

Imposters, All of Us

ANDRE COMELLA
Contributing Writer

There are a lot of commonalities among students at Caltech. As a small school at the forefront of research, Caltech demands excellence of its applicants and has the ability to select only those who show it. No one managed to get here without a great deal of passion, intelligence, and determination. The people who come here are used to being at the top, no matter where they were. But Caltech is a whole different environment, many people were used to being the best, and now half of them are below average.

Intelligence and high performance have been part of many student's identities for as long as they can remember. How many of us were "the Smart One" in high school? To suddenly lose that is to suddenly lose a core part of what makes someone who they are, and leaves them in a state of crisis over their very identity.

Imposter syndrome is described as a condition where one believes, in spite of external evidence and praise, that they are much less competent, intelligent, and deserving than people perceive them as being. Success and respect are not the result of hard work and positive attributes, but rather luck and deception. It is a crippling thing to live with. Imposter syndrome means living without confidence or self-worth. It's feeling ashamed by every compliment you're given because every time someone compliments you it feels like you lied to them. It's feeling guilty for your successes, feeling like you stole them from someone who actually deserved them.

It's not surprising to anyone that this is a problem here, but the extent is much greater than most people realize. In my days as a UCC, I spoke to many people about these feelings. It's a strange thing to have half a dozen people in a week tell you they think they're the worst in their class. Definitionally alone, this can't be true, but that doesn't stop many people from feeling that way. See, we have this strange culture at Caltech, where people are willing to express quite openly the struggles they face, but not that they're actually struggling. It's someone talking about how they've been running on 4 hours of sleep a night all term, are taking 51 units, and are totally fine. The irony is in how often people compare themselves to other "successful" people, who, only privately, admit to the same feeling.

So we live in this interesting world where everyone around us seems to have it just as bad

or worse, but is cruising along just fine. The sentiments I heard expressed were not just "I feel like I'm barely getting by," but also came with "and I feel like I'm the only one." It is this last part which is perhaps the most damaging. It leaves people feeling like they're weak and incapable of handling their problems and stresses. As if it isn't bad enough to have to deal with the struggles in our lives, we have a culture that makes us feel bad about feeling bad.

We need to be better about these things, about admitting when we're overwhelmed, about talking about what we're all going through, about supporting each other instead of putting each other down, about swallowing pride, letting down the facade, and admitting that we're drowning. Maybe it doesn't solve the first set of problems we're dealing with, but it helps so much to know we're not each alone. Both to not feel like we're each the only one's suffering, but also to provide support and commiseration for each other. If we're going to all have to get through this place, let's at least do it together.

D.C. Science Policy Trip

ALEX CUI
Page Editor

A group of 6 undergrads and 14 graduate students along with Caltech Y staff went to Washington DC from Dec 13 - 17. D.C. was freezing cold, with record low temperatures, but make no mistake -- the city was scrambling to prepare for the one of the most unpredictable administrations in history, and everyone we talked to was trying to prepare for it.

We got the inside look from influential scientists-turned-policymakers, like the director of DARPA (Defense Advanced Research Projects Agency) Arati Prabhakar, the director of the NSF (National Science Foundation) France Cordova, and the director of the National Institute of Deafness and other Communicative Disorders (and previous Fleming President!) James Battey. Some of the funding agencies were prepared to change the way they communicate to Capitol Hill to get the funding they need. Others, like the Assistant Director of the Office of Science and Technology Policy, Kei Koizumi, were concerned

about whether or not the Trump administration would take notice of their advice like the Obama administration had. Overall, it was a scene of calm uncertainty. The White House could only do so much to affect science policy in the US. Ultimately, much of the science funding was in the hands of relatively more consistent Congress.

