, naming, and in-person dinner celebration for the 2023 class of MacVicar Faculty Fellows.
- Supported MIT's veteran population by:
 - o serving as a liaison with Student Financial Services (SFS) and other key offices.
 - creating connections between veterans, student groups, and the community at large.
 - o assisting with events such as the annual Veterans Day commemoration.
 - serving as MIT's representative with state and federal officials to ensure that benefits, policies, and regulations are being realized.
- Collaborated with IS&T and Open Learning (OL) on the installation of lecture capture technology in 10-250 and 32-123.
- Served as lead on the project to design a 250-seat lecture hall and 60-seat activelearning classroom in the Schwarzman College of Computing. Construction began in June 2021 and continues through Fall 2023.
- Made substantial enhancements to existing classrooms by:
 - overhauling audiovisual systems in 9-254 and installing motorized projection screens in 10-250.

- installing new tables and chairs in 1-246, 56-154, 56-169, and 56-191 and new floors in 3-133, 26-142, and 26-204.
- o adding new tables for exams in 50-340 and a new conference table in 66-148.

Notable Statistics / Data

- In the past year, we issued 3,861 paper diplomas and 3,233 digital diplomas.
- We facilitated the approval of 67 new subjects and 420 revisions to existing subjects.
- Through the d'Arbeloff Fund for Excellence in Education and the Alumni Class Funds, we awarded grants to 24 curricular projects from across the Institute totaling more than \$930,000.
- We supported the submission of 33,234 student subject evaluations over the course of seven evaluation periods during AY2023. Forty departments (unique subject prefixes) participated, and 2,466 subjects and 5,062 instructors were evaluated.

Awards / Recognitions / Staffing

- Beverly Turner, associate registrar for operations and technology, received a 2023 OVC Infinite Mile Award.
- One person was promoted to Staff Associate for Curriculum & Faculty Support and the Administrative Assistant II for Curriculum & Faculty Support position was filled with an external hire.

Looking ahead

We will:

- Provide data and institutional knowledge that addresses the changing landscape of higher education and supports the Institute's senior leadership, the graduate student union, and the central advising office.
- Transfer the printing of paper diplomas to a third-party vendor, Paradigm.
- Facilitate the deployment of a name recording service (NameCoach) to Registrar systems.
- Serve as a primary source of expertise when the Institute pursues a new Student Information System.
- Be prepared to assist with the Institute-wide General Institute Requirements (GIR) review.
- Assist with the first phase of the development of learning outcomes and assessment as required for MIT's interim report to the New England Commission of Higher Education (NECHE) due in fall 2024.
- Familiarize ourselves with Artificial Intelligence (AI) tools to assess their impact on academic curriculum and pedagogy and help staff better understand implications of these technologies on our work.

- Support the Classroom Advisory Board (CAB) in its charge to provide short- and longterm strategic plans to create teaching and learning spaces that appropriately serve MIT's students and instructors.
- Provide guidance on the renovation of lecture halls 54-100 (January 2022 through December 2023) and 34-101 (January through August 2024) including fixed seating with power at each seat; wall, ceiling, and floor finishes; improved acoustics; LED lighting; and multi-projector A/V systems with lecture capture technology.
- Further define the strategic direction of the office by creating a values statement.
- Provide ongoing staff training to ensure a welcoming and inclusive environment for all members of the Registrar's teams and the students we serve.

Reserve Officer Training Corps—Air Force

<u>Air Force ROTC</u> Detachment 365 seeks to develop leaders of character for tomorrow's Air Force and Space Force. Our staff of six (three active-duty officers, two non-commissioned officers 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, participate in physical fitness training, and 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 and support, which facilitates high-quality, formative opportunities for 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 and Air Force relationships and resources to provide unique opportunities for cadets, including visits from Col. (Ret.) Pam Melroy, former NASA astronaut and mission commander; Col. (Ret.) Hise Gibson, who teaches at Harvard Business School; Brigadier General (Ret.) Eric DeLange, former Director of Cyberspace Operations, North American Aerospace Defense Command and U.S. Northern Command; General John "Jay" Raymond, Chief of Space Operations; and Mr. Frank Kendall, Secretary of the Air Force.
- We conducted a Northeast Region-wide Field Training Exercise that included eight Detachments, with over 300 cadets and cadre members. Cadets learned expeditionary skills, executed problem-solving challenges, and traversed an obstacle course. This event gave cadets a glimpse into a simulated operational environment and developed their leadership and followership skills.
- We sent 16 cadets to Field Training, a transformational experience all Air Force cadets must attend before they can lead at their respective detachments. Of those, 14 earned Fitness Awards (scored > 90/100) and nine were recognized as Distinguished Graduates (top 10%).
- We proudly commissioned 21 new second lieutenants this year. Three were Air Force and Space Force Distinguished Graduates an honor reserved for the top 10% of graduates in all of AFROTC.
- 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 one of our largest cadet wings in fall 2023, made up of students with both full and partial scholarships, as well as several walk-ons.

