

## CALTECH CONNECTED: HOW FROSH ARE BEING SUPPORTED DURING **REMOTE LEARNING**

Alice Cheng | Current Events

The freshman experience at Caltech is designed to acquaint students with the rigor, collaboration, and problem-solving that Caltech is known for providing. However, the realities of remote learning have drastically changed how this is occurring for the Class of 2024.

For most first-term Freshmen (affectionately known as frosh) at Caltech, a typical schedule consists of Ma 1a, Ch 1a, and Ph 1a, courses designed to give students an introduction to their respective subjects, in addition to a freshman-level humanities course. Despite taking these courses from the comfort (or confinement) of their own bedrooms, the core curriculum is just as rigorous as ever.

The challenge of the transition to college-level academics isn't the only one for this year's frosh. The class of 2024 must undertake this difficult transition over a virtual medium. While Discord, Zoom and virtual whiteboards have facilitated collaboration and become staples of the freshman experience, many frosh have expressed that in-person collaboration would be much easier and more efficient.

Luckily, there are a multitude of resources available for frosh to ease their transition to Caltech's rigorous academics while learning remotely. The deans' office and the Office of Residential Experience formed extended Living-Learning Groups, in a similar format to orientation groups in previous years. Each group is designated an RA and two upperclassmen counselors to provide a support network in place of the in-person house system.



In-person collaboration has now become rare. Image from @avery.glory on Instagram

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## PERFORMANCE AND POWER: CRACKS FORM IN THE COMMITTEE ON NAMING AND RECOGNITION

#### Raha Riazati | Opinion

Shortly after the fall academic term began, Sarah Sam, the only Black individual on the Committee on Naming and Recognition, a graduate student in Neurobiology, announced her resignation from the committee in an open letter addressed to President Rosenbaum, and circulated among the entire Caltech community.

As the president of BSEC (Black Scientists and Engineers) at Caltech, Sam has continuously advocated for changes that would improve racial equity and diversity on a campus that is already struggling at providing opportunities to underrepresented minorities. As a school that does not partake in affirmative action, Caltech's Black and Latinx student population is extremely low, with Black students in particular making up less than 1% of the total student population. This is much lower than the percentage at peer institutions like Harvard, Yale, and Stanford.

BSEC has wasted no time in attempting to remedy this. The group prepared a 60-page document in June outlining all of the steps that the Caltech administration could take to dismantle Caltech's legacy of white supremacy and support anti-racism efforts, proposing an increase in funding for diversity-oriented programs such as FSRI, a summer

program for new students from underserved backgrounds, and efforts to reduce racial bias in admissions.

The group also proposed a change in the enrollment statistics' categorizations from "underrepresented minority," an obscure and misleading term that often includes mixed race and racially white individuals, to allow for separate categories for "Black", "Latinx", "Alaskan Native/American Indian", and "Native Hawaiian/Pacific Islander."

And, of course, the group proposed renaming buildings on campus that currently honor Nazi sympathizers and racists from the institute's past. BSEC presented their proposal to key members of the Caltech administration at a presentation on June 25th.

Despite this dedication to change, it seems that progress has been frustratingly slow and even nonexistent for the Black community at Caltech. The contents of Sarah Sam's resignation letter alone provide undeniable proof. She describes how several committee members dismissed Millikan's views as "private" and "a product of the times," phrases often used to justify the memorialization of Confederate leaders in Southern states; how committee members did not take it upon themselves to read the testimonies of victims of the forced sterilization practices promoted by Millikan's Human Bet-



From left to right,

Robert Millikan was a prominent member of the Human Betterment Foundation and advocated strongly for its agenda. (Image credit: Getty Images)

Harry Chandler endorsed many biological distinctions of race. (Image credit: Cow Hampshire History Blog)

Thomas J. Watson had strong ties to Adolf Hitler and the Nazi Party. (Image credit: IBM Corporate Archives)

terment Foundation, or to even read the petition started by Dr. Michael Chwe; how she came to realize the committee members were apologists for eugenics, more focused on defending Millikan than having an honest discussion about how he, and his compatriots at the Foundation, were a cog in the machine of white supremacy. It isn't hard to see the writing on the wall after such glaring assertions, but Sam makes it clear for us anyway: "because of the unwillingness to condemn irrefutable evidence of overt racism,...this committee will be [unable] to complete its charges in a responsible way."

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## UNDERGRADUATE RESEARCH IS MOSTLY REMOTE THIS FALL

Alex Hong | Current Events

the safety of their employees and students with the need to continue pushing the boundaries of human knowledge. Caltech, whose core identity is deeply rooted in research, has been no exception.

the Director of Student Programs in PMA, "Research in As coronavirus case numbers continue to tick upwards, PMA is limited to only those who are a part of approved universities around the country have struggled to balance lab plans". This is presumably a requirement in all other departments as well. It also appears that only in chemistry and materials science are students required to take research for credit. BBE, GPS, and PMA did not respond to requests to officially comment on their current policies.

Research ground to a halt in March as undergraduate students were instructed to leave campus and labs were closed down. In May and June, various departments began to slowly open research back up again, with the requirement that they submit detailed lab plans (including rotation schedules to allow for social distancing). Undergraduates were still prohibited from entering labs throughout the summer.

As the fall term has arrived, some departments have also released policies regarding undergraduate research. In the chemistry department, undergraduates may participate in research as long as they take research for at least 9 units of credit, participate in some coronavirus educational training as well as standard lab safety training, are added to the rotation schedule, and have a backup plan in case undergraduate research must move to remote.

Other departments appear to have been less stringent on undergraduate participation. According to Nam Ung,

According to Guruswami Ravichandran, the EAS department chair, "At this point most lab-based research is back to normal or near-normal. Theory and computational groups have continued to work remotely. While this is not ideal, since in-person collaboration is important, these groups have continued to work throughout the pandemic. Recently, small, outdoor in person collaboration meetings of four people or less have been approved to be held."

When asked about predictions for winter, spring, and even fall 2021, Ravichandran commented, "The Institute will be studying the safety of any further reopening plans, working with local and state government, and guiding us forward."

Since September 14th, Los Angeles County Public Health "Protocols for Institutes of Higher Education" have prohibited colleges and universities from conducting most in-person activities. The protocols currently permit faculty and staff to "carry out essential research projects."

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## ASCIT BOARD OF DIRECTORS MEETING MINUTES

MINUTES FOR OCTOBER 25, 2020. TAKEN BY LC CHEN.

Officers Present: Yuying Lin, Kriti Devansenapathy, Megan Wang, Eilleen Zhang, Aditi Venkatesh, Ayooluwa Odemuyiwa, LC Chen

Call to Order: 7:32 pm

**PRESIDENT'S REPORT (YUYING):** New secretary appointment Committee appointments Meeting date for setting annual budget (next week) Meeting with administration next week

**OFFICER'S REPORTS:** 

V.P. OF ACADEMIC AFFAIRS (MEGAN): Interviews for ARC secretary At-Large ARC reps REGIS tutorial for freshmen

V.P. OF NON-ACADEMIC AFFAIRS (KIRITI): Rotation planning logistics

**DIRECTOR OF OPERATIONS (ADITI):** Met with Club Steering Committee about club funding timeline Working on club funding Met with the Tech

**TREASURER (EILLEEN):** Met with the Bursar's

SOCIAL MANAGER (AYOOLUWA): Brainstormed events with Tom Mannion

SECRETARY (LC): New ASCIT Secretary search

If anyone has any questions or concerns about a section of the minutes please email the appropriate officer. We are happy to answer any questions.

MEETING ADJOURNED: 7:48pm

## ASCIT BOARD OF DIRECTORS **TRANSITION MEETING**

MINUTES FOR OCTOBER 11, 2020. TAKEN BY LC CHEN.

Officers Present: Varun Shanker, Yuying Lin, Kriti Devasenapathy, Arushi Gupta, Rachel Sun, LC Chen

Guests: Megan Wang, Eilleen Zhang, Ayooluwa Odemuyiwa, Aditi Venkatesh

Call to Order: 7:00 pm

#### **PRESIDENT'S REPORT (VARUN):**

Organization of Transition Caltech app Mentoring program New secretary search New committee appointments Club funding **Board Resolutions** 

**OFFICER'S REPORTS:** 

V.P. OF ACADEMIC AFFAIRS (ARUSHI): ARC appointments SFC this year Collaboration issues because online format

V.P. OF NON-ACADEMIC AFFAIRS (KIRITI): Planning logistics for Rotation

**DIRECTOR OF OPERATIONS (RACHEL):** Temporary club funding set up Little T editor ASCIT Finance Manual **Club Steering Committee transition** 

## CHECK OUT ASCIT'S HOT NEW(ER) BOD ASCIT BOARD OF DIRECTORS ELECTION RESULTS

#### **President**: Yuying Lin

Vice-President of Academic Affairs (ARC Chair): Megan Wang

Director of Operations: Aditi Venkatesh

**Treasurer**: Eilleen Zhang

Director for Social Activities: Ayooluwa Odemuyiwa

201 votes were cast in this election. Full results can be found below.











