MIT's Oldest and Largest Newspaper

*thetech.com*

# The Tech

Established 1881

Volume 145, Number 2

Thursday, February 20, 2025

WEATHER, p. 2

THU: 27°F | 22°F
Chance of snow

FRI: 30°F | 14°F
Sunny

SAT: 32°F | 23°F
Sunny

# President Kornbluth addresses the Trump administration, generative AI, and future of the Institute

*In an interview with* The Tech*, President Kornbluth discusses the impact of the Trump administration on MIT and reflects on her recent initiatives*

MICHELLE XIANG — THE TECH

**President Sally Kornbluth speaks with *The Tech* on Feb. 3, 2025.**

**By Vivian Hir, Alor Sahoo, Karie Shen, Peter Pu, and Lucy Cai**
*NEWS STAFF*

On Feb. 3, *The Tech* spoke with President Sally Kornbluth about the Institute's plan in response to the Trump administration's new policies affecting higher education and research. In the interview, Kornbluth also reflected on recent initiatives launched in 2024, including the MIT Climate Project, the MIT Human Insights Collaborative (MITHIC), and the MIT Health and Life Sciences Collaborative (MIT HEALS). Kornbluth also commented on the launch of the MIT Generative AI Impact Consortium (MGAIC), announced on Feb 3.

**On the Trump administration's impact on MIT**

When asked about the impact of the Trump administration's policies on MIT, Kornbluth stated, "Everything is in flux." Given the uncertainty of recent events, Kornbluth shared that MIT has created working groups to address different issues that may affect MIT, such as immigration policy and research funding. Despite the many unknowns, Kornbluth emphasized that MIT's focus is to "keep moving forward" such that the Institute maintains its status as a "national asset."

Recent discussions with members of Congress involve how certain policies can affect higher education, particularly the finances of the Institute, such as the endowment tax and indirect cost cap. Kornbluth views her efforts as a combination of advocacy and engagement to reconcile "overlapping interests" between the two groups. Although these visits involve meeting people all across the political spectrum, Kornbluth appreciated that the dialogue thus far has been "respectful and engaged."

Regarding the Trump administration's policies and their impacts on MIT's research funding, such as the threats to NIH grants, Kornbluth emphasized the role of indirect costs in research, citing "money to keep lights on" for maintaining operations as an example. Although Kornbluth knows that the government may save money via these cuts, she believes MIT is "the R&D for the country," and the cuts will negatively affect the country's "economic competitiveness." For now, Kornbluth said MIT is considering all future possibilities of research cuts, as there is currently "no firm guidance" on how to navigate the situation.

Kornbluth later discussed the Institute's plans on helping and informing students and faculty about the recent changes. She directs the MIT community to a new website of the Office of the Vice President for Research (VPR), which aims to provide regular updates on changes to research funding. Kornbluth asks that graduate students and principal investigators keep the administration informed if their grants are affected.

**On MIT's plans for generative AI**

On Feb 3., Kornbluth emailed the MIT community to announce the creation of the MIT Generative AI Impact Consortium. This initiative aims to help the community investigate "high-risk, high-reward ideas" and will "bring MIT researchers together with industry leaders to explore how generative AI can spawn transformative solutions for real-world challenges."

Within the context of MIT undergraduate education, Kornbluth noted that there were discussions underway to integrate elements of artificial intelligence across the General Institute Requirements (GIRs), a core part of the MIT curriculum. She stated that incorporating "bite-sized [AI-centric] modules" into classes could help students recognize the interconnected and interdisciplinary nature of AI. She also noted that there have been conversations around potential modifications to the GIRs, including the addition of a possible computer science requirement. Beyond the GIRs, she emphasized the importance of diving deep and exploring fields with generative AI, such as drug development for biologists.

When asked about whether MIT would enact an institute-wide AI usage policy for classes, Kornbluth noted that, as of now, AI usage policies are left to the instructors' discretion, given that ethical AI usage is a nuanced topic both inside and outside the classroom. She believes that the Institute must continue to investigate AI as a creative and educational tool while considering the guardrails necessary for these models.

**On Kornbluth's initiatives**

Although the US recently withdrew from the Paris Climate Accords, Kornbluth asserted that the MIT Climate Project will remain unaffected, with development continuing across various disciplines on technologies that address climate change, ranging from nuclear fission to decarbonizing steel. By doing so, she believes MIT can benefit the economy and climate at the same time.

Kornbluth then discussed the purpose of the MIT Human Insights Collaborative (MITHIC). In her words, by fostering collaboration between the humanities and other fields like science and engineering at MIT, MITHIC will help "set up a robust research and educational framework." For instance, faculty could consider using economics and politics to evaluate the feasibility of a climate solution in an underdeveloped country.

After outlining the mission of MITHIC, Kornbluth shared the MIT HEALS projects that excite her the most. She believes the "interdisciplinary strength of our faculty" will help to further promote collaboration in the life sciences, citing the Ragon's Institute cross-institutional research on the immune system as an example. Kornbluth also expressed particular interest in research by Professors Angela Belcher, Paula Hammond, and Sangeeta Bhatia on ovarian cancer. "They want to cure ovarian cancer," Kornbluth stated, "and I actually believe they will do it." Kornbluth looks forward to the innovations that will come out of MIT HEALS, as the initiative aims to help companies with seed funding and commercialization.

**On diversity in undergraduate admissions**

Despite the Supreme Court's reversal of affirmative action, Kornbluth stated that the Admissions Office has been working towards increasing diversity in the Class of 2029 by recruiting more alumni to conduct interviews and lowering MIT's financial barrier. Kornbluth highlighted the record number of QuestBridge matches in the Class of 2029 and the expanded financial aid policy, in which undergraduates with family incomes under $200,000 attend tuition-free. She stated that MIT uses holistic admissions. "We don't make any selections based on wealth, and we don't have legacy admissions," she stated. "We really want everybody to know that." Kornbluth concluded by stressing, "Everyone who comes to MIT belongs at MIT," emphasizing the importance of a "OneMIT" community.

## NIH funding cuts pose challenges to Institute's health research

On Feb. 7, the National Institute of Health (NIH) announced that indirect cost rates for current and new grants would be capped at a rate of 15% in order to reduce expenses. Also known as Facilities and Administrative (F&A) costs, indirect costs are used to support research infrastructure and operations, such as administrative services or maintaining equipment. According to the MIT Research Administration Services page, MIT's indirect cost rate for the 2025 fiscal year was set at 59% for on-campus research, meaning that 30% of a project's total costs come from indirect costs.

In light of the NIH's new guidance policy, on Feb. 10, President Sally Kornbluth sent an email to the MIT community regarding the Institute's response to the funding cuts. Kornbluth stated that the 15% cap would result in annual cuts of $30 to $35 million at MIT. "If these proposed cuts are allowed to proceed, they will do immediate harm to work that saves American lives," Kornbluth wrote.

In her email, Kornbluth shared that MIT has joined a number of other universities in filing a lawsuit in federal court to stop the Trump administration from cutting NIH funds. Led by the Association of American Universities (AAU), the filing highlighted the "declarations of harm" of the proposed cuts, stating that the cuts would harm the "breakthrough health research" at these institutions, including MIT.

On Feb. 12, Vice President for Research Ian Waitz sent an email update regarding the NIH funding cuts, stating that a federal judge has temporarily blocked the NIH funding cuts from taking effect. As a result, MIT's current indirect cost rate of 59% remains unchanged as of publication. However, Waitz recommended principal investigators to "take a conservative approach to new funding commitments on federal awards and constrain non-personnel expenditures."

*— Vivian Hir*

**MIT BUILD FOR UKRAINE**

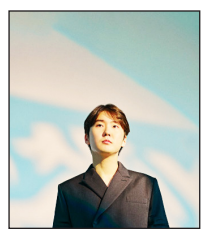
Students worked in teams to innovate and hopefully implement. **SCIENCE, p. 9**

**"HOW TO TALK TO A HUMAN"**

A talk by *Radiolab* founder Jad Abumrad. **ARTS, p. 6**

**MEET MISHAEL QURAISHI '25**

Quraishi was named a 2025 Churchill Scholar. **NEWS, p. 4**



**SEONG-JIN CHO'S PIANO PROWESS**

A review of his two-hour performance of Maurice Ravel's piano repertoire. **ARTS, p. 7**

**100-WORD MIT LOVE STORIES**

From passionfruit to geese to Zoom encounters. **CAMPUS LIFE, p. 5**

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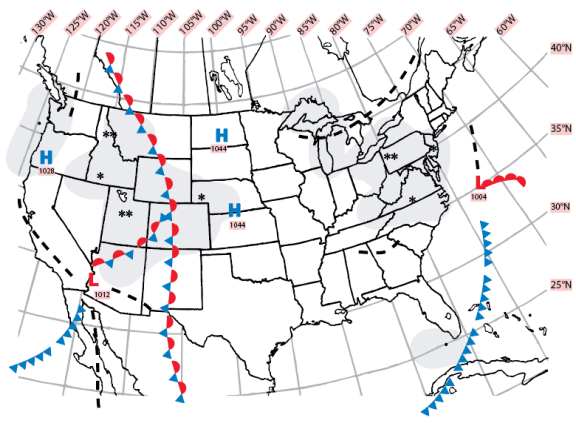
## WEATHER FORECAST




# Continuation of the cold

**By Lou Lahn**
*CHIEF METEOROLOGIST*

Below freezing temperatures continue into the weekend. Steady winds are mild, but Friday will be windier with gusts as high as 35 mph. Sidewalks will likely stay icy, bundle up and tread carefully while commuting to class!

**FEBRUARY 20**
*SITUATION FOR NOON (ET)*

**Extended Forecast**

**Today:** Mostly cloudy, chance of snow. High around 27°F (-3°C). North wind around 8 mph.

**Tonight:** Chance of snow. Low around 22°F (-6°C). Northwest wind 10-15 mph.

**Friday:** Sunny. High around 30°F (-1°C). Northwest wind 15-20 mph with gusts as high as 35 mph.

**Saturday:** Sunny with clouds in the evening. High around 32°F (0°C) and low around 23°F (-5°C). West wind around 10 mph.

**Sunday:** Partly sunny. High around 35°F (2°C) and low around 25°F (-4°C). West wind around 7 mph.

# Festival of Learning 2025 discusses the future of *mens et manus* education at MIT

On Jan. 29, the Festival of Learning 2025 took place at Stata Center. Co-sponsored by MIT Open Learning and the Office of the Vice Chancellor, the annual event serves to bring MIT faculty, staff, and students together to discuss ways to improve "teaching and learning at the Institute." This year's theme centered on the future of *mens et manus* education at MIT. This motto of MIT, *mens et manus,* means "mind and hand" in Latin, which reflects MIT's focus on hands-on learning.

