

SHINJINI GHOSH — THE TECH

A frozen, glistening Charles River greets students Tuesday noon with the conclusion of MIT's Q-Week.

2,129 undergraduates move into dorms Feb. 13–15, experience Quarantine Week

Students noted fast COVID-19 testing at Johnson and convenient dining

By Nicole Chan
ASSOCIATE NEWS EDITOR

Undergraduate students moved onto campus starting Feb. 13 and transitioned into Quarantine Week (Q-Week).

2,129 undergraduate students arrived during move-in weekend, with first-year students arriving on Feb. 13 and returning students arriving on Feb. 14 and 15, Senior Associate Dean of Housing and Residential Services (HRS) David

Friedrich wrote in an email to *The Tech*. Friedrich wrote HRS has “received encouraging feedback from students about their positive move-in experience.”

Friedrich also included data about the number of students residing in each dorm. Maseeh Hall and New Vassar house the most students, with 288 and 284 respectively. Simmons Hall, Next House, and MacGregor House each house over 200 students; and Baker House, New House, Site 4, East

Campus, and McCormick Hall each house over 120 students.

The Tech interviewed several undergraduate students on their experience with move-in weekend and Q-Week via email.

Morgan Schaefer '24 wrote that “there were people and signs everywhere directing us where to go” and that “everything ran very smoothly and efficiently” on her arrival day Feb. 13. Katherine Miner '24 wrote that “the Office of the First Year made instructions incredibly clear.”

Meanwhile, Toomas Tennisberg '23 wrote that “I arrived late due to flight scheduling” and “had to find someone to let me in” after a doorbell intercom “cut off without warning.” Tennisberg waited with a friend who was also late until someone let them in.

Regarding her first COVID-19 test on campus, Miner wrote that testing at the Johnson Athletic Center “was also incredibly fast given

Move In, Page 2

IN SHORT

Feb. 26 is the **last day to add half-term subjects** offered in the first half of term and to change grading options for these subjects.

Access to academic and research spaces and in-person learning begins March 1.

MIT affiliates should complete the **COVID-19 Vaccine Eligibility Form**.

The deadline to submit nominations for the **MIT Awards** is March 26.

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

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



KEVIN LY — THE TECH

Students stand in line at the Johnson Athletic Center Feb. 20 for what was originally supposed to be the final test before the conclusion of Q-Week.

MIT Student Worker Alliance holds virtual rally to support mistreated dining hall workers

Chief shop steward Sims' final warning removed by Bon Appetit management prior to rally on Monday

By Kristina Chen
EDITOR IN CHIEF

The MIT Student Worker Alliance held a virtual rally Monday in support of workers at MIT's dining halls.

The rally came after Mark Sims, chief shop steward of MIT's dining hall workers' union and McCormick Hall cook, received a final warning from Bon Appetit management, which used racially stereotyped terms to describe Sims, after Sims brought up the concerns of a fellow worker.

The hour-long rally, held over Zoom, started at 6 p.m., and saw

nearly 150 attendees, including students, staff, and faculty. The rally began with a series of student and dining worker speakers and ended in breakout rooms where students and workers discussed their experiences with racial discrimination or harassment at MIT.

The student organizers of the rally were Fiona Chen '21, Yara Komaisha '21, Danielle Geathers '22, Faduma Khalif '22, Ki-Jana Carter G, and Lucky Pattanaik G.

Chen wrote in an email to *The Tech* on behalf of the organizers that they were “incredibly excited and energized by the number of stu-

dents” who attended the rally and felt that the event “really showed the power of building solidarity between students, staff, and faculty, and using public pressure to effectuate change at MIT.”

She added that the organizers hope to “continue to build on this momentum” to support dining workers and other MIT employees in the future.

Speakers at the rally included Sims, McCormick cook Rabindra Rajbanshi, Carter, former McCormick co-president Afeefah Khazi-

Dining Rally, Page 2

MIT ENABLED EPSTEIN

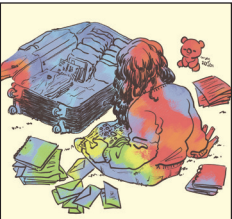
Punishing Lloyd is not enough to change Institute values.
OPINION, p. 5

REIMAGINING CURRICULUM

MIT must educate students on race.
OPINION, p. 6

SUSTAINABLE AQUACULTURE

2,017 students will design a real world vessel.
CAMPUS LIFE, p. 8



LIVING IN A CIRCLE

To recycle, to keep, to bring.
CAMPUS LIFE, p. 6

SPACE FOOD

Replicating the feelings of food in outer space.
SCIENCE, p. 12

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WEATHER

Spring weather is (briefly) here

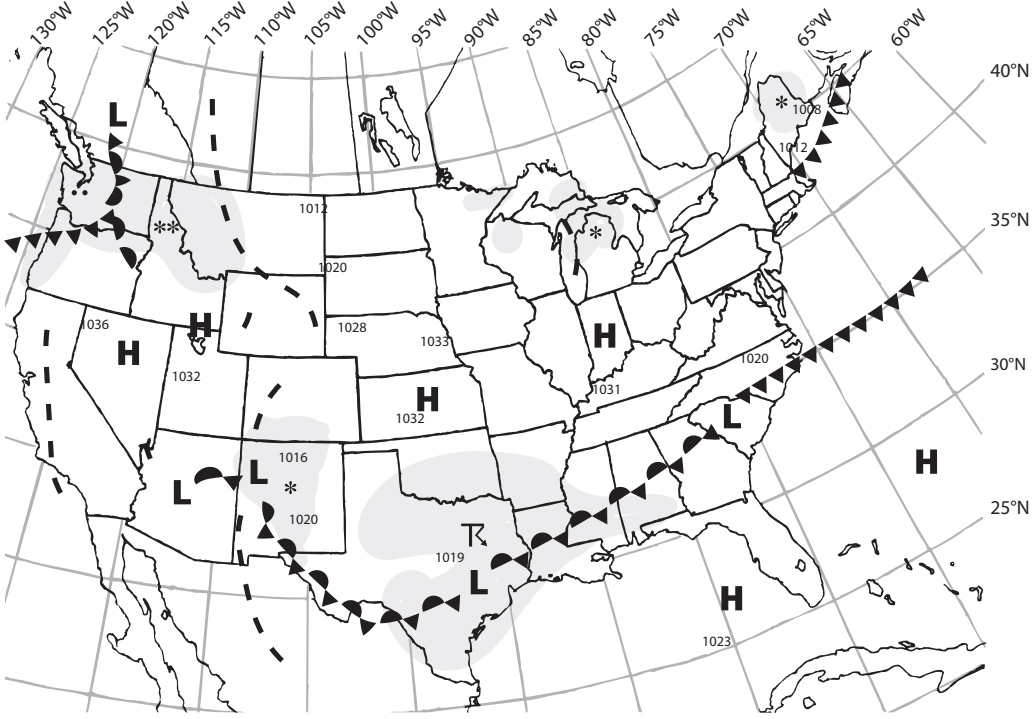
By Conrad Goffinet
STAFF METEOROLOGIST

As the country digs itself out of the massive snow storms that made their way across the country last week, many have been left wondering when the first signs of spring will appear. For Cambridge, those signs came on Wednesday when the Mercury finally rose

above 50 degrees. The clouds parted, the sun shone, and the birds excitedly sang in the trees. For a brief, evanescent moment, the times seemed to be “precedented” again. Another pleasant day is on the way, with temperatures poised to return to the 50s on Sunday. Temperatures are going to drop off later in the week, so get out there and enjoy the nice weather while it lasts.