Notable Statistics / Data

- Spring 2020 total enrollment was 72; Spring 2021 was 90; Spring 2022 was 95; Spring 2023 was 94. We are expecting 20 incoming first-year students this fall to bring our total enrollment to 97.
- AFROTC scholarships now pour ~ \$4.4M in undergraduate tuition into our four schools annually, including \$2.57M at MIT.
- In addition to our undergraduates, Detachment 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

- Our Detachment was recognized as the Best Large Detachment in the nation, out of 145 detachments, for the year 2022.
- Cadets were recognized with multiple national-level awards, including the AFCEA ROTC Scholarship Award, the Society of Military Engineers (SAME) Boston Post Scholarship, and the Sons of the American Revolution.

Looking Ahead

- U.S. Air Force Staff Sergeant Vincent Frisbee joined our team in the fall of 2022.
- U.S. Space Force Captain Simone Keith joined our team in the summer of 2023 and will be our Space Force liaison.
- We will seek to foster better and more consistent contact with our alumni network.
- We will advocate for our cadets to partner with academic faculty on Department of Defense-sanctioned research projects.
- We will 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, Gordon, Endicott and Salem State to prepare them for future leadership roles in the U.S. Army, the nation, and the world. Our vision is to be the premier ROTC program in the country, leading Cadet Command in all measurable categories.

Accomplishments

Over half of our commissionees for summer 2023 earned the title of "Distinguished Military Graduate," an accomplishment that is only achieved by ranking within the top 20% of cadets nationwide. Of those, the top female cadet in the nation came from the MIT AROTC program, Cadet Madeline Gavitt, who ranked #3 out of over 5,000 cadets. Another notable achievement came from Cadet Grace Motes, who ranked #256/3,500 cadets who were selected for active duty across the nation. And, once again, all commissionees were slated for their first component choice – Active Duty, Army Reserves, or National Guard.

MIT AROTC projects to continue to achieve mission success as we foster and develop new cadets into competent and successful officers who answer our nation's highest calling – to serve in the U.S. Armed Forces.

	MS 23(Sr)	MS 24(Jr)	MS 25(So)	MS 26(Fr)	Total
Contract Mission	16	15	15	15	N/A
Commission Mission	14	13	13	13	N/A
Contracted	19	17	18	21	73
Enrolled Not Contracted	0	0	2	2	4
Total Enrollment	19	17	20	23	79

MIT AROTC has a carefully crafted set of accomplishments that we aim to achieve each year. Divided into various lines of effort, one is to successfully train our cadets to perform well at Cadet Summer Training, which takes place over the course of 35 days at Fort Knox, Kentucky. During summer 2023, we sent 16 cadets to summer training. Of those, 14 received an overall "E" for excellence or higher. We cannot be prouder of what our team has accomplished.

Other various training and events for AROTC cadets within the last few months were Air Assault, Airborne, SOCOM-Ignite, Project-GO, Sage Eagle, and Hackathon team collaborations. Cadets, from first-years through rising seniors, participated in the training and gained invaluable experience that they will bring back to make the overall organization better.

Another notable achievement was made by MIT Mechanical Engineering student Cadet Mark Mosser, who was nominated for and presented a national award medal from The National Defense Transportation Association. This prestigious award is given to cadets who demonstrate outstanding leadership ability and academic excellence, and who have committed themselves to a life of serving in the Armed Forces. Traditionally, this decoration is awarded to only around 80 Army cadets across the country each year.

Lastly, but no less noteworthy, Cadet Connor Huey competed and won an essay contest for the Military Historical Society of Massachusetts. The title of the essay, "Baptism by Fire: Leadership Lessons from Kasserine Pass and its Modern Applications," examines leadership perspectives from Eisenhower and other leaders during WWII. Cadet Huey and the team will attend a dinner and presentation of the paper by Cadet Huey in early September. This event will honor him and the AROTC program.

Challenges and Plans for the Future

AROTC intends to continue to refine and adjust our primary lines of effort in order to commission qualified officers to lead our future Army. We have no major challenges for the foreseeable future.