The event began with opening remarks from Interim Vice Chancellor Daniel E. Hastings, followed by a panel titled "Mens et Manus for the Future." The panel was moderated by Director of MIT Teaching + Learning Lab Janet Rankin, and featured four panelists from different disciplines: Professor of History Christopher Capozzola, NEET Founding Executive Director Dr. Amitava 'Babi' Mitra, Professor of Biology Adam Martin, and Professor of Anthropology Susan Silbey. Following the first panel was a second panel called "Moving Forward Together," an event where panelists discussed how interdisciplinary collaboration helped "transform their MIT subjects."

The afternoon consisted of three facilitated sessions across different areas in education and pedagogy. Associate Director of Learning Sciences and Teaching Aaron Kessler hosted "Improve Your MIT Subject(s)," while Senior Educational Technology Consultant Jim Cain organized a session about the educational tool Lightboard, used for creating written or visual demonstrations. Prof. Adam Martin held a white paper brainstorming session for the Task Force on the Undergraduate Academic Program (TFUAP), an initiative that aims to improve and change the MIT undergraduate academic experience.

A recording of the event will be uploaded onto the MIT Open Learning website in February.

*— Vivian Hir*

# School of Science website removes "Diversity and Inclusion" page

Recently, the MIT School of Science removed its "Diversity and Inclusion" page, which now redirects to the MIT School of Science Academic Affairs & Community Engagement (AACE) website. Although the words "Diversity, Equity, and Inclusion" still exist under the Mission and Values heading on the About page with the hyperlink of "https://sites.mit.edu/sciencedei/," this link also redirects to AACE.

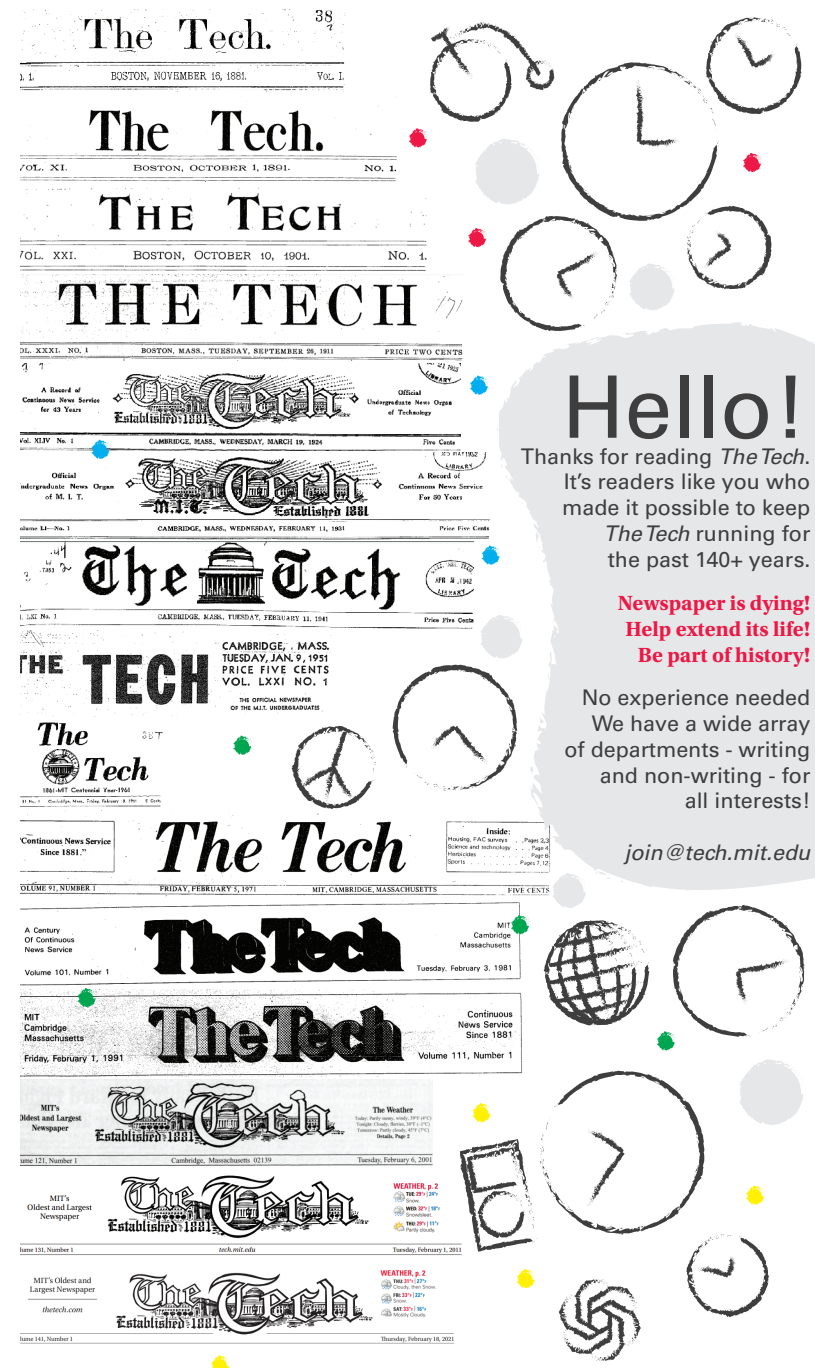
According to a *The Tech* article published on Nov. 11, 2020, the "Diversity and Inclusion" page linked to each School of Science academic department's community value statements. The page also provided information about departmental affinity groups for women and racial minority groups. Furthermore, resources for DEI scholarship and research also existed on this page.

An exact date for the removal of the DEI page on the School of Science website could not be confirmed. As of the time of publication, the School of Science spokesperson had not responded to *The Tech*'s request for comment.

Besides the School of Science, a number of MIT institutions and departments have removed their webpages about DEI. These include research centers such as the Whitehead Institute and McGovern Institute, as well as academic departments like the Department of Biology.

These changes reflect a recent trend of universities across the U.S. removing or renaming DEI pages from their websites in response to the Trump administration's recent executive orders banning DEI programs and initiatives across various sectors, including higher education and research. Due to the executive order, some federal agencies including NASA and the Department of Energy have recently required grant recipients to end DEI-related activities.

*— Vivian Hir*



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*This issue of The Tech is sponsored by:*
The Knight Science Journalism Program @ MIT

# Vice President for Equity and Inclusion Karl W. Reid ’84, SM ’85 steps down

## *Reid: “I did my best to build bridges”*

PHOTO COURTESY OF CORBIN SWAIN

**Dr. Karl Reid ‘84, SM ‘85, is MIT’s first Vice President for Equity and Inclusion.**

**By Vivian Hir**
*NEWS EDITOR*

On Feb. 7, President Kornbluth sent out an email stating that Vice President for Equity and Inclusion Karl W. Reid ’84, SM ’85 decided to step down from his position. As Vice President for Equity and Inclusion, Reid was responsible for promoting “inclusive excellence” at MIT and overseeing the Institute Community and Equity Office (ICEO). Furthermore, Reid was involved in directing the execution of the Institute’s Strategic Action Plan for Belonging, Achievement, and Composition.

Previously, Reid served as the executive director of the Office of Engineering Outreach Programs at MIT from 1998 to 2005. In 2005, he was appointed Director of the Office of Minority Education and Associate Dean of Undergraduate Education. Outside of MIT, Reid has taken on senior leadership roles at nonprofit organizations that focus on increasing educational opportunities, including the United Negro College Fund (UNCF) from 2008 to 2014 and the National Society of Black Engineers (NSBE) from 2014 to 2021. More recently, Reid was the Chief Inclusion Officer at Northeastern University from 2021 to 2024.

Reid’s term ends on Feb. 28, and Vice Provost for Faculty Paula Hammond will temporarily oversee the ICEO staff from March 1 to the summer. Reid’s decision comes amidst the Trump administration’s recent executive orders banning Diversity, Equity, and Inclusion (DEI) programs, which have led to sweeping changes in universities across the U.S.

In order to comply with the new policies, some universities have been closing or renaming DEI programs and initiatives, including Northeastern University and the University of Pennsylvania. The executive order has also impacted MIT, as some department and research center websites have removed their DEI pages, including the Koch Institute and the Biology Department.

Over email, Reid responded to *The Tech*’s request for comment regarding his decision to step down and his role as Vice President for Equity and Inclusion. Answers have been edited lightly for clarity.

*TT*: What factors motivated you to step down from this position?

Reid: As President Kornbluth wrote in her statement, the decision to resign was driven by a desire to return to my professional roots: to work with national organizations and programs that broaden pathways for students who are not afforded high-quality STEM opportunities for a variety of structural reasons. Never has this work been more important than it is now.

*TT*: What do your future plans entail, and how will this work differ from your past work at MIT, UNCF, and Northeastern?

Reid: My future efforts won’t differ much from my past and some aspects of my present work. The only major difference is its scale. For instance, I serve on a board of a non-profit (Engineering for Us All) that is introducing engineering curricula in high schools across the country, and another (Saga Education) that provides high dosage tutoring in algebra for students in schools and districts that serve low-income students.

For more than 50 years, MIT has been successful at forging one-off partnerships with organizations like these. However, I believe a future opportunity is to bring these efforts to scale nationally (and internationally) in order to create systemic partnerships that will dramatically increase access to, and opportunities for high-quality STEM education.

*TT:* Looking back, what have been your major accomplishments as Vice President for Equity and Inclusion? As a whole, what are your proudest achievements in your work of promoting DEI in higher education?

Reid: It was an honor to return to my alma mater to play a part in fulfilling the Institute’s mission to serve the nation and the world. For generations, MIT has been a beacon of innovation and a magnet for thousands of talented people from across the globe. MIT stands as a shining example of inclusive excellence. I owe so much to the Institute both educationally and professionally.

I am proud of the work the ICEO team does to help fulfill this mission, both prior to my arrival and since then. During my tenure, we built on the work that Dan Hastings started in refining the ICEO’s mission and reinforcing its programs and worked closely with senior leadership all along the way. We’ve hosted dozens of listening sessions to learn what is working, and explored opportunities for increased impact in creating a more welcoming campus community.

My proudest moments are the instances when I’ve interacted with members of our community, and particularly when I helped them to be seen, valued, and heard. Whether it was speaking with students in the Asian Christian community about resilience and faith, having meals with Jewish faculty, staff, and students, hearing from Black and Latino students about admissions, brainstorming with Palestinian and Arab alumni, holding space with both politically conservative and progressive alumni, or celebrating festivals with Indigenous faculty, staff, and students, I did my best to build bridges.

