

# Gates and Black donations to MIT tied to Epstein

## 2020 Goodwin Procter investigation missed donation links

By *The Tech* News Staff

New emails in the Epstein Library released by the U.S. Department of Justice appear to contradict Bill Gates's statement in the Goodwin Procter report that Jeffrey Epstein had nothing to do with his donations to MIT. The report was the culmination of the Institute's investigation into its ties with the convicted sex offender in 2020.

The new records, part of the Justice Department's release in January led by Rep. Thomas Massie '93 SM '96 (R-KY) and Rep. Ro Khanna (D-CA), indicate that Epstein met and coordinated with top advisors to Microsoft co-founder Bill Gates on donations to MIT.

Email correspondence also shows that Epstein helped coordi-

nate a \$5 million dollar gift to the Institute from Apollo Global Management co-founder Leon Black, which has not been previously reported. The 2020 Goodwin Procter report stated that while Black has "publicly acknowledged donating to charities 'affiliated' with Epstein," he did not address "whether Epstein asked him to donate to MIT"

In 2014, Epstein claimed to have organized a \$2 million dollar anonymous gift to MIT from Gates and a \$5 million dollar anonymous gift from Black. But the 2020 report notably left many questions on the veracity of these claims unanswered.

### Bill Gates

According to the 2020 report, representatives of Bill Gates told Goodwin Procter that support "for MIT and the Media Lab" from "Mr.

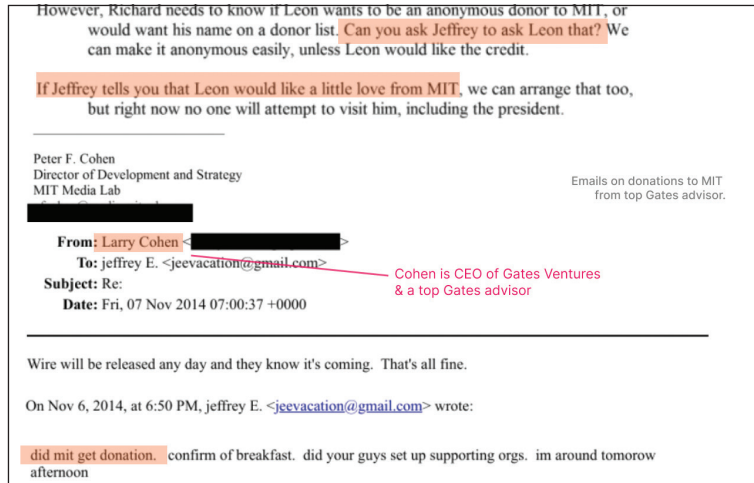
Gates and various Gates-related entities" had "always been completely independent of Mr. Epstein."

Yet several email exchanges from 2012 to 2014 offer a different account. One email chain from October 2014 between Epstein and Larry Cohen, a top Gates advisor who serves as the CEO of Gates Ventures and on the board of Khan Academy, has the subject "Re: MIT."

In the chain, Cohen wrote to Epstein to "let them know we are prepping letter, etc and wire will go 3rd of Nov," with "them" referring to the Institute.

Later, Epstein replied to describe a call he had with Boris Nikolic, another Gates advisor. He wrote that Nikolic spoke for an hour with

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NEWS STAFF—THE TECH

New documents from DOJ detail Epstein's involvement in Bill Gates and Leon Black donations to MIT. Emails cropped and condensed for clarity; link to full DOJ documents are available in the article.

# No Epstein probe yet, President Kornbluth says

## Kornbluth says revelations "recoiling" but still "premature" to launch investigation

By Jada Ogueh and Samuel Yuan  
NEWS EDITORS

"All of these revelations make us recoil," MIT President Sally Kornbluth stated in an interview with *The Tech* on Feb. 11 regarding Epstein's ties with current and former MIT affiliates. "But it's premature to say how we're going to proceed," she added.

"This is a really fast moving train," Kornbluth said, pointing to the roughly three million pages of

Epstein documents released by the U.S. Department of Justice on Jan. 30, 2026.

According to Kornbluth, Institute administration is not currently running an internal investigation into the new files; rather, they are just "waiting and seeing." She also mentioned that MIT was not actively "looking for incidents," citing how there are "people everywhere mining" the files.

When asked if MIT was going to release an official statement about

the situation, Kornbluth said that she would not like to say something preeminently and have to "change course" a few days later due to the rapid pace of new updates.

### On the Goodwin Procter report

This is not the first time the Institute has faced public scrutiny regarding the ties between certain faculty members and Epstein. Under former President L. Rafael Reif in 2020, the law firm Goodwin Procter was

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*The Tech* interviews MIT president Sally Kornbluth on Wednesday, Feb. 11, 2026.

# Buddhist Chaplain corresponded with Epstein

## Chaplain wanted to construct retreat center with Epstein funds

By *The Tech* News Staff

According to Epstein Library documents, MIT Buddhist Chaplain the Venerable Tenzin Priyadarshi and former Media Lab Director Joichi Ito corresponded with sex offender Jeffrey Epstein from 2015 to 2017 regarding donations to the Prajnopaya Institute, a Buddhist nonprofit orga-

nization. The nonprofit is related to Prajnopaya at MIT, a religious organization that holds Buddhist events and educational programs for the MIT community. According to a 990 form from 2017, the full name for the Prajnopaya Institute was "MIT Office of Religion Prajnopaya institute," and

paya for the proposed construction of a retreat center in Massachusetts. The 2020 Goodwin Procter report does not mention the donation or Priyadarshi's meeting with Epstein in 2016.

Priyadarshi is the Founding Director of The Dalai Lama Center for Ethics and Transformative Values at

### Ito introduces Epstein to Priyadarshi

In an email sent in May 2015, Ito recommended Epstein to meet Priyadarshi. At the time, Priyadarshi served as Director of the Ethics Initiative, a Media Lab group active from 2015 to 2019 responsible for projects focused on ethics and wellbeing. The group's work is now conducted under The Dalai Lama Center.

"We're working on some cool things like a meeting about cognitive machines and man," Ito wrote. "I think you'll probably like him. He can get the Dalai Lama." Epstein expressed interest in meeting Priyadarshi, replying, "Why not have different types of money for different groups?"

In March 2016, Epstein met Priyadarshi and Ito at the Media Lab. Shortly after the meeting, Epstein wrote to Ito about how he "really enjoyed Tenzin." In response, Ito wrote, "We can now embark on your path to enlightenment."

### Epstein donates to Prajnopaya in 2017

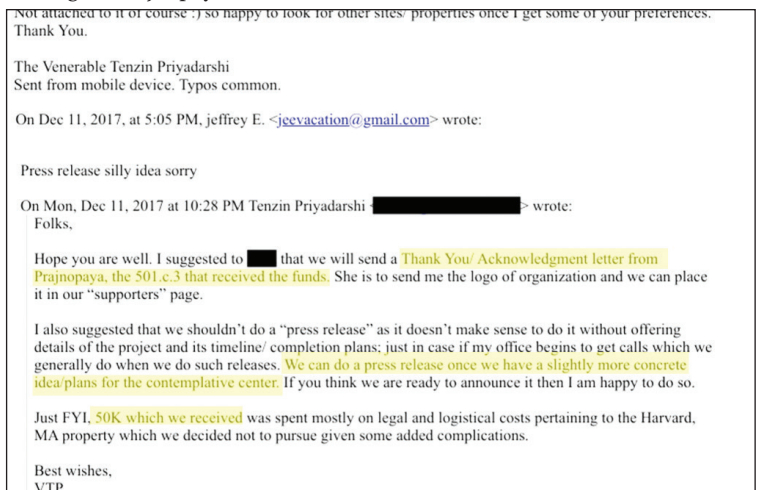
Based on emails that Ito and Priyadarshi sent to Epstein in 2017, the purpose of the donation was to build a retreat center for Prajnopaya. In April 2017, Ito emailed Epstein that he planned to start looking at proper-

ties with Harvard professor Moshe Hoffman at the end of the month.

The same month, Ito messaged Prajnopaya's bank account information to Epstein. He then emailed his personal accountant, Richard Kahn, telling him to donate \$50,000 to Prajnopaya from Education Advance. The defunct STEM education nonprofit organization was founded by Svetlana "Lana" Pozhidaeva, a Russian model with ties to Epstein. According to 2017 federal statements for the J. Epstein Virgin Islands Foundation, the foundation donated \$55,000 to Education Advance under the category of "enhanced education." Tax filing data from Propublica's Nonprofit Explorer reveals that Education Advance's total revenue in 2017 was \$56,500, indicating that Epstein was the main contributor by far.

Ito expressed excitement about a potential location for the retreat center in an August 2017 email to Epstein, stating that he visited the place with Hoffman and wanted to build the center on the top of a hill. "It's going to be a really beautiful building in a beautiful place if we sort this out," Ito wrote. In a September 2017 email, Ito mentioned that the site was in Harvard, in Massachusetts.

Priyadarshi, Page 3



NEWS STAFF—THE TECH

In 2017, MIT Buddhist Chaplain Tenzin Priyadarshi corresponded with Jeffrey Epstein about donations to the Prajnopaya Institute.

its address was MIT's official address at 77 Massachusetts Ave.

In 2017, Education Advance, a nonprofit funded primarily by Jeffrey Epstein, donated \$50,000 to Prajnop-

MIT, a nonpartisan think tank that promotes dialogue about ethics. He is also the Founder and Director of the Prajnopaya Institute and Foundation.

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# Meanwhile, Harvard expands Epstein probe

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hired to investigate the ties between the convicted sex offender and MIT, culminating in a 61-page report.

Kornbluth asserted MIT’s record of “paying close attention” and “thinking carefully,” lauding the Goodwin Procter report for being “thorough” and exceeding other “such investigations in many other sectors of society.”

Many of the same names in the 2020 report, including current professors Seth Lloyd, Neil Gershenfeld, and Ed Boyden, appear again in the latest trove of files. However, these new documents paint a far more vivid picture on the nature of these relationships.

For instance, in one newly released email uncovered by *The Tech*, Professor Gershenfeld suggested to Epstein that their meeting would be a “warm-up” for “more entertaining venues”; in another, Professor Boyden accepted an offer to visit Epstein’s New Mexico ranch along with Harvard Professor Martin Nowak, which was not explicitly disclosed previously.

Meanwhile, the ramifications of the new trove of files are already being felt at peer institutions.

Down Massachusetts Avenue, Harvard has recently expanded its Epstein probe, and, in November 2025, former Harvard University President and professor Larry Summers ’75 resigned from his teaching role due to new revelations regarding his long-term relationship with Epstein even after the sex trafficker’s 2008 conviction. At Yale, computer science professor David Gelehrter was sus-

pending from teaching after troubling emails with Epstein surfaced, including one describing an undergraduate as a “v small goodlooking blonde.”

At this time, it is unclear if MIT will take action as well, as Kornbluth refused to comment on individual cases during the interview.