Reserve Officer Training Corps—Navy

The mission of the <u>Navy Reserve Officer Training Corps</u> (NROTC) is to develop our midshipmen (MIDN) 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 the 13 graduates from the Class of 2023, we are also preparing to welcome a class of 23 incoming students.

Key Accomplishments

Reinvigorated by the full opening of campus after Covid, the Naval Science Department resumed these long-standing events: the Fall Welcome Barbecue; visits to the *U.S.S. Constitution*, and to Fenway Park. Two admirals and a vice admiral guest lectured at Battalion Lab. We hosted the USMC Ball in November, and participated with Air Force ROTC and Army ROTC in the Joint Services Military Ball in February. A favorite event, "Dining In," occurred in April. This is a time-honored tradition where the Battalion military staff and students gather for a formal dinner in full dress uniform, a highlight for all.

AY2023 concluded with MIDN sailing on the Charles and a visit to the Mystery Room. Other highlights included participation in the Women in Submarines Conference, held at the U.S. Naval Academy in May in Annapolis.

Harvard and Tufts midshipmen commissioned in joint ceremonies on their respective campuses in May. For the second time in two years, we hosted the Joint Commissioning Ceremony for the MIT ROTC Class of 2023, dockside at the *U.S.S. Constitution*. A catered reception at the U.S.S. Constitution Museum followed, attended by commissionees, family, friends, and ROTC staff to commemorate this auspicious occasion. It was a fitting way to send our graduates on their journey as Naval and Marine Corps officers.

We are proud to recognize the outstanding accomplishments of our 13 Class of 2023 graduates, and we commend their commitment to our program. The graduates and their post-graduation plans are noted below:

- Andrew Cummings (MIT) USMC, Student Naval Aviator
- Frederick Humm (MIT) Nuclear Reactors Engineer
- Albert Kwon (MIT) Cyber Warfare Engineer
- Juliet Liao (MIT) Submarines
- Joshua Malone (MIT) Submarines
- Andrew Manwaring (MIT) Submarines
- Andrew Motz (MIT) Submarines
- Daniel Saavedra (MIT) Cryptologic Warfare

- Elisabeth Aigeldinger (Harvard) Surface Warfare, Nuclear
- Isaiah Coleman (Harvard) Submarines
- Kyle Englander (Harvard) Submarines
- Jack Leland (Harvard) Submarines
- Matthew Mullahy (Harvard) Submarines
- Dominic Haley (Tufts) Naval Supply Corps

Notable Statistics/Data

Our enrollment for AY2023 showed a continued growth trend, and the numbers are steadily improving after the impact of the Covid-19 pandemic:

	Class of 2027	Class of 2026	Class of 2025	Class of 2024	Class of 2023
MIT	10	3	2	4	7
Harvard	8	3	1	9	5
Tufts	5	0	0	3	1

Notable Recognitions

We are excited to welcome the following new staff members to our Naval Science Department.

Navy Officer Staff

- 1st Lt Brendan Connors, MOI (Marine Officer Instructor)
- Gunnery Sergeant Antonio Lopez, AMOI (Assistant Marine Officer Instructor)

Student Financial Services

Student Financial Services

<u>Student Financial Services</u> (SFS) provides students and families the assistance and resources they need to make the dream of attending MIT a reality.

AY2023 Initiatives

Financial Aid, Loans, and Affordability

- Continued efforts to educate undergraduates on financial planning; increased financial education presentations by 140% from academic year 2022, from 15 to 36; and increased student touchpoints by 60%, from 440 to 706 across presentations, workshops, and 1:1 appointments.
- Hired financial education counselor in November to increase student connections and program reach.
- Hosted over 61 unique presentations to current and prospective students, 36 of which were hosted by the financial education team.
- Partnered with Division of Student Life (DSL) to identify the students with the highest economic need living in cook for yourself dorms, so that DSL could provide meal swipes to them between winter break and Independent Activities Period (IAP), and during IAP. Program expanded in AY2023 to include all students, not just first-year students.
- Modified the new expanded available income table to increase aid to lower income students who would have lost aid with the expanded available income table.
- Waived the noncustodial parent form for returning students with a \$0 parental contribution.
- Implemented new dependency override form and process.
- Increased free tuition threshold to \$140,000.
- Worked with Priscilla King Gray Public Service Center (PKG) to improve student employment information on SFS website; worked with financial education team and PKG to find ways to promote working on campus; created new reports to help PKG outreach to different departments to students about work opportunities.
- Agreed to accommodate unique student situations regarding payment options for international students experiencing large currency fluctuations and cost of attendance increases.
- Included Veterans Affairs benefits on financial aid awards to help students better understand their full financial picture and plan for their time at MIT.