Extended Forecast

Today: Sunny, with a high of 45°F (7°C). Winds gusting up to 36 mph out of the west.
Tonight: Mostly clear, with a low of 24°F (-4°C). Winds from the west of 9–17 mph.
Tomorrow: Sunny, with a high of 38°F (3°C). Winds out of the west up to 9mph. Clear at night with a low of about 29°F (-2°C).
Saturday: Rain in the afternoon and evening, with a high of 48°F (9°C). Wind gusts out of the south as high as 28 mph. Low of 40°F (4°C) at night.
Sunday: Mostly cloudy, with a high near 51°F (11°C) Low of 39°F (4°C) at night.



Situation for Noon Eastern Time, Thursday, February 25, 2021

Weather Systems	Weather Fronts	Precipitation Symbols	Other Symbols
H High Pressure	Trough	Snow	Fog
L Low Pressure	Warm Front	Rain	Thunderstorm
Hurricane	Cold Front	Light	Haze
	Stationary Front	Moderate	
		Heavy	

Compiled by MIT Meteorology Staff and The Tech

Miner: “The meals are often pretty bland,” less options for dietary restrictions

Move In, from Page 1

the influx of first-years moving in.” Miner added that “getting tested was extremely easy” and that “having everything in the Atlas app makes testing so convenient.” Schaefer echoed this sentiment that the COVID testing process is “very simple,” while the Atlas ap-

plication is “not too confusing to use.” In terms of dining during Q-Week, Miner said that it is “especially convenient” since “you don’t have to travel outside in this brutal Boston winter.” Tennisberg described the process of getting food as “walk in, get food, walk out.”

“The meals are often pretty bland, with less options for those with dietary restrictions like myself,” Miner wrote. She has been “forced to take chances” when “guessing if a meal was safe to eat.” Schaefer wrote that she was “pleasantly surprised” by campus dining “after reading and hearing many comments from upperclass-

men and students who were on campus in the fall.” Students were allowed a one-hour window daily for exercise outside of their dorms during Q-Week. Miner wrote that the one-hour outside time “helped clear my mind from a busy week starting classes” and has spent it “exploring the academic side of campus.”

Schaefer wrote that “it was hard to fully take advantage of the one hour outdoor time” because of the “cold and snowy” weather. The one-hour time limit “feels a bit too prison-like to place restrictions on the amount of time students can spend getting fresh air.” Q-Week restrictions were officially lifted noon Feb. 23.

DSL plans to meet with student leaders to foster dialogue about workers

Dining Rally, from Page 1

Syed ’21, New Vassar cook Radames Moran, and Bon Appetit catering driver Said Kouhail. Rally attendees showed their support for speakers through messages in the chat and audible applause and cheers between speakers. Additionally, Husayn Karimi ’19 led attendees in a call and response chant of “When workers’ rights are under attack, what do we do?” “Stand up, fight back.” Sims said at the rally that the retaliation against him is “unacceptable” because it prevented him from speaking up for other workers. The discipline was removed from Sims’ file earlier on Monday, an action that he described as “convenient” for Bon Appetit. Sims also said that as chief shop steward and representative for the union, he advocates for workers in situations where “a person of color gets disciplined for the same things that a person not of color” is not disciplined for and makes sure that the work environment for dining hall staff is “safe and comfortable.” Sims thanked attendees of the rally for their support and for coming together so that “things are made right.” He said that he will continue to represent and speak for “what is just and right.”

Carter said that the discipline against Sims “failed because of the strength of the dining workers Union and because all these students showed solidarity by organizing and attending this rally.” He also said that the “issues facing dining hall workers at MIT are not disconnected from the issues” facing undergraduates and graduate students, mentioning the Reject Injustice through Student Empowerment campaign, a coalition of student groups that organize to fight racism and sexism at MIT. “If we allow racism ... [and] anti-worker practice to go unchecked in dining halls, then you can’t be surprised when the same actions show up” in labs or classrooms, Carter said. Rajbanshi, Moran, and Kouhail also emphasized the need for students and workers to “stick together” to demand better treatment for workers. Vice President and Dean for Student Life Suzy Nelson wrote in an email to *The Tech* that while MIT is not able to comment on “individual personnel matters” of Bon Appetit and Local 26, it expresses “clearly to all vendors that the fair treatment of those working” at MIT is a “top priority.” She wrote that MIT is aware of the concerns from students over

Sims’ discipline and is planning to meet with student leaders to discuss these concerns to “foster a productive dialogue” between students, Bon Appetit, and the Division of Student Life (DSL) and to “strengthen our community for all those who engage with dining and residential life.” Chen wrote that the Student Worker Alliance is “exploring ... ways that MIT could play a role in improving the working conditions for all of the dining workers” by posing questions such as how DSL can be more informed about mistreatment of dining hall workers and whether it would be beneficial for MIT to set up conflict resolution or anti-discrimination mechanisms for dining hall workers. Nelson added that “it is important to MIT, and to me personally, that we actively promote... safe, respectful, diverse, equitable, and affirming” work environments and that MIT’s contract with Bon Appetit “stipulates” that Bon Appetit take steps to achieve this, including participating in diversity, equity, and inclusion and harassment prevention training and having a fair treatment policy and a hotline where incidents may be reported. The MIT Student Worker Alliance also previously advocated for dining hall workers’ rights at the onset of the COVID-19 pandemic.



STEPHANY PANG — THE TECH

A dining worker in McCormick’s dining hall serves students.

