

# The California Tech

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TECH@CALTECH.EDU

## PREPARATIONS MADE FOR PANDEMIC ROTATION

SNIGDHA SAHA | FEATURED ARTICLE

Rotation is one of the most integral aspects of a student's transition to Caltech. Through ten days of events and house dinners, upperclassmen provide a glimpse of the different house cultures. The goal is to ensure prefrash can find their own smaller community in their house or in Bechtel, which they choose at the end of Rotation.

However, no undergraduates are on campus for fall term. This raises an important question: how should Caltech proceed with Rotation?

To answer this question, the Interhouse Committee (IHC) sent out a survey to all the upperclassmen to gather opinions. As Adam Abbas (MS '22, Blacker), the IHC Secretary says, "Rotation is a whole-campus activity", and thus it is difficult for the IHC to make any decisions without any input from students. Following the survey, the IHC held a meeting on September 5th, but the answer continues to be difficult without definite knowledge of the pandemic's trajectory.

The IHC is looking at a few options: Virtual Rotation in the Fall, Virtual Rotation during Spring Break, In-Person Rotation in Spring Term, or a two-class Rotation in Fall Term 2021. Kriti Devasenapathy (CS '21, Ricketts/Ruddock), the IHC Chair, believes that the best "option is that things are normal in the winter, and we just run with regular rotation...virtual rotation is difficult to coordinate, and just doesn't feel the same". Jeffrey Ma (CS '22, Fleming), the Interhouse Athletics Manager, agrees that "there are a lot of aspects of Rotation that are specifically more suited towards an in-person experience".

However, both Devasenapathy and Ma realize the limitations with having an in-person experience, as does the Dabney Hovse President, Logan Apple (CS '21). Apple mentions that a virtual rotation is a "realistic possibility" and advises the house social teams to "prepare" for such a situation.

Despite the uncertainties, there is a general consensus that a two-class Rotation in Fall Term would be a terrible idea. Devasenapathy is strictly against this because "only one class would have experienced

rotation" from an organizing perspective after the class of 2021 graduates. Ricketts Hovse President Alex Guerra (CS/Math '21) echoes this sentiment, stating that such a situation "seems like an absolute disaster" and does not "see that going well in the slightest". Apple agrees that this will be a "logistical nightmare for whoever takes it over" since the present IHC will no longer be in session and the new IHC would have to work with twice as many students.

Regardless of the final decision, it is safe to assume that Rotation will be very different this year. There are several aspects central to Rotation that will be difficult to recreate in a virtual or even a restricted in-person Rotation. Michelle Hyun (ACM/PS '22), Lloyd House President, mentions that "generally showing up to houses and talking to people" was the most valuable part of her own Rotation experience, which allowed her to "get a feel for how the houses work". Guerra mentioned that being "relatively introverted", Rotation helped "ease the transition" into college.

From an organizing perspective, Ma says "being on the other side and showing something that you enjoy to others" is one of the best parts of Rotation. Similarly, Abbas mentions that the "line of people" for each event is a great way to have "twenty-minute chats" with new freshmen, while Guerra states that the lack of expectations from freshmen allows the upperclassmen to create fun and new experiences. However, with restrictions on large gatherings, it is impossible to tell if these experiences can be recreated.

It is highly possible that the Class of 2024 will be spending at least one term without a house, which is an unpleasant prospect for all the classes. Guerra is worried that "a lot of freshmen will try to do the fall term on their own" which will lead to an inability to "get their head above water". On the other hand, Hyun is afraid that house cultures will "blur together" to appear as "residential homes", when the houses are more than that.

Although final decisions regarding Rotation are yet to be made, the IHC has made some modifications to pre-Rotation Rules to provide freshmen with some insight into the house culture. On September 24th,



Fleming's cannon probably isn't firing soon. Credit: Canon.vs.nikon under Creative Commons

Devasenapathy sent out an email to the undergraduate population with a document of pre-Rotation guidelines as well as an invite to a massive Discord server. The guidelines allow freshman and upperclassmen to have honest and insightful discussions regarding houses, and also include some examples of right and wrong conversations. The Discord server facilitates these discussions, with channels and sections divided by house.

With all the difficulties of Rotation in a pandemic, another important question arises: should freshmen be allowed to re-rotate in the next possible physical Rotation? The opinion on this is conflicted. Devasenapathy personally thinks this should be allowed but she is unsure of the scope. Similarly, Apple believes it depends on the circumstances and the number of students who are interested; too much interest could lead to a double class rotation. Ma believes that there are enough opportunities at Caltech to be social or full members of other houses, and that the goal of rotation is not to have freshmen re-rotating until they find their first choice. It seems that this question will be revisited based on how Rotation is eventually addressed.

It can be said without doubt that many opinions and perspectives are being taken into account to create a successful Rotation for the current prefrash. However, the ultimate decision is not with the IHC or the Office of Residential Experience, but with the health status of the world around us.

## ADMINISTRATORS BEGIN CLEARING STORAGE IN BROWN GYM

DEVIN HARTZELL | FEATURED ARTICLE

As students were evacuated from campus in mid-March, the institute offered free storage in Brown Gym. Now, six months later, with no immediate timeline for students to return to campus, administrators are asking that the gym be cleared. An email sent on September 10th to students with belongings in storage asks that "all students who can come get their things do so by October 1, 2020."

While many students interpreted this as a deadline, this interpretation is flawed, according to Felicia Hunt, Assistant Vice President of Student Affairs & Residential Experience. "We just wanted a timeframe," she said, emphasizing that asking students to retrieve their belongings was the first step in the long process of reuniting students with their belongings.

Many students don't immediately need their things back. "The things in storage are thankfully not things I need soon, because I was able to pack up what I need at the end of spring term," said Alex Cui (CS '21, Blacker). However, organizing off-campus storage is still a burden for others. "For an international student it's impossible to store my items in the U.S.," said Bilge Gungoren (ChE '23, Blacker), who is still considering whether or not she wants to retrieve her items.

The email did not mention administrators' reasons for needing to clear the gym. According to Joe Jordan, Assistant Athletic Director for Facilities, it was prompted by the August 12 closure of in-person higher education activities by the County of Los Angeles.

| CONTINUED ON PAGE 5 |



The exterior of Brown Gym

## ASCIT ELECTIONS ANNOUNCEMENT

MAGGIE SUI | ANNOUNCEMENTS

Nominations for the following elected ASCIT positions: will open on **Monday, September 28** at 8:00 PST and close **Friday, October 2** at 17:00 PST. Elections will occur **Monday, October 12** from 10:00 PST to 24:00 PST. Eligible voters and candidates for office must have been ASCIT members as of 4/20/2020. See Bylaws Art. VII for more details.

- **President**
- **Vice President of Academic Affairs (ARC Chair)**
- **Director of Operations**
- **Treasurer**
- **Director for Social Activities**

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# ARE YOU REGISTERED TO VOTE?

# VOTE.ORG



## IHC OPEN ROTATION MEETING MINUTES

Minutes for Sept. 9, 2020.

Agenda:

11:00am-11:05am: Introduction

11:05am-11:35am: Possible Rotation Scenarios (Preferences and Limitations)

11:35am-11:50am: Rotation Rules and Modifications

11:50am-12:00am: Closing Remarks and Preserving Tradition

Call to Order: 11:02 PDT

*Introduction to What's Going On*

Kriti: We've been trying to figure out how to do rotation given all of the constraints with the virtual term. We've been thinking about this and wanted to get your feedback and hear what you've been thinking. We have a couple main rotation scenarios.

- Virtual Rotation Winter Term

- Virtual Spring Break Rotation

- In Person Spring Term Rotation (with virtual as a fallback)

- Two Class Rotation Next Year

If possible, the default option will be an in-person rotation. My impression is that we will have to choose between virtual winter or waiting till spring to potentially do an in-person rotation.

\*Survey Results Were Shown\* (see next page)

Some considerations:

We wouldn't be the IHC for a spring rotation, would need an elongated transition. However, I think it's unlikely we will be in person in the spring term. Therefore we should have backup plans. We should choose a point fall term, where we decide on having a virtual rotation or a 2 class in-person rotation.

Most people wanted the option to re-rotate after rotation. Especially considering how much this year's freshmen are missing (senior year of HS, freshman year of college). IHC, opinions?

Guerra: Personally in favor of in person rotation, but agree we would either need to push elections or have a longer transition. Having a brand new IHC running rotation, on top of things not being normal, would be very hard to do.

Kriti: The houses are a really important support system, and it might not be worth pushing off rotation for them to not have that system.

Adam: We're likely going to have to meet in the middle, similar to the re-rotating idea. There's a big logistical mess with rotation 2 classes, in terms of how long it'll take as well as IHC not having lessons learned from the previous one.

Irene: I'm not in favor of a full 2 class rotation, and think that we might want to just plan for the worst-case of a virtual rotation. The houses and social teams can figure out exactly how to support everyone, but depending on rotating two classes is risky.

Logan: I also oppose a 2 class rotation from the pure nightmare of logistics. I do think it's very important that we establish communications channels in the meantime.