Customer Service, Operations, and Communications

• Restructured the operations team and created new operations coordinator role to provide better customer service to students as well as our internal and external partners.

- Dispersed all Federal Work-Study funds for FY2023 so there was no need to transfer unspent funds.
- Continued monthly billing reminders to users of Charge Assessment, an online tool for departments to post academic-related charges and credits to student accounts. Helped departments check charges posted to student accounts.
- Worked with Office of the Vice President of Finance to streamline alternative loan payments received via wire to streamline reconciliation and payment processing.
- Switched from a manual posting process to automated posting of 600+ monthly payments for MIT Education Loan borrowers via an approved vendor, Educational Computer Systems, Inc.
- Assigned 55 loans that were previously 24 months or more in default to the Department of Education. The department accepted all our loan assignments.
- Supported campus partners with planning, testing, and implementing new systems that impact SFS, such as StarRez, a property management platform tool used by the housing department and Stripe, a payment processing platform for processing credit card payments billed to non-enrolled students.
- Implemented a new project on our financial aid management system software, PowerFAIDs, to evaluate and push student social security number discrepancies directly to the student's financial aid counselor, enabling the counselor to reach out to the student directly for verification purposes.
- Rewrote and redesigned the Affording Your MIT Education (AYME) and the Getting Started Guide. The AYME guide answers the common questions that admitted students and their families have about affording an MIT education, and the Getting Started Guide contains key information to help enrolling students prepare for MIT.
- Hosted two new online sessions for newly admitted students and their families.
- Developed a new sub-brand for the financial education team to help make dealing with finances more approachable.

Notable Statistics

Financial Aid

- In AY2023, MIT awarded \$152.3 million in need-based institutional grants to 2,680 undergraduates with an average family income of \$115,030. The median need-based grant was \$63,729, or 83% of the cost of tuition, fees, housing, and meals.
- Forty percent of MIT undergraduates received grants (from any source) sufficient to allow them to attend tuition-free. The average total family contribution, not including student term-time work, for those receiving an Institutional grant was \$17,068.
- Fifty-eight percent of the 4,638 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.

- Seventy-four percent of undergraduates, 3,418 students, earned wages totaling more than \$15.1 million from MIT employment or the Federal Work Study program.
- The percentage of undergraduates taking out loans rose slightly from 7.8% to 7.9% in AY2023. Among seniors graduating in 2023, 86% graduated with no debt. Of those with education debt, median indebtedness at graduation was \$14,844, an increase of 4.5% from AY2022.

Customer Service and Operations

- Received 41,521 email messages and replied to 31,241. In early spring 2023, started deleting spam emails for better data collection.
- Processed 179 MIT Education Loan applications, averaging \$9,845.64 per application, and disbursed over \$1.7 million in funds to MIT staff and faculty.
- Gross tuition and fees for the Institute totaled \$814 million in AY2023. Within this category, undergraduate tuition and fees were \$264.6 million or 32%; graduate tuition and fees were \$498 million or 61%; and non-degree tuition and fees were \$51 million, or 6%.

Awards, Recognition, and Staffing

- For AY2023, SFS was composed of 30 administrative staff and one support staff. Fifty-five percent are women, 45% are men, and 39% are underrepresented minorities (Hispanic, Asian, and Black/African American).
- Ryan Blair won an individual Infinite Mile Award for Serving the Client; and Erica Aguiar won an individual Infinite Mile Award for Innovation & Creativity.

Teaching + Learning Lab

The <u>Teaching + Learning Lab's</u> work during the 2023 academic year has leveraged a range of lessons learned from remote programming, teaching, and otherwise working; and has addressed the longer-term, evolving needs of the MIT teaching and learning community. TLL had ~70 active and completed projects in AY2023.

Key Accomplishments

Support for MIT Educators - Advancing OVC-wide Initiatives

The TLL Speaker Series

During AY2023, we hosted five outside speakers and one panel of MIT educators who addressed the topic "Reigniting the Spark of Learning." <u>Summary blog posts</u> that include Zoom recordings (and often, the guest speakers' slide decks) are available through the TLL website.

TLL Monthly Newsletter

The <u>newsletter</u> with approximately 3,000 subscribers was distributed monthly and included curated news, events, and resources for the MIT teaching community.

Flipping Failure

To further the goal of TLL's <u>Flipping Failure</u> initiative, in March 2023 we launched a bimonthly (every two months) <u>newsletter</u> to inform MIT students of relevant and valuable information on academic challenges faced by someone in our community and strategies they used to cope.