#### **President:**

VS.	Yuying Lin	NO	Sara Fish	Robert Abrahamson	Brock Jones	Tanner Moore	Ari Rosner	Marcus Kuhne
NO	181 10 10		_					
Sara Fish	179 <mark>3</mark> 19	55 <mark>3</mark> 143						
Robert Abrahamson	182 <mark>0</mark> 19	57 1 143	4 1 196	5				
Brock Jones	182 0 19	57 1 143	4 1 196	50 <mark>0</mark> 201				
Tanner Moore	181 1 19	58 1 142	4 1 196	51 1 199	1 1 1 99			
Ari Rosner	181 1 19	58 1 142	4 1 196	51 1 199	1 1 1 99	1 1 199		
Marcus Dominguez- Kuhne	182 <mark>1</mark> 18	58 1 142	4 1 196	51 1 199	1 <b>1</b> 199	1 1 199	1 1 1 9	

Abstentions: 0

## Vice-President of Academic Affairs (ARC Chair): Megan Wang

vs.	Megan Wang	NO	Sara Fish	Sophie Howell	Ari Rosner	Daniel Neamati
NO	178 12 11		_			
Sara Fish	181 2 18	54 2 145		_		
Sophie Howell	182 <mark>1</mark> 18	55 1 145	2 <mark>1</mark> 198			
Ari Rosner	182 1 18	56 1 144	2 1 198	1 1 199		
Daniel Neamati	182 1 18	56 1 144	2 1 198	1 1 199	1 1 199	
Marcus Dominguez- Kuhne	183 1 17	56 1 144	2 1 198	1 <b>1</b> 199	1 1 199	1 1 199

Abstentions: 0

#### Director of Operations: Aditi Venkatesh

vs.	Aditi Venkatesh	Katelyn Lee	NO	Sara Fish	
Katelyn Lee	92 <mark>87</mark> 22				
NO	135 <mark>15</mark> 51	120 <mark>18</mark> 63			
Sara Fish	141 1 59	130 1 70	58 1 142		
Ari Rosner	141 1 59	130 1 70	58 <mark>0</mark> 143	2 1 1 98	

Abstentions: 0

#### Treasurer: Eilleen Zhang

VS.	Eilleen Zhang	Shubh Agrawal	Geoff Pomraning	Leah Griffith	Amrita Mayavaram	NO	Ari Rosner	:
Shubh Agrawal	95 <mark>59</mark> 47							
Geoff	90 <mark>54</mark> 57	65 <mark>5</mark> 1 85						

**TREASURER (YUYING):** Club funding process

SOCIAL MANAGER (NOT PRESENT.): Nothing to report.

**SECRETARY (LC): Transition Logistics** 

If anyone has any questions or concerns about a section of the minutes please email the appropriate officer. We are happy to answer any questions.

MEETING ADJOURNED: 7:41pm



Leah Griffith	105 47 49	72 <mark>68</mark> 61	74 <mark>63</mark> 64	]			
Amrita Mayavaram	102 <mark>32</mark> 67	75 47 79	74 <mark>46</mark> 81	65 <mark>56</mark> 80			
NO	121 <mark>12</mark> 68	102 <mark>16</mark> 83	101 13 87	96 27 78	84 <mark>20</mark> 97		
Ari Rosner	129 1 71	115 1 85	112 1 88	118 <mark>0</mark> 83	101 1 99	60 1 140	
Sara Fish	129 1 71	114 1 86	111 1 89	118 1 82	100 1 100	59 1 141	1 1 1 99

Abstentions: 0

#### Director for Social Activities: Ayooluwa Odemuyiwa

VS.	Ayooluwa Odemuyiwa	Daniel Kyme	NO	Ari Rosner
Daniel Kyme	137 43 21	]		
NO	157 <mark>8</mark> 36	99 22 80	]	
Ari Rosner	161 1 39	113 1 87	62 1 138	]
Sara Fish	160 1 40	113 1 87	61 1 139	1 1 1 9 9

Abstentions: 0

Editors' Note: The (now redacted) title of this article is not a comment on the appearance of any members of the BoD.

## ASCIT REVCOMM MEETING MINUTES

Zoom 16 May 2020

Present: Alejandro López (Chair), Emily Du (Ll), Martin Holmes (Pa), Tarini Singh (Ru), Danny Wendt (Da), Antonio Caceres (Av), Eric Smith (Bl)

Guests: none

Call to Order: 18:00 by López

Complaint

The committee discusses an anonymous complaint alleging an election for CRC Off-Campus Rep should have been held second term: 'hi wasnt (sic) revcomm supposed to run crc unaffiliated rep too whered (sic) it go'

Third-Term Elections and the Pandemic

The committee discusses third term ASCIT elections including those for Senior Class Co-Presidents still scheduled to take place after Tomorrow and those for BoD positions that were already delayed to first term, in light of the current term being on-

## ASCIT BOARD OF DIRECTORS MEETING MINUTES

Minutes for October 11, 2020. Taken by LC Chen.

Officers Present: Varun Shanker, Yuying Lin, Kriti Devasenapathy, Arushi Gupta, Rachel Sun, LC Chen

Call to Order: 6:00 pm

#### **PRESIDENT'S REPORT (VARUN):** 1 week left until new BoD Vote!!! Promote Tom's ~weekly events New Caltech app New STEM outreach program (with Caltech Y and YWCA)

OFFICER'S REPORTS:

**V.P. OF ACADEMIC AFFAIRS (ARUSHI):** Option buddies pairings to come out soon (~60 signups)

**V.P. OF NON-ACADEMIC AFFAIRS (KIRITI):** Planning for Rotation in winter term Tech support rolled out

**DIRECTOR OF OPERATIONS (RACHEL):** Tech is up and running virtually Still looking for Little T successor Club/event funding in the interim

**TREASURER (YUYING):** New finance manual

**SOCIAL MANAGER (NOT PRESENT.):** Nothing to report.

**SECRETARY (LC):** Nothing to report.

If anyone has any questions or concerns about a section of the minutes please email the appropriate officer. We are happy to answer any questions.

Meeting Adjourned: 7:44pm

line and the new possibility that next term may be online as well. Reps can gather feedback from the juniors in their houses on Senior Class Co-President elections. (See donut for full minutes; RevComm has no additional information on the status of first term classes than that which is already publicly available.)

Smith moves to rule:

Clarifying the earlier Revcomm ruling (2020.3), the Committee has found the following:

The ASCIT elections which have been delayed to first term 2020 are a rescheduling of elections that should have occurred on 4/20/2020. Both the electorate and the pool of eligible candidates for this election will remain the same. Eligible voters and candidates for office must have been ASCIT members as of 4/20/2020.

Installation for the elected general offices of the Corporation for which elections have been delayed shall happen one week after the election.

## DOMESTIC VIOLENCE/ INTIMATE PARTNER VIOLENCE AWARENESS MONTH

Announcements

# Caltech **vio**lence

#### IT'S NATIONAL DOMESTIC VIOLENCE AWARENESS MONTH!

#### WHAT IS DV/IPV?

Domestic violence (also referred to as intimate partner violence (IPV), dating abuse, or relationship abuse) is a pattern of behaviors used by one partner to maintain power and control over another partner in an intimate relationship. Abuse can can take a number of forms, ncluding physical, verbal, emotional, economic and sexu abuse and stalking.



Wendt Seconds

Vote: 5-0-0

(Chair's Note: Holmes had to leave early and did not vote)

Complaint (cont.)

Further action on the CRC Rep complaint is tabled by unanimous consent.

Adjourned: 19:21

Respectfully Submitted,

Alejandro López

**Review Committee Chair** 

Editor's Note: It was recently brought to our attention that these minutes were not published in any previous issue so we're including it in this issue. We apologize for the inconvenience.

#### VICE PROVOST OFFICE HOURS Announcements

Cindy Weinstein, Vice Provost, Chief Diversity Officer, and Eli and Edythe Broad Professor of English, holds regular office hours as an opportunity for undergraduate students, graduate students, and postdoctoral scholars to meet and discuss topics pertaining to the Council on Undergraduate Education; Caltech accreditation; the Staff and Faculty Consultation Center; Student-Faculty Programs; the Center for Teaching, Learning, and Outreach; and the Caltech Diversity Center.