### On vetting sponsor money

In the wake of the Epstein findings, Kornbluth gave *The Tech* an overview of new procedures implemented to vet sponsor money following the 2020 report. She mentioned “vetting at multiple levels,” including with senior leadership overview and a gift acceptance committee. “People always portray universities and university presidents as seeking the money,” she said, but “we really want to be on the right side ethically.”

According to Kornbluth, MIT has turned down “significant” gifts where the individual or circumstances have been “troubling.” She acknowledged situations where MIT would have to renege on a gift after troubling details emerged, stating they would not “hesitate” to return money or “to bring it to light.”

“The most important thing... right now is transparency,” she added.

In early June of last year, however, MIT discontinued the Brown Book, a supplemental publication listing the fiscal contributions of primary and direct research sponsors. According to MIT spokesperson Kimberly Allen, doing so brought “MIT’s finance reports in line with typical practice while remaining fully compliant with federal requirements.”

Referring to the Epstein funding incidents, Kornbluth noted them as a very significant event in the history of the Institute. “None of us want to be there again,” she said.

*The Tech* also asked about the Institute’s general position on navigating public scrutiny regarding funding from controversial sources. “I want to be transparent, but I also don’t want to rely on others to tell us what the right thing and the wrong thing to do is,” Kornbluth said.

Pointing to an “ever-changing” political landscape around fundraising, especially international fundraising, Kornbluth noted that MIT has to “interact with other entities in ways that we think are morally right and satisfactory.”

“We’re not doing quid pro quos in terms of donations; we believe that when people give MIT money to do the work, it’s to do our best and highest work, and we just have to assess whether the constraints and the source will allow us to do that,” she said.

Referring broadly to Epstein’s involvement with MIT research groups, Kornbluth noted it was “just one example of something that can go wrong” adding that the way to proceed is not to

“scrutinize” every research group but to think about “what responsible conduct of research means overall.” She explicitly mentioned how MIT Vice President for Research Ian Waitz is “rethinking that [and] putting in new educational modules.”

### On immigration and international students

On Dec. 1, 2025, President Trump sent U.S. Immigration and Customs Enforcement (ICE) troops into Minnesota after weeks of criticizing the state’s significant Somali population following reports of a fraud scandal. Doing so sparked protests across Minnesota, with heavy ICE crackdown on demonstrators in response.

Later, on Jan. 7, a video of the killing of Renee Good, a 37-year-old U.S. citizen, served to spark nationwide outrage, including in Boston, which has seen several anti-ICE protests within the last few months. When asked about a hypothetical scenario involving ICE appearing on campus or individuals being “hounded,” Kornbluth said that it would “very likely elicit some strong response” from MIT.

Kornbluth added that she was “horrificed” as a “human being” about what is happening in the country right now in relation to how some of these people were being treated, stating that, “I don’t care whether they’re from other countries, the ‘American First’ thing doesn’t resonate with how you treat people.”

On the subject of international students at MIT, Kornbluth praised them as “the lifeblood” of the science and engineering that takes place at the Institute. “It’s an incredibly important value to me to protect these students,” she said. “What that looks like? I don’t know.”

“What I can say is, regardless of what your positions are on a variety of issues, the best thing to do is to call the MIT Police. Our police do not give out information on our students.

They’re not going to let people into places where they’re not supposed to go without warrants,” Kornbluth said. “If there’s any problem with students, we’ve already arranged so that they can get pro bono legal advice, etc.,” she added.

### On the TFUAP’s future plans for undergraduate education

*The Tech* also asked Kornbluth to share some words for students expressing their opinions at the TFUAP town hall on Feb. 23. The 85-page proposal listed numerous changes to undergraduate education at MIT. “I would have a rational, educational or lifestyle reason for the answers,” she said. “I would come in expecting respectful dialogue.”

“This is not just performative. [Faculty and administrators] want to hear what folks have to say,” she urged.

“These changes are not dramatic. It’s not like we threw out the whole system, but they’re targeted to things that we really know that students need,” Kornbluth said, mentioning how she has “repeatedly” heard employers express concerns that students are not prepared to work as a team, especially considering that “some members of that team in the future may be AI.”

Kornbluth acknowledged the arguments about moving the add/drop dates earlier and removing double booking. “But one thing I learned as the provost at Duke, and I know now as president: the curriculum belongs to the faculty,” she said. “[The curriculum] should be a conversation between the faculty and the students.”

# Priyadarshi sent Epstein Zillow listing of house

Priyadarshi, from Page 1

In November 2017, Priyadarshi sent an attachment of properties to Ito, which then got forwarded to Epstein. Ito asked, “What do you think about this Jeffrey? Is this something you’d be willing to fund?” Priyadarshi also sent an email to Epstein about a Zillow listing of a 7,250-square-foot house in Concord, Massachusetts. “So happy to look for other sites/properties once I get some of your preferences,” Priyadarshi wrote.

The \$50,000 donation was spent on “legal and logistical costs” for the

Harvard property. Ultimately, however, the property was not under further consideration because of “some added complications,” according to Priyadarshi.

### Education Advance requests recognition

Given that Prajnopaya received a \$50,000 donation, a representative from Education Advance asked Epstein in November 2017 if Prajnopaya could recognize the organization on their website or in a press release. The sender’s name and email address was redacted in the file.

According to an email sent by Education Advance in December

2017, Priyadarshi initially did not want to “publish a ‘thank you’ because the donation wasn’t big enough,” causing Epstein to reply with “???”

Shortly after, however, Priyadarshi proposed to Education Advance that Prajnopaya would send a letter of gratitude and acknowledgement regarding the donation. He added that Education Advance’s logo could be added on Prajnopaya’s “supporters” page. In regards to a press release, Priyadarshi expressed reservations about writing one until Prajnopaya had “slightly more concrete ideas/plans” for the retreat

center, as the organization had not finalized details for the project’s timeline and completion plans.

Epstein also agreed that Priyadarshi should not write a press release, calling it a “silly idea sorry.” Priyadarshi replied, saying, “Glad you think so :) I didn’t want to be the one to convey this to them :)”

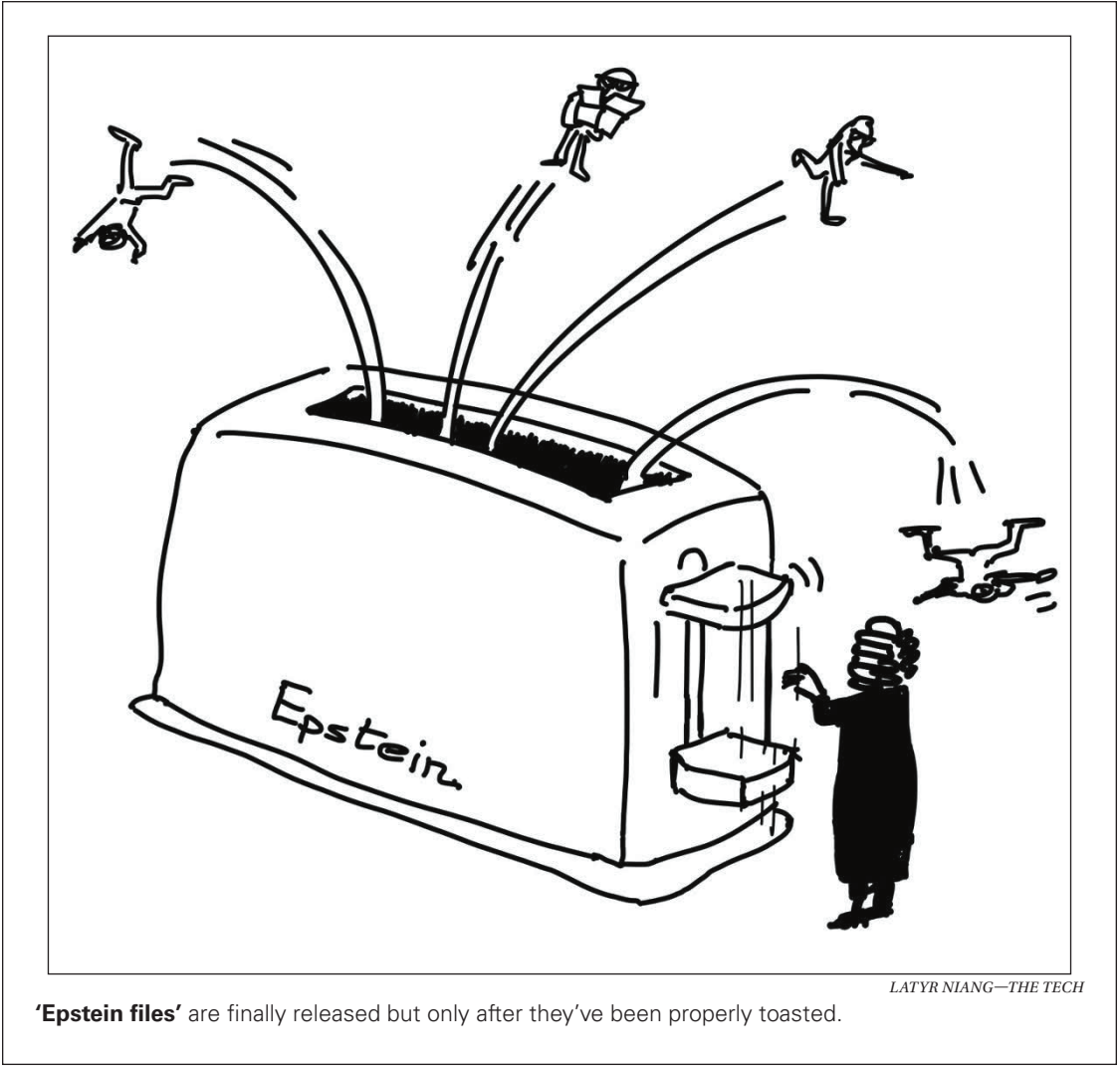
### MIT responds to Priyadarshi in the Epstein files

In a statement to *The Tech*, MIT Buddhist Chaplain Linda Krause denied that Priyadarshi “solicited any funding from Epstein.” However, this contradicts the emails in the Epstein Library, which show records

of communication between Priyadarshi and Epstein from 2015 to 2017. Krause stated that Prajnopaya returned the \$50,000 donation in 2019 “in its entirety” after learning that Education Advance’s funds came from Epstein.

MIT spokesperson Kimberly Allen stated that the Prajnopaya Institute is not an “MIT entity.” Although Priyadarshi is affiliated with the MIT Office of Religious, Spiritual, and Ethical Life, Allen clarified that Priyadarshi is not an MIT employee.

As of time of publication, Priyadarshi did not respond to *The Tech*’s request for comment.



LATYR NIANG—THE TECH

# Do you have a question for President Kornbluth?

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# MIT holds 52nd annual MLK luncheon

Dean of Engineering Paula Hammond '84 PhD '93 was the keynote speaker

By Vivian Hir  
SENIOR EDITOR

On Feb. 11, over 250 people attended the 52nd annual Martin Luther King Jr. Celebration luncheon held in Walker Memorial. Organized by the MLK Celebration Planning Committee, the celebration featured President Sally Kornbluth as the host, with Dean of Engineering Paula Hammond '84 PhD '93 giving the keynote speech. This year's celebration centered on Dr. King's iconic quote from "Shattered Dreams," a chapter from his 1963 sermon book *Strength to Love*: "We must accept finite disappointment, but never lose infinite hope."