**Question:** Is there any way to know what the pre-frosh are thinking?

Kriti: We currently have no email lists or communication routes to the pre-frosh (although we hopefully will have one soon), but they also don't know what rotation really is, so their views might be skewed.

Irene: Agree, they haven't had things like PFE or any other experiences to familiarize themselves with the houses.

Michelle: Yeah it's really hard to appreciate the house system and rotation without having actually physically experienced it

Kriti: So it sounds like the idea should be to prepare for a winter term virtual rotation. Then we can assess the world situation, and adjust the timeline for school year/actual year. Something I didn't consider was whether people would be willing to rotate.

\*More survey results\*

Most people wanted to postpone indefinitely without in-person events. This is risky.

Most people were opposed to no house dinners, and wanted to wait to try and avoid it. This supports waiting towards spring term.

People were pretty split on limited or sign-up based house dinners.

People were generally opposed to rotation without all freshmen on campus. It might be best to do a semi-virtual rotation.

People were ambivalent about not all upperclassmen being on campus, so we would likely still proceed.

Freshmen staying in their pre-rotation rooms will likely not be an issue if we rotate spring term.

A concern with spring term rotation in person is that houses will be cramming a lot of events at the last minute, so we might have a hard time convincing admin. Felicia sounds pretty pessimistic of us rotating in person this year. A lot of organization for it might just be on the houses. IHC will likely do a bit less coordination because of it. If we can be on campus we should be able to go to admin with a plan/structure.

Irene: Real quick, I don't think we'll be having that many events since it'll probably still be limited. I think most people would be willing to set events aside to focus on rotation.

Kriti: So if we're focusing on spring term, we would likely want this IHC to carry on after second term.

Irene: Okay with it as an IHC member, not sure how everyone else feels.

Guerra: It would be 18 person meetings, since chair and secretary would likely not be chosen yet.

Kriti: We have an issue with pushing everything back hoping to have more info in 3 months, and then not having enough info. If we concretely choose spring, we at least have a deadline.

Irene: I think we haven't really committed anything, but talking about this is more concretely giving us ideas to think about.

Kriti: Right, I think presidents and excomms should operate as if they will be hosting a rotation winter term.

**Question:** Have we looked at frats/sororities and their rushing?

Irene: The ones in person have had a lot of break-outs.

LC: I've heard that they're not necessarily a part of the institution so they can do things we can't.

\*Chat mentions virtual rushing and minecraft rushing\*

Kriti: Think it's important then to have re-rotation, so that even if people are happy in a house they can have the experience of rotation. This might be difficult from a rotation rules perspective, but it will probably be worth it.

Irene: Worried about too many people re-rotating and not being able to handle that many. Also people re-rotating into a house that doesn't have many people rotating out.

**Question:** Will admin that deals with student events be able to handle Ditch Day + PFW + Rotation?

Kriti: We've heard a lot of promises from admin about what we could do third term, but I think it's because they don't think we'll be able to be on

campus third term. Caltech's took a big financial hit, and laid off some of ORE. It does feel like admin pities us, so maybe we'll have some advantage. Timeline-wise, it'll be strange with no P/F for freshman and whatnot, but I think most people will be happy enough to be able to do these things we'll manage.

Guerra: I agree, everyone is just going to want to do everything.

Irene: Yeah we'll have plenty of third-term seniors, and people with lots of free time.

### *Rotation Rules and Modifications*

Kriti: We did modify some of these for pre-frosh, but let's look at what we have at the moment. [ihc.caltech.edu/rotationrules.html](http://ihc.caltech.edu/rotationrules.html). We should get an idea on whether people want to restrict or loosen rotation rules. Personally, I think having to be super strict about what we say for 1-2 terms is going to almost be impossible. However, loosening them feels like giving in. I would want to loosen them. There are plenty of edge cases that would be considered rotation violations, but could just be descriptions of things that are good and fun. What we could do is provide examples of things that are acceptable and leave it up to Honor Code. It could go poorly if one or two houses effectively "pre-rotate"

Irene: I think one of the big ones is going to be the rule about giving frosh gifts. Some of these are going to be normal interactions from friendships, and we don't want to ban people from being friends with pre-frosh. Adding examples, and focusing on not adding stereotypes.

Kriti: Some of these feel pretty specific to rotation, as in they're supposed to be in effect for the first two weeks that a person is here. Having the rules apply otherwise, we might want to have a separate set of rules like pre-rotation rules. Rules about rankings shouldn't apply. Pretty much all of the first year student guidelines aren't super relevant. I think there's merit in making a separate set of rules, since people are going to be making opinions regardless.

**Question:** Are these for rerotation or virtual rotation?

Kriti: We might have to make rerotation rules, but this is mostly for before having our official rotation. We don't want to encourage people putting other houses down.

Irene: I agree with you Kriti, something along the lines of more loose during the term and focusing on not spreading stereotypes but encouraging friendships. I don't think people will be pressuring pre-frosh to rank when the rankings are so far away. We can ramp up as we get closer.

Kriti: That makes sense. What we could do, is instead of trying to fit these rules just make a separate documents. We could make this example based. Give a few examples, and let everything else be generally allowed. Leave the rule-based aspect out. If we end up having a platform by which we can interact with the freshman, it's important there (since its organized by IHC) to try and keep up something closer to rotation rules. But in general we can be a bit looser.

Adam: We should think about how we're enforcing these rules, since it's pretty official during rotation (with maybe admin involvement). We should think about incorporating the penalties into the "ramping up" of the rules.

Kriti: During the pre-rotation period, it should be not that penalized. If we do decide to have some kind of discord, we have the moderators tell you to stop and then if you do it again you get kicked out. In a situation where someone is privately breaking the rules, i'm not sure how much we want to push. What does everyone think?

Adam: I think we should have a way for the pre-frosh to get to us, like a form or something similar. In the case of upperclassmen, I don't know how much we should push, we have the honor code and everyone knows things aren't great.

Kriti: Right I think the only problem would be if it was something group-based or systemic breaking of the rules.

Irene: I think in general upperclassmen don't want to break the rules they just sometimes aren't super aware of what they are. That's why I think something example based would be a good idea.

Kriti: So to summarize, we have largely looser restrictions and then maybe 2 weeks before rotation ramp up the rules and make them stricter

**Closing Remarks and Keeping Tradition**

Kriti: To summarize, things are wack and we're trying to make things less wack. This'll be a group effort with excomms and everyone else, and we'll take some of the suggestions (like looking into rushing) and try and make a decision. We'll likely

have another open IHC meeting where we officially make a call on virtual vs pushing it back. And then if we push it back, we can have a n o t h e r open meeting around midterms.

**Question:** How set in-stone are these decisions?

Kriti: Not very. We have to run this by administration, and we can get shot down there. Also we have a limited number of people in this meeting. If we don't get any large scale negative opinions then this is likely what we're going for.

Kriti: Yeah. Once we make a decision, we can decide on things like re-rotation. And then leading up to rotation, we can work on guidelines. And if anyone has further concerns, you're free to come talk to any of us. In terms of preserving tradition: I've been in a lot of meetings, and it's very clear that no

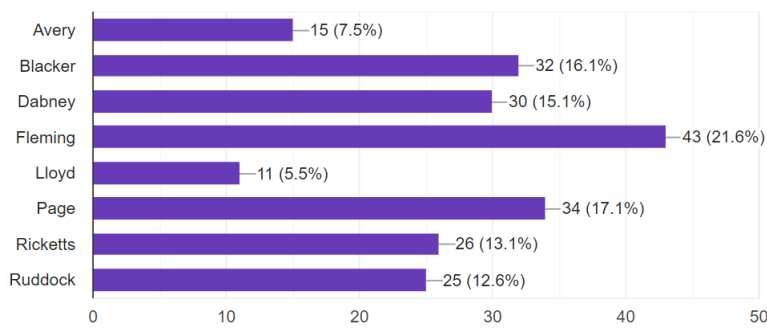
one wants the house system to die. They're their best to keep traditions going forward, and helping out with fundraising. I think we can all agree that this isn't ideal, but we can keep trying. I encourage everyone to document everything, even the things you don't consider as big traditions (like saying alright at dinner). I'm very afraid those are going to get lost. Especially the current Smores, do your best to try and remember these things for when we get back on campus. If you have ANY ideas, go to your house excomm. Clinging to whatever we can is much better than having to build everything back up from the bottom. This is my plea to everyone.