In every situation, even when meetings were contentious, the ICEO team and I saw the power of dialogue to make everyone better and more understanding. I learned from everyone. This is the work that I will never forget.

*TT*: Anything else you would like to share with The Tech?

MIT has defined excellence and community as two of its core values. It’s no coincidence that over the past five decades, the Institute has become more outstanding along many metrics while also becoming more diverse and inclusive. At MIT, diversity and excellence do not exist in tension, but rather coexist in the community.

As President Kornbluth has said, the degree to which we can continue to attract and retain exceptional people from across the country and around the world, solve the most complex and difficult problems, and train the next generation of leaders depends on our continued ability to foster an environment that allows and equips everyone in our community to do their best work.

As I’ve recently written in citing Dr. Martin Luther King’s last book, “Where Do We Go From Here: Chaos or Community?,” I echo his call to action to prioritize community-building.

## David Darmofal SM ’91, PhD ’93, appointed as next vice chancellor for undergraduate and graduate education

In an email to the MIT community on Feb. 3, Chancellor Melissa Nobles announced David Darmofal, SM ’91, PhD ’93, Professor of Aeronautics and Astronautics, as the next vice chancellor for undergraduate and graduate education. Darmofal’s role will formally begin on Feb. 17 under the supervision of Chancellor Nobles. Darmofal succeeds Ian Waitz, who stepped down in May 2024 to become vice president for research, and Daniel Hastings, the interim vice chancellor.

As vice chancellor for undergraduate and graduate education, Darmofal is responsible for overseeing the undergraduate and graduate academic offices. These offices include undergraduate admissions and financial aid, as well as undergraduate advising and the Career for Academic and Professional Development. Furthermore, Darmofal will act as the primary liaison for major student organizations such as the Undergraduate Association and Graduate Student Council.

Darmofal joined the MIT faculty in 1998. Per his website, his research focuses on “computational methods for partial differential equations.” From 2008 to 2011, Darmofal served as the associate and interim department head in Aeronautics and Astronautics (AeroAstro). As department head, Darmofal made extensive changes to the graduate program and AeroAstro curriculum. During the COVID-19 pandemic from 2020 to 2022, Darmofal was the AeroAstro director of digital education.

Outside of the AeroAstro department, Darmofal also served as co-chair on two Institute-wide committees that aimed to improve career exploration and professional development for students. He introduced the idea of the graduate student professional development requirement, and served as a faculty advisor to the Fall Career Fair. Furthermore, he created a first-year advising seminar about career exploration. Darmofal and his wife Claudia are also the heads of house at the Warehouse, an MIT residence for first-year graduate students.

“His thinking is also informed by a rare breadth and depth of first-hand knowledge of our community — as a leader in his department, a current head of house, a recent MIT parent, and an alum,” Nobles said.

*— Vivian Hir*

# Mishael Quraishi '25 named 2025 Churchill Scholar

## *Quraishi: "MIT beat me down and built me back up"*

**By Aheesh Sharma**

Mishael Quraishi '25, a Course 3-C (Archaeology and Materials), was recently named a 2025 Churchill Scholar. The Churchill Scholarship was established at the request of Sir Winston Churchill in 1959 to support American students studying at Cambridge University. The program's goal is to strengthen the US-UK relationship by advancing science and technology.

As a Churchill scholar, Quraishi will continue her research on Egyptian blue pigment at Cambridge, and plans to pursue a MPhil in archaeological research. In an interview with *The Tech*, Quraishi outlined her goal to pursue a PhD in archaeological materials, integrating ancient techniques with modern design.

*This interview has been lightly edited for concision and clarity.*

*TT:* What was your journey of applying for the Churchill Scholar program? How did you feel when you were selected?

Quraishi: I found out about the Churchill fellowship through the MIT Distinguished Fellowships page. I had been thinking for a while that I might want to study in the UK because archaeology is a big field there. A year of being able to have freedom with your research is very thrilling to me.

I would say it was a long process of self-reflection and thinking about what I value, how I've gotten to study the things that I'm studying, what I want to study in the future, and what kind of impact I want to have. Having clarity on all of those helped me tell my story in a way that not only felt true to myself, but also made sense to an outside reader.

I had faced a few rejections, but I wasn't discouraged. My mentality is whatever is meant to work out, will work out. When I found out [I was selected], I was with my whole family for Christmas and we were all freaking out. I'm still freaking out. I'll probably be freaking out until I get there.

*TT:* What do you intend to do as a Churchill Scholar? What are your long-term professional goals?

Quraishi: The Churchill program is one year, which feels pretty short, so I've had to put a lot of thought into this. My current research is on Egyptian blue pigment, which is the oldest synthetic pigment in human history. While I'm there, I'm going to continue some of the threads of research that I'm doing here.

My current SuperUROP is trying to look at the atomic scale, using transmission electron microscopy (TEM) to uncover differences in production methods for how different places produced Egyptian blue a long time ago. While I'm there, I'll continue some of that research, and try to meet other people in the [Churchill] Scholars Program.

I'm the only archaeologist among the scholars. The rest of them study pure math, physics, or computer science, so hopefully, that interdisciplinary cohort will help me challenge my own research questions. After this, my goal is to pursue a PhD in archeological materials, with the idea of antiquity-inspired design, which is how we can look at the past and repurpose or find new ways to use old materials to do things that benefit people today.

*TT:* How has your experience at MIT shaped the person you are today?

Quraishi: MIT is one of the few places that has a joint archaeology and materials engineering program, so I've been really lucky having the background of a hardcore science engineering perspective and combining it with archaeology. I have loved my time here, and I think there are a few different core facets that I can say I loved the most.

So there's obviously Course 3, which has given me plenty of materials science knowledge, and a great academic community of friends who I've bonded with over hard classes that have made us stronger. My lab work here has allowed me to explore questions that interest me.

The rowing team has given my life a lot of balance in that I am seeing a different demographic of people every day. I'm outside for two hours every day, which is definitely good for my mental health.

The last thing is the arts, which I've recently been pushing a lot more through taking art classes. I'm taking ceramics this semester. I do a lot of stuff in the forge and the MIT-Broad Foundry through Course 3, and all of that is another balancing factor.

I think MIT has pushed me really hard, but it's taught me how to find joy and balance.

*TT:* Looking back, what advice do you have for MIT students interested in fellowships like Churchill?

Quraishi: Don't be afraid to ask for help. It sounds so cliche, but at MIT, we are blessed to be in a community where everybody wants to see you succeed and wants to help you. I talked to previous students who had won other fellowships, and they kindly offered to talk through ideas with me.

I met with the Fellowships Office very frequently. Kim Bernard is wonderful. She's amazing. Shout out to her. I also made really good use of resources like CAPD and the Writing and Communication Center.

The whole process for me was very introspective, and sometimes that can be difficult. It can be daunting to try and describe your purpose in life, but talking to people who know you was helpful to me. At a certain point, you just have to trust that you know yourself and you know the things that you want to do. Stick by what you believe, and write something that feels reflective of you and something that you're proud to submit.

My final piece of advice is that it's easy to get caught up in the doom and gloom when things are hard. It definitely was hard and it challenged me a lot. I did not walk around this place thinking that I was great all the time. But it beat me down and built me back up.

PHOTO COURTESY OF KRISTI RAE

**Mishael Quraishi '25 has been selected as a 2025 Churchill Scholar.**

VIVIAN'S REFLECTIONS

# GTL Germany and the post-vacation blues

## reluctance to return to the MIT life

VIVIAN HIR — THE TECH

**A breathtaking view of Nuremberg on Jan. 20, 2025.**

**By Vivian Hir**
*NEWS EDITOR*

I hadn't expected that adjusting back to my MIT life after GTL* Germany would be rough. On my plane ride from Germany to Boston, I couldn't help but feel pensive and sad that the experience came to an end. I knew I had to return to MIT because GTL Germany was meant to be a short-term program — my primary role as an undergraduate student was to take classes and do research, not to teach high schoolers and have ample free time for the rest of the day. In other words, my laidback life in Germany couldn't last forever.

Logically, I told myself that I should accept my return to the busy MIT lifestyle, full of assignments. However, emotionally, I lingered on my wonderful GTL Germany experience, which felt like a long vacation to some extent; although it involved preparing and teaching classes, I had a lot of free time to relax and explore with my friends.

When I got back to campus, I was happy to live in my comfortable dorm room and see my friends, returning to a familiar place where I understood the language and ate food more suited to my palate. Despite this, I missed some aspects of Germany: the quaint houses that dotted the peaceful landscape on my train ride, the windy cobblestone streets in the old town of Regensburg, the breathtaking view of Nuremberg from the top of the Imperial Castle, and so much more.

This feeling of melancholy persisted after I returned to campus. I didn't have words to describe my unique situation, nor understand why I was feeling this way. The closest emotions that came to me were yearning and nostalgia, like the time I felt sad that my summer in Taiwan was coming to an end. Why couldn't I just move on quickly and accept my normal life again?

Instead of thinking about my plans for the next semester, I kept adding destinations to my travel bucket list, even though I knew that reading about the various cities of Europe and scanning the map was silly and useless. It wasn't until a few days after the trip that I noticed I was experiencing the post-vacation blues, a feeling of sadness that comes after a vacation ends. When I reflected on my happiness hangover, I realized that my reasons were unavoidable.

Although I like living in Cambridge, its novelty has faded after more than three years, which is inevitable after one settles down. Sometimes, I feel like I have already explored most of Cambridge and Boston. On the other hand, Germany was a novel experience for me. Each day was an adventure, from eating new dishes to exploring new places. I truly embraced the spirit of carpe diem** during my time there. With just sixteen days in Germany, I made the most out of my limited time, visiting nearby cities like Munich and exploring Regensburg, where I had lived.

This different setting provided me the opportunity to do things I otherwise wouldn't have done at MIT, which I greatly appreciate. For instance, I allowed myself to indulge in food and drink without feeling guilty about my decisions. Eating out added up, but I was satisfied with the gastronomic experiences that allowed me to appreciate the local cuisine, from deer meat to pork shoulder. I let myself buy delicious bread and pastries at bakeries and try new cocktails at restaurants and bars.

What stood out the most, however, was the instant friendships I made with the five other MIT students in GTL Germany. Despite coming from different backgrounds and not knowing one another beforehand, we became very close within a short period of time. The camaraderie I developed with my friends encouraged me to be more light-hearted and humorous, traits that I often overlooked in the past.

Over the course of the program, we developed many inside jokes and one-liners for each person in the group. Besides teasing one another in daily conversations, we also bonded from playing group games — my friends liked poking fun at my inability to lie in Among Us, W was teased for being the most American, and we made frequent jokes about M's expressive hand gestures when he apologized.

