thetech.com

WEATHER, p. 2

THU: 55° F | 32° F Rain.

FRI: 42° F | 32° F Windy.

SAT: 40° F | 26° F Mostly Sunny.

Volume 145, Number 3 Thursday, March 6, 2025

Uncertainty the sentiment at February Faculty Meeting amidst turmoil in D.C.

Leaders of MIT's administration shared several dramatic changes to research and budgetary policy

By Sabine Chu
ASSOCIATE NEWS EDITOR

On Feb. 19, the Institute held its second monthly faculty meeting of 2025. Throughout the 90-minute meeting, President Kornbluth and other administrators emphasized the unprecedented threat of the Trump administration's recent funding cuts to MIT's research and education missions.

MIT's overarching strategy

At the start, a faculty member read a poem by Anne Stevenson called "Living in America," which opens: "Living in America,' / the intelligent people at Harvard say, / 'is the price you pay for living in New England." Around the room, faculty laughed nervously. These themes — anxiety, political tension, sardonic humor, and vague alienation from the rest of the country — would characterize the meeting as a whole.

After announcements of Cynthia Barnhart's retirement from her position as provost and Professor of Biological Engineering William "Bill" Thilly's recent passing, President Kornbluth addressed the "financial challenges facing the Institute," stating that "probably all of us feel some concern about how things will play out." She outlined MIT's strategy for the upcoming months, given that "the Republican leadership sees this election as a pretty strong repudiation of elites." Public perceptions of top universities' inaccessibility due to high sticker prices, along with campus unrest centering on the Israel/Palestine conflict, have enhanced this negative view of elite universities

Throughout her talk, Kornbluth emphasized MIT's research mission, the Institute's contribution to national progress, and the faculty's responsibility to support these goals. She believes that over the next 12 to 18 months,

MIT's key priorities will be to enhance its reputation as an "exceptional institution," stop or decrease the loss of federal funding, preserve its academic freedom, and continue to pursue research and education priorities. Noting that these points will sometimes come into conflict, she proposed three approaches to the new administration: "engagement where possible, opposition where necessary, and adaptation where sensible." On the engagement front, she believes that the Trump administration will support some of MIT's research interests, including its AI, quantum science, manufacturing, and educational initiatives. She plans to hold monthly MIT President meetings in Washington, DC, where she will engage with Congress, agency leaders, and the White House with a focus on MIT's value to American competitiveness, security, and health.

and vague alienation from the rest of the country — would characterize the meeting as a whole. progress, and the faculty's responsibility to support these goals. She believes that over the next 12 to 18 months, Faculty Meeting, Page 3 Three from MIT chosen for Gates

Cambridge ScholarshipFreudenburg-Puricelli: "I'm just really excited to be in a new place that is not my MIT bubble"

By Sabine Chu and Aneesh Sharma

NEWS STAFF

Three individuals from MIT have been named 2025 Gates Cambridge Scholars, earning fully funded postgraduate scholarships to study at Cambridge University in the UK. The recipients are Markey FreudenburgPuricelli '25, Abigail "Abbie" Schipper '24, and Rachel Zhang '21.

Freudenburg-Puricelli, who is majoring in Earth, Atmospheric, and Planetary Sciences, will pursue an MPhil in environmental policy. Schipper, who graduated with a SB in mechanical engineering, will pursue an MPhil in engineering, focusing on medical devices for pre-hospital trauma systems.

Zhang, a physics graduate, will pursue a PhD in applied mathematics and theoretical physics.

and theoretical physics.

The Tech spoke with Freudenburg-Puricelli about her path to the Gates Cambridge scholarship. Responses have been lightly edited for clarity.

Scholarship, Page 2

IN SHORT

March 7 is Add Date, which marks the final day to add full-term subjects to registration. It is also the last day to drop half-term subjects offered in first half of term.

March 14 is Pi Day! Regular Action decisions for the Class of 2029 will be released that evening.

Interested in joining *The Tech*? Email *join@tech.mit.edu*

Send news and tips to *news@ tech.mit.edu*.



MICHELLE XIANG—THE TECH

Zeb Powell completes a trick at Zone 1 during Red Bull Heavy Metal on Saturday, February 22nd.



The Edward and Joyce Linde Music Building, designed by SANAA architectural firm.

The Joyce and Edward Linde Music Building opens on Feb. 15

Prof. Keeril Makan: "The choice of spaces responded to long standing priorities that the music program has identified over 20 years"

By Vivian Hir

NEWS EDITO.

On the afternoon of Feb. 15, MIT Music students, faculty, and staff held an open house for the public opening of the Edward and Joyce Linde Music Building. The open house marks the first concert of Artfinity, an MIT music and arts festival with 80 scheduled events from Feb. 15 to May 2, 2025.

The event featured the Institute's different music groups, such as the MIT Laptop Ensemble and MIT Jazz Ensemble. Hands-on workshops for the public were also held at the open house by groups like the MIT Balinese Gamelan and Rambax, a Senegalese drum ensemble. At night, MIT Music held SONIC JUBILANCE, a sold-out concert to celebrate the opening of the music building. The concert featured four world premieres composed by MIT Music faculty and performances by MIT's eight music ensembles.

by MIT's eight music ensembles.

The new music building started with the late philanthropist Joyce Linde's cornerstone gift in 2018. Linde is the wife of the late Edward H. Linde '62, a former MIT Corporation member. Linde's gift helped address the Institute's need for a central music space. Previously, MIT did not have a main music building for music classes and rehearsals, as they were spread across different places on campus.

"The choice of spaces responded to long standing priorities that the

music program has identified over 20 years," Prof. Keeril Makan wrote in an email to *The Tech*. Makan is the associate dean of MIT's School of Humanities, Arts, and Social Sciences (SHASS), and a professor of music composition. In the proposed building plan, these spaces included a concert hall, rehearsal rooms, a recording studio, and a classroom for world music instruction.

The building is designed by SA-NAA, a Tokyo-based architectural firm that received the 2010 Pritzker Architecture Prize. It is located next to Kresge Auditorium, and is approximately 35,000 square feet. The building consists of three distinct brick volumes that surround a glass lobby, and underneath the building is a two-level parking garage with more than 140 spaces.

One main feature of the Linde Music Building is the Thomas Hull Concert Hall, a performance venue with a maximum seating capacity of 390. Unlike traditional concert halls where the stage is in the front and the seats follow a row configuration, the Hull Concert Hall has the performers in the center of the circle. As a result, the rows of the audience form a ring around the performers. The circular layout of the concert hall was inspired by the Pierre Boulez Saal in Berlin.

Music Building, Page 4

MORE MITINY LOVE STORIES

Family at first sight. **CAMPUS LIFE, p. 5**

13TH ANNUAL COURSE 1 RE-SEARCH SYMPOSIUM

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GLENN SILVA OBITUARY

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YUJA WANG AND VIKINGUR ÓLAFSSON

The duo stun with their musical prowess at Boston Symphony Hall. **ARTS**, **p. 7**

MCCORMICK RE-NEWAL DELAYS

Partly due to financial considerations, new date set for Summer 2026. **NEWS**, **p. 4**

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2 THE TECH THURSDAY, MARCH 6, 2025

THER FORECAS Precipitation Symbols Other Symbols Veather System Weather Fronts Fog $\overset{*}{\vee}$ $\dot{\bigtriangledown}$ 又 Thundersto Light * OO Haze ** § Hurricane **

Returning to temperatures

By Conrad Straden METEOROLOGIST

As our storm exits Thursday, there will be some lingering rain showers in the afternoon. Thursday night temperatures cool down into the 30s and there is a chance for a passing snow shower. Expect strong west winds on Friday with gusts near 40 mph. Wind chills stay in the 20s Fri-

day and Saturday, before the winds finally let up Sunday. The weekend will feature more typical weather for this time of year, with a few passing snow showers possible Sunday evening. The ice on the Charles River is melting quickly and should be mostly gone by the weekend. Next week features a gradual warming trend, with highs reaching the 60s by the middle of the week!

MARCH 6 normal

SITUATION FOR NOON (ET)

Extended Forecast

Today: Lingering rain showers. High around 55°F (13°C). South wind 10-15 mph, gusting to 25 mph.

Tonight: Cloudy, chance for snow. Low around 32°F (0°C). West wind 15-20 mph, gusting to 35 mph.

Friday: Sunny. High around 42°F (6°C). West wind 20-25 mph, gusting to 40 mph.

Saturday: Mostly sunny. High around 40°F (4°C) and overnight low around 26°F

Sunday: Mostly sunny, chance for a snow shower in the evening. High around 41°F (5°C) and overnight low around 33°F (1°C).

Scholarship, from Page 2

TT: Tell us about yourself and why you decided to apply for the Gates Cambridge

Freudenburg-Puricelli: I study geology. I've had a really good time as an MIT student getting to learn all the ways that geology can be applied to real world problems. There are a lot of earth science-based solutions to modern issues, especially climate change and preparing for a more sustainable future. But I think earth science alone can't fix things, because I don't really have the background knowledge or the context that I need in order to take these kinds of earth science-based solutions outside of labs.

Something that was exciting to me was trying to figure out how I could get this background in economics, in policy, in government, trying to figure out how I can use the science I've learned here to actually make a difference. It happened that the Gates Cambridge scholarship was the perfect way to give myself that background in a year in economics and environmental policy, and also get someone to pay for it!

TT: In the broad fields of environmental policy, economics, and geoscience, what are the specific areas you're most interested in?

Freudenburg-Puricelli: I wrote in my application that I was excited to look into more sustainable means of extracting lithium — improving lithium mining, improving working conditions, and figuring out how to protect people who live here. Of course, those communities are affected by [lithium mining]. That's something I'm still interested in.

Some other things that I've been thinking about lately are geologic hydrogen, and figuring out how we could produce hydrogen or invest in different ways of carbon capture. There are really cool geoscience methods to speed up natural processes, given what the earth is already doing, but also figuring out how to make them happen on a human time scale. It would be learning how to make these kinds of things economically viable, like figuring out the processes that you can tie to it such that you can make a profit doing this, so that people will actually start doing it.

TT: Do you see your future most oriented towards academia, a startup, industry, policy, or something else?

Freudenburg-Puricelli: Honestly, I don't know. This fall, I wrote all my applications to PhD programs, and I submitted none of them. I don't think I'm ready to commit to five to six

years in academia, but I could totally see myself doing that. After next year, maybe I'll go back and be a PhD student, then stay in academia and maybe become a teacher, continuing the research side of things with the necessary context to speak the language of those people who can help me take the science out of the lab.

At the same time, there are a lot of doors that are going to open next year that I feel like I don't even know what they are yet. I could totally see myself being happy working at a startup, or working in industry.

TT: What at MIT has been the most transformative or made you interested in any of the other areas you've explored?