After an invocation from Reverend Thea Keith-Lucas, President Kornbluth delivered opening remarks. She began by describing the current state of affairs in the United States as "fractured, isolated, and pitted against each other." Despite the pessimistic outlook, Kornbluth reminded the audience the importance of finding a sense of community and belonging. "The solace we all take from [the luncheon] could not be more relevant now," Kornbluth said.

Kornbluth then introduced Dean Hammond, commending her for exemplifying MIT's values of excellence and curiosity throughout her academic career. Kornbluth also praised Hammond for continuously striving to make MIT a warm and welcoming place. "She smiles a lot, and that's a great way to make room for everyone," Kornbluth said.

Emcee Michael Ewing '27 then gave a welcome speech about accepting finite disappointment but not losing infinite hope. "It's this idea that we can never let fleeting setbacks stop us from moving forward," Ewing said. "Let whatever setbacks that we face strengthen our resolve, not shatter it." He urged the audience to embrace Dr. King's words of viewing each challenge as an opportunity for growth and hope for a brighter future.

Following Ewing's welcome, various undergraduates and graduate students gave speeches that reflected upon the life and legacy of Dr. King. Oluwadara Deru '26 highlighted that Dr. King's legacy came with major

costs, as he was under "constant and strategic attack." Despite this, Deru believes that people fighting for positive change in the world gain something invaluable from these experiences. "The beauty of linkages that cannot be broken, colleagues that turn into family, freedom and wins that are only won through sustained action," Deru said. She also implored the audience to not give up on the fight for change and continue to hold on to hope.

Ekua Beneman G, a chemistry PhD student, shared her story about the impact of the MIT Summer Research Program (MSRP) on her academic career. Beneman admitted that as an undergraduate, she was not well-informed about the PhD application process. At MSRP, however, she met David, an influential mentor who inspired her to apply to PhD programs. As a Black woman in science who actively engages in STEM outreach programs such as MITES, Beneman talked about the importance of accessibility in success. "Hope is choosing to pass forward what was once given to you at a place like MIT," Beneman said. "Infinite hope looks like mentorship."

Director of the Office of Graduate Education (OGE) Denzil Streete encouraged the audience to make infinite hope a daily practice through small actions that show joy and care for the community. "Care is a sudden refusal to treat people like problems to be solved instead of human beings to be supported," Streete said. He also discussed collective action as a way to share hope with others, citing the civil rights movement as an example. Streete left the audience with a question, asking, "Would you be counted among those who work behind the scenes to provide hope in testing times?"

After the MIT Gospel Choir performed the spiritual "Jesus Spoke to Me," Hammond gave a keynote address about her supportive upbringing, the lessons she learned at MIT, and the significance of Dr. King's quote in the context of today's issues.

Before becoming the Dean of Engineering, Hammond was the executive vice provost and vice provost for faculty. An Institute Professor,

Hammond was also the head of the Department of Chemical Engineering from 2015 to 2023, known for her innovative research in novel biomaterials, including electrostatic polymers and nanoparticles for drug delivery in cancer. Hammond received her bachelor's degree and PhD in chemical engineering (Course 10) from MIT in 1984 and 1993, respectively, and then joined the MIT faculty in 1995.

Hammond began the address by talking about her parents, who were her role models growing up because of their emphasis on education. Hammond's mother founded a nursing school at Wayne County Community College while her father was the director of health laboratories for the City of Detroit and was active in Detroit's NAACP chapter. Growing up in 1970s Detroit, Hammond noted that although there was progress towards racial equality, racism still existed. She recalled her parents being frustrated about the challenges they faced at work, but they persevered, and their actions ultimately paid off. "I believe [my mother] was an early example for me of finite struggles and infinite hope," Hammond said.

She then discussed her journey at MIT, from entering as an undergraduate student to becoming a faculty member. Hammond admitted that she felt a lot of impostor syndrome at MIT, as some members of the community made her feel like she did not belong, from "anti-affirmative action editorials in The Tech" to "misguided comments from instructors." Hammond credits the close friendships she made in organizations like the Black Student Union and Delta Sigma Theta for helping her navigate her MIT undergraduate experience. Although Hammond experienced academic challenges, she found that she had the power to shape her trajectory for the better, such as working hard to improve her grade in difficult classes. "By the time I finished, I had grown in confidence and left MIT feeling [that] I could handle just about anything with time and energy," Hammond said.

Hammond spoke positively about the changes MIT has experienced over the decades, including a more diverse student body and a near even



PHOTO COURTESY OF CORBAN SWAIN  
**Dean of Engineering Paula Hammond** gives a keynote speech at the annual MLK celebration luncheon at Walker Memorial on Wednesday, Feb. 11, 2026.

gender balance. When Hammond entered MIT in 1980, only 17% of undergraduates were women, compared to 48% of the class of 2029. She also highlighted the impact of MIT's research and discoveries on the world, from biomedical therapies to computer technologies. "MIT is moving us toward a more enabled future," Hammond said. Hammond then transitioned to discussing Dr. King's quote on finite disappointment and infinite hope. She elaborated upon the definition of finite, stating that the word describes "having limits or bounds" in mathematics. She used the Jim Crow era as an example of a finite era, stating that the oppressive period gradually came to an end after the rise of the civil rights movement. She praised the people who participated in the movement, as they continued to resist despite the violence and risks. "They knew that what was just and right would prevail, and that whatever finite challenges they faced, there would be a new time, a new day," Hammond praised.

Hammond recognized numerous challenges in today's society, from an increasing polarized country to a rise in misinformation. In light of these challenges, Hammond reiterated the definition of finite, stating that these disappointments are "limited, bounded" in time and intent. "Principles founded in fear, ignorance, or injustice ultimately fail because they do

not meet the needs of a growing and prosperous nation," Hammond said. Conversely, Hammond believes that infinite hope and faith will enable people to overcome setbacks and spur change, thus leading to a better future. She urged the audience to not let disappointments in the country "distract us from our mission."

Hammond shared that she faced many struggles in her life, from finding research funding as a new faculty member to challenges as a senior MIT leader. While she acknowledged that some of these challenges were "self-induced," she emphasized that all of them were finite in nature. What instead prevailed for Hammond was the concept of infinite hope. Hammond expressed gratitude for the mentors and colleagues that supported her career, as well as the students who offered valuable research insights. She also underscored the importance of inclusivity and diversity across all spectrums, from socioeconomic status to race.

Hammond ended her address by encouraging the audience to embrace infinite hope in their everyday lives. "Each of you represents a piece of Dr. King's dream," Hammond said. "We have a role to play in contributing to our future, and we each must embrace endless hope and continuously renew our faith in ourselves to accomplish that dream."

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FROSH FILES

# My time in Rwanda!

Many thanks to MISTI GTL Africa

By Shelly Yang  
CAMPUS LIFE EDITOR

Independent Activities Period, or IAP, is a time for students to explore interests and opportunities without the pressure of semester-long classes. Taking place after winter break, IAP presents an interesting choice for students. Some people choose to stay home for an extended winter break while others work on their personal projects on campus. A lot of people also choose to take classes offered only during this period, while some take on research or an internship.

This IAP, I decided to participate in MISTI's Global Teaching Labs (GTL) in Rwanda at the African Olympiad Academy (AOA). I'd work with my group and the Rwandan coaches to teach the IMO team, which included students from Tanzania, Uganda, Botswana, South Africa, Kenya, Namibia, and Nigeria.

We worked on developing our own curriculum, which might change in future years. This year was the first year of the AOA program, so everything was new. We selected problems for a baseline test and formed a methodology for splitting up the students into different classes. The students were amazing, and I'm sure this school will grow even more as the years go on!

I got to teach algebra and combinatorics! I didn't realize how tiring it would be. I had to teach for four hours per day, and on top of that, there were problem-solving sessions. There was a session in the morning

from 8:00 a.m. to 10:00 a.m., followed by a break, and another session from 10:15 a.m. to 12:15 p.m.

After that was problem solving from 3:45 p.m. to 5:00 p.m, during which I would give students problems to do. Honestly, it didn't feel too different from the sessions in the morning. There was another problem solving session from 7:45 p.m. to 9:30 p.m., but I didn't have to be there for that.

Overall, I had a very good experience! You definitely have a lot of time to get to know people and get immersed in the culture. People here are so incredibly kind and willing to help make sure you have a good time. It was my first time coaching in an olympiad format; it was intimidating to me at first, but the coaches all specialized in different subjects, which was enough to cover what we wanted to teach.

I would say Rwanda stands out in that it has very little corruption and is developing very quickly. It's also pretty safe; people were surprised to learn that I didn't generally walk out alone at night, because you can pretty much do that fine in Rwanda.

We got to go on a safari, visit a farm (where I milked a cow and held a lamb), and tour the capital, Kigali. Rwanda is a pretty small country, so while we were there for only three weeks, I felt like we got a pretty decent look at what it's like to live there.

As my first IAP, I'm really glad I spent it in a fresh environment! I really love traveling and teaching math, so this was the best of both worlds.

# Stratton's Cinderella

To my favorite study spot, the origin of my journalism, and boba and pianos

By Jada Ogueh  
NEWS EDITOR

To: Floor 4 of the Stratton Student Center  
I felt like a young deer, shivering with curiosity and a bit of fright, knees clacking together, when I first saw you<sup>1</sup>. You peered at me, blankly, as the elevator opened to Stud 4. You were so silent and still, save for the perfume of a classical piano remix of some pop song wafting. I waded through you like sludge, taking in the lump-shaped chairs, the occasional *ding* of the elevator, and mostly, the weight of being at MIT as an admit.

I, alone, plopped down on a green lump and called my mom. You grabbed my words from my mouth and swallowed them up in your silence. I felt small, just a body in your orbit. At CPW, I already felt small in this "grown-up" environment; old trees, cracked gravel, chalkboard classrooms, young adult scholars. I couldn't stand it. So I left you.

Fast forward to freshman year, burdened with 8.01 learning sequences and psets, I traveled up the Stud elevator to floor 5 — what a betrayal! Stud 5 twirled me around to the chatter of newly-minted frosh also navigating MIT's waters. With the half hubbub in the crowded, loud study room and half still, locked-in-ness in the quiet room, 5 confused me. After an hour, I looked down at my work, which was unfinished. While my body was in 5, my heart was inevitably with you.

The next day, I carried my 6.1200 pset up to you. The elevator opened; I was nervous, but you were still as usual. I carried myself to your lumps, gently seated my belongings and a small brown sugar boba from TeaDo, and opened my iPad. I put my headphones on and listened to "Ojuelegba" by Wizkid as I attempted discrete math for the first time. Your silence possessed me; I blinked, and hours had passed. I looked down at my work and saw the pset 75% done and two 8.01 learning sequences conquered. *Look at that*, I thought.