Solution to Optional
from page 10

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

Solution to Required
from page 11

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

Solution to Async
from page 11

4	5	6	1	3	2
5	6	1	2	4	3
2	3	4	5	1	6
1	2	3	4	6	5
6	1	2	3	5	4
3	4	5	6	2	1

Solution to Four
from page 11

FORE	AFAR	WOOF
TAKEN	SOSO	ECHO
AIRED	SOIL	LEAN
BRAKE	PEDAL	CART
	DOT	TONES
TISSUE	DENIM	
ONTAP	FIVECENTS	
ETAL	FACET	MOAT
SORE	LOSER	HASTE
	SIXTY	GOTEAM
SPACE	MEN	
PULL	TREE	LEAVES
ERIE	YELL	SCALE
NEAR	PAST	TRIKE
DESK	ODES	YENS

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DEI strategic plan, MIT-China relations, vaccine roll-out discussed at February faculty meeting

First draft of DEI strategic plan to be available by March, plan to be finalized by May

By Kristina Chen
EDITOR IN CHIEF

Faculty members discussed MIT's Diversity, Equity, and Inclusion (DEI) Strategic Action Plan, issues surrounding MIT's relations with China and international research collaborations, and updates on vaccine roll-out at the Feb. 17 faculty meeting.

Associate Provost Tim Jamison, Institute Community and Equity Officer (ICEO) John Dozier, and Deputy ICEO Maryanne Kirkbride presented updates on MIT's development of a strategic action plan for DEI. Those involved with developing the plan include the DEI steering team which includes the Institute's Committee on Race and Diversity.

An estimated timeline for the strategic plan presented to faculty projects that a first draft of the plan will be available in March and a second draft in April. Both drafts will receive community engagement before a final draft is developed in May, as well as an implementation plan and a public launch of the strategic action plan.

Dozier outlined a model of MIT's DEI efforts. The model begins with the Institute-wide strategic action plan after which are plans for each academic, research, and administrative units. The implementation plan will guide work with each of these units. Dozier said that the Institute would work with these units to develop their own plans that "articulate with the overarching Institute-wide strategic plan."

The model also includes metrics, target, and reporting and infrastructure and capacity. Dozier said that the effort "is intended to align with accountability" and "with a way that we can measure our progress."

Dozier named three pillars upon which the efforts stand: composition, belonging, and achievement, adding that "instead of coming from members of our community and being reported to or given to our leadership team," the efforts are "something that is being owned by us as a community collectively."

The development of the strategic plan will be informed by previous contributions, such as the Black Students' Union and Black Graduate Student Association's 2015 recommendations, the National Academies of Science, Engineering, and Medicine working group's recommendations, and other reports and projects from the past 30 years. The steering team will also consult internal data to compare with

external data as it relates to DEI and meet internally and with MIT groups — such as the Human Resource senior leadership team, the Undergraduate Association, and the Graduate Student Council — to receive feedback.

Kirkbride said that the Institute will ensure that it is making progress by providing metrics to identify areas of improvement and need, coordinating and facilitating access to training and consultation for those implementing DEI plans, and being able to hire "senior level staff experts" who can help with plans.

Jamison named three broad reasons for creating the plan. The first is evidence indicating underrepresented races and ethnicities at MIT and narrative data of staff monologues describing the experiences of these underrepresented groups at MIT. Jamison described the second as "a combination of opportunity and urgency," citing MIT's previous "efforts upon which we can build" and the events of the past 18 months, such as the killing of George Floyd and MIT's relationship with Jeffrey Epstein. The third reason is that peer institutions have also invested "significantly" in DEI, and studies have shown that "diverse groups, led inclusively, achieve better outcomes."

Jamison said that faculty can visit the DEI action plan website for information. Additionally, President L. Rafael Reif sent a Feb. 23 email to MIT community members announcing the creation of a new Institute commitments website to track the progress of MIT's efforts.

Electrical engineering and computer science professor Martin Rinard asked whether faculty could anticipate receiving guidance as to whether particular policies or actions regarding DEI by faculty search committees were legal.

Dozier said that there are many challenges surrounding Rinard's question but that the ICEO hopes to have "more consistent, better-coordinated training for faculty search committees."

Janelle Knox-Hayes, professor in the urban studies and planning department and co-chair of the faculty diversity committee, added that the faculty diversity committee works with faculty searches to review the processes of hiring and to "try to ensure that they're equitable, fair, diverse, and inclusive." She said that "it would be nice to see" the Institute develop a formalized system of bias trainings and guidelines for conduct in search committees.

Additionally, mechanical engineering professor Alexander

Slocum PhD '85 said that MIT can evolve its "top-level thinking of what it means to be a professor." He said that a lot of "really great students would graduate with a Master's and leave because they didn't want to 'play the PhD game,'" going on to enter industry as engineers and scientists.

Slocum said that he would like MIT to bring "people of variety" into the pipeline of hiring and to investigate hiring "some of these really excellent seasoned engineers in industry."

Provost Martin Schmidt PhD '88, Vice President and General Counsel Mark DiVincenzo, Vice President for Research Maria Zuber, Jamison, and Associate Provost for International Engagements Richard Lester provided updates on Professor Gang Chen's legal case over allegations of federal grant fraud and resources for faculty considering international collaborations.

Schmidt said, regarding Chen's case, that MIT had "tried to address issues publicly, when we felt that there were misrepresentations" or a need for clarification and that "at times, people have expressed concern that perhaps MIT should be speaking more forcefully on this topic." Schmidt said that MIT is working closely with Chen's legal team and is making sure that what MIT says is "aligned with and supportive of" Chen's legal defense.

DiVincenzo said that the legal proceedings for the case would likely "take 12 to 18 months" and "probably more" due to the COVID-19 pandemic slowing down court processes. DiVincenzo reiterated that MIT will be supporting Chen by covering his legal fees and communicating with his legal team and the government "with the hope" of providing "appropriate information so the facts can be there" in the case.

Lester described MIT and the U.S.'s relations with China, saying "this has been a difficult period" for Chinese faculty, students, postdoctoral associates, and research staff, citing "the government's focus on foreign influence on American university campuses" and "anti-China rhetoric around COVID."

Lester said that in summer 2020, MIT "began a series of conversations with senior faculty colleagues of Chinese origin" both individually and in small groups to ask what MIT could do to support them. As a result of these conversations, a meeting with Chinese faculty members and senior research staff members to discuss MIT's actions occurred January 2021, coincidentally sched-

uled "a week or so" following Chen's arrest.

At the meeting, Lester said three sets of questions were identified. The first surrounded Chen's legal situations, the second covered the guidance MIT is offering to faculty for international collaborations, and the third discussed the broader issue of relations between MIT and China or other international bodies.

Regarding the third set of questions, Lester made three further points. He said first that MIT had "put in place a process" since January 2019 to work with faculty principal investigators "to assess the risks of proposed new projects" in addition to the regular reviews of sponsored activities executed by the staff at MIT's Research Administration Services and Office of Strategic Alliances and Technology Transfer.

His second point was that MIT continues to work with faculty governance to ensure "a clear understanding of the situation" and "geopolitical environment" between China and the U.S.