Freudenburg-Puricelli: I've done a lot of MISTI programs which have been really, really impactful. I live in my little MIT bubble, and I learn the science and see that the science solves problems. Then, I go to these different places where, like, the problems are just circulating; even though the science exists, it hasn't been implemented. I spent this last IAP in Spain, and I just listened to my host family telling me about all the flooding that happened. People were devastated. There was a big flood back in 2018 in Peru, where my host family lives, and I could see all of the effects of the water level rise there.

I lived in Chile for a couple months, and we did a lot of research, like assessing and understanding the vulnerability of different communities in the shadows of the volcano. What we were saying was, "You guys are super vulnerable. We can be involved in helping you understand these risks, or how you're going to respond to activity." And I guess the hope is, with the background that I will get, or the connections that I will build, I can take these solutions and actually help them.

TT: Are there any professors you're really excited to work with at Cambridge?

Freudenburg-Puricelli: Yeah, there's this one professor who teaches a class in environmental policy that I'm excited to take. She is the perfect example of a person who did STEM, has a PhD in chemical engineering, and totally understands science. But she did this pivot to policy where she works with international governments in many different sectors, translates science for policymakers, and teaches classes. I've always wanted to be a teacher. So maybe that will manifest itself in staying in academia and teaching about geology, or maybe in teaching about using geology for policy, right? I think there are a lot of good models

TT: Are you excited for non-academic things in Cambridge?

Freudenburg-Puricelli: I like to say I feel like I have not reached adult status in my life yet. In order to become an adult. I need to be able to work by myself and feed myself. I'm very excited to go to a different country and know nobody and successfully exist as an adult. Then, I will reach the status where I am allowed to make decisions about five to six years in the future. I'm just really excited to be in a new place that is not my MIT bubble, and meet people who study things that aren't science and technology.

TT: Would you give any advice to MIT students who are living in that science and tech bubble, or MIT students in general?

Freudenburg-Puricelli: Everyone should do MISTI. Everybody should go abroad. People should take our language classes here. I didn't know a word of Spanish until I started taking Spanish classes here and now I've gotten to go to these incredible places. Because of MISTI, I found the perspective I needed in order to decide what my next steps would be, instead of blindly following the academic path and saying, "I graduated undergrad. Now I have to go be a



Markey Freudenburg-Puricelli '25 is a 2025 Gates Cambridge Scholar.

grad student." I mean, I am going to go be a grad student, but it's different.

Provost Cynthia Barnhart SM '86 PhD '88 announces retirement

On Feb. 19, President Kornbluth wrote an email to the MIT community announcing that Cynthia Barnhart SM '86 PhD '88, MIT's provost since 2022, will step down on July 1. As provost, Barnhart has overseen the Institute's academic and budgetary affairs in aspects that encompass financial organization, education, research, and international engagement.

Before becoming provost, Barnhart came to MIT as a graduate student in 1984 and joined the faculty in 1992 with a research focus on systems analysis with applications to transportation logistics. She was appointed chancellor in 2014, a role that focuses on student life and education. As chancellor, Barnhart worked to prevent sexual misconduct and improve mental health services.

As provost, Barnhart has focused on advancing MIT's major academic priorities by launching initiatives such as the Climate Project and Generative AI Impact Consortium. After stepping down and taking a sabbatical, Barnhart plans to continue increasing educational accessibility by making MIT's Mens et Manus approach available to a wider swath of the public.

"Cindy has been a wonderful partner in thinking and doing," President Kornbluth said in the email. "I will be forever grateful for having been able to tap her knowledge of the Institute's people, culture, practices and institutional systems." She highlighted Provost Barnhart's roles in identifying talent, improving organizations, and externally representing MIT. In the coming months, faculty can nominate themselves or others to replace Barnhart.

-Sabine Chu

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This issue of The Tech is sponsored by: THE KNIGHT SCIENCE JOURNALISM PROGRAM @ MIT Thursday, March 6, 2025 The Tech $\, \mathbf{3} \,$

Faculty Meeting, from Page 1

To MIT's leadership, "necessary opposition" seems to mean legal action. In particular, Kornbluth highlighted the Association of American Universities' Feb. 10 suit challenging the Trump administration's new 15% cap on Facilities and Administrative reimbursements, also known as indirect costs, for National Institutes of Health grants. As of Mar. 2, these cuts have been blocked by Angel Kelley, U.S. District Court Judge for Massachusetts. Kornbluth underscored the necessity of taking a public stand whenever MIT encounters "things we believe are fundamentally antithetical to our mission." For most of the meeting, Kornbluth addressed potential areas of "adaptation." In regards to the Trump administration's hostile stance towards Diversity, Equity, and Inclusion (DEI) programs, she noted that the Institute may have to assess their programs aimed at "attracting a supportive and diverse community." Notably, this assessment seems to already be underway: as previously reported by The Tech, multiple MIT institutions and departments have removed references to DEI on their webpages. Kornbluth also singled out biosecurity and research compliance as possible realms for assessment.

Kornbluth finished her speech by outlining some broad messaging themes. She stressed MIT's role as a major economic and innovative driver in American life. In addition, she argued that taxes on MIT's endowment amounted to taxes on research and student aid. Contrary to Republicans' view of higher education as dominated by "elites," Kornbluth said that, in reality, "MIT is the university that people want: merit-based and affordable, grounded in innovation and entrepreneurship, and driven to excellence — all with a mission of service... We are a place that tackles our problems and seeks excellence in everything we do."

Research impacts

After Kornbluth's presentation, Vice President for Research Ian Waitz explained the potential impacts on MIT's research enterprise. First, he noted that all areas of research may face funding reductions, although climate change and renewable energy research will likely be the most affected. Agencies across the board, from the National Science Foundation to the Department of Energy and Department of Defense, have recently begun conducting keyword

searches on their contracts and grants to provide guidance on new research policies. Flagged words include commonly used terms that do not have inherently political meanings, such as "implicit bias," "gender," and "trauma." Waitz emphasized to faculty the importance of a unified approach that involves administrators, given that MIT currently has over 2,000 federal contracting grants, instructing them to reach out over email if they have questions. Other "compliance" requirements include Trump's first-term "Presidential Memorandum on United States Government-Supported Research and Development National Security Policy," which mandates that agencies must attempt to address research security in disclosures and digital identifiers.

Waitz stated that although F&A costs are "indirect," capping them at 15% will greatly impact MIT's ability to support all campus research. As detailed in his recent letter to the faculty, of MIT's \$879 million in sponsored research funding during the 2024 fiscal year, \$660 million were direct costs and \$219 million were indirect; in total, indirect costs amount to about 30% of MIT's research costs. These amounts were complemented by co-investments from MIT. When accounting for inflation, the 15% growth in overall research funding over the past 11 years is primarily due to growth in MIT's internal investments in research. This internal investment provides for key areas including faculty salaries, support for graduate students, and tuition subsidies.

What might change?

An issue arises: what happens if MIT no longer has access to the same level of internal funding? Since Republicans have proposed to increase the tax on universities' endowments from 1.4% to 21%, this hypothetical may become reality. As Provost Barnhart explained, this tax encompasses realized capital gains, investment income, and the net of investment expenses.

In the best-case scenario in which the policy does not change, but in which MIT saw a 10% decrease in campus research activity, the Institute would lose \$34 million annually. In the worst-case scenario, with a 15% cap on indirect funding from all sponsors and a 21% endowment tax, the Institute would incur a \$658 million loss per year. Responding to a faculty member's question regarding how these numbers compare to the 2008 financial crisis, a member

of the Office of the VP for Finance stated that the worst-case scenario losses would be significantly higher than those during the recession.

Barnhart proceeded to explain the specifics of the Institute's financial planning in response to both existing and possible cuts. First, the administration has notified all units that funding will be cut by 5% across the board. In addition, through a "rebalancing" process, 10% of the payout in professorships will be redistributed to central funding. Moreover, the administration plans to eliminate "unintended subsidies" — cuts on the 55% tuition subsidy for research assistants, if they receive other support.

The Institute will also implement a hiring freeze, which will not affect faculty, graduate students, funded postdoctoral fellows, essential employees, or tenure decisions. Finally, MIT plans to reduce pay-as-you-go capital by halving the Committee for Renovation and Space Planning budget, which provides capital for large facilities renewal projects, among others.

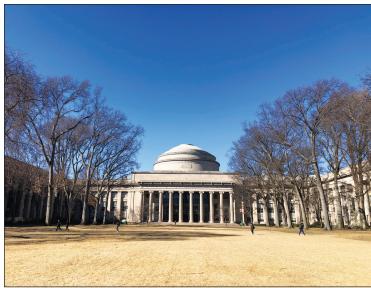
After a question from Professor of Materials Science and Engineering W. Craig Carter, Barnhart stated that overall cuts would lie between 0 and 10% for chairs, and 5% for the general institute budget. Barnhart emphasized that the Institute's triage may change given the changing situation from Washington.

Faculty pushback

The administration's presentation evidently did not satisfy several members of faculty, who lined up or "raised" their Zoom hands to clarify facts, disagree with strategies, or simply take the opportunity to give a small speech about their concerns.

Professors Yossi Sheffi, director of the Center for Transportation Logistics, and Retsef Levi of Management brought up the possible opportunities at play in the new administration. Sheffi emphasized that MIT could use this moment to decrease its reliance on federal funding, while Levi believes that the Institute should "use tech to revamp and modernize." Meanwhile, Professor of Physics Or Hen said that MIT could take this opportunity to use artificial intelligence for cost reduction or to change their funding mechanism to work more directly with national laboratories.

Faculty members also expressed interest in changing MIT's reputation for the outside world. Hen stated that decreasing MIT's



VIVIAN HIR—THE TECH

A photo of Killian Court taken on Monday, March 3.

tuition could send a "message to society" and compel smaller universities to also lower costs. Kornbluth pushed back, claiming that MIT's sticker price only applied to students whose families could comfortably afford the tuition. More broadly, Professor of Biological Engineering Alan Jasanoff asked about "what [MIT] can do to fundamentally change how we message" to the American public. To that point, Professor of History and Senior Associate Dean of Open Learning Christopher Capozzola asked faculty to consider creating programming for Open Learning.

Impacts on student life and learning

The proposed changes, along with any future announcements from the federal government, will have wide-reaching implications for the entire Institute. For undergraduates, these consequences may not be obvious. While the Undergraduate Research Opportunity Program (UROP) provides certain research positions, its funding is relatively inconsequential, according to several administrators.

On the other hand, teaching will likely be significantly affected. Professor Michel Goemans, the Course 18 department head, told The Tech that many undergraduate Course 18 classes are taught by graduate students or postdoctoral fellows. As the department already has the highest student-faculty ratio in the School of Science, any hiring freezes could drastically reduce its teaching capacity for core classes such as 18.01, 18.02, 18.03, or 18.06. Other departments, especially those that strongly depend on teaching assistants, could face similar challenges.

In addition, as several faculty members brought up, the Trump administration's policies are not and will not be limited to scientific research. Compliance issues regarding the use of race in areas including admissions, hiring, or discipline may result in a loss in funding from the Department of Education.