Jokes aside, I also appreciated the deep conversations about our backgrounds and how they shaped our present selves. I still think about the nice dinner we had at an Italian restaurant as I listened attentively to my friends discussing their various cultures, learning about different customs and practices. Maybe it was the dim lights and the wine, but I enjoyed the close knit, personal intimacy of the conversation. Although we could meet up at MIT, finding shared time to hang out would be difficult, and we wouldn't be together as often as in GTL Germany.

I continued reminiscing about GTL Germany through the last week of IAP, but I gradually overcame the post-vacation blues and returned to embracing my normal life at MIT by the start of the spring semester. Yes, I am back in the same place, living the same lifestyle, but that doesn't mean life is boring here. In fact, it is far from boring; I look forward to the new events, conversations, knowledge, and milestones in my last undergraduate semester at MIT.

Likewise, I am grateful for many things here. I love running around the Charles River. I cherish French House for its home-cooked dinners and tight-knit community. Classical music concerts at the Boston Symphony Orchestra and Jordan Hall have been one of the best experiences I had here. I won't forget the many author events at Harvard Book Store where I listened to my favorite authors share enlightening ideas and left feeling inspired. I cannot see myself attending undergrad somewhere else; I have truly found a second home here.

**GTL stands for "Global Teaching Labs," an MIT program in which students teach STEM subjects abroad during Independent Activities Period (IAP).*

*** "Seize the day"*

# MITiny Love Stories Vol. 1

## Reader-submitted love stories from across campus

This Valentine's Day, we asked MIT community members to tell us, in 100 words, about the people — and things — they love. Here are five of their stories, with more to come next issue!

### Perfectly Imperfect

VIVIAN HIR — THE TECH

**A photo of passion fruit**

"Why do you like passion fruit so much?" my housemate asks me. "It's so sour and it's just seeds." I don't know how to respond. Can I just say I like it just because? It's not just with fruit, but also with people — liking them for who they are, despite their imperfections. Imperfectly perfect. I love the sweet and sour juices that clash together, acting like fireworks that go off in my mouth. I savor the tiny meat on the seeds like popping boba. Never had I realized until now how something so simple can bring so much joy.

*— Vivian Hir*

### Finding Love in an Empty Classroom

I fell in love with the green-haired girl in 6.191. There wasn't recitation that day, but we both showed up. We exchanged numbers to work together on psets. After the next class, I helped her find the Cheney Room for the first time and texted her after to ask her on a date. She responded "OMG YOU'RE GAY?" and we became girlfriends on Pi Day, walking home together after campus shut down early for bad weather. That was almost two years ago, hundreds of can-I-touch-your-nose-s ago, and thousands of Pikmin Bloom flowers ago.

*— sarah*

### Questionable Advice

SABINE CHU — THE TECH

**A gaggle of geese on the Kresge lawn**

As the old adage goes, if you want people to like you, talk about them, not yourself. I've internalized this message so thoroughly that now, whenever I encounter a lull in conversation, I'm compelled to ask as many questions as I can. Knowing this, my friends humor me by thinking hard about their answers, even if the initial query is a little nonsensical. ("If you were a goose, which side of Killian would you forage on?") Still, they always disregard the original point (to learn about them, goddamnit!) when they pause, poke my arm, and go, "what about you?"

*— Sabine Chu*

### Once Interwoven, Now Unraveled

My UROP mentor asked for "any Course 2 friends that might also be interested." I thought of you, with whom I'd spent awkward half-minute silences in the Vassar elevator; long hours asking for 6.100A help; trips to Maseeh late night not ever for the food. You, my gateway drug to another: Cafe 472 froyo, reserved for the coldest nights. Our time wove into furtive glances stolen across the lab bench, psets finished in heinously fishbowl-like study rooms, nights spent with you holding me when I couldn't bear myself.

MIT is different without you now.
-
MIT without you.
MIT is different now.

*— J*

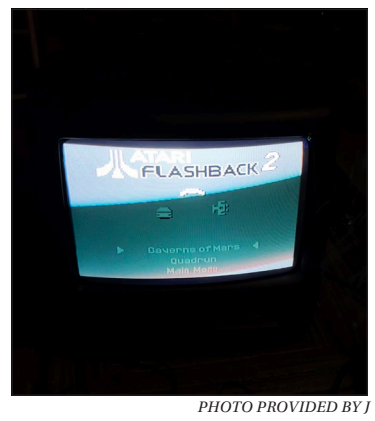



PHOTO PROVIDED BY J

**A person looking at a screen in the darkness**

### It Was Virtually Fate

We met in the most MIT way possible: through a mailing list. It was fall of freshman year, all of us stuck at home because of COVID quarantine. It was in one of those mind-numbing Zoom classes that I saw him, the cute guy in the lower-left corner. I've never been the boldest guy, but something about his name seemed familiar. I searched my email, and there it was: both of us subscribed to the same queer first-year mailing list. With that starting signal, I sent him a message, and Zoom calls became lasting love.

*— Emilio*

EVENT REVIEW

# *Radiolab* founder and creator Jad Abumrad presents "How to Talk to a Human" at Sanders Theatre

## Abumrad: "Actual listening is something much, much different."

**By Vivian Hir**
*NEWS EDITOR*

On Jan. 31, radio host and producer Jad Abumrad presented "How to Talk to a Human," his latest project at the Sanders Theatre. A three-time Peabody Awards recipient and 2011 MacArthur Fellow, Abumrad is the creator and former co-host of NPR's *Radiolab*, a radio program broadcasted on nearly six hundred radio stations across the country. Using an investigative journalism approach, *Radiolab* covers topics across various disciplines, such as science and history.

In "How to Talk to a Human," Abumrad, a Distinguished Research Professor of Communication of Science and Technology at Vanderbilt University, shared his insights on how people can have better conversations in many kinds of settings, from conducting interviews to talking to a family member. Although Abumrad is a journalist with extensive experience, he admitted that he is still in the process of understanding how to talk to a human.

Abumrad's dissatisfaction with the quality of his interviews in 2021 inspired him to investigate this topic. "I hit this run of interviews where suddenly all the interviews I was doing, were just sucking," he said. As a result, Abumrad became interested in talking to other journalists to learn how they conducted interviews, but he then realized that "we all do the same thing," which elicited laughter from the audience. So Abumrad started talking to professionals outside journalism whose jobs required effective communication, from therapists to lawyers to even hostage negotiators. Eventually, his search ended up taking a broader scope of learning how to talk to a human, hence the title of his talk.

Abumrad began his presentation by introducing resonance, a concept in which two people are truly engaged in a conversation. Although people think that they are good at listening in a conversation, Abumrad argued that people are sometimes just waiting for the other person to pause before responding.

"We're all pretty good at miming listening," Abumrad said. "Actual listening is something much, much different."

To practice resonance, Abumrad had the audience form pairs and participate in an interactive activity. In the activity, each person had two minutes to answer the question, and the other person had thirty seconds to respond to the person's answer. The main rule of the timed conversation was to use phrases to build resonance, such as "I was impacted" or "I was right there." Abumrad also emphasized things to avoid in the conversation, which included talking about themselves or sharing their opinions.

While the rules sounded straightforward, the exercise served as a friendly reminder for the audience to build resonance in a conversation, even if one may not agree with the other person. "It doesn't actually mean you necessarily have to like them," Abumrad said. "It just means you are here at this moment, and you share something together."

After discussing the significance of resonance, Abumrad presented the choreography of conversation. Although choreography is typically associated with dance and theater, Abumrad argued that the orientation and location of people in a conversation are also relevant. One interesting example was Columbia Law lecturer Nicolas Grabar's advice for law school students to sit next to a prisoner at a 90-degree angle in a conversation. According to Grabar, this allows the prisoner to "speak as much as he wants or as little as he wants."

This powerful example transitioned into the next idea of how eye contact and closeness in conversation tend to be overemphasized. In certain cases, less eye contact and more space may be more effective than the default. Abumrad shared his own experience of how deviating from the standard face-to-face orientation helped his interview with country singer Dolly Parton. When he first interviewed her face-to-face, he said, "She steamrolled me." He then altered the arrangement such that they sat on the couch with room for their "eyes and arms to wander." In addition, the table had a laptop containing images and songs for Parton to respond to. These changes resulted in a much better conversation. "She got really reflective, really quiet," Abumrad said. "It was just a beautiful, beautiful shift."

Abumrad reiterated the importance of considering factors like orientation and location in a conversation instead of solely focusing on dialogue. "How can I change the choreography?" Abumrad asked the audience. "Forget what we are saying."

Abumrad then spoke about the listening triangle, a framework used for improving communication. The listening triangle consists of three steps: asking an open-ended question, listening, and paraphrasing the response to verify. While the model is simple, people don't use the listening triangle enough because of their overconfidence in understanding the other person. "The truth is, we project onto each other, and then relate each other's projections," Abumrad said. What the listening triangle offers is clarifying what the other person meant, allowing both sides to feel understood and heard.

Following the listening triangle was the topic of oneness and separateness, a concept coined by child psychologist Louise Kaplan. Before an infant is eighteen months old, they do not have a concept of self, causing them to feel "oneness." Afterward, however, the child experiences "separateness" and realizes they have their own identity. The dichotomy between the two experiences inspired Abumrad to apply this concept when trying to help someone.

PHOTO COURTESY OF LIZZY JOHNSTON

**Jad Abumrad is the creator and founder of *Radiolab*.**

Based on his conversation with University of Michigan Psychology Professor Ethan Kross, Abumrad suggested to first use oneness and then separateness when talking to someone having a challenging time, such as failure. What Abumrad means by this approach is to first build social and emotional connections by relating to them. Afterwards, the person should be given space to understand what is happening so they can develop their own plan and move on.

While it may be unclear when one should go from oneness to separateness, Abumrad recommended simply asking the person if they would like advice, or aren't ready yet. An analogy to oneness and separateness is the transition from empathy to compassion. While the two words sound synonymous, Abumrad argued that they fall under different stages. According to Abumrad, a person starts with empathy, the act of feeling another person's emotions. Then, this develops to compassion, the act of helping someone in need.

Abumrad concluded his talk with a reprise called "Find the Third," a concept based on an interesting conversation card game that nonprofit director Alisa del Tufo developed. To interview children from abused families, she had them draw cards that had questions. She also offered blank cards in the deck for them to write their personal questions. Abumrad found this method to be an inspiring way of approaching journalism from a different angle. Traditionally, interviewers follow a list of questions for the interviewee. "You give yourself the opportunity to ask questions, and you alsow give the other person a fair amount of control over the experience," Abumrad said.