As I picked up my Apple Pencil again to continue working, the sharp sound of a tuba broke me from my focus. I jolted. It sounded again, and I peered around the booth to see an entire orchestra had set up in the room opposite me. To the left of the room, dancers piled into a studio. Students in the middle of the study space squeezed into a dragon costume. Waltzers danced in front of the UA office. The piano sang again. The elevator dinged. People's voices wafted in. It seemed silence wasn't all Stud 4 had to offer. Around 6 p.m., you would adorn your silver gown and transform from an un-assuming maid to a dazzling Cinderella. I appreciated your transformation. You weren't split, but unique. Sort of human. I no longer felt small. I felt like your companion.

I soon realized you hid more secrets. While I was walking around looking for *The Tech's* office, I saw club doors and mysteries locked behind keypads and storage rooms with props and chairs. It wasn't until I became News Staff and gained keycard access to the office that I was able to explore some of your ancient history.

W20-483 contains bookshelves full of newspapers from years past (1881 to be precise), storage cabinets with files and recollections, and a broken Coca-Cola vending machine with a crinkled note from an unknown K.J.M. reading, "Don't Steal the Fucking Quarters!" News staff meetings start at 6 p.m. on Sundays, so when the clock strikes six and you transform into Cinderella, so do I — in a way. I shift from a silent studier to a vocal news writer.

I've seen my biggest growth with you, from figuring out classical mechanics to becoming the V146 News Editor of *The Tech*. I kind of love you, I fear.

Sincerely,  
Jada  
<sup>1</sup> Some of the shivering might also have been due to the frigid CPW cold seeping into my cheap puffer from Amazon.



Students working in Stud 4.

JADA OGUEH—THE TECH

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CONCERT REVIEW

# Leif Ove Andsnes fits every round peg into the square hole

Which he does with varying levels of success

Schumann's *Four Piano Pieces* Op. 32, Selections from Kurtág's *Játékok*, Janáček's *On an Overgrown Path* Bk. 1, Schumann's *Carnaval* Op. 9

Vivo Performing Arts

Leif Ove Andsnes, piano

New England Conservatory Jordan Hall

Jan. 30, 2026

By Caleb Zhao

On Friday, Jan. 30, seasoned concert pianist Leif Ove Andsnes played pieces by Schumann, Kurtág, and Janáček in New England Conservatory's Jordan Hall.

He began the evening with Schumann's Op. 32, opening the Scherzo with full-bodied sound. The subsequent Gigue ambled along without a single breath taken across the entire piece. A stormy Romanze followed, which then unfurled into a sweet but lonely intermediate melody. These opening statements established baseline characteristics of Andsnes's style that would remain incredibly consistent throughout the recital: clear voicing of all notes, rhetorical demarcation of phrases, strict metronomic rhythm within those phrases, and a preference for smooth gradations of volume whenever possible. He presented a very comfortable manner of

Andsnes played the last Fughette in Op. 32 with a light but muted dryness. Despite the piece's tonal distance from its more impassioned predecessors, Andsnes still constrained to the same sepia tones that characterized his performance thus far. As the final hushed major key chords hung in the air, Andsnes remained motionless to savor the moment, before launching immediately into the next set of pieces.

The first characteristic that caught the ear was the dissonance. In the almost 200-year gap between Schumann and Kurtág, music had become unmoored from tonality, anything becoming permissible. For an undisturbing concert thus far, the Kurtág offered the first wrinkle, the first hint of intrigue. Yet even in these free-spirited "children's games" (*Játékok*), one could feel Andsnes's restrained, serious presence. Past an unsettling entrance into the set, the next piece allowed Andsnes a chance to showcase the sonic capabilities of the piano to glittery effect. In fact, the whole Kurtág experience could be summarized as an exploration of all the sounds at the mercy of two hands and a keyboard, up to and including pure noise, which made its appearance somewhere midway through the set. Paradoxically, the expanded suite of sound did not lead to a diversity of sonic experiences, instead, it remained rather uniform. Despite Andsnes's crystal clear control, the music was not crystalline; it was a haze, fuzzy at its densest, tingly at its most sparse. The seven *Játékok* went by in short order, a confusing blip in the grand scheme of things.

The audience let out an audible sigh of recognition (or perhaps relief) upon the return of melodious music present in Janáček's *On an Overgrown Path*, again segued immediately without applause. Andsnes played these ten memories in the same measured manner and sepia tones he did with the earlier Schumann. Like some old photographs, a few of these pieces

piece ("The Madonna of Frydek") suited his seriousness perfectly, eerie placidity alternating with brooding introspection, ending surprisingly in exuberance. He succeeded in literally fulfilling the title of the seventh piece ("Good Night!") for one tired soul in the back of the audience, but he also succeeded musically in pacing the dynamics of an otherwise overly repetitive piece.

In the other Janáček works, Andsnes's approach seemed less idiomatic. He equalized the four contrapuntal lines in the opening piece ("Our Evenings"), as opposed to a more typical homophonic melody plus accompaniment. Rhythmic freedom within phrases was nonexistent, the melodic contour of the top line bound to the strict regimen of his internal metronome. It would be hard to claim that the clarity of line justified the sacrifice of expressive rubato. A similar interpretation defined the second piece ("Blown Away Leaf"). Although he took rhetorical liberties between ideas, the eighth notes within each phrase always fell exactly in time, a little too stuffy to be the love song that the program notes implied. In the fifth piece ("They Chattered Like Swallows"), he took his rhythmic precision to an extreme, mimicking the chatter more of a typewriter than of birds or humans. Even between phrases, he took no time, giving the same breathless quality present all the way in the opening Schumann. However, in the final piece of the set ("The Barn Owl Has Not Flown Away!"), his tendencies managed to align into a convincing performance, the reward of the climax ever greater by the suffocation of the nearly overlapping previous phrases.

Post intermission, Andsnes began Schumann's *Carnaval* much like he did the opening of the concert: declaimed boldly, loudly. The first half of this long set of pieces felt like exposition, a necessary step to get the audience acquainted with the characters. Among the characters presented, the two aspects of the composer (Eusebius and

even got close to feigning unpredictability. Of course, his restraint and rigidity prevented him from committing.

Nearing the end, Andsnes seemed to loosen ever so slightly, perhaps in anticipation of the end of the recital. The *Valse Allemande* bore no evidence of conscious control, its lilt cute and natural. The subsequent flurry of notes representing Paganini again showcased Andsnes's incredible ability for clarity in dense textures, but it was in the return to the *Valse* that Andsnes created a truly magical moment, a haunting dominant chord that lingered after clearing Paganini's cacophonous ending from the pedal.

Andsnes then laid bare his full capacity for lyrical warmth in the final "Promenade" before the finale. All his best slow music qualities coalesced into a full-bodied singing voice floating over a glowing bed of harmonic accompaniment. The subsequent "Pause" barely registered as much more than noise, but it mattered little as it led straight into the bombastic belligerence of "March of the Band of David Against the Philistines." Here, Andsnes revealed all of his best fast music qualities. Abounding triumph. Heroism in spades. An exciting churning forward momentum. Surprise! Clarity. The final concluding leap quickly brought the audience to its feet, the horizontal musical velocity channeled into the vertical. They had to hear more if he still had *that* in store.

Andsnes obliged with Chopin's *Tarantelle*, a fun whirlwind of a showpiece that maintained the energy of *Carnaval*. Again, the audience coaxed him back for one last round, for which he gave the Mozart Rondo in D Major K. 485. In Mozart, his orderliness and technical finesse found a complete aesthetic synergy. Gone were any cognitive dissonances of style. What remained was pure joy and the magic of Mozart's modulations. Andsnes had saved the best for last.

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playing, perhaps to a fault.

turned out particularly powerful. The fourth

Florestan) stuck out. In Florestan, Andsnes



# MIT's 7th annual quantum hackathon, iQuHACK, nurtures a new generation of quantum enthusiasts

1,400+ participants joined iQuHACK 2026, sponsored by NVIDIA, IONQ, and other quantum computing companies

By Malakhi Beyah and Jojo Placides  
STAFF WRITERS

The frigid air of Hayden Library, the enticing aroma of cheese pizza, and above all else, the commotion of cracking Hamiltonian equations: by hour 24 of iQuHACK, MIT's annual quantum hackathon, participants could practically dream in quantum circuits as they sat in a superposition between sleep and deep concentration. With only three days to compete, the teams spent every free second huddled in an entanglement of laptops and research papers, searching for the best solution to their chosen challenges.

iQuHACK ran from Jan. 30 to Feb. 1, with more than 400 students from U.S. universities participating in person and 1,000 students from 76 countries joining virtually. This year, the event was sponsored by 15 major quantum technology companies: NVIDIA, IonQ, IQM, QuEra, Superquantum, Alice & Bob, Quantum Rings, Nord Quantique, qBraid, BlueQuibit, Classiq, and Quantum Design.

At the heart of the event was the field of quantum computing. While a classical computer uses bits, which process information as 0s or 1s, quantum computers use qubits, which represent 0, 1, or a state between both — a state of “superposition.” This property allows a quantum computer to solve problems that classical computers cannot, such as molecular simulations, optimization, and cryptography.

However, the field of quantum computing has seen no practical uses so far, as quantum systems are too unstable to be manufactured and shipped out to the public. Small changes and disruptions in the environment are enough to destabilize qubits, leading to high error rates.

Nevertheless, fault-tolerant quantum computers, which are computers that can resist these disruptions in the environment, are seemingly “only 10–15 years away,” according to QMIT Faculty Director and Professor of Chemistry Danna Freedman PD '12, one of iQuHACK's keynote speakers.

MIT launched iQuHACK in January 2020 as quantum computing began growing in popularity. “The goal of iQuHACK has always

been to give undergraduate students the opportunity to learn about the near-term challenges and applications of quantum computing hardware,” explained iQuHACK Director Om Joshi G.



Team QAT poses at the iQuHack awards ceremony in the Stata Center on Sunday, Feb. 1, 2026.

research and development (R&D) pipeline, with each student in the team taking one of four roles: project lead, graphics processing unit (GPU) acceleration person-in-charge (PIC), quality assurance PIC, and technical marketing PIC. The first phase of the project was the research and development phase, where students used qBraid to simulate and design quantum systems. Then, the solutions they came up with were scaled up to more powerful hardware using Brev.

IonQ took a more lighthearted approach to their quantum challenge, tasking teams with beating their “entanglement distillation game.” The game is played on a graph representing a quantum network; the vertices represent quantum computers that host “utility qubits” (or points) and bonus resources, and the edges represent entanglement links that connect two nodes. The objective of the game is to maximize the amount of utility qubits while managing a limited budget of entanglement links.

Challenges from other sponsors included analyzing the performance of OpenQASM 2.0 quantum circuits, exploring how quantum methods calculate financial risk, and modeling noise and parallelism in quantum error correction circuits.