Finally, international students may be impacted by President Trump's recent actions. As Professor Michel DeGraff of Linguistics noted, under a new executive order, non-citizen students whose activity is regarded as antisemitic or in support of violence may face deportation. President Kornbluth agreed that this question was important, but said that MIT has not received any direct communication on the topic.

Sloan Professor Ezra Zuckerman Sivan also highlighted the changes to visa policy. In response, Kornbluth stated that MIT will advocate strongly for visas and the flow of international talent to the Institute: "We're weighing in as heavily as we can." Future directions

As of Mar. 6, 15 days since the faculty meeting, universities across the country have taken dramatic steps to address both immediate and potential challenges to funding. MIT will continue to assess the situation and will hold the next Institute Faculty Meeting on Mar. 19. In addition, as announced by President Kornbluth on Mar. 4, the Institute has created a webpage dedicated to its response to government activity.

If federal funding changes have affected your research, please contact The Tech by filling out our online survey or emailing tt-newseditors@mit.edu.

MIT Biology graduate program reduces incoming PhD class size by 20%

Decline reflects impact of NIH funding cuts on graduate admissions

By Vivian Hir

NEWS EDITOR

The MIT Department of Biology has recently decided to reduce the incoming fall 2025 PhD class size by 20%. An exact date of the decision could not be confirmed. Professor Mary Gehring, the Graduate Officer for the Department of Biology, said that the reduction is due to "uncertainty in the federal funding environment." This decision reflects the impact of the NIH's proposed funding cuts on graduate admissions; other universities such as the University of Pennsylvania have also reduced or paused graduate admissions altogether in biomedical PhD programs. Additionally,

MIT's National Institute of Health (NIH) T32 training grant, which is used to support pre-doctoral training, is up for renewal.

Given that the current first-year cohort has 34 students, Gehring estimates that the incoming class will have around 27 students as a result of the 20% reduction. Graduate admissions in the Department of Biology is made on a rolling basis starting in mid-February, and the total number of accepted students depends on the estimated yield rate, which historically has "ranged from 40% to 56%."

In an email to *The Tech*, Gehring wrote that "no offers are being or will be rescinded" despite the 20% reduction in class size. Likewise, the change did not im-

pact the second open house for admitted graduate students that took place on Feb. 24.

Despite the smaller class size, Gehring remains optimistic about the Department of Biology's graduate program. "We are committed to our graduate program," she said. "Training future scientific leaders is a core — or even *the* core — mission of our department."

Head of the Department of Biology Professor Amy Keating's statement to *The Tech* also echoed Gehring's sentiments. "We are focused — as always — on recruiting the most talented students and faculty members from around the world to work with us in a stimulating and supportive environment," Keating wrote.

Archbishop of Boston Visits MIT Chapel

As a part of his efforts to engage with college campuses and see the communities of his newly inherited archdiocese, Archbishop Richard G. Henning, the Seventh Archbishop of Boston, celebrated mass at the MIT Chapel on Feb. 23.

Recognizing the analytical mindset of MIT students, Archbishop Henning incorporated mathematical reasoning into his homily to illustrate the messages of the day's Biblical readings. He began with the simple fact "1+1=2," a universal truth that is logical and clear.

He then expanded on this idea of clear-cut logic to highlight how, unlike the physical laws many study on campus, God's love is "beyond understanding," emphasizing how its abundance and boundlessness seemingly violates reason itself because of how it is freely given. He captured this concept by saying, " $1 + 1 = \inf_{i=1}^n ty_i$," explaining that such is a testament to how God's immeasurable love is beyond our conventional reason.

Following the mass, the Archbishop visited students in W11, sharing coffee and donuts with the community to conclude his trip

Archbishop Henning was installed as the seventh Archbishop of the Archdiocese of Boston last Halloween, succeeding Cardinal Seán O'Malley. Before coming to Boston, Henning served as the Bishop of the Diocese of Providence, RI. His visit to MIT is one of many others in the Boston area as he familiarizes himself with the archdiocese.

–Sabine Chu

Do you like doodling during class? Are your psets covered with drawings? If so, become a Tech Illustrator!

E-mail join@tech.mit.edu

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Music Building, from Page 1

According to Makan, the purpose of this special arrangement is for the audience to have "less separation" from the performers, allowing the experience to be "more intimate." For instance, a piano recital in the concert hall would enable the audience to view the pianist from an angle that they otherwise wouldn't in a conventional setting. The seats in the concert hall are also configurable to meet the specific needs of the performance, such as demounting seats for a chorus, or removing seats at the front row for a larger music ensemble.

Besides the unique seating arrangement, the Hull Concert Hall has features for adjustable acoustics; this includes the acoustic banners that can be lowered to reduce reverberation time and a ring of speakers that offer reinforcement. By doing so, the concert hall is able to accommodate various kinds of music performances.

Next to the Hull Concert Hall is the Music and Culture Space, a music space for the MIT Balinese Gamelan and Rambax. Previously, the two music ensembles were taught in Building N52. Given that the ensembles' sounds have loud volumes, the space has walls insulated with felt for acoustic insulation. In addition, the wide

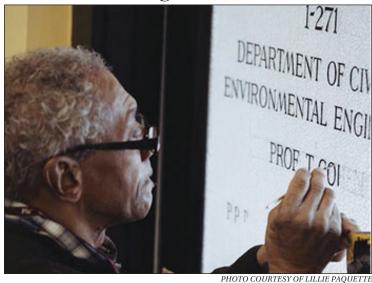
open space allows for classes to have music demonstrations more easily versus a traditional lecture room, as in the case for Introduction to World Music (21M.030).

The third volume of the Linde Music Building is the Music Maker Pavilion, a four-story building that contains rehearsal rooms, a recording studio, offices, a research lab, and a music makerspace. The rehearsal rooms have double height ceilings and drapes for acoustics. Similarly, the offices are acoustically treated so music faculty members can play instruments and compose in the office. The music makerspace is for digital instrument design and music technology prototyping, while the research lab is for students and faculty in the new Music Technology and Computation program that will begin

The Linde Music Building will help support MIT's large music program that has a yearly enrollment of over 1,500 students and over 500 musicians. Makan hopes that the music building will not only help "foster community" for the music students, but also for the general MIT community. "I hope that going to concerts at Tull Hall in the Linde Music Building becomes a regular part of everyone's

Glenn Silva, iconic painter of MIT door signs, dies at 78 Silva: "My mind is just focused on

what I'm doing"



Glenn Silva has spent over three decades at MIT meticulously painting names on more than 700 glass-paned doors

By Boheng Cao

COPYEDITOR

Glenn A. Silva, a longtime painter of door signs across the MIT campus, passed away on Feb. 12, 2025 at the age of 78. Joining the Institute in 1994, Silva was a familiar fixture for students and faculty alike, who often watched as he hand-lettered office entrances and classroom doors.

Silva was born on Sept. 25, 1946, in Plymouth, MA and graduated from Plymouth Carver High School. After serving in the National Guard and working at the Quincy General Dynamics Shipyard, Silva enrolled in the Butera School of Art in Boston to further his interest in lettering. He taught there for ten years after his graduation, before starting Glensign, his sign fabrication company. These signs remain all over his Plymouth hometown and the greater Boston area.

Throughout his three decades at MIT, Silva found his work fulfilling. "My mind is just focused on what I'm doing," Silva said in a 2017 MIT School of Engineering video. "And that's what I enjoy. Maybe that's why I just don't retire."

It's true that the painstaking process of lettering — from mixing paint to tracing with pencil and ruler to delicately applying brush pressure - sometimes led Silva to frustration. Most of the time, however, he recalled having "a lot of peace" within himself. In a 2017 Boston Globe interview, Silva

said that he could "drown the whole world out" when properly engrossed in his craft, often failing to notice the curious passersby around him.

Silva usually kept himself busy, hauling his supplies from door to door and installing vinyl signs whenever he wasn't painting. "That is what gives you the drive to keep going," Silva said "I'm here every d

Reflecting on a trade that some consider antiquated, Silva said that he is glad his craftsmanship remains appreciated at the Institute. However, he also laments the slow loss of handlettering. "No one does it anymore, very few people," Silva said. "And I'm very fortunate that here I get the opportunity to do it."

Outside of sign-making, Silva was remembered as a loving grandfather and selfless friend. He "appreciat[ed] nature," "collect[ed] trinkets," and had a penchant for photography. A "man of great faith," Silva enjoyed bowling, telling stories, playing the saxophone, and documenting his grandchildrens' life milestones.

Silva is survived by his brother, four children, four grandchildren, and five great-grandchildren, along with countless nieces, nephews, and cousins. His cause of death was not given. Funeral services at the New Hope Chapel were held on March 1. Silva's legacy, etched in meticulous black Serif text, will undoubtedly adorn Institute walls for many future generations of students to come.

McCormick Renewal Project delayed until summer 2026 Senior Associate Dean for Housing and Residential

Life David Friedrich: "We remain committed to the project and look forward to continued engagement with the McCormick Community"



A photo of McCormick Hall taken on Monday, March 3rd.

By Jackson Hamilton

Announcement of the delay

On Feb. 12, all returning MIT undergraduates received news of the one-year delay in the McCormick Renewal Project via the undergraduate housing intent form. Originally, the renovation project was planned to begin in the summer of 2025. McCormick Head of House Raul Radovitzky first found out about the delay on Feb. 9. Then, McCormick residents received an email on Feb. 11.

Reason for the delay

According to Senior Associate Dean for Housing and Residential Life David Friedrich, the reason for the sudden change in plans is that "MIT is rebalancing the pace of capital plan spending across a range of existing and emerging priorities." Chelsea Goodwill '27, a McCormick resident, said in an interview with

about the possibility that the renovations could be delayed again at this time next year, given that the delay was partly based on financial considerations.

She elaborated upon her concerns by saying that she thinks Mc-Cormick needs renovations to happen soon, partly due to areas such as the bathrooms and common areas, which are "very old and dated." She also mentioned that her floor had also been having some general facilities problems, including a leak in the ceiling.

In regards to the project, Friedrich said, "The renewal of McCormick's aging building systems will preserve the building's historical charm while meeting modern accessibility standards... We remain committed to the project and look forward to continued engagement with the McCormick community."

Preserving the McCormick

Both Goodwill and Rachel Yang 28, another McCormick resident interviewed by The Tech, shared that, to some degree, they were happy the renovation was being delayed because this meant they could spend more time living with the community. Goodwill said, "I'm happy that McCormick is staying open for another year because I really like the community here.'

Friedrich and Radovitzky discussed how MIT is working to support McCormick residents and preserve the McCormick community during and after the renovation process, regardless of the time of delay. Friedrich said that MIT is "working together with the McCormick community to determine programming needs and envision the use of common spaces after the renovation." He also shared that the input from residents is helping the design team create "refreshed spaces that reflect the character and community of this iconic residence."