Abumrad left the audience with an enlightening question, asking, "What is your version of the card game? What is the thing that you can do when you are talking to ensure that people hear you and that you are listening to encourage people to share?"

**Jad Abumrad**

**"How to Talk to a Human"**

**Celebrity Series of Boston**

**Sanders Theatre**

**Jan. 31, 2025**

# Seong-Jin Cho Dazzles With Two Hours of Ravel

## Cho's performance of Ravel's solo piano repertoire leaves no doubt of his technical and musical prowess

**By Susan Hong**
*CAMPUS LIFE EDITOR*

Maurice Ravel—Claude Debussy's arguably less famous musical cousin—is a master of swirling harmonies that mimic the fluid, capricious nature of water; almost-melodies that pass between different voices and never seem to resolve; and grand, virtuosic sweeps that challenge even the most skilled pianists of our generation. Yet Seong-Jin Cho brilliantly glides through arpeggios, glissandos, and never-ending runs like second nature, drawing out overlapping textures and turning clusters of notes into stories. Cho, who performed at Boston's Symphony Hall as part of the Celebrity Series on February 2, 2025, played the complete set of solo piano works written by Ravel, a live rendition of an over two-hour-long album he released in January 2025 to commemorate the 150th anniversary of Ravel's birth.

Cho begins with the *Sérénade grotesque*, immediately demonstrating his command over the variety of textures prominent in Ravel's work. This piece is a patchwork of various sounds, with fast transitions from sharp, fortissimo staccatos to gentle, heavily-pedaled pianissimo. In the middle of the piece, Cho immediately channels bursts of energy from loud chords into soft, alternating notes, which then explode back into the chords. His powerful control over dynamic contrast appears to stem from the flexibility of his fingers. Throughout the entire performance, Cho plays softer passages with a soft, flattened hand, gently stroking the keys of the piano, and for the louder sections, he leans forward and channels his body weight into his more rigid hands. The genius of Cho's Ravel performance lies not only in his interpretation of overarching melodic and harmonic stories but also in his clear knowledge and deliberate application of the mechanics of piano technique.

This skill is further demonstrated in Cho's performance of *Jeux d'eau*, a piece meant to evoke the playful character of sparkling streams of water arching over a fountain. And indeed, Cho's fingers sparkle. Most of the piece is composed of fast clusters of notes, whether in the form of short arpeggios, long runs, or something else entirely. While Cho plays the notes with great speed and precision, creating a sweeping effect reminiscent of flowing water, each and every note is somehow still perfectly distinct, portraying the smooth jets of water and clear sparkles that emit when light is shone upon the fountain.

*PHOTO COURTESY OF PHOTO COURTESY OF DEUTSCHE GRAMMOPHON*
**The cover of Seong-Jin Cho's new album, "Ravel: The Solo Complete Piano Works"**

*Alborada del gracioso* is the first clear departure from Ravel's penchant for flowy, water-like pieces in the program. It begins immediately with a rhythmic staccato background, reminiscent of beating drums. Ravel's versatility in composition perfectly complements Cho's versatility of playing style, as the audience gets to witness the performer paint a different kind of picture. Cho performs the lively sections of this piece like a virtuosic dance. The textural contrasts that he applies so well come as Cho uses the pedal to alternate between crisp staccatos and smooth lines—which sometimes even appear within the same measure. In this piece, his feet move almost as fast as his fingers, as he varies not only the length of pedals, but also the depth, expanding his range of textures. The sparkling quality seen in *Jeux d'eau* also extends to the repeated notes that pepper the last half of the piece—they are played so fast they almost blur into a singular sound, but each note remains distinct and accurate.

Arguably the climax of Cho's entire performance, *Scarbo* from *Gaspard de la nuit* is a demonstration of not only Cho's strengths—textural contrast, voicing, tone—but also a display of pure virtuosity. Fast runs, rapid repeated notes, runs spanning nearly the entirety of the keyboard, sharp changes in texture and dynamics, a resounding storyline—*Scarbo* has it all. And, evidently, so does Cho. He effortlessly passes voices between hands, bringing out clear, interconnected melodies even from within a cesspool of dissonance, and, as expected, his runs are essentially flawless without sounding robotic, creating a distinct feeling of increasing suspense. *Scarbo* ends surprisingly quietly—an understatement compared to its roaring technicality—but the applause that follows is far from quiet. A resounding standing ovation, and the program hasn't even ended yet.

The rest of Cho's program is similarly impressive. Highlights include the collection of waltzes that blend into each other, leaving only their distinct styles to indicate starts and finishes to the listener, and *Le tombeau de couperin*, a suite similar in organization to a Bach Partita, echoing more traditional forms while adding Ravel's unique touch. In the *Prelude* of *Le tombeau de couperin*, Cho does a masterful job of changing the color of the music—by modifying dynamics and his touch on the keys—even as the tempo and rhythm of the notes remain constant.

Overall, Cho's performance of Ravel's entire solo piano repertoire proved to be both technically impressive and musically alluring. After multiple rounds of standing ovations by audience members who were no doubt waiting for an encore, Cho came back out and shut the piano lid—a sign that there would be no encore—to laughter from the audience. And after two hours straight of brilliant, virtuosic musical performance, who can blame him?

## SPORTS BLITZ

**Friday, February 7th:**

- **Women's Swimming and Diving** participated in the Boston Winter Open at Boston University
- **Men's Swimming and Diving** participated in the Boston Winter Open at Boston University
- **Women's Track and Field** participated in Crimson Elite at Harvard University
- **Men's Track and Field** participated in Crimson Elite at Harvard University

**Saturday, February 8th:**

- **Rifle** defeated Norwich University 4389–4361
- **Rifle** lost to the University of Rhode Island 4389–4489
- **Women's Fencing** lost to Johns Hopkins University 8–9
- **Women's Track and Field** participated in the Tufts Cupid Challenge
- **Men's Track and Field** participated in the Tufts Cupid Challenge
- **Women's Fencing** lost to the University of North Carolina 6–21
- **Men's Squash** defeated Dickinson College 8–1
- **Men's Basketball** lost to the United States Coast Guard Academy 68–84
- **Women's Fencing** lost to Duke University 10–17
- **Women's Basketball** defeated the United States Coast Guard Academy 88–79
- **Women's Fencing** defeated the Air Force 15–12
- **Men's Volleyball** lost to Springfield College 0–3
- **Men's Squash** lost to Drexel University 1–8
- **Women's Fencing** defeated Penn State University 18–9
- **Men's Volleyball** defeated Nichols College 3–2

**Sunday, February 9th:**

- **Men's Fencing** lost to the University of North Carolina 11–16
- **Men's Fencing** lost to Duke University 13–14
- **Men's Squash** defeated the Navy 7–2
- **Men's Fencing** lost to the Air Force 20–7
- **Men's Fencing** lost to Penn State University 10–17
- **Men's Fencing** lost to Johns Hopkins University 8–19
-

**Wednesday, February 12th:**

- **Men's Basketball** lost to Emerson College 62–65
- **Women's Basketball** lost to Babson College 79–84 in OT

**Thursday, February 13th:**

- **Women's Tennis** defeated Brandeis University 6–1

**Friday, February 14th:**

- **Men's Track and Field** participated in the Boston University David Hemery Valentine Invitational

**Saturday, February 15th:**

- **Women's Track and Field** participated in the Boston University David Hemery Valentine Invitational
- **Men's Track and Field** participated in the MIT Gordon Kelly Invitational
- **Women's Track and Field** participated in the MIT Gordon Kelly Invitational
- **Women's Track and Field** participated in the Tufts Stampede Open
- **Men's Track and Field** participated in the Tufts Stampede Open
- **Men's Volleyball** lost to St. John Fisher University 0–3
- **Men's Basketball** lost to the Worcester Polytechnic Institute 53–72
- **Men's Tennis** lost to Rensselaer Polytechnic Institute 2–5
- **Women's Basketball** lost to Smith College 38–77
- **Men's Volleyball** lost to Russell Sage College 3–0

**Sunday, February 16th:**

- **Rifle** lost to the Ohio State University 4394–4680
- **Rifle** defeated the United States Coast Guard Academy 4394–3865

# Winter Recap, Spring Preview

**By Matthew Barnett**
*SPORTS EDITOR*

As winter sports enter the twilight of their seasons, spring athletes are preparing to kick off their 2025 campaigns. Before we get too caught up in our sports of sticks and bats (that's lacrosse and baseball/softball, if you didn't know), let's recap how our winter sports have fared since the last issue of the paper published on Feb. 6.

**Men's Basketball** - Men's Basketball continued their IAP struggles into February. Since their 69-66 win against Salve Regina on Feb. 1, they have lost four straight conference games and have officially been eliminated from the NEWMAC Championship tournament. They face Clark University in their season finale, sporting a dismal 9-15 record (3-12 conference).

**Women's Basketball** - Women's Basketball has slipped since the last issue of The Tech. They have lost three of their last four conference games, including a tough loss in OT to Babson on Feb. 12, falling to fourth place in the NEWMAC. They currently hold a 10-13 record (6-3 conference) and have secured a spot in the NEWMAC Championship Tournament. They finish the season with two conference games against Wheaton and Salve Regina, both of which will have major implications in the seeding of the tournament.

**Men's Volleyball** - Men's Volleyball has seemingly cooled off. After their hot 7-0 start, they currently sit at 9-5. All five of their losses have come from ranked teams— their most recent defeat was to No. 14 St. John Fisher University on Feb. 15. If this trend holds up, the team might be in for a rough weekend: MIT is set to take on No. 3 Vassar College on Feb. 21, and No. 1 NYU on Feb. 22. The team currently is ranked No. 20 nationally by the latest American Volleyball Coaches Association (AVCA) poll and are most likely at risk of losing their ranking if they continue to drop games against ranked competition.

**Looking Ahead to Spring Sports**

Many sports have later start dates that will be captured best in the next issue. These are the current spring team sports starting this week.

**Men's Lacrosse** - Men's Lacrosse begins their season on Feb. 22 at Roger Williams University. They're projected to finish 3rd in the NEWMAC according to the Preseason Coaches Poll. They have twenty-six returning student-athletes and are seeking to improve upon their 6-10 record last season.

**Women's Lacrosse** - Women's Lacrosse kicks off their 2025 season on Feb. 22 against Endicott College. Projected to place 2nd in the NEWMAC according to the Preseason Coaches Poll, the Engineers hope to continue their success from last season. In 2024, the Engineers finished with a 17-5 record but lost in the NEWMAC Championship Game to Babson College (who are projected to repeat as champions this year). MIT made it a game deep into the NCAA tournament before losing to William Smith in the second round.