The Inclusive and Equitable Teaching Assessment

The Inclusive and Equitable Teaching (IE-Teaching) Assessment is an initiative designed to promote more inclusive and equitable teaching practices by using data to motivate, inform, and tailor change efforts to in departments. Three MIT departments participated in AY2023. Additional information is available <u>here</u>.

Workshops and Presentations for the MIT Teaching and Learning Community

TLL staff organized and offered a variety of workshops and presentations during AY2023:

- "Polish your Syllabus: Increase Transparency and Purpose to Support Student Belonging" | IAP
- ChatGPT in Research and Teaching workshops/presentations (3)
- NECHE-prep ILO workshops (3)
- Workshops for departments in the IE-Teaching Pilot
- "Foundations of Inclusive and Equitable Pedagogy" workshop | Department of Biological Engineering
- "<u>How to Hack Your Learning: Strategies for Becoming a More Effective Learner</u>" series for MIT students | IAP
- What TLL does for Grad Students | Department of Chemical Engineering
- Inclusive Teaching as a TA | Department of Architecture

- Non-Faculty Roles in Higher Education | CAPD
- Growth Mindset workshops (5)
- Teaching Philosophy Workshop | CAPD

Assessment and Evaluation

- Makerspace Inclusion Project (ACF)
- The Educational Justice Institute (TEJI) Self-Efficacy Study
- DEI Departmental Needs Assessment IE-Teaching. Student survey
- FYD Class of '26 Discovery Credits Study
- FYX Class of '23 P/NR and Discovery Unit Studies
- VM-Lab Evaluation of Interactive Simulations for Online Photonics Fundamentals course
- Academic Well-being Initiative (with the Department of Brain and Cognitive Science and Open Learning)

Support for TAs, Grad Students, and Postdocs

- <u>TA Days</u>: Our workshop series for new TAs was offered at the start of each semester, (August 2022 and January 2023). All resources from each of the workshops were made available to the MIT community through Canvas. (>225 attendees)
- <u>Grad Teaching Development Tracks</u>: Our <u>alternative development pathway</u> for graduate students was offered during AY2023, with seven tracks attended by 114 graduate students.
- <u>Kaufman Teaching Certificate Program</u>: Four sections were offered in fall 2022, and five in spring 2023. A total of 157 participants completed the programs.
- <u>Teaching Development Fellowship Network</u> (TDFN): 18 fellows from 17 different departments, and two at-large fellows (funded by TLL) participated in the network.

TLL-Staff Participation in Institute-wide Committees and Working Groups

- Health & Promotion Working Group Academic Stream
- NECHE Preparation and support for Mid-term Report
- OVC Personnel Action Committee (PAC)
- RIC 7 Teaching Staff Professional Development
- Search Committee for an Associate Dean, Advising and Strategic Initiative
- Collaboration with OME on update of the *It's Intuitively Obvious* video series and discussion guides
- RIC 16 Ad Hoc Committee (co-chair and report creation)
- MIT Diversity Think Tank
- MIT Strategic Change Reading Group
- LMS Advisory Board

One-on-One Teaching Consultations

TLL staff provided approximately 65 formal and informal consultations with members of the MIT teaching community.

Awards, Recognition, and Staffing

We successfully ran a search to fill the position of assistant director for research and evaluation.

Looking Ahead

- Expansion of the Inclusive and Equitable Teaching Assessment to support additional departments.
- Continued increased programming and support for inclusive and anti-racist teaching.
- Continued development and implementation of a campus-wide learning strategies selfassessment.
- Continued identification and development of additional programming to support the professional development of future faculty.
- Continued expansion of the Teaching Development Fellows Network (TDFN) to include more at-large fellows.
- Ongoing revision and refinement of the TLL website with development of timely and relevant web-based resources for the MIT community on best practices in our dual fields of expertise of research and evaluation, and teaching and learning.
- Continued work on the Flipping Failure project with the development of additional studentproduced recordings, and a wider distribution of the newsletter.
- Support for instructors around the opportunities and challenges of teaching and learning with generative AI.

Undergraduate Advising Center (UAC)

Vision

To provide a transformative advising experience that empowers all undergraduate students to excel, grow, and thrive throughout their academic journey at MIT and beyond.

Mission

The <u>Undergraduate Advising Center</u> team strives to help every undergraduate student at MIT reach their full potential with individualized, holistic advising from matriculation to graduation.