Adjourned: 11:57PDT

Signed,  
Adam Abbas

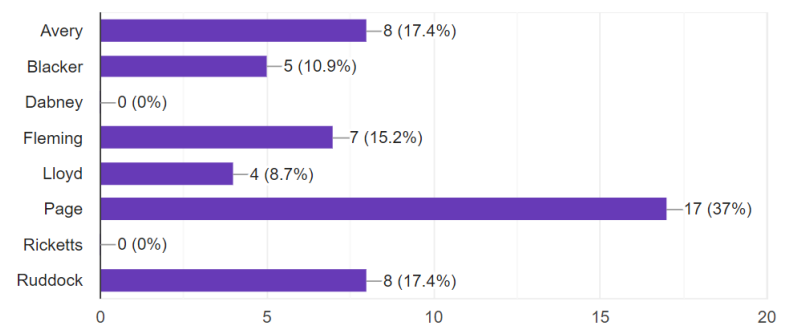
Full Membership(s) (Optional)

199 responses



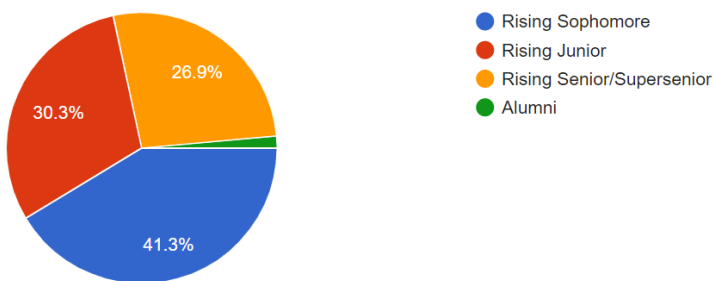
Social Membership(s) (Optional)

46 responses

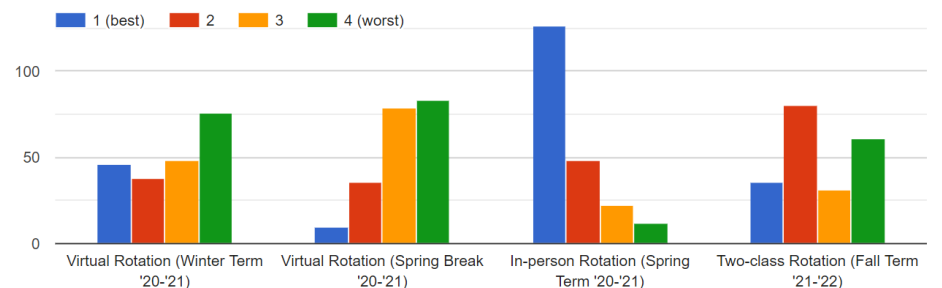


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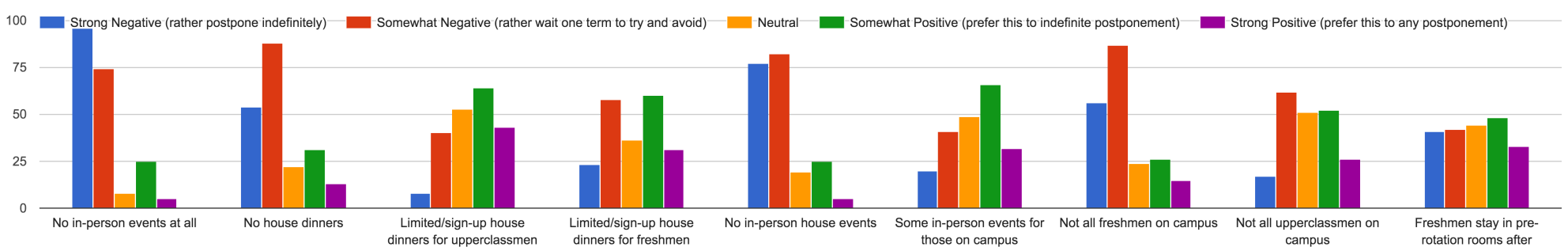
208 responses



Rotation Options Ranking (Non-exhaustive, ties allowed)

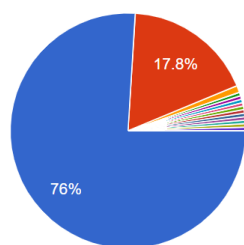


What are your opinions on proceeding with Rotation given each of the following potential limitations?



If Rotation is fully/mostly virtual, should freshmen be given the option to re-rotate the following year?

208 responses



Redacted to maintain anonymity

**Editor's notes:**

- There were 208 total responses to the survey.
- The three multiple choice questions were required for submission, so all got 208 responses.
- Left out were the responses to questions asking for name, Caltech email, and the following free response questions:

"If you have any ideas regarding the enforcement/modification of Rotation Rules during first term, please provide them below:"  
 " Do you have any other suggestions or feedback that you would like to share?"

## Write for the Tech!

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

Email [tech@caltech.edu](mailto:tech@caltech.edu) if you're interested!

**ARC MEETING MINUTES**

Minutes 6 June 2020

Present: Arushi, Daniel, Nathan, Schuyler, Megan, Sophie, Mohini, Anjini, Marcos, Alejandro, Erika, Anna

Minutes by Daniel

- 1) Do you have concerns about online learning? Better yet, do you have suggestions to make it better? Please tell your friendly neighborhood ARC rep or post on the "ARC Feedback" form on Beta Donut.
- 2) The ARC Course Advice Slack will stay open over the summer. Feel free to ask questions about courses.
- 3) The ARC also discussed Student-Faculty lunches and the ARC Frosh Guide.
- 4) We spent some time discussing Ma 1, Section 1 including the pros and cons of different strategies.
- 5) We spent a significant amount of time discussing possible improvements to online learning in the case that online learning remains in the future. ARC reps brought up suggestions including different learning management systems (i.e. to replace Moodle), slack workspaces to help with collaboration, other ways of collecting input on online learning, methods to help frosh find collaboration groups.



## ASCIT BOARD OF DIRECTORS MEETING MINUTES

MINUTES FOR SEPTEMBER 23, 2020. TAKEN BY LC CHEN

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

Guests: Tom Mannion

Call to Order: 6:00 pm

### PRESIDENT'S REPORT (VARUN):

Reconciling old ASCIT accounts  
Working on joint volunteer program with the Caltech Y  
ASCIT activities brainstorming for the fall

### OFFICER'S REPORTS:

#### V.P. OF ACADEMIC AFFAIRS (ARUSHI):

iPad Loaner program successful, students who were approved should expect to receive iPads if they haven't already  
Option buddies program

#### V.P. OF NON-ACADEMIC AFFAIRS (KIRITI):

Discord server out  
Modified Rotation guidelines out

#### DIRECTOR OF OPERATIONS (RACHEL):

Proposal for modified club funding cycle due to delayed elections

#### TREASURER (YUYING):

Reconciling old accounts

#### SOCIAL MANAGER (NOT PRESENT.):

Nothing to report.

#### SECRETARY (LC):

Nothing to report.

#### GUESTS:

#### Tom:

Activities brainstorming for fall term

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: 8:00pm

## 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 [aliciac@caltech.edu](mailto:aliciac@caltech.edu) 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!

[http://provost.caltech.edu/vp\\_weinstein/office\\_hours](http://provost.caltech.edu/vp_weinstein/office_hours)



Vice Provost Cindy Weinstein

## SENIOR CLASS CO-PRESIDENT ELECTION RESULTS

vs.	<b>Ashima Agarwal and Alessandra Mondello</b>	LC Chen, Krystyna Maruszko, and Liana Merk	Cindy Cao and Amy Wang	Sam Owen, Lily Kitagawa, Andrew Chan, Vidhya Dev, Eric Han, Rachel Sun, and Ari Rosner
<b>LC Chen, Krystyna Maruszko, and Liana Merk</b>	<b>62-38-21</b>			
<b>Cindy Cao and Amy Wang</b>	<b>69-29-23</b>	<b>56-35-30</b>		
<b>Sam Owen, Lily Kitagawa, Andrew Chan, Vidhya Dev, Eric Han, Rachel Sun, and Ari Rosner</b>	<b>77-32-12</b>	<b>74-31-16</b>	<b>66-34-21</b>	
<b>NO</b>	<b>92-17-12</b>	<b>84-25-12</b>	<b>74-25-22</b>	<b>56-48-17</b>

## STUDENTS READY TO BEGIN ANOTHER ONLINE TERM

ADITEE PRABHUTENDOLKAR | CURRENT EVENTS

As humanity grapples with a pandemic unprecedented in modern times, schools worldwide are struggling with the difficulties of remote learning, and Caltech is no exception. Techers are zipping in and out of Zoom meetings and Discord servers more than ever; online communication is especially important at a university that values collaboration so strongly.

While most classes have been reasonably converted to an online version, many lab classes can't make the transition to the new normal with the same finesse.

Traditionally, freshmen who want to pursue options in Chem or ChemE take Ch 3a *Fundamental Techniques of Experimental Chemistry* in the fall term. But aspiring chemists and chemical engineers in the class of 2024 have been encouraged to put off taking Ch 3a until a later, hopefully more orthodox, term; truth be told, there's no ideal online equivalent to an in-person lab class.

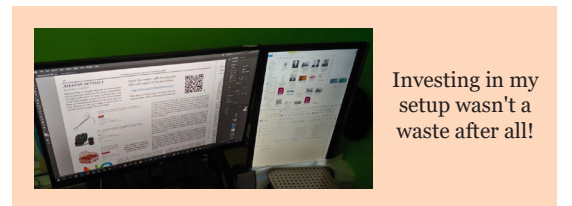
Even when the pandemic first hit, Caltech administrators and the ASCIT Academics and Research Committee were searching for ways to keep the lab classes, especially those involving an engineering aspect, in-person with safe conditions. According to Blacker Hovse ARC Rep Alex Hong (Ch '23), "The original hybrid plan was to have ME 72 and EE 110 in-person. Students taking either of these classes would live on campus, quarantined within their project groups, and take all other classes remotely."