**Baseball** - MIT's Baseball Team starts their season against Mitchell College on March 1st. They are ranked 5th in the NEWMAC according to the Preseason Coaches Poll. The team hopes to improve upon their 17-20 record in 2024 as they enter the last season of Head Coach Andy Barlow's tenure at MIT (who previously announced his retirement at the end of the season).

# Upcoming Sports Events

## FRIDAY 21

**Women's Swimming and Diving**
*NEWMAC Championship*

**Men's Swimming and Diving**
*NEWMAC Championship*

**Men's Volleyball**
*at Vassar College*
*5 p.m.*

**Men's Squash**
*at Middlebury College*
*5 p.m.*

## SATURDAY 22

**Women's Track and Field**
*Brown Invitational*

**Men's Track and Field**
*Brown Invitational*

**Rifle**
*NCAA Qualifier*
*7:45 a.m.*

**Women's Track and Field**
*Triangle Classic*

**Men's Track and Field**
*Triangle Classic*

**Sailing**
*at USF Women's Team Race*
*10 a.m.*

**Women's Swimming and Diving**
*NEWMAC Championship*

**Men's Swimming and Diving**
*NEWMAC Championship*

**Women's Tennis**
*at Vassar College*
*11 a.m.*

**Men's Lacrosse**
*at Roger Williams University*
*12 p.m.*

**Men's Volleyball**
*at New York University*
*2 p.m.*

**Women's Basketball**
*vs Salve Regina University*
*2 p.m.*

**Women's Lacrosse**
*at Endicott College*
*3 p.m.*

**Men's Tennis**
*vs Nichols College*
*3 p.m.*

**Men's Tennis**
*vs Holy Cross*
*3 p.m.*

## SUNDAY 23

**Sailing**
*at USF Women's Team Race*
*10 a.m.*

**Women's Swimming and Diving**
*NEWMAC Championship*

**Men's Swimming and Diving**
*NEWMAC Championship*

**Men's Fencing**
*NEIF Championship*

**Women's Fencing**
*NEIF Championship*

## WEDNESDAY 26

**Women's Basketball**
*NEWMAC Championship*

## FRIDAY 28

**Men's Swimming and Diving**
*NCAA Diving Regionals*

**Women's Swimming and Diving**
*NCAA Diving Regionals*

**Men's Squash**
*CSA Championship*

**Women's Track and Field**
*New England DIII Indoor Track and Field Championship*

**Men's Track and Field**
*New England DIII Indoor Track and Field Championship*

**Men's Lacrosse**
*vs Western New England University*
*6 p.m.*

## SATURDAY 1

**Men's Squash**
*CSA Championship*

**Sailing**
*at Liam O'Keefe Team Race Trophy*

**Sailing**
*at Harvard Women's Team Race*

**Men's Swimming and Diving**
*NCAA Diving Regionals*

**Women's Swimming and Diving**
*NCAA Diving Regionals*

**Women's Track and Field**
*New England DIII Indoor Track and Field Championship*

**Men's Track and Field**
*New England DIII Indoor Track and Field Championship*

**Rifle**
*MAC Championship*
*12 p.m.*

**Baseball**
*at Mitchell College*
*12 p.m.*

**Men's Volleyball**
*vs Nazareth University*
*1 p.m.*

**Women's Lacrosse**
*vs Westfield State University*
*1 p.m.*

**Men's Tennis**
*vs Vassar College*
*1 p.m.*

**Men's Volleyball**
*vs SUNY Poly*
*5 p.m.*

## SUNDAY 2

**Men's Squash**
*CSA Championship*

**Sailing**
*at Liam O'Keefe Team Race Trophy*

**Sailing**
*at Harvard Women's Team Race*

**Rifle**
*MAC Championship*
*12 p.m.*

**Baseball**
*vs Amherst College*
*1 p.m.*

**Men's Track and Field**
*at BU Last Chance*

**Women's Track and Field**
*at BU Last Chance*

## TUESDAY 4

**Baseball**
*at UMass Boston*
*3 p.m.*

## WEDNESDAY 5

**Men's Lacrosse**
*at Endicott College*
*4 p.m.*

# Build for Ukraine: MIT Innovators Tackle Misinformation, Education, and Infrastructure Challenges

## From fighting disinformation to constructing new polymers, participants worked together to solve problems for Ukraine

**By Eric Wang**
*SCIENCE STAFF*

In MIT's Suffolk Building, a group of innovators sit around a projector, listening to a team of speakers address misinformation associated with Ukrainian subjects on Wikipedia. According to the group, the limitations of the Russian language create a systematic bias in English-language descriptions of Ukrainian subjects, leading to incorrect narratives and perspectives on already heavily-monitored Ukrainian heritage pages. The rest of the innovators ask for clarification, suggest new methods for gathering and flagging misinformation, and offer their services to help with the project.

But this is not just a research conference or lab meeting. This is Build for Ukraine.

Build for Ukraine was started by Ford International Professor of History Elizabeth Wood, MIT-Ukraine Program Manager Dr. Svitlana Krasynska, Research Scientist Dr. Phil Tinn PhD '16, and Dr. Ho Chit Siu '14, SM '15, PhD '18. The goal of the program was to bring together people at MIT and the Kyiv School of Economics to address some of the biggest humanitarian problems caused by Russian President Vladimir Putin's invasion of Ukraine. As a result of the class's unique undertaking, Build for Ukraine was designed to be a project-focused class similar to a hackathon. Its focuses include constructing online infrastructure to detect misleading narratives, inventing and testing of materials as alternatives for HVAC systems, and streamlining innovations in the demining of Ukraine. For three-and-a-half weeks, the teams worked to create initiatives for resolving the shortcomings in their respective fields, culminating in the highlight of the class: a hackathon-style presentation that allows for both fellow classmates and professors to share their input.

For Catherine Tang '25, a senior at MIT working on improving STEM education for children in Ukraine, collaboration was the most valuable part of this experience. Tang originally planned to focus on fighting disinformation, but decided to switch her focus to education due to her interactions with a classmate.

"When Nazar, a first year at Tufts and participant in this program, presented on his experience with the Ukraine Leadership & Technology Academy program (ULTA) and how it lead to Khan Academy for Ukraine, I was struck by how he described education as the means by which we could empower the next generation of Ukrainians students to help their country," Tang said. "This made me certain that this is the area I wanted to address."

According to Tang, average math and science scores have decreased over the course of the war, with dangerous conditions impacting learning for many Ukrainian children. In addition, Ukraine's current educational infrastructure cannot adequately teach the science and math concepts that are necessary for Ukraine's future. Tang's group drew inspiration from ULTA, an educational program that bridges MIT education and the perspectives of Ukrainian high school students. Tang's group introduced an initiative that would bring Beaver Works — an MIT summer program designed to give high school students hands-on STEM experience — to Ukraine. Instead of structuring content into long, monotonous flows of information, Tang's initiative would use shorter, feedback-centered, and project-based teaching approaches for explaining material. As a result, Ukrainian students would be more excited to learn and build the hard skills necessary to succeed in the future and close the education gap created by the Russian invasion of Ukraine.

Initiatives from other teams also sought to revolutionize existing systems. One group showcased improved polymer filaments that reduce the energy cost of heating. Because of the material's novel braiding patterns, these new polymer filaments reduce heat loss and energy needs in the winter, protecting Ukrainian civilians during frequent blackouts.

Another group proposed protocols for streamlining demining innovations to improve safety for civilians. They argue that lack of communication and technology in place makes Ukraine especially dangerous and susceptible to mining. The group proposed new protocols that not only allowed for better communication with civilians but also updated maps and charts to help educate and protect the public.

Tang's group, like many others in the class, has already begun taking the next steps for their future plans. From contacting potential sponsors and securing funding to interviewing potential teachers and contacts in Ukraine, Tang and her team are aiming to get their project from Boston to Ukraine by June or July, in order for Ukrainian teachers to teach the summer program. "I see this project and the larger problem in education we're trying to address as a lack of people rather than a lack of technical resources," Tang said.

Through collaboration, innovation, and determination, Build for Ukraine is not just about generating ideas — it is about actively shaping solutions that empower Ukrainians to rebuild, educate, and strengthen their country for the future.

# Let There be LiDAR: Technological Advances Shine Light on Lost Mayan City

## Researchers discover an ancient city using old LiDAR data

**By Vaibhavi Addala**

Last October, a team of researchers led by Luke Auld-Thomas of Northern Arizona University published a paper in *Antiquity* on their discovery of Valeriana — an ancient Mayan city buried in the jungles of Mexico's state of Campeche.

Over a thousand years ago, between 30,000 and 50,000 Mayans lived in this grand metropolis. Named for a nearby lake, the 16.6 square kilometer city boasts several traditionally Mayan features, including soaring, stepped limestone temple pyramids, an expansive ballcourt used to play a traditional Maya ballgame, and a sophisticated reservoir.

While these features are impressive feats of architecture and urban planning, they are not necessarily unique: many Mayan sites in the area feature similar structures. So why has the discovery of Valeriana generated such great interest? The city was discovered not through traditional archaeological methods, but through the use of Light Detection and Ranging, or LiDAR.

LiDAR is a method in which lasers are used to measure a sensor's distance from the earth, helping scientists understand a region's topography and detect man-made features, such as the structures of an ancient city. Over the last fifteen years, archaeologists have gained wider access to the high computing power needed to process LiDAR data, and its usage has surged.

The biggest reason for this increase in LiDAR usage, especially in Mesoamerica, is because of the difficulty of physically hacking through and uncovering ruins in a dense, vast, and dangerous jungle environment. Consequently, LiDAR's ability to "see through" jungle growth is invaluable in examining structures — especially smaller ones, such as houses or low walls. Dr. Jennifer Meanwell SB '01, PhD '08, an archaeology lecturer in MIT's Department of Materials Science and Engineering (DMSE), highlights LiDAR as particularly advantageous since it minimizes the invasiveness of archaeological research.

"Archaeology is, by its nature, a destructive science," Meanwell said. "To do more detailed analysis, you often have to damage [artifacts] in some way. And yes, we learn amazing amounts by doing that. But at the same time, if we can minimize that, that's also a really wonderful goal."

While LiDAR's usage for archaeology has its advantages, including its noninvasiveness, the data collection process is not easy. Researchers must plan where to collect data, purchase drones equipped with sensors, and acquire permits, all of which takes a great deal of time and money. Auld-Thomas, however, bypassed this tedious process, since the data had actually been acquired for environmental reasons by the Mexican government many years prior.