At the UAC, we recognize that every student is unique and has different goals, interests, and challenges. We aim to create a safe and inclusive space where students can openly express concerns, ask questions, and explore opportunities. Whether a student needs assistance selecting courses, exploring experiential learning opportunities, or finding co/extra-curricular activities, we connect students with the appropriate resources they need to accomplish their goals.

The Office of First Year is now a subunit of the UAC. The <u>Office of the First Year</u> (OFY) aims 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)
- First Year Advising
- Committee on Academic Performance (CAP)
- First Generation/Low-Income (FLI) Program

In addition to first-year programming and CAP, OFY includes three first-year learning communities: **Concourse, Experimental Study Group**, and **Terrascope**. Each community's submission to the President's Report is included below.

Notable Data/Statistics

- A total of 71% of the Class of 2026 was advised or mentored by faculty during their first year at MIT.
- In the fall 2022 semester, 11% of the Class of 2026 was flagged; 77% of flagged students recovered and passed their flagged subjects. In the spring 2023 semester, 6% of the Class of 2026 was flagged; 60% of flagged students recovered and passed their flagged subjects.

Key Accomplishments

• Development of the UAC vision and mission statements

- Associate Dean and Director of the UAC, Dr. Diep Luu, hired three new staff:
 - Sade Abraham, Associate Dean, Advising and Student Belonging
 - Chelsea Longin, Associate Dean, Advising and Strategic Initiatives
 - o Jordan Sell '23, Administrative Assistant
- The FLI Community held a series of monthly community events that invited all undergraduates that identify as FG or LI. A coat closet was introduced this year and made accessible beginning in January. The first FLI Advising award was presented.
- The Class of 2026 was invited to four targeted class programs throughout the year with the goal to increase class interaction.

Awards / Recognitions

Received

- OVC Infinite Mile Awards
 - Office of the First Year Team Community
 - Commencement '22 Team Collaboration & Communication
 - o FLI Student Support and Advocacy Award: J. Alex Hoyt
- Staff Promotions:
 - Michael Santoro: Senior Staff Associate
 - J. Alex Hoyt: Senior Staff Associate

Given Out

- First Year Student Awards (four categories)
- Outstanding Associate Advisor Awards (two categories)
- First Year Advisor Awards (six categories)

Looking Ahead

- Launch the new <u>UAC website</u> in August 2023.
- Present vision and mission and progress of the UAC to the MIT community in fall 2023.
- Hiring of five additional institute advisors during AY2024.
- Move the UAC team into Building 11.
- Research advising technology systems to expand the 5th week flag beyond the first year and online tutoring management systems.

Concourse

<u>Concourse</u> is a first-year learning community of students and instructors dedicated to exploring the foundational questions at the heart of humanistic inquiry, and to interrogating the relationship of these questions to the larger MIT curriculum. We offer subjects from the science core (mathematics, physics, and chemistry), a foundational humanities course (and companion CI-HW subject for those who require it), and an interdisciplinary weekly first-year advising seminar. We also host community and cultural activities and offer opportunities for continued involvement in the community past the first year through seminars, teaching opportunities, and advising.

Updates to Annual Programs

- 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.
- Offered advanced upper-level reading seminars covering political philosophy, political economy, and Latin American literature.
- Combined cultural and historical education with outreach to alumni during our annual student trip to New York City.
- Collaborated with the Department of History and Ancient and Medieval Studies to run our annual IAP Ancient Italy trip.
- Offered a summer Zoom reading group for continuing students to stay intellectually engaged.

New in AY2023

- Secured a grant from the Arthur Vining Davis Foundation for Civil Discourse in the Classroom and Beyond project in conjunction with two faculty colleagues in the Department of Philosophy.
- Piloted a debate program for discussing controversial topics on campus, including one debate focused on campus free expression during a moment of intense campus conversation on the subject.
- Developed a newly unified TA training program for Fall Orientation week for all our subject TAs.
- Recruited and hired a new math instructor.
- Recruited and hired a new assistant director.

Student Awards

- One of our first-year students was awarded the History Department Undergraduate Writing Prize for a paper written in a Concourse upper-level subject.
- One of our upper-level students led a team that was awarded the PKG IDEAS grant.

- Two of our upper-level students became Burchard Scholars.
- One student was awarded the Aarav Amar Bajpayee Memorial Prize for Undergraduate Achievement.
- Eight students graduated Phi Beta Kappa.
- Two were awarded Fulbright Fellowships.