There are four 15-minute appointments available per office hour. Please sign up by email to <u>aliciac@</u> <u>caltech.edu</u> and a zoom meeting or telephone call will be scheduled.

Vice Provost Office Hours:

Every Tuesday from 11:00 am - 12:00 pm

Parsons-Gates Hall of Administration

Building 31, Room 104 We look forward to hearing from you!

# Write for the *Tech!*

We're looking for writers for the *Tech*!

Email tech@caltech.edu or contact Devin Hartzell on Messenger if you're interested! than undergraduate remaies than undergraduate males and by graduate females than by graduate males. 45 percent of TGQN students experienced at least one stalking behavior.

STALKING

## DON'T STAY SILENT. IT'S TIME TO SPEAK UP ALL MONTH LONG!

October is National Domestic Violence Awareness Month, which first began in 1981 by the National Coalition Against Domestic Violence as a Day of Unity to connect battered women's advocates across the country. By taking a stand we intend to remind the nation that there are still countless people--victims and survivors, their children and families, their friends and family, their communities--impacted by domestic violence/intimate partner violence.

If you, or someone you know, needs help contact Peace Over Violence's 24/7 hotline: 626-793-3385 More resources: National Domestic Violence Hotline, 1-800-799-SAFE The TransLatin@ Coalition, 1-833-847-2331

October is ... A Awareness Month

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http://provost.caltech.edu/vp\_weinstein/office\_hours



Vice Provost Cindy Weinstein

## DIVERSITY IN ADMISSIONS AT CALTECH

Aditee Prabhutendolkar | Current Events

In light of recent efforts to reckon with the institute's past, it's no secret that Caltech has had a complicated relationship with racial diversity, not least when it comes to undergraduate and graduate admissions. In 1998, The Journal of Blacks in Higher Education even called it "the whitest of the nation's 25 highest-ranked universities."

Yet, in the past few years, many changes in the admissions process have attempted to increase Caltech's inclusivity and overall diversity.

Admissions to Caltech start at what Jarrid Whitney, Assistant Vice President for Student Affairs, Enrollment and Career Services, calls the "pipeline." Whitney has been overseeing undergraduate admissions since 2010, and believes Caltech needs to focus on getting more diverse students in its applicant pool and increasing the proportion of students identifying as racial minorities who choose to accept their offers of admission.

In fact, he identifies as a tribal member of Six Nations Cayuga; one of his goals when he took his position in 2010 was to bring more students of color to campus.

One unfortunate truth Whitney revealed was the fact that only 200 African-American students apply to college each year who have shown that they can handle the academic rigor of Caltech and are

STEM-inclined. In his 10 years at the admissions office, the number of undergraduate students at Caltech who self-identify as African-American has increased (from 13 to 40), but the total number of 200 applicants around the country has remained roughly the same.

According to Whitney, Caltech's

reputation as racially exclusive means it often loses potential applicants to peer institutions like MIT, Stanford, and Harvard. The question is how Caltech can improve its ability to identify and connect with these students.

Increasing diversity in the "pipeline" is probably the most difficult part of admissions. One reason why students don't apply to Caltech is because of the display of scores they used to see on the class profile on our website. Many polls and statistics demonstrate that higher income students tend to score better on standardized tests, so many disadvantaged students don't apply because they don't think they stand a fighting chance.

Nikki Chun, Director of Undergraduate Admissions, explains that these test scores were there to "give some indication of the kind of preparedness the [admissions] committee is looking for," but they have been removed in light of testing difficulties during the pandemic.

Regarding testing, Chun ensures to advertise that testing is "one factor among many." She emphasizes that the admissions committee is "fueled by the context" that the "playing field is not so equal."

Chun also addressed that Caltech's priority is to select students who will thrive here. It has never been a school to broadcast something such as "all 50 states are represented at Caltech." For many students, "it takes a different level of courage to hold an identity that few others do." Because the college experience is built on "relationships and connectivity," she would never want a student to attend Caltech if they don't feel "safe" and believe that they won't "find their space."

Due to Whitney's and Chun's efforts, many programs are incorporated to increase diversity in the Caltech student body. Whitney began the Up Close

"The number of undergraduate

students at Caltech who self-

identify as African-American

has increased (from 13 to 40),

but the total number of 200

applicants around the country

has remained roughly the same."

fly-in program as a way to bring underrepresented students to campus.

WiSTEM also began in 2012. It's a one-day showcase of professors, researchers, and JPL scientists, to encourage young women to apply and attend Caltech.

Other efforts include partnering with Quest-Bridge, College Horizon (for Native Americans and Hawaiians, which Chun is a board member of), and American Talent Initiative.

As for graduate admissions, Professor Tim Colonius chairs the Advisory Committee on Student Admissions and Recruitment, initiated by President Thomas Rosenbaum. One of the committee's goals is to recruit "racially minoritized populations."



https://www.admissions.caltech.edu/explore/student-life/diversity

According to Professor Colonius, the committee "hopes to understand whether, given the structure of the admissions process, are there improvements we can make?". In graduate admissions, "Faculty are primary reviewers of applicants... They're looking for students that they're going to take into their research programs." As a result, diversity is often overlooked by graduate admissions. Unlike undergraduate admissions, where a class is recruited with the big picture in mind, students are individually chosen.

The committee has yet to begin its work, but Professor Colonius says that he believes "diversity on campus should reflect the diversity of the society around us. And if it's different, we should be asking ourselves why. If our competitors have more parity between men and women or racial minorities, then we know there's something we should be doing to become as good as them."

One more contested point in Caltech's ongoing diversity issues is the campus's low population. Often, the lack of representation is attributed to the fact that there aren't enough students to have accurate representation. While the statistics can get skewed from a small sample size, it should be no excuse for lack of diversity in admissions. Professor Colonius added, "If we're only making a few offers, we should make the effort to get those few students."

Caltech still has a lot of work to do, especially compared to its peers. And although many changes need to be made for the institute to better connect with students who identify as racial minorities, it's uplifting to see positive changes being made in the admissions process.

## CALTECH CONNECTED: HOW FROSH ARE BEING SUPPORTED DURING REMOTE LEARNING

Alice Cheng | Current Events

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LLGs (Living/Learning Groups) have proven to be useful for some, such as freshman Lynn Yang. According to Yang, the presence of LLGs facilitated the process of finding not only "people who I can collaborate with... [but] also helped me find genuine friends."

One tremendous benefit of LLGs is that frosh are automatically connected with upperclassmen who volunteer to lead these groups. Yang claims that they are helpful with both the academic side of things, as well as giving general advice such as "adjusting to the workload, expectations, and how to balance out our schedules." Despite the multitude of roadblocks imposed on collaboration and transitioning into college in general created by remote learning, LLGs have helped many frosh like Yang transition more easily into college academics and the Caltech community. TAs, who are typically graduate students in the field or upperclassmen who have performed well in the course in previous years. TAs have designated office hours on Zoom that students can attend, whether it's to clarify a concept from lecture, go over a homework problem, or to give feedback about the course.

In fact, even a few fellow frosh have devoted some time to helping their classmates. Out of the fall term core courses, Ma 001A seems to be one of the most challenging. After the Discord server that frosh use for collaboration was flooded with questions about the formal definition of a limit, Sasha Tolstoff ('24) wrote up a thorough explanation of the basics of limits of sequences, complete with examples of the basic definitions and theorems covered in that week's lectures. When asked why she took the initiative to write such a thorough explanation of the material despite her busy schedule, Tolstoff told of her passion for the Feynman technique, "a concept which suggests that the simpler you can explain something, the better you can come to understand it yourself." For Tolstoff, this is not only a way to improve her own understanding of concepts, but also a way to bring others towards that goal while "contributing to the development and growth of others," something she believes is important in these trying times. As she states, this is "what makes Caltech special and it is what makes the aura of STEM itself so powerful."

Yang and many other students agree that combined with the regular lectures and recitation sections, Tolstoff's notes have helped solidify concepts in their mind and make them more confident about the material.

The support frosh have received during these trying times are indicative of the collaborative tendencies and nature of Caltech. Teaching assistants, professors, upperclassmen, and even their own classmates are almost always willing to help at any time. While students won't be able to walk into a house lounge and find someone to work with, instead they are staying connected through Discord and Zoom and can easily find peers to collaborate with in the various voice channels. Techers may be scattered all over the world, but help is often just one click away.