## Students take on quantum challenges

Amidst the buzzing backdrop of the Student Center, *The Tech* interviewed competing iQuHACK teams as they diligently worked toward solutions to their quantum computing challenges.

For Felix Antoine, a second-year undergraduate student from the University of École de Technologie Supérieure in Montreal, Canada, iQuHACK marked his first time competing in a hackathon.

His team's challenge involved replicating a particular quantum state presented to them the day before; however, he admitted that he would likely be relying on his more experienced teammates. “I haven't even done any classes on quantum computing, which is why I'm kind of struggling right now with this challenge,” he said. “It's very exciting; I'm learning so much stuff in only a couple of hours.”

Other groups competing at iQuHACK had a considerable amount of experience in the field. The four PhD students and senior undergraduate comprising a team from Clemson University had all already competed in multiple quantum hackathons; Abrar Faiyaz, one of the PhD students, had even won one of the iQuHACK challenges in 2025.

The Clemson team was focused on completing Superquantum's challenge. Their work involved improving a quantum computer's compiler, a software that breaks quantum programs into instructions the machine can understand. “Certain instructions are more expensive than others, and there's multiple ways to break it down,” Faiyaz explained. “So the challenge today is about breaking a program into [more] cheaper instructions and fewer of the expensive ones.”

Faiyaz, alongside teammates Nathan Jones, Landon Holcomb, John Layton, and

Valentine Mohaugen, would later win the first-place prize for Superquantum's challenge.

For some competing students, the end goal wasn't to take home a prize. Aanya



MALAKHI BEYAH—THE TECH

Bhandari, a senior undergraduate studying computer science and quantitative finance at the University of Florida, reflected on what brought her to iQuHACK.

“I actually didn't go into this with a prospect of winning at all,” she admitted. “I think, for me, it was more about learning something new because quantum is such a relative[ly small] field that it's hard for computer scientists without a physics background to get into.”

Bhandari's team was tasked with implementing quantum error correction as part of QuEra's challenge. The fundamental question behind this challenge was how to accurately read the “gray” area between qubits' 0 and 1 states.

“So if we're expecting it to be 0 and it's becoming 1s,” Bhandari explained, “how can we stop it as we detect that it's about to be 1 and then shift them back?” This seemingly simple question was the reason she only got an hour of sleep that night.

Regardless of their prior experience with the quantum field, participants agreed that competing at iQuHACK was exhilarating.

The Clemson team, even having competed in other hackathons in the past, remarked that there was something particularly special about iQuHACK. “I like the city, I like the campus,” Layton said, “and I like being surrounded by a lot of intelligent people who have a lot of good ideas and are working towards the same goal.”

Antoine echoed that sentiment, especially from the viewpoint of an international competitor.

**“I heard that it was the biggest quantum computing hackathon of the year,” he recalled. “It's also the opportunity. I've never been to Boston, [...] so I was like, ‘Yeah, I'll go to see MIT!’”**

## Announcing the final results of iQuHACK

On Feb. 1, each team was given ten minutes to present their findings in front of a panel of mentors from the sponsor companies. After an intense hour of waiting for the results — the fruits of their 72 hours of toil — competitors flocked to the Stata Center to hear the winners of each sponsor's challenge. The sponsors gave out various prizes, ranging from Amazon gift cards and Nintendo Switches to merchandise and Brev credits, which are units of currency for buying computation.

*The Tech* interviewed Jack Ploof, a first-year Harvard undergraduate and member of team Piqasso, which came first in QuEra's challenge.

Ploof's team compared two properties of quantum circuits: the “fidelity” and the

“magicness.” In quantum computing, fidelity is the measure of the difference between observed, physical data and expected, theoretical data. On the other hand, “magicness” measures the difference between an arbitrary quantum state (any possible quantum state) and a “magic” quantum state, a special quantum state needed to achieve fault-tolerant quantum computation.

“We actually found no correlation between this “magicness” value and the fidelity, which was a pretty interesting result,” said Ploof.

Though Ploof considered himself lacking a rigorous background in quantum mechanics, he became interested in tackling quantum computing after participating in MIT's Quantum Winter School over IAP as well as examining the research of Norman Yao, a physics professor at Harvard University.

In the IonQ challenge, the team led by Allen Wu '29, iQuackers, won second place. Their project focuses on a way to filter noise from quantum networks. Most of the time, noise — uncontrollable disruptions from the environment, whether from magnetic or thermal sources — can disrupt quantum environments, leading them to have high error rates. Therefore, Wu's team designed ways to clean up their data using adaptive protocol selection: in other words, combining different existing protocols for dealing with the noise. “In the real world, it's quite probable that the source of noise is unknown,” Wu said, “so hopefully there'll be ways to more dynamically test and swap protocols in real-time.”

Though his team encountered small issues along the way, in Wu's words, “that's always fun to figure out with a team.”

## Developing the future quantum workforce

For keynote speaker Pedro Lopes, a quantum scientist and lead educator at QuEra, iQuHACK is among the most important events in quantum computing for developing the field's upcoming workforce.

As a mentor for the event, what stood out to Lopes the most was the number of young people with no prior experience in quantum computing tackling QuEra's challenge. “It takes a lot; you have to read papers. You have to kind of extrapolate from our codebase and grasp a bunch of concepts that you're really starting from zero,” said Lopes.

Lopes cited the intensity of the event as one crucial factor to how it kickstarts quantum careers.

**“iQuHACK is the crucible, a place that is hot and has high pressure, [where] people are fighting against themselves and fighting against the fact that they are trying to take a step bigger than their legs,” he said.**

The number of students competing in iQuHACK has grown over the past few years. This year's hackathon also saw the highest number of challenges and sponsors that the event has ever had, with the participation of major quantum companies like NVIDIA and State Street, as well as new ones like Superquantum and Quantum Design.

In her keynote speech, Freedman highlighted the importance of these young researchers, stating that, as they get exposed to the relatively fresh field, “[they] all get to acquire [their] own opinions” selecting quantum-driven solutions to these long-standing problems.

“We need to bring together teams that can leverage their deep expertise to build networks to bring everyone together,” Freedman said.

From the challenges to the collaboration to the endless boxes of cheese pizza, iQuHACK continues to be a launchpad for future quantum scientists and engineers, providing the energy and community to do just that.



JOJO PLACIDES—THE TECH

Teams prepare to present projects to judges at iQuHack on Sunday, Feb. 1, 2026.



MEET THE MINDS

# Ticked off: How Mikki Tal is using Lyme disease to transform women’s health research

Chronic illness is a disproportionately female problem, and immunoengineer Dr. Michal “Mikki” Tal took action to stop it

By Chelsy Goodwill

By the early 2010s, Dr. Michal “Mikki” Tal was well-acquainted with immune cells and infectious diseases. Having just completed her PhD in immunology at Yale, she was beginning a postdoctoral fellowship at Stanford University when she picked up a paper by someone she only identified as a “well-respected clinician and scientist.”

The piece was about a gender skew in chronic Lyme disease. Doctors had observed that women were developing chronic Lyme at a far higher rate than their male counterparts. Tal was shocked, not just by this finding, but by what she would discover as she kept reading: “He was talking about the sex skew of chronic Lyme and used that to insinuate,” she said, that this “must be a manifestation of hysteria.”

“This was the first time I saw so plainly that the fact that I’m a woman can and would be used against me,” Tal said.

That realization changed the trajectory of her career. At the time, her work at Stanford studied how CD47, a cell-surface protein that prevents cells from being eaten, affects the clearance of cancer and infectious diseases. Since then, she switched her focus to Lyme disease, studying how *Borrelia burgdorferi* — the spiral-shaped bacteria behind the disease — prompts different immune responses in men and women.

*B. burgdorferi* is primarily transmitted by ticks. Often characterized by flu-like symptoms and a bullseye rash around the tick bite, the resultant Lyme disease normally clears after a round of antibiotics. For around 10% of people though, most of whom are women, debilitating symptoms of body aches, migraines, joint pain, brain fog, and newly identified gynecological disorders persist indefinitely.

Tal, now a principal scientist in MIT’s Department of Biological Engineering and the associate scientific director of MIT’s Center for Gynepathology Research, wanted to know why women were more at risk for chronic Lyme — and why that question hadn’t been asked in the first place.

There’s so much more to know about women’s health

Women have been largely excluded from health research for decades (read more). These shortcomings have resulted in preventable suffering and left many unknowns about the female immune and reproductive systems.

For example, take the global medical scandal that unfolded in the late 1950s and early 1960s. After the release of thalidomide, a sedative intended to treat morning sickness, thousands of children were born with severe birth defects.

While toxicity studies were conducted in animals and healthy people, the drug was never tested in its target population—pregnant women—before it hit the market.

Thalidomide was never approved in the U.S., but the nation still felt its effects. In 1977, the FDA published guidelines that advised excluding any fertile women from participating in the clinical research stages that assess safety, dosage, and efficacy: phases I and II (read more). This meant that most women were kept out of clinical research altogether.

Though the FDA reversed this decision in 1993, its consequences persist (read more). Many studies still underrepresent women, once again citing concerns about pregnancy risks and hormonal fluctuations. The resultant shortage of data on how various drugs

and diseases affect women has often left doctors unequipped to treat their female patients, especially those with female-predominant illnesses (read more).

In 2023, Tal launched MIT MAESTRO (Mucosal And systEmic Signatures Triggered by Responses to infectious Organisms), a clinical study to address these gaps. The study collects data from patients with chronic illnesses, specifically chronic Lyme disease long long COVID, associated with infections. Though one is caused by a bacteria and the other by a virus, Tal Research Group research specialist Paige Hansen observed that “both are female skewed, and both have a similar percentage of patients [roughly 10%] that continue to have symptoms.”

MAESTRO participants are first asked to provide their medical history and past infection experiences. Then, at MIT’s Center for Clinical and Translational Research, they receive a physical exam followed by about four hours of non-invasive tests and sample collections.

The assessments look at memory and thinking skills, vision, skin health, how well the body adjusts to sitting or standing, and joint flexibility. Researchers also collect urine, saliva, blood, throat, and vaginal swabs.

“We are measuring everything,” Hansen said.

These measurements allow scientists to search for extrinsic contributors to disease, including infectious pathogens and other microbes in the body, while also examining intrinsic contributors, like “variations within DNA, cells, and proteins” that influence an individual’s immune response, Tal explained.

Currently, chronic Lyme has neither a definitive diagnostic test nor established treatments. This flood of data could help change that: “We are going to make anonymized data sets [from the MAESTRO study] publicly available, so that scientists and doctors worldwide can probe this data for more answers,” Tal said.

The mouse that changed it all

As for their own laboratory experiments, the Tal Research Group started by studying a familiar mammalian model organism — the mouse.

Tal and her team toward their next focus: gynecology.

“I wish I could tell you that I had this brilliant hypothesis and this was the proof I was looking for,” Tal said.

“But really, it took the surprise of seeing this for it to really dawn on me how understudied gynecological conditions are, especially in the context of infectious disease.”