But these plans were "torpedoed" early in August when the LA County Department of Public Health made the sweeping decision that, as part of new COVID-19 regulations, undergraduates wouldn't be returning to college campuses in the near future.

So what's the current state of these classes? Some of them--including EE 110c *Embedded Systems Design Laboratory*, ME 13 *Mechanical Prototyping*, and Ch 5b *Advanced Techniques of Synthesis and Analysis*--are cancelled entirely, but might be offered online later this year if needed.

EE 110, a class that's heavily reliant on in-person training, is usually split into three terms. As said by Julian Sanders (EE '21, Blacker/Ruddock), EE 110a and b involve "assembly programming for a pretty advanced microcontroller" as well as designing projects.

However, very few students decided to take EE 110c online last year, and those that did received "mail/pick up parts for [their] project and



Investing in my setup wasn't a waste after all!

tried to finish." Given the difficulties, "an in-person version will be offered as soon as anyone's allowed back on campus," although we have no method of predicting when that will be.

ME 13 is required for MechE sophomores before taking ME 14 *Design and Fabrication* or ME 72 *Engineering Design Laboratory*, which are third term classes. According to Evan Dicker (ME '23, Blacker), ME 13 "is normally a series of demonstrations by the prof and then scheduled sessions where you come in and produce a part using the knowledge you gained from the demonstration." It's understandable that a suitable online format couldn't be found for this class. But if circumstances don't improve, such a format will become necessary to accommodate MechE students.

Perhaps the way ME 72 *Engineering Design Lab* has adapted to present conditions can serve as an example. According to Maheck Jerez, (ME '21, Blacker) this project-based course centers around mobility-based "tasks to be performed by a group of legged robots... These robots will be designed by teams, piece part drawings will be sent to the Caltech shop for [manufacturing], and the finished parts will be returned to the teams via mail where they will be assembled and will perform the tasks assigned. The teams will still be scored based on how they perform with each bot, and there will still be a winner."

Elaine Lowinger (ME '21, Blacker/Ruddock) adds that "a large part of it is shifting some of the focus from manufacturing in house to gaining design experience and focusing on how to outsource parts... Therefore, the competition will be more oriented for 'at home' capable small competitions, rather than the large display we usually have."

Despite these improvements, online education isn't everyone's cup of tea. Sarah Barrett (ME '23, originally '22, Blacker/Ruddock), is one of many students who elected to take a gap year. When speaking of her plans for this year, she said, "I am currently doing an internship with Xos Trucks! I'm a development engineer intern and I'm working on design and prototyping for the battery team."

The shift to online education hasn't been simple, but the Caltech community is continuing to find innovative ways to deal with this situation. We don't know whether a return to campus will occur in the foreseeable future, but we can always hope for the best.



## FRESHMAN CLASS ADAPTS TO ONLINE FORMAT

ALICE CHENG | CURRENT EVENTS

When the Coronavirus first brought the world to a standstill, most did not imagine that it would last six months and counting. Over the course of the pandemic, administration and Techers both have made the most of the situation through various online platforms.

Despite learning that prefrosh weekend, an opportunity to meet fellow Techers and experience the magic of Caltech in real life, and later the entire fall semester, had been moved to a remote experience, incoming freshmen still made the most of the situation.

Platforms such as Facebook groups and Instagram allowed students to connect, but ultimately Discord was the primary means of communication for many. Several early admits started to use Discord starting in December 2019 to bond with each other. With the fall quarter approaching, Discord has remained the primary source of communication for many.

Set up like a virtual Caltech campus, there are both text and voice channels, or chat rooms, for topics ranging from general Institute announcements to technology/engineering to pets/animals. Voice chats are used by members to interact with each other more personally or to host game and movie nights. In addition to the prefrosh, some upperclassmen have also

joined the Discord group in order to provide guidance and advice to incoming first-years and transfers about courses and majors, student life, and much more.

Despite the versatility of Discord, it is far from a replacement for an in-person college experience. Many students have organized local meet-ups to spend time with peers close by in person. Others have decided to rent an apartment with friends for the fall semester. Students like Alice Kutsyy ('24) found it an "insanely hard time focusing last spring" as she calls herself "the type of person to go to a cafe with [a] friend to study."

While she initially thought she would stay at her home in Northern California for the fall quarter due to the ability to meet with friends in her hometown and have access to racing her cars on weekends, ultimately she decided that the costs outweigh the benefits. In August, Kutsyy and a group of prefrosh began looking into renting a house through AirBNB, including locations in Arizona, Colorado and Lake Arrowhead.

For Kutsyy, she believed that "if we were gonna be stuck somewhere, it might as well be pretty." However, they struggled to find a house in a remote location that could offer stable WiFi, so ultimately they found a spacious house near Caltech that was under their budget. Kutsyy, who is a member of the Caltech women's volleyball team, will be able to have practices with 5 to

6 other teammates who are also living nearby.

On the administrative side, faculty members are working to support the prefrosh as best they can. All prefrosh will be assigned to an advisor group which consists of 8 freshmen, 2 upperclassmen (Frosh Camp Counselors), and a faculty advisor. These groups will meet for the first time before orientation and will continue to meet throughout the year, giving freshmen an opportunity to meet upperclassmen and bond with a faculty advisor which provides both academic and social support.

For freshman Nathan Ng, these pods hold promise as he thinks they are "similar in function to the study/friendship groups we would've inevitably created" on campus. While one major challenge remote learning poses is the ability to collaborate with and meet students online, many students including Ng and Kutsyy believe these pods will facilitate this process by creating a smaller and more intimate environment to achieve this.

With just under a week until the start of fall term, the prefrosh have been introduced to a variety of support services and groups to ensure they experience a smooth transition to college, albeit remote. As we continue monitoring the coronavirus situation in the United States, Techers are hopeful to return to campus at some point this year, but for the time being they're making the most of the virtual experience.

## HOW FSRI ADAPTED TO BEING ONLINE

SNIGDHA SAHA | CURRENT EVENTS

This summer, I was fortunate to be a part of the 2020 FSRI cohort. I researched under graduate students Sara Beery and Neehar Kondapaneni who work in the Pietra Perona Lab on Computer Vision. My specific project was working on constructing a neural network to predict when a MegaDetector Model for detecting Camera Trap images is falsely confident.

Caltech's Freshman Summer Research Institute (FSRI) is a five-week program meant to ease the transition from high school to college. Normally, the program consists of five weeks (or more) of research with a mentor and a four-week Math class introducing students to Caltech rigor, supplemented with Caltech dorm life experience, field trips, and social activities. However, in compliance with COVID-19 pandemic health guidelines, organizers Monique Thomas and Taso Dimitriadis transformed the 2020 FSRI program into an online version instead. They included a three-week Python bootcamp, online social activities, and many online sessions regarding Caltech resources, trying their best to reproduce the same environment as they did online.

I joined this project with no experience in research, very limited experience in Python and close to none in Machine Learning. I also joined FSRI with no knowledge of linear algebra or differential equations. But, despite the virtual setting, I learned all of these concepts through my research project, a four-week Caltech level Math class by UC Irvine Assistant Profes-

sor of Teaching Robert Pelayo (PhD '07), and a three-week Python bootcamp by Teaching Professor Justin Bois (PhD '07).

Beyond the learning experience, I also met a community of many freshmen and upperclassmen (our mentors and TAs). Throughout the program, we had several fun events and games to meet one another, starting with a scavenger hunt and closing with an escape room. Interestingly, my birthday fell in the middle of the program and the entire cohort collaborated to write me a special birthday card. We also grew closer through difficult homework sets and collaboration in the Math lessons. The community truly helped assure many of us that Caltech is really the place we belong, and we bonded closely through our meetings on Discord voice chat and Zoom.

Despite the fun and valuable learning experience, FSRI definitely demanded a lot of hard work out of all participants. Between the classes, the homework sets, the tests, and the project, there seemed to be an insufficient number of hours in the day. Therefore, it was quite the introduction to the Caltech rigor and really helped us as newcomers transition into the academic challenges that lie ahead.

My fellow participant, Hope Arnett, expressed her gratification with the program in saying, "The challenges I faced during FSRI gave me an opportunity to see what I'm capable of... I can look back on this experience and have confidence in my abilities. It is very exciting to know that I contributed to the field of syn-



thetic biology." Similarly, Daniel Nagles said that FSRI was a "fantastic experience", further stating, "I got to understand what Caltech academics might look like, got to learn new things about mathematics and computer science; I had my first experience in research, and I got to make new friends that I hope to grow closer with as Caltech goes on!"