In addition to LLGs, students have access to TAs as well as upperclassmen Deans' Tutors who have taken the course during their undergraduate career and can offer their advice and knowledge to current frosh. Getting a Deans' Tutor is simple; frosh can view a list of available tutors on the Deans' page and contact the tutors to set up a time to discuss and review concepts. Each course also has regular



## PERFORMANCE AND POWER: CRACKS FORM IN THE COMMITTEE ON NAMING AND RECOGNITION letter, it is that she is tired. BSEC, CL

Raha Riazati | Opinion

#### | From Page 1 |

The university administration's response to Sam's scathing indictment of the committee was swift. Ben Rosen, Chair of the Committee, released a statement about his regret at her resignation and his faith that the committee would, in fact, complete its charges, a claim quite at odds with Sam's anecdotal evidence. Interestingly, Rosen says in his statement, "Eugenics is morally reprehensible. That is not up for debate." Not only does this directly contradict Sam's resignation letter, it begs the question: then what is up for debate? Is this committee not purported to examine the morality of the aforementioned individuals and the validity of the claims that they do not deserve to be honored at one of the premier science institutes of the world? If the committee has acknowledged that the eugenics movement is "morally reprehensible", and if objective historical fact tells us that Millikan, Chandler, and Ruddock were the founders of the California eugenics movement, shouldn't these men also be deemed morally reprehensible? It seems to be a simple application of logic, yet Rosen calls the committee's task "multi-faceted" and "complex".

President Thomas Rosenbaum released a statement soon after Rosen, again calling eugenics "morally reprehensible", and asked for the Caltech community to provide their thoughts on the renaming in a Community Input Form. Opening up the floor to the opinions of the faculty and students seems to be a wise choice that makes the renaming process more democratic, especially since its result affects all members of the community. Yet it is strange that this measure only came after Sam's public exposé, 2 months after the committee's formation, almost as an attempt to save face rather than a genuine desire to hear the voices of Caltech students and faculty.

This brings us to the fundamental problem of the Caltech renaming committee: it appears to be primarily performative. Caught up in the social fervor

of the Black Lives Matter movement, many corporations, among them Disney and Netflix, pledged to hire more Black creatives and executives to gain good publicity and then failed to deliver on their promises. Scores of Black creatives have reported

being ignored in the months following June when they were previously met with faux enthusiasm.

The same phenomenon seems to have occurred here: put under public pressure and shoved into the critical spotlight of the academic community, Caltech pledged to reckon with its uncomfortable past so as to wear the crown of social progress and moral righteousness. But that's all it is: a crown, a sparkly phantom object that quickly disappeared as soon as attention was diverted. The mere fact that the administration only agreed to implement the most airy and non-substantial measure of BSEC's list of fundamental reforms indicates how little the Caltech administration truly wishes to change.

Which is why it is absolutely vital that the Caltech community keep up the pressure. If there's anything Sarah Sam made clear in her resignation letter, it is that she is tired. BSEC, CLASES, and the marginalized communities which they represent are tired. It is not the responsibility of the oppressed to do the emotional labor of sitting in on committee meetings, enduring constant microaggressions, and writing 60-page documents about how to mitigate their oppression, especially when the material for self-education exists in abundance. Yet they do it anyway, because they believe that the Caltech community and the nation at large has the

> power and potential to change. So it is up to us to do our part as well: to listen, to learn, and to speak out. This becomes clearest in the final section of Sam's resignation letter, which is perhaps the most powerful and also the most uncomfortable to read. Here, Sam addresses the

request for discretion from the committee members on discussions and progress occurring at committee meetings. After all, any question asked of students and faculty on the task force thus far has been met with a polite refusal to disclose any extraneous information out of respect for the all-important Honor Code, a hallmark of Caltech's academic culture. Yet Sam asserts that staying silent constitutes the true violation of the Honor Code; for only by speaking out could she, and can we, ensure that the racially marginalized communities at Caltech are not simply used for show, but that the reforms that are long overdue are finally implemented.

Editors' Note: The registrar is now gives its statistics on students' racial identification rather than "underrepresented minority", a change proposed by BSEC.

## WHAT'S ONTHE BALLOT: CALIFORNIA AND BEYOND

DEVIN HARTZELL | POLITICS

The election taking place next Tuesday will be one of the most momentous in recent memory, as voters across the country decide whether to give President Trump another term in office, amidst the COVID-19 pandemic, high unemployment, a racial reckoning, the confirmation of Amy Coney Barrett to the Supreme Court, and ongoing economic uncertainty. However, the Presidential election (and high-profile federal elections) aren't the only things on the ballot next Tuesday.

The topline contests on the ballot next Tuesday are set to draw large numbers of people to the polls. Early voting across the country has already set records, as Florida, Georgia, Texas, and North Carolina (among the Presidential swing states) have already surpassed 60% of their total turnout in 2016, according to the U.S. Elections Project and Professor Michael McDonald of the University of Florida. However, it's not possible to say whether these early voting numbers benefit Democrats or Republicans, as polling shows voter enthusiasm is at an all-time high for both parties. cording to a New York Times analysis, app-based services such as Uber, Lyft, and DoorDash are worth a combined \$70.5 billion, but none are profitable. Despite losing \$1.8 billion in its most recent quarter, compliance with state labor regulations is said to cost Uber an additional \$500 million per year. This proposition is largely a response to Assembly Bill 5, which prevented wide swaths of gig workers from being classified as independent contractors beginning this year.

Other notable referenda in California include Proposition 16, which would repeal a referendum passed in 1996 which prevents the state from practicing affirmative action; Proposition 21, which would allow local governments to enact rent control on housing built as long as 15 years ago (as opposed to housing built after 1995); Proposition 25, which would replace cash bail with a risk assessment; and Proposition 18, which would allow 17-year-olds who turn 18 by the next election to vote in primaries.

Pasadena is also set to decide whether to give Mayor Terry Tornek another term in office, or elect Victor Gordo, the city's longest-serving councilman. Gordo has criticized Tornek's approach to the COVID-19 pandemic and urban planning, as well as his decision to withdraw from the San Gabriel Valley Council of Governments in favor of a smaller organization with La Cañada Flintridge, Glendale, and Burbank. Tornek defends his efforts to reform the Pasadena Police Department in the wake of the shooting of Anthony McClain over the summer. In Los Angeles County, Jackie Lacey is running for reelection for District Attorney against George Gascón, who previously held the same job in San Francisco. While Lacey is the first woman and first black L.A. District Attorney, she has been criticized for her reluctance to prosecute police officers for fatal shootings, according to an Associated Press report. Mayor Eric Garcetti recently changed his endorsement in the race from Lacey to Gascón. Lacey is supported by law enforcement organizations, while Gascón, a former police officer, has been endorsed by Patrisse Cullors, the co-founder of Black Lives Matter, among others.



California's State Capitol Credit: Andre m under Creative Commons

However, voters residing in Los Angeles county will also get a chance to fund "alternatives to incarceration" in Measure J, which would dedicate 10% of the county's general fund to be appropriated to efforts including youth development programs, job training, investment in minority-owned businesses, rent assistance, health services, and counseling. Of course, interesting initiatives are not limited to California this November. The city of Portland, Maine is asking its residents if they want to solidify a ban on use of facial recognition technology by the city's police department, and Massachusetts voters will decide whether to adopt Ranked Choice Voting and a Right to Repair, which guarantees consumers the ability to repair their own electronic devices.

"It is not the responsibility of the oppressed to do the emotional labor... Yet they do it anyway, because they believe that the Caltech community and the nation at large has the power and potential to change."

In California, voters get to vote on 12 different referenda, ranging from the mundane (bonds for

state stem cell research) to the impactful (reclassifying millions of gig workers as employees, not independent contractors). Some of these campaigns have drawn tens of millions of dollars in backing from corporate and labor interests, with some companies such as Uber, Lyft, and DoorDash spending to ensure their own survival.

California's Proposition 15 would repeal parts of the notorious 1978 Proposition 13, which capped property tax rates at 1% of the property's purchase price. Passing this year's initiative would tax commercial and industrial property at its market value beginning in fiscal year 2022-2023, with further possible delays for small businesses. The law is expected to bring in between \$6.5 billion and \$13 billion to local governments, many of which are facing a budgetary crisis.

Proposition 22 would classify app-based drivers as independent contractors, relieving their companies from certain labor and wage restrictions. AcAlaska voters are also considering Ranked Choice Voting, as well as voters in several municipalities in California, Colorado, Missouri and Minnesota. Mississippi voters are considering switching away from an electoral system which lets the state house decide the winner if there is no majority, and Florida voters are considering a top-two primary system like California's.

The cities of Oakland and San Francisco are considering whether 16-year-olds should be allowed to vote in city elections, while the City of Honolulu is asking its voters to establish a "youth commission" to advise its officials on issues important to them, in order to strengthen political engagement.

