

The California Tech

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PASADENA, CALIFORNIA

TECH@CALTECH.EDU

OCTOBER 24, 2016

Caltech Chinese Association hosts Moon Festival



Photos Courtesy of Katherine Guo

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Caltech Y Column

CALTECH Y

The Caltech Y Column serves to inform students of upcoming events and volunteer opportunities. The list is compiled by Katherine Guo from information given by the Caltech Y and its student leaders.

Founded by students in 1916, the Y was organized to provide extracurricular activities planned and implemented by students as an opportunity to learn leadership skills and discover themselves. The mission of today's Y remains the same—to provide opportunities that will prepare students to become engaged, responsible citizens of the world. The Y seeks to broaden students' worldviews, raise social, ethical, and cultural awareness through teamwork, community engagement, activism, and leadership. More information about the Caltech Y and its programs can be found at <https://caltechy.org>. The office is located at 505 S. Wilson Avenue.

Ongoing and past programs hosted by the Caltech Y:

Alternative Spring Breaks: Peru, Costa Rica, New York, Yosemite, San Diego, San Francisco

Make-A-Difference Day: Hillsides Home for Children, LA County Arboretum and Botanic Garden, Children's Hospital Los Angeles (Coachart), Eaton Canyon, Lifeline for Pets

Explore LA: Lakers game, Next to Normal musical, Norton Simon Museum trip

RISE Tutoring program (an afterschool math and science-focused tutoring program that serves public school students between grades 8 and 12)

Upcoming Events

1. Inspiration Point Hike

Saturday | October 29th | 8:00 AM - 2:00 PM

Come join the Y-Outdoors for a hike up Echo Mountain all the way to Inspiration Point on Saturday Oct 29. We will pass the historic ruins of hotel, railroad, observatory and powerhouse. We should also be able to see the Pacific Ocean and more at our destination. We will meet at Caltech Y at 8am and should be back no later than 2:00 pm. The hike is 10.4 miles with 2740 ft elevation gain. So it should be enjoyable for moderate and experienced hikers.

Make sure to bring appropriate hiking shoes such as sneakers with good traction or hiking boots, 3L of water, lunch, snacks for the hike, sunscreen, and a couple of bucks to reimburse your drivers for gas.

Signup for this hike at <https://goo.gl/forms/ftnLwSo1J1VG29wX2>.

Please email phe@caltech.edu if you have any questions.

2. Union Station Family Center

Saturday | October 29th | 4:00 - 8:00 PM | Pasadena

Prepare and serve dinner to the homeless at Union Station Family Center in Pasadena. Food and materials are provided. The Family Center provides a home-like environment for up to 50 parents and children. It's one of the only shelters in LA County that accepts single fathers with children. For more info and to RSVP email [Benzi Estipona bestipona@gmail.com](mailto:Benzi_Estipona_bestipona@gmail.com).

3. Discount tickets on sale at Caltech Y!

Saturday | November 5th | 2:00 - 4:00 PM | Cost: \$27 | Transport NOT provided

Sales begin 12:30 pm, this Friday, October 21st at the Caltech Y (505 S. Wilson)

The Caltech Y embarks on a mellifluous journey curated by the Pasadena Symphony

at the Ambassador Auditorium in Old Pas. The concert starts in the mighty Appalachians with Copland's Appalachian Spring. For the main event, the concert moves to the bustling city of New York with Gershwin's Rhapsody in Blue. As a happy ending, we will end half way around the world in Russia with Rimsky-Korsakov's Scheherazade.

This offer is for students only; however students purchasing tickets are permitted to purchase tickets for up to one guest each - and that guest can be a non-student. Explore LA is coordinated by the Caltech Y. The Caltech Y is located in the Tyson House 505 South Wilson (Bldg. 128)

4. Washington DC Science Policy Trip

December 13th - 17th | Washington DC

Join us for an exploration into Science Policy in the nation's capital! Our five day trip includes lodgings and most meals; flights - if you choose; educational discussion sessions, and of course the opportunity to see Washington, DC landmarks like the White House, the Memorials; Smithsonian Museums; the National Archives; and the Capital. Discussion leaders include those who have played a role in setting and implementing science policy for the United States including: Academics, Lobbyists, Scientists, Politicians, and Caltech Alumni. Don't miss this opportunity!

Cost Options:

\$500 (with round trip flight to DC and back to LA)

\$300 (with one-way flight to DC - go your own way at the end) or

\$150 (no travel - join us in DC)

The Washington, DC Science Policy Trip is coordinated by the Caltech Y with generous support from the George Housner Fund. Questions and applications may be directed to caltechy@caltech.edu.

Visit: https://www.caltechy.org/programs_services/areas/dc/ for more info and applications (due by Tuesday, October 25th).