According to Radovitzky, the purposes of the McCormick Hall Transition Team are to gather resident feedback about what the building itself should look like after the renovation and about how to meet the needs of McCormick residents while the physical building is closed. The McCormick Renewal Project FAQ page on the HRS website states that part of the planning for the renovation period includes the establishment of women-only floors in Tang Hall for McCormick residents who request this type of

Radovitzky and the McCormick Hall Transition Team have begun to plan how to maintain community among McCormick residents during the renovation so that the culture of the community is preserved and the community can be fully reestablished in McCormick at the end of the renovation period.

Any further questions about the McCormick Renewal Project can be emailed to mccormick-renewal@

Federal funding cuts shake graduate admissions for MIT undergraduates Senior Paige Yeung: "It's frustrating that the current

political situation is making it even harder to seek a career in my field"

By Macy Lehrer

On Jan. 27, the White House issued a memo temporarily suspending federal grants, loans, and other financial assistance until further review. One such cut that affects universities is the indirect cost cuts from the National Institute of Health (NIH). On Feb. 7, the NIH announced a major federal funding cut by means of a 15% "indirect cost" cap, significantly impacting the financial resources of universities across the country.

Most grants are made up of both direct and indirect costs; examples of direct costs include salaries and wages for employees, materials for research, and travel expenses. Indirect costs, on the other hand, fund data storage, utilities, and other needs that may arise while conducting research. In the fiscal year of 2024, the NIH

spent \$47.3 billion funding research. The average indirect cost rate prior to this cut was around 27%, with some Ivy League universities, like Harvard, having rates as high as 60%. MIT's indirect cost rate is currently 59%.

Although the NIH estimates these cuts will save the U.S. government around \$4 billion, at least 22 different states argue these cuts are "arbitrary" and "unlawful." President Kornbluth explained in an email announcement sent on Feb. 10 that even the NIH indirect cost cuts, which total to "\$30 to \$35 million a year at MIT," will affect the university's ability to conduct cutting-edge research. She further announced thwat MIT has joined the American Council won Education in filing suit against "indiscriminate cuts from taking effect" in federal court.

Besides the NIH, other federal funding sources have become uncertain: in particular, the recent National Science Foundation (NSF) grant freeze. The NSF stated in a Jan. 28 memo that "all review panels, new awards, and all payments of funds under open awards will be paused as the agency conducts the required reviews awnd analysis." In his Feb. 24 announcement, Vice President of Research Ian Waitz advised principal investigators to remain conservative about new funding commitments.

In her announcement, Kornbluth wrote, "If these proposed cuts are allowed to proceed, they will do immediate harm to work that saves American lives." She also stated, "In the longer term, they would severely degrade the research capabilities that drive American innovation and leadership in advancing scientific and technological progress for human health."

Admissions, Page 12

MITiny Love Stories Vol. 2

More reader-submitted love stories from across campus

Family At First Sight

East Campus is a place of love. A home filled with warmth, and smiles, and chaos, and a place to be yourself. I remember walking in for the first time—full of nerves and excitement-and being instantly welcomed by the people inside. It was strange to feel so comfortable in an unfamiliar place. EC very quickly became my home, and I miss being in those halls every day. The murals and the strange decor brought me so much joy, and the community I found saved my life. Thank you East Campus, I love you.

Meet your fellow tech staff. (aka, your new 3 a.m. pset support group)



join@tech.mit.edu W20-483, 617-253-1541

A Love to Keep

you planted kisses on my face i never saw a sweeter garden you intertwined your fingers with

i never shook nor held another

you showered me with love i haven't taken a bath in a year.

— ari peró

A Bean for Your Thoughts

I split green beans with my grandma. We snap off their ends, we peel off green strands, we break them into halves and thirds. Three neat piles. I'm jet-lagged, and the morning sun glows bright. I tell her about classes, about friends, and it all comes spilling out: melancholy late

nights of homework, new carpeted bedroom, sunsets. Seven hundred sunsets since we last talked. She recounts our neighbors' dramas and tragedies, distant relatives, names already shadows in my mind. We swat mosquitos and sit in the same chairs we've sat in for thirteen years, splitting bean after bean after bean.

— Boheng

URES CAMPUS LIFE ARTS

The Friend You Deserve

For some reason, you let them walk all over you, and it is so painfully obvious to everyone except you. I was hoping it'd get better, but months after The Incident, you still think that it was all your fault and not theirs. When we talked about it in 32-123, I was gentle. But inside, I wanted to berate you for not having a backbone. Please stop putting them on a pedestal. Stand on our shoulders and elevate yourself instead. I'm begging you to be the friend that you are to other people to yourself.

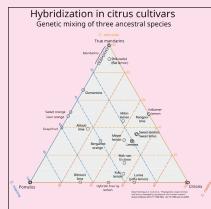
– Alor Sahoo

Love, Hybridized Most Americans I know tend to call

all orange citruses oranges, but did you know that mandarins (flatter, typically smaller and sweeter) are naturally occurring, while oranges are hybrids of pomelos and mandarins? Furthermore, tangerines are a group of mandarin hybrids, satsumas are mandarin-pomelo hybrids, clementines are mandarinsweet orange hybrids, grapefruits are pomelo-sweet orange backcrosses, and

More than what they're called, though, I like peeling them for you, piece by piece, so you can enjoy them bite-sized and plain with no peel and no pith. I hope you'll keep letting me do so for a long, long time.

— Angelina



isn't bold.@@@

@@@ I'm a photo caption. This part



THEATER REVIEW

Deception, Choice, and Violence: The Odyssey

Kate Hamill's refreshingly unique take on a classic epic

The Odyssey

Written by Kate Hamill

Based on The Odyssey by

Directed by Shana Cooper

American Repertory Theater

Feb. 11 - Mar. 16

By Kaitlin Yeoh

This review contains spoilers.

In the American Repertory Theater's (A.R.T) new three-act play, playwright Kate Hamill adapts the classic epic poem of The Odyssey into a modern, feminist, and ironically self-aware story. Hamill and Director Shana Cooper, through the benefit of hindsight and modern context, bring to light the text's flaws, irony, and hypocrisy. However, the play ultimately falls apart in its final act and lacks the "punch" in its final message.

The play is broken up into three one-hour acts, each with its own theme: deception for Act I, choice for Act II, and violence for Act III.

Act I asks us to question our idea of deception and when it crosses the line from being used for good to evil. Odysseus's admirers introduce us to Odysseus (Wayne T. Carr) as a courageous, cunning hero who is able to outwit any enemy. When the audience finally sees Odysseus for themselves, he instead is a man who is haunted by

nightmares of his past and recklessly puts himself into danger.

This comes to a head in a standout scene of Act I: the infamous fight between Odysseus and Polyphemus the giant (Jason O'Connell). The giant comes to life with enlarged projections on tapestry, with booming voices and ominous background music adding to the terror of the scene. Faithful to the original story, Odysseus tricks Polyphemus into letting him and his crew out of the giant's cave by proclaiming his name is "Nobody." Unlike the original, however, the play portrays Polyphemus in a sympathetic light, making him appear naive and childlike. Thus, when Odysseus defeats the giant, the audience is left to question the morality of Odysseus's actions.

Act II

This theme expands into Act II, which deals with the freedom of choice. The play takes on a noticeably darker tone, with an action-packed rhythm. Major deviations from the source text also become apparent, and female characters take the center stage.

In the original text, Odysseus's wife Penelope (Andrus Nichols), and Circe the witch, played by writer Hamill herself, were foils to each other, with Penelope representing the devoted wife and Circe the evil seductress. The double standards of the way men and women are treated becomes apparent through the original text; Odysseus is allowed to be unfaithful to his wife and is not shamed for pursuing his desires, whereas Penelope must stay pure and wholly devoted to her husband. Penelope has no freedom of choice, since she is shamed if she exercises it.

Hamill takes the leap to make her version of Penelope defy this notion - Penelope has an affair with one of her suitors, Amphinomus (Keshay Moodliar). She does this out of her own volition, even while knowing this means breaking her faithfulness to her



PHOTO COURTESY OF NILE SCOTT STUDIOS AND MAGGIE HALI

Members of the cast hide from Polyphemus the giant.

husband. In the face of all of this, Hamill forces the audience to confront their own biases - why is it we feel Penelope's decision holds so much more weight, when we've seen Odysseus traipsing with other women for the past two hours of the play? Hamill makes this message clear: Women, like men, also have desires and are tempted by them. Women are also flawed. They are human, just as men are allowed to be human. And this message works, because Hamill isn't afraid to change the plot to show these messages, not just tell them.

While humanizing Penelope, Hamill also humanizes Circe. By making Circe self-aware of her own faults, Circe also has the freedom to call out Odysseus. She openly admits she's not a good person, but demands Odysseus to admit he isn't one either. Odysseus might be given more leeway and forgiveness by the original text, but in this version, Hamill—and by proxy Circe—isn't going to let him get away with his wrongdoings. Odysseus still chose to let his ego overtake him, chose to get himself into his own troubles, and chose to consummate a relationship with her. While Circe may be a seductress, Odysseus isn't absolved of responsibility.

The last act tackles what it means to break cycles of violence, and reveals what has been haunting Odysseus the entire play. However, unlike the past two acts, this act fails to deliver its message soundly. The act starts off strong: in a powerful monologue by Carr, Odysseus recounts the ambush of the city of Troy through his devised Trojan Horse. It becomes apparent Odysseus is a broken man, beaten down by the horrors of war. No longer is his story a tale to aspire towards; instead, it's an ominous reminder of the true nature of war. There is no right, no justice, no heroism in war-war can't be anything but cruelty.

Unfortunately, the rest of the act rushes itself into conclusion. Hamill, interestingly enough, decides to stick to the original ending of the story—one where Odysseus goes back to Ithaca, kills Penelope's suitors, and reunites with his son and wife. The play closes off with the narration, "We can't go back. We have to go forward."

Given all the narrative changes and restructuring of the story, it becomes painfully obvious the original ending doesn't work anymore. In this play, Odysseus's arc is about taking responsibility. But does he actually accomplish that in the end? Odysseus ultimately succumbs to his violent and emotional tendencies, and only spares one man in his murderous spree-Amphinomus, Penelope's other lover—and he does so because Penelope begs him to spare Amphinomus, not out of his own volition. Odysseus is not a different person by the end of the story, nor does he learn his

Penelope, too, doesn't receive a satisfying ending to her character arc. The play attempts to give her more agency and choice through the second act, but rips it away in the last act by having her decision to stay with Odysseus or move on with her new lover decided for her by Odysseus. As such, the message of Act II also falls short. With all this in mind, the final theme of moving forward feels pointless. Moving forward can only be positive if it is an active choice to do so in the face of violence. But if there is no choice, the message of moving forward becomes one of defeat, because what can you do but move forward?