## WESTERNASIA FALLS BACK INTO DEEP-ROOTED UNREST

Daniel Contaldi | World News

On September 27, war reignited in the Nagorno-Karabakh region of Western Asia. The conflict originates from the dissolution of the Soviet Union in 1988 when ethnic tension grew in the region between Armenians and Azerbaijanis, leading to a full-scale war in 1992, lasting two years until a ceasefire was signed. Between 1994 and 2016, lower level fighting continued until April of 2016, when the Four-Day War occurred, renewing more violent border conflicts that escalated until September of this year. In short, Nagorno-Karabakh is home to ethnic Armenians, recognized globally as part of Azerbaijan, and controlled by the self-declared Republic of Artsakh.

Since September 27, over 300 people have been killed and thousands have been displaced. Increasing conflict led to ten hours of "substantive talks" in Moscow on October 10, according to Russian Foreign Minister Sergei Lavrov, resulting in a temporary ceasefire. This truce was to allow time for the two nations to exchange captured soldiers, as well as recover the bodies of those lost. It took less than 12 hours for this ceasefire to begin breaking down, with fresh explosions rocking the region's capital, Stepanakert, late evening on the same day. With both sides pointing fingers over the fresh bombardment it seems increasingly unlikely that peace will be achieved any time soon. With that being said, it seems worth it to take a deeper look at this conflict that has escalated in recent days and what each side wishes to achieve.

#### What was said in Moscow on October 10?

As stated by Armenian Foreign Minister Zohrab Mnatsakanyan, the peace talks were "rather difficult." He claimed that Armenia wishes for Nagorno-Karabakh to be recognized as an independent state on the global scale, agreeing with claims from self-declared leaders of the region who inculpated Azerbaijan for allegedly agreeing to peace talks in an attempt to veil fresh attacks.

Even with temporary ceasefires being negotiated, there is still seemingly little hope for peace any time soon. In a televised speech on Friday President Ilham Alivyev said that he would be willing to begin talks but would be conceding nothing. He stated "We are winning and will get our territory back and ensure our territorial integrity . . . Let them abandon our territory in peace." These comments were echoed following the peace talks as Azerbaijan's Foreign Minister Jeyhun Bayramov said that Azerbaijan expected to take control of more territory. He also expressed the sentiment that more pressure should have been placed on Armenia and that the situation could not remain in its current state.

#### What went wrong?

What went wrong after the negotiations is not totally clear, as both sides place the blame on the other. According to Armenia's defense ministry, Azeri forces shelled a town within minutes of the truce coming into effect, resulting in ethnic Armenian forces in the region being forced to respond. This is corroborated by the self-declared ethnic Armenian authorities in the region who accuse Azerbaijan of firing missiles into the civilian neighborhoods of the region's capital. Claims made by the defense ministry of Azerbaijan contradict those made by Armenia. Azeri officials state that Armenia was "blatantly violating the ceasefire" order, claiming that Armenian forces were firing into the regions of Terter and Agdam, both of which are under Azeri control. We are no closer to understanding the origins of the resurgence either as both sides claim the other fired first, unprovoked.

#### A potential for escalation.

In the past both Russia and Turkey have cooperated in attempts to subdue conflict in the regions,



Credit: Anadolu Agency via Getty Images Copyright: 2020 Anadolu Agency

however Turkey's recent and direct engagement supporting Azerbaijan threatens to escalate the situation from a local one to a regional one. Turkey, who has already ostracized the United States after buying weapons from Russia, has seen increasing tensions with Russia following a series of blows dealt by each side in multiple proxy wars. So far Russia, who has connections to both sides of the regional dispute, has yet to directly involve itself outside of peace negotiations. Azerbaijani President Aliyev has warned Russia against involving itself in the war militarily.

#### A new peace deal.

On Friday, October 23, the foreign ministers met again in Washington, where Secretary of State Mike Pompeo was able to broker a third ceasefire after the first and second, both brokered by Russia, unraveled. As expected, minutes after the third ceasefire came into effect, both sides accused the other of violating the new deal, and both claiming that their own nation has strictly adhered to the deal.

Watch for more articles as we keep you up to date on this intensifying conflict.

## NATIONAL COMING OUT WEEK ADAPTS TO ONLINE MEDIUM

#### Ankita Nandi | Current Events

Sunday, Oct. 11 marked the 32nd anniversary of the 1987 National March on Washington for Lesbian and Gay Rights, and the 32nd observance of National Coming Out Day. Countless individuals around the United States and the world came out as queer on various social media and news outlets and in private. Since 1987, there have been countless events commemorating the fight for LGBTQIA+ rights and the significance of "coming out."

Whether through a heartfelt post on social media, or singing along to Diana Ross', "I'm Coming Out!", National Coming Out Day is an opportunity for the queer community to embrace and celebrate their identities. It also marks the beginning of National Coming Out Week, which continues to highlight issues regarding LGBTQ+ equality. Caltech was one of many colleges and community organizations that celebrated National Coming Out Week, as Caltech PRISM, the campus LGBTQ+ organization,

As Abby Jiang (MS '23, Ruddock, she/her) of PRISM leadership said, PRISM is unique in the bonds that form between the undergraduate and graduate communities and with JPL. Taso Dimitriadis (he/him), Associate Director of the CCID, emphasized how the LGBTQ+ community is often one of chosen family due to varying support backgrounds. Speaking on the relations between undergraduates, graduate students and JPL, he said, "we try to utilize a sort of mentorship model with the LGBTQ+ students because they might not have that same level of support that the other groups [housed under the CCID] do in terms of identity and their affinity space...there is more of a blending in terms of looking at affinity spaces for that group." However, as with other clubs, the virtual setting has made community building difficult. Nonetheless, events were still put on, such as Queer Me Out!.

Queer Me Out!, held on Friday, October 16, was a series of short ten minute presentations given by various queer members of the Caltech and JPL communities discussing their experiences coming out and being queer while also sharing their research. As Dimitriadis put it, PRISM leadership came up with the idea for Queer Me Out! "to engage undergrads and create a culture where people can see themselves and their identities represented in STEM." Speakers included Prashant Bhat (he/him, BBE G4), John Bostick (he/him, BBE postdoc), Dustin Buccino (he/him, JPL), Amila Cooray (he/ him, JPL), Livia Hecke Morals (she/her, BBE postdoc), and Josh Zak (he/him, Ch G4). Aside from the academic diversity, the speakers were also of varying sexual and gender identities. Dimitriadis described how the CCID has a few key goals when planning events: offering relevant resources, providing cultural and celebratory opportunities so people are proud of their identities, cultivating a connection to one's STEM identity due to Caltech's STEM focus, and serving specific populations within a broader community. Thus, Queer Me Out! allowed individuals across academic commu-



A screenshot of the Queer Me Out! panelists.

nities to connect and showcased the many different queer voices present in various STEM fields.

Despite the challenges, the virtual environment increased accessibility to the event; Dimitriadis mentioned that if this event were on campus, maybe twenty people would have attended due to time restrictions and people's schedules. However, due to the ease of attendees simply zooming in from their homes and JPL's current rotation schedule allowing for more JPL participation, attendance was around 50 individuals.

and the Caltech Center for Inclusion and Diversity (CCID) hosted a variety of events supporting and celebrating the queer community.

The CCID collaborated with PRISM to have a variety of events and resources available for students to celebrate National Coming Out Week. In previous years when students were on-campus, the CCID would set up a lavender door in front of Red Door Dining Hall, dubbed the "Lavendoor," through which students can members of the Caltech community could walk through to "come out," along with signs and setups for posting on social media. The CCID would also provide resources at a table by the Lavendoor, so that lesser known issues regarding queer identity were put front and center. Given Caltech's affiliation with the Jet Propulsion Laboratory (JPL), the CCID would also collaborate with JPL's LGBTQ+ organization Spectrum. In past years, members of the Caltech student body and faculty would join Spectrum in walking and fundraising for the LA AIDS Walk, which would typically take place in October.

Although National Coming Out Week has concluded, the CCID has more events planned for the rest of the term to support the LGTBQ+ community. For Transgender Awareness Week in November and Transgender Day of Remembrance on November 20, the CCID is holding a safe space hosted by a Caltech alumnus in order to provide dialogue and engage with and find support for trans individuals on campus. The CCID will also continue to hold Safe Zone Trainings in order to provide resources for allies, and Queer Me Out! will return in late November or early December so more people can share their research and connect to the queer community. Even without a formal week focusing on LGBTQ+ rights, it's important to continue supporting the queer community at Caltech and beyond.