My own mentor, Neehar Kondapaneni, expressed his satisfaction by saying, "It's always an awesome experience watching someone improve at something. The only thing I really wished I had was a whiteboard, it's just so difficult to explain some things without being able to draw. Overall it went really smoothly, I feel like we all adapted to being virtual really quickly."

Overall, FSRI was an invaluable experience and helped many of us explore research in a virtual setting. Personally, it was my first time researching and I realized that it is potentially something I enjoy immensely. I am happy I was able to do this program ahead of my freshman year: I have now experienced a snippet of the Caltech rigor and am a little more prepared for my classes and the busy days that are soon approaching.

## ADMINISTRATORS BEGIN CLEARING STORAGE IN BROWN GYM

DEVIN HARTZELL | FEATURED ARTICLE

| FROM PAGE 1 |

"In March, it was the right thing to do and we stand by that," says Jordan, who emphasized that "the goal was to help students evacuate campus as quickly as possible." Now, with no clear timeline for students' return to campus, Jordan wants to avoid storing students' belongings indefinitely and help students retrieve their items when possible. According to Jordan, "we knew in the moment we needed to assist students with their belongings, without regard for how items would eventually be retrieved. Many students now have the opportunity to do so."

Jordan cited Brown Gym as an area used for research and an eventual space for physical education and recreational activity to return to again.

Jordan also cited the need for Brown Gym's use as an emergency evacuation site. According to Catherine Christensen, the Emergency Preparedness & Business Continuity Program Manager at Caltech, "Brown Gym is identified as a location that may be used for temporary shelter for students or as a gathering location to centrally locate the campus' in-residence population in the event of an emergency." The City of Pasadena does not include Brown Gym as a part of its emergency plans.

Jordan says that the department and administration will make announcements regarding future uses of the gym. As of September 23rd, the bouldering cave adjacent to the gym has reopened for use, in line with the guidance from Los Angeles county allowing outdoor gym activity.

The task of returning students' belongings has already been accomplished for the seniors who graduated in June. According to Hunt, the Office of Residential Experience coordinated with shipping companies throughout August to return seniors' belongings. Seniors were video-called by institute staff to determine which belongings they wanted to keep.

The current push for returning students to collect their belongings is the next phase in the process. According to Hunt, no decisions have been made regarding how students' belongings will be stored or returned. "We want to return students' items in an appropriate, timely manner and don't want to inconvenience people," said Hunt, emphasizing that plans can only be made once the office knows how many items still need to be stored.

Indeed, traveling to Pasadena to pick up items left in storage is out of the question for many students. "I would need to fly to California from Canada to get my

stuff, which is really expensive and also would require me to do a 14-day quarantine when I get back," said Cui.

However, there are efforts among alumni groups and houses to organize off-campus storage. The Student Defense Initiative (SDI), a non-profit founded in 2013 to provide Caltech students with legal aid and preserve student culture, is soliciting donations from alumni to organize storage for students who cannot retrieve their items.

According to Jason Cerundolo (BS '09, Blacker/Ricketts), the President of SDI, the initiative has raised more than \$1000 since sending out an appeal to Alumni Thursday morning. Several have joined a patreon as well. The role of the SDI is largely to support student initiatives; Lloyd and Ruddock Houses are organizing storage off campus, and the initiative is helping channel alumni donations to fund it. The SDI is coordinating with the Interhouse Committee to ensure that all students have access to storage, should they need it.

However, according to Hunt, "we've not asked students to find outside solutions to this at this point, we're just asking students to come get their stuff if they can."



# NAMING AND RECOGNITION: CALTECH'S RENAMING COMMITTEE HAS FORCED A HARSH RECKONING WITH THE INSTITUTE'S PAST

RAHA RIAZATI | SPOTLIGHT

The past 6 months can be undeniably summarized as a whirlwind of change. Catalyzed by a ravaging pandemic that has utterly exhausted most economic resources, long-simmering issues facing minority groups, such as racism, xenophobia, sexism, and income inequality have again reared their heads, as have attempts to address and solve them.

The exemplar of sweeping social movements sparked by the hardship of coronavirus is Black Lives Matter, a powerful anti-racist movement that gained renewed momentum after the death of George Floyd on May 25th. As protests in support of Black lives and against the policies that seek to marginalize them broke out across the country, individuals and institutions across the country began to examine their own history and prejudices, seeking to take any action necessary.

It is only natural that such a widespread movement also affected Caltech's campus. On July 22, university president Thomas Rosenbaum announced the formation of a Committee on Naming and Recognition, purported to discuss whether and how to rename buildings such as the Millikan Library, Chandler Dining Hall, Ruddock House, and the Watson Laboratories, buildings named after individuals associated with the eugenics campaign that categorized and degraded individuals based on race.

The Committee on Naming and Recognition, made up of trustees, professors, and students with knowledge of scientific, social, and racial history, will consider various factors, including the problematic and offensive actions of each of the individuals for whom these buildings are named, Caltech's commitment to be both a beacon of science and inclusivity, and practical limitations like contractual obligations; they will then make recommendations to the president regarding how best to proceed. The president has promised to have finalized recommendations by the end of the calendar year, underscoring the urgency of this committee's task.

This declaration of change from President Rosenbaum came after UCLA political science professor and Caltech alum Dr. Michael Chwe (BS '85, Blacker) started a petition calling for Caltech to remove the names of scientists associated with the California eugenics movement from its buildings and grounds. Dr. Chwe describes his inspiration for starting the petition as the result of reading about students and alumni at other universities, among them Princeton University and Pomona College, discussing whether to remove Robert Millikan's name from buildings on their own campuses. Feeling rather confused, he conducted some of his own research and was shocked at Millikan's ties to a virulent race science.

"The more I read, the worse it got," he remarks. Having realized the full scope of Millikan's bigotry and the forced sterilization enacted partly due to his support, Chwe felt shocked and even "betrayed that Caltech faculty taught [him] that [Millikan] was a person worthy of admiration". After all, as Women in BBE leader and graduate student Jessica Griffiths explains, "[Caltech]'s own values displayed on the website...are in direct contrast with [the] message that is conveyed by having three buildings named after prominent Nazi-sympathizers and eugenicists (Millikan, Ruddock, and Chandler)". Dr. Chwe noticed this contradiction and attempted to remedy it by starting a petition that would go on to gain 1032 signatures.

Hearing such ringing, harsh, and perhaps uncomfortable criticisms of Nobel Prize winners and House namesakes might lead to questions and pushback if the history of Caltech, and the chief institution promoting eugenics in California, the

Human Betterment Foundation, is not carefully examined. The Human Betterment Foundation was an organization devoted to supporting research on race science and the forced sterilization of women deemed not evolutionarily "fit" to bear children. Robert Millikan, famous for quantifying the elementary electric charge, winner of a Nobel Prize, and probably the most revered scientific icon at Caltech with his name adorning the illustrious 9-story Millikan Library, Millikan Pond, and the Athenaeum's Millikan Suite, was a leading figure in this Foundation. He strongly advocated for the forced sterilization of poorer women, who were almost always Black, Latinx, and indigenous, so as to "help" natural selection advance the survival of "superior" humans who were more intelligent and well-adapted to society; not surprisingly, these "superior" humans were almost always white and male.

The Human Betterment Foundation was rather well-received by the California scientific community and its members included Harry Chandler and Albert Billings Ruddock. Chandler, for whom Chandler Dining Hall is named, was a staunch defender of eugenics and, as the then editor-in-chief of the Los Angeles Times, allowed columns on the need for "better breeding habits" to flourish under his leadership. Albert Billings Ruddock, Ruddock House's titular figurehead, was on the Board of Trustees of the Human Betterment Foundation and helped to establish the E.S. Gosney Research Fund, a fund that still exists today, as part of the Human Betterment Foundation; the fund specifically granted financial support to Caltech scientists investigating the biological distinctions of race. The E.S. Gosney Research Fund points to a more disheartening truth: Caltech's historical tie to the Foundation

does not simply manifest in the activities of a few individuals. After World War II, the foundation was dissolved, and Caltech assumed all of its financial assets and activities. As Dr. Chwe delineates, "Caltech is the direct institutional successor of the Human Betterment Foundation" and, noticeably, "has never disavowed its activities".

This knowledge of the doings and beliefs of a significant portion of the Caltech community of the past becomes even more flagrant when remembering that much of the Nazi race science of the 1930's and 1940's was developed on the basis of the California eugenics movement and took direct inspiration from the Human Betterment Foundation. Perhaps the clearest link to Nazi race science comes with Thomas J. Watson, for whom the Watson Laboratories of Applied Physics are named. Watson was not only the innovative CEO of IBM, but also a close business associate of Adolf Hitler; he furnished the Nazis with punch-card machines that helped to accurately count and track the Jewish populations of Germany and countries under Nazi occupation.