Hamill creates a refreshingly new take on The Odyssey that draws out themes and messages from the original. The play isn't afraid to make the audience think and poke at their discomfort, but it ultimately falls flat in tying these ideas together into a satisfy-



PHOTO COURTESY OF NILE SCOTT STUDIOS AND MAGGIE HALL

Odysseus (Wayne T. Carr) and members of the cast miming being on a ship

MOVIE REVIEW

The Brutalist: A visual and auditory masterpiece with seriously flawed thematic decisions

The immigrant epic merits discussion not only for its use of AI, but also for its stunning cinematography, best-in-show score, and flawed conclusions

The Brutalist

Directed by Brady Corbet

Screenplay by Brady **Corbet and Mona Fastvold**

Starring Adrien Brody, **Guy Pearce, and Felicity** Jones

Rated R, Now Playing

By Cameron Davis

Best Picture nominations for the 97th Academy Awards have been mired in

unusual levels of controversy, from the questionable lack of Mexican representation — and poor behavior of star Karla Sofía Gascón — in Emilia Pérez to on-set crew support under director Sean Baker in Anora. Brady Corbet's The Brutalist is no exception, coming under fire for its use of artificial intelligence in its modification of Hungarian speech to improve authenticity and alleged creation of some architectural renderings. While discussions of AI are certainly relevant, the unwanted press has pushed discussion of Corbet's actual film, a 3-hour and 35 minute-long intermissionwielding immigrant epic, to the sideline.

That's a shame, as The Brutalist is a visual and auditory masterpiece that merits discussion not only for its use of AI, but also for its ultimately flawed story and thematic decisions

The film follows László Tóth (Adrien Brody), a Hungarian Jew immigrating to the United States after World War II. As he arrives at Ellis Island during the brief "Overture" section, we're greeted with askew

shots of the Statue of Liberty that suggest László's journey toward the American Dream will be less smooth than he hopes. This worry is quickly confirmed in the film's first part, "The Enigma of Arrival." László is hosted warmly by his Hungarian-Jewish cousin Attila Miller (Alessandro Nivola) and his cousin's Catholic wife Audrey (Emma Laird), and the two men are offered a lucrative carpentry job for a wealthy benefactor's son. Unfortunately, the job soon blows up, Attila comes to believe that László is hitting on Audrey, and László ends up out on the street. To make matters worse, he spirals into a heroin addiction - although, frankly, seems to function just fine as he holds a construction job and hangs out with new friend Gordon (Isaach De Bankolé).

Things begin to turn around, though, when the wealthy benefactor, Harrison Van Buren (Guy Pearce) finds László after having changed his mind on the job - a beautiful home library — especially once it gets him featured in an architectural magazine. Seeing László's work as a path to continue

boosting his ego, Harrison invites László to a party. There, Harrison makes a surprise announcement to his family, the party guests, and László: he has selected László to design and build a community center in their small town dedicated to the memory of Harrison's dead mother. Despite his wariness around Harrison's ostentatious wealth, arbitrary whims, and insistence that a Christian chapel be part of the community center, László takes the job.

The remainder of The Brutalist follows László's years-long struggle to build the community center in the face of derision and suspicion from his Christian-majority workforce, town, and employers. He also has to face an increasingly tense relationship with his wife, Erzsébet (Felicity Jones), and their mute adopted daughter, who have been sponsored to come to America with the help of Harrison's well-connected lawyer. The women both suffered greatly in the Holocaust, and László is too busy sourcing

Brutalist, Page 7

Yuja Wang and Vikingur Ólafsson stun in recital with works both old and new

The duo take the Symphony Hall stage in recital with works by Rachmaninoff, Schubert, and John Adams

Celebrity Series of Boston

Yuja Wang and Víkingur Ólafsson

Boston Symphony Hall

Feb. 21, 2025

By Noah McAllister

Star pianists Yuja Wang and Víkingur Ólafsson took the Symphony Hall stage on Friday, Feb. 21, 2025, performing a Celebrity Series of Boston concert featuring works by Cage, Adams, and Rachmaninoff, among

While the virtuosity of the pair was evident, what was most impressive about the concert was how Wang and Ólafsson managed to tie disparate pieces together seamlessly. The gentle and undulating F-minor chords of the opening piece, Luciano Berio's No. 3 "Wasserklavier" from his Six Encores, transitioned directly into the more brooding Schubert Fantasie in F-minor. The abrupt pauses in the Fantasie were brought out by the pair's almost-telepathic connection: only rarely did the duo look at each other, but they played together just as intended. Indeed, the emotional range of the Fantasie was enhanced by Wang and Ólafsson's generous (but not kitsch) rubato that made it seem like there was a single performer.

John Cage's *Experiences* No. 1 followed, metaphorically linked to Schubert with its interspersed pauses. Its simple composition and harmony were played in an all-but-simple manner. Cage's piece served as a contrast

to the following piece, the rarely performed *No. 6 from Studies for Player Piano*, written by Conlon Nancarrow and arranged for two pianos by Thomas Adès. Like the Berio and Schubert, the duo connected the Cage piece and Nancurrow back to back. Ólafsson took the lilting, off-kilter bass line of the Nancurrow, while Wang played the jazz-like melody on top. Originally written for player piano, the duo performed the rhythmically challenging piece with ease, effortlessly staying together, even when it felt like each performer was in their own rhythmic world.

Massachusetts native John Adams' pointillistic *Hallelujah Junction* ended the first half of the program. Adams recalls the many ways the choir sings "hallelujah" in Handel's Messiah, through minimalistic rhythms that serve a sort of leitmotif for the piece. In a piece that could have easily gotten bogged down by its sheer complexity, the duo brought it to life with their clear and expressive interpretation. The piece had an energetic, fiery, and percussive ending that used alternating octave chords in a final interpretation of Handel's motif.

The shorter works by Berio, Cage, and finally Arvo Pärt served as an appetizer to the main works of the program by Schubert, Adams, and Rachmaninoff. In this way, the program felt balanced, and alternated between more lighthearted pieces that built intrigue within the audience to the larger works. Whereas programs of mostly modern music can sometimes feel like an intellectual chore to get through, this one was structured such that the audience was waiting with bated breath for the next piece.

The best part of the concert was unquestionably the closing piece: Rachmaninoff's *Symphonic Dances*. Rachmaninoff himself arranged the orchestral work for piano duet. A highlight of the first movement was Wang's solo (originally played on saxophone in the



Yuja Wang and Víkingur Ólafsson perform side-by-side in Boston Symphony Hall.

orchestral version) that demonstrated her unmatched dynamic range and legato. Even in the thickly orchestrated third movement, Wang and Ólafsson performed with such exceptional clarity that I heard many lines I had never noticed in the orchestral version. The sparkle of Ólafsson's upper-register scales throughout the movement contributed to the frenetic yet controlled energy that had the audience sitting on the edge of their seats. Wang and Ólafsson's virtuosic faster-than-normal ending to the piece brought the program to a thrilling close.

The duo ended the concert with four encores for piano four hands, starting with the No. 2 and 3 waltzes from Brahms' Op. 39 and Dvorák *Slavonic Dance* Op. 72/2. After the Brahms waltzes, there was a palpable unspoken question in the audience: would that encore be the last? Wang and Ólafsson's exuberant performance of Schubert's *Marche Militaire*, which finally ended with a brilliant performance of Brahms' *Hungarian Dance* No. 1, was more than sufficient to answer that question, and concluded the concert as a whole.

Brutalist, from Page 6

marble from Italy, dealing with lazy employees, fending off anti-Semitism, and doing heroin to be a kind husband or gentle father.

For such a substantively heavy movie, The Brutalist matches its subject focus thanks to the strikingly grandiose cinematography by Lol Crawley, who frames everything from cranes and men to hillsides and skyscrapers with both physical heft and powerful meaning. The long movie also zips by with patient yet commanding pacing by Hungarian editor Dávid Jancsó, who lets scenes take their time without ever dragging on. Both men do their jobs respecting the centrality of harsh beauty in The Brutalist, as does production designer Judy Becker, whose architectural designs, sketches, and constructions are convincingly the work of László's tormented genius.

In the same vein, the music by Daniel Blumberg is a stirring highlight and without a doubt the best original score in a 2024 release. László's arrival by ship is announced with blaring horns, yet a sole cowbell underscores uncertainties about the fate that awaits him. In Philadelphia, as László's mental wheels spin, metallic tinkling sounds pair with swelling brass to mirror the process of building and creation. When an initially unappreciative Harrison insists that his party guests march up the hill to see the community center's future site, drum rolls evoke a band of toy soldiers. Puff pieces for Pennsylvania's growing economy are radioed in over music that sounds perfectly old-world propagandistic, just as New York is introduced in a jazzy, fast-paced ditty, Carrara in a nervous woodwind-heavy song, or 1980s Venice in a determinedly electronic clap-step track.

The two lead performances, from Adrian Brody as László and Guy Pearce as Harrison, consistently match the excellence of the movie's visual and sonic execution. The early scenes that the two men share together, especially a long dialogue over brandy, cigars, and stories about their challenging pasts, completely engage the audience and are among the most compelling scenes of the film.

It seems that great scriptwriting moments are only for tragic leads (Brody) or larger-than-life villains (Pearce), not for those who get in the way of great men. Thus, the supporting cast is disappointingly weak, since they're not given much to work with. Harri-

son's boy (Joe Alwyn, most famous as the exboyfriend of Taylor Swift) is an unassailably snide failson. Isaach de Bankolé plays the only Black character in the film, and is reduced to a drug addict and a delinquent dad who mostly sticks around to virtue-signal that László can have associates other than rich WASPs or white employees. Alessandro Nivola, hot off his atrociously weird performance in Kraven, is decent and offers a brief glimpse into immigrant assimilation, but his character is quickly written out.

Most disappointingly, the women are overwhelmingly weak, as Brody (and his long-time romantic and scriptwriting partner, Mona Fastvold) take a page from the Christopher Nolan playbook for female characters in creating women who are powerless, annoying, sexually obsessed with the protagonist, or all of the above. Despite her Academy Award nod, Felicity Jones is terribly out of her element as Erzsébet, whose autonomy is fleeting as she tries to goad László into sex or complains about a journalism job. Raffey Cassidy's Zsófia is literally silent; Stacey Martin's Maggie Van Buren is frustratingly meek; Emma Laird's Audrey only exists symbolically to look sexy in red lips and a red dress to drive Attila and László apart Every other woman, from a sex worker in an early scene to an Italian dancer in a late one, only grace the screen to be turned on by László.

Three core themes are broached in the film with varying degrees of success. The first. which focuses on the financial entrapment of artists by their backers, is the most nuanced. Harrison is definitely an annoying millionaire, which we gather from his introduction via dismissive outburst towards László and Attila and from subsequent developments. Although László repeatedly acknowledges that the art is simply a plaything to the industrialist, Harrison does seem to care... sometimes. Listening to his architect describe fanciful designs against town hall unpopularity, he consistently vouches for the Hungarian because he recognizes the man's genius. In an Italian marble quarry, he stares in awe at the stone, visibly moved and whispering, "It's just as beautiful as you said." Even though they're mostly doing it for themselves, Corbet seems to argue, financiers aren't completely bad.