5. Hathaway Sycamores

Every Wednesday | 5:30 - 8:00 PM | Highland Park

Volunteer at Hathaway Sycamores, a group that supports local underprivileged but motivated high school students. There are a variety of ages and subjects being tutored. The service trip includes about an hour of travel time and 1.5 hours of tutoring. Transportation is included. For more info and to RSVP email [Sherwood Richers at srichers@tapir.caltech.edu](mailto:Sherwood_Richers@tapir.caltech.edu). Eligible for Federal Work Study.

6. Pasadena LEARNS

Every Friday | 3:00 - 5:00 PM | Pasadena

Come volunteer at Madison and Jackson Elementary School! We are partnered with the Pasadena LEARNS program and work with their Science Olympiad team or do regular tutoring along with occasional hands-on science experiments. Transportation is provided. For more information and to RSVP, contact azhai@caltech.edu. Eligible for Federal Work Study.

Beyond the Y

1. Volunteering with PCC

The Veteran students at PCC would appreciate a little extra support to prepare themselves for their civilian and academic careers. Having been out of school for several years creates special challenges that you can help them overcome.

Caltechlive!

SCIENCE
SATURDAYS

Ice Worlds

Saturday, November 5, 2016 | 4 PM

Tickets available on Saturday at the Auditorium Box Office
Beckman Auditorium | \$10 (general admission)
Recommended for ages 8 and up.



Journey to the polar extremes of the planet: the Arctic and the Antarctic – lands locked in ice for most of the year.

A BBC/Discovery Channel/NHK co-production in association with the CBC.

Discussion Leader: **Alistair Hayden**
Caltech graduate student in
Geological & Planetary Sciences

Save the Date
The Blue Planet – Seas of Life: Coral Seas
Saturday, December 10, 2016 | 4 PM

Caltech Students \$5
Free Parking
Caltech's Beckman Auditorium
www.events.caltech.edu



Call campus x 4652 for information

An hour or two per week could be a huge boost!

How can you help? One-on-one tutoring sessions with self-identified Veterans

When do you Need me? Right now!

Where? Caltech Campus or at PCC's Veterans Resource Center

Time of Day? Flexible - To be arranged between Tutor and Student

How can I get started? Call or e-mail the Volunteer Coordinator below, or got to the PCC Veterans Resource Center website. See link- <http://www.pasadena.edu/academics/support/veterans-services/become-a-tutor.php>

Contact the volunteer coordinator for more info:

Urte H. Barker | urtebarker@gmail.com | 626.379.7471

2. Volunteering with the Pasadena Kidspace Museum

December 26th - 31st | Pasadena

From Monday, December 26th to Friday, December 30th, Kidspace is hosting a day full of snowy fun, with real snow for guests to play in, and winter themed activities throughout the museum. On Saturday, December 31st, we are hosting our annual "Noon Year's Eve" event to celebrate the end of 2016.

Please see the dates and details below:

SNOW DAYS

DATES: December 26th through December 31st

TIMES: December 26th & 27th = 7:30am-5pm; December 28th, 29th, 30th = 8:30am-5pm

*12 volunteers are needed each day to help guests create snowflake crowns, explore the water cycle, make magnetic ice skating figurines, and play in real snow!

NOON YEAR'S EVE

DATE: December 31st

TIME: 9am-3pm

*12 volunteers are needed to help guest create noise makers and party hats, pass out sparkling apple cider, and assist staff with the dropping of thousands of balloons at 12 noon!

--If interested in any of these events, please respond with A) Your name or group's name, B) the number of volunteers who will be attending, and C) the date(s) you will be attending.

Please remember the following:

1) Volunteers **MUST** commit to the entire shift/full day. Shifts cannot be split up. Volunteers are not allowed to leave early, or be replaced by new volunteers mid-day.

2) These assignments fill up very quickly, so if you are interested, please RSVP sooner rather than later! Assignments will be awarded on a first-come, first-serve basis. (I will keep everyone updated on space availability.)

3) If you RSVP for an assignment, please make sure this is really a commitment you can keep. During the holidays, volunteers often back out at the last minute, or don't show up at all, which causes severe challenges for the museum. If you think the holidays might pose a problem for you in terms of keeping this commitment, please do not sign up for these events.

*This is a great opportunity for service groups!

*Lunch will be provided for all volunteers each day.

For more information please contact Brooke Applegate - bapplegate@kidspacemuseum.org

Rounding up the third debate

RAMYA DESHPANDE AND TANVI GUPTA
Page Editors

TRUMP: “She’s taking in tens of thousands of Syrian refugees, who probably in many cases -- not probably, definitely... in many cases, ISIS-aligned, and we now have them in our country... this is going to be the great Trojan horse.”