## THE CURRENT PROGRESS OF A CORONAVIRUS VACCINE

HARUNA TOMONO | WORLD NEWS

On October 17, the US surpassed 8 million nationwide COVID-19 cases and is currently averaging over 50,000 new infections daily. As the pandemic grows in prominence and forces people to readjust to a new normal, much of people's hope lies in the rapid development of a coronavirus vaccine that would allow for a return to pre-COVID society. This brings an important and complex question to mind: what is the status of the vaccines that are currently in development?

To understand the progress that companies and researchers have made, it is important to first understand the timeline of a vaccine's creation to distribution. First, the treatment must be developed in the laboratory and undergo preclinical testing on cells and animals. Once its preclinical efficacy is confirmed, it then moves into Phase 1 in which a small number of participants are tested on for safety and proper dosage. Following this, Phase 2 and 3 expand into hundreds and thousands of participants respectively. Phase 3 is particularly critical in the development process, as the vaccine is compared to placebo treatments.

A study can be paused or put on hold at any point during the three phases in the case of an unexpected result or perceived failure. After successful completion of all phases, the vaccine then enters the legal process of acquiring production and distribution approval, from which widespread vaccinations can begin. To expedite the trial process, many administrations and developers are choosing to run Phase 1 and 2 simultaneously.

Of the 60+ vaccines that have entered the clinical trial phase (passed preclinical testing), only a few have reached Phase 3 and limited use approval. These vaccines can be categorized by the treatment type into 5 categories: genetic, viral vector, protein-based, inactivated coronavirus, and repurposed vaccines. Below are some of the most promising vaccines of each category.

#### **Genetics Vaccines**:

Moderna Therapeutics' approach uses mRNA sequences to produce viral proteins in the body. Beginning development in January, their mRNA-1273 vaccine has been one of the leaders in the race to vaccine development, and is currently in Phase 3 involving 30,000 volunteer patients (began July 27). They have been given over \$2.5 billion in support from the US government in exchange for 100 million doses once approved. Canada has also agreed to purchase 20 million doses. Completion is pro-

## AMAZON SKYMALL

Kenny Thai | Columnist

Welcome back to Amazon Skymall! For those of you that haven't kept up, each time this column is published, we hold a raffle where we [not] randomly select one of our lucky readers and give them the item of their choice from our hand picked selections! This time, you can even click/tap on the item images to go to their respective Amazon pages! Oh technology~

jected to be at the end of 2020 or early 2021, before entering the legal approval process.

The German pharmaceutical companies Pfizer and BioNTech have partnered on a similar mRNA vaccine that entered Phase 3 on the same day as Moderna's product. They expanded their trial to include 43,000 participants in September and gained permission to begin testing on children 12+ years old this month. This the first and only vaccine to gain testing permissions for minors in the US. The US, Japan, and EU are slated to purchase a total of over 320 million doses if successful. Completion of clinical trials will be at the end of October at the earliest.

#### Viral Vector Vaccines:

Both CanSino Biologics (China) and Gamaleya Research Institute's (Russia) vaccines contain engineered adenovirus Ad5 as the primary method for carrying coronavirus genes. Both vaccines entered limited approval phases in August with questionable validity due to a lack of information on their clinical trial results.

Janssen Pharmaceutica, owned by Johnson & Johnson, is currently in Phase 3 testing for their vaccine derived from adenovirus Ad26. The study was paused last week due to an unexplained illness in a participant. They have, however, received over \$1 billion from the US government in exchange for 100 million doses should the vaccine be approved. The EU is also planning to purchase 200 million doses.

AstraZeneca (England) and the University of Oxford's joint vaccine development, based on chimpanzee adenovirus ChAdOx1, is currently paused for Phase 3 testing in the US, but is continuing in other countries. The treatment known as "Covishield" in England and India caused a spinal inflammation called transverse myelitis in a participant last month and led to the sustained pause in the US. The EU is planning to purchase 400 million doses if successful.

#### **Protein-Based Vaccines:**

Novavax has been awarded \$1.6 billion from the US government and \$384 million from the Coalition for Epidemic Preparedness Innovations for their protein-based vaccine, which entered Phase 3 trials last month in the UK. They are also planning for additional testing in the US later this month. An agreement was made last month with the Serum Institute of India that would allow them to manufacture up to 2 billion doses annually once the vaccine is approved (planned early 2021).

#### **Inactivated Coronavirus Vaccines:**

Sinovac Biotech and Sinopharm (China) have separately developed a total of three vaccines using weakened coronaviruses. Trials for these vaccines are currently in Phase 3 being tested in the United Arab Emirates, Argentina, and Brazil. Sinovac's vaccine named "CoronVac" has been given emergency approval for limited use by the Chinese government for medical workers, high-risk personnel, and public service workers. They are planning for worldwide distribution in early 2021. Similarly, Sinopharm's two vaccines have been cleared by the U.A.E. for emergency approval for healthcare workers. The only information shared on its safety has been a dat set released in September.

#### **Repurposed Vaccines:**

There have been various clinical trials for vaccines originally created for other viruses. The only one known to be in Phase 3 is Murdoch Children's Research Institute's (Australia) BRACE trial that is using the Bacillus Calmette-Guerin vaccine, originally developed for tuberculosis. They are currently looking to see if it can partly protect against the coronavirus.

It is evident that there is significant progress being made on the developmental process for a coronavirus vaccine. However, many drugs remain in Phase 3 and will most likely remain so until at least the end of this year.

Yet, the public has high hopes for the development of an effective vaccine by early next year, with many governments awarding grants to companies and promising to purchase millions of doses once approved. Additionally, the US Centers for Medicare & Medicaid Services has partnered with CVS and Walgreens to provide free coronavirus vaccinations to residents and workers in long-term care facilities once a vaccine is approved by the US Food and Drug Administration. This initiative will allow those in nursing homes, residential care homes, and adult family homes, along others, to gain access to a vaccination without financial concerns. The world remains optimistic for rapid vaccine development and approval as the end of 2020 approaches with no signs of returning to "normal" by 2021.

Enter this week's raffle by using the QR code (right) or the link below:

https://forms.gle/f9v5amg7Jbud3ymM8



Note that we (still) make no claims that the winner of the raffle is determined randomly





Oil 2-PACK 1 Ounce

Aceite De Culebra 1 Oz. Snake

#### \$15<sup>99</sup> (\$8.00/Fl Oz)

Get it as soon as Fri, Oct 30 FREE Shipping on your first order shipped by Amazon More Buying Choices \$15.30 (3 new offers)

Now hold on just a second. I shouldn't be the one you call a snake oil salesman when Amazon's the company responsible for selling and distributing it! I do wonder, though, how do they get the snakes' oil? We may never know...

Dey Designs Large Pyrite Chunk Fools Gold Specimen- Iron Pyrite Raw Crystal Stones - Healing Crystals -Raw Natural Rough Stones - Crystal... \*\*\*\*\*\* ~74

\$1195

Get it as soon as Fri, Oct 30 FREE Shipping on your first order shipped by Amazon

You hear that? They're selling gold now on Amazon! They must have taken it straight from the hands of a fool if they're selling at that price. Ooooooh! Maybe that's why it's called fool's gold! It all makes sense now! And according to the seller, it can even heal! Better get your chunk now while they're still practically giving them away!



Westminster Nova Electronic Perpetual Motion

**★★★★☆** ~ 236

#### \$12<sup>99</sup>

Get it as soon as Fri, Oct 30 FREE Shipping on your first order shipped by Amazon Only 18 left in stock - order soon Ages: 14 years and up

Ever used the nonexistence of perpetual motion machines in one of your proofs? Well think again! This device seems to take advantage of the infinite energy source known as the "power outlet" to do what we once thought was impossible!

It seems like "NO" is back after its crushing 5-0 victory over Sara Fish in the ASCIT elections! After its victory in last issue's Amazon Skymall, it seems like our most frequent item can't be stopped!

## THE SECRET ALTERNATIVE TO IN-PERSON ROTATION

#### Norman Chung | Humor

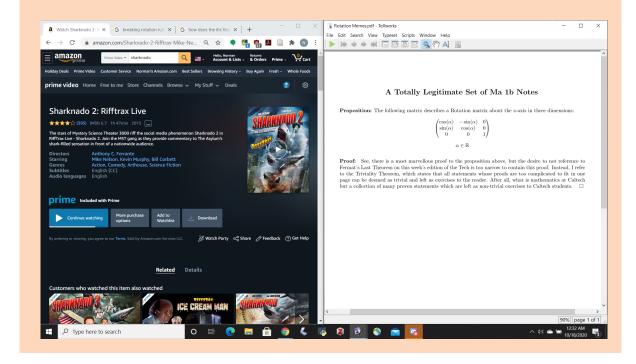
Under normal circumstances, Rotation would have been over and done with by this point in term. But of course, these circumstances are anything but normal and the question of Rotation still looms in the air. I'm sure we're all raring for the in-person Rotation we all deserve to happen one day, but in the meantime, we're stuck with that Rotation itch and seemingly no way to scratch it. However, have you ever considered having your own top-tier Rotation experience at home as a (better?) alternative to in-person Rotation? No? Well, let me enlighten you!