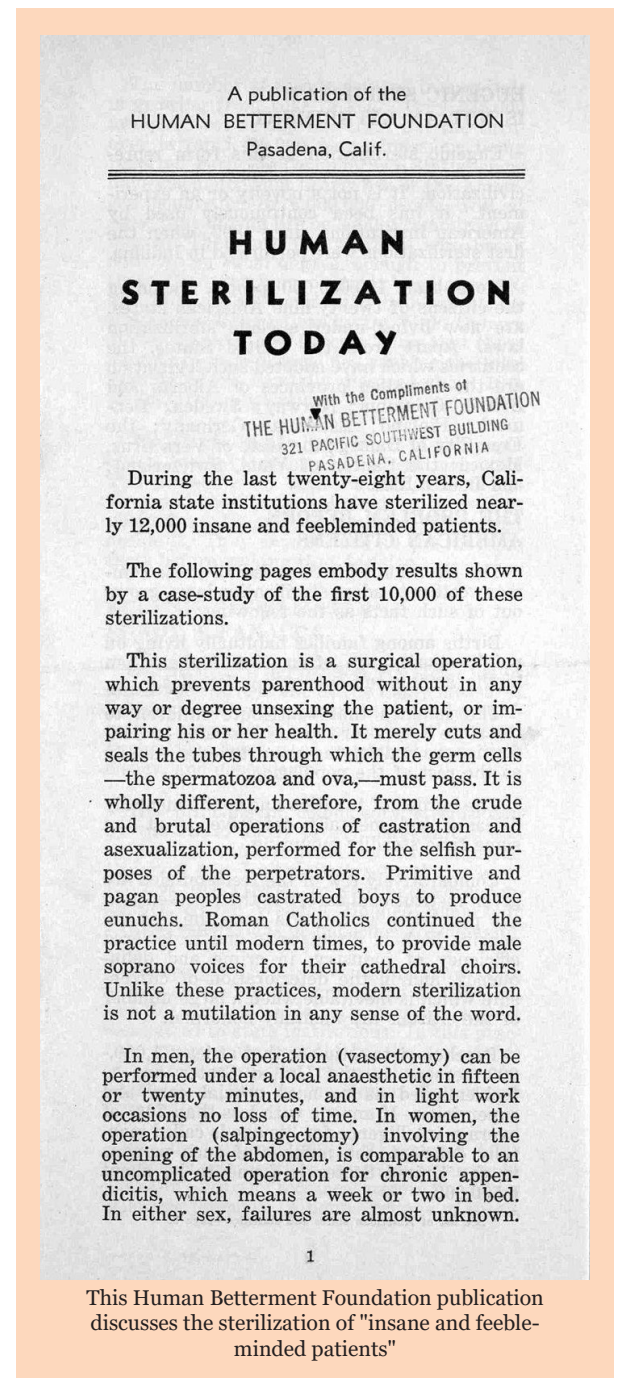
So far, it seems that much of the Caltech student community is in favor of revising building names to reflect the values and diversity of the current Caltech community. Out of 295 students surveyed by The California Tech, 48.5% were in favor of renaming Millikan Library, Chandler Dining Hall, and the Watson Labs, while 34.5% supported the renaming of Ruddock House. Noticeably, 27.8% of students were unsure about the renaming of Millikan, Chandler, and Watson while 40.7% of students were unsure about the renaming of Ruddock. This large amount of uncertainty may be due to the fact that students are largely unaware of the ties of these scientific figures to the eugenics movement. After all, the dark sides of leading scientific individuals are often not taught in schools or publicized in Caltech

"The Human Betterment Foundation was... devoted to supporting research on race science and the forced sterilization of women deemed not evolutionarily 'fit' enough to bear children"

"Caltech is the direct institutional successor of the Human Betterment Foundation [and] has never disavowed its activities"

- Dr. Michael Chwe

"Watson was not only the innovative CEO of IBM, but also a close business associate of Adolf Hitler"



science lessons, as Dr. Chwe himself mentioned. It may be difficult for students to support the renaming of buildings when they don't know exactly why the buildings should be renamed in the first place.

That is why certain student organizations, among them the Caltech Feminist Club, are taking the lead in advocating for the renaming of these buildings and educating their members. Club leadership asserts, "We must rename these spaces to challenge the notion that being a great scientist and being a great person can be mutually exclusive things". They currently propose changing the buildings names to celebrate lesser known but equally stellar scientists who are Black, indigenous, Latinx, or identify as women or LGBTQ+; ideas include Assistant Professor Katie Bouman, who captured the first image of a black hole, Katharine Johnson, a mathematician instrumental in American space travel, and Caltech's own Nobel Laureate Professor Francis Arnold. The Feminist Club also supports BSEC, or Caltech's organization of Black Scientists and Engineers, in its demands that Caltech fund more diversity encouragement programs and admit more students from underrepresented minorities to campus. These sentiments are echoed by Dr. Chwe and Griffiths, who explain that the Caltech community and administration must recognize that science and politics are not separate spheres and push for greater education and racial equity on campus, both in specific policies and in overall attitude.

For as the renaming issue has demonstrated, science and society are almost always inextricably linked. Eugenics, in fact, arose as an attempt to apply scientific principles of natural selection to social constructs of race and gender. Therefore, it does not seem too outlandish to consider how Caltech, and its students, faculty, and staff, plan to manage this balance between science and society, between honoring discovery and respecting history, between technical greatness and ethical responsibility.



## VACANCY IN THE SUPREME COURT: WHAT COULD HAPPEN NEXT

ANKITA NANDI | CURRENT EVENTS

After a long battle with cancer, Supreme Court Justice Ruth Bader Ginsburg died on Friday, September 18, shocking the nation and creating chaos over her now vacant Supreme Court seat. With the U.S. Presidential election quickly approaching on November 3, citizens are demanding to know if President Trump or the winner of the election will provide a nominee to fill the vacant seat. The country is divided, as the Republicans demand to hold a vote for a new Justice, and Democrats call to wait for the election to decide.

Justice Ginsburg was known for her prolific feminist stances, including various pro-choice decisions as she demanded equal protection under the law for all genders. Despite her overall liberal stances during her time as a Justice, Ginsburg still maintained close friendships with her fellow Justices across the political spectrum. As a result, Ginsburg's death was mourned by politicians across party lines, and the US flag at the White House was raised at half mast the day following her death. However, various individuals quickly moved on to considering Ginsburg's replacement.

Tensions regarding the seat vacancy arose quickly following news of Ginsburg's death, exemplified by U.S. Rep. Doug Collins (R-Ga.). Representative Collins tweeted, "RIP to the more than 30 million innocent babies that have been murdered during the decades that Ruth Bader Ginsburg defended pro-abortion laws. With @realDonaldTrump nominating a replacement that values human life, generations of unborn children have a chance to live." Despite criticism for sharing his remarks so soon after Ginsburg's death, Collins stood by his comments. And he is not the only politician pushing for President Trump to nominate a Supreme Court justice soon.

President Trump posted on his Twitter that he intends to announce his Supreme Court Nominee on Saturday at the White House. He is receiving support from GOP members including U.S. Sen. Ted Cruz (Texas) and Senate Majority Leader Mitch McConnell (Ky.). However, Democratic politicians including Sen. Amy Klobuchar (Minn.) and Presidential nominee Joe Biden are pushing for the winner of the election to nominate a Justice instead. Furthermore, McConnell's support is raising questions regarding his refusal to hold a vote in the Senate in 2016 for President Obama's Supreme Court nominee Merrick Garland.

In the last year of Obama's second term as President, McConnell said that he would not hold a vote if Obama presented a Supreme Court nominee, saying

"If no Supreme Court appointee is successfully confirmed before the argument, the decision is likely to be 4-4, thereby upholding the Fifth Circuit judges' decision, eliminating Obamacare."

although it is a president's constitutional right to nominate a Supreme Court Justice, the Senate also has the constitutional right to consent. Following Justice Antonin Scalia's death in February 2016, Obama nominated Merrick Garland as a replacement. However, standing by previous comments, McConnell did not hold a vote for Garland, and Scalia's seat was filled by Neil Gorsuch months after the start of Trump's term. Thus, given the proximity of RBG's seat vacancy to the November election, there is uncertainty about the changes that could be faced with a new Supreme Court justice, and who would nominate said justice.

In order to understand the scope of the changes in policies due to the seat vacancy, professor emeritus Morgan Kousser was interviewed. Professor Kousser was known for teaching Law/PS/H 148 ab. The Supreme Court in U.S. History., has served as an expert witness or consultant in numerous voting rights cases, and is currently working on a book about judicial cases. When asked about the implications of a new Supreme Court justice, Professor Kousser emphasized the potential for the changes in policy with a third Trump appointee, the result of which is often termed a "Trump Supreme Court."

As demonstrated by Representative Collins' tweet, abortion would be one of the first issues addressed and contested. *Roe v. Wade*, the landmark 1973 Supreme Court case protecting a women's right to abortion without excessive government restriction, has attracted attention for decades from Republicans and pro-life organizations. Although abortion is currently legal in all states, Professor Kousser said that if the Supreme Court ruled that a fetus is a person from the point of conception, abortion would be considered a deprivation of life under the Due Process clause of the Fourteenth Amendment, and therefore could be criminalized throughout the country.