Notable Statistics/Data

- First-year enrollment at fifth week:
 - Fall: 37
 - Spring: 33
- Upper-level Concourse students as UROPs, tutors, TAs, office workers, and graders:
 - Fall: 34
 - Spring: 25
- Associate Advisors: 12

Experimental Study Group

The <u>Experimental Study Group</u> (ESG), with a cohort of 55 first-year students, teaches all GIR subjects in sections of eight to 12 students. Cornerstones include educational experimentation, community building, and peer teaching. The small classes, high instructor-to-student ratio, and large number of undergraduate TAs provide an environment where relationship, innovation, and creativity flourish. Community is built through weekly Friday Lunches, outings, group study sessions, team projects, and simply hanging out in the ESG lounge.

AY2023 Initiatives

Pilot Project with MIT Stephen A. Schwarzman College of Computing, Electrical Engineering and Computer Science, and OVC

Over the past two years ESG students have taken ES.801 (equivalent to 8.01) coupled with ES.S601 (equivalent to 6.100A), enabling them to enrich their physics understanding by adding computation, learning Python over an entire semester, and reinforcing computational knowledge by applying it to physics. In the second year, all ES.801 students learned computational thinking, whether they took ES.S601 or not, and could do a final computational project. New ES.S601 problems were developed to connect 6.100A learning objectives with physics and are available for adaptation to mainstream physics and computer science. The pilot originally included teaching ES.S602 (6.100B) and ES.802 (8.02) in spring 2023. However, only three students signed up for that option. Instead, we shifted to develop computational thinking materials for ES.802 and ES.8022, which served 26 students in ES.802; collaborated with TEAL to adapt this material to its platform for fall 2023; and worked with two ESG TAs and one UROP student to develop new material. ES.802 modules are available for adaptation to the mainstream as well.

ESG Seminars

ESG sponsors several 3-6 unit seminars each year on subjects not covered in the regular curriculum. Intended to be hands-on and experiential, these seminars are open to all MIT students, making the ESG experience available to the broader MIT community. Thirteen seminars were offered on various topics, including extraterrestrial life, emotional intelligence, and the chemistry of sports.

Strengthening ESG Alumni Ties

- ESG hosted alumni at various ESG Friday Lunches, where they discussed their research and career paths. Topics ranged from bias in AI, creating a start-up, and working on the Mars Rover at JPL. We also hosted a medicine and health policy panel with two of our earliest alumni (1973 and 1974), as well as a current MD/PhD student who graduated in 2015.
- We held two alumni reunions, one virtual in February and the other live during Commencement Weekend.

The Educational Justice Institute (TEJI)

- In partnership with the New England Board of Higher Education, <u>TEJI</u> launched the New England Commission on the Future of Higher Education in Prison, which includes 90 stakeholders from the five New England states. A comprehensive <u>report</u> issued recommendations for increasing the availability of affordable, high-quality postsecondary education programs and identifying specific ways for stakeholders to collaborate within and across the states to accelerate progress, build capacity, economize resources, avoid duplication, and improve quality and outcomes.
- TEJI partnered with Dr. Raechel Soicher (MIT's Teaching + Learning Lab) and Dr. Joshua Long (UMass Lowell's School of Criminology and Justice Studies) to quantify how TEJI courses impact students.
- Under TEJI's leadership, the Massachusetts Prison Education Consortium (MPEC) held five virtual meetings focused on learning from formerly incarcerated leaders in prison education and reentry, technology available for higher education in prison programs, and the effect of Pell Grant restoration for incarcerated students.
- Since 2018, TEJI has coordinated 78 humanities and computer science courses, provided 23 experiential learning opportunities, taught 731 incarcerated students and 320 MIT students, and increased MPEC membership from 13 to 890.

Awards

- Peter and Sharon Fiekowsky (PSF) Community Service Awards: Isabella Salinas '23 and Waly Ndiaye '24
- PSF Excellence in Teaching Award: Héctor Cantú Bueno '23 and Skylar Larsen '23
- PSF Distinguished Teaching Awards: Audrey Gatta '23, Kaitlyn Przydzial '23, Mariia Smyk '23

Students

- Class of 2026: 51
- Underrepresented minorities: 8
- Five international students (Czech Republic, Estonia, Kenya, Malaysia, and Poland)
- Sixty-one undergraduate Teaching Assistants in the fall and 44 in the spring provided academic support, while learning teaching and leadership skills.