TANVI: Trump is trying to make a case for why not to accept refugees, but this is not a good way to do it. Refugees are fleeing Syria in fear of ISIS; they are unlikely to be ISIS-aligned. Trump was presumably trying to say that ISIS-aligned terror units would try to enter the US under the guise of refugees, but the vetting process for refugees typically takes 18-24 months and involves multiple checks by federal agencies and the United Nations. Of the nearly 785,000 refugees admitted since 9/11, only about a dozen have been arrested or deported due to terrorism concerns that existed prior to their entry in the US. The UN’s special rapporteur on the protection of human rights while combating terrorism stated that “there is no evidence that terrorist groups take advantage of refugee flows to carry out acts of terrorism”, and statements like Trump’s perpetuate unfounded fear and stigma.

TRUMP: “Well, I think it’s terrible. If you go with what Hillary is saying, in the ninth month, you can take the baby and rip the baby out of the womb of the mother just prior to the birth of the baby.”

RAMYA: Time out, Donald. Doctors do not perform abortions in the ninth month. It’s frankly horrifying to employ such rhetoric to describe the reality: less than 1.3% of abortions occur after 21 weeks and the vast majority occur in the first trimester [Washington Post]. Women who seek late-term abortions have legitimate reasons for doing so, including severe fetal abnormalities, birth defects or health risks to the woman. Taking such an extreme stance on reproductive issues will ultimately deny access to abortion services for these women and that in itself is a repudiation of Trump’s claim that he respects women more than anyone else.

TRUMP: “What I’m saying is I’ll tell you at the time... I’ll keep you in suspense, OK?”

RAMYA: He’ll keep us in suspense. About whether or not he would accept the results of the election. As Chris Wallace aptly pointed out, we have adhered to a long tradition of peaceful transitions of power - from the very first one in the Election of 1800, as John Adams and the Federalists passed on the reigns to the Republicans. And now, a presidential candidate is telling us that he may or may not be willing to accept the election results, keeping us in suspense as if democracy were a horror movie (although it is quite close with someone like Donald J. Trump running for President).

CLINTON: My Social Security payroll contribution will go up, as will Donald’s, assuming he can’t figure out how to get out of it...

TRUMP: Such a nasty woman.

RAMYA: You once said that nobody respects women as much as you do. Yet, you regularly call your female opponent “Crooked Hillary” and now when she rebukes you for avoiding taxes (something

you willingly confessed), she is suddenly an unrespectable, nasty woman.

CLINTON: And I’ll say something about the Affordable Care Act, which he wants to repeal. The Affordable Care Act extended the solvency of the Medicare Trust Fund. So if repeals it, our Medicare problem gets worse. What we need to do is go after...

TRUMP: Your husband disagrees with you.

RAMYA: Feminists everywhere must have winced at these words. How are a female candidate’s policy points delegitimized in any way by her husband? In fact, attacking Clinton through her husband seems to be a recurring theme with the Trump campaign: in the last debate, it invited three women who had accused President Clinton of sexual misconduct, in an attempt to somehow intimidate Hillary Clinton.

CLINTON: We have 11 million undocumented people... [Trump] said as recently as a few weeks ago in Phoenix that every undocumented person would be subject to deportation... law enforcement officers would be going school to school, home to home, business to business, rounding up people who are undocumented. And we would then have to put them on trains, on buses to get them out of our country.

TANVI: This is in reply to Trump’s plan for mass deportation, and it’s a very clever move. Clinton’s phrasing of the situation provokes an image disturbingly close to scenes of deportation from Nazi Germany; it was the first thing that came to mind as I watched the debate. Using this sort of rhetoric is smart because it expresses the difficulties of mass deportation in terms that even voters in favor of Trump’s “throw them out” approach will have to concede to.

CLINTON: We learned in the last debate he has not paid a penny in federal income tax.

TRUMP: We’re entitled because of the laws that people like her passed to take massive amounts of depreciation on other charges, and we do it. And all of her donors [do it too]... If you don’t like what I did, you should have changed the laws.

TANVI: While “not paid a penny” might be a stretch, Trump openly concedes using his 1995 loss to offset his tax payments for an unspecified period of time. His only justification seems to be that the government didn’t stop him - is he implying that if the law isn’t stringent enough, it’s okay to bypass it? This might not be the best way to way to appeal to middle class voters with frustrations about the tax disparity between them and the wealthy.

Curious tilt of the Sun traced to undiscovered planet

ROBERT PERKINS
Caltech Media Relations

This article is adapted from a story that was originally published online at caltech.edu.

Planet Nine—the undiscovered planet at the edge of the solar system that was predicted by the work of Caltech’s Konstantin Batygin and Mike Brown in January 2016—appears to be responsible for the unusual tilt of the sun, according to a new study.

The large and distant planet may be adding a wobble to the solar system, giving the appearance that the sun is tilted slightly.

“Because Planet Nine is so massive and has an orbit tilted compared to the other planets, the solar system has no choice but to slowly twist out of alignment,” says Elizabeth Bailey, a graduate student at Caltech and lead author of a study announcing the discovery.