His third point was that MIT could probably assume that U.S. policy toward China would have "more continuity than discontinuity" due to the bipartisan views on China within the government and "a realistic appraisal of the nature of the Chinese regime which hasn't been moving in a positive direction."

Lester said that in the past two years, at MIT, over 200 projects from China and Hong Kong have been proposed by principal investigators and others, and most "have gone forward," so it is "reasonable to conclude that collaborations in China and with Chinese colleagues are feasible."

Lester concluded by voicing a "personal observation" that "China is rapidly emerging as the world's largest and most important economy" and will likely be a world superpower "for the rest of the century" at the forefront of fields of science and technology. Thus, Lester said it would "be important" for MIT community members "to have a deep understanding of China's political, cultural, economic, and scientific characters" and "to collaborate with Chinese colleagues."

Zuber said that "international collaborations need to be handled with care and transparency," because it is not illegal to work or collaborate internationally, but it is "essential that proper reporting occur."

Zuber listed government concerns surrounding these collaborations: agreements with foreign entities that impose obligations

contrary to university or federal requirements; failure to disclose activity to that overlaps with activity done under an existing grant; undisclosed significant conflicts of interest; sharing of confidential information such as peer reviews; unlawful transfer of intellectual property, materials, or samples; and data security and cyberattack vulnerability.

Zuber said that while China is currently "the country of greatest tension and greatest interest," there are concerns beyond China, such as the "recent Russian cyber hack."

Zuber explained necessary federal and university level disclosures — sponsor-specific proposal, financial conflict of interest, and outside professional activities disclosures — for researchers participating in international engagements.

She also described resources available for faculty, including Collaborative Institutional Training Initiative training on foreign influence, guidance for international travel, the International Coordinating Committee, and MIT's EthicsPoint hotline.

Vice Chancellor and Chair of the MIT Vaccine Planning Team Ian Waitz and MIT Medical Director Cecilia Stuopis '90 updated faculty on MIT's COVID-19 vaccine roll-out.

Waitz asked faculty to "encourage" others to fill out MIT's vaccine eligibility form, to inform MIT Medical about the number of community members who would like to be vaccinated and whether they can receive vaccines depending on the state's vaccination phase.

Massachusetts began the second step of phase 2 of its vaccination plan Feb. 18 and is vaccinating individuals over the age of 65, those with more than two certain medical conditions, and residents and staff of low income and affordable senior housing.

Stuopis said at the meeting that MIT would be unlikely to receive more vaccine doses from the state, which is "ramping up" its "own large-scale vaccinations sites at Gillette [Stadium] and Fenway [Park]" and at its "CVS and Walgreens distribution networks."

Stuopis added in a Feb. 17 email to the MIT community that those who qualify for the vaccine under the state's current phase "should seek to obtain vaccination through" the Commonwealth of Massachusetts' process.

MIT Medical will share further information with the community when the Commonwealth resumes shipping the vaccine to Medical.

Have something to say?

Write opinion for *The Tech*!

opinion@tech.mit.edu

GUEST COLUMN

Reimagining our MIT curriculum

Is this what an MIT education looks like?

By Danielle Geathers, Kelvin Green II, Tyler Lawal, Myles Noel, Brian Williams, and Sienna Williams

This op-ed accompanies a video created by the Black Students' Union. Before reading this piece, please watch the video.

"Why are you dwelling on all these things that are so far in the past? Maybe if you want to study history, become a history major." As stated by an MIT student in the 1990s, there is a prevalent sentiment that students at MIT, especially Black students, should focus on the future and forgo reflecting on the dark past. Our present-day curriculum requirements seem to agree with this student's assessment. Each year, hundreds of MIT students graduate lacking a fundamental understanding of the effects that anti-Black racism and other systems of oppression have on our present-day technologies, even our own decision-making.

As an institution for learning, we have the opportunity to learn from our mistakes and change this pattern.

"You're walking in the halls. There's no one around and the lights are out. Out of the corner of your eye you spot him; *Average black male around 5ft 6" wearing a blue backpack*," is the opening to an email sent by East Campus residents during last Black History Month to their dorm community. These MIT students' poor attempt at so-called "comedy" is overshadowed by the covertly racist rhetoric — "*Average black male around 5ft 6" wearing a blue backpack*," being repeated no less than nine times throughout the email. For those who've seen the "It's Intuitively Obvious" series (1996) produced by MIT, the EC email (2020) is strikingly reminiscent of the

fear and ignorance rooted in the minds of the 1993 white members of Phi Beta Epsilon Fraternity who shouted "Fuck Chocolate City. Fuck all niggers," to a group of Black MIT students walking towards their dorm along Amherst Alley.

From being founded by a slaveholder in 1861 to vandalism by swastika on the 2019 Black History Month display, the Institute has largely neglected the goal of reckoning with its own racist history. The work of the MIT & Slavery course is critical to this goal, but its research findings have been limited in their ability to create radical shifts in our Institute curriculum. This institutional failure leads to racism continually rearing its head in the perspectives shared by our students. It is difficult to hold anyone responsible for what they do not know. It is doubly difficult to hold someone responsible for what they were not taught, despite receiving a so-called internationally-renowned and respectable education. Yet, as an institution for learning, we have the opportunity to learn from our mistakes and change this pattern.

As an Institute, we currently have strict standards for what an MIT student must know to graduate. From being able to swim to understanding the replication of DNA, MIT has mandated that students take General Institute Requirements (GIRs) in the fields of mathematics, biology, chemistry, physics, and the humanities, seeing these as critical to a student's education. But by that same logic, why does MIT fail to teach the genesis of the technology we use today? And how it is often rooted in exploitation of land, socio-economic status, even another human's mind and body?

MIT requires its students to demonstrate their ability to swim four lengths of a swimming pool to earn their degree. And yet, this proactive approach designed to prevent students from drowning in the Charles isn't replicated in an approach to prevent students from creating, contribut-

ing, or approving the use of technologies that perpetuate systemic racism at home and abroad?

Our concern for the curriculum is not a new one. In 2015 the Black Students' Union published a list of demands mandating an immersion studies course (BSU 2) that has only been avoided on the merits of its proposed implementation. We do not propose to be the experts on how this knowledge should be implemented in the MIT curriculum, but we remain experts on our experiences as Black students and have conviction that we cannot continue to conduct business as usual. The sloth-like pace of MIT's progress towards an inclusive educational environment is why Black student experiences today match the experiences of Black alumni for decades with uncanny accuracy. Their voices still echo through the Infinite yearning for change.

Our concern for the curriculum is not a new one.