Looking Forward

• Know what you Learn: Rigorous Process-Oriented Grading Strategies in MIT's Physics GIRs: ESG won an Alumni Class Grant to design and implement a "Specification Grading" system for the physics GIRs. This system will use assessment as a teaching and a learning tool and provide structured opportunities for students to take responsibility for their learning. Goals include linking grades to mastery of learning goals, making the hidden curriculum clearer to students, reducing student stress, and developing a more equitable learning experience. During summer 2023 and IAP 2024, we will redefine learning objectives and write growth-oriented assignments, rubrics, and examples using specification grading as a template. During fall 2023, we will write new material and apply the new grading system to our fall physics classes.

Terrascope

<u>Terrascope</u> is founded on the proposition that first-year MIT students are ready to take control of their own education to tackle important, sustainability-related problems. In project-based classes, Terrascopers draw on diverse perspectives, interdisciplinary research, and a supportive community. They bond in common space and over meals, advising, and a field experience.

Key Accomplishments

- This year, Terrascope devoted its curriculum and annual field trip to Navajo Nation, strengthening existing partnerships and establishing promising new ones; all are long-term collaborations centered on community partners' priorities.
- This spring four students from Diné College (a public tribal college) remotely took part in Terrascope's engineering/design class, 2.00C[J] Design for Complex Environmental Issues, along with eight peer students from MIT. Students from both institutions mixed within project teams to develop appropriate-technology solutions to issues faced by elders in agricultural practice.
- In the fall class 12.000 Solving Complex Problems, students addressed issues related to water and agriculture in Navajo Nation. Partners from Navajo Nation addressed the class and connected with students in smaller groups.
- The IAP class SP.361 Majors and Careers through a Terrascope Lens again provided close contact with alumni to students about to declare majors.
- Students in the SP.360 Terrascope Radio class produced a rich audio story about agriculture, tradition, language and water in Navajo Nation. "<u>Yá'át'ééh–Everything Here</u> <u>Is Sacred</u>," premiered on WMBR and was distributed nationally by the Pacifica Radio Network.
- In a new class, SP.310 Discovery and Engagement through the Terrascope Field Experience, students worked on individualized projects involving poetry, art, food, geology, geographical information systems, and a future Navajo-Nation-based Terrascope topic.
- This year's Terrascope Field Experience covered a large and diverse area of Navajo Nation. Highlights included:
 - An extensive tour of the geology of western Navajo Nation led by Arizona State University geologist Professor Steven Semken.
 - A farm visit and discussions with Danielle Goldtooth, founder of a traditionalcuisine-centered farm-to-table catering company.
 - An excursion to the confluence of the Animas and San Juan Rivers and a visit to the New Mexico State University Agricultural Experiment Center, led by Terrascope partner Brandon Francis.
 - Farm tours and cultural-education sessions at partner Navajo Ethno-Agriculture.
 - A day at Diné College, where MIT and Diné College students in the class Design for Complex Environmental Issues worked together to develop prototypes of their projects and continue building team dynamics.

- A Diné-guided hike in Canyon de Chelly.
- A site visit and tour by staff from partner DIGDEEP, covering both standard installation of water services for individuals and adaptations made necessary by the pandemic.
- A near-sunset overlook of the Grand Canyon.
- Community-building activities were a high priority this year. Incoming students were welcomed into the community over the summer, giving them a head start on building comfort and connections. Terrascope saw the welcome return of our student kitchen as another space to foster community and wellbeing.
- Terrascope continued its emphasis on strengthening its alumni community through the Alumni Mentor program.
- Terrascope continued to disseminate nationally the unique model for community engagement developed in collaboration with community partners and the PKG Public Service Center.

Notable Statistics/Data

- Terrascope completed its 21st year, and the 23rd year of its cornerstone fall class.
- Thirty first-year students participated, with 217 upper-level students continuing to be full members. Forty-six alumni served as alumni mentors, 11 engaged with the hybrid IAP class, and several dozen participants attended an in-person spring gala. Fifteen students served as undergraduate teaching fellows, and 22 as associate advisors.

Awards and Recognition

• Ari Epstein was promoted to associate director and senior lecturer.

Looking Ahead

- Terrascope's next academic year will be devoted to developing proposals for stable, sustainable electrical power on community scales in Puerto Rico, as Terrascope continues to build and foster long-term partnerships in the archipelago.
- Terrascope continues to build strong partnerships on campus, in particular with the Environmental Solutions Initiative, the PKG Public Service Center, the Office of Minority Education, the Department of Mechanical Engineering, D-Lab, Beaverworks, MISTI, and the Office of Sustainability. Terrascope remains involved in broader efforts to improve the first-year experience.
- Terrascope is working with development staff in the Chancellor's Office to contribute to a robust fundraising and alumni engagement strategy around the Whole Student Initiative.