Despite the attention on abortion, Kousser said the first thing likely to be overturned would be the Affordable Care Act. A week after the election, there will be an oral argument for *Texas v. California*, a case that will decide the constitutionality of Obamacare. If no Supreme Court appointee is successfully confirmed before the argument, the decision is likely to be 4-4, thereby upholding the Fifth Circuit judges' decision, eliminating Obamacare. However, should Obamacare be overturned, this would result in 20 to 40 million people being without healthcare, signifying just how many people that decision would impact.



Supreme Court Justice Ruth Bader Ginsburg  
1933 – 2020  
Image is Public Domain

As Professor Kousser explained, a "Trump Supreme Court" would go on to contest decisions made regarding climate change, Affirmative Action (specifically *Grutter v. Bollinger* (2003)), decisions concerning voting rights, and gun control. For instance, it is currently illegal in California to sell gun clips with more than 10 bullets or to sell semi-automatic weapons; a "Trump Supreme Court" would almost certainly reverse this decision. Professor Kousser summarized, "Almost anything that a Democratic administration, either in a state or nationally, would pass, would be overturned by a Trump Supreme Court."

Regardless of the outcome of the election, Professor Kousser highlighted the potential impact on voting rights. He focused on two specific voting rights bills that have already been passed by through the Democratically controlled U.S. House of Representatives: HR 1 and HR 4. HR 1 expands voting registration and voting access, allows for new redistricting commissions in all states, and puts restraints on campaign finances. HR 4 regards Section V of the Voting Rights Act and establishes new criteria for determining which states and political subdivisions must obtain preclearance before new election laws may be passed. With a Trump Supreme Court, both bills would likely be declared unconstitutional. Thus, Professor Kousser says that the new Supreme Court nominee will determine the attitude towards voting rights.

Regardless of the outcome of the upcoming election, as said by Professor Kousser, "the politics of the United States could shift to the left, but the policy of the United States, because of the control over the Supreme Court, and over District and Appeals Courts, could shift to the right." Justice Ginsburg's replacement will determine the course for policy in our country for years to come.

## REMEMBERING THE NOTORIOUS R.G.B'

JOSHUA PAWLAK | OPINION

When Ruth Bader Ginsburg graduated from Columbia Law School in 1959, it seemed that her pursuit of a law career would be doomed before it even started. Despite graduating first in her class, contributing to two major law reviews (Harvard Law Review and Columbia Law Review), and obtaining strong recommendations from her professors (all while mothering a young child and caring for her cancer-afflicted husband), she was rejected from multiple clerkship positions on the basis of her gender. A US District Court judge eventually agreed to hire her, but not until after one of Ginsburg's former professors threatened to stop recommending students if she was not offered the position.

Her early years as a legal scholar proved to be essential to shaping her opinions on the gender equality she fought for in the years to come. At Lund University in Sweden, where she took a temporary position in 1962, she saw that women there comprised close to a quarter of law students. Having graduated in a 500-student class with just nine women, she had learned to accept the second-class position women were frequently relegated to: "I guess I knew inequality existed, but it was just part of the scenery. It was the way things were. You just had to cope with it", she said during an interview in her later years. Her time in Sweden showed her that it was possible to work towards equality: "I saw what was wrong and what needed to change in the U.S.A."

Despite the promise she saw outside of the U.S, she continued to face adversity upon her return, at many

times in the form of blatant sexism. She was informed, when she was hired as a professor at Rutgers Law School in 1963, that she would be paid less than her male colleagues, on the grounds that her husband already had a stable and well-paying job. When she took a professorship at Columbia Law School in 1972, she was not only the first woman to receive a tenured position at the school, but also the first woman ever to teach at the prestigious institution.

As a co-founder and the director of the Women's Rights Project within the American Civil Liberties Union, Ginsburg truly began the career that distinguished her as a masterful lawyer and legal scholar. The Project would argue hundreds of gender discrimination cases over the next several years, with Ginsburg herself arguing six cases before the Supreme Court between 1973 and 1976. She chose her plaintiffs extremely carefully and strategically, initially going after smaller discriminatory statutes and building on each success, and using male plaintiffs in multiple cases to demonstrate the harm gender discrimination causes at an institutional level. She would go on to win five of these cases, establishing precedents for legal review of gender discrimination cases and significantly advancing women's rights under the Fourteenth Amendment's equal protections clause.

In her years on the Supreme Court, Ruth Bader Ginsburg championed the equality she fought for in her earlier years. In her time on the bench, the Supreme Court extended the discrimination protections provided in the Civil Rights Act of 1964, rejected attempts to block same-sex marriage, and ruled in favor

of dozens of sex-discrimination cases. She became one of the most recognizable names and faces in politics, and has been portrayed in film, opera, and SNL skits. When asked when there would be enough women on the Supreme Court, she famously replied, "when there are nine".

The woman who became the 'Notorious R.G.B' for her often-fierce dissents will be remembered as a dedicated, brilliant, and deeply passionate champion of women's rights. Her death leaves a gaping hole in American politics and pop culture alike, one which may never be completely filled. Though the odds were stacked against her, Ruth Bader Ginsburg was a woman who faced and conquered every roadblock in her life. In the coming weeks, a conflict over her Supreme Court seat seems inevitable, but we must not let it distract us from her legacy: although she will be sorely missed, her fight for equality has not yet been won; it is our duty to continue the battle she leaves behind.

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# I'LL MAKE A MOCKERY OUT OF YOU: DISNEY'S LIVE-ACTION MULAN MOCKS EFFORTS OF ASIAN AMERICAN REPRESENTATION

HARUNA TOMONO | CULTURE

On September 4th, Disney released yet another live-action remake of one of its well-known animated films. Following the successes of *Cinderella*, *Aladdin*, and *The Lion King*, the newest adaptation of *Mulan* is now available to those who have an active Disney-plus subscription for a one-time payment of \$29.99. Despite this steep price tag, the void that the pandemic has left us with makes this a shiny new film to watch. But, is supporting this movie for its all-Asian cast and seemingly authentic portrayal really worth it?

As many know, the 1998 animated film tells the story of an empowered young woman, Fa Mulan, as she hides her identity to fight in the Imperial Army on behalf of her father. Through a series of personal revelations, she decidedly reveals her truth, expelling her from the army. However, by a show of bravery, she is, in the end, recognized as a worthy warrior and commended for her efforts in battle. With a message of female empowerment and as the only East Asian character in Disney's franchise, Mulan served as an icon for females and Asian Americans alike.

The 2020 adaptation is no different. With just a slight name change, Hua Mulan (Liu Yifei) battles fearlessly in a series of beautifully choreographed scenes alongside the Hun Army to defeat Bori Khan (Jason Scott Lee) and gain respect from the emperor. The addition of a powerful female witch — Xian Lang (Gong Li) — underlines the message of female empowerment that brought the original film great success. A quick glance at the cast list makes it evident that every member of the cast is of Asian descent. With a powerful feminist message and Disney's first all-Asian cast, the new Mulan seems like the epitome of what we have sought: female, East Asian representation that does not culturally appropriate Chinese

traditions. But, IMDb's list of the full cast and crew tells a different story.

Below the cast list lies the names of the production, direction, storywriting, and design teams. And as you scroll through, you begin to notice something peculiar: there are no Chinese names. Searching through the hundreds of individuals credited for their contributions, it becomes evident that the story on screen that we believed to be an authentic rendition of the story of Mulan is actually the brainchild of mostly White writers and designers, recreating a narrative based on the ideas they have formed on what a Chinese battalion looks like. A simple Google search about the accuracy of *Mulan*'s set design and costumes brings thousands of articles up with historians voicing their concerns on the misleading nature of the film. Furthermore, the historical accuracy of the story itself is widely skewed from the original anthology *Ballad of Mulan* — a flaw present since the 1998 classic's release. Despite efforts to bring the story closer to the original such as excluding the beloved dragon Mushu and changing the original love interest Li Shang into two different characters, Commander Tung (Donnie Yen) and Chen Honghui (Yoson An), the authenticity of the traditions and concepts presented throughout the narrative is far from true. Though the legend of Mulan has been adapted through the centuries, its stark contrast from the Disney-fied version is undeniable.

Behind the facade of an all-Asian cast and an empowering message to strong women lies the sad truth of 2020's *Mulan*: a majority White crew that unauthentically told a story that is not theirs to tell. It is as if they were making a mockery of the public that wanted to believe that Hollywood was moving forward in Asian American representation. Instead, we were fooled by the facade they had cast.



## THE LITTLE THINGS WE LEFT BEHIND

JUSTIN TOYOTA | HUMOR

The announcement that the upcoming fall term would also be fully remote has left many feeling disappointed. While certainly understandable in light of the current pandemic situation, for many virtual learning is a mere shadow of the full Caltech experience, lacking many of the most enjoyable parts about going here. There's a lot people can (and have) said about the logistical difficulties of online learning and how hard it is to maintain house culture without being in the houses. But I wanted to hear a different side of the story. As such, I have interviewed some of my peers to learn about the little things they miss about Caltech life, or what surprising benefits they have found in distance learning.

• "I miss the new house fireplace. There's just something novel about a fireplace that doesn't give off heat that you just don't see anywhere else."