To further investigate the relation between Lyme and gynecological disorders, Tal repeated several experiments. More female mice were infected and left untreated for between eight weeks to fifteen months. These animals developed similar symptoms to Mouse 23, with enlarged uteruses, yellowed tissues, torsion of the uterine horns (where the fallopian tubes connect to the uterus), and fluid-filled sacs called ovarian cysts.

Tal was not quite done with her mouse model. She knew from past immunology experience that sex and age are known to influence an individual’s immune response to a pathogen. To investigate the effects of age, Tal and her team infected female mice at either fifteen weeks old (considered young for a mouse) or one year old (considered old); then, after nine weeks of infection, they euthanized them. Some of the young mice did not show any noticeable uterine pathology, while all of the older mice did, with some showing more severe symptoms than the younger ones. With these results, the next step was to investigate whether humans experienced the same gynepathology.

To do so, the researchers collected epidemiological data from clinical surveys and electronic health records of real women. Working with Hansen and current Tal Re-

uterine fibroids, and endometriosis (read more). These conditions can mean years of chronic pain, severe anemia, infertility, and, for some patients, major surgery. What’s more, the human data revealed the same age-linked trend observed in mice.

While approved treatments and diagnostics are yet to come, Tal believes these recently published findings can be a light in the lives of many women who have been struggling with chronic Lyme disease. “I know that everything that we can do, every piece of information we can give them... helps them on their journey,” Tal said.

“This helps them feel seen, and this helps them understand their illness, and this helps them navigate their care in ways that could be the difference between hope and despair.”

Researchers, listen up!

Beyond the laboratory, Tal is calling on the clinical research community to take action.

In 2017, while still a postdoc at Stanford, she attended a talk by Johns Hopkins University professor and immunologist Sabra Klein. Klein shared that women are more likely to report adverse reactions to the flu vaccine. While many doctors attribute this to a reporting bias, Klein discovered that women were being given “twice the dose that they need... the minimum protective dose for men.”

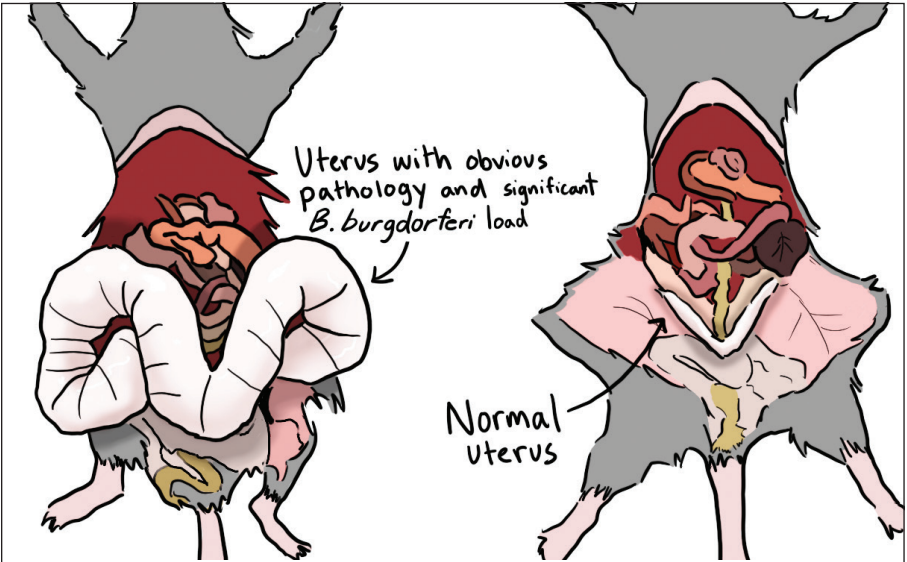
Tal refused to let vaccine companies get away with a “one-size-fits-all dose” at the expense of women. Inspired by Klein, she spoke to leading scientists at a major pharmaceutical company and asked if they would test a female vaccine dose. Her proposal was shot down. The company insisted that they would only test a female dose if the FDA mandated it, claiming they lack the money to analyze the data based on sex. Undeterred, Tal took it upon herself to raise awareness for this issue.

On Jan. 19, 2022, researchers from around the world gathered at MIT’s Stata Center to hear Professor Klein speak. It was the first talk in a series of discussions and seminars called SeXX and Immunity, an initiative started by Tal.

Tal hopes that the group will encourage researchers to join her in exploring the unanswered questions about women’s health and how biological sex affects the immune system: “Every single immune cell in your body has estrogen receptors, progesterone receptors, androgen [testosterone] receptors. So what do these... hormones do? How does that change your immune system? Why do women live longer but sicker lives?”

Despite her success so far, there are still many unanswered questions for Tal. Her research, as well as her initiatives SeXX and Immunity and MAESTRO, remain necessary to address the decades-long omission of women in health research.

“There have been a lot of decisions made by people who got to decide what funding priorities need to be that did not give as much importance to women’s health or gynecology,” Tal said. “My research is actively taking a stand against that.”



GRACE ZHANG—THE TECH

An illustration based on the original photograph comparing the enlarged uterus of mouse 23 in Tal’s experimental group (left) with a normal mouse uterus (right).

Mouse research has been the gold standard for biological experimentation, not just because the animals are cost-effective and easy to breed, but also because they are genetically and physiologically similar to humans. Of course, mice aren’t humans, but they can “teach us how mammalian immune systems interact with these bacteria,” Tal said, “and then everything that we learn from this mouse model, we’re then able to take into different human [models].”

To begin, Tal and her team set up an experiment in which they injected a lethal dose of *B. burgdorferi* into 24 mice, half male and half female, and left them untreated for weeks without antibiotics. With these conditions, the mice were expected to develop chronic illness, but the results exceeded expectations: “I was horrified... by what we saw,” exclaimed Tal.

After allowing the infection to persist, Tal and her team noticed that Mouse 23 was a little “chunky,” and decided to take a closer look at what was happening inside her body. Mouse 23 had unexpectedly developed a significantly swollen uterus, a sign that pointed

search Group postdoc Dr. Guido Pisani (OB/Gyn), Tal discovered that *B. burgdorferi* infection causes several gynecologic pathologies in humans — like Mouse 23’s enlarged uterus — and increases the risk for heavy or prolonged menstrual bleeding, miscarriage,

Are you a gramma ninja?

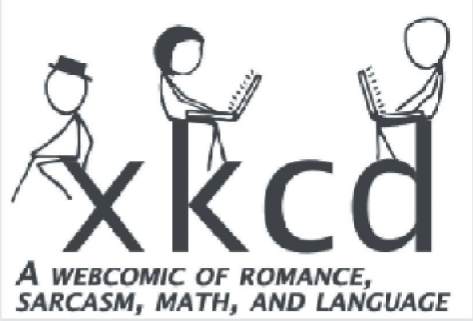
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should say grammar



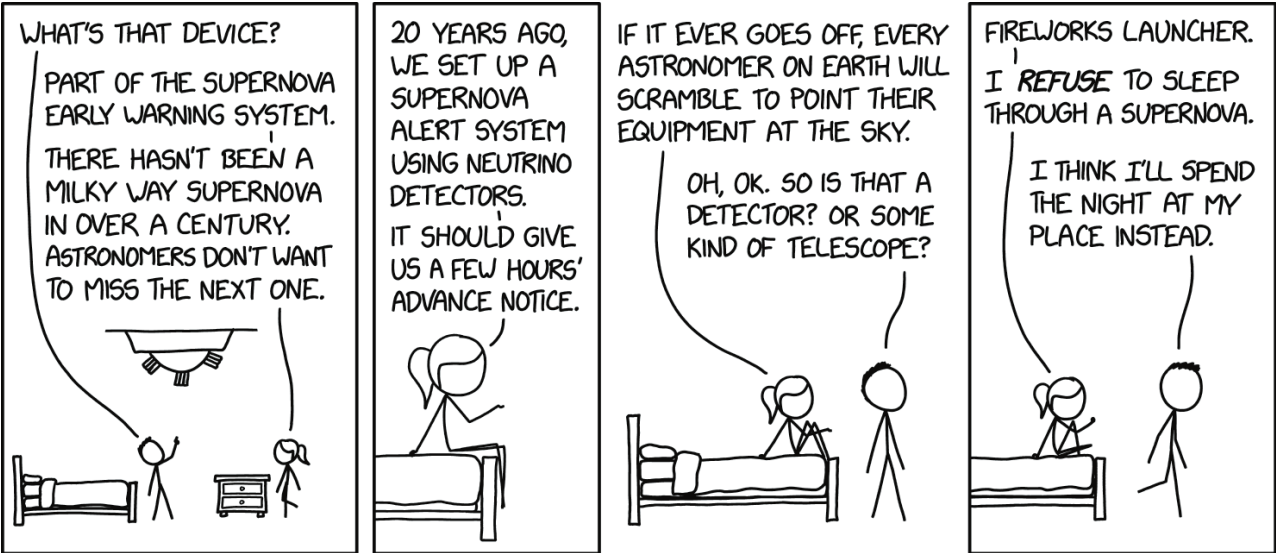
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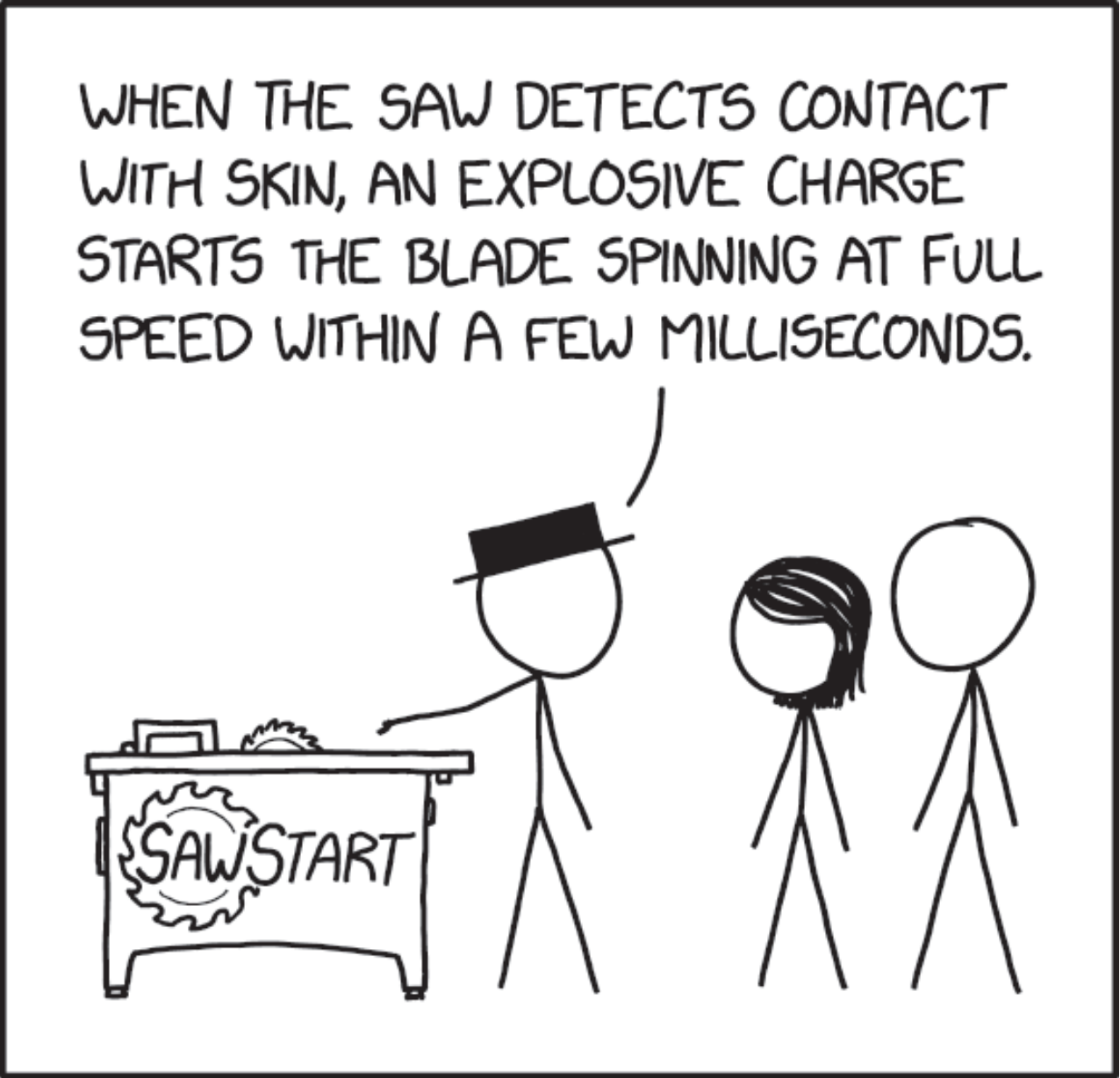
by Randall Munroe