So, let's start out as you do by answering a stupid question: why is it called Rotation in the first place? Well, during normal Rotation, we would have many a young prefrosh "rotating" around the houses, looking for people who they'll create top-quality memes make good memories with for the next few years. This is great and all, but the energy required to walk around to each house can be incredibly daunting! It already takes 10 whole minutes to walk from one end of campus to the other. Caltech students don't have the time and energy for that kind of exercise! Don't fret though. The simple alternative is to move around one's house while spinning in circles. Not only can one experience the thrill of rotating around a house, but this thrill can be experienced at a fraction of the energy cost. If that's too much effort for you, getting an office chair and rolling around in that is even more energy efficient! No more dying before your sets are done because you're out of breath from walking around.

Of course, if we're talking about Rotation, we can't forget about the fine CDS dining experience provided at every dinner. You might think that any food would work if you're having your Rotation experience at home, but you're dead wrong. Replicating the CDS experience is an art to be mastered. Don't worry, though - I'll get you started with some tips. The meals you choose for your at-home Rotation experience must follow strict guidelines. Whether you order take-out or cook your own food, you must ensure that your first Rotation meal is good, but not too good. It should all go downhill from there, with the level of steepness dependent on your desired level of realism, your level of masochism, and how much you think you miss CDS food\*. If you really miss your fantastic experiences with cheeseburger soup, by all means, make some cheeseburger soup for dinner! Bonus points if you cook your food at 360 (the angle, obviously) or mix random substances from your refrigerator together to make yourself a cursed drink. The benefit here is the degree of freedom you're allowed to have with your dinners: you decide how you much want to suffer!

Once you've had your fill of "CDS" food, it's time for a quintessential part of any house dinner: announcements. There are many ways you might approach announcements during your Rotation at home. Perhaps you'll check your emails for anything important. Perhaps you'll Google the intro for your favorite movie about bees and start reading aloud. Perhaps you'll pour water on yourself because you were misbehaving during dinner. Perhaps you'll record yourself saying "This is a stalling announcement" and loop it for minutes on end. Whatever the case, you'll want to ensure that your Rotation announcements contain the perfect mix of important and extra important content. Just like with your

## Me: "can we have Rotation on-campus?" Admin: "we have Rotation at home" Rotation at home:



choice of food, that mix is up to you, which is one of the beauties of Rotation at home.

Of course, what's a Rotation experience without some Rotation videos to watch? Sure, you might not be able to watch or help make videos about the Caltech houses, but every time a door closes, a new one opens. With your at-home Rotation experience comes the opportunity to consume media on things much more intimately related to the act of rotation, such as:

#### Earth

Quaternions

Dead or Alive's You Spin Me Round

#### Ph 1a lectures

The 6 (yes, 6) Sharknado movies

On-campus Rotation videos might teach you some things about the Caltech Houses, but what's the point of those videos if they have nothing to do with rotation in the first place? As you can clearly see, the media consumed in an at-home Rotation experience is much more relevant than any House Rotation video could ever be! This is only more evidence that Rotation at home is not only an alternative to the typical Rotation, but a superior alternative. Just be careful not to pause while you're consuming your rotation media - that would be a rotation violation. We wouldn't want the IHC to come hunting you down, now would we?

So there you go! Maybe you'll have a surprisingly

## The California Tech

Editor-in-Chief Devin Hartzell Page Editor

Kenny Thai

COPY Editors

Alejandro López | Alex Hong Devin Hartzell

Staff Writers

Raha Riazati | Haruna Tomono Daniel Contaldi | Alice Cheng Ankita Nandi | Alex Hong Aditee Prabhutendolkar Devin Hartzell

Columnists

Norman Chung | Kenny Thai

Contributing Writers

Justin Toyota | Alice Gottlieb Maggie Lee

fun time with at-home Rotation. Maybe you'll use these ideas to stave off your in-person Rotation desires for just a bit longer. Maybe you've stopped reading by now. Whatever the case, just know that Rotation might be more feasible than you think.

\*Real talk though, I really miss Red Door's roast turkey sandwiches and grill nights... :(

## THE BEST CODDAMN TECH ARTICLE YOU WIL EVER READ I'M SO SORRY KENNY

Maggie Lee | Humor

Ah yes the tech my favorite publication

I love the tech so much

I wonder if Kenny, the all around one man tech write is watching me

I hpe he's proud of me

That's it that's the news this week

Nothing else

Editor's Note: im proud of u maggie

Business Manager Daniel Contaldi Advisor Richard Kipling

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## WHY YOU SHOULD BE A MATH MAJOR

Justin Toyota and Alice Gottlieb | Humor

One of the biggest choices you will make in Caltech is choosing your major; or, as we call it here (but not really), your option. While prefrosh/frosh are not required to make their choice until spring, it is never too early to give some thought to the future. As such, I would like to make my case as to why, when spring comes along, you should consider choosing the math major.

(Disclaimer: The ARC has not approved this, nor have they approved of anything I have ever done.)

1. Everyone's favorite class from core is obviously Ma 1a. I daresay this is not a coincidence, nor is it something I totally made up. Every Caltech student who hears the words "equivalence relation" and "supremum" feels something turn deep inside. Is it fear, disgust? No. It is an inkling of the true path.

2. What is it everyone finds most dissatisfying about other subjects? Lack of rigor. It is abundantly clear that the reason people struggle with subjects such as physics is because they are not nearly rigorous enough. After all, how can one expect to understand Fourier analysis without first understanding the Lebesgue integral? Obviously, the best way to treat this is to choose the most rigorous major.

3. Carl Friedrich Gauss once said, "Mathematics is the queen of sciences." This alone should be reason enough to consider this subject. Given that Gauss revolutionized number theory and explained how to properly eat pizza slices, his opinion should not be discarded lightly.

4. Mathematics is good for the soul. Its purity cleanses the mind, just as how blasting fiber supplements cleanses the gastrointestinal tract. Compare this to the far more popular computer science major, whose devotees trade their souls to Mammon within the first year.

5. If you become a math major you will have a reason to spend a lot of time in Linde Hall, which is where you can find the good chalk.

6. Many famous figures from history were math majors. Consider for instance Theodore Kaczynski (better known for other work), who not only majored in math but also served as a professor before he was famous.

7. Just as learning Latin will help you learn every other Romance language, learning math will help you learn every other lower subject, including physics, applied math, computer science, geophysics, and economics. After all, what is quantum mechanics but functional analysis with more experiments and less rigor? What is computer science but combinatorics with higher pay? What is economics but analysis where the variables represent money? What is geology if not using math to count rocks?

8. Math majors learn things the right way. Every Caltech student learns about vector fields in Ph 1b as the association of a vector to every point in space. But it is through higher math that you learn what is obviously the better way to think of them: as sections of a tangent bundle. 9. The ultimate goal of Buddhism is to become free of the suffering of existence by casting away ego and ignorance. In much the same way, math majors cast away their temporal shackles by purging themselves of the false idols known as "motivation" and "intuition."

10. Many other majors have things that are hard. But in math, you soon realize that everything is, in fact, completely trivial.

11. As a math major, you will have free license to throw around phrases like "trivial", "elegant", "canonical", "obvious", and "exercise left to the reader."

12. The math major provides the opportunity and background to learn the most important of all theories, category theory. There are many perks to such a path. You get to throw around strange jargon that makes you sound quite intelligent, such as "functor," "universal property," "coproducts," or "cofree cocomplete coalgebra." You get to look at things and say, "Oh, that's just a [categorical construction]. It's trivial." You get to prove things by drawing arrows and following them around the board. The categorical approach is a pathway to many abilities some consider to be very natural, and the benefits speak for themselves.

13. Most importantly, those who study math will learn the art of careful and exact thought. Mathematics is built on deductive reasoning, and those who study can learn to think good.

**QUOD ERAT DEMONSTRANDUM** 

you shouldn't look at the next page. to distract you and make you forget that a next page exists, here's a bonus article (below)!