All of the planets orbit in a flat plane with respect to the sun, roughly within a couple degrees of each other. That plane, however, rotates at a six-degree tilt with respect to the sun—giving the appearance that the sun itself is cocked off at an angle. Until now, no one had found a compelling explanation to produce such an effect. “It’s such a deep-rooted mystery and so difficult to explain that people just don’t talk about it,” says Brown, the Richard and Barbara Rosenberg Professor of Planetary Astronomy.

Brown and Batygin’s discovery of evidence that the sun is orbited by an as-yet-unseen planet—that is about 10 times the size of Earth with an orbit that is about 20 times farther from the sun on average than Neptune’s—changes the physics. Planet Nine, based on their calculations, appears to orbit at about 30 degrees off from the other planets’ orbital plane—in the process, influencing the orbit of a large population of objects in the Kuiper Belt, which is how Brown and Batygin came to suspect a planet existed there in the first place.

“It continues to amaze us; every time we look carefully we continue to find that Planet Nine explains something about the solar system that had long been a mystery,” says Batygin, an assistant professor of planetary science.

Their findings have been accepted for publication in an upcoming issue of the *Astrophysical Journal*, and will be presented on October 18 at the American Astronomical Society’s Division for Planetary Sciences annual meeting, held in Pasadena.

The tilt of the solar system’s orbital plane has long befuddled astronomers because of the way the planets formed: as a spinning cloud slowly collapsing first into a disk and then into objects orbiting a central star.

Planet Nine’s angular momentum is having an outsized impact on the solar system based on its location and size. A planet’s angular momentum equals the mass of an object multiplied by its distance from the sun, and corresponds with the force that the planet exerts on the overall system’s spin. Because the other planets in the solar system all exist along a flat plane, their angular momentum works to keep the whole disk spinning smoothly.

Planet Nine’s unusual orbit, however, adds a multi-billion-year wobble to that system. Mathematically, given the hypothesized size and distance of Planet Nine, a six-degree tilt fits perfectly, Brown says.

The next question, then, is how did Planet Nine achieve its unusual orbit? Though that remains to be determined, Batygin suggests that the planet may have been ejected from the neighborhood of the gas giants by Jupiter, or perhaps may have been influenced by the gravitational pull of other stellar bodies in the solar system’s extreme past.

For now, Brown and Batygin continue to work with colleagues throughout the world to search the night sky for signs of Planet Nine along the path they predicted in January. That search, Brown says, may take three years or more.

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Looking for something exciting to get involved in this new year?

We are looking for more contributors!

We accept reviews, opinion pieces, research, news stories, comics and more!

Email tech@caltech.edu with questions.

VICE PROVOST’S OFFICE HOURS

Vice Provost, Chief Diversity Officer, and Professor of English, Cindy Weinstein, offers weekly office hours. This is an opportunity for undergraduate, graduate students, and postdocs 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; the Caltech Diversity Center; and the Libraries. There are four 15-minute appointments available per hour. Please sign up in Parsons-Gates room 104, or call the Vice Provost’s Office at ext. 6339.

Fall term hours: 12:00-1:00 p.m.

Monday, Nov. 7

Tuesday, Nov. 22

Wednesday, Nov. 30

Thursday, Dec. 8

Tuesday, Dec. 13

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Feist surpasses 500 career save milestone

GOCALTECH.COM
Actual Sports Content Editor

PASADENA, Calif. (Oct. 15, 2016) – Senior J.D. Feist surpassed the rare milestone of 500 career saves with a 13-save performance at the SCIAC-leading University of Redlands on Saturday after-noon.

“It is an outstanding achievement for JD, and speaks not only to his ability as a goalkeeper and shot stopper – he has consistently been a high performer within the team

and leads us by his example – but also to his deliberate approach to his preparation and physical fitness,” Head Coach Phil Murray said. “He has been ever-present in his four-year career and will leave a huge void to fill in the backline when he graduates.”

A mere five minutes into the first half, the Bulldogs were on the board courtesy of a Casey Chubb Fertil header. In the 12th minute, Caltech gave up an own goal to put the score at 2-0. The

Bulldogs would strike again that half as Kayvon Parsa tapped in a deflection for the third.

The Beavers defense would hold strong from the 24th to 67th minutes before giving up the final goal of the game. Feist’s 13 saves marked his eighth double-digit performance of the season, while freshman Theo Yang recorded the Beavers’ lone shot on goal, which came in the second half.