[3208] SNEWS



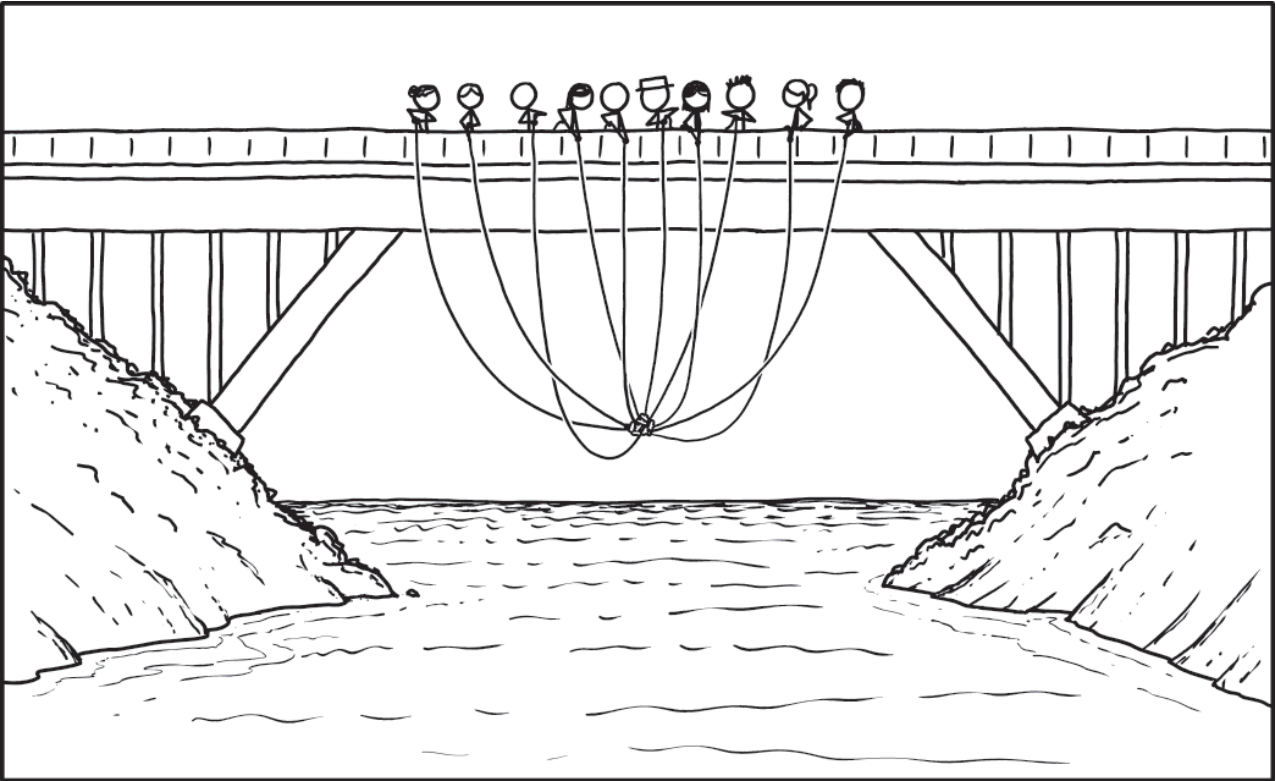
People say setting of fireworks indoors is dangerous, but I looked at their energy release and it's like 10^4-40 foe; totally negligible.

[3067] SawStart



Unfortunately, SawStart is one-use-only. Once started, the blade cannot be stopped, and must be replaced with a fresh blade while the running one is carefully disposed of.

[1302] Year in Review



THE FIRST, AND LAST, WORLD MAGNET FISHING CHAMPIONSHIP

The ten-way tie was judged a ten-way tie, so no one won the grand prize, a rare fishing monopoly.



# Sanctuary campus now

*MIT must end research for DHS and become a sanctuary campus for all*

By Anton Perez and Eda Lozada

Those of us whose hearts burn for the cause of bread and roses — for a world liberated from scarcity, violence, and empire — see a sick society. We see those with the wrong papers or skin color persecuted by an ICE terror state. We see the pollutive fumes of fossil capital destroying life on earth for short-term profit. We see the horrors of a 21st-century colonial regime in occupied Palestine. We see rising homelessness, food insecurity, debt, rent, and persistent poverty. Automation, now directed toward white-collar workers, is eroding the value of our degrees. Our economic system, capitalism, moves closer to crowning an oligarch the world’s first trillionaire even as it viciously exploits a global working class left behind in the rising tides of inequality.

In the United States, Republican politicians enjoy a trifecta — in the White House, Congress, and Supreme Court — and have used it to give tax breaks to the wealthy and cut life support for the poor. They have attempted to defund science, erode public health protections, and shred civil, reproductive, and soon, voting rights. Other countries and territories, such as Venezuela, Cuba, Greenland, and Iran are also being destabilized and threatened with invasion. An ICE gestapo army, reminiscent of slave-catcher militias, is terrorizing both immigrants and non-immigrants, torturing people in detention camps and killing or disappearing those who dissent, such as Keith Porter, Renée Good, Leqaa Kordia, and Alex Pretti. Meanwhile, the corrupt establishment of the Democratic Party — with its empty promises and opportunism, its betrayal of voters, its compromises to special interests over the majority of working people — has only mounted an insipid and half-hearted opposition to this fascism.

As socialists, we believe in a world beyond these conditions — a world without exploitation, oppression, and social domination. We believe in the centrality of class struggle and the necessity of a politics oriented towards complete emancipation of the working class. We also believe in a profoundly democratic society, one in which democracy doesn’t end at the ballot box, but is extended to every facet of our daily lives: the university, the tenement, and, most urgently, the workplace. However, a better world will not be handed to us on a silver platter by the ruling capitalist class; they will fight tooth and nail to prevent such a world from existing, and it is our responsibility as socialists to wrest power from them to build this world ourselves.

MIT, as one of the vital nodes of the U.S. military-industrial complex, is a crucial site of struggle. Amidst a university administration that prioritizes MIT’s profitability over protecting its own students and workers, it is only through organized movement that we can prevent MIT from capitulating to the rabid demands of a Trump administration hellbent on attacking immigrants and racialized minorities. As such, we recognize that our power must come not from our position as students, but as current and future members of the working class. To protect our community from ICE, we must integrate ourselves with the workers’ movement and form principled relationships with organized labor on campus, including academic and non-academic unions alike.

Under these conditions, a sanctuary campus is crucial. The border regime and its extension into an apartheid and mass surveillance system within the U.S. heartland denies immigrants the basic rights of others — rights to privacy, due process, free speech, and nondiscrimination. It is in this context that we, as students at MIT in the new chapter of the Young Democratic Socialists of America, call on MIT to adopt public commitments to stand behind all its community members — not just students, but also employees and contractors.

Specifically, we call on MIT to:

Publicly declare itself to be a sanctuary campus by refusing to assist, coordinate, or partner with the Department of Home-

land Security (DHS). This should include refusing to participate in Immigration and Customs Enforcement’s 287(g) program, cooperation with ICE detainer requests or the transfer of detainees from MIT police to DHS custody.

Publicly end MIT research for DHS, including Lincoln Labs’ partnership with the Security Science and Technology Directorate to develop drone-mounted surveillance to “see” through walls.

Publicly refuse to collaborate with federal agencies in any effort to identify, surveil, detain, or deport community members (e.g. the Trump administration’s March request for universities to spy on and report student protesters).

Publicly refuse to release information on immigration status or place of residence of community members to any government agency, except as required by a court-ordered subpoena. This includes not complying with Section 3 of the expanded Executive Order 13899.

Publicly commit to provide notice within one calendar day to any community member of a subpoena or any investigation from a governmental agency seeking information about the community member.

Publicly designate a fund to cover legal advice, representation, and other expenses related to immigration services, including legal defense against immigration enforcement authorities for all community members, including non-academic staff and contractors employed by MIT.

Mandate training for all employees, including but not limited to Graduate Resident Advisors (GRAs), Principal Investigators (PIs), and dormitory security on protocols for interactions with federal agents on campus, and the difference between administrative and judicial warrants.

Ensure all community members can continue their education or work regardless of changes in immigration status or apprehension by immigration enforcement. MIT must support a student or worker’s request for leave/temporary withdrawal due to changing immigration status.

Make reasonable efforts to reemploy/re-enroll these community members as soon as possible once their physical location and immigration status permits them to work.

We acknowledge that a sanctuary campus at MIT is not enough. ICE must be abolished, along with the structural forces that coerce people to migrate. The only way we can ultimately protect ourselves from ICE’s terror is to organize ourselves as a class. This includes the necessary work to build up a democratic socialist party that organizes not just for our immediate self-defense, but also the long-term political struggle to abolish ICE and transform society such that reconstituting ICE as an organ of state terror is impossible.

To this end, the MIT YDSA chapter commits itself to advancing the project of a sanctuary campus together with the existing labor organizations on campus and advancing the cause of socialist, feminist, anti-imperialist, and anti-fascist movements across the world. We call on all MIT students and workers to join us in this struggle.