• "I miss the pasta from Red Door. I tried making some pasta myself at home, but it was too flavorful. It just wasn't the same."

• "It's become a lot easier to game during lectures and recitation. I've played some of my best League games during physics lectures."

• "I find it so weird to lie down now. Everything is just too... odorless? I miss the bear pit. I tried to sweat on my couch while I watched a movie to make it more like the ASCIT screening room, but it's missing something."

• "God, as a chem major, not being able to be in lab sucks! How am I supposed to learn about what I can't even taste?"

• "I miss the fridge in Purg. It added some extra aroma to my leftovers that my family's fridge just doesn't."

• "I miss the showers in Dabney. Sometimes when I take a bath at home I won't run the hot water, just to make me feel like I'm back at Caltech."



A serving of Red Door's glorious pasta

• "It's kind of nice to be able to sleep during lectures. I mean, I did that before, but now it's not as obvious."

• "My neighbor's kid owns a turtle. Some days I consider kidnapping it to remind me of campus."

• "Online learning has been perfect for me as a CS major. When we were on campus I only used the computer for sets and projects. Now all of my learning is on my computer. I am closer to becoming one with the machine."

• "It's rough not being in the same room as the professor when they lecture. When we had normal lectures I could feel myself absorbing some of their knowledge, which is why I always sat in the front. I fed off of that energy. It nourished me. It nourished my soul. But you just don't get that from a Zoom call."

• "I'll never get to find out where the BoC meets."

• "There's no Tommy's around here. My tongue yearns for Tommy's chili. My stomach yearns for Tommy's chili. My entire digestive tract feels the siren call of the Triple Threat."

• "Something that was difficult about online lectures were the bathroom breaks. When you're in person, you just step out and go, no problem. But now that I can carry the lecture with me, I feel obligated to bring my laptop with me to the bathroom. And it's still not bad, until the prof asks me a question and unmutes me right in the middle of a big one, and it all goes downhill from there. I wish we were back on campus."

## 2020 ROTATION DINNER SCHEDULE

EDITORS | HUMOR

Last Name	First Name	Dinner A	Dinner B	Dinner C	Dinner D	Dinner E	Dinner F	Dinner G	Dinner H
All	All	Home	Home	Home	Home	Home	Home	Home	Home

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## AMAZON SKYBALL

KENNY THAI | COLUMNIST

Welcome back to Amazon Skymall! For those of you that are new here, 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~

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

<https://forms.gle/E8Mx8sJ9tFQnZcyy8>

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



Long Buy 3-Claw Stainless Steel Outdoor Carabiner Grappling Hook/Climbing Claw/Aquatic Anchor Hook Climbing, Hiking, Tree Lin  
★★★★☆ ~ 136  
13% off  
\$6.99 ~~\$7.99~~  
Lowest price in 30 days  
Get it as soon as **Tomorrow, Sep 25**  
FREE Shipping on your first order shipped by Amazon

Would you put your life in the... uhh... claws of a seven dollar grappling hook? Do you want to go against the opinion of this publication, the author of this column, and the Amazon product description that clearly says "NOT FOR SUPPORTING HUMAN" along with "is not suitable to bare human weight" and want to hang off it anyways? Then this climbing claw is definitely not for you! That is, if you can even manage to open the box without cutting yourself on the "very sharp" points. But seriously, don't be stupid. The seven dollar variation of the hook is rated to hold 88 lbs and nothing more.



One Hand Gaming Keyboard and Mouse Combo, 39 Keys PUBG Keycap Version Wired Mechanical Feel Rainbow Backlit Half Keyboard, Support...  
★★★★☆ ~ 416  
\$19.99 ~~\$49.99~~  
Get it as soon as **Tomorrow, Sep 25**  
FREE Shipping on your first order shipped by Amazon  
More Buying Choices  
\$17.59 (8 used & new offers)

Why pay for a full keyboard when you only need half? With all the money you'll save, you can get yourself a mouse! A hundred lines of code? How about one line of code! By slashing that unnecessary enter key, his keyboard cuts down on clutter so that your programs can run even more efficiently! Don't look back - you'll finally be able to curb your unhealthy reliance on those pesky delete keys! You can stop wasting your time with those fancy punctuation marks those pesky essay graders nag you about! It even comes with a cord included, handy for tying it around your neck when travelling!



FoxPrint Basketball Ball Pit - Toddler Ball Pit Tent - Sensory Ball Pit with Basketball Hoop & Zippered Storage Bag - 4'/120cm - Balls not Included  
★★★★☆ ~ 485  
Limited time deal  
\$13.71 ~~\$21.99~~  
Get it as soon as **Tomorrow, Sep 25**  
FREE Shipping on your first order shipped by Amazon  
Ages: 12 months - 7 years

yes, Amazon's search layouts aren't consistent between categories. you gotta deal with this.

Wanna relive the good ol' days in Dabney's ball pit? Well this might just be your chance! Maybe. Those balls here sure aren't as big as I remember them being. The pit is also only about four feet, so immersing yourself until you're invisible would be uncomfortable to say the least, but it does have something that singlehandedly puts it far above Dabney's ball pit, its basketball hoop to practice for your team's next /dabneyvictory ! At least... that's what I thought before I saw it: "Balls not Included". It appears that revisiting your glory days will cost you more than \$13.71 after all.

# NO

Hey there, kids~ Did you know that we here at The California Tech get paid to write our articles? I still can't believe it either! We're technically some of the highest paid employees of our parent company, ASCIT. Do you want to let me keep the money I make from writing this article instead of having to re-invest it in buying these items for someone else? Then this is the option for you! Or maybe you want to take some of this money

for yourself and push me out of my job, both of which I would applaud you for doing! We're always taking email submissions at [tech@caltech.edu](mailto:tech@caltech.edu). If you want to get even more involved in the paper, feel free to message me (Kenny Thai), Devin Hartzell, or any of our other elected editors. If you're truly set on taking my job for yourself, elections for my shared position of Tech Editor happen every year during second term, so give it your all!

## HOW TO CREATE QUALITY\* CONTENT FOR THE TECH

NORMAN CHUNG | HUMOR

In these trying times, there is an ever-growing need for two things: not letting our memes be dreams, and consuming the top-quality content of others in an attempt to forget all about this apocalyptic year. What better solution is there to these two problems than the Tech? Out of public service to the Caltech community, this is an article about how you can create quality\* content for the Tech, both for your necessity and the necessity of others.

Every piece of media starts with an idea, and content for the Tech is no different. Ideas are like the quotes people post on the Overheard at Caltech Facebook page: all the good ones come when you're not expecting them, and they can come at any time from anywhere.

- 3:00 AM prime procrastination hours? Yup.
- The cursed content in your House spam chat(s)? Absolutely.
- During that Zoom lecture which you should be paying more attention to? Hell yeah!

Even a seedling of an idea can grow up to become quality\* content worthy enough to be a part of the Tech. Don't be afraid to ask "What if?" and take something several steps too far into places no Caltech writer has ever dared to explore (for better or for worse).

Once you've got your idea, it's time to start writing. Go find a nice and quiet place. Sit down and get comfy with your PC. Channel the raw fervor the

writers of the Bee Movie had when they were crafting their masterpiece. Lay your 200 IQ ideas out in bullet format and consolidate them into something that looks like an article. If you somehow have extra time and motivation even as Caltech classes destroy you throughout the term, edit your stuff. After all, editing does tend to make things even more quality\*. (Alternatively, approach your content creation just like a hum essay due in an hour and Just Don't™.)

Of course, walls of texts are boring to look at, so you should probably include some kind of image with your content as well. If you're writing something more serious, you can take your own pictures and include those. But if you're like me, you'll be including memes which are tangentially related to the quality\* content you're making for the Tech.



Usually, images have accompanying captions which explain what's going on, and this image is no exception. This image reflects my state of mind as I write this article and ignore all the work I'm not doing.

Once you've made something, it's time to send it off for publication. Some things are guaranteed to happen in life, and the Tech is no exception to this rule. There will invariably be some section (possibly in Comic Sans) which will contain an email address somewhere in this edition of the Tech. Said section may also include a description of a Tech content crisis or a proposed solution to solving said crisis. Whatever the case, send your stuff to that email address. From there, it will grace the eyes of the Tech editors, who will then greet your content with some linear combination of disappointed looks, nods of approval, and raised eyebrows.

Once your article gets enough nods of approval, you'll get to see it become a part of the publication. At this point, you can be proud that your unholy creation quality\* content made it through the editing process. If not, you can always make some improvements and resend your stuff. And before you say your content won't ever be quality\* enough, just think: if this article can make it into the Tech, your article can too. Once all that's done, go finish the work you procrastinated while creating your content, take a little break, and start the whole process over again if you found it fun.

So what are you waiting for? Get out there and have some fun making some quality\* content! I, for one, would love to see what you people can come up with. :)

\*Bad is a quality too, you know. Just read this article...

This week's recommended Tech usage after reading: click/tap [here](#) to visit our Instagram page! (@thecaliforniatech)