JD practices for Cirque du Soleil and still gets save #498.
Photo Courtesy of Michael Wong



“You won’t!” – JD before save #499.
Photo Courtesy of Michael Wong



Take one down, pass it around, 500 saves for JD on the wall!
But seriously look, that other dude is so mad that he can’t score.
Photo Courtesy of Michael Wong

Mixed results in final cross country tune-up

GOCALTECH.COM
Actual Sports Content Editor

Walton clocked a 22:24 to shatter the previous program record by more than 30 seconds while leading the Beavers to a scoring team average time of 24:34.8, which also cleared the previous mark by over 30 seconds. On a wet course that ran roughly

15 seconds slower than the Multi-Duals at La Mirada Park two weeks prior, Walton chopped off a full 1:30 to place fourth overall and tops among all rookies. Classmate Jena Srikanth was a key contributor to the historic day, making her collegiate debut following injury as the Beavers’ No. 2 runner and already ranking as the seventh-fastest runner in program history. Her performance helped Caltech vault past Chapman University in the championship scoring format by more than 30 points, whereas the Panthers recorded a 24-36 dual victory at the Multi-Duals. Sophomores Melissa Gutierrez and Michelle Marasigan ran well in third and fourth position, with Gutierrez shaving 45 seconds

off her time at last year’s meet and Marasigan recording a personal best, while freshman Skye Reese broke out to score in fifth thanks to a 38-second improvement on her Multi-Duals time. Senior Lilly Luo also impressed, cutting 21

seconds off her most recent time and running almost two minutes faster than last year.

“Sophie was one of many on the team who turned in strong runs,” Head Coach Ben Raphelson said. “It was a really strong team effort. Collectively, we’re moving in the right direction, but we still have work to do in order to realize our full potential.”



Sophie’s bringing XC back.

-gocaltech.com

Freshman Simon Ricci again led the men’s team, placing 27th overall to lead the Beavers to their second-fastest team average time in history, just six seconds shy of the record. Fellow rookies Tanner Moore and Sam Blazes each moved

up a position in the lineup, with Moore finishing third on the team and Blazes scoring for the first time in fifth as the duo shaved 43 seconds and 1:14, respectively.

Sophomore Rohan Choudhury turned in a personal record on a full-length course by four seconds while the majority of the rest of the team also dropped significant chunks of time. Freshmen David Fager and Tiger Lu and junior Mason MacDougall all cut more than two minutes from their previous performance, while sophomore Joey Hong fell just short of that mark but clocked a personal-best as he ran almost a minute faster than at the same meet last year. Senior Rishabh Pipada also trimmed 1:30 from last year, while classmate Nick Holiday incredibly chopped off more than three minutes.

“We weren’t able to match the effort and motivation of some other teams in today’s field who really elevated their performances,” Raphelson said. “We didn’t run poorly, as our individual improvements clearly show, but I hope it will serve as a wake-up call headed into SCIACs and Regionals. As

the final competitive opportunity before our championship season, it showed that we’re positioned well, but have some critical things to work on if we’re going to end the year the way we’d like.”

Bradley maintains SCIAC lead against No. 17/1 Sagehens

GOCALTECH.COM
Actual Sports Content Editor

PASADENA, Calif. (Oct. 15, 2016) – Senior Christopher Bradley scored another six goals to retain the SCIAC lead as the Caltech men’s water polo team suffered a 21-11 defeat to national No. 17 and DIII No. 1 Pomona-Pitzer Colleges in the conference opener on Saturday morning.

The Sagehens improve to 11-7 overall and 1-0 in the SCIAC while the Beavers fall to 4-11 (0-1).

The Sagehens jumped off to a quick 3-0 lead before the Beavers got on the board, when sophomore Charles Ross and Bradley scored back-to-back goals within a

minute to cut the lead down to one. Before the first quarter ended, the Sagehens scored their own consecutive goals to stretch the lead back to three. Pomona-Pitzer turned it up another notch in the second quarter, scoring eight goals and giving up only one.

With only five goals scored in the first half, the Beavers went on a scoring spree to open the third quarter, netting five goals and following with another three in the fourth. Caltech’s offensive resurgence in the second half was for naught, however, as the Sagehens sat on a comfortable lead throughout the game, recording a final score of 21-11.



“NO! Please don’t shoot, Chris Bradley! I surrender!” – that goalie.
Photo Courtesy of Michael Wong

ASCIT Minutes

Meetings are every week in SAC 13

ASCIT Board of Directors Meeting

Minutes for 19 October 2016. Taken by Alice Zhai.

Officers Present: Andrew Montequin, Tim Liu, Bobby Sanchez, Sakthi Vetrivel, Robin Brown, Alice Zhai

Call to Order: 12:35pm

President's Report (Andrew):

- BoD retreat is scheduled for Saturday, November 19 - Sunday, November 20
- Got bagels and donuts this week
- IHC Chair and ASCIT president will meet with Deans about end of rotation party
- Planning to have IHC and BoD meet once a term

Officer's Reports:

V.P. of Academic Affairs (ARC Chair: Tim):

- Student faculty committee option chairs are chosen
- Frosh reps were chosen Sunday, October 16
- Special topic committee chairs will be chosen this weekend (October 22-23)
- Considering to make a list of professors with research projects for freshman

V.P. of Non-Academic Affairs (IHC Chair: Bobby):

- Librarians want to form a new library committee with a student representative from each house - committee will increase student awareness of resources available at the library
- Big I is happening based on survey results

Director of Operations (Sakthi):

- Deadline for club funding forms is Tuesday, October 25
- Club Funding Day is on Sunday, October 30th from 11AM-5PM

Treasurer (Kalyn):

- Absent

Social Director (Robin):

- Movie night for *Fantastic Beasts and Where to Find Them* on November 18/19

Secretary (Alice):

- 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: 12:57pm

The California Tech

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The Tech is published weekly except during vacation and examination periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and advertisers.