The data was never meant to be used in archaeological research; strangely, that may have made it more useful. Why? Because it was "pseudo-randomly" sampled — collected without specific archaeological questions in mind — Auld-Thomas and his team were able to generalize their discoveries about Valeriana to the entire region of Campeche. For example, since Valeriana was found to be densely populated, Auld-Thomas and his team argued that the entire region was similarly densely populated.

According to DMSE lecturer Dr. Franco Rossi, who has worked with the San Bartolo-Xultun Regional Archaeological Project (PRASBX) to study Mayan sites in Guatemala, this ability to make general conclusions is what makes the discovery of Valeriana especially interesting. In addition to demonstrating the general utility of LiDAR, the find also shows "the utility of LiDAR [surveys] that [aren't] necessarily archaeologically shaped," according to Rossi. Using data collected for other purposes could save archaeologists both time and money by enabling them to gather valuable information without having to physically be present at the site, as well as generalize their findings to the surrounding area.

As with most new technologies, many questions surround LiDAR's use for archaeology. For example, should such data be publicly available? Both Meanwell and Rossi acknowledge that making the data public could result in security risks, potentially giving looters an intimate understanding of a region's landscape and topography. Still, Rossi believes such data should not be kept private. "I'm of the mind that it should be publicly available," he said. "It's land data. It exists."

While these kinds of questions may never fully be answered, one thing is for sure: LiDAR has made a significant impact on archaeology, and it is here to stay.

# NOTICE: LIFTING SUSPENSION ON OPINION POLICY

*The Tech* Editorial Board is lifting the temporary suspension on the Opinion section, and we are accepting submissions, effective immediately.

After taking steps to rectify our operating guidelines, we believe that our updated Opinion Policy will enable us to engage with MIT community members in a meaningful and sensitive way. We will continue to take next steps in our pursuit of the highest journalistic standards.

With these modified guidelines, we will ensure that each piece is screened for factual accuracy and novelty. We uphold accountability standards for author(s) by requiring, among other things, a brief biography of the author(s) to contextualize their submission with past and present affiliations at MIT. Furthermore, we will automatically reject any articles without an author or designated signatory (for submissions on behalf of a group).

These guidelines were created to enforce author accountability, validity of claims made, and relevance to our readership. Find the updated Opinion Policy below and on our Opinion Policy page.

We are very excited to bring the Opinion section back to print, and look forward to reading your submissions!

*— Claire Mao, Vol. 145 Publisher*

# 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.

**Editorials**

Editorials are the official opinion of *The Tech.* They are written by the Editorial Board.

Dissents are the opinions of signed members of the editorial board choosing to publish their disagreement with the editorial.

**Staff Submissions**

Staff columns express a particular opinion on campus-relevant matters.

Cartoons are hand-sketched graphics expressing a particular opinion through hyperbole and satire.

Columns and cartoons are created by individuals and represent the opinion of the author, not necessarily that of the newspaper.

**Guest Submissions**

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; a Letter to the Editor is an open letter addressed directly to the "Editor," in reference to a particular opinion expressed by *The Tech* through an Editorial or a Staff Opinion or to a particular piece or set of pieces published.

Electronic submissions are encouraged and should be sent to 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).

**Submission**

All submissions must be made to the Opinion Editor with the following items:

- The full name of the author(s) as it shall be published
- The full manuscript of the opinion piece
- A list of citations for sources used
- A brief biography of the author, including their past and present affiliations with MIT and the purpose or context of their submission

In cases when a submission is made on behalf of a group, there must be a designated signatory (e.g. Jane Doe, on behalf of *The Tech*). Articles penned under anonymity or under a pseudonym shall be immediately rejected. Submissions published elsewhere or which shall be reprinted by the author outside of *The Tech* shall be automatically rejected. All submissions must be written solely for publication in *The Tech*. All submissions shall be fact-checked by the Editorial Board or the corresponding Officership designate throughout the editorial process. Unverified facts are considered grounds for rejection. Corrections may be issued after publication, but writers are ultimately responsible for the accuracy of their own pieces. For consideration in a particular issue, the submission must be made at least two weeks prior to the date of publication thereof.

**Rejection**

The Editorial Board, with the concurrence of the Publisher, the Editor-in-Chief, and the Opinion Editor, reserves the right to reject any and all Guest Submissions on any and all of the following bases:

- One or more of the required items for submission is missing, such as the absence of a clearly-designated individual signatory
- The submission lacks novelty in context to previously published Opinion pieces
- The submission lacks an appropriate and cohesive opinion on a campus-relevant matter
- The submission or the author does not adhere to community standards and proper journalistic ethics
- The submission asserts unverified or contested facts without clarity or context

The Editorial Board may also reject a Guest Submission at its discretion by unanimous decision. In addition, the Editorial Board reserves the right to retract any published Guest Submissions by unanimous decision should it find that the corresponding author or group fails to adhere to community standards in a context relevant to the published piece.

# Peaches

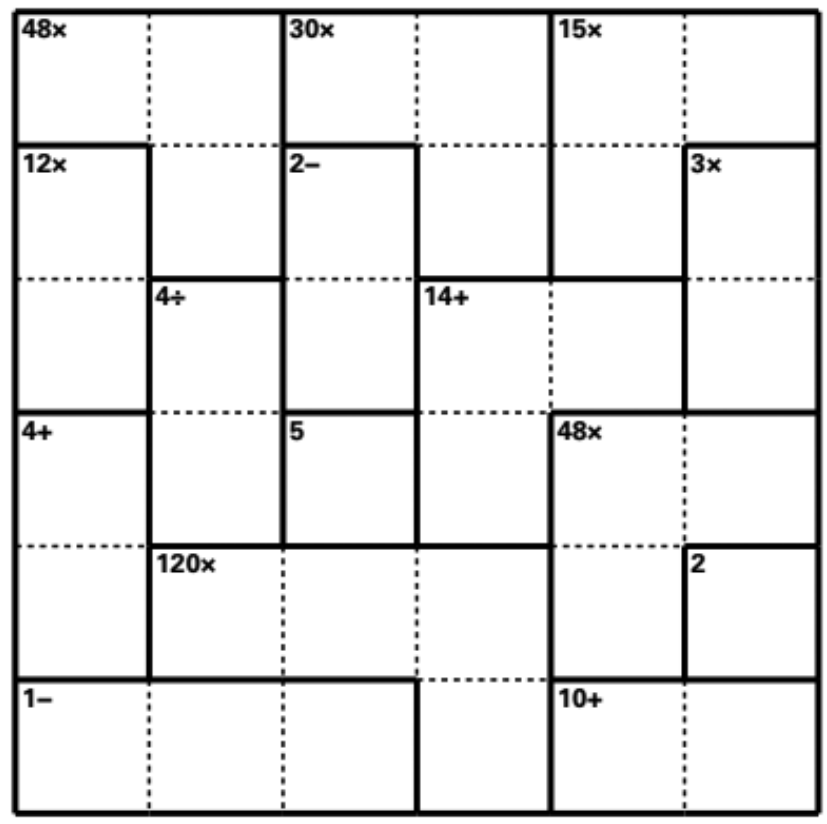
Solution, page 12

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

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.

# Bezel

Solution, page 12



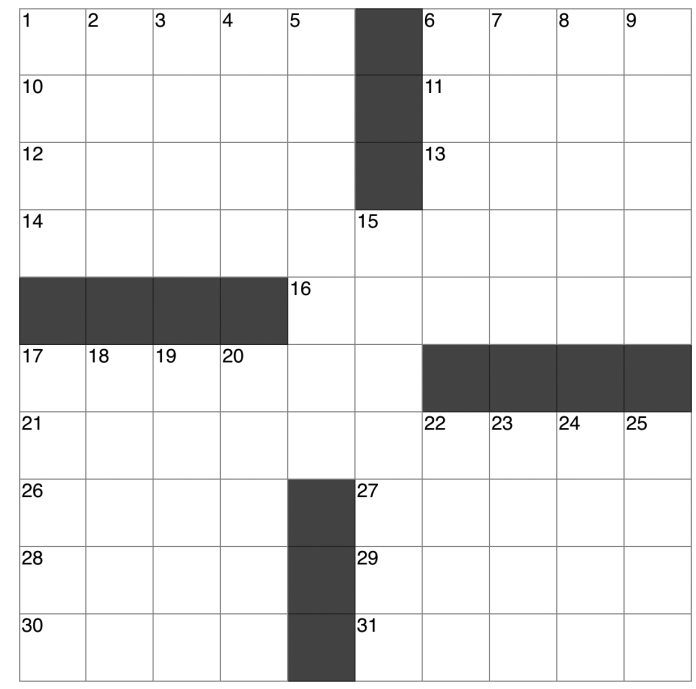

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1–6. Follow the mathematical operations for each box.

# Creature Comforts Manaal Mohammed

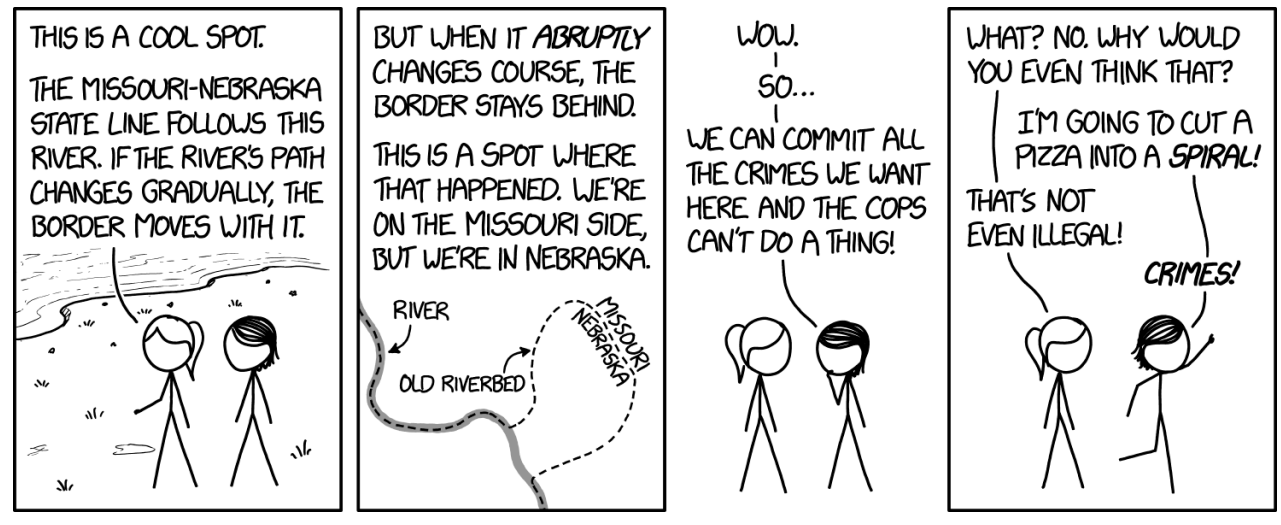
Solution, page 12

**Across**
1 Casual Adidas shoe
6 Arctic native
10 Freeze
11 Dunham of "Girls"
12 Dehydrate
13 Mating call?
14 Extremely ill
16 Arizona city known for its red rocks
17 Nailed the exam
21 Working a lot
26 Crafts go-with
27 Shock
28 Italian goodbye
29 Figure of speech
30 "Freak On a Leash" artist
31 Many, colloquially