It is MIT's responsibility to educate its students who become leaders in their communities, the world, and beyond. It is a failure that most of our department curricula are devoid of requisite studies on social inequities, absent of historical examples of the human cost of both scientific and technological advancement, and barren of the institutional history lessons which work to lead students to be better than many of the historical figures we learn from in our classes. A Course 7 student graduating during the COVID-19 pandemic without knowledge of the Tuskegee syphilis experiments is unprepared. A Course 20 student who does not know the story of Henrietta Lacks is unprepared. A Course 6 student without an understanding of the effects of implicit bias in machine learning is unprepared. And the list goes on. How many

more students will graduate ignorant of the inequities and injustices that developed and continue to impact their field of study?

It is MIT's responsibility to educate its students who become leaders in their communities, the world, and beyond.

This year marks the 25th anniversary of the first "It's Intuitively Obvious" production, a series of videotapes depicting MIT students discussing issues of race. Will it be another 25 years before our curriculum meets its educational duties and responsibilities? We need allies in this effort. Students, staff, faculty, administrators and Corporation members — we are asking for your help to ensure that before we turn our brass rats and leave this side of the Charles, we are prepared; prepared to face the rising challenges of an ever awakening world. We must reimagine our MIT curriculum and then, and only then, can we say MIT has succeeded in its mission to "advanced knowledge and educate students in science, technology, and other areas of scholarship that will best serve the nation and the world in the 21st century."

Please share the BSU's video and this opinion editorial with your network. Thank you for your acts of solidarity.

Danielle Geathers is a member of the MIT Class of 2022.

Kelvin Green II is a member of the MIT Class of 2022.

Tyler Lawal is a member of the MIT Class of 2024.

Myles Noel is a member of the MIT Class of 2024.

Brian Williams is a member of the MIT Class of 2022.

Sienna Williams is a member of the MIT Class of 2023.



A pearl of a project: Transforming the aquafarm of the future

By Michelle Kornberg Ward Aquafarms, located on Cape Cod, That's where the students of 2017 (De- ics, robotics, or mechanics. Students wi

In 2016, the aquaculture industry overtook wild caught seafood for the first time in human history. Our population continues to grow, and our oceans cannot keep up without help. As our climate changes and our need for sustainable food sources grows more pressing, aquaculture — farming fish and mollusks and seaweed — can fill the gap in a delicious and environmentally healthy way. In Massachusetts, some of the most important species for aquaculture are mollusks like oysters, clams, and scallops. The local farms that grow them are able to provide a sustainable food source that prevents overfishing along the depleted New England coastline while using fewer resources and producing less waste than land-based meat farming.

Farm workers must flip thousands of bags weighing up to 50 lbs each from a small kayak that they must fit through the rows of oyster bags. It is this difficult, exhausting, and uncomfortable labor that presents one of the largest barriers to production on the farm.

The class is geared towards juniors and seniors with some background in electron-

This article is part of the column Class Spotlight, which will discuss and recommend interesting, yet not popularly known, classes at MIT. Students or professors who hope to submit further entries or classes for consideration to this column may email cl@tech.mit.edu.

Baa

By Wenbo Wu, seeing the light of day, I'll get to spend on

Specifically, in regard to MIT Alert texts, I just absolutely love knowing that after spending a week in quarantine essentially without

My pod-mate calls me and tells me that dorm security told her that the alarm must've been triggered by the wind and that there is



I panic. I have class in an hour. I have to stop thinking about sheep, for sheep do not ponder the existence of sheep. To truly tune

Hence, I will see all of you again in two weeks. I hope that by then, I will be able to adjust to my new room and get some sleep again. I also hope that Q-Week ends by 5 p.m. on Tuesday. I suppose, dear reader, that by the time this article gets to you, you will already know of that outcome. But alas, for this I currently know not. For now, I'll count my meadows and carry on.



Got a lot on your mind?

Share some thoughts with us!

Write for Campus Life. *join@tech.mit.edu*

UA Committee on Sustainability releases Fall 2020 undergraduate survey findings and report over IAP

Respondents support MIT engagement in sustainability education and climate research, feel strongly that MIT should further engage in sustainability and climate action in industry

By **Srinidhi Narayanan**
NEWS EDITOR

The MIT Undergraduate Association (UA Sustain) released the findings of their Fall 2020 undergraduate sustainability survey. The results, compiled by the 2021 IAP Survey Analysis Group, chaired by Carolina Gutierrez '23, Kelly Wu '21, and Megan Xu '22 and led by Hanna Tuomi '21, were prepared in conjunction with other groups on campus, including, but not limited to, the MIT Office of Sustainability, Environmental Solutions Initiative, and the Student Sustainability Coalition.

The survey was open for two weeks from Nov. 29 to Dec. 13, distributed through the mailing list for all undergraduates, and received 934 responses (approximately 21.5% of undergraduates), with the highest response rate coming from the Class of 2024, followed by juniors, sophomores, and then seniors.

The report contains summaries of the survey results from the five direct-question sections, the open-ended question, and conclusions drawn from the responses as

a whole. Across the sections, there were “a few main themes supported by” the data, according to the report.

First, “respondents care significantly about the energy aspect of sustainability,” evidenced by “significant participation in MIT Divest, day-to-day concern with reducing energy consumption, significant interest in MIT’s relationship with fossil fuel companies, and strong support for fossil fuel divestment.”

Respondents also reportedly felt that MIT “does a good job” providing sustainability education and “furthering climate research.” While sustainability is not a core feature of students’ class schedules and does not play a “significant role” in shaping students’ careers, respondents “frequently” sought out information on these topics.

Finally, respondents felt strongly that MIT should “further engage in sustainability and climate action as they relate to government and industry,” while acknowledging that MIT “adequately” engages in sustainability from education and research perspectives. Respondents also indicated that “they care about” MIT’s climate action at an

institutional perspective; the report mentions waste reduction strategies in particular.

The first of the five direct-question sections — campus community — sought to gauge undergraduates’ knowledge of and involvement in groups under the MIT sustainability umbrella. The main takeaways from these questions, in which students were asked to identify sustainability groups they knew of and might have participated in, were that “respondents had a similar level of familiarity and participation between the most well-known MIT-led and student-led sustainability groups,” yet since more student-led groups were identified, “total membership in these groups is higher than that of MIT-led groups.”

The second section — campus sustainability — examined interest in institutional sustainability and preferences for MIT sustainability policy. More than half of respondents said “they had searched for information” about fossil fuel “investment/divestment,” “sustainability education opportunities,” or “sustainability research” with regards to MIT. Respondents also “collectively” felt that “energy us-

age” and “sustainability research” should be higher on the priority list. While “sustainability education opportunities” was a frequently searched topic for respondents, “not many” believed MIT should prioritize it as an institution “relative to other topic areas.”

In the third section — external relations, divestment, and the climate action plan — the report summarizes the respondents’ views on the “ideal relationship” between the Institute and external stakeholders. An “overwhelming number of respondents” (87.4% of 769 respondents) support MIT action in regards to external politics, while being unsure of “how successfully the institution has reduced its carbon emissions and worked with the government to accelerate action.”