## **CREATIVE WRITING**

VIDALIA O. BOTALOT | COLUMNIST

The Microwave is a revolutionary new product that is sure to revolutionize the way you enjoy your food. Well, it's been on sale for a couple months now, and it's a great bargain, especially when you've got an app that allows you to download the app in just seconds and start eating right out of the hand!

The Microwave app lets users enjoy their food without having to wait for food to arrive at their table. The app lets users simply point their smartphone at a restaurant menu and accept their order, trust the servers to transmit the food to their table, and then simply start getting it.

Um, ha. This sounds pretty good to us! What can't we do?

The Microwave app is now available on iOS and Android devices, and it's easy to download. Just log on to the Microwave app, point your smartphone to a restaurant menu and make your order electronically, and you're just a few seconds away from eating. It's that simple.

You can log on to the Microwave app and order a meal at a different restaurant on your computer, but that's it. That's not the Microwave app. We don't know where Microwave orders come from or where they get to go. It's just that we find it's effective, and we're pleased customers appreciate the convenience and feel of handling everything electronically.

The Microwave app lets you order a restaurant in the bathroom of the city of Cincinnati and it's right in front of the city. So why not put it in front of the city? The Microwave app lets you order a restaurant in the bathroom of a city.

The Microwave app even lets you check the gas gauge of your car before you begin driving -- and it's even on a phone!

We've been using the Microwave app for years now, and we can't imagine going back to our lousy

old phone. The original Microwave was the best. It was cool, fast, and loaded with features. The app's new features are seamless and really convenient.

#### Sound good?

The Microwave app was also the first to allow customers to order the perfect birthday party, too. Now there's nothing like ordering a restaurant and receiving an order from the restaurant and then ordering the right place and having it with drinks. We couldn't have imagined this halfway through the Microwave app's lifespan, but that's just what Microwave customers are up to.

With the Microwave app, you can order your wings from the restaurant, too. And the Microwave app lets you order the perfect martini. The Microwave app lets you order the perfect martini.

The Microwave app is available now on the App Store for anyone who wants to get in the mood for eating.

## ABUSE OF POWER? IN THE TECH? IMPOSSIBLE!

#### Kenny thai | Humor

Following the release of this year's second issue of *The California Tech*, there have been a few questions raised about the potential for abuse of power in the elected position of Tech Editor, so the editorial staff of this publication has put independent researcher Kenny Thai in charge of investigating the potential misdeeds of current Tech Editor Kenny Thai in the previous issue along with the alleged election meddling done by a team of his predecessors. The investigation's findings are as follows:

Addressing the first point regarding "Kenny's Conquest", for those unaware, on the day of the 2020 ASCIT Board of Directors election (October 12, 2020), Thai created and published an issue of the Tech which had multiple anomalies surrounding it which the researcher has been tasked with investigating. These include:

1. A credits box that credited him for nine out of its eleven roles.

2. Distributing the issue without the knowledge of the rest of the *Tech*'s staff.

3. The delay in publication of a humor article sent to him before publication to promote a false narrative within the issue.

4. Writing an abundance of articles for which he will presumably get paid disproportionately more than his fellow contributors that usually submit one or two articles per issue.

The investigation dismisses all four of these complaints for the following reasons:

1. Thai had shown that he believed that he deserved credit for the nine roles he took on, as evidenced by his article, "Kenny's Conquest", printed directly to the left of the credits box on the same page. Since by precedent, the Tech Editor determines the contents of the credits box, and Thai is without a question an elected Tech Editor, this complaint is invalid.

2. The issue was distributed with full support of the de facto Tech Editor team which includes (but is not limited to) all current elected Tech Editors, garnering widespread approval and no negative comments. We should also note that the existence of de facto Tech Editors has had years of precedence (see the RevComm decision to the right). These editors have no experience or contribution requirements and have no method of removal by members of the ASCIT corporation aside from the elected Tech Editors. Their existence allows the publication to be run far more efficiently.

3. Toyota and Gottlieb's "Why You Should Be a Math Major" (on the previous page) was sent after the deadline for accepting submissions. This deadline was set by primary Editor-in-Chief Devin Hartzell to be Saturday afternoon. The pair's article was submitted at 1:06 AM Pacific Time on the day after by Toyota, invalidating this concern. Addressing the second point relating to election meddling, the research team was also sent to investigate the humor article "Why is Tech Editor an Elected Position?" by G. Kuo, published in the same issue as candidate statements for Tech Editor (published March 6, 2017). The article reads as follows:

This has been a mystery for me for a while. Well, the thing that I really wonder about is what if the "incumbent" editors lost? Would we train the winning team? What would stop us from just going "here's the combo to the room, figure the rest out yourself." I suppose elections for Tech editor could prevent abuses of "power", like pandering toward our personal interests... Speaking of power--Sophie, Dan, and Milan, I really enjoyed your candidacy statement, but I have to say that us editors (well, except the sports editor, hmmm) have already chosen to forgo getting a salary in the best interests of the paper, and even then we don't have money (??). Would love any suggestions.

Anyway, regardless of the outcome of this very contentious election, I wholeheartedly welcome Sophie, Dan, and Milan to the newspaper team. We meet most Thursdays at 5pm in the SAC!

Love, definitely not Jon Cotler.

The aforementioned Tech Editor candidate team of Sophie, Dan, and Milan viewed this as "a hit piece against the candidacy of Sophie, Dan, and Milan," as written in their candidate statement the following year (published March 6, 2018). Fortunately, analysis of this article has already been done by the ASCIT Review Committee (RevComm) in the aftermath of its initial publication, conveniently also included in the candidate team's statement:

#### Hi All,

Multiple concerns were reported with respect to the Tech's short editorial "Why is Tech Editor an Elected Position?"; specifically, that it uses ASCIT funds allocated to the Tech in a way which could potentially influence the election, and uses knowledge of the opponent's candidate statement, both advantages not readily available to the other candidate team.

RevComm has determined that while this editorial was inappropriate, this was an attempt at humor that was not intended to affect the election or to be taken as a serious piece. Students can join the Tech Editorial team at any time, so Katherine was under the impression that she, Jon, Sophie, Milan, and Dan could all be editing together regardless. She thought that this was common knowledge, and as such thought that an humor editorial joking about Tech Editor election would be seen as amusing by the undergraduate population. From this decision, we can comfortably conclude that there have been no instances of this alleged abuse of power in the article in question. It is as Kuo asserted in the article in question, "I suppose elections for Tech editor could prevent abuses of 'power', like pandering toward our personal interests." After all, the job of Tech Editor, like all elected ASCIT positions is incredibly insecure. According to the ASCIT bylaws,

#### ARTICLE VIII--RECALL

SECTION 1. Any elected officer may be recalled in a special election. A special election shall be held upon presentation of a petition bearing the signatures of twenty percent (20%) of those eligible to vote for the office or by request of the Review Committee. Signatures will be valid only if the petition was signed not more than seven days before it was submitted to the Board. On the question of whether or not the officer shall be recalled, an affirmative vote from two-thirds (2/3) of the voters shall suffice to remove him from that office; otherwise they shall continue.

This 2/3 threshold should be trivial to surpass if an elected official has indeed committed such an abuse of power. After all, it would be highly unethical for a member of ASCIT's corporation to vote in such a special election while having any sort of personal relationship or vested interests with an elected official. Fortunately, we can trust that those with such relationships will choose to abstain from voting and allow justice to be served, should that be the conclusion reached by the vote.

Additionally, even if the trivial 2/3 threshold cannot be reached, members of the corporation can always wait until the next regularly scheduled election for the position where a vote of less than 50% can often lead to a legitimate victory being won over the incumbent. Pay no mind to the rampant complaints about the voting system; RevComm will throw those complaints out anyways.

We all know that incumbents want to stay in their seats for as long as possible. No one would ever knowingly abuse their power in an unpopular way even if they were effectively immune from removal because they would not want to diminish their chances in the next election!

I hope this has definitively shown that the position of Tech Editor has no potential for abuse of power.

Respectfully submitted, Kenny Thai

## Editor's Note: get owned nerdz



4. Thai is unable to allocate his own salary. This is the responsibility of the *Tech*'s business manager, Daniel Goncalves Contaldi, who was credited as such in the very issue in question. Thai simply made the editorial decision to publish multiple articles in the absence of other submissions, a privilege he maintains due to his elected position as Tech Editor. We are forwarding a clarification from Katherine:

"About three things I was absolutely positive. First, Jon was a vampire. Second, anyone could be a Tech editor and join anytime. And third, the Tech editor election held no weight in the production of the newspaper."



This week's recommended Tech usage after reading: find the primary sources for this article using the <u>Caltech Library's archives</u>!

They go back to 1946!