thetech.com

Volume 139, Number 32



WEATHER, p. 2 Sunny SAT: 34°F | 31°F Chance snow and

Thursday, January 16, 2020

# **Investigation finds** Reif was not aware of Epstein donations

Goodwin Procter reports donations approved by senior administrators

By Kerri Lu

ASSOCIATE NEWS EDITOR

The results of the law firm Goodwin Procter's investigation of MIT's relationship with Jeffrey Epstein were released by the Executive Committee of the MIT Corporation Jan. 10. The fact-finding report concludes that senior members of MIT's administration approved Epstein's donations to MIT without President L. Rafael Reif's knowledge.

Reif and the executive committee instructed MIT's General Counsel to retain Goodwin Procter to conduct the fact-finding investigation September 2019. The report uses information from 73 interviews with 59 individuals and a review of over 610,000 emails and documents.

According to the report, Jeffrey Epstein made ten donations to MIT totaling \$850,000 between 2002 and 2017. The earliest donation was a gift of \$100,000 to Professor Marvin Minsky's research in 2002. The other nine donations, totaling \$750,000, were made after his 2008 conviction as a sex offender.

Of the post-conviction donations, the Media Lab received \$525,000 and professor of mechanical engineering Seth Lloyd received \$225,000.

The report states that Epstein visited MIT nine times between 2013 and 2017. Goodwin Procter found that these visits and post-conviction donations were arranged by former Director of the Media Lab Joi Ito and Lloyd rather than by MIT administration.

Epstein, Page 2



NAACP attorney Michaele Turnage Young discusses admissions ethics and diversity with MIT faculty members La-Tarri Canty and Beatriz Cantada in an open panel discussion Jan. 9.

# **Executive Vice President Israel** Ruiz to step down Spring 2020

Ruiz says is unrelated to knowledge of Epstein's gifts

By Shelley Choi

Israel Ruiz SM '01, MIT's executive vice president and treasurer, will step down at the end of the spring semester. President L. Rafael Reif announced Ruiz's decision in a letter addressed to the MIT community late December. Ruiz has served MIT for the last 20 years.

Ruiz wrote in an email to The Tech, "I am immensely proud of the work that we have done to make MIT better at every level, to strengthen its financial foundation and to launch transformative initiatives that will benefit the community for years to come. ... We have worked together with the MIT community to not only recover from the 2009 financial crisis, but to come out stronger than ever before in support of MIT's boldest aspirations."

After graduating from MIT in 2001 as a graduate student at the Sloan School of Management, the Barcelona native began working as a consultant to then-President Chuck Vest and Provost Bob Brown. In 2003, he was hired as the associate director of the Budget Office to lead MIT's long-term financial plan, and was named director of finance in 2005 and vice president of finance in 2007. Ruiz was elected executive vice president and treasurer October

In his letter, President Reif praised Ruiz as a "brilliant strategic thinker" whose efforts have transformed the MIT community and institution . MIT has not had an operating loss since Ruiz was appointed VP of finance.

Ruiz developed renewal plans for the MIT campus, guided by the MIT 2030 framework, and helped transform the nearby Kendall He also helped launch the online course programs MITx and edX created in conjunction with Harvard

The Engine, an enterprise that invests in "tough tech" startups from MIT and the Boston area, was heavily supported by Ruiz's commitments for its first \$205 million venture fund, according to MIT News. He was also instrumental in negotiating for the funding of MIT's newest college, the Stephen A. Schwarzman College of Computing.

The spring semester will be spent as a transitional stage for senior leadership as it prepares to fill the gap in leadership left by Ruiz.

Ruiz wrote in his email, "While there is never the right time to leave a wonderful institution like MIT," his work around innovation inspired him, "to consider a change in my professional career ... and led to my decision to step down from my position to have the freedom to pursue them without conflicts" Ruiz did not further specify on what he intends to do after leaving MIT.

Ruiz mentioned in a separate email to The Tech that his stepping down is not related to his knowledge of Jeffrey Epstein's donations, as uncovered by the Goodwin Procter investigation.

# **IN SHORT**

Pre-registration for spring is due today by 5 p.m. The late fee is \$85.

Martin Luther King Jr. Day, an Institute holiday, is Monday.

The change period for spring meal plans is currently open and ends Interested in joining *The Tech*? Stop by for dinner Sunday at 6 p.m. or email join@tech.mit.edu.

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

# | ICE may conduct F-1 **STEM OPT site visits**

Postdoctoral associates, postdoctoral fellows, and research scientists potentially affected

# By Margaret Rodriguez

Members of the MIT community received an email Jan. 9 informing them of potential site visits by Immigration and Customs Enforcement.

ICE "has started conducting site visits to employers of F-1 postgraduate students" who are working on Optional Practical Training (OPT), Penny Rosser, director of the International Scholars Office, wrote. The memo was sent to faculty; principal investigators; deans; assistant deans; HR administrators of departments, labs, and centers; and MIT supervisors.

In response to questions from the MIT community, Rosser sent a follow-up memo Jan. 14 stating that the previous memos "were not a response to a specific event, complaint, or notice of an imminent visit to MIT."

"To the best of my knowledge, none of our Greater Boston peer institutions have received F-1 STEM OPT employment-related site visits," Rosser wrote in the Jan. 14 memo.

In an interview with The Tech, Vice President for Research Maria Zuber said that the original memo was not precipitated by any event or recent notification from the DHS.

"This was basically a general update to a very small community of people at MIT," Zuber said.

Zuber said that the subset of students impacted by these potential homeland security visits are researchers with F-1 status who have an OPT extension.

"On our campus we currently have 221 people of our entire community who fall under that designation. They are mostly postdoctoral associates and postdoctoral fellows; some are research scientists," Zuber said

"By comparison, we have over 4,000 international students, and re have on the order of 2,500 international scholars," Zuber said.

In order to facilitate the OPT extension program for international students with this type of visa, MIT is required to agree to the possibility of potential DHS visits "to make sure that they have the resources they need to accomplish their training and that they are actually executing their training," Zuber said.

Zuber said the decision to send the Jan. 9 memo was simply "meant to provide a general update to people" that anybody contacted by ICE should contact the International Scholars Office so it can "provide the support and resources necessary."

# TOOLS UP!

A new party game for those tired of Overcooked. ARTS, p. 4

# **DOOLITTLE**

As good as CGI talking animals can be. ARTS, p. 5



# **RASEDOVICH GROUP**

Creating new reactions. SCIENCE, p. 3

# **BRAVEHEART**

Binding us together with stories. ARTS, p. 4

# **SECTIONS**

Science				. პ	
Arts				.4	
Fun Pages				6	

**WEATHER** 

# The hint of spring is over

By Sarah Weidman

STAFF METEOROLOGIST

Last weekend we experienced some extremely unseasonable weather, with temperatures in the high 60s. This warm trend was felt all throughout the eastern US, with several cities seeing record high temperatures for early January. The warm air mass was part of what is called a "warm sector" that often precedes large storms. Although the storm managed to barely miss Boston, other parts of the country experienced some

heavy precipitation as the storm pushed the warm air out of the way. If you're a fan of frigid temperatures and winter precipitation, don't worry. The spring-like weather was just a tease, and we will be back to cold, wind, and possibly some snow later this week and over the weekend. As always, Boston's strong winds are what really brings the bite to winter, and the next couple days will be no exception. You'll definitely have to bundle up if you plan to get outdoors over the long weekend.

# **Extended Forecast**

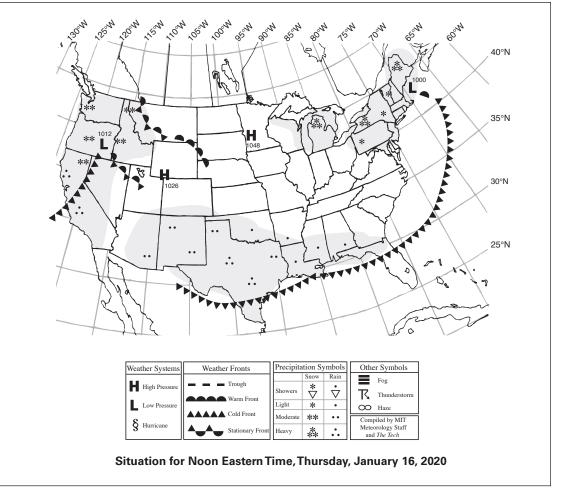
Today: Rain, then cloudy. High around 45°F (7°C). Northwest winds around 21–26 mph, with gusts up to 48 mph.

Tonight: Partly cloudy. Low around 19°F (-7°C). Northwest wind

Friday: Sunny. High around 25°F (-4°C) and low around 12°F (-11°C). Northwest wind around 20–23 mph.

Saturday: Chance of snow and rain. High around 34°F (1°C) and low around 31°F (-1°C). Northwest winds around 6-10

Sunday: Mostly cloudy. High around 44°F (7°C).



# Three vice presidents aware of Epstein's criminal record and donations

Epstein, from Page 1

Goodwin Procter concluded that Reif "was not contemporaneously aware of" and "had no role in approving MIT's acceptance of the donations." Preliminary results of the investigation, disclosed in September, found that Reif signed a standard letter thanking Epstein for a \$50,000 donation to Lloyd Aug. 16, 2012.

"There is no evidence that President Reif, or anyone else involved in sending the Presidential Acknowledgement letter in 2012, had any knowledge that Epstein had a criminal record or was controversial in any way," the report says, noting that during this time frame Reif "was asked to sign approximately 500 such Presidential Acknowledgement letters to donors per year."

However, the law firm found evidence that former Vice President and General Counsel R. Gregory Morgan, former Vice President for Resource Development Jeffrey Newton, and Executive Vice President and Treasurer Israel Ruiz SM '01 were aware of both Epstein's criminal record and his donations to the Media Lab.

Morgan, Newton, and Ruiz "established an informal framework in 2013, under which all subsequent Epstein donations to MIT were ultimately approved," the re-

Ruiz wrote in an email to The *Tech* that his recent decision to step down from his position was "not related" to the fact-finding investigation. Newton retired in 2013, and Morgan retired in 2018.

The investigation concluded that while "the decision to accept Epstein's post-conviction donations cannot be judged as a policy violation," it was the result of "collective and significant errors in judgment."

There is no evidence that anyone in MIT's central administration was aware of any of Epstein's visits to MIT's campus," the report states.

The report states that Lloyd accepted two \$50,000 donations in 2012 and \$125,000 in 2017 to fund his research, as well as a personal gift of \$60,000 from Epstein in 2005 or 2006. Lloyd did not notify MIT of the personal gift.

According to the report, Lloyd 'purposefully failed to inform MIT" that Epstein was the source of the 2012 donations.

Reif has placed Lloyd on paid administrative leave.

The Tech joined a press call with MIT Corporation executive committee members Alan Spoon '73 and Denis Bovin '69 and Goodwin Procter attorneys Roberto Braceras and Jennifer Chunias. Braceras and Chunias led the investigation.

Spoon said that Goodwin Procter has "served MIT well and expertly in a number of matters." Braceras has previously represented MIT in class action lawsuits "involving claims seeking greater accessibility to various websites," according to Goodwin Procter's

Spoon said that the executive committee has "expressed full confidence in [Reif's] leadership," applauding Reif's commitment to listening to faculty concerns over the past months.

Spoon said that the law firm Paul, Weiss, Rifkind, Wharton & Garrison LLP became involved in the fact-finding process to assist Goodwin Procter by "providing counsel and insight in the investigation and interpretation of the findings." Unlike Goodwin Procter, Paul Weiss had no relationship with MIT prior to the investigation.

When asked what aspect of the investigation he found the most surprising, Spoon called the number of visits by Epstein to the MIT campus a "very disturbing discovery."

Bovin said that although MIT has traditionally been an "open campus" in which faculty may freely invite guests, Epstein's visits to campus prove that additional safety measures are necessary.

According to the report, Goodwin Procter found no evidence that Epstein arranged anonymous gifts to MIT from wealthy donors such as Bill Gates and Leon Black, as Epstein previously claimed.

Braceras said that representatives of Gates "denied that any Gates donation" was related to Epstein. Chunias added that Stroz Friedberg, a third-party firm specializing in digital forensics that Goodwin Procter retained for the investigation, confirmed that there was no evidence that Epstein encouraged donations from Gates or Black

The New Yorker reported Sept. 6 that Epstein was "credited with securing" two million from Gates and \$5.5 million from Black.

Braceras said that Epstein invested in one of Ito's venture capital funds, "which is not against current MIT policy." Spoon added that "sharpening and clarifying any and all concerns about conflicts of interest" in donations to private firms and research might serve to reduce such "side door possibilities."

In response to a question about Lloyd's paid administrative leave, Spoon said that Lloyd is currently "being subject to review in his home department of mechanical engineering," and that disciplinary proceedings are "moving swiftly." Bovin added that mechanical engineering department head Evelyn Wang '00 is "fully involved" in "doing what is procedurally appropriate at MIT."

Wang wrote in an email to The *Tech* that the department plans to "review the findings in the report and consider any appropriate disciplinary action."

In an email to the MIT community Jan. 10, President Reif outlined the Executive Committee's recommendations.

The committee recommends the creation of policies to "guide decisions about controversial donors." The Ad Hoc Faculty Committee on Guidelines for Outside Engagements and the Ad Hoc Committee to Review MIT Gift Processes, which were launched in the fall, will present their recommendations in th

Reif wrote that in the interim, an "additional process" has been instituted to "make sure all relevant information is reviewed before any reasonably significant gift is accepted." Reif has also asked the vice president for resource development and the CEO of the MIT Alumni Association to improve the donor database's "integrity and factual accuracy."

Other recommendations include building "a culture in which whistleblowing is accepted, effective, and safe," creating guidelines to keep MIT's campus safe from "visitors who pose a direct threat," supporting the Media Lab as it assesses its "future internal governance" and searches for a new director, and forming an "Institute-wide community process to address persistent issues in our campus climate."

Reif wrote that he "profoundly regrets" that "decisions that sustained MIT's ties to Jeffrey Epstein occurred on [his] watch," and that he feels a "deep responsibility to repair what has been broken."

Reif wrote that MIT administration is currently "designing an inclusive process that will allow our community to articulate the goals we share for our campus climate and culture, and decide how best to achieve them - together."

MIT offers several resources to survivors of sexual assault and violence, including MIT Student Mental Health and Counseling Services, MIT Violence Prevention and Response, MIT Title IX and Bias Response Office, MIT Medical, MIT Police, and an anonymous hotlin

# Prof. Jeffrey Grossman named new head of department

Grossman will no longer teach 3.091, 'at least not in the first years'

**By Kristina Chen** 

ASSOCIATE NEWS EDITOR

Professor Jeffrey Grossman has been appointed the new head of the Department of Materials Science and Engineering (DMSE), effective Jan. 1, 2020. Grossman succeeds Chris Schuh, who had been head of DMSE since 2011

Anantha Chandrakasan, dean of the School of Engineering, wrote in a letter to the DMSE, "Professor Grossman has been a core member of the materials science and engineering community and has made outstanding contributions as an educator. He will undoubtedly be

an excellent leader for DMSE."

Grossman is the Morton and Claire Goulder and Family Professor in Environmental Systems and a MacVicar Faculty Fellow. Additionally, Grossman has taught 3.091 (Introduction to Solid-State Chemistry) since Fall 2015.

Grossman said in an interview with *The Tech* that he will no longer be teaching 3.091, a decision that was "one of the single greatest points that [he] had to grapple with." Ultimately, he decided it was "not going to be possible, at least not in the first years" to "still teach 3.091 and be a great department head at the same time and also be giving both [his] all."

The version of 3.091 as Grossman taught it in Fall 2018 will be made available on OpenCourseWare.

When asked about his goals as department head, Grossman told The Tech that he hopes to examine the comprehensive student experience, working with both graduate and undergraduate students. He aims for a "holistic" view, looking beyond classes and curriculum at "the entire experience when you're here."

Grossman said that the department could "do a better job at integrating our view into how we can best support our students to be challenged and excited and passionate, but not to be overly stressed."

Grossman also hopes to foster connections between students, faculty, and staff, seeing "facilitating the community and its engagement" as an important way to "add value to everyone's work." He explained that at MIT, "it's the intersections between people where the spark can be so

Grossman also reflected on the future of his field, discussing the ubiquity of materials science and engineering, which "plays a fundamental role everywhere you look: from energy to medicine to computation to climate and much more." He added that the "limiting factor to drastic improvement" in

the efficiency and cost of solutions to "pressing global challenges" is in the material used. "Design a better material and understand it, and you can find game-changers," Grossman said.

Grossman also told The Tech that he cares deeply about the people at the Institute, calling his interactions with MIT community members "the most exciting part of the day." To Grossman, his work is "about helping students learn, but it's also about inspiring them," "helping them find what they are excited most about," "being a resource for students," and "helping faculty make the most impact in whatever they do."



# Publisher

Áron Ricardo Perez-Lopez '20

**Editor in Chief** Jessica Shi '21

Business Manager Thomas Wang '21

Managing Editor Ivana Alardín '21

Executive Editor
Nathan Liang '21

NEWS STAFF

News Editors: Whitney Zhang '21, Rujul Gandhi '22; Associate News Editors: Zoe Anderson '21, Sharon Chao '21, Edwin Song '22, Kristina Chen '23, Kerri Lu '23; Staff: Billy Woltz '20, Zoe Sheill '22; Meteorologist: Sarah Weidman '21.

PRODUCTION STAFF

Editors: Eber Nolasco-Martinez '20, Joanna Lin '22; Associate Editors: Kevin Pho '22, Ana P. Reyes Sánchez '22; Staff: Yichi Zhang G, Nicole Teichner '22, Caroline Bao '23, Arthur Reiner De Belen '23, Dean Fanggohans '23, Chloe McCreery '23, Ronak Roy '23, Olivia Schirm '23, Arun Wongprommoon '23, Wenbo Wu '23; Illustrators: Jaeho Kim '20, Max Yu '21.

OPINION STAFF

Associate Editors: Steven Truong '20, Jen Fox '21; Staff: Mark Goldman G, Octavio Vega '22.

SCIENCE STAFF

Editor: Jordan Harrod G; Staff: Isabel Barnet '22, Anushka Ray '22, Jocelyn Shen '22.

SPORTS STAFF

**Staff:** Ben Kettle '22, Muhammed Suleman Thaniana '23.

ARTS STAFF

Editor: Ivy Li '20; Associate Editors: Shreyan Jain '20, Lior Hirschfeld '21, Liane Xu '23, Erika Yang '23; Staff: Rogers Epstein G, Alexandra Sourakov G, Mariam Dogar '20, Jessica Tang '20, Rona Wang '20, Erica Weng '20, Johnson Huynh '21, Max Langenkamp '21, Lani Lee '21, Nyssa Miller '21, Torri Yearwood '21, Leah Yost '21, Alana Chandler '22, Victoria Dzieciol '23.

PHOTOGRAPHY STAFF

Editors: Ethan Sit '21, Kevin Ly '22; Associate Editor: Assel Ismoldayeva '22; Staff: Mahi Shafiullah G, Leon Yim '20, Maxwell Yun '21, Ether Bezugla '22, Sophia Fang '22, Shinjini Ghosh '22, Alex Li '22, Kevin S. Chen '23.

COPY STAFF

Copy Chief: Adira Balzac '21; Associate Copy Chiefs: Ayomikun Ayodeji '22, Jack Dinsmore '22; Staff: Yaseen Alkhafaji '21, Talia Blum '21, Kendall Yu '21, Pranit Nanda '22, Clinton Reid '22, Sophia Zhi '22, Laura Schmidt-Hong '23.

BUSINESS STAFF

Staff: Asia Hypsher '21, Tafsia Shikdar '21, Leon Yu '21, Alvin Zhu '21, Pranit Nanda '22, Steven Ngo '22, Daniel Zhang '22, Amber Liu '23.

TECHNOLOGY STAFF

Director: Tareq El Dandachi '22.

ADVISORY BOARI

Paul E. Schindler, Jr. '74, Barry S. Surman '84, Deborah A. Levinson '91, Karen Kaplan '93, Saul Blumenthal '98, Frank Dabek '00, Satwiksai Seshasai '01, Daniel Ryan Bersak '02, Eric J. Cholankeril '02, Nathan Collins SM '03, Tiffany Dohzen '06, Beckett W. Sterner '06, Marissa Vogt '06, Andrew T. Lukmann '07, Zachary Ozer '07, Austin Chu '08, Michael McGraw-Herdeg '08, Marie Y. Thibault '08, Ricardo Ramirez '09, Nick Semenkovich '09, Angeline Wang '09, Quentin Smith '10, Jeff Guo '11, Joseph Maurer '12, Ethan A. Solomon '12, Connor Kirschbaum '13, Jessica J. Pourian '13, Aislyn Schalck '13, Anne Cai '14, Jessica L. Wass '14, Bruno Faviero '15, Kali Xu '15, Leon Lin '16, Kath Xu '16, Anthony Yu '16, Colleen Madlinger '17, Lenny Martinez Dominguez '17, Charlie J. Moore '17, William Navarre '17, Katherine Nazemi '17, Emma Bingham '19, B. D. Colen.

FDITORS AT LARG

**Senior Editors:** Nafisa Syed G, Christopher Wang G, Josephine Yu '20.

PRODUCTION STAFF FOR THIS ISSUE

Editors: Eber Nolasco-Martinez '20, Joanna Lin '22; Staff: Kevin Pho '22, Ana P. Reyes Sánchez '22, Chloe McCreery '23, Olivia Schirm '23, Arun Wongprommoon '23; Copy Editors: Josephine Yu '20, Adira Balzac '21; Laura Schmidt-Hong '23.

The Tech (ISSN 0148-9607) is published on Thursdays during the academic year (except during MIT vacations) and monthly during the summer by The Tech, Room W20-483, 84 Massachusetts Avenue, Cambridge, Mass. 02139. Subscriptions are \$50.00 per year (third class). POSTMASTER: Please send all address changes to our mailing address: The Tech, P.O. Box 397029, Cambridge, Mass. 02139-7029. TELEPHONE: Editorial: (617) 253-1541. Business: (617) 258-8324. Facsimile: (617) 258-8226. Advertising, subscription, and typesetting rates available. Entire contents © 2020 The Tech. Printed by Graphic Developments, Inc.

# Creating compounds with catalysts

The Radosevich Group uses innovative phosphorus catalysts to create new reactions

By Alexandra Wolff

Imagine a world where toxic chemicals abound in the air in the form of unfiltered carbon monoxide from car exhaust. Imagine a world without paper because the pulp cannot be refined into the crisp white sheets we have today. Imagine a world without fertilizer, gasoline, or even plastic. Imagine a world without life because the processes to replicate DNA now take 2.3 billion years. This is the reality of a world without catalysts, which are used to propel reactions in manufacturing, petrochemicals, the human body, and many other areas of life.

Although catalytic processes have become widespread over all industries, there are still many areas with potential for great advancements. The Radosevich Group, a synthetic chemistry laboratory led by Dr. Alexander Radosevich, PhD '07, has been investigating the process of catalysis for nine years. A catalyst is a compound that can be used to increase the rate of a reaction without being consumed in the reaction itself. "We are interested in designing new reactions," Radosevich said. By designing and improving catalysts, completely new compounds can be created.

In describing the setup of his lab, Radosevich noted that most of the equipment could easily be found in a standard teaching laboratory. What makes the Radosevich group lab unique are the tools, or catalysts, created through straightforward techniques. Radosevich compared his research to the construction of a building. While the tools used in construction are commonplace, the end-product can be elaborate and complex. Also, having simple tools and processes allows for the catalysts to be easily reproduced in a commercial setting. Radosevich states that "the point of reaction chemistry that we develop is to be used by other people."

The Radosevich group focuses on the creation of catalysts with phosphorus compounds. Phosphorus is a unique catalytic element because, although it is a nonmetal, it has multiple oxidation states like a transition metal, which make up most catalysts. For example, a rhodium catalyst is used in the catalytic converters of cars to filter the exhaust. However, transition metals can be rare and expensive. In contrast, phosphorus is abundant and inexpensive. Phosphorus's free ability to cycle through



COURTESY OF THE RADOSEVICH GROUP

Postdoctoral researcher Jeff Lipshultz at work in the Radosevich Lab.

oxidation states allows it to act similarly to transition-metal catalysts. Additionally, organophosphorus molecules, which are molecules that contain both carbon and phosphorus, have useful spectroscopic properties. Spectroscopy uses electromagnetic radiation to identify compounds.

After completing a round of experiments, the researchers used various spectroscopic techniques to indirectly identify the compounds created. The most abundant isotope of phosphorus, 31P, is easily identified by the spectroscopic techniques used, which allow the compounds to be characterized very easily. Identifying and characterizing the compounds created allow the researchers understand more about the compound and which reactions it would best optimize as a catalyst.

The organophosphorus molecules created by the Radosevich group have appli-

cations in many fields, one such field being the pharmaceutical industry. By treating organic compounds containing nitrogen dioxide with nitric acid and then introducing a phosphorus catalyst, reactive nitrogen intermediates are produced. These nitrogen intermediates can then be reacted to form other compounds. The catalysis of these reactions is important in pharmaceuticals, as many drugs contain nitrogen. Finding an easy and efficient way to separate nitrogen is valuable for drug discovery.

In the future, Dr. Radosevich hopes to expand his research from catalytic synthesis with phosphorus to other equally abundant, non-metal compounds such as silicon or sulfur. He would also like to investigate the compounds he creates in his lab through the broader lens of reactivity rather than just catalysis. "At root," says Radosevich, "I'm interested in reactions."



THURSDAY, JANUARY 16, 2020 4 THE TECH

# **STORYTELLING REVIEW**

# Four women; four stories

A multigenerational group of women harnessed the expressive power of the spoken word to express their nuanced identities and challenge social paradigms

# **Braveheart:** Storytelling from a Soulful Place

Starring Amanda Shea, Valerie Stephens, Porsha Olayiwola, and Gcina Mhlophe

Isabella Stewart Gardner Museum

Jan. 9

## By Valeria Robayo

I have always been a bookworm at heart and was understandably hooked when I first heard about Braveheart, a storytelling evening hosted by the Isabella Stewart Gardner Museum. The event promised "storytelling from a soulful place," encouraging each of its four female artists to celebrate their diverse roles as mothers, businesswomen, philanthropists, and friends; selfdefine their racial and gender identities; and reflect on the various social and familial obstacles they each have had to overcome. Throughout the evening, each performer harnessed the expressive power of the spoken word, sharing their struggles, triumphs, and vulnerabilities with the audience. Each artist's whispered poems, soulful songs, and hearty laughter drew me in close and made for a highly personal experience.

The night started off with Amanda Shea, a poet and singer, who performed several pieces on identity, social justice, and racism. Her first performance was my personal favorite. It was both beautiful and disturbing, beginning with a woman wearing a floor-length white dress standing in the center of a spotlight. Shea's voice floated in from off stage, describing the first few years of her marriage in rhythmic prose, and she soon emerged, draped in a flowing black maxi dress, holding a pile of chains.

Shea's raspy voice communicated her unhappiness, and as she began to wrap the chains in her hand around the woman in white, the audience began to better understand the stifling nature of Shea's relationship. Throughout her performance, Shea communicated the importance of uncompromising self-care and dignity. I could understand how much thought had gone into the performance from the thoughtful symbolism and deliberate vocal inflection it was infused with. Shea's story was told in a refreshing, albeit sobering way, and her next few pieces continued to showcase her remarkable skill.

Next came Valerie Stephens, a native Bostonian, philanthropist, and performing artist with a passion for history. Stephens's presentation more closely resembled traditional storytelling, and she began by describing her experiences growing up in a racially charged Boston, including elucidating pictures of herself as a child in a starched white dress, of herself as a college student engaging with Shirley Graham Du Bois, and even of her birth certificate, which classified her race as C for "colored." Punctuated by hearty, booming laughter, Stephens' story related her ultimate success in accepting and rejoicing in her black identity with sobering sincerity and encouraged her audience to do the same.

After a short intermission, Porsha Olayiwola, a queer feminist and winner of multiple national and world poetry slams, took the stage. Olayiwola began her performance with a poem about the social dangers of being a queer black woman and her journey towards realizing her identity. It was clear that Olayiwola's artistic talent lay in poetry, as her inflective, almost musical voice skillfully communicated her romantic relationships and nuanced identity. Olayiwola's extensive usage of photographs projected on the wall behind her gave the audience a glimpse into her life and made her stories all the more tangible. After a few dances and musical numbers, Olayiwola yielded the stage to Gcina Mhlophe, a South African freedom fighter, actress, and storyteller.

Out of all of the performances, I enjoyed Mhlophe's the most. Her charisma rolled



COURTESY OF THE ISABELLA STEWART GARDNER MUSEUM

Renowned storyteller Nokugcina Elsie Mhlophe brings her talent to the Isabella Stewart Gardner Museum.

off in waves, and her double bass voice beautifully resonated across the hall. Wearing a traditional dress and Zulu beaded necklace, Mhlophe paid homage to her rich South African history and spent her time talking about her life-long relationship with poetry, theater, and words. "Stories have been a lifeline for me to have a sense of self and confidence," Mhlophe said. My favorite moment in the performance was her recitation of her original poem, "The Dancer." Mhlophe begins by admiring her mother's beautiful traditional wedding dancing and expressing a wish to emulate her graceful rhythm. Soon, her voice becomes agitated and vigorous as she reflects that there are no weddings anymore, only funerals in which she can dance with "strange smiles" and "vengeance" in her eyes. This poem,

which referenced the dangerous times of the anti-apartheid movement, was beautifully written and moving.

The night concluded with an appreciative standing ovation as the four women stood together on stage, a picture of solidarity. I am sure the applause had much to do with the creativity of each artist and the richness of their expressive voices, but I also like to think it was due to the willingness of each performer to open up their hearts to the audience — to talk about both the beautiful and ugly aspects of their experiences and lay out their lives to their listeners in such a vulnerable way. As Mhlophe reflected, stories are "invisible threads that bind us together, make us feel connected to each other, and say,

# **VIDEO GAME REVIEW**

# **Construction for dummies**

Tools Up! provides hours of couch co-op fun

By Matt Farejowicz

Tools Up! is a game that accomplishes exactly what it sets out to do: provide a fun, wild, and wacky couch co-op experience. The premise is simple: you and your friends take on the role of a renovation crew. Together, you tackle increasingly complex home improvement jobs in which you have to paint walls, place tiles, carpet floors, and so on. The format will probably be very familiar to fans of the Overcooked series, although Tools Up! stands out in its own right, with different mechanics, challenges, and opportunities for disaster.

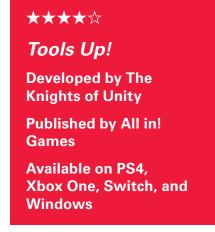


COURTESY OF THE KNIGHTS OF UNITY

Meant for up to four players, the game features level after level of constructionbased madness. Within each level, players must first find and read a blueprint that outlines the level's objectives. Each level has a time limit, so the longer you take to find the blueprint and understand the plans, the less time you have to renovate! The more you're able to complete in the time limit, the more stars you earn. A certain number of stars is required to progress to further areas, but fully completing every level is mostly for earning alternate character skins and bragging rights. Fortunately, levels do not change between attempts, so players can commit the blueprint to memory and try again for more stars.

While it might seem like time is your biggest enemy, you will quickly realize that cooperation is just as much of a challenge, albeit in the best way possible. My friends and I refrained from assigning concrete roles, so every level led to unique new forms of chaos and fun. We would run into paint buckets or try to throw supplies to each other, resulting in countless spills and misplaced items. There was no shortage of shouting as we discussed what needed to get done, who would pick up the carpet delivery, or why the heck there was a couch in the doorway.

There is no overall story to the game, but this decision makes sense, as one isn't required. Going from level to level and seeing what fiendish new tasks the game has in store for players is enough motivation to progress. However, the game could use slightly better tutorialization throughout. Often, the first time my friends and I en-



countered a new task, we would have no idea what to do until we exhaustively tried everything.

Another minor disruption is the occasionally questionable selection mechanic. In the heat of construction, you might often find yourself in a scenario where your paint is lying between your carpet and another player. Trying to select just the paint can be a whole trial on its own. We would frequently pick up each other instead of the paint, which led to laughs but also a failed level.

The downsides mentioned are fairly rare occurrences in the grand scheme of things and don't detract too much from the core gameplay. My friends and I had an absolute blast, feeling like construction pros after just a few levels. Tools Up! is super easy to pick up and play, and it is recommended for anyone seeking a fun party game.

Tools Up! is a fun and wacky adventure with friends.

# **MOVIE REVIEW**

# **Dolittle** does little to impress but entertains nonetheless

It is a lack of expectations that makes the film surprisingly enjoyable

By Erika Yang ASSOCIATE EDITOR

Stephen Gaghan's Dolittle is the latest entry in Hollywood's disappointingly robust collection of (uninspired) remakes nobody asked for, and as a result, expectations going into the film were not particularly high (especially given the January release date a month notorious for mediocre movies). Perhaps it was this lack of expectations that made the movie surprisingly enjoyable.

Gaghan takes the general premise of the doctor, Dr. John Dolittle (Robert Downey Jr.), who can talk to animals and transplants it into a fantastical Victorian England. Ever since his wife, Lily (Kasia Smutniak), passed away several years ago in a shipwreck, Dolittle has isolated himself in his menagerie

with only his animals for companionship. However, upon receiving the news that the Queen of England (Jessie Buckley) has fallen gravely ill, the doctor resolves to end his self-exile and embark on a quest to find a cure. Accompanying him on his journey are his loyal animals, including Poly (Emma Thompson), the parrot of reason; Chee-Chee (Rami Malek), the cowardly gorilla; and Yoshi (John Cena), the loyal polar bear. Tagging along is Stubbins (Harry Collett), a young boy who is fascinated by Dolittle's ability to communicate with animals and quickly worms his way into an apprenticeship.

The combination of predictable and cheesy dialogue lends itself to a certain air of underlying exasperation throughout the film. However, in a way, the cheesiness

worked in the movie's favor. Perhaps it was the delivery of the dialogue or the charisma of the characters (or a combination of both) that balanced out those typical pitfalls. Either way, the clichéd tone proved to be less of a hindrance than anticipated, and I actually found myself genuinely laughing out loud at several moments throughout the movie. It seems that everyone involved was acutely aware of the type of film they were making and chose to embrace the inevitable tropes that come with a movie like *Dolittle*.

Critically speaking, however, this does not rescue the film from its glaring weaknesses and actually greatly contributes to the poor execution. Like many similar films, Dolittle suffers from gaping plot holes, lack of character development, predictability, and corny dialogue. It somehow manages to simultaneously try too hard and too little to be meaningful — sprinkling in many scenes where an attempt is made at generating some sort of further depth to the story, but the dialogue is much too forced and the pacing much too fast to formulate anything of consequential importance. The signs of lazy writing emerge at the very beginning when the film's exposition is a summarized storytime of all the events that led to current day, complete with a voiceover and animation. Luckily, that does help to reduce runtime and saves the audience from sitting through an extra half hour of generic backstory. Visually, the CGI for the animals was not as terrible as I had initially thought it would be. There were certainly aspects that looked rather out of place when juxtaposed next to everything not green-screened and computer generated, but it did not distract too much from the general flow.

The only remarkable aspect of the film is found in its cast's credentials. From Robert



# Dolittle

**Directed by Stephen** Gaghan

Screenplay by Stephen Gaghan

**Starring Robert Downey** Jr, Antonio Banderas, Michael Sheen, Emma **Thompson, Rami Malek** 

Rated PG, Playing Jan. 17

Downey Jr. to Emma Thompson to Ralph Fiennes, the sheer amount of starpower and raw talent is enough to catapult the film from the usual indistinctiveness of January films to a higher profile slot, but there is only so much starpower can do in an age where the draw of the moviestar is dwindling. The performances were entertaining but overall are largely uninspired, which is rather disappointing given the breadth of talent.

Dolittle does its job as a whimsical movie for kids. There's fantasy, adventure, talking animals, everything that can keep a child enraptured, and as long as you don't try to go beyond its surface, it can be enjoyable for all audiences. To quote my friend: "If you don't want to spend any IQ points on a movie..." The best way to enjoy *Dolittle* is to take itfor what it is at face value and refrain from putting too much thought into it.



Robert Downey Jr. and Emma Thompson star in Dolittle.

# DID YOUR MIT ESSAYS **GET YOU IN?**

The Tech is collecting successful application essays (hint: yours!).

Email your pieces to cl@the-tech.mit.edu!

# FUNFUNFUNFUNFUNFUNFUNFUNFUNFUN FUNFUNFUNFUNFUNFUNFUN FUNFUNFUNFUNFUNFUN

# Independent

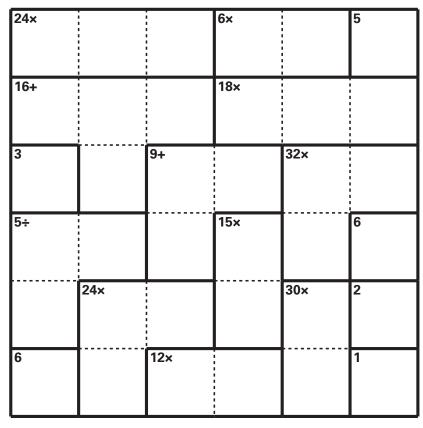
Solution, page 8

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

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.

# **Activities**

Solution, page 8



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.

29 30

14

17

32 33

63

69

# Italian Dinner by Sandy Fein

Solution, page 8

# **ACROSS**

- 1 204 in Roman numerals
- 5 Twirled around
- 9 "Step right \_\_ way!"
- 13 Hydrant attachment 14 Otherwise
- 15 Elbow or ankle
- 16 Woes
- 17 German car
- 18 Excessive, as force
- 19 First course with romaine and croutons
- 22 Clairvoyance, for short
- 23 Apiece
- 24 Quarterback's throws 26 Money, slangily
- 29 Backyard barbecue site
- 31 Rowboat propeller
- 32 Handle roughly
- 34 Sneering smile
- 38 Poultry entrée with red sauce and melted cheese
- 42 Substance in sweet cubes
- 43 One of Columbus' ships
- 44 Self-image
- 45 Acutely necessary

- 47 Buy stocks or bonds
- 50 Tranquil
- 53 Place for a pants leg patch
- 54 Hour after midnight
- 55 Doughy side order
- 61 With a flat surface
- 63 Sedan or coupe 64 Manuscript enclosure:
- Abbr.
- 65 Get a smile out of
- 66 Swedish furniture chain
- 67 A Great Lake
- 68 Sandwich loaves
- 69 "\_\_ we forget . . 70 Open-handed hit

# **DOWN**

- 1 Fashionably elegant
- 2 Coke or Pepsi
- 3 Bit of land in the ocean
- 4 Ship or boat
- 5 "I have no clue!"
- 6 Thick, as carpets
- 7 Meat inspection agcy. 8 Astronaut Armstrong
- 9 2,000 pounds
- 10 Keeps out of sight

- 11 Occupied, as a conference room
- 12 Dance moves
- 15 Rabbi's religion
- 20 Small battery size
- 21 Appropriate
- 25 \_\_ of the time
- (occasionally) 26 Soft leather shoes, for
- short 27 Hawaiian 3 Down near
- Maui
- 28 Not a copy: Abbr.
- 29 Classroom student
- 30 Alda of M\*A\*S\*H
- 33 Actress Kendrick or tennis pro Kournikova
- 35 "Thanks for the explanation"
- 36 Dustcloths
- 37 Necktie securer
- 39 Bat's underground home
- 40 Kris of Christmas
- 41 Outerwear for a downpour
- 46 Pekoe, for example 48 Omaha's state: Abbr.
- 49 Parts of poems
- 50 Of the sun

16

38

42

65

68

26 | 27 | 28

50 51 52

- 51 Foe
- 52 Show with skits and songs

45

- 53 Kids' windy-day toys 56 Staircase banister
- 57 Skywalker of Star Wars 58 \_\_ Grey (variety of 46 Down)

64

70

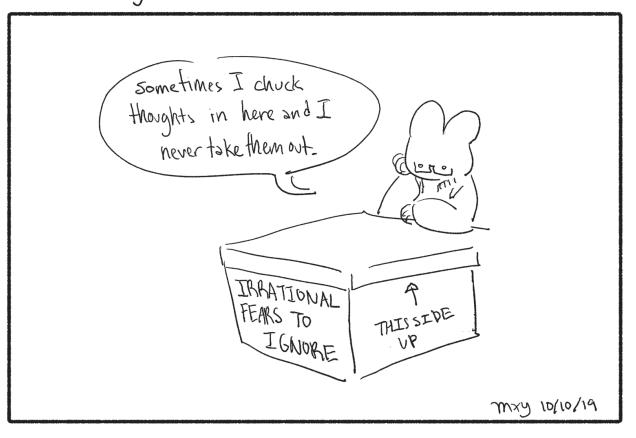
18

- 59 China's continent
- 60 Profound

62 Shape of a dollar sign

# miscellany #10: a box

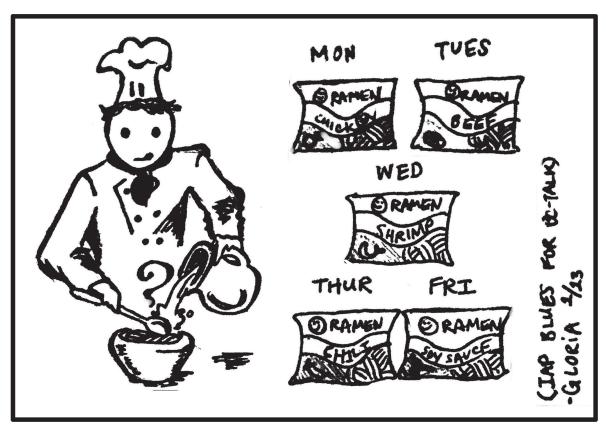




22+			1	140×		42×	16×	
432×			3	<b>-</b>	3+	<b></b>	15+	5
	5÷	270×			<b>-</b>			36×
24×	<b>-</b>		- 63×	26+			3	
	- 21×		<b>-</b>		224×	40×		
180×			3–			108×		
16×		<u> </u>		6	<b>-</b>		7×	
28×		40×			24×		162×	
7	<del>-</del>	144×				30×		<u> </u>
			!		!			

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.





"Yeah, I'll cook over IAP."

8 THE TECH Thursday, January 16, 2020

# CORRECTIONS

A news article last week stated that a new west campus graduate residence would open in 2022. In reality, the residence does not yet have an opening date. Construction will start in 2021 or 2022.

# Solution to Italian

from page 6														
С	С	T	٧		S	Р	U	N			T	Н	I	S
Н	0	S	Е		Е	L	S	E		J	0	I	N	Т
	Г	L	S		Α	U	D	I		U	N	D	U	Е
C	Α	Ε	S	Α	R	S	Α	L	Α	D		Е	S	Р
			Е	Α	ပ	Н			Ρ	Α	S	S	Е	S
М	0	0	L	Α	Η		Ρ	Α	T	_	0			
0	Α	R			М	Α	U	L		S	M	I	R	K
C	Н	I	O	Κ	Е	N	P	Α	R	M	Е	S	Α	N
S	U	G	Α	R		N	I	N	Α			Е	G	0
			V	T	Т	Α	L		I	N	V	Е	S	T
S	Ш	R	Е	N	Е			K	N	Ε	Е			
0	N	Ε		G	Α	R	L	Ī	C	В	R	Ε	Α	D
L	Ε	V	Е	L		Α	U	T	0		S	Α	S	Е
Α	M	U	S	Е		Ī	K	Е	Α		Е	R	Ī	Е
R	Υ	Ε	S			L	Ε	S	T		S	L	Α	Р

# Solution to Independent

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

### **Solution to Activities** from page 6

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

# **Solution to Period**

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

# MIT admits 687 students in Early Action decisions

MIT offered admission to the Class of 2024 to 687 students, or 7.4 percent, of 9,291 applicants during its Early Action round, wrote Chris Peterson SM '13, assistant director at MIT Admissions, in an MIT Admissions blog post.

There were 6,792 applicants (73.1 percent) deferred to be "reconsidered without prejudice" in

the Regular Action round, while 1,622 students (17.5 percent) were rejected. Others either withdrew their application before the final decision or submitted an incomplete application, Peterson wrote.

Compared to last year, this is a slight decrease in both the number of admitted students and total applicants from the previous year. Thus, the admission rate remains the same as the Class of 2023's.

Stu Schmill, dean of admissions and student financial services, wrote in an email to The Tech that the decisions were difficult to make. "Applicants to MIT are a pretty self-selecting group, and most of our applicants are very strong students and exceptional

people. It is why our student body is of such high caliber, both as students, and as community members," Schmill said.

Compared to MIT, Harvard University and Yale University have higher early acceptance rates at 13.9 percent and 13.8 percent for this year, respectively.

—Shelley Choi

# Like Alexander Hamilton?

# See him in your wallet every week!

Join the Business Department of The Tech and earn \$12/hr!

Email join@tech.mit.edu



# 4th Annual **Data Science & Analytics Career Fair / Networking Night**

MIT Media Lab, 6th Floor Tuesday Feb 4, 2020 5:30-8:30pm

**FREE** (MIT ID required for entry)

To register & drop your resume, please visit: www.AnalyticsFair.mit.edu









# Companies attending include:

**Bain & Company BERTELSMANN Boston Consulting Group Capital One Citadel & Citadel Securities End-to-End Analytics Facebook** Falabella **Fidelity Investments Jobcase** Johnson & Johnson **Kraft Analytics Group Maestro Technologies McKinsey & Company Novartis** P2 Analytics **Publicis Sapient** Raytheon Spacemaker AI

The Walt Disney Company

# The Puzzle Club welcomes MIT Mystery Hunt Teams!

This weekend, you can help the Mystery Hunt give back to local nonprofits in the Pay It Forward Scavenger Hunt. Details at gr8ergoodgames.com/mystervhunt

# 16,267 SF office space in Cambridge with parking

... and more!

# 810 Memorial Dr Cambridge Fl 2 | Available for lease on 10/1/2020

At the crossroads of MIT, Harvard and **Boston University** 

24/7/365 access FOB key; Elevator Handicap access Kitchen

Fitness center Community room

Near Whole Foods, Dunkin Donuts, Trader Joe's, Alive & Kicking Lobsters, Riverside café, and Micro Center

Close to the Charles River bank, 5 parks



At the corner of River St and Memorial Dr. near the Cambridge exit ramp off Mass Pike 90

Garage parking 2/1,000 bike rack, Zipcar nearby

0.7 mile to Central Square T stop on the MBTA red line

Bus lines nearby: 64 (Oak Square —

University Park or 70A (North Waltham -

Kendall MIT) 70 (Cedarwood -Central Square)

Central Square)

Contact: Patrick Verbeke | www.ValtiCommercial.com Tel: +1-617-230-3638 | Email: Patrick@ValtiRealEstate.com