The fourth section — career choices — examined undergraduates’ engagement with sustainability career development opportunities and students’ consideration of sustainability when planning for careers. 26% of respondents “strongly disagreed” that their choice of major was influenced by the desire to pursue/learn about

sustainability; 23% answered “somewhat disagree”; 21% were neutral; 19% “somewhat agreed”; 11% “strongly agreed.” A plurality of students “somewhat agreed” with sustainability being a factor in career planning.

The final section — personal sustainability — sought to understand how respondents practiced sustainability in their day-to-day lives. Respondents “preferred to engage in personal sustainability as opposed to higher-commitment strategies such as careers or advocacy.” Over half of respondents felt that lack of knowledge of sustainability hindered their practicing sustainability, though “time, effort, lack of resources, and financial reasons” were listed as obstacles by “over a third of respondents.” Respondents that felt that living on campus affected their sustainability felt that “being on campus improved” their sustainability.

UA Sustain will carry out additional data analysis of these responses during the Spring, and “welcomes questions, feedback, or requests for collaboration,” which can be directed to ua-sustainability-survey@mit.edu.

Q-Week extended due to students out of compliance with testing and violations reported

Quarantine Week, or Q-Week, was extended until at least 5 p.m. Feb. 23, Vice President and Dean for Student Life Suzy Nelson and MIT Medical Director Cecilia Stuopis '90 announced in a Feb. 21 email to the MIT community. Q-Week restrictions were lifted noon Feb. 23 after undergraduates complied with testing requirements Feb. 22, and no positive cases were detected.

Nelson and Stuopis wrote that Q-Week would be “extended

at least until every residential undergraduate student is tested again” Feb. 22 and “those testing results are received.”

All on-campus undergraduate student residents living in dorms or pilot FSILGs this semester were mandated to self-quarantine for Q-Week while taking all classes online until Feb. 21. This date was then postponed to 7 a.m. Feb. 22 in a Feb. 19 email from Housing and Residential Services.

The second delay came as a “precautionary measure,” “despite the fact that the vast majority of undergraduates” have followed “all Q-Week policies.”

Nelson and Stuopis explained that the step to extend Q-Week until Feb. 23 was taken “not because of an increase in positive test results,” but due to a “substantial number of residential undergraduate students” who were “out of compliance with testing requirements.”

Some students had only tested once “upon check-in”; some had tested twice “without five days elapsing between their arrival and their second test”; others had not tested at all.

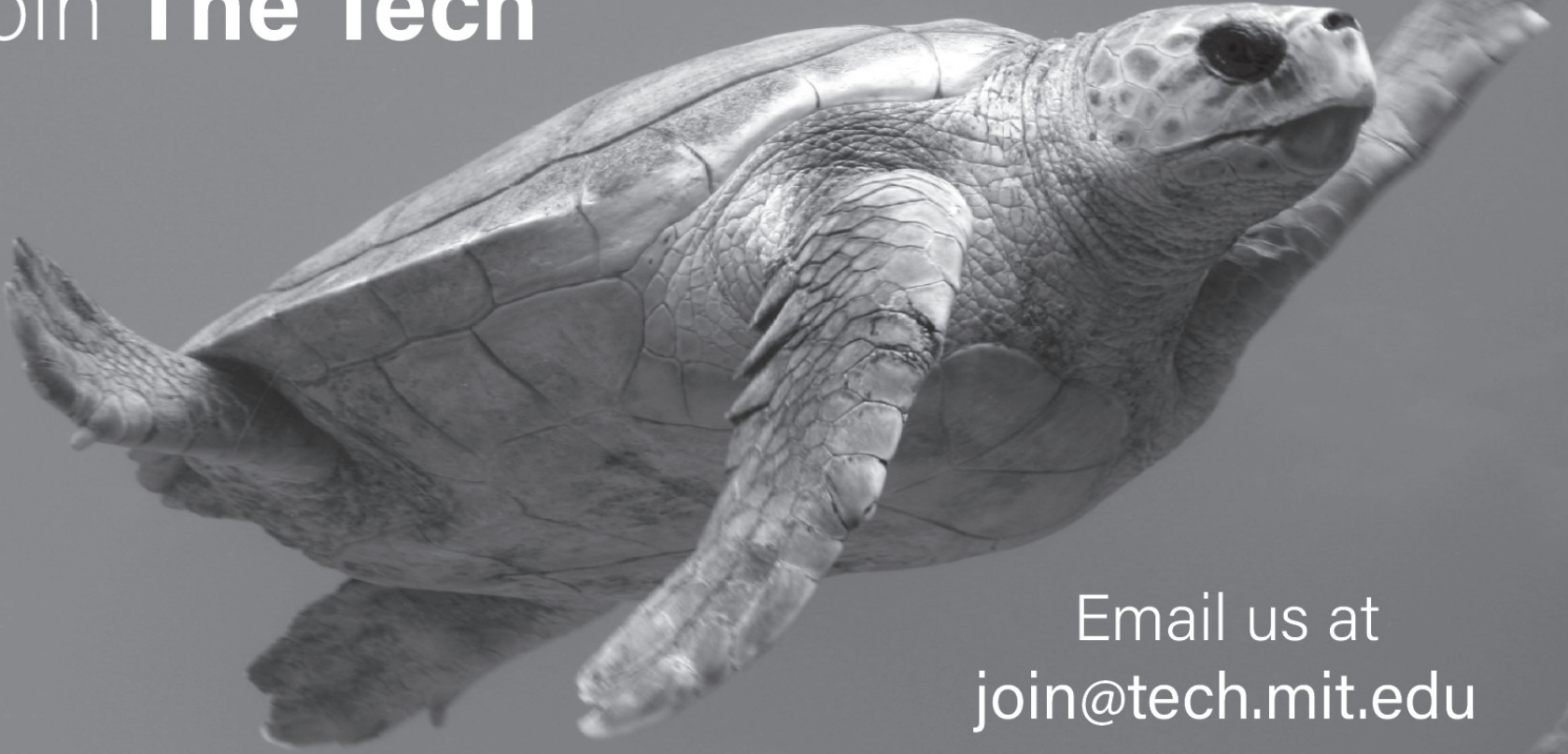
Nelson and Stuopis also wrote that they had already received reports of COVID-19 policy violations before the end of Q-Week. Reports included a pod gathering in-person and a group of undergraduate students “socializing, without face cover-

ings, in an off-campus apartment.” They wrote that these individuals “have been referred to the Committee on Discipline for an expedited review of these allegations.”

The end of Q-Week means that students can now form pods, spend more time outside of their residences, and access the Department of Athletics, Physical Education and Recreation facilities.