**Down**
1 Drinks slowly
2 Popular bowl berry
3 Soldier for hire, briefly
4 Resist
5 Inability to speak
6 Trojan War epic poem
7 Fresh cut
8 Marriage
9 Roo's mom
15 Leave port
17 Taken follower, often
18 Odd keepsake
19 To be, in Spanish
20 Quality hair dryer producer
22 Designer Gucci
23 Lure
24 God of passion
25 Jane Austen novel



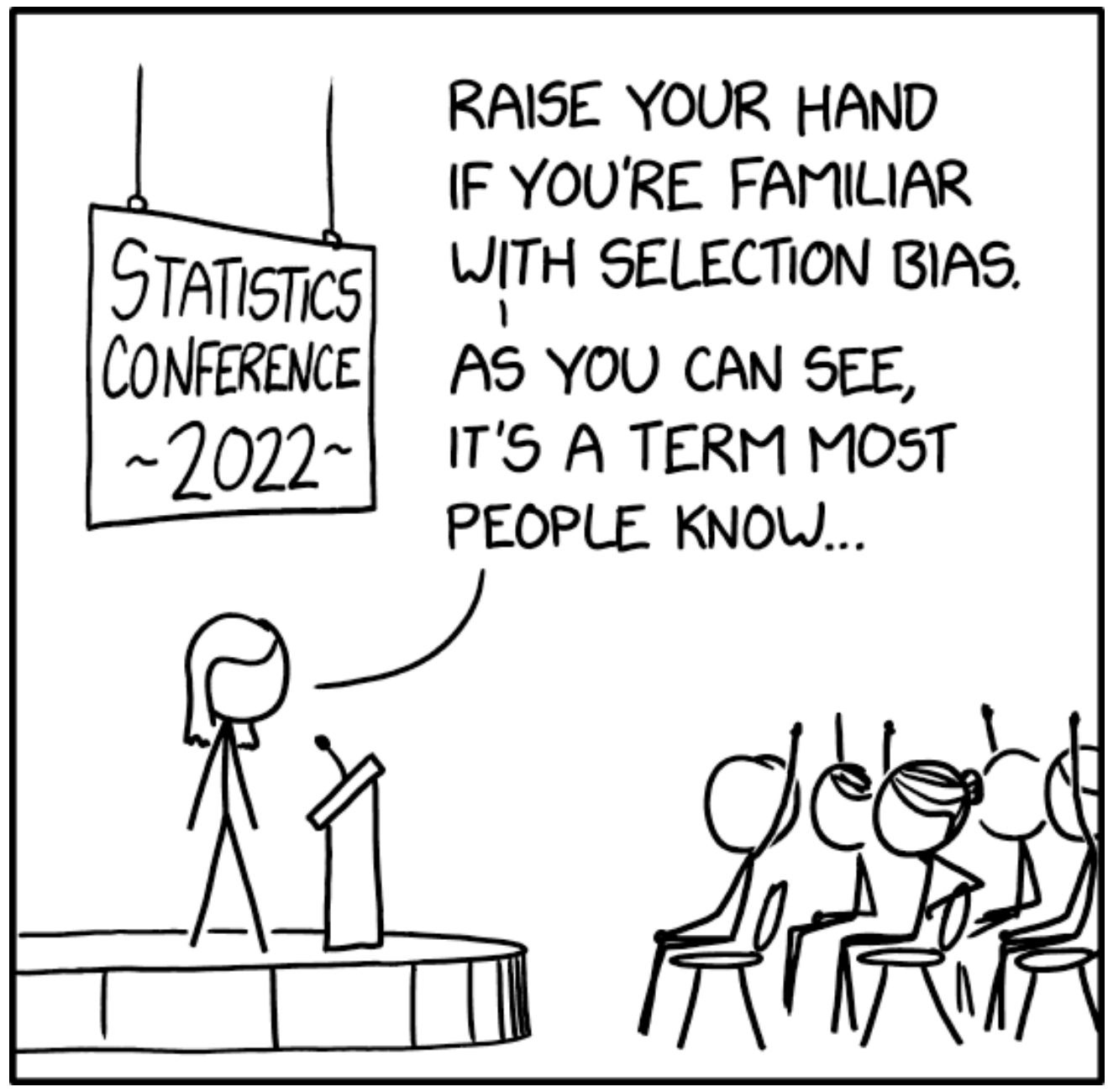
## [1986] River Border




xkcd
A WEBCOMIC OF ROMANCE, SARCASM, MATH, AND LANGUAGE
by Randall Munroe

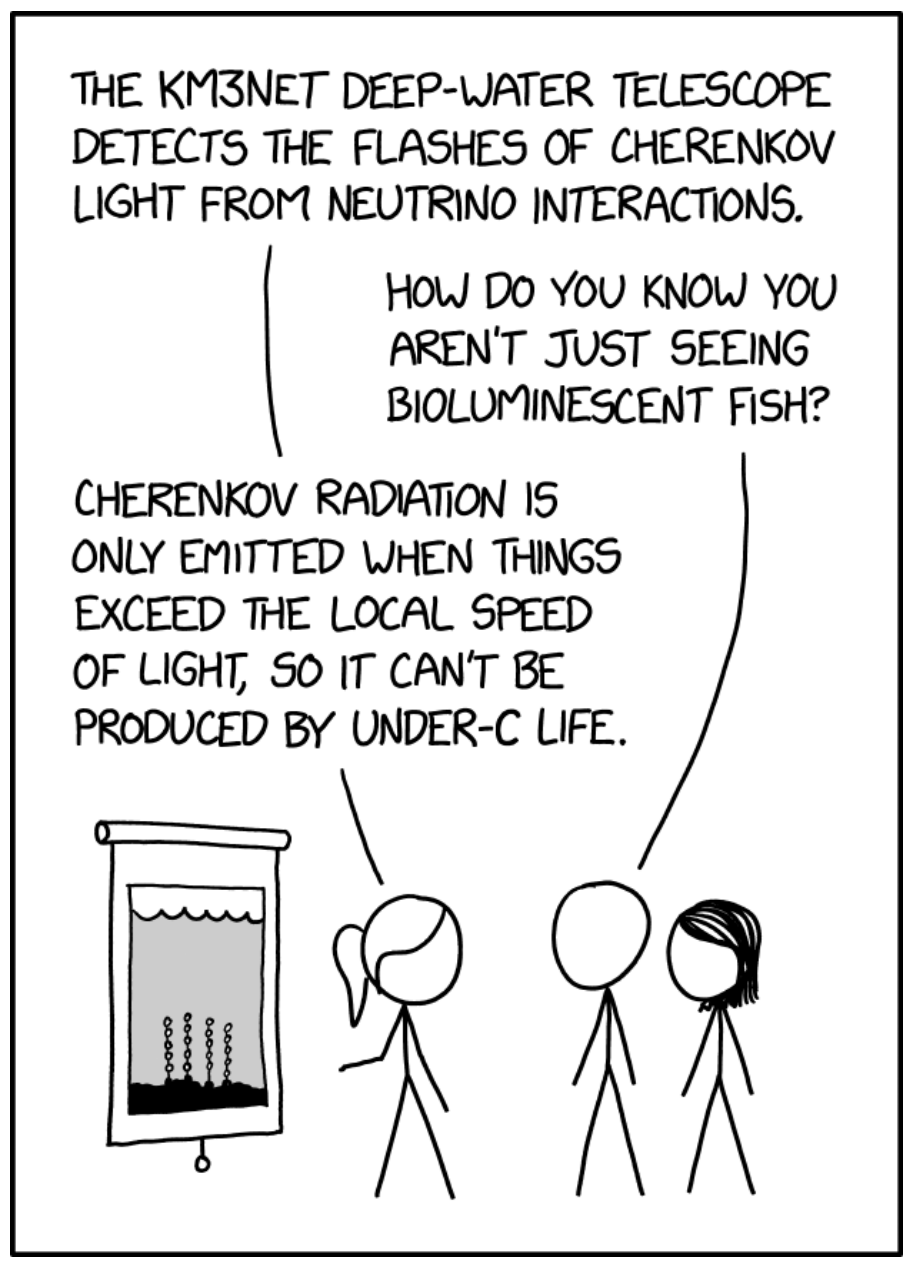
I'm not a lawyer, but I believe zones like this are technically considered the high seas, so if you cut a pizza into a spiral there you could be charged with piracy under maritime law.

## [2618] Selection Bias




We carefully sampled the general population and found that most people are familiar with acquiescence bias.

## [3053] KM3NET




Unfortunately, KM3NeT led to the discovery of the Pauli anglerfish, which emits Cherenkov radiation to prey on neutrino researchers.

### Solution to Peaches

from page 11

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

### Solution to Bezel

from page 11

| | | | | | |
|---|---|---|---|---|---|
| 4 | 2 | 6 | 1 | 3 | 5 |
| 2 | 6 | 4 | 5 | 1 | 3 |
| 6 | 4 | 2 | 3 | 5 | 1 |
| 3 | 1 | 5 | 6 | 2 | 4 |
| 1 | 5 | 3 | 4 | 6 | 2 |
| 5 | 3 | 1 | 2 | 4 | 6 |

### Solution to Creature

from page 11

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 S | 2 A | 3 M | 4 B | 5 A | ■ | 6 I | 7 N | 8 U | 9 K |
| 10 I | C | E | U | P | ■ | 11 L | E | N | A |
| 12 P | A | R | C | H | ■ | 13 I | W | I | N |
| 14 S | I | C | K | A | 15 S | A | D | O | G |
| ■ | ■ | ■ | ■ | 16 S | E | D | O | N | A |
| 17 A | C | E | D | I | T | ■ | ■ | ■ | ■ |
| 21 B | U | S | Y | A | S | 22 A | 23 B | 24 E | 25 E |
| 26 A | R | T | S | ■ | 27 A | L | A | R | M |
| 28 C | I | A | O | ■ | 29 I | D | I | O | M |
| 30 K | O | R | N | ■ | 31 L | O | T | S | A |