So how do these academics get into the world of policy? It turns out everyone's story is different. One alumni took a one way bus to Washington DC and knocked on the doors of senators until he got a job. Others, like James Battey, work as PIs in government labs and slowly worked their way up the bureaucracy. Others, like DARPA head Arati Prabhakar, were leaders at universities, who were then recruited into the public sphere. Once you're in, it's not easy to stay employed. The election cycle means that many of the science analysts in the OSTP have less than 3 years of experience in their current job, and don't know where they'll be employed next until a few months before your current

contract ends. Nonetheless, many are confident they'll find a new position somewhere, and are willing to follow very non-linear career paths.

While Caltech is sometimes considered an overly theoretical space, it's no coincidence that the heads of the three of the biggest science funding agencies, NSF, DARPA, and ARPA-E, are female graduates from Caltech. Alumni credit their broad education for helping them understand the science behind policy across all fields, but they also credit a desire to make a more human, more direct impact on the world, than what they could do in academia. The role they play is critical, as these agencies generally have the independence from Congress to choose where their funding goes, and drive the direction of scientific innovation. After hearing these stories, many of the Teachers on the trip were convinced that science policy was the path for them. With the greatest challenges in science ahead of us, the need for brilliant, science-literate minds on the Hill will not die down anytime soon.



Students pose in front of various national landmarks

Photos Courtesy of Alex Cui

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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.

Upcoming Events

1. Caltech Y Nuclear Winter Series International Nuclear Weapons Policy in the Current Era:

A Conversation with Dr. Michael Nacht

Wednesday | February 8th | 12:00 to 1:30 pm | Location to be announced | Lunch is provided (spaces are limited), RSVP Required

RSVP: <https://goo.gl/forms/UvTmxxsIvKAMazxCo1>

Michael Nacht served as Assistant Secretary of Defense for Global Strategic Affairs (2009-2010), for which he received the Distinguished Public Service Award, the Department's highest civilian honor. He also served as Assistant Director for Strategic and Eurasian Affairs of the US Arms Control and Disarmament Agency (94-97), during which time he participated in five Presidential summits – four with Russian President Yeltsin and one with Chinese President Jiang Zemin. Nacht currently holds the Thomas and Alison Schneider Chair in Public Policy at U.C. Berkeley and is Chair of the Policy Focus Area for the Nuclear Science and Security Consortium led by the Berkeley Department of Nuclear Engineering. He is the author or co-author of six books and more than eighty articles and book chapters on nuclear weapons policy; regional security issues affecting Russia and China, the Middle East and East Asia; cyber and space policy; counter-terrorism and homeland security; international education; and public management.

The Caltech Y Social Activism Speaker Series (SASS) Committee is hosting the lunch seminar with Professor Michael Nacht to discuss recent international developments in nuclear weapons policy as a part of a Nuclear Winter Series. As tempers flare and tensions rise across the globe, open dialog on nuclear arms is more important now than ever. Watch for more programs within the series this winter term. Programs coordinated by the Social Activism Speaker Series were made possible with generous support from the George Housner fund and the Caltech Y.

2. 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. Eligible for Federal Work Study.

3. 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. Rev. William Barber, President of the North Carolina NAACP

Wednesday | February 1 | 7:00 pm | Thorne Hall – Occidental College in Eagle Rock | Free

Oxy Facebook event page: <https://www.facebook.com/events/648332075331014>

Rev. Barber is the president of the North Carolina NAACP and leader of the Moral Monday movement, a multi-racial, multi-generational interfaith movement that has led protests at the NC General Assembly around issues of injustice, including voting rights, gun violence, immigration reform, school funding, LGBT rights, the minimum wage and workers' rights, and others. Hundreds of activists, including Dr. Barber himself, have also engaged in non-violent civil disobedience to expose what the politicians in North Carolina are trying to do in the dark.

The event is sponsored by Occidental College and several student groups and cosponsored by the Southern Christian Leadership Conference, Clergy and Laity United for Economic Justice, the Coalition for Humane Immigrant Rights in LA, the LA Alliance for a New Economy, the LA County Federation of Labor, the Black Worker Center, and LA Voice. Martin Luther King spoke in Thorne Hall in April 1967, 50 years before Rev. Barber's talk.

Rev. Barber's speech to the Democratic convention last summer made headlines around the world. If you weren't able to see it then, here's a link to that speech: <https://www.youtube.com/watch?v=aw3PUghqIAA>

2. Science Fair Judges Needed

February 6th - 9th | 9:00 AM - 2:30 PM (Flexible Hours) | Glendale, Ca

Volunteer judges are needed for Franklin Magnet School Science Fair in Glendale. Transportation available and we will feed you too! Graduate students preferred but all welcome to apply.

The times are flexible and you don't have to be present for the whole time slot. We are in need of 12 volunteers to judge our students' projects/submissions. Ideally these volunteers will have a solid background in science and/or currently work in a science-related field. Another preference is that the volunteers not be related to any children at our school to ensure impartiality when awarding prizes.

Please let me know as soon as possible if you or any of your colleagues would be willing to commit to this awesome event that fosters a love of science in our youth. Please email Mary at mbehar@gmail.com immediately if interested! Time is running short. Compensation will be in the form of a free lunch on the day(s) of service, networking with other scientists and the joy of having volunteered.

We are also open to any donated prizes you think elementary school-age children might want for first, second, third prize and honorary mentions.

Caltechlive!

EARNEST C. WATSON
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USING FISH TO UNDERSTAND HOW AND WHY WE SLEEP



David Prober,
Assistant Professor of Biology, Caltech

People can reject food, abstain from sex, and control their thirst, but they cannot keep from falling asleep. And yet, we know remarkably little about why we sleep or how sleep is regulated.

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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.

Student Office Hours for Winter Term 2017:

2/21/17 Tuesday 11:00-12:00 a.m.

3/2/17 Thursday 12:00-1:00 p.m.

3/13/17 Monday 10:00-11:00 a.m.

ARC Steps up Surveying Efforts

TIM LIU
Contributing Writer

Surveys and data collection have become important tools for communicating with faculty.

Any Caltech student is familiar with the following subject line in their inbox: "Please fill out this survey about..." Since the start of February, I've received an average of 3 surveys per day in my inbox. While occasionally a nuisance, surveys are critical for gathering student feedback and for guiding decision making. One of ARC's roles is to communicate student concerns and opinions to faculty members and administrators. The ARC is a small organization with only seventeen official members, and our thoughts represent a small sliver of student opinion. Instead, the ARC relies on surveys to collect data and better gauge student views. Through sometimes painful trial and error, these surveys have begun increasingly rigorous, opening the door to more data driven decision making.

I've spent three years on the ARC, and surveys have been a constant part of the organization. As the ARC chair, I've tried to make our approach to surveys more systematic and scientific. When designing a survey, our goals are to make them short, unambiguous to answer, and meaningful. Survey drafts are reviewed and polished multiple times, and sometimes sent to several trial groups before being launched. Survey results are also more heavily scrutinized than before. In the past, a cursory glance over the charts automatically generated by Google was often the only "analysis" that was performed. Since last year, several formal reports have been written up by ARC members detailing how a survey was conducted, what question the survey sought to answer, and what was learned. All of the completed reports are available at arc.caltech.edu, and two more are being drafted. In my last few months as ARC chair, some of my goals for the ARC are to standardize our surveying techniques, produce more reports, and to produce them faster. Currently, it can take more than a term to "close the loop" on surveys and go from sending a survey to publishing a report. I

want to shorten this time scale to less than a month.

Our surveys are meant to enable faculty to make informed decisions, and to give faculty an accurate image of student behavior and student opinion. There is a large body of collective information, passed by word of mouth or gained through experience, that students take for granted and that faculty cannot easily access. This zoo of student knowledge includes the relative difficulty options, when students take specific courses, and other disparate tidbits that are intuitive and obvious to students, but that faculty are less aware of simply because faculty members are not undergraduates. Student faculty communication is critical for bridging the gap in knowledge, and ultimately for shaping policies that align with the interests of students and faculty. Written summaries of surveys, which can be easily distributed amongst faculty members, are especially powerful tools for communication. Open discussion between students and faculty is critical, but it is dangerous to only rely on faculty members playing telephone to spread student opinion. The surveys and reports published by the ARC are meant to overcome this limitation, and to give faculty a more coherent message from students.

Finally, I'd like to thank students for filling out our surveys. Though they may sometimes take more than "a few short minutes" to fill out, response rate is critical. A larger sample size improves the quality of our data, and lets us perform more interesting analysis on specific cohorts. Our most recent survey, sent by the Core SFC committee, had 526 respondents. For comparison, this was more participants than in any campus wide election since 2012. A higher response rate also demonstrates to faculty that students care about issues and adds legitimacy to the data. As students, we cannot expect faculty members to automatically know what our opinions are. It is a student responsibility to voice our opinion in a coherent and representative fashion. Well designed surveys and the resulting written reports have become powerful tools for communicating clearly with faculty members.

Response to Complaint on Trash Comic

BOLTON BAILEY
Contributing Writer

To the editors of the Tech,
In the February 13th edition of the Tech, an editorial note was placed addressing a complaint. The complaint was about a comic entitled "Trash" published in the Tech the week before. I would like to take the time now to respond to that complaint.

Upon reading the comic "Trash", published in the February 6th edition of the Tech, I had a light-hearted chuckle. The comic reminded me of the many times when I myself have, after procrastinating on an assignment and going to bed late, chosen to ignore my alarm and sleep till one or two in the afternoon. This kind of thing happens too often in my life, and whenever I roll over in my bed to discover I have slept past my morning classes and maybe a few of my afternoon ones, I groan inwardly at my lack of discipline for not going to bed earlier, and for not starting my assignments earlier.

But I still chuckled at "Trash",

because the comic reminded me of something: Despite the fact that I am lazy and that I should improve my work habits, I'm not alone in having the kind of feelings that the comic portrayed. My friends and my peers throughout the school share my experiences, which is a fact that I feel the humor of "Trash" was consciously predicated on. Rather than making me feel depressed, the comic made me feel glad to know that other people in my position feel the same way as me. Rather than being unnecessary, I felt the comic gave me a needed sense of support. I felt the comic was incredibly sensitive in how it perceived, acknowledged, and gave acceptance to the (often biting) self-doubt so many of us feel.

Reading the complaint placed in the Tech last week, I get the sense that the author deeply respects the power of emotional health, and that they want to support the well-being of the Caltech community. But the message of this complaint is a message of censorship. While "Trash" affirms that negative

thoughts may be commonplace at Caltech, it also implicitly affirms that we can deal with negative thoughts by discussing them with our friends, whether it be through conversation, or through publishing a comic in the Tech.

The message that the editors conveyed in their note was an apology towards anyone they offended by publishing "Trash". But was that apology meant to convey regret? Does this apology mean the Tech staff is resolved to censor future submissions similar to "Trash"? The note doesn't say that they will or will not, but by publishing the note, the editors have discouraged potential writers and illustrators from addressing "potentially problematic" topics. The fact is, some of these topics may lie very close to their hearts, and to the hearts of the Tech readership, and having ways to express these thoughts is a positive thing. I hope that the Tech remains open to these forms of expression, because while may be melancholy in tone, they remind us that we are united by common experience.

Bechtel Town Hall Meeting Notes

ANDREW MONTEQUIN
Contributing Writer

It is certainly no secret that a new dorm is being constructed on campus, nor is it unknown that it will be larger than every current house and will impact Caltech housing and student life for many decades to come. For that reason alone, the question of how to fill it is not one that should be made without careful deliberation and consideration of all possibilities. To aid in this process, a panel of RAs who volunteered to share their experience with residence life at their undergraduate institution was assembled for last Monday's town hall meeting and, in front of a crowd comparable in size to a Ch 1a lecture, they did just that. While more detailed notes of the meeting will be published in the online version of the Tech, what follows is a concise summary of the meeting's discussion for any of you who may have missed it.

To begin the meeting, we heard each of the RAs describe their living situations as undergrads. These experiences ran the gamut from Rachel's large, female-only dorm at the University of Kansas and Vatsal's triple in Berkeley's "athlete dorm," to the smaller communities contained within Juri's co-op at Brown and Viki's upperclassmen house at some liberal arts school in Cambridge. As expected, our level of familiarity with the living situations they described also varied wildly. On one end of the spectrum was Juri's co-op, which he described as a group of about 50 people who live, eat and socialize together, while the rules and regulations that came with living in Rachel's female-only dorm prompted one student in the

audience to ask what century she was describing.

When it came to the topic of comparing Caltech's houses with their undergrad living situations, all four RAs stated their appreciation of the house communities and the support that they provide for students. Additionally, there was agreement that the biggest tangible difference between our houses and their dorms was the process by which students are sorted into them. In short, they were all initially placed as freshmen after filling out a questionnaire some time prior to setting foot on campus for their freshman year. With a sample size of four, a very "hit or miss" picture of this process emerged. Some met their best friends this way, while others ended up hating who they were placed with. However, they did note that Rotation can be a stressful time with an even tougher adjustment period for those who felt like they were put in the wrong place. As Juri put it, it took him three weeks to learn how to take out trash when he started college, so asking freshmen to choose a house after two weeks requires a very rapid adjustment to college life. He did mention, however, that giving people time to reconfigure things and lowering the barrier for moving around could alleviate some of that.

Major ideological differences between some of the RAs and their audience brought about by different experiences mainly arose in discussion of the pros and cons of being given "a community for free" by the house system. Vatsal, after describing his experience of being thrown into an unfamiliar environment with people who weren't all like him, said that his adjustment was a big part of the

growth he went through as an undergrad and was able to extract a lot of value out of the experience. Echoing some of his sentiments, the others also agreed that they felt like they benefited from living with people they would not have actively chosen to live or interact with. Following from this, they shared their beliefs that it is very easy to let the houses become very insular, something that many of us probably also agree with.

During the open question and answer session, the biggest question on the minds of students revolved around the how the panelists were able to learn from upperclassmen given their living situations. For Vicki, it was through "tutors" placed in the dorms and participation in extracurricular activities, while Juri took more of a trial and error approach to learning. Rachel did note that at her freshmen dorm, the level of "built-in" mental health support was nowhere near the level that is present in the Houses. It was not until the final question of the night that the Honor Code was brought up, and how much of its success can be contributed to the strength of the house community. Unfortunately, we did not have time to solve the problem of whether humans are inherently selfish, so in the end this probably raised more questions than it answered. Where is the efficacy of the Honor Code derived from? Can one event shatter it or weaken it substantially, or is it strong enough to survive a shift in the way that we live on campus? Every interaction that takes place at Caltech occurs within the context of the Honor Code, so it is only fitting that a discussion of residence life happens under the same circumstances.

To view past survey results, please visit:

arc.caltech.edu

and click on "Surveys" in the bottom left

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Rookie Gallup wins SCIAC 100 breast title

GOCALTECH.COM
Actual Sports Content Editor

COMMERCE, Calif. (Feb. 17, 2017) – Freshman Thomas Gallup won the individual conference title in the 100 Breast, earning his first NCAA ‘B’ cut on Day Three of the SCIAC Championships.

Gallup is the first member of the Caltech men’s swim & dive team to win an individual title in a swimming event since 1996 and could become the Beavers’ first representative at the NCAA National Championships since 1983, should his seventh-ranked time in the nation remain among the Top 16 after all championships have concluded. He also played a key role on the 400 Medley Relay team that claimed a spot on the podium with a program-record 3:23.46, which was good for third place and the Beavers’ first All-SCIAC relay since 1993.

The Beavers find themselves in a tie for seventh place with 234 points – 43 more than after Day Three of last year’s meet and a mere six points out of fifth place, which would be Caltech’s best in decades.

A slew of other records fell over the day’s two sessions, beginning with freshman Alex Moraru in the 400 IM preliminaries. The rookie chopped 20 seconds from his top time in the regular season to clock a 4:08.71

and earn the eighth seed in the finals heat. He would go on to place ninth in the evening.

Sophomore Henry Steiner followed by re-setting his own 100 Fly record and qualifying for the finals heat, then lowered it again as he moved up a spot from seventh to sixth and touched just over the 50-second barrier at 50.15. Senior Leon Ding dropped exactly two seconds from his time in the same event, finishing in 54.37.

The Beavers’ record-breaking streak continued with sophomore Jonathan Willett in the 200 Free, where the recently crowned 50 Free record-holder blazed his way to a 1:43.31 to make it back in the consolation finals heat as the 13th seed. At finals, he re-set the mark by the smallest of margins, trimming .01 from his morning time and moving up a spot to finish in 12th. Junior Avikar Perival



Look at these fish out of water.

Photo Courtesy of Joe Bergman

and senior Kyle Seipp each shaved significant time as well, with Perival getting under the 1:50 mark for the first time in his career (1:48.93) and Seipp dropping

an impressive five seconds.

Gallup then went to work in the 100 Breast, beating the entire field by more than two seconds and likely earning himself a trip to the NCAA Championships with an incredible 55.16 – just .45 off former national champion Steven van Deventer’s SCIAC record. He led from start to finish in the finals heat, touching three quarters of a second ahead of the runner-up at the 50 mark and closed with the only sub-30 split to win by nearly a second. Sophomore Adam Dai just missed out on joining him in the evening session, touching the wall in a season-best 1:01.62 to finish

22nd, while junior Alexander Bourzutschky placed 32nd via a three-second drop.

Sophomore Dylan Lu rounded out the day’s events with a consolation finals-qualifying appearance in the 100 Back, giving the Beavers a representative in every event that evening. His 53.13 in the morning was a half-second PR, but he followed that with another near-half second drop to finish in 11th place with a 52.72, just .34 off the program record. Junior Hanzhi Lin notched a PR by half a second as well, finishing one spot out of an alternate position in 54.86, while Ding came in almost a second under his seed time at 59.03.

The night ended with the Beavers shocking the conference in moving up from the seventh seed to reach the podium in third place behind likely national qualifiers Claremont-Mudd-Scripps and Pomona-Pitzer Colleges. Lu led off with a marginal PR of 52.68, followed by the freshly minted SCIAC champion Gallup, who outsplitted the field by over a second with a 54.84 to put the Beavers half a second clear of fourth place. Steiner then posted his first career sub-50 butterfly split (49.90), with Willett cruising to a 46.04 with nearly two seconds of separation from both second and fourth place.

Cahill sinks the Sagehens on Senior Day

GOCALTECH.COM
Actual Sports Content Editor

PASADENA, Calif. (Feb. 17, 2017) – Locked in a tight game and trading leads with an on-paper superior SCIAC foe on home soil with just over a minute to go in regulation, the Caltech men’s basketball team knows this situation all too well. It almost led to perhaps the biggest SCIAC upset of the year when the Beavers came up short to Claremont-Mudd-Scripps Colleges back on February 2nd.

Clinging to a two-point lead with just seconds separating them from the sweet relief of victory and the agony of defeat, this too is a situation the Beavers know all too well when just days removed from the CMS game, the same team had its heart broken at the hands of an Occidental College buzzer-beater three-pointer.

As luck would have it, both of these situations reared their ugly heads in the Beavers’ Senior Night clash with Pomona-Pitzer College, then ranked third in the SCIAC and eighth in the NCAA West region. Yet this time, the Beavers refused to let themselves be defined by heartbreak. They hung tough in the face of adversity, scored when they needed to and held it together defensively long enough for Pomona-Pitzer guard Corbin Koch to miss the game-tying layup to seal a 61-59 Caltech victory over the Sagehens on Senior Night. The win also marks the Beavers’ first ever conquest of a regionally-ranked opponent.

Seniors Ricky Galliani, Nasser Al-Rayes and David LeBaron received recognition for their accomplishments at Caltech in a brief pregame ceremony with their parents in attendance. All three of the seniors played an important role in winning the final game they will play in Braun Gymnasium as student-athletes.

“It’s a little bittersweet for us seniors,” Galliani said. “It’s our last game here and it’s the last time we get to put on the white jersey but it’s an incredible feeling. There’s no better way to go out than by knocking off one of the best teams in the league.”

While the seniors took center stage, sophomore Brent Cahill stole the show with his clutch performance in the game’s final two minutes. Shortly after Al-Rayes fouled out after pacing the Beavers with 11 points and 11 rebounds, Cahill took it upon himself to hit the big shots his team needed to keep themselves in the game. Cahill first drew a foul on Daniel Rosenbaum before following it up with two big free throws. He then drove nearly coast-to-coast on a layup to give the Beavers a two-point lead. After Glenn Leininger tied things up on a jump shot, Cahill hit the game-deciding jumper from about 15-feet out. The dagger marked the final two points of a sterling 20-point game for the sophomore.

The Sagehens never scored again.

“Brent was absolutely clutch tonight and we all know he has that capability to make an explosive impact,” Head Coach Dr. Oliver Eslinger said. “What he did defensively tonight was maybe even better. Great play all around. He made some great decisions and finished plays by scoring and with assists, rebounds and a huge block.”

Cahill’s spectacular showing did not come without a hint of controversy. Minutes following a technical foul called on Al-Rayes, Cahill too earned himself a technical foul with about 12 minutes to go. The foul came at a costly time, as Caltech was already mired in foul trouble. Al-Rayes and LeBaron each had four fouls and the margin of error began to grow slimmer and slimmer. To make matters worse, the Sagehens made all four of the free throws stemming from the technicals, providing them with a little extra confidence

to almost complete a comeback in the latter portion of the second half.

“I didn’t want those calls, any of the calls, to affect our mental state,” Eslinger said. “I knew that even though we can always improve in various situations that what was most important was keeping the guys stable and getting them to come back more resilient. Moving onto the next play was vital.”

After holding both LeBaron and Al-Rayes out for much of the second half, Eslinger brought his seniors back into the game with 7:49 left to play. Though Al-Rayes ultimately fouled out, LeBaron provided three key

points within the game’s final four minutes. He finished with 11 points and leads the team in games with at least 10 points this season. Galliani, meanwhile scored all nine of his points from beyond the arc.

The early portion of the game featured some unique

twists and turns, the most significant of which involved Caltech holding Pomona-Pitzer without a field goal until 14:33. The Beavers made good use of energy and precision to create an uphill battle for the SCIAC’s fifth-best shooting team. The Sagehens did find success at the free throw line, however. For a stretch spanning between 9:52 and 6:05 of the first half, all of the Sagehens’ points came from Daniel Rosenbaum free throws. As for the Beavers, with the exception of five Al-Rayes field goals all of their first-half points from the field came from three-pointers until Cahill broke the trend with a jump shot at 1:55. Caltech did go on to outshoot Pomona-Pitzer, 35.7 percent to 25.4 percent.

Freshman Ross Carter filled in admirably while Al-Rayes took a breather in the second half, collecting three rebounds in seven

minutes. Fellow freshman Aaron Ayres took over LeBaron’s role in a similar fashion and held his own in 25 minutes of action. He finished with two free throws, two rebounds, one assist, one block and one steal. Freshman point guard Alec Andrews dished out three assists, as did Cahill. The strong play of the underclassmen mattered just as much as the strong play from the upperclassmen and their development will determine if the men’s basketball program can build on the foundation they have fortified this year.

The immediate consequence of a hard fought team victory with multiple contributors? A fitting sendoff for the seniors and a memory that could last a lifetime.

“I am just so happy for, and proud of our seniors,” Eslinger said. “We prepped for this game by focusing on how we can make it special for the three captains, the three seniors. I wanted so badly for them to have a great game and for the team to give it all they could for those three guys who have built this program into an even stronger one. It makes it all that much sweeter, I suppose, to take it to the end and keep the fans engaged like that. When we have a crowd like that, loud and enthusiastic, it really gives us a true home court advantage. Thanks to all the fans.”

Now 6-9 in SCIAC play, Caltech’s fortunes could have been drastically different had a couple breaks gone its way, though not qualifying for the conference’s four-team playoff is not a direct measurement of the success this year’s group saw or how history will remember them.

“People will remember our toughness, our fighting through adversity and playing hard,” Eslinger said. “There are challenges and more challenges but especially for the seniors, when they walk away, they can feel good about all they’ve done and how they’ve learned and enjoyed being with one another through good times and tough ones. They said some really thoughtful words today and tonight as we went through this. They have certainly made an impression on a lot of people, myself included.”



#22 + #21 + (1 coach) = #42

-gocaltech.com

Counseling Center Groups and Workshops Winter Term 2017

The counseling center is excited to announce our workshops for the Winter term:

Workshops

Catalyst: A 3-week workshop teaching general coping skills

Refresh: A 1-hour workshop teaching how to get better sleep

Emotion Lab: A 1-hour workshop to recognize your emotions better

Spark: A 1-hour workshop to cope with procrastination and work avoidance.

Groups

Social Confidence: A 7-week week group for anyone who'd like to be more comfortable and less anxious in social situations. Pre-screening required; see the webpage for more information. Begins 1/23.

Mindfully Resilient: An 8-week group focused on reducing the risk of relapse for depression and anxiety. Pre-screening required; see the webpage for more information. Begins 1/12.

For the full list of workshops, dates, and times, visit:

counseling.caltech.edu

and follow the link to the new classes and workshops.

2017 CALTECH UNDERGRADUATE WRITING PRIZES

Each year the division of Humanities and Social Sciences awards a number of prizes for undergraduate writing. Consider submitting your work to be recognized and rewarded for your work as a writer.

Submit your writing this year for these prizes:

MARY A. EARL MCKINNEY PRIZE IN LITERATURE

Awarded to the best original poetry and fiction. Submit up to three poems. Fiction should not exceed 12,000 words – one submission.

Prize amount: \$500.00/each category

GORDON MCCLURE MEMORIAL COMMUNICATIONS PRIZE

Awarded to the best academic writing in three categories: English, History and Philosophy.

Prize amount: \$500.00/each category

HALLETT SMITH PRIZE

Awarded to an outstanding essay related to the work of Shakespeare.

Prize amount: \$500.00

Copies of last year's prizewinning writing are stored in CaltechTHESIS, and they can be viewed by following links from this writing center webpage: <http://writing.caltech.edu/community/prizes>

Submission Guidelines:

Deadline: April 4th, 2017

Only currently enrolled full-time students may submit. Entries should be double-spaced PDFs. Winners will be announced in June, and winners' names will be in the commencement program. Winning writing will be archived using CODA through the Caltech Library. Email entries to Sini Elvington at elvington@caltech.edu, noting the prize to which you are applying in the email subject and filename.

Project IDEA.
inspire discover express accept.
Caltech's creative assignment for your week.

What would you do if you saw a dancing pancake?

What is a crazy idea you have? Tell it to someone. Write down your idea and their reaction.

Write the phone call you wish to have. Format it as a dialogue/script in first-persons.

A: Hi, how's it--

Me: Bye.

What is something you never want to forget?

Please send all responses to totem@caltech.edu.

Last time: What is something that interests you? Make a playlist with at least eight songs for someone. A collection of music that makes you think of them when you hear the songs, or songs they might like. Send us the song names and who you chose them for. Have you ever given up something? Given up on something? Make a poster or banner of encouragement and hang it up. It could be for someone in particular or for anyone. Use at least 4 different colors and send us a picture.

For more, go to <https://www.facebook.com/CaltechTotem>.

Crossword

Across