The epilogue, which opens with a quick montage of beautiful art in Venice, ham-

mers this point home; although these works were all financed by the blood money of the Medici family and their ilk, their beauty outlives the earthly wrongs that funded them. When an adult Zsófia quotes her father, saying, "It is the destination, not the journey," we can take it as the ultimate approval of artistic creation by any means necessary. As a director in today's Hollywood, there's no doubt Corbet feels this from experience.

Meanwhile, the power dynamics of sex and rape are handled much more coarsely. Having already discussed the ludicrous need of every woman in The Brutalist to be attracted to its protagonist, scenes in which László has sex are consistently unpleasant. In one, Erzsébet masturbates beside him, muttering vague hypnotic threats as he refuses to touch her. In another, László causes Erzsébet to overdose on heroin before they have intense sex with heavy erotic asphyxiation.

These single instances, however, are nowhere as frustrating as the repeated use of rape as a trope to signify that a character is evil. In the first instance, Harrison's son, who we already know isn't morally good rapes Zsófia off-screen. She continues to be silent and, as far as we can tell, never speaks of it. Then, later and even more upsettingly, Harrison rapes László in a mineshaft. Corbet thus not only undercuts all the hard work of characterizing Harrison as a flawed but critical figure for László, but also gives his film an overly simplistic resolution when Harrison uncharacteristically commits suicide from the guilt of his action. There are many ways characters can be drawn as evil; rape and sexual violence are one of the least creative — and most upsetting — symbols in a

Finally, The Brutalist approaches the question of Judaism and post-Holocaust Jewish faith with stops and starts. Moments of lucidity, such as when László is forced to explain the enormous concrete cross atop the community center while deflecting intrusive questions about his own faith, do exist but are few and far between. For the most part, they are tied up too neatly; László's ultimate distancing and departure from Judaism are explained as egotistical impressions of grandeur, overwork, and psychological decline, as opposed to engagement in his faith.

Similarly, one of the most fascinating central tensions of the movie — László be-

ing forced to build a monument to a faith that is not his — is hand-waved away by dual unearned reveals: first, that the church was actually designed in a way that processed his Holocaust trauma, and second, that he went on to build synagogues later in life, so don't worry about that.

Instead, Corbet, an atheist with no personal connections to Judaism, seems to be more interested in the defense of Israel as a Jewish state than as conflicted expressions of Jewish faith. For example, only two newsreel voice-overs mark the film: the first is about the foundation of Israel and the need for a Jewish state at all costs, and the second is an announcement about the first ICBM launch, implicitly tying the importance of Israel to its defense by military force. In the same vein, the behemoth community center quite literally appears to be a "city on a hill," historically used to describe Jerusalem and later broadened to refer to the United States

At every turn, Corbet goes out of his way to paint Israel as the solution for Jewish marginalization in America. Zsófia is silent until she finds her voice to announce her move to Israel and explicitly state that her adopted parents are lesser Jews for not following her. She's ultimately given the final words of the film (over a now-silent László), implying that Israel is singular in its ability to empower her. Furthermore, her aforementioned final words are unquestionably in support of Israel: the journey of hardships faced by László, Erzsébet, Zsófia, and the Jewish people more broadly are ultimately inconsequential next to the successful destination of Israel. Erzsébet co-signs this argument, too, telling László she must "go home" before dying in Israel off-screen. These are disappointing conclusions given current events in Gaza, to say the least, and sell short the personal struggles of László, his family, and Jews everywhere.

The Brutalist is a sumptuous audiovisual feat; stills from the film are pure art, and I've already downloaded the score. In addition, its lead performances will hopefully bestow well-earned awards season victories for Adrien Brody and Guy Pearce. However, by writing two-dimensional supporting characters (especially women), and fumbling tougher themes such as artistic financing, sexual violence, and religious faith, Corbet misses important marks.

SPORTS BLITZ By Hannah Friedman

SPORTS EDITOR

Friday, February 21st:

- Women's Swimming and Diving placed first at the NEWMAC Championship
- Men's Swimming and Diving placed first at the NEWMAC Championship
- Men's Volleyball lost to Vassar College 0-3
- **Men's Squash** defeated Middlebury College 7–2

Saturday, February 22nd:

- **Rifle** placed third at the NCAA Qualifier
- Women's Track and Field placed eighth at the Brown Invitational
- Men's Track and Field placed tenth at the Brown Invitational Sailing placed second at the USF Women's Team Race
- Women's Tennis defeated Vassar College 6-1
- Men's Lacrosse defeated Roger Williams University 13-4
- Men's Volleyball lost to New York University 0-3
- Women's Basketball lost to Salve Regina University 61-82

Sunday, February 23rd:

- Men's Fencing placed first in the NEIF Championship
- Women's Fencing placed first in the NEIF Championship

- Wednesday, February 26th: • Women's Lacrosse lost to Endicott College 9-10
- Women's Basketball defeated Springfield College 70-65 in Overtime

Friday, February 28th:

- Women's Swimming and Diving participated in the NCAA Diving Regionals
- Men's Swimming and Diving participated in the NCAA Diving Regionals

- Men's Squash lost to Colby College 4-5
- Women's Track and Field placed fourth in the New England DIII Indoor Track and Field Championship
- Men's Track and Field placed sixth in the New England DIII Indoor Track and Field Championship
- Men's Lacrosse defeated Western New England University 15-7
- Women's Basketball defeated the Worcester Polytechnic Institute 60–33

Saturday, March 1st:

- Sailing placed fifth at the Liam O'Keefe Team Race Trophy
- Sailing placed third at Harvard Women's Team Race
- Women's Track and Field placed second in the New England DIII Indoor Track and Field Championship
- Men's Track and Field placed second in the New England DIII Indoor Track and Field Championship
- **Rifle** placed fourth in the MAC Championship
- Women's Lacrosse defeated Westfield State University 16-5
- **Baseball** lost to Mitchell College 3-5
- Men's Volleyball lost to Nazareth University 1-3
- Men's Tennis defeated Vassar College 6-1
- Men's Volleyball defeated SUNY Poly 3-0 Men's Squash defeated the Navy 7-2

Sunday, March 2nd:

- **Rifle** placed second in the MAC Championship
- Men's Squash lost to University of Rochester 1-8
- Women's Basketball lost to Smith College 66-79

Tuesday, March 4th:

• Baseball lost to UMass Boston 6-16

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Upcoming Sports Events FRIDAY 7

Women's Track and Field at NEICAAA 10 a.m.

Men's Track and Field at NEICAAA 10 a.m.

Women's Lacrosse

at Roger Williams University 4 p.m.

Women's Tennis

at Trinity University (Texas)

Baseball

at Chapman University

SATURDAY 8

10 a.m.

Franny Charles Team Race and Wood Team Race (Harvard University)

Women's Track and Field at NEICAAA

Men's Track and Field at NEICAAA

Women's Track and Field at Tufts Last Chance

11 a.m. Men's Track and Field

at Tufts Last Chance 11 a.m.

Men's Lacrosse

vs Rensselaer Polytechnic Institute

Men's Tennis at Tufts University

1 p.m. Men's Volleyball

vs SUNY New Paltz 1 p.m.

Women's Tennis vs Gustavus Adolphus College

1 p.m.

Baseball at Pomona-Pitzer

2 p.m.Men's Volleyball

vs Wentworth Institute of **Technology** 5 p.m.

SUNDAY 9

Sailing

Wood Team Race (Harvard University)

Women's Fencing

NCAA Northeast RegionalChampionship

Men's Fencing NCAANortheast

Regional Championship Women's Tennis

vs Washington University in St.

Louis 11 a.m.

Baseball

at the University of La Verne

WEDNESDAY 12

Baseball

at Tufts University 3 p.m.

Softball

at Simmons University 4 p.m.

Women's Tennis

Softball

at Simmons University 6 p.m.

Women's Lacrosse

at Amherst College 6 p.m.

Men's Volleyball

vs Springfield College 7 p.m.

We're looking for people to help us design infographics to highlight writers' content!

FRIDAY 14

Men's Track and Field

NCAA DIII Indoor Track and Field Championships

Women's Track and Field

NCAA DIII Indoor Track and Field Championships

Baseball at Montclair State University

11:30 a.m. Men's Tennis

at Wesleyan University

SATURDAY 15 Sailing

Geiger Team Race, New England Team Race, Women's Southern New England Team Race, and St. Mary's Women's Fleet Race

Men's Track and Field

NCAA DIII Indoor Track and Field Championships

Women's Track and Field

NCAA DIII Indoor Track and Field Championships 10 a.m.

Women's Tennis

vs Hamilton College 10 a.m.

Softball

at Salisbury College $11 \ a.m.$

Men's Tennis

at Clark University 12 p.m.

Men's Volleyball vs Arcadia University

Women's Lacrosse vs Union College

1 p.m. Baseball

12 p.m.

vs Penn State Harrisburg 2:30 p.m.

Men's Lacrosse

at Clark University 3 p.m.

Softball

vs New York University

Men's Volleyball

vs Rivier University 4 p.m.

SUNDAY 16

Sailing

New England Team Race, Women's Southern New England Team Race, and St. Mary's Women's Fleet Race

vs Susquehanna University 11 a.m.

Baseball vs Salisbury College 11:30 a.m.

Softball vs Muhlenberg College 11 a.m.

TUESDAY 18

Softball

vs Wentworth Institute Technology3 p.m.

Softball

Wentworth Institute vsof Technology 5 p.m.

WEDNESDAY 19

Men's Tennis

vs Bates College 3 p.m.

Baseball

vs New England College 3 p.m.

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Celebrating Civil and Environmental Engineering: Course One Hosts 13th Annual Research Symposium

MIT researchers present breakthroughs on climate, biodiversity, and infrastructure

By Eric Wang and Veronika Moroz

SCIENCE WRITERS

On Feb. 24, the MIT Department of Civil and Environmental Engineering (CEE) held its 13th Annual Research Day. Throughout the afternoon, members of the CEE community listened to talks and poster sessions that showcased research projects on developing sustainable infrastructure as well as furthering knowledge in biodiversity and climate change.

Reimagining multi-level infrastructure

The conference began with a focus on sustainable infrastructure, including a keynote talk by Assistant Professor Gioele Zardini, whose work focuses on compositional design of sustainable critical systems for society with applications in energy, aerospace, and autonomy.

In his presentation, Zardini talked about decarbonizing shipping technology, reducing congestion, and increasing the energy efficiency of design algorithms. "Designing a single one of these systems is one thing, but thinking about the entire interaction between all the subcomponents and integration with the existing infrastructure is hard," Zardini told the audience, before providing an explanation of how his lab manages these challenges through the consideration of components, variables, and stakeholders.

Zardini's address was followed by four lightning talks by graduate students Kirby Heck, Jackson Jewett MEng '18, Mahdi Seyyedan, and Edgar Ramirez Sanchez. Each talk focused on a different infrastructure optimization problem, from reducing the toll of wind turbine wakes on energy production to the development of reliable weather generators that model how unsaturated soil influences the potential weather damage to infrastructure.

Modeling impacts and solutions to climate change

Professor Charles Harvey delivered the opening keynote for the second part of the symposium, which focused on biodiversity and climate, explaining his research on the importance of peat swamp forests for controlling emissions. According to Harvey, peat forests release a substantial amount of carbon dioxide emissions into the atmosphere because of the high amount of organic material present in peat forests. When the water table lowers in these areas, decomposition rates of the organic material increases, which leads to increased emissions. By increasing the water table in peat forests, Harvey says, scientists can

lessen the already staggering amount of man-made emissions.

For Harvey, the research event was a demonstration of humanity's hope for combating climate change. "We actually have a lot of technologies now that work really well to reduce emissions," Harvey told *The Tech*. "By contrast, oil drilling is actually going to lead to much more expensive energy."

The keynote was followed by lightning talks by graduate student Vassiliki Mancoridis, as well as postdocs Hsin-Fang Chang, Maya Anjur-Dietrich, and Ian McCahill. With topics from new modeling methods for tracking biodiversity loss to findings on a marine cyanobacteria responsible for 10% of all CO2 uptake in the world, the presentations highlighted the breadth of research in Course 1.

In the closing remarks, Associate Professor Darcy McRose and Associate Professor Desirée Plata PhD '09 emphasized the importance of scientific progress toward resolving the climate crisis and meeting the Intergovernmental Panel on Climate Change's goal of 13 gigatons removed annually.

"Will this carbon be stored in the ocean? The deep Earth? The built environment?" Plata asked. "These are questions and points that require careful thought about Calvin cycling, physical infrastructure, logistics, energy use, and ecological impacts — the stuff we here at CEE were born to do."

An open discussion panel followed the closing remarks led by Associate Professor Serguei Saavedra and Associate Professor Admir Masic, where participants discussed possible checkpoints for combating climate change. One issue of great topic was reducing the cost of removing a metric ton of carbon dioxide in the atmosphere from the costly \$600-\$1,000 range to \$25. While carbon removal from the atmosphere has been advertised as a critical component in combating rising temperatures, proponents at the conference argued that such a goal would only divert time and resources from more feasible and efficient solutions. Fostering a continued discussion of existing research

Once discussion and presentation had ended, two rounds of poster sessions began. Participants were able to freely interact with the poster presenters and listen to their projects as well as suggest ideas and renditions.

"It's nice to have an informal gathering where you can freely express ideas and talk



THE TECH — VERO

CIENCE

Professors, Researchers, and Attendees gather in the Samberg Center for the beginning of the Research Day Ceremony.

to professors you usually wouldn't get the chance to talk to about your research," said second-year PhD student Evan King of the Wainwright Lab.

Senior undergraduate Richard Chen '25 researchers the distributive impact of variable electricity pricings to optimize energy use and the effects on all income brackets. His days are flooded with calculations, but events like the CEE Annual Research Day remind him of the tangible impact his work has.

Electricity bills are part of people's day-to-day lives, so "seeing how they experience that and their ideas has definitely brought me more excitement in terms of realizing that this project really does affect people," Chen explained. "Many conversations with audiences that come by reminds me exactly just how relevant this is and how critical this is."

Honoring the best posters and presenters

The event culminated in an awards ceremony. The top three prizes in best poster went to Master's student Yu-Hsuan Hsu, junior Margarita Zambrano, and PhD student Ilan Upfal.

"It's exciting, because I was so nervous about this research day. It was my first time present[ing] such a poster," Hsu said. "I'm very grateful for it and thankful for everyone's help."

The award for best talk went to PhD student Jackson Jewett. About 8% of the world's carbon dioxide emissions come from the cement industry, Jewett said in his presentation. His research focuses on creating more sustainable concrete through topology optimization. "Concrete is a wonderful material, but it's very complex, and we need to understand that complexity during the design and optimization process," Jewett said. By using computer science simulations to pick the best placement of both concrete and steel in the design of a cement beam, Jewett made the beam bear a 40% heavier load than an unoptimized beam with the same volume of material.

The CEE Annual Research Day not only celebrates the work currently being done by students in Course 1, but it aims to foster new innovative projects. As PhD candidate Randall Pietersen explained, the format motivates presenters to "digest what they do in a mode of presentation that you understand, [which will] definitely will help you make connections you wouldn't have seen."

"A lot of them are trying to address climate change in very diverse ways," summarized CEE Masters of Engineering student Eileen Zhang, an event attendee. "I think it's really cool that they bring it all together.

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ION NEWS FEATURES CAMPUS LIFE ARTS

Cachet in a time of crisis

DOGE's credibility among many Americans rests upon the illusion that it is run by qualified individuals. As students, faculty, and alumni, we must use the prestige of our Institute affiliation to dispel this illusion

By Hairuo Guo

It's easy to conflate distance with displacement and speed with progress. One month of the new Trump administration has shown that Elon Musk's Department of Government Efficiency (DOGE) hopes that we've forgotten the difference. To date, the misleadingly named advisory body has propelled the country backwards under the guise of progress by demanding essential government employees be fired, health sciences funding be slashed, and unvetted access be provided for privileged data on millions of Americans. The official DOGE website asserts that this is the will of the people: that they have "voted for major reform." It's undeniable that voters want reform and that the federal government sclerotic when it comes to innovation — needs reform. Yet people's faith in DOGE's ability to carry out this work judiciously and effectively rests on the illusion that it is staffed with qualified individuals. This illusion is one which we students, faculty, and alumni must help dispel.

The sleight of hand at play is that the young, inexperienced staffers carrying out DOGE's dirty work — less-than-affectionately labeled by federal employees as the "muskrats" — make up for both youth and inexperience through sheer brilliance. This gimmick has been convincing. Those who support DOGE point towards supposed brilliance as justification for its actions and as the basis for feeling that the reform is in good hands. Lending additional tangibility to this misdirection are soundbites from friends and family of some muskrats that cast their intelligence in superlative terms. Taken together, it's a compelling vision of some of America's best, brightest, and most eager being tasked with tackling some of the most challenging problems we face in

One of the benefits of time spent at the Institute is that we become familiar with uncommon brilliance. With this familiarity comes also intimate knowledge of its limitations.

One of the benefits of time spent at the Institute is that we become familiar with uncommon brilliance. With this familiarity comes also intimate knowledge of its limitations. From my time not too long ago, there is the anecdote of the International Math Olympiad medalist who tried to cook dry pasta without water. Most of us know of or have had the backhanded honor of being featured in similar stories. We learn that sheer intellect alone does not make up for inexperience or immaturity.

Cutting federal spending and promoting effective governance are hardly new ideas. Under the Clinton administration, Vice President Al Gore led the bipartisan "National Partnership for Reinventing Government" initiative with those exact goals. Abstaining from Executive overreach, they accomplished reform - not the illusion thereof — by conducting thorough investigations of agencies using those who best knew the system's flaws: experienced federal workers. While Musk lines his own pockets with government contracts, DOGE's quest for "efficiency" has exposed little besides the inexperience and immaturity of its staffers and the fact that they are utterly unqualified to carry out the reform that is their stated ambition. As smart as some of the muskrats might be, they have made juvenile errors such as leaving the official DOGE's database unsecured, allowing anyone to access and modify its contents. They have been fired from previous jobs for leaking proprietary security information and they have called out for the normalization of hate against ethnic minorities on social media. America is about to learn the same lesson that we did about intelligence and its limitations, with much more than a ruined dinner and an evacuated dorm as consequences.

MIT's cachet, the prestige of its name conferred upon those affiliated, is a tool not to be underestimated. As some of the muskrats are the "best and brightest" to those close to them, so are many of us to our friends and neighbors. From my experience, when we speak with humility and good faith, people listen. As DOGE's actions begin to spark backlash, even in states that voted for the Trump administration, remember that your voice has disproportionate power within the communities in which you grew up. Call your Congressional representatives, write to your local newspapers, and talk to your friends back home. Dispel the illusion that what DOGE is doing, and what its staffers are capable of, is progress.

Hairuo Guo is a Course 6-3 and Comparative Media Studies graduate from the

Battlecode at 25: how a whimsical idea became an enduring MIT love story

Battlecode reconnects with its founders, evolves with new technologies, and continues to inspire a global community of gamers and coders.

By Arjun R Narayanaswamy

In 2001, my junior year at MIT, I embarked on what I now recognize as my first real startup: a programming contest called 6.370, the Battlecode Programming Competition. At the time, there was 6.270, an incredibly popular Independent Activities Period (IAP) Lego robotics class. I was VP of the MIT IEEE-ACM organization, which represents branches of the Institute of Electrical and Electronics Engineers (IEEE) and the Association for Computing Machinery (ACM). I found myself seated at an Eta Kappa Nu dinner between Anne Hunter, EECS department secretary and Professor Michael Ernst, my professor from 6.170. Since I was absolutely terrible at hardware design, I casually asked, "Why isn't there a virtual version of 6.270? Let's call it 6.370." Their response: "Why don't you create it?" And so... the contest was born.

It felt audacious, ambitious, and just within the realm of possibility. But it also completely took over my junior year. I had to navigate uncharted territory — securing course number, finding a faculty advisor getting sponsorship from Microsoft and Morgan Stanley, choosing a game, and, most importantly, finding the incredible Paul Pham '04 who built the entire game engine. The contest ran during IAP, attracting more than 40 teams. A live audience of over 200 people gathered to watch algorithms move white and black pieces around on a screen to play an ancient Hawaiian board game named "konane." Only

At the same time, I was finding my junior year at MIT increasingly difficult. I was an international student far from home. I was experiencing my first real heartbreak. A back injury forced me off the fencing team. Prescribed codeine for the pain, I found myself unable to think clearly enough to perform well in my 6.046 algorithms class. I escaped that class with a C. As an honors student at the start of the year, I felt like I was in personal and academic freefall.

Yet I had stumbled across something special - something that mattered, and had appeal. For the next two years, Paul ran the competition. Along with Hesky Fisher '02 and GJ Snyder '02, he rewrote the game format from a Hawaiian board game to today's beloved format - a realtime strategy game. The 2003 contest winners, Aaron Iba '05 and Dave Greenspan '07, started the "giving back" tradition, becoming the next year's organizers. The reach and popularity of the contest snowballed. Jerry Mao '23 competed as a high schooler, then came to MIT and ran the contest for two years. Alumni give guest lectures over IAP and are active in the Battlecode Discord community. The contest has outlived many of us at MIT by decades carried forward by a staggering 25 generations of students.

Incredibly, this year's students were -5 years old when Battlecode began. A team of over ten student developers came together last March to plan and run this year's edition. It is now MIT's longest-running student-run programming competition course and the largest by participation. MIT teams, I was surprised to learn, are no longer the usual winners. Over 400 teams participate from all over the world across four tracks: High school, US College, International College, and MIT Newbie. Finalists are flown to MIT, and students gather every January to watch virtual bots bash each other on screen — just like in 2001.

Because it really wasn't about me; it was about our puzzle**loving community that** has since poured their energy into Battlecode year after year, simply for their love of playing the game.

Back in Boston after many years, I got in touch with the Battlecode community. The current team of developers told me they'd been working to recover the contest's early history and move the game forward into a world of Python, machine learning, and large-scale AI. They invited me to share a meal to discuss the past and brainstorm the future. How will this pan out exactly, I don't know, but this is how nerdy love grows and propagates. (If you'd like to get involved in any way, please also email 6370-chair@mit. edu and jump in for 2026!)

Starting 6.370 changed more than just the programming scene at MIT. It changed me. It reshaped my career, skills, and confidence. It gave me the courage to return home to India in 2007 and build two companies there. It forced me to take on things I had no idea how to do — things that nearly broke me, things that ultimately defined me. It has done this not just for me but for thousands of MIT students over the years

- the founders of Dropbox, Regression Games, and Amplitude, amongst others. We all learned how to persist through failure, how to be bold, and, most importantly, how to trust in each other as a team and as a community. In the end, no one builds something like this alone.

Consider this: of all the things I did or tried to do as a student in 2001, Battlecode made the least "practical" sense. And yet it is the only thing from my junior year that is still alive in 2025. Why? Because it really wasn't about me; it was about our puzzleloving community that has since poured their energy into Battlecode year after year, simply for their love of playing the game. What was a crazy, difficult idea for us has become, through a quarter-century of play and participation, something quite sane and perfectly delightful today.

So maybe that's the real lesson — do crazy, nerdy stuff if your heart tells you to. Sometimes things will look hard and the future will be unclear. This is just as true today with the AI boom, as it was in 2001 with the dot com bust. But know this: if you can find a way to start your journey with a community that you have genuine love and consideration for, you'll almost always find that you won't be alone 25 years later, because there's always another exciting chapter to write in a good MIT love story.

Arjun R. Narayanaswamy SB '02, MEng '03, was the founding MD of catamaran.in, Co-founder of soroco.com, and is currently working on e6data.com

OPINION POLICY

Management

The Opinion department is collectively managed by the Editorial Board of The Tech, which consists of the Publisher, Editor-in-Chief, Managing Editor, Executive Editor, and Opinion Editor.

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A Guest Submission, which may be designated as either a Guest Column or a Letter to the Editor, may be written and submitted by any member of the MIT community.

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Electronic submissions encouraged and should be sent to

tt-opinions@mit.edu. submissions should be addressed to The Tech, P.O. Box 391529, Cambridge, Mass. 02139-7029, or sent by interdepartmental mail to Room W20-483. Electronic submissions will be prioritized over hard copy submissions. All submissions are due on Thursday two weeks before the date of publication (i.e. by the publication prior to the target publication).

WEATHER **ENTERTAINMENT** OPINION NEWS FEATURES CAMPUS I

Raspberry

Solution, page 12

6	9			4		7	5	
	4	3		7		8		1
1		8						2
		1	4	9				
		7	3		5	6		4
	6		7					
7	3	6		2		5		
2	1	5	9				3	
4	8		5	3	7	1	2	6

Instructions: Fill in the grid so that each column, row, and 3 by 3 grid contains exactly one of each of the digits 1 through 9.

Solution, page 12

×120		+6		+4
			2	
	+18			
+15			3	
			+12	

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

Block Party by Manaal Mohammed

Solution, page 12

Across

- 1 World Wide ____
- 4 Tease
- **7** A little, in music
- 8 Many bodybuilders are on it
- 9 "if u ask me"
- 10 Heaven-sent food
- 11 The Weeknd hit 13 Knee part, briefly
- **14** Morning after pill brand

SARCASM, MATH, AND LANGUAGE

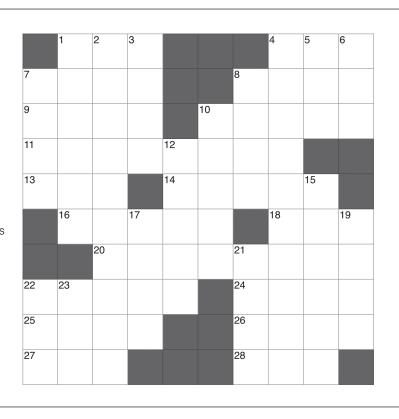
by Randall Munroe

- **16** "Squid Game" setting
- 18 Critical hosp. areas 20 Pre-Lent festival
- 22 Ghosts, to many
- 24 Wreck
- **25** Bird associated with Isis
- 26 "It was me"
- 27 Golden _
- 28 Khan of Khan Academy

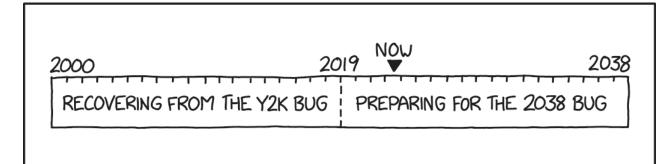
Down

- 1 Bobby who was backing guitarist for Sam Cooke
- 2 Navigate like a bat
- **3** Betty
- 4 Home of more than
- 16,000 slot machines

- 5 "Atonement" author McEwan
- 6 Cup holder?
- **7** Location of a famed leaning tower
- 8 Black-tie affair
- **10** 1998 Disney princess
- 12 Copycatting
- **15** 11-across country 17 Half-baked?
- 19 Saucer or toboggan
- **21** Eye part 22 Sublime genre
- 23 Smoke



[2697] Y2K and 2038



REMINDER: BY NOW YOU SHOULD HAVE FINISHED YOUR Y2K RECOVERY AND BE SEVERAL YEARS INTO 2038 PREPARATION.

It's taken me 20 years, but I've finally finished rebuilding all my software to use 33-bit signed ints.

[1592] Overthinking

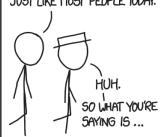
I FOUND A STUDY* THAT SAID

WATER IS GOOD FOR YOU. BUT YOU SHOULD JUST DRINK IT WHEN YOU FEEL THIRSTY AND NOTGO OVERBOARD. UH HUH? *DOI: 10.1097/JSM.00000000000000221

ANOTHER STUDY* FOUND THAT PROLONGED SITTING ISN'T NECESSARILY BAD FOR YOU, AS LONG AS YOU'RE ALSO GETTING EXERCISE.



NOW A STUDY* CLAIMS THAT HUMANS IN PRE-INDUSTRIAL SOCIETIES STAY UP LATE AND SLEEP 6 OR 7 HOURS A NIGHT, JUST LIKE MOST PEOPLE TODAY.



*Doi: 10.1016/j.cub.2015.09.046

MAYBE WE'RE OVERTHINKING IT. BUT WHAT CAUSED OUR MODERN EPIDEMIC OF OVERTHINKING?! PLUMBING? OR IS IT EMAIL? MODERN? I BET THE WHEEL WAS INVENTED BY SOMEONE OVERTHINKING "PUSHING."

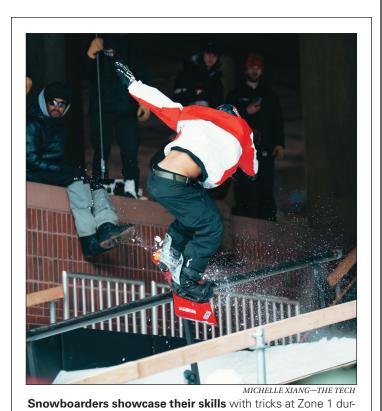
" figuring out which ideas are true is hard. " On the other hand, it took us embarrassingly long to clue in to the lung cancer/cigarette thing, so I guess the real lesson is

Admissions, from Page 4

These cuts also have significantly altered the graduate program admissions process. As federal funding for research is looking less and less reliable, seniors like Isaac Lock '25, a biological engineering major, and Eleanor Winkler '25, a physics major, are finding graduate school results to be impacted accordingly. Lock noted "delays in admissions decisions, greater selectivity, and warnings that the future is uncertain" from graduate programs he has applied to, including the Baylor College of Medicine Genetics & Genomics and Johns Hopkins Human Genetics and Genomics PhD programs. Winkler also re-

ported a similar experience, explaining that the graduate school she applied to has delayed their acceptances and plans to reduce their cohort sizes.

The natural and physical sciences aren't the only fields being impacted by this. Paige Yeung '25, a mathematics major, said that although her field provides academic year funding, due to the current situation, "summer funding is going to be very uncertain" and she is "afraid [her] stipend will not be enough to live on." Yeung wrote, "My field already gets barely any funding and is quite far removed from politics, so it's frustrating that the current political situation is making it even harder to seek a career in my field."



ing Red Bull Heavy Metal on Saturday, February 22nd.

Leave marks not sharks!

Email

Solution to Pecan from page 11							
×120 3	5	2	4	1			
4	1	5	2	3			
2	+18	1	5	4			
+15 1	2	4	3	5			
5	4	3	+12 1	2			

Solution to Block Party									
	¹W	E	³В				⁴R	5	в
⁷ P	0	С	0			[®] G	Е	Α	R
9	М	Н	0		M	Α	Ν	Ν	Α
¹¹ S	Α	0	Р	¹² A	U	L	0		
¹³ A	С	L		¹⁴ P	L	Α	Ν	¹⁵ B	50
	¹⁶ K	0	¹⁷ R	Е	Α		¹⁸ E	R	¹⁹ S
		²⁰ C	Α	R	Ν	21	V	Α	L
²² S	²³ C	Α	R	Υ		²⁴ R	Α	Z	Е
²⁵ K	ı	Т	E			26	D	1	D
²⁷ A	G	Ε				²⁸ S	Α	L	

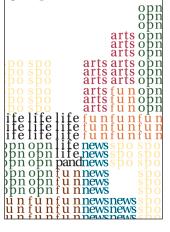
Are you a tetris ninja?

> Use your powers for good!

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...by joining the production department at The Tech!

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The Spring 2025 Karl Taylor Compton Lecture

Al in an Age After Reason: A Discourse on Fundamental Human Questions



Ben Vinson III President, Howard University

Monday, March 17, 2025 4-5 pm

Samberg Conference Center (Building E52) 7th Floor

All MIT community members are invited. Registration required: bit.ly/compton25



Massachus Institute of Technology

COMPTON LECTURES

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John D. Joannopoulos

Francis Wright Davis Professor of Physics Director, MIT Institute for Soldier Nanotechnologies

Killian Award Lecture

Working at the Speed of Light

Thursday, March 13, 2025 4:00 pm | Huntington Hall, Room 10-250

Reception to follow in The Nexus (14S-130 in Hayden Library)

All MIT community members are invited. More information: bit.ly/killianlecture25



KILLIAN LECTURES James R. Killian, Jr. Award and Lecture Series