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Letters and submissions are welcome; e-mail submissions to tech@caltech.edu as *plain-text* attachments, including the author's name, by Friday of the week before publication. *The Tech* does accept anonymous contributions *under special circumstances*. The editors reserve the right to edit and abridge all submissions for any reason. All written work remains property of its author.

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The advertising deadline is 5 p.m. Friday; all advertising should be submitted electronically or as camera-ready art, but *The Tech* can also do simple typesetting and arrangement. All advertising inquiries should be directed to the business manager at tech@caltech.edu. For subscription information, please send mail to "Subscriptions."

Join the Meditation Mob!

Tuesdays, 12:00 - 12:50

Want to learn more about mindfulness meditation? It's a great way to improve your attention and to become more grounded in the present moment.

There's no religious component. We use secular, evidence-based meditation techniques.

We meet in the small room just off the lounge in Winnett. All students are welcome, from total beginners to more experienced meditators.

Mailing list and MP3 archive:
counseling.caltech.edu/students/meditation



From the President's Desk: Don't fear Big I

ANDREW MONTEQUIN
ASCIT President

If you think back to about two weeks ago, you will remember a survey sent out by the IHC Chair concerning Big I. For those of you who have never experienced a Big I (e.g. all current freshmen and sophomores), just imagine a different party in each of the south house courtyards happening simultaneously. It sounds pretty awesome until you imagine the struggle of organizing a party with another house, coordinating its construction, putting in all the hours of labor necessary to actually do it all, and then waiting in a line

on the Olive Walk to get in while security meticulously checks for a wristband on every partygoer. To add to this, Big I is typically held during mid-November, roughly a month and a half after the end of Rotation. All in all the immense amounts of effort and short time frame involved with Big I have, according to many anecdotes, taken a lot of the fun out of throwing the party itself.

Now that the survey results are in though, it looks like we're not quite ready to give up on Big I just yet. While "Big I as normal" and "campus-wide party + another school" were roughly even in first choice votes, "Big I as normal" was

the clear winner in second choice votes. As a result, Big I will happen once again. Planning for Big I will begin soon, but because of the timeline, the party itself will almost certainly have to occur during the winter or spring term of this academic year. Although this will hopefully eliminate the massive time crunch that Big I has been in the past, at least three houses will now have two interhouse parties in one term. Additionally, we are looking into the possibility of inviting another local school to the party, but that has not been finalized yet. For the last piece of logistical information, the house pairings for Big I will be as follows:

Blacker/Page, Dabney/Avery, Fleming/Ruddock and Ricketts/Lloyd.

Finally, since this is supposed to be my platform for addressing the undergraduate body, I would like to ask for you to not brutally beat all the fun out of putting together Big I. Sometimes we have the tendency to hold on to traditions long past the point of them being fun anymore, and in some respects that has happened to Big I in the past. The announcement that Big I is happening again shouldn't be met with groans of "great, now I'll be forced to go spend dozens of hours building something ridiculous for a four hour party just

because that's the precedent." They say Rome wasn't built in a day, but I can tell you that Apache (a.k.a. Ricketts Interhouse) sure as hell is. And while the glory of Ricketts Interhouse definitely can't be translated directly to Big I, the point is that showing off our creativity in the form of parties doesn't have to come at the cost of a month's worth of hard labor. Even though I sincerely hope "Make _____ Great Again" memes are dead and gone by the time Big I happens this year, let's try to make Big I great, enjoyable, non-stressful, and phantasmagorical (one of my favorite adjectives) again.