— Shelley Choi

It would be *turtley*
awesome if you
join **The Tech**

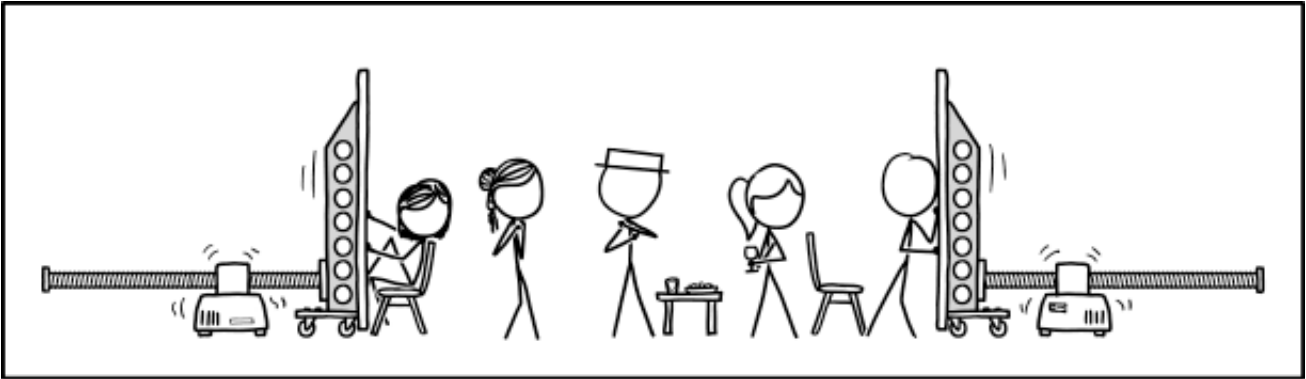


Email us at
join@tech.mit.edu

[2416] Trash Compactor Party



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



I'M PLANNING A TRASH-COMPACTOR-THEMED PARTY FOR WHEN THIS IS ALL OVER SO WE CAN GET USED TO STANDING NEAR EACH OTHER AGAIN.

What an incredible smell you've discovered.

In Person Optional

Solution, page 3

6-		26+				21x		
45x	48x			45x	108x			14x
	18x				56x		224x	
168x		20x			12x			6
3			29+		5x			45x
7		8		3		12x		
60x		3		378x		54x		1-
	36x	12+			8		5÷	
		7		8x		5		8

Instructions: Fill in the grid so that each column and row contains exactly one of each of the numbers 1-9. Follow the mathematical operations for each box.

In Person Required

Solution, page 3

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

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

Asynchronous

Solution, page 3

22+		5-	12x		
				8+	
	6+	16+			1-
1				6	
6		30x		1-	
12x			3÷		

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.

Four on the Floor by Sally R. Stein

Solution, page 3

ACROSS

- 1 Golfer's shout
- 5 Remote place to "worship from"
- 9 Sound of a dog's bark
- 13 Occupied, as a seat
- 14 Just adequate
- 15 Rebound, as a sound
- 16 Showed on television
- 17 Farmer's ground
- 18 Tilt to one side
- 19 Slowing lever on a car floor
- 21 Vehicle in grocery stores
- 22 Topper on an "i"
- 23 Shades of color
- 24 Disposable hanky
- 28 Jeans fabric
- 31 Ready to serve from a keg
- 32 Value of a nickel
- 36 And others: Abbr.
- 37 Gem surface
- 38 Castle's watery ring
- 39 Ungracious competitor
- 41 Impulsive speed

- 42 Mile-a-minute speed
- 43 Pep rally cry
- 44 Parking-lot spot
- 47 Guys
- 48 Drag from behind
- 49 Foliage on a forest floor
- 56 A Great Lake
- 57 Holler
- 58 Weighing machine
- 59 Close to
- 60 Bygone time
- 61 Tot's three-wheeler
- 62 Schoolroom furniture
- 63 Poems of praise
- 64 Cravings

DOWN

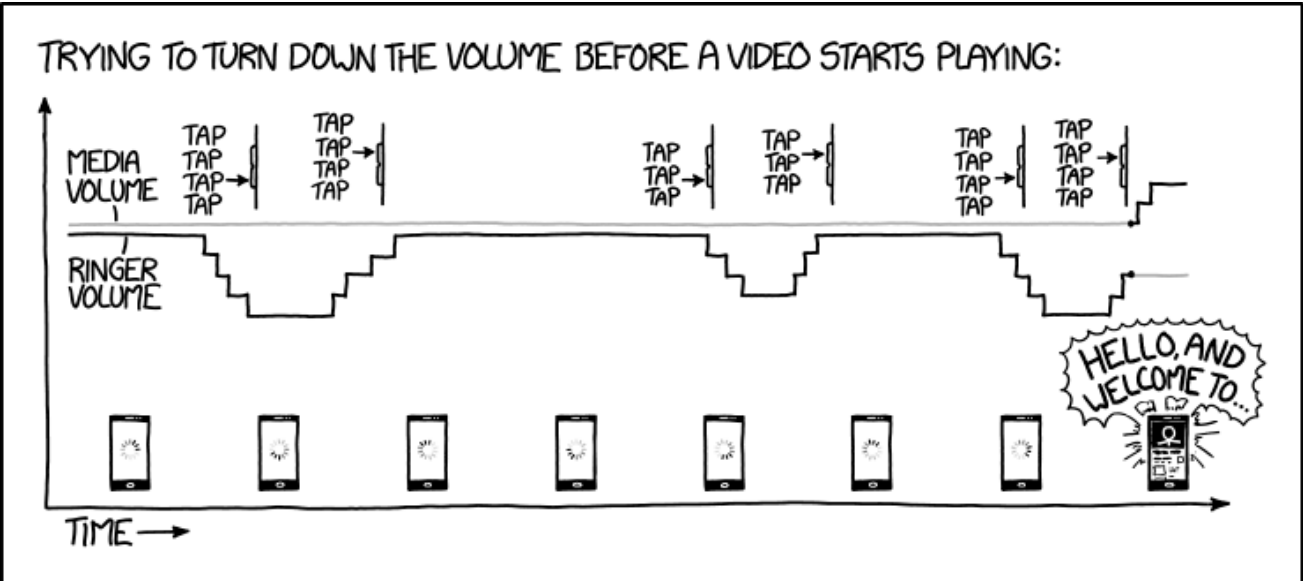
- 1 Impartial
- 2 Cajun veggie
- 3 Have an unpleasant aroma
- 4 Eventually became
- 5 Desirable feature
- 6 Anything edible
- 7 Largest continent
- 8 Bun or bagel

- 9 Small rug at an entryway's floor
- 10 Atlantic, for instance
- 11 Chicago airport
- 12 Typefaces
- 13 Bar bill
- 20 Writer Edgar Allan ____
- 23 Game's first X or O
- 24 Tips of shoes
- 25 Delve ____ (investigate)
- 26 Principal performer
- 27 Employee on a store's floor
- 28 Risky, informally
- 29 At any time
- 30 Tennis court barrier
- 32 Quickly
- 33 Odor-sensing organ
- 34 "Bye-bye!"
- 35 Flower stalk
- 37 Supposedly sly animal
- 40 Be untruthful
- 41 Truthfulness
- 43 Hair salon goo
- 44 Make purchases

	1	2	3	4		5	6	7	8		9	10	11	12
13						14					15			
16						17					18			
19						20					21			
				22						23				
24	25	26	27				28	29	30					
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				42					43					
44	45	46						47						
48						49	50	51			52	53	54	55
56						57					58			
59						60					61			
62						63					64			

- 45 Turn to mush in a blender
- 46 Criminal's false name
- 47 Thaws
- 49 Mistake in print, for short
- 50 Sit with a book
- 51 Otherwise
- 52 Real estate measure
- 53 Egotistical
- 54 Large antlered animals
- 55 Get a look at

[1884] Ringer Volume/Media Volume



Our new video ad campaign has our product's name shouted in the first 500 milliseconds, so we can reach the people in adjacent rooms while the viewer is still turning down the volume.

What's it like to design a meal that floats?

By Alana Chandler

Stardust-sprinkled luminescent orbs and Dua Lipa-infused cotton candy are replaced with the reality of vacuum-sealed hunks of dehydrated meat and powdered stews. Today's space food focuses on practicality over aesthetics, but behind what might look like forensic evidence lies meticulous engineering. Shelf stability, nutrition content, mass minimization for transport, and ease of consumability in a zero gravity-environment are some issues carefully considered by NASA's food scientists. It's a wondrous feat of engineering that, in the lifeless void of space, astronauts can still enjoy a peanut butter and jelly sandwich, albeit made with a tortilla instead of fluffy bread. (Like the ultimate neat freak, NASA doesn't allow bread on space missions because it can make crumbs that can cause significant damage to equipment and human lungs as they float around.)

What can be gained if, instead of warm water, the space food experience is injected with Earthly traditions or wholly new rituals?

Coblentz's path to the Media Lab began without any connection to space or food. Out of college, Coblentz started her own jewelry company. While she loved making wearable fashion pieces, she yearned to tap into her problem-solving skills. She left her company and obtained a master's degree in industrial design from the Rhode Island School of Design (RISD). It was Coblentz's love for design and cooking, coupled with her childhood camping trips, that led her to write her thesis on space food and other extreme environments.

"I grew up in Canada doing a lot of canoe tripping. Part of my role was planning all the menus with the limited resources that we had to carry with us," Coblenz reminisces. She began to wonder how food functions in environments outside of the domestic kitchen, bringing people together without a traditional set of tools.

Coblentz has explored the influential power of virtual reality in the eating experience. During her time at RISD, she ran a blind wine-tasting event where participants tasted the same wine while looking at two virtual reality scenes — one of a lush Earth landscape and the other on Mars. Participants believed the wines were different depending on the scene they viewed, emphasizing the notion that food will feel significantly different on another planet. “If we understand the impact of different settings, we can design for it,” says Coblentz.

Half of Coblenz's research is solving near-term goals for astronauts, like her project on space fermentation to promote astronauts' gut health and microbiome. The other half of her research is "a little bit down the line," as she puts it, peering into what the future of space tourism might possess. In August 2019, Coblenz tasted such a future when she adorned a "space food helmet" whilst on a flight in simulated zero gravity chartered by the Media Lab's Space Exploration Initiative. The helmet acted as an immersive floating "restaurant-for-one" where Coblenz enjoyed a multi-course menu that she fit with a lazy Susan so that the food could rotate around, aromas pumped inside, and one day it could even include video projections for a fully immersive experience. Inspired by a glovebox, she crafted the avant garde fishbowl-like helmet with two iris openings so that she could put her hands inside while preventing items from floating out.

The snack-and-sail experience began with the adage of a champagne toast, consumed in popping candy-form instead of from a crystal flute. Because carbonated beverages are not recommended in space due to how they interact with the body, Coblenz wanted to capture a similar staccato sensation with the candy. “I’m trying to break apart all the rituals of eating. What makes it feel celebratory?” The texture, the fizz, the sounds, the tradition — recreating that for the context of space was Coblenz’s mission.

Coblentz also brought along her “silicon bones,” a food utensil that she created to emulate the primeval experience of gnawing the remnants and gritty bits of food. She

COURTESY OF MAGGIE COBLENTZ

coated the bones in miso paste as a precursor for a future project where her team is sending miso to the ISS to see how umami flavors evolve with fermentation. Due to shifting bodily fluids in space, flavors become muted, like eating with a severe cold. Now imagine that experience lasting for months on end on space missions. Incorporating the strong flavor profile of umami into dishes might help make food more palatable in space.

Coblentz also used her limited time on the zero gravity flight to attempt making the algae caviar spheres. She injected a prepared syringe of liquid within a drop of the calcium solution, then fished out the polymerized ball from the floating “bath” — an inception remix on the spherification process. “I’m coining this ‘anti-plating’: thinking of new ways of plating food where you don’t need a flat surface,” Coblentz says. “It can be spherical, or a 3D shape where you could put food on all different sides. Imagine having your salad dressing on the inside as a sphere, and then the lettuce on the outside.”

While taking a Willy Wonka-meets-extraterrestrial-science approach to space food design is both beautiful and intriguing, some people question whether food is

Coblentz acknowledges that not everyone likes food and admits that the importance of food in one's life is highly subjective, but its tremendous influence on emotions, behavior, and cognitive performance isn't to be overlooked. Coblentz's passionate belief in the importance of crafting rich food cultures places her work as the antithesis of Soylent-like products. Ready-to-go and all-in-one meals are the epitome of the modernist North American pursuit of efficiency, uniformity and optimization. "Although Soylent has succeeded in creating a community in and of itself, is this the community and future that we desire?" A similar question can be asked about space food.

"Taste is often the last sense experienced in a meal. All of the senses must be considered when designing food and eating experiences," Coblenz states. At our next meal, perhaps we can all put on our Coblenz hats. No, you don't need a space food helmet. What I mean is, imagine what your meal would be like if it were to be eaten within a helmet with irises or while floating, if it were made without access to a gas stove, thousands of miles away from the scents of paper grocery bags and frying spices, if it were enjoyed in a capsule surrounded by the orange-red dust of Mars. What habits would be transposed, what rituals lost, what customs newly developed? Food customs reflect our value systems, and Coblenz's work reflects a hope for a space food future that promotes social interaction, emotional health, and connection in the isolating backdrop of the space void.