Signed,  
MIT YDSA Steering Committee  
Anton Perez, Co-Chair  
Eda Lozada, Co-Chair  
Graciela León, Parliamentarian  
Victor Dominguez, Communications Chair

Richard Solomon, Political Education Chair

*Anton Perez is a third-year undergraduate majoring in Course 18 and a co-chair of MIT YDSA.*

*Eda Lozada is a third-year undergraduate majoring in Course 8 and a co-chair of MIT YDSA.*

*YDSA is the youth wing of the Democratic Socialists of America (DSA), a multi-tendency, democratic socialist organization in the United States active in electoral politics, labor and tenant organizing, and direct action campaigns.*

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1. Difference is unavoidable
2. Appearing cannot be reduced to structure alone
3. Determinacy requires a principle of actualization
4. Experiential boundaries are real
5. Actualization is neither fixed nor arbitrary
6. Identity is continuity, not static substance
7. Termination doesn't undo occurrence
8. Continuation is underdetermined
9. Meaning requires consequence not eternity

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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.

Guest Columns express a particular opinion on campus-relevant matters;

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Electronic submissions are encouraged and should be sent to [tt-opinions@mit.edu](mailto:tt-opinions@mit.edu). Hard copy 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).

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# Former China Ambassador gives talk at MIT

*Burns: “We cannot afford to be number two in military power ten years from now”*

By Vivian Hir  
SENIOR EDITOR

On Feb. 10, former U.S. Ambassador to China Nicholas Burns gave a talk at MIT about the current state of U.S.-China relations and the importance of advancing the energy transition for both countries. The event, organized by the MIT Energy Initiative (MITEI), received over 200 attendees. In his talk, Burns discussed major areas of competition between the U.S. and China and how the two countries can cooperate in areas such as clean energy and climate change.

From 2021 to 2025, Burns served as the U.S. Ambassador to China. As ambassador, Burns oversaw 48 U.S. government agencies at the U.S. Mission in China, including the Beijing embassy and four consulates. Throughout his career in diplomacy, Burns served six presidents and nine secretaries of state. Currently, Burns is an international relations professor at the Harvard Kennedy School and a faculty affiliate at Harvard’s Fairbank Center for Chinese Studies.

Burns began the talk by underscoring that the U.S. and China are the world’s top two global powers due to both countries’ position as leaders in the global economy, military, and technology. “These are the only two countries that affect everybody else in the international system,” Burns said.

Before further discussing the two countries’ diplomatic relationship, Burns also took a moment to praise China’s higher education system. From his visits to major Chinese universities, Burns was impressed by the “seriousness of purpose,” the quality of students and faculty, and the merit-based structure. One aspect that stood out to Burns in particular was the country’s emphasis on technology in higher education. He cited a 2025 *Economist* article that found that 36% of undergraduate entrants in China declared engineering, whereas only 5% of undergraduates in the U.S. receive an engineering degree.

Burns then transitioned to discussing the current political relationship

between the U.S. and China, which he described as “highly competitive” and “adversarial.” He broke down the relationship into four areas: military, technology, trade, and human rights.

Using his hands to draw an imaginary map of the Indo-Pacific, Burns stated that the U.S. and China are competing for military power in a region which he called “the power map of the world.” He pointed out that the Indo-Pacific includes four of the five largest economies of the world by GDP (the U.S., China, Japan, India) and, in his opinion, the four strongest militaries globally.

Burns cited China’s major advancements in military technology as a contributor to military competition, specifically the increase in aircraft carriers and improvement in ballistic missiles that now have greater geographical reach. “We cannot afford to be number two in military power ten years from now,” Burns said. “That’s not going to be in the interest of the United States, because we are on [the] Indo-Pacific.”

Besides military power, technology is another critical area of competition. Burns stated that a country’s technological progress comes not only from being the “first mover,” but also from being the “first adapter.”

“The Chinese are very skilled in terms of industrial process and often adapting quickly,” Burns said. He used the AI company DeepSeek as an example, as its model was not only the first to arrive in the market, but was also novel for its lower cost compared to other models like ChatGPT. Burns connected a country’s technological strength with military power, stating that one factor in shaping war, such as the Russo-Ukrainian War, is the “technologies in the battlefield.”

On trade, Burns described the \$750 billion two-way trade relationship between the U.S. and China as “a difficult relationship to manage.” Burns first cited intellectual property theft as a key problem, drawing from his experience working with American CEOs and companies. “The Chinese state uses its power to help

Chinese companies rip off the intellectual property of foreign competitors,” he said.

Burns also noted the practice of “forced technology transfer,” where non-Chinese companies must have a Chinese joint venture partner to enter the Chinese market, as “predatory.”

“They want you to share your most sophisticated technology with them, or they’ll sink you in that market or eject you from the market,” Burns said. He further noted that while this violates the World Trade Organization (WTO) regulations, the WTO is “kind of moribund.”

Burns addressed the outright trade war between the U.S. and China as another challenging aspect of trade relations. Noting that tariffs once reached 145% and 125% from the U.S. on China and China on the U.S. respectively in 2025, he expressed concern about the intensity. “Those level tariffs, had they been sustained, would have meant zero trade between the two countries.” Burns characterized the current situation as a “standstill,” citing China’s policy on export controls in rare earth metals as key in forcing Trump back to negotiations.

Burns also specified China’s focus on a 5% annual GDP growth as a “pernicious aspect” of the trade dilemma. He described the “Chinese playbook” — where China pushes out manufactured products below the cost of production to squash competitors and grab domestic market share in Japan, North America, and Europe in a practice called “dumping” — as effective, noting that China now makes up 33% of global manufacturing. Burns contextualized the high tariffs on Chinese clean energy technology as responsive to this practice, noting that a host of other countries including India, Turkey, South Africa, and the European Union all raised tariffs; in addition, the Biden administration’s heavy tariffs that included “100% tariff on Chinese EV, 50% on lithium batteries, and 25% on solar panels.”

Burns discussed values as the last major area of competition between

the U.S. and China, specifically beliefs in civil liberties and human rights as a key difference between the two countries. He illustrated his point by using Jimmy Lai, the founder of the Apple Daily newspaper, as an example. On Feb. 9, Lai was sentenced to 20 years in prison for national security concerns. Burns considered Lai’s conviction to be unjust. “What was his crime? He ran a newspaper and a news service in China from the 1980s all the way through to the big demonstrations in Hong Kong in 2019 and he has spent the last five years in solitary confinement.” Burns noted the support of Trump, Prime Minister Takaichi of Japan, and European Union leaders for his release as symbolic in nature, and reiterated his hope for Lai’s humanitarian parole. “That’s a symbol of this huge difference between our two governments about the type of societies we want to have and the type of rights that we want individuals to have,” he said.

While Burns maintains that the U.S. and China are competitors, he emphasized the need to manage competition between the U.S. and China such that escalation does not occur. He also stressed that while dialogue between military leaders is necessary, Chinese military officials have historically not been cooperative. He referred to the 2001 Hainan Island incident, where an American intelligence aircraft and Chinese fighter jet collided over the South China Sea, leading to the detainment of the surviving American crew, as an example of hazardous communication difficulties. He recalled that it took Secretary of State Colin Powell “three days even to get his Chinese interlocutor on the phone, so we’ve got to normalize this kind of communication and engagement.”

Although the U.S.-China relationship may sound “pretty harrowing,” Burns argued that the two agree on some issues, highlighting climate change and AI as areas of important areas of collaboration between the two countries moving forward. Burns noted that the U.S.

and China are the two largest global emitters, and that both countries historically took climate issues seriously in negotiations such as the 2015 Paris Climate Agreement.

Burns emphasized that while the two countries dealt with climate issues differently — China’s intense focus on renewable tech like solar energy and lithium-ion batteries in contrast with the Biden Administration’s Inflation Reduction Act providing \$369 billion in tax incentives and programs for a greener economy — the two countries could learn from each others’ strengths. “We need to strengthen our own industrial and scientific basis, tech basis on cars that now has now gone wayside in the current administration,” Burns said. “We did believe that the Chinese need to do more on methane, on nitrous oxide, and certainly the burning of coal.”

Burns also appreciated the strong consensus between the U.S. and China on AI and nuclear safety. Burns quoted Chinese President Xi Jinping, stating, “Human beings should be in control of nuclear weapons, not AI systems.” He found this statement to be hopeful, given that there has been competition and mistrust in both areas between the two countries. “We’re entering a really, in many ways, hopeful part of human history,” Burns said. “You want women and men with a conscience, with a heart, with a brain thinking about the welfare of eight billion people to make these decisions.”

Burns acknowledges that many issues between the U.S. and China have yet to be solved, but he remains optimistic about the coexistence of competition and peace. He pointed out the diversity in the audience, as many were foreign nationals. “The faith of everybody in this room and all of the countries is linked together by these huge transnational challenges,” Burns said. “So we’ve got to learn to compete and yet live in peace with each other in the process.”

# MIT ORCD to add 200 NVIDIA B200 GPUs

*Most of these new chips will be available to the entire Institute*

By Samuel Yuan  
NEWS EDITOR

MIT’s Office of Research Computing and Data (ORCD) is set to deploy over 200 NVIDIA B200 graphics processing units (GPUs), some of the most advanced GPUs for training AI models, following a \$31 million matching grant from Massachusetts Governor Maura Healey.

Most of these new state-of-the-art GPUs will join hundreds of older advanced NVIDIA devices, including H200 and L40 GPUs, already

maintained by ORCD on the Engaging cluster, a shared computing resource available to the entire MIT community. These machines are hosted off campus in the Massachusetts Green High Performance Computing Center (MGHPCC).

The Office of Research Computing and Data was established in Sept. 2022 to address the “computing and data needs from the entire MIT research and education community.” Its services are especially useful for training or running large AI models, which generally require distributing

computationally intensive tasks across multiple GPUs.

In late January, ORCD Head and Thomas A. Frank (1977) Professor of Physics Peter Fisher and ORCD Executive Director Chris Hill announced that ORCD would begin adding a fee-based tier to “provide PIs the opportunity to run longer” and more intensive jobs for research. However, they noted that the office would still continue to offer free “base level” usage of GPUs and CPUs to all MIT community members.

Per ORCD’s January newsletter, the office is targeting around “100

public B200s on Engaging by mid-year” with access across free and paid tiers. However, supply chain issues surrounding chip manufacturing have added uncertainty to these timelines. “We are routinely seeing months of delays on commodity parts and vendor price fluctuations of 100% or more on some components,” the newsletter said.

The B200 model, according to NVIDIA, provides “three times the training” and “fifteen times the inference performance” compared to “previous-generation

systems.” In a statement, MIT Vice President for Research Ian Waitz expressed optimism about the new devices.

“Scholarship and innovation are increasingly fueled by computation,” said Waitz. “The broad access to hardware at MGHPCC will support the pursuit of new artificial intelligence discoveries, practices and solutions that can benefit the state and the nation.”

The MGHPCC also consumes “100% carbon-free” power, according to Massachusetts AI Hub Director Sabrina Mansur.

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