	1 st Choice	2 nd Choice	3 rd Choice	4 th Choice
Big I as normal	114	120	68	25
Smaller parties throughout the year	66	105	103	22
Campus-wide party w/ another school	127	72	77	29
Do nothing	24	22	45	84
Abstain	0	9	26	110

Results from the recent Big I survey

Crossword

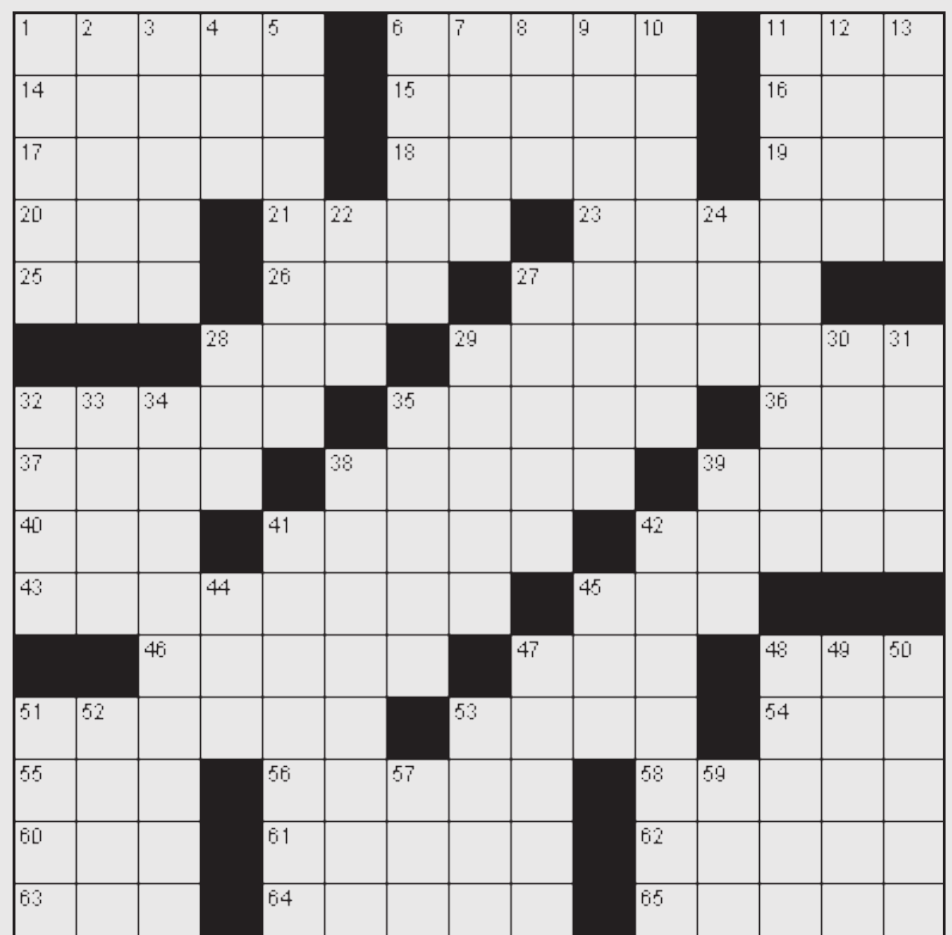
Across

1. Accumulate
6. Hand shovel
11. Male sheep
14. Relating to the nose
15. Metal spike used in mountaineering
16. Self
17. Relish
18. Choose by vote
19. Cooking vessel
20. The night before
21. Scourge
23. Feed container for animals
25. Allow
26. Used to control a horse
27. Transplant
28. Cerise
29. Uphold
32. Earlier in time
35. Enumerate
36. Express displeasure or contempt
37. First class
38. Hag
39. Singing voice
40. Short sleep
41. Seashore
42. A squeaking sound
43. Calibrate
45. Large tub
46. Deed of conveyance
47. Craze
48. Kind of fairy

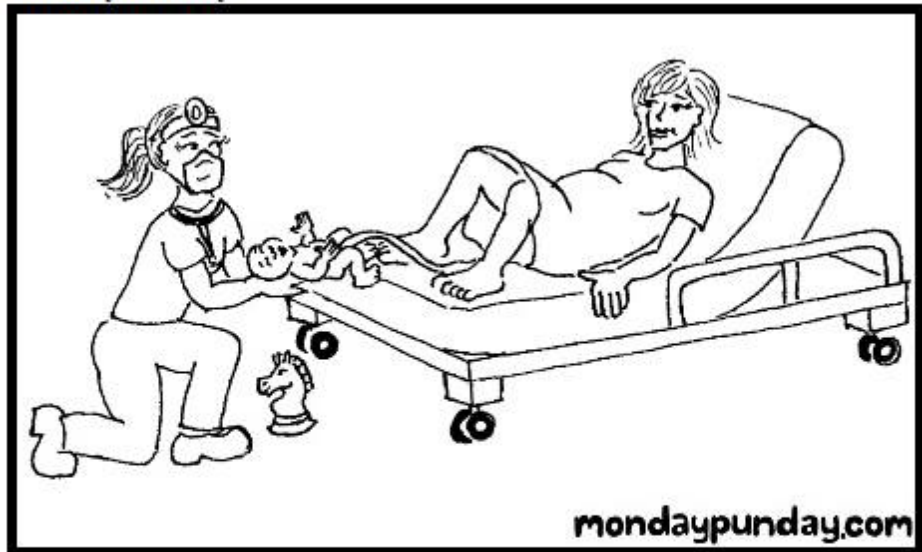
51. Headgear for a horse
53. District
54. Hawaiian garland
55. Regret
56. On the move
58. Inexperienced
60. Tavern
61. Barely sufficient
62. Beverage made from apples
63. Encountered
64. Woolen fabric
65. Mineral used as an abrasive

Down

1. Someone who invests in a theatrical production
2. A moderate purple
3. Useful resource
4. Was seated
5. Drool
6. Exhausted
7. Heap
8. Consumed
9. School of thought
10. Contestant
11. Honorable
12. Highly excited
13. Nocturnal insect
22. Assist
24. Frequently
27. Haggard
28. Fish eggs
29. Elk
30. Scintilla
31. Corner
32. Twinge
33. Bellow
34. Person residing and being treated in hospital
35. Rugged box
38. Mix together different elements
39. Creative activity
41. Short heavy curved sword
42. Close of a musical section
44. Carried out an action
45. Vehicle
47. Strong suit
48. Leave or strike out
49. Pry
50. Torrid
51. Part of a hat
52. Character from an ancient German alphabet
53. Dynamism
57. Pitch
59. Objective



Monday Punday



This picture represents a common phrase, title, or person.

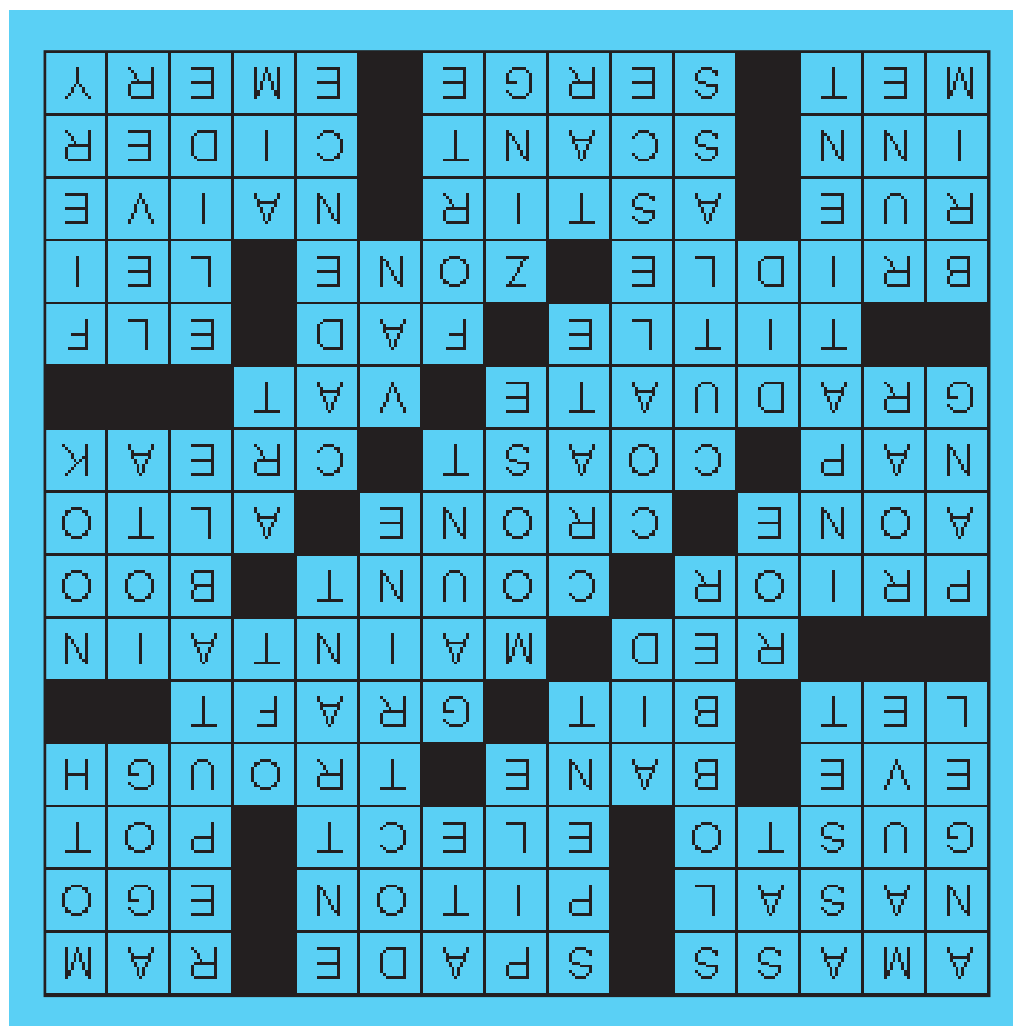
Think you know the answer? Take a guess at mondaypunday.com/303

Granny's Day Off



Slava, Nina, Lazarina

Answers to current crossword (pg 7)



-<http://puzzlechoice.com>

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