

Chair of the Faculty

In AY2021, Arthur C. Cope Professor Rick Danheiser (Department of Chemistry [Chemistry]) served as chair of the faculty, Clarence J. LeBel Professor Duane Boning (Department of Electrical Engineering and Computer Science [EECS]) as associate chair, and Raphael Dorman-Helen Starbuck Professor David Singer (Department of Political Science [PoliSci]) as secretary. Ford International Professor Lily Tsai (PoliSci) served as chair-elect.

There were 1,053 faculty members during AY2021. Of these, 155 were assistant professors, 216 were associate professors, and 682 were full professors. These were joined by 64 professors, post-tenure.

Institute Faculty Meetings

Seven Institute faculty meetings were held, all via the video conferencing platform Zoom.

Issues pertaining to the Institute's response to the Covid-19 pandemic were discussed at five of these meetings. The specific topics included the impact of the pandemic on the Institute; vaccine roll out; and planning for spring 2021 and fall 2021.

The faculty received briefings and participated in discussions regarding a restructuring of the Institute's research support activities; the efforts of Task Force 2021 and Beyond; the Strategic Action Plan for Diversity, Equity, and Inclusion; the ongoing development of the MIT Schwarzman College of Computing; issues pertaining to the relationship between MIT and China; and sexual/gender-based harassment prevention training. The new chair of the MIT Corporation, Diane B. Greene SM '78 was introduced to the faculty at the November meeting. Greene provided updates on recent changes in the Corporation and responded to questions.

Updates to Rules and Regulations of the Faculty during AY2021 included the addition of a third graduate student to the Committee on Discipline; the addition of a second undergraduate and a second graduate student to the Committee on Campus Planning; adding the dean of the Schwarzman College of Computing and the Institute Community and Equity officer as formal members of the MIT faculty; an update to reduce the required units for the master of architecture degree to reflect current practice; and updates to align Rules and Regulations with the Institute change from Columbus Day to Indigenous Peoples Day; clarifying the regulation prohibiting tests in undergraduate subjects on Monday evenings, and changing pronouns to be gender neutral. In addition, a proposal from the Committee on the Undergraduate Program (CUP) was approved, resulting in an increase to the first-year spring credit limit from 57 to 60 units.

The faculty heard the standard annual reports on recruitment and retention of faculty and graduate students from underrepresented minority groups; the Committee on Discipline's caseload and disciplinary trends for the previous academic year; the slate of nominations for faculty officers and the standing committees of the faculty; and citations for faculty moving from tenured status to professor, post-tenure, or to professor emerita/emeritus. There were also memorial resolutions for two faculty: Institute Professor

Daniel I. C. Wang (Department of Chemical Engineering [ChemE]), who passed away in August 2020, and Kathleen and Curtis (1963) Marble Professor of Cancer Research Professor Angelika Amon (Department of Biology [Biology]), who passed away in October 2020.

Faculty Awards

On April 14, Lee and Geraldine Martin Professor in Environmental Studies Professor Susan Solomon (Department of Earth, Atmospheric and Planetary Sciences [EAPS]) presented the AY2021 Killian Lecture, titled “The Antarctic Ozone Hole: A Global Success Story of Science and Policy.” Gilbert W. Winslow Career Development Professor Desirée Plata (Department of Civil and Environmental Engineering [CEE]) and Class of ’42 Career Development Professor Justin Steil (Department of Urban Studies and Planning [DUSP]) were recognized as the recipients of the Harold E. Edgerton Faculty Achievement Award in April, and in May, Professor Robert Merton (MIT Sloan School of Management [Sloan]) was named the winner of the James R. Killian Jr. Faculty Achievement Award; Professor Merton will present the AY2022 Killian Lecture in March 2022.

Faculty Officer Activities

On behalf of the faculty, the three officers met monthly with the Institute’s senior administration. The officers continued the long-held tradition of hosting informal monthly gatherings for random groups of Institute faculty. During AY2021 these were held via Zoom due to the pandemic. The officers also conducted a listening tour both semesters, visiting with each school and the college council to learn what was on the minds of faculty members. All three officers participated in the monthly department heads’ lunches as well.

The officers hosted a successful and well-attended virtual town hall meeting for junior faculty in December 2020 to get a sense of the key issues faced by this cohort as a result of the Covid-19 pandemic. They also hosted a virtual town hall meeting for all faculty in May 2021 to hear about and discuss Institute strategic priorities with the provost, Ray and Maria Stata Professor Martin Schmidt, and Executive Vice President and Treasurer Glen Shor.

As chair and chair-elect of the faculty, Professors Danheiser and Tsai regularly attended the virtual meetings of the Ivy+ Consortium.

As chair of the faculty, Professor Danheiser served as a member of Academic Council, the Academic Appointments Subgroup, and Deans’ Group, as well as serving on the newly formed Deans’ Council, which began meeting during summer 2020. Danheiser also served on the MITx Faculty Advisory Committee, the Enrollment Management Group, and the Corporation Joint Advisory Committee on Institute-Wide Affairs. Professor Boning, associate chair, served as a member of the Committee on the Undergraduate Program, the Committee on Graduate Programs, and the International Advisory Committee. Professor Singer, secretary, served on the Committee on Race and Diversity.

In collaboration with the president and the provost, Danheiser brought forward two nominations for Institute Professor: Robert T. Haslam (1911) Professor in Chemical

Engineering Arup Chakraborty (ChemE, Chemistry, and Department of Physics [Physics]) and David H. Koch Professor of Engineering Paula Hammond (ChemE). The two cases were discussed at Academic Council in December 2020, reviewed internally and externally in early 2021, and approved by the Executive Committee in April 2021.

Danheiser served during AY2021 as co-chair of Task Force 2021 and Beyond, together with vice president for Open Learning, Fred Fort Flowers (1941) and Daniel Fort Flowers (1941) Professor Sanjay Sarma. President L. Rafael Reif charged the task force in May 2020 to reimagine and reposition the Institute for the post-Covid world. The idea generation phase of the task force was completed in December 2020. The refinement and implementation phase was launched in March 2021, to be completed in AY2022.

Danheiser also wrote the following articles for the MIT Faculty Newsletter:

- “Improvements in Policies for Promotion and Tenure are Long Overdue,” September/October 2020
- “Task Force 2021 and Beyond—Toward ‘Building a Better MIT,’” January/February 2021
- “A Look Back and a Look Ahead,” May/June 2021

Faculty Policy Committee

Rick Danheiser, chair
Tami Kaplan, staff

Chaired by Danheiser, the Faculty Policy Committee (FPC) met on 19 Thursdays during the fall term, Independent Activities Period (IAP), and the spring term to conduct consultative, oversight, and policy-making activities.

Curricular Issues

The key curricular issue brought to FPC for discussion during AY2021 was recommendations from the Committee on the Undergraduate Program for improvements to the first-year curriculum. Central to these were permanently changing the spring credit unit limit from 57 to 60, and permanently discontinuing early sophomore standing.

No new degree proposals were brought to FPC during AY2021.

Faculty Governance

In its role providing oversight of the faculty governance system, FPC addressed several issues during AY2021.

FPC considered and approved a proposal from the Committee on the Library System to make a permanent change to require theses to be submitted digitally. FPC discussed but did not approve a proposal from the Committee on Student Life (CSL) to expand the committee’s membership by adding several ex officio voting administrative staff

members. FPC's concerns focused on the fact that if the membership were to be changed in this way, the faculty on the committee would no longer hold a voting majority.

The Committee on Campus Planning (CCP) presented its annual report to the FPC. With FPC and faculty approval in fall 2020, CCP added two students (one undergraduate and one graduate student) to the committee membership to increase student engagement. CCP continues efforts to establish a place for its input within the campus planning process.

Finally, discussions continued from AY2020 on the election process for faculty officers and committee membership, and the practice of electronic voting.

Institute-Wide Issues

There were a number of Institute-wide activities and issues that FPC discussed during the year. Among these were the reports of the Ad Hoc Committee to Review MIT Gift Processes (aka the Processes Committee) and the Ad Hoc Faculty Committee on Guidelines for Outside Engagements (aka the Principles Committee), both of which were established in fall 2019 in response to the revelations regarding Jeffrey Epstein's gifts to MIT. Another set of significant discussions related to the recommendations from Phase One of Task Force 2021 and Beyond, with regard to education; campus spaces; remote work; social responsibility; lifelong learning; and postgraduate education. The MIT Values Statement Committee visited with FPC to get input on their efforts as part of a community engagement process, and FPC provided input to the Holidays Working Group. FPC additionally provided input to a draft policy on academic relationships with family members and guidelines on non-enrolled participation in classes, and heard an update from the Ad Hoc Working Group on Disclosures in Connection with Complaints. Continued from AY2020 were discussions regarding improving communication between faculty and the Corporation, as well as establishing guidelines for communicating with junior faculty regarding promotion and tenure processes.

Special Issues

The Covid-19 pandemic

The impacts of the pandemic remained of concern to FPC during AY2021, though not to the same extent as in the second half of spring 2020. However, the impacts of the pandemic on faculty were an important discussion topic, and FPC provided input on pandemic-related issues, such as the proposed spring 2021 academic calendar.

Meetings with senior leadership

In discussions with the president, provost, and chair of the MIT Corporation, the committee expressed continuing faculty interest in Institute finances (including the impacts of the pandemic on the budget) and strategic priorities (including issues such as graduate tuition, housing, and childcare), the challenges of climate change, follow-up from the Epstein gifts, and Institute governance and the engagement of faculty with the Corporation. Additional topics of note included identifying and implementing learnings from the pandemic through Task Force 2021 and Beyond, the Diversity, Equity, and Inclusion Strategic Action Plan (including how to incentivize and promote an increase

in the number of Black faculty at MIT, as well as an increase in number of faculty from underrepresented minority groups), MIT's promotion and tenure processes, and the Institute's archaic technology infrastructure.

Committee membership

Professor David Geltner served for an additional semester and completed his term on December 31, 2020, and Professor Isaac Chuang and Abdul Latif Jameel Professor of Water and Food John Lienhard completed their terms on June 30, 2021. After serving on FPC since 2014 as the president's designee, Ford Professor of Engineering Cynthia Barnhart's term concluded on June 30, 2021, when she stepped down from her role as chancellor. Professor Steven Barrett and Paul E. (1965) and Lilah Newton Professor Mriganka Sur were elected to join the FPC for three-year terms beginning in AY2022. The faculty elected Danae and Vasilis (1961) Salapatas Professor in Metallurgy Christopher Schuh to serve as associate chair of the faculty and J. W. Kieckhefer Professor of Health Sciences and Technology Martha Gray as secretary during AY2023, including service on FPC during their terms in office.

Committee on Academic Performance

Jeremiah Johnson, chair

Jocelyn Heywood, staff

The Committee on Academic Performance (CAP) concerns itself with the academic progress of undergraduate students at MIT. The work of the committee typically involves the consideration of petitions to change a student's academic record, the review of students who appear to be making insufficient academic progress, and the recommendation of SB degrees to the faculty. CAP also makes recommendations to the faculty on academic standards, the academic calendar, examinations, degree requirements, and grading.

Responding to the Covid-19 Related Significant Disruption

The declaration of a Significant Disruption in March 2020 and issuance of emergency academic regulations raised several issues for CAP. At that time, CAP waived the Physical Education and Wellness (PEW) requirement for members of the Class of 2020 by reducing it from eight to six points. The committee also relaxed the Deficiency Degree requirement by allowing a single deficiency to consist of a General Institute Requirement (GIR), though this was not ultimately used.

For AY2021, the committee took into consideration the continued disruption of the Covid-19 pandemic, but did not make any alterations to the PEW requirement or the single Deficiency Degree requirements as they existed prior to the disruption. However, the committee reviewed students at the end of each of the fall and spring terms as they did for the spring term of AY2020: generating flags for students who earned fewer than 36 units during the term.

Petitions

CAP reviewed 1,009 petitions during AY2021, as compared to 922 in AY2020. This year, we saw a slight increase in the number of petitions due to the first-year experiment and the process for those students to choose Pass/No Record grading on certain GIRs. The lack of familiarity with the online add-drop process due to the previous term's disruption carried over to the fall 2020 academic term and could have happened for the same reasons.

Of this year's petitions, 792 (78%) were approved and 217 (22%) were denied.

End of Term Academic Actions

In AY2021, 405 undergraduate students were flagged for review at the CAP's grades meetings, comprising approximately 11% of the student body. There were fewer students flagged in the fall term (197) than in the spring term (208). It is not uncommon for the load to vary significantly from term to term.

CAP issued 104 academic warnings as a result of these reviews. The number in AY2020 was 164, which is significantly higher and can be attributed to the Covid-19 pandemic and the change in the end of term flag criteria. Ten students were required to take an academic leave, the same number as in AY2021. Details of this year's actions are given in this table:

CAP End-of-Term Action Summary AY2021

Year	Fall 2020 warnings	Fall 2020 required academic leaves	Spring 2021 warnings	Spring 2021 required academic leaves
First-years	2	0	9	0
Sophomores	8	0	9	2
Juniors	17	2	11	1
Seniors	24	4	19	1
Total	51	6	48	4

Degrees

In AY2021 CAP recommended degrees as follows:

- September 2020: 15 students, 15 majors
- February 2021: 186 students, 209 majors
- June 2021: 826 students, 1,025 majors

Returning Students

Student Support Services (S3) reported returning student data to the committee in September 2020 and February 2021 as follows:

S3 received 35 completed requests for return from personal, medical, or required academic leave for fall 2020. Of these, 35 (100%) were approved and 0 (0%) were denied. Eighteen students returned under the new leave of absence category. Their returns were automatically processed without a need for CAP approval.

S3 received 23 completed requests for return from personal, medical, or required academic leave for spring 2021. Of these, 22 (96%) were approved and 1 (4%) was denied. Seventy-three students returned under the new leave of absence category. Their returns were automatically processed without a need for CAP approval.

Membership

The committee enjoyed a year of stable membership, with no changes during the year. The average attendance of the nine voting members at petition review and end-of-term meetings was seven for each of the fall and spring terms. The following faculty committee members are not returning due to their term ending and/or scheduled sabbatical: Professor Jeremiah Johnson (chair and scheduled sabbatical) and Professor Kripa Varanasi. We thank them for their service to MIT.

Committee on Campus Planning

Brent Ryan, chair
Amy Kaiser, staff

The Committee on Campus Planning (CCP) was created seven years ago when faculty called for more input into the Kendall Square project. Since that time, the committee has learned about the complex process of campus planning at MIT and established a presence in the planning process by keeping a finger on the pulse of projects. The CCP uses its meetings to deepen committee members' understanding of how the campus is evolving and to ask tough questions of those who are driving campus change.

Activities

This past academic year, CCP expanded its membership to include two additional students—one undergraduate and one graduate student—bringing the total number of students on the committee to four.

Associate Provost and Michael (1949) and Sonja Koerner Professor of Materials Science and Engineering Krystyn Van Vliet met with CCP several times over the course of the academic year to provide updates and receive feedback on a range of current planning activities, including: Task Force 2021; planning for future renovations along the Infinite Corridor; and the work of the Planning Subcommittee of the Committee for Renovation and Space Planning (P-CRSP).

As in past years, CCP received an update each semester on the capital projects that are taking shape across the campus. CCP also met with the head of MIT's capital renewal team to discuss campus renewal priorities and how they are identified.

Members of the MIT Investment Management Company (MITIMCo) team met with CCP to discuss progress on the Kendall Square initiative as well as ongoing planning, permitting, and construction efforts at the Volpe site.

To better understand and assess the link between sustainability and campus planning at MIT, CCP met with MIT's director of sustainability to explore campus sustainability initiatives; received a briefing on sustainability and decision making on capital projects from the vice president for Campus Services and Stewardship and a senior project manager from the Facilities Department; and heard from student leaders about their recommendations for on-campus sustainability.

Looking Forward

CCP is tasked with representing the faculty voice on plans for MIT's evolving campus. The committee seeks both to strengthen and to broaden that voice by:

- Resuming visits to each school council
- Maintaining communications with multiple campus planning threads, including: Task Force 2021 and Beyond and its relevant Refinement and Implementation Committees (RICs), including Campus Working Spaces, Work Succeeding, and Undergraduate Living and Learning; P-CRSP; capital project development; and planning and development activities led by MITIMCo
- Continuing to explore questions about CCP's role within MIT's planning and development ecosystem

Committee on Curricula

Singer Professor of Mathematics William Minicozzi, chair
Pam Walcott, executive officer

The Committee on Curricula (COC) acts on proposals to create, revise, or remove undergraduate subjects; proposals to create, revise, or terminate undergraduate curricula; student applications for double majors; and petitions for substitutions for the General Institute Requirements. The voting members consist of six faculty (including the chair) and four student members. The committee met six times during the fall term, four times during IAP in January, and seven times during the spring term.

Review of Undergraduate Subjects

From June 5, 2020 to June 4, 2021, the committee approved 489 subject proposals, including proposals for 77 new subjects, and numerous minor changes to degree charts.

Review of Undergraduate Curricula

The committee approved the following major curricular changes:

Course 1

Added a footnote to clarify the "180 units beyond the GIRs" requirement to SB 1-ENG

Course 3

Updates to SB in Course 3 electives; specified a list of subjects for the minor in materials science and engineering, and modified the text to reduce questions about what subjects can count toward the minor

Course 6

Updates to SB in Course 6 electives

Course 6-9

Updated degree chart to reflect that Course 9 is the administrative home; added 9.67[J] Materials Physics of Neural Interfaces to program subjects in Course 9

Course 7

Minor revision of degree chart to designate 7.19 Communication in Experimental Biology as a capstone class (recommended progression and conclusion to the undergraduate program); minor revision of minor chart to replace 7.09 Quantitative and Computational Biology with 7.093 Modern Biostatistics and 7.094 Modern Computational Biology

Course 9

Minor revision of degree chart to add 9.67[J] Materials Physics of Neural Interfaces (Communication Intensive in the Major [CI-M]; child number of 3.056 Materials Physics of Neural Interfaces) to degree chart

Course 10

Two existing subjects added to the 10-ENG degree chart

Course 11-6

Added urban technology workshop section to degree chart; additionally, added 11.138 Crowd Sourced City: Civic Tech Prototyping (new subject) and 11.074 Cybersecurity Clinic (existing subject with new Restrictive Electives in Science and Technology [REST] and digital components)

Course 12

Removed 12.005 Applications of Continuum Mechanics to Earth, Atmospheric, and Planetary Sciences and 12.174 Chemistry of Life from degree chart as they are no longer being taught; replaced 3.012 Fundamentals of Materials Science and Engineering with either 3.010 Structure of Materials and 3.020 Thermodynamics of Materials, or 5.60 Thermodynamics and Kinetics

Course 15

Added 15.960 Independent Study in Management to business analytics minor

Course 18

Added 18.061 Linear Algebra and Optimization as restricted elective in the general mathematics degree chart, in a footnote as a substitute for required subject 18.06 Linear Algebra in the applied mathematics degree chart, and as a foundational subject option in the 18-C degree chart

Course 21

African and African diaspora studies added as an official concentration within the 21 Humanities, 21E, and 21S majors; minor updates to African and African diaspora studies minor to encourage more study of indigenous languages

Course 21A

Minor change to update footnote examples of unifying theme in anthropology minor

Course 21M

Four new subjects (21M.816 Advanced Play Translation, 21M.780 Writing the Full-Length Play, 21M.810 Creating the World We Want: Protest, Activism, and Performance, and 21M.820 Production Design Visualization) added to 21M-2 major and theater arts minor degree charts

Course 24

Added 24.213 Philosophy of Film to philosophy major subject list

Interdisciplinary

Minor changes to polymers and soft matter minor; substantial changes to minor in environment and sustainability

Other actions

- Reviewed and approved hundreds of Covid-related subject changes as the Institute prepared for mostly remote learning in fall 2020, including changes to unit hours, unit distribution, enrollment limitations, and descriptions
- Approved seven undergraduate subjects as part of the new Common Ground initiative, which blends computing with other disciplines; considered a subject numbering proposal for Common Ground subjects from the new Schwarzman College of Computing, which was ultimately tabled per the request of the Common Ground Steering Committee
- Supported Class of '42 Associate Professor of Nuclear Science and Engineering Michael Short in testing Do Less Better, an application intended to identify discrepancies between published unit hours and actual hours spent, in spring 2021; data will be reviewed and potential next steps taken in fall 2021

- Evaluated and endorsed a proposal by the Committee on the Undergraduate Program to change the first-year spring credit limit to 60 units, end early sophomore standing, and continue experimental discovery units for two years
- Conducted the two-year review of the polymers and soft matter interdisciplinary minor (postponed from AY2020)
- Discussed best practices and established updated guidelines for reviewing digital content in subject proposals; the COC agreed that, with few exceptions, 12-unit subjects with digital content should have at least three lecture, recitation, or lab hours indicated in a subject's unit distribution
- Supported Undergraduate Association proposal to report on faculty committee meetings
- Conducted biennial review of REST and Institute Lab subjects

Committee on Discipline

Edmund K. Turner Professor of Civil and Environmental Engineering Andrew Whittle, outgoing chair

Class of 1949 Professor Jay Scheib, incoming chair

Tessa McLain, executive officer

James Reed, staff

The Committee on Discipline (COD), chaired by Professor Andrew Whittle during AY2021, resolves complaints by adjudicating cases of alleged misconduct.

Reported Cases

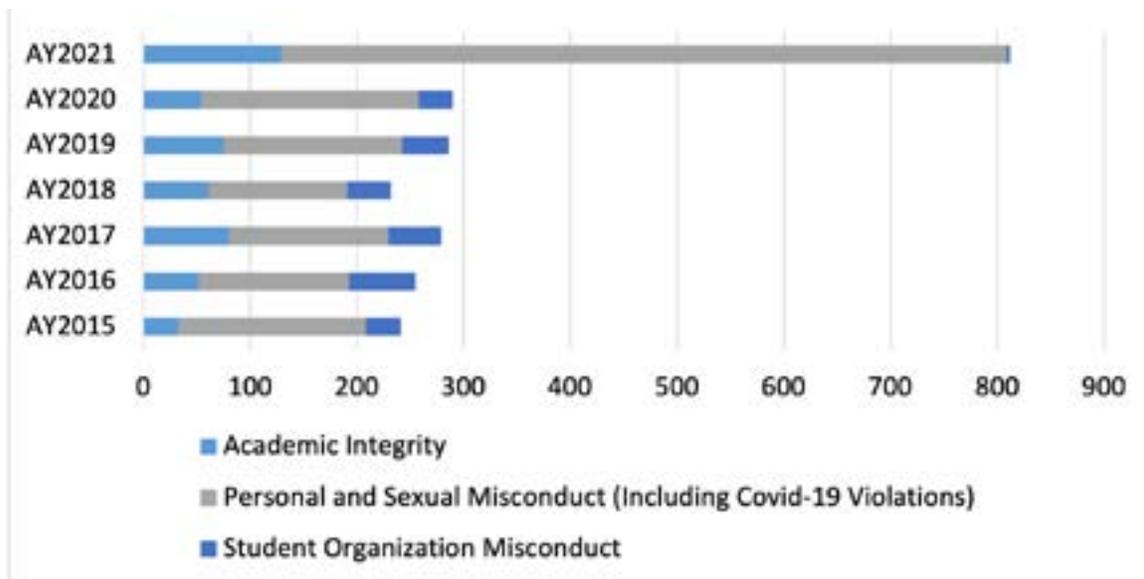
There were 812 total complaints brought to the Committee on Discipline's attention in AY2021. Of these, 809 (99.6%) were complaints alleging individual student misconduct and 3 (less than 1%) were complaints alleging student organization misconduct.

Case Trend

The case numbers for this past year reflect the impact of the Covid-19 pandemic, altered campus access, and Covid-19 policies. Of the cases, 632 (78%) pertained to violations of Covid-19 policies. Reports of academic misconduct increased by 138%. Personal misconduct (excluding Covid-19 policies) decreased by 76%.

The following stacked bar chart, Complaints by Type July 2014 to June 2021, shows the number of cases reported over this seven-year period. The chart shows that the number of cases reported to the COD increased from 241 in AY2015 to 255 in AY2016 and to 279 in AY2017. There was then a decrease to 232 cases reported in AY2018, but there was an increase again in AY2019, to 286 cases reported, and in AY2020, to 290. There were 812 cases reported in AY2021, 632 of which pertained to violations of Covid-19 policies, as mentioned above.

Complaints by Type July 2014 to June 2021



The tables below summarize alleged policy violations from AY2021 compared to previous years. There is often more than one alleged policy violation per complaint, so there are more alleged policy violations than total complaints.

Alleged Policy Violations for Individual Student Misconduct, AY2018–AY2021

Alleged policy violations	AY2018	AY2019	AY2020	AY2021
Covid-19 policies	-	-	-	929
Academic misconduct	61	87	54	129
Alcohol	55	79	98	43
Other drugs	6	22	11	0
Assault, reckless endangerment, threats/ intimidation	14	25	19	5
Harassment	4	4	5	5
Property damage	9	11	25	0
Disorderly conduct	17	5	7	30
Theft	5	1	2	0
Unauthorized access/improper use MIT property	17	23	42	37
Fire safety, arson	17	2	4	1
Weapons	2	1	0	1
Residential and housing policies	14	15	25	15
Institute expectations of behavior/integrity	25	33	28	6
Other	11	10	6	2
Community well-being	8	8	10	2
Sexual harassment, sexual exploitation	0	5	4	4
Stalking	1	2	1	2
Nonconsensual sexual contact or penetration	1	4	5	6
Intimate partner violence	0	3	4	0
Total alleged policy violations	267	340	350	1,217

Alleged Policy Violations for Student Organization Misconduct, AY2018–AY2021

Alleged policy violations	AY2018	AY2019	AY2020	AY2021
Covid-19 policies	-	-	-	4
Alcohol	20	38	36	0
Other drugs	0	3	0	0
Exceeding occupancy	8	11	9	0
Fire safety	1	2	0	0
Hazing	2	0	0	0
Harassment	1	0	1	0
Disorderly conduct	5	2	2	0
Noise complaints	7	15	8	1
Recruitment violations	0	3	3	1
Social event policy violations	38	49	21	1
Other	4	8	1	0
Total alleged policy violations	86	131	81	7

Case Resolutions

The COD utilizes resolution methods as described in the [Rules of the Committee on Discipline](#).

Given the unique risk factors associated with students returning to campus and the need to take immediate action to address noncompliance with MIT's Covid-19 policies, the COD delegated authority to the Office of Student Conduct and Community Standards (OSCCS) to address violations of MIT's Covid-19 student and Institute-wide policies on an [expedited basis](#).

Covid-19 Case Dismissal: During fall 2020, while data tracking for testing compliance was still in early development, 55 students were referred to OSCCS who were found to be in compliance upon further investigation, prior to notifying the student (hence not a finding of not responsible). Further, OSCCS received 18 reports without a specific respondent and therefore was unable to pursue individual accountability, but still engaged in educational follow-up with appropriate communities. Additionally, we received some reports that were not policy violations. In all cases where appropriate, educational interventions were utilized.

Committee on Discipline Resolution Methods, AY2018–AY2021

Resolution type	AY2018	AY2019	AY2020	AY2021
Covid-19 expedited process	-	-	-	517
Covid-19 amnesty application	-	-	-	12
Covid-19 case dismissal*	-	-	-	77
COD administrative resolution	119	121	152	41
COD hearing	2	4	2	0
COD sanctioning panel	2	7	2	3
COD sexual misconduct hearing	0	2	2	3
COD sexual misconduct sanctioning panel	1	0	0	0
Faculty letters to file	47	62	46	109
Complainant withdrew case or dismissal*	9	19	13	16
Good Samaritan Amnesty Policy (GSAP): Referred to Alcohol and Other Drug Services (AODS)**	7	7	4	0
Nonadjudicative resolution: restorative justice, mediation, referral to other office	4	20	36	28
Delegated to student-run judicial mechanism	27	30	22	1
Cases pending (as of June 30)	14	14	11	5
Total	232	286	290	812

* Dismissal is not the same as a finding of not responsible. It means that the situation did not rise to the level of a possible policy violation, but still may have involved educational follow-up.

** Most GSAP cases were referred directly to AODS and only a few are referred to OSCCS because at the onset it was unclear if GSAP applied or not in the case.

Case Outcomes

COD strives to meet its educational philosophy of student accountability through intentional educational sanctions (e.g., substance use education, mentoring programs, projects, reflections, workshops, etc.). Through these structured sanctions, students learn about various interpersonal skills and are able to reflect on their own personal development. A small number of cases (0.3% in AY2021) required a student to be separated from the Institute, either temporarily or permanently; 99.7% of cases are resolved without suspension or expulsion.

The new sanction types, Covid-19 Warning and Covid-19 Probation, are effectively identical to a standard warning or standard probation, but the language of the warning or probation assignment in students' letters makes clear that their behavior may have put others at the Institute at risk for contracting Covid-19. The sanction type Covid-19 FYI Warning is a step below these. Students who receive Covid-19 FYI Warnings are reminded that their behavior in a given incident is not in line with Institute expectations, but they do not receive a disciplinary record for the incident.

Sanctions Assigned AY2017–AY2021

Sanction type	AY2017	AY2018	AY2019	AY2020	AY2021
Degree revocation	0	0	1	0	0
Expulsion	2	1	3	1	0
Suspension	8	4	3	2	3
Probation	34	29	25	46	17
Removal from Institute housing	2	0	0	1	2
Housing relocation	2	1	0	2	1
COD warning	59	79	74	117	17
Covid-19 probation	-	-	-	-	146
Covid-19 FYI warning	-	-	-	-	127
Covid-19 warning	-	-	-	-	217
Faculty letter to file	63	47	61	48	109
Substance use education/treatment	53	58	55	88	25
Restitution	1	0	0	2	1
Other educational sanctions or referrals	181	148	138	136	326
Decision-making workshop	N/A	29	15	51	90
No contact order, directive to stay away from certain buildings	9	4	4	7	5
Academic integrity seminar	5	3	6	2	4
Total	419	403	385	503	1090

Note: It is common for the COD to assign more than one sanction in a case, so there are more sanctions than cases. Sanctions exclude all cases in which the respondent was found not responsible, the case was dismissed, or the case is still pending.

Committee on Graduate Programs

Martha Gray, chair
Jessica Landry, staff

During AY2021, the Committee on Graduate Programs (CGP) conducted preliminary discussions about a professional development requirement for all graduate students, endorsed a change to Rules and Regulations of the Faculty to specify digital deposit of theses, and learned about the work of a working group tasked with updating materials regarding financial and research conflicts of interest to provide guidance for faculty and graduate students. The committee also handled several matters related to the period of academic disruption and met seven times during the academic year.

At several points during AY2021, CGP engaged in an evolving discussion about an Institute requirement for the professional development of graduate students. Vice Chancellor and Jerome C. Hunsaker Professor Ian Waitz and Lauren Pouchak, director of special projects in the Office of the Vice Chancellor, presented the topic at the first meeting of the academic year, with faculty guests from the Department of Civil and Environmental Engineering and the Department of Biology, who shared information on the graduate student professional development efforts in their programs. Later in the term, the committee reviewed the report of the Education Group of Task Force 2021 and Beyond. The Education Group was co-chaired by CGP members Professor Krishna

Rajagopal and Professor Boning. The report presented ideas for innovation in MIT education that have arisen from the unprecedented changes experienced during the pandemic. CGP identified connections between the Task Force's recommendations on educating the whole student and a potential requirement for professional and personal development. By the end of the spring term, the Task Force 2021 Phase II Refinement and Implementation Committee on Graduate Student Professional Development recommended "the creation of an ad hoc committee, reporting to the CGP, to develop a set of graduate professional and personal development requirements that all graduate students must fulfill, that constitute opportunities beyond the technical training and the degree requirements of their disciplines."

The committee supported an Emergency Academic Regulation (EAR) on the definition of "in residence" for graduate students during the period of academic disruption in spring 2020, to avoid problems in fulfilling program requirements for students who were remote during the pandemic. The associated EAR for AY2021 defined in residence as "enrolled as a student and making progress toward a degree." This definition applied only during the AY2021 period of academic disruption. Without such a redefinition of in residence, many students would have been ineligible to graduate simply because they were not physically on campus.

After the sudden need in spring 2020 for makeshift processes for all aspects of thesis handling, including thesis submission, among others, CGP endorsed a proposed change to Rules and Regulations of the Faculty, Section 2.70 Theses, brought forward by the Committee on the Library System and the leadership of the MIT Libraries, to specify digital deposit only. It was planned that this proposal, which would bring MIT in line with the majority of its peers regarding thesis submission, would be brought to an Institute faculty meeting for discussion and vote during AY2022.

During the spring semester, the committee approved a request from the Department of Architecture to make a permanent reduction in the number of units required for the Master of Architecture degree, defined in Rules and Regulations of the Faculty, Section 2.85.3, from 312 to 282 units. In August 2020, CGP approved a special accommodation for students in this program on the February 2021 and June 2021 degree lists to graduate with up to 24 fewer elective units than normally required, due to academic disruption. The Department of Architecture saw evidence that reducing the program's high unit requirement did not affect the program's rigor and had reduced pressure on students.

The CGP chair approved several minor programmatic changes on behalf of the committee, and in conjunction with the senior associate dean for graduate education: the addition of the Department of Physics to the group of participating programs for the Interdisciplinary Doctoral Program in Statistics, allowing students who complete the requirements to receive a doctoral degree in the field of physics, statistics, and data science; and, the addition of the Department of Materials Science and Engineering (DMSE) to the interdisciplinary Computational Science and Engineering (CSE) PhD program, allowing DMSE students who meet the CSE requirements to receive a doctoral degree in the field of computational materials science and engineering.

Committee on the Library System

Roger Levy, chair

Erin Stalberg, executive officer

In September 2020, Libraries' director Chris Bourg shared [MIT Libraries Vision: A New Urgency](#), drafted in May 2020 to guide future priorities using lessons learned during the pandemic. The document states that the Libraries aim to facilitate and advance open and equitable scholarship; support data-intensive and computational research and learning; and focus on physical collections, services, and spaces on an essential core that cannot be replicated digitally.

In line with the document, the main themes of the work of the Committee on the Library System (CLS) during AY2021 involved defining and supporting MIT's principles for open and equitable scholarship. Subthemes include providing liaison support for the Libraries' initiatives, such as service design and technology platform migration.

CLS was chaired by Professor Roger Levy (Brain and Cognitive Sciences) during AY2021, meeting four times in fall 2020 and five times in spring 2021.

During the pandemic, the Libraries moved to digital submission workflow for thesis deposit, and wished to formalize this change and update thesis copyright language to align with the MIT Framework for Publisher Contracts. The updates will make students the holder of thesis copyright by default, bringing MIT policy in line with peer institutions and with the Institute's broader principles on open and equitable scholarship. In fall 2020, CLS reviewed draft language for changes to Rules and Regulations of the Faculty. This language was shared for feedback with the Committee on Graduate Programs, the Committee on the Undergraduate Program, and the Committee on Intellectual Property. In March, a subgroup met with cross-Institute experts to resolve thesis copyright draft language, which is expected to come before the faculty in fall 2021 for discussion and vote.

In October 2020, CLS expanded on a realignment of priorities reflecting the new document, highlighting changes to reserves systems that would cut back on under-utilized services while expanding e-services to improve equitable access to materials. The Libraries' technology team also briefed CLS on upcoming changes in the service platform. The new system will be cloud-based, modular, and application programming interface-first, resolving many long-standing user frustrations and providing a foundation for new growth. CLS advised on communications strategies to inform the MIT community of this development.

With the framework in place since 2019, work continued on advancing the open access (OA) landscape, understanding related business models, and exploring how MIT can continue leadership in this arena. Following the recommendation of the [Open Access Task Force](#) (OATF), CLS began developing a set of principles for open science and scholarship. Based on discussion, CLS adopted a revised title, Principles for Open and Equitable Scholarship, drafted a document, and shared it with the OATF Implementation Team for feedback. Revisions are currently underway.

CLS received updates and provided feedback on negotiations with scholarly publishers throughout the year. Many publishers are adopting article processing charge-based pay-to-publish models, raising concerns around equity, costs, and transparency. The impact of being out of contract with Elsevier has been carefully discussed. Information available to MIT Libraries based on interlibrary borrowing requests and direct feedback has not indicated widespread adverse impact, consistent with [recent research on the situation in Germany](#), where a large university consortium has been out of contract with Elsevier since 2018.

However, CLS believes more systematic outreach to the MIT community is called for. In April, the University of California resigned with Elsevier; CLS discussed these impacts. Heather Joseph, executive director of the Scholarly Publishing and Academic Resources Coalition and Libraries Visiting Committee member, presented deeper context for OA publishing trends, outlining opportunities for MIT to continue leading in this sphere. Joseph and Scholarly Communications and Collections Strategy head Laura Hanscom walked CLS through available details of the UC-Elsevier deal, and how this did not align with MIT's principles as written in the framework. CLS discussed this topic over two meetings, identifying needs for proactive outreach to contextualize the open and equitable scholarship landscape and MIT's relations with scholarly publishers, including a more systematic survey of MIT community attitudes and needs.

In AY2022, CLS anticipates bringing the digital thesis submission and copyright language to an Institute faculty vote; connecting with departments to discuss publisher negotiations, open access, and equitable scholarship; and finalizing Principles for Open and Equitable Scholarship for ratification by the faculty.

Committee on Nominations

Tomás Palacios, chair
Tami Kaplan, staff

The Committee on Nominations performed the majority of its work from October to December. In late September, the committee conducted an annual survey of all faculty to identify service preferences for standing faculty and Institute committees. The committee contacted deans and committee chairs for suggestions, noting that some schools consider Institute service as a factor in promotions, and updated materials to share with prospective committee members and officers. The committee made four out-of-cycle (interim) appointments and nominated 28 faculty for appointments beginning on July 1, 2021, with the slate including nominees from 16 academic units across all five schools. The committee also led a process to nominate the next associate chair and secretary of the faculty to serve from 2021–2023; Danae and Vasilis (1961) Salapatas Professor in Metallurgy Christopher A. Schuh (Materials Science and Engineering) and Professor Martha Gray (Electrical Engineering and Computer Science) were nominated to serve in these roles. The slate was presented at the March faculty meeting and unanimously adopted in May.

Committee on Student Life

Carrie Sampson Moore, chair
Judy Robinson, executive officer

The Committee on Student Life is concerned with the quality of the learning and living environment at MIT, with specific attention to issues of community. During AY2021, the committee was chaired by Carrie Sampson Moore, assistant professor and director of physical education and wellness.

Agenda for AY2021

The focus of the year was on four issues relevant to student life: student wellbeing and wellness, with a specific focus on the graduate student experience; diversity, equity, and inclusion; renewal of student life facilities and, Covid-19 emergency response and planning. Guests at CSL meetings included senior administrators, department heads, and student government leadership.

Discussion Topics

Student wellbeing

College student mental health is a national issue that impacts the student academic and campus experience. For this reason, a major goal of CSL was to explore current practices to promote wellbeing both on and off campus, including the curriculum of the Department of Athletics, Physical Education, and Recreation, health promotion initiatives, and student support efforts. The committee also focused on the wellbeing of graduate students, noting the competing priorities of housing costs, stipends, and research.

Recommendations: CSL recommends approaching student wellbeing holistically, encompassing the intersection of student life and academics. A team approach involving the Division of Student Life (DSL), the Office of the Vice Chancellor (OVC), the Office of Graduate Education (OGE), and academic departments is needed to be proactive in addressing student wellness at MIT. It is commendable that DSL has created the Office of Wellbeing and identified core pillars: relationships, purpose, mind, and body. The committee recommends that this office establish strong ties to academic departments and faculty partners.

The new Institute-wide Health Promotion Working Group (HPWG) is a positive step and will help sustain staff efforts to support student health and wellness. However, it will be important that faculty and students be a regular part of the HPWG efforts to promote student wellbeing campus-wide. [MindHandHeart grant funding](#) offers incentives to faculty, staff, and students to collaborate on wellness programming.

Diversity, equity, and inclusion and student life

Diversity, equity, and inclusion (DEI), and the implementation of antiracist practices, is a dimension of wellness. The experience of racism, sexism, classism, homophobia, and other forms of bias exact an unequal toll on students from underrepresented minority groups, undermining our community as a whole. The committee urges DSL to continue to take a leadership role in DEI efforts as inextricable from student wellbeing.

Recommendations: At a time when members of the MIT community have been confronting this institution's legacy of anti-Black racism, the year included discussions

with the Institute Community and Equity Officer about the proposed DEI strategic action plan. The initial plan provides guidelines for addressing related topics, and the expected details from MIT's schools, departments, centers, and labs, including DSL, will provide future direction. The committee recommends that MIT continue to support DEI efforts to educate and assist staff to complement the Office of Multicultural Programs for students.

The committee recommends implementing a program to facilitate inclusion for both undergraduate and graduate students spearheaded by MIT student Wellbeing Ambassadors through focused programs, such as ProjectConnect. It is further recommended that DSL and OVC continue to advocate for resources for graduate students with financial need, particularly those who have families and are struggling to cover essential costs of living.

Lastly, the committee supports diversifying the committee to include staff as full voting members, equal in rank to the students and faculty on the committee. Staff have content expertise and are integral to operationalizing many of the ideas discussed in CSL. It is recommended that the membership comprise three graduate students; three undergraduate students; six faculty; and three staff members, to include the vice president and dean of Student Life, the senior associate dean for Residential Education, and a staff member at large from another area of the Institute that works closely with students in an advisory or mentoring capacity.

DSL facilities renewal

CSL reviewed facilities renewal plans, including completing two new residence halls (Site 4, Buildings E37 and E38; and New Vassar Residence Hall, Building W46), residential renewal (Burton-Conner House Renewal, Building W51), and ongoing renewal planning for the Student Center (Building W20). CSL has made recommendations regarding Building W20 for many years, and the committee is pleased to see a comprehensive renewal plan underway.

Recommendations: The committee is encouraged by the Institute's efforts to create local and affordable housing. The committee is also encouraged about the plans to transform Building W20 into a student hub and to include a wellbeing lab as part of the renovation. However, even more space is needed on campus to facilitate student wellbeing and wellness education, and the committee supports the work of the HPWG to identify existing campus spaces for this use.

Covid-19 emergency response and planning

Covid-19 was a focus throughout the year. In addition, plans were shared with the committee regarding summer policies and procedures as well as plans to reopen campus for the fall 2021 semester.

Recommendation: The success of this pandemic year was due to solid, consistent collaboration and communication between DSL, academic departments, and students. The committee urges documentation of best practices around working and communicating with student leaders and the student body for more effective collaborations in the future.

The committee also urges the administration to consider the ongoing, long-term effects the pandemic will have on students' academic progress and overall wellbeing. As the student body returns to campus in the fall, the committee urges DSL, OGE, and OVC to help rebuild and renew the community, with particular attention to individual students and student populations most adversely impacted by Covid.

Committee on Undergraduate Admissions and Financial Aid

George Maverick Bunker Professor of Management Joseph Weber, chair
Stuart Schmill, executive officer

The Committee on Undergraduate Admissions and Financial Aid (CUAFA) met several times during AY2021 and worked on the following topics:

- Financial aid changes: The committee recommended to the senior administration that MIT join the Yellow Ribbon program to support veterans and their dependents who study at the undergraduate level at MIT.
- Standardized testing: The committee approved the recommendation that the admissions office suspend the standardized testing requirements (SAT/ACT) for the upcoming (AY2022) admissions cycle.
- The committee discussed what types of data might be useful in tracking the effects of suspending the standardized tests on class composition and student performance in the classroom.
- The committee heard updates on various changes and disruptions to both the admissions and the financial aid processes this year due to the pandemic.

The paragraphs below summarize the committee's deliberations and recommendations.

Financial Aid Changes

In fall 2020, CUAFA recommended that MIT join the Yellow Ribbon Program, which is designed to support veterans and their dependents by providing tuition assistance for undergraduate education. The program matches each dollar of tuition assistance provided by MIT through this program, subject to annual and lifetime caps. Peer schools have joined the program with a variety of different levels of assistance being offered to veterans and their dependents. The committee recommended to the senior administration that MIT join the Yellow Ribbon Program at the \$5,400 level for the upcoming academic year, and revisit the issue in fall 2021 after determining the extent to which undergraduates participate in the program, and the overall cost of the program. This proposal was accepted by the senior administration and the Institute has since joined the program at the \$5,400 level.

Standardized Testing

At the end of AY2020, the admissions office recommended that CUAFA suspend standardized testing as a requirement for admissions due to the global Covid-19 pandemic. This recommendation came very late in the academic year, and CUAFA ultimately approved the recommendation for one year, and voted to revisit the decision

in AY2021. In fall 2020, it became apparent that standardized testing would again be disrupted due to the pandemic, and the disruptions were likely to be heterogeneous across the world. Some applicants would likely have access to these exams, while others would not. CUAFA debated the strengths and weaknesses of suspending the tests for an additional academic year, and determined that the benefits of suspending the test would likely exceed the costs. As a result, again because of the pandemic, CUAFA approved the recommendation to suspend the standardized testing requirements (SAT/ACT) for the upcoming admissions cycle (i.e., AY2022). Peer schools made similar decisions for both academic years.

The discussion around the decision to suspend the standardized tests led to a discussion of the data that might be tracked during this unusual period, where some students would gain admission to MIT without having taken the standardized tests. Students admitted without standardized test scores might offer an opportunity to examine the importance of the standardized tests in admissions decisions.

Committee on the Undergraduate Program

Arthur Bahr, chair

Genevra Filiault, executive officer

During AY2021, the Committee on the Undergraduate Program was chaired by Professor Arthur Bahr (Literature), and met on alternate weeks throughout the fall and spring terms. The committee addressed a number of matters related to MIT's undergraduate educational programs and policies in their steady state, as well as policies related to the Covid-19 disruption. The CUP also provided input on a range of issues across faculty and institutional governance.

The committee continued discussions about student behaviors and learning related to its AY2019–AY2021 experiment to “enable opportunities for exploration in the first year,” specifically discussing those related to the first-year credit limit, first-year discovery subjects, and early sophomore standing. Relevant stakeholders and governance committees were consulted; they provided the CUP with feedback on a set of preliminary recommendations. After considering the input, the CUP voted to move forward with the recommendations, which included ending the practice of early sophomore standing, continuing a separate credit limit for first-year discovery subjects for another year, and raising the first-year spring credit limit from 57 to 60 units. At its meeting in May 2021, the faculty approved this change to the spring credit limit in Rules and Regulations of the Faculty.

Relatedly, the Office of the First Year (OFY) shared its work welcoming and supporting first-year students during the remote fall semester. The OVC and OFY also reported findings from the fall 2019 first-year advising pilot and gave recommendations on advising resources for first-generation and low-income students, as well as on creating continuity in advising throughout a student's career at MIT.

The CUP also heard from the Committee on the Library System regarding proposed changes to regulations on theses and copyright pertaining to theses, and from the deans

of the Schwarzman College of Computing on undergraduate curricular initiatives and the work of the Social and Ethical Responsibilities of Computing area of the college. The CUP also discussed policies related to subject evaluations during the Covid-19 disruption, use of subject evaluation data for research and the need for an oversight body, the role of faculty residency, and the value of residential education.

Subcommittee on the Humanities, Arts, and Social Sciences Requirement

Emily Richmond Pollock, chair
Patricia Fernandes, executive officer

During AY2021, the CUP's Subcommittee on the Humanities, Arts, and Social Sciences (HASS) Requirement (SHR) was chaired by Professor Emily Richmond Pollock (Music). The subcommittee met monthly to fulfill responsibilities related to the oversight of the HASS requirement.

SHR staff and chair reviewed 84 student petitions for substitutions within the HASS requirement, including 58 for Harvard cross-registered subjects.

SHR approved 37 new proposals for subjects to count toward the HASS requirement: 18 HASS Humanities (HASS-H); 11 HASS Social Sciences (HASS-S); and eight HASS Arts (HASS-A). SHR also reviewed and approved a proposal for a new HASS concentration in Korean language.

As part of an annual review, the subcommittee analyzed how the Class of 2020 moved through the HASS requirement. The results were consistent with prior graduating classes: for each cohort, close to 40% of students completed more than the required eight subjects, and, on average, students completed three HASS-H subjects, three HASS-S subjects, and two HASS-A subjects.

SHR conducted the first full review of HASS concentrations in AY2018 and AY2019, and finalized a report in May 2019. Dissemination of the report began in AY2020 and continued into AY2021, with the chair presenting the report's findings and recommendations to the School of Humanities, Arts, and Social Sciences Council in fall 2020. Although the research has concluded, SHR continues to use and direct people to the report as a resource for HASS units.

The restructuring of Global Languages continued as a topic of discussion for SHR. Concerns remain about the detachment of all tenure track lines from Global Languages and the resulting lack of an administrative support structure for curricular oversight, which has implications for HASS-designated subjects and for the administration of language concentrations. The subcommittee is eager to collaborate with the incoming director and faculty curriculum committee in developing a formal and stable process for the proposal and evaluation of new subjects and programs.

Subcommittee on the Communication Requirement

Adam Albright and Michael Follows, co-chairs
Kathleen MacArthur, executive officer

During AY2021, the CUP's Subcommittee on the Communication Requirement (SOCR) was co-chaired by Professors Adam Albright (Linguistics) and Michael Follows (Earth, Atmospheric and Planetary Sciences). The subcommittee engaged in a number of activities in its oversight of the undergraduate communication requirement (CR) at MIT. The subcommittee reviewed and approved proposals for three new communication intensive (CI) subjects (one CI-M and two Communication Intensive in HASS) and one substantially revised CI-M subject. SOCR offered feedback on and endorsement of the CUP's proposals regarding first-year credit limits and early sophomore standing.

The ongoing disruption related to Covid-19 shaped the subcommittee's work again this year. SOCR agreed not to include the CR questions on the revised AY2021 subject evaluations given the length of the form and the disruptions to teaching. Since spring 2020, SOCR has provided more support to instructors teaching CI subjects than is typically the case. The subcommittee issued statements to instructors, asking them to meet the spirit of the CR, while being flexible and emphasizing quality over quantity. Last summer SOCR held two forums for instructors on teaching CI subjects remotely. A follow-up forum was held during IAP. Each of these meetings was well attended and instructors appreciated the opportunity to share their experiences, successes, struggles, and tips.

Given the challenges of the last three terms, SOCR members debated whether to proactively offer increased flexibility around petitions and in assessing students who may have fallen behind the required pace of the CR. Early analysis showed that there was not an unusual number of students found to be out of compliance, in part due to appropriate petitions submitted in response to advisory messaging from the subcommittee's staff.

SOCR set priorities for AY2022, including ongoing consideration of the emerging role of visual communication in CI subjects, a celebration of the anniversary of the implementation of the CR, and engaging with instructors to identify practices from remote teaching that merit consideration when in-person teaching fully resumes.

Harold E. Edgerton Faculty Achievement Award Selection Committee

Bevin Engelward, chair
Tami Kaplan, staff

At the April 21 Institute faculty meeting, the Edgerton Award Selection Committee announced two winners of this year's award: Gilbert W. Winslow Career Development Professor Desirée Plata, and Class of '42 Career Development Professor Justin Steil.

Desirée Plata

Professor Plata received a BS in chemistry from Union College and a PhD in chemical oceanography and environmental chemistry from the MIT-Woods Hole Oceanographic Institution Joint Program. After receiving her doctorate, Professor Plata held positions at Mount Holyoke College, Duke University, and Yale University. She joined the MIT faculty in 2018 as an assistant professor in CEE, and was promoted to associate professor without tenure in 2020. The senior faculty colleague who nominated her wrote: "She is

one of the most remarkable individuals I have encountered in my years at MIT, and an exemplary member of our faculty.”

Professor Plata is motivated by the common good, especially with regard to keeping people safe from hazardous chemicals in the environment. She feels particularly strongly that we have a responsibility to serve underprivileged persons who are disproportionately impacted by hazardous chemicals.

In alignment with her passions, she is the global leader in proactive environmental engineering—the development of sustainable practices guided by fundamental science, industrial practicality, and concepts such as green chemistry. Her work is leading us away from the clean-up mode of environmental protection and toward smart and sustainable innovation that aims to prevent future negative impacts on the environment. In the area of hydraulic fracturing and unconventional drilling, she has provided perhaps the most complete and best-grounded study of potential water quality impacts from this technology and is publishing geospatially-referenced guidance for avoiding compromising chemical reactions. Professor Plata is also making important contributions to carbon nanotube manufacturing—not only with regard to the mitigation of waste product formation, but also to the enhanced growth of desired carbon nanotube products, and she was a driving force behind two patents related to carbon nanotubes from her doctoral time at MIT.

Recognition for Professor Plata’s work includes a National Science Foundation CAREER Award as well as being named a National Academy of Engineering Frontiers of Engineering Fellow and—twice!—a National Academy of Sciences Kavli Frontiers of Science Fellow.

Professor Plata is known as an enthusiastic and energetic teacher who presents material clearly and has a deep commitment to ensuring her students’ success. Her exemplary record as a research mentor is similarly impressive. In addition to her dedication to the professional development of her students, she serves as an inspirational model for them in personal development issues such as work-life balance. A former student commented that she “leads by example and bestows confidence in those she mentors.” Her excellence in these areas has been recognized by the MIT School of Engineering’s Junior Bose Award for Excellence in Teaching and the Mount Holyoke College Student Government Association Mentoring Award.

Professor Plata’s leadership is also evident through her service. At MIT, she is the incoming deputy director of MIT’s Superfund Research Program and has helped in the development of educational materials for the Environmental Solutions Initiative. She is also highly proactive with regard to strengthening diversity and inclusion. Outside the Institute, she is a member of the Commonwealth of Massachusetts Decarbonization Academic Steering Committee, which has been commissioned to inform strategies for 80% emissions reductions by 2050. She is also an associate editor of the Royal Society of Chemistry journal *Environmental Science: Processes and Impacts*, and has served as session chair and organizer for several Gordon Research Conferences on environmental nanotechnology and one on environmental sciences and water.

Continuing the legacy of Professor Harold E. Edgerton, this award honors achievement in research, teaching, and service by a nontenured member of the faculty. The Selection Committee recognizes Professor Desirée Plata for her innovative approach to environmentally sustainable industrial practices, her inspirational teaching and mentoring, and her service to the Institute, the commonwealth, and her professional community.

Justin Steil

Professor Steil received an AB in African American Studies from Harvard University; an MSc in City Design and Social Science from the London School of Economics and Political Science; a JD from the Columbia University School of Law; and a PhD in Urban Planning from Columbia University. Professor Steil joined the MIT Department of Urban Studies and Planning in 2015. He was promoted to associate professor without tenure in 2018. As nominated by a senior colleague, Professor Steil “far surpasses any reasonable bar for ‘exceptional distinction in teaching, in research, and in service.’ Indeed, he is redefining these terms for us all.”

Professor Steil is a nationally recognized scholar of urban planning and law. His scholarship examines the connections between urban policy and land use, immigration, racial segregation, and civil rights law. His research on immigration and local government law identifies the underlying reasons why some US cities have vigorously resisted immigrants and set policies to make their lives more difficult, while other demographically similar cities have embraced immigrants more fully. His research has been particularly impactful with regard to fair housing and preserving existing civil rights protections. Fifty-seven cities, counties, civil rights groups, and fair housing organizations across the United States cited his research in comments to the Department of Housing and Urban Development (HUD) regarding HUD’s suspension of the Affirmatively Furthering Fair Housing Rule, and the attorneys general of 22 states cited his research in comments regarding HUD’s efforts to change a key antidiscrimination tool provided under the Fair Housing Act.

Through his outstanding, highly rated, and innovative teaching, Professor Steil brings MIT students into contact with real-world problems that they help to address. He has connected students with local groups working on urban environmental hazards; with regional leaders involved in making and implementing policy regarding immigrants; and with students of urban sociology who are incarcerated, to explore issues such as processes by which urban inequality is created and reproduced. He has received the Department of Urban Studies and Planning Student Council’s Excellence in Teaching Award, and the Office of Graduate Education’s Committed to Caring Award.

Professor Steil’s service record is also exceptional. At MIT he has been an active and valued member of both the Academic and Organizational Relationships Working Group of MIT’s response to the National Academies of Sciences, Engineering, and Medicine report on the sexual harassment of women, and also the Committee on Sexual Misconduct Prevention and Response. Outside the Institute, he is a member of the Mayor of Boston’s Housing Advisory Task Force, and a board member of the Inter-University Committee on International Migration, and the Poverty and Race Research Action Council. In 2018, he received the inaugural MIT Paul Gray Award for Public Service, and in 2019 the International Municipal Lawyers Association’s Amicus Service Award.

Continuing the legacy of Professor Harold E. Edgerton, this award honors achievement in research, teaching, and service by a nontenured member of the faculty. The Selection Committee recognizes Professor Justin Steil for his tremendous dedication to building institutions to remediate social injustice and relieve suffering by doing so, his deep commitment to creative ways of teaching his students how to do similar work, and a service record that is without equal.

James R. Killian Jr. Faculty Achievement Award Selection Committee

Anna Mikusheva, chair
Tami Kaplan, staff

The James R. Killian Jr. Faculty Achievement Award Selection Committee selected Robert C. Merton, the School of Management Distinguished Professor of Finance at the Sloan School of Management, as the recipient of the AY2022 James R. Killian Jr. Faculty Achievement Award.

Professor Merton joined the Sloan School of Management in 1970 as an assistant professor of finance, holding positions of increasing rank and ultimately serving as J. C. Penney Professor of Management. In 1988, he joined the Harvard Business School, where he remained until 2010, at which time he rejoined the MIT faculty in his current role.

The faculty who contributed to Professor Merton's nomination all noted his tremendous impact as one of the founding architects of modern finance theory. He has made important contributions in a number of areas of financial economics, but he is best known as one of the creators of the Black-Scholes/Merton option pricing theory, which laid the foundation for the development of markets for options and other derivative securities. These markets have become an integral part of the global financial system.

We also commend Professor Merton for his profound commitment to innovation through scientific research and to advancing pedagogy in financial economics, as well as to serving as a highly valued mentor to graduate students and junior colleagues. He is also adept at developing scientific, nonpartisan, and apolitical frameworks in which to apply theory to address critical challenges at the intersection of financial economics and public policy pertaining to sovereign risk management, financial regulation of systemic risk, personal retirement planning, and university endowment management.

Professor Merton's accomplishments have been recognized by numerous awards—far more than we can mention here. Of particular note is the 1997 Alfred Nobel Memorial Prize in Economic Sciences, which he shared with Myron Scholes for their pioneering work in developing the Black-Scholes/Merton option pricing theory in collaboration with the late Fischer Black. In addition, he has been awarded two dozen honorary degrees from institutions of higher education in nine countries across four continents. He is a member of the National Academy of Sciences, a fellow of the American Academy of Arts and Sciences and of the Econometric Society, and a senior fellow of the International Association of Financial Engineers, and he is a past president of the American Finance Association.

It is our great pleasure to have this opportunity to honor Professor Robert Merton for his role in the founding of modern finance theory and for his skill in developing and applying innovative techniques to resolve challenging areas of tremendous public interest and impact.

Rick L. Danheiser
Chair of the Faculty
Arthur C. Cope Professor

Tami Kaplan
Faculty Governance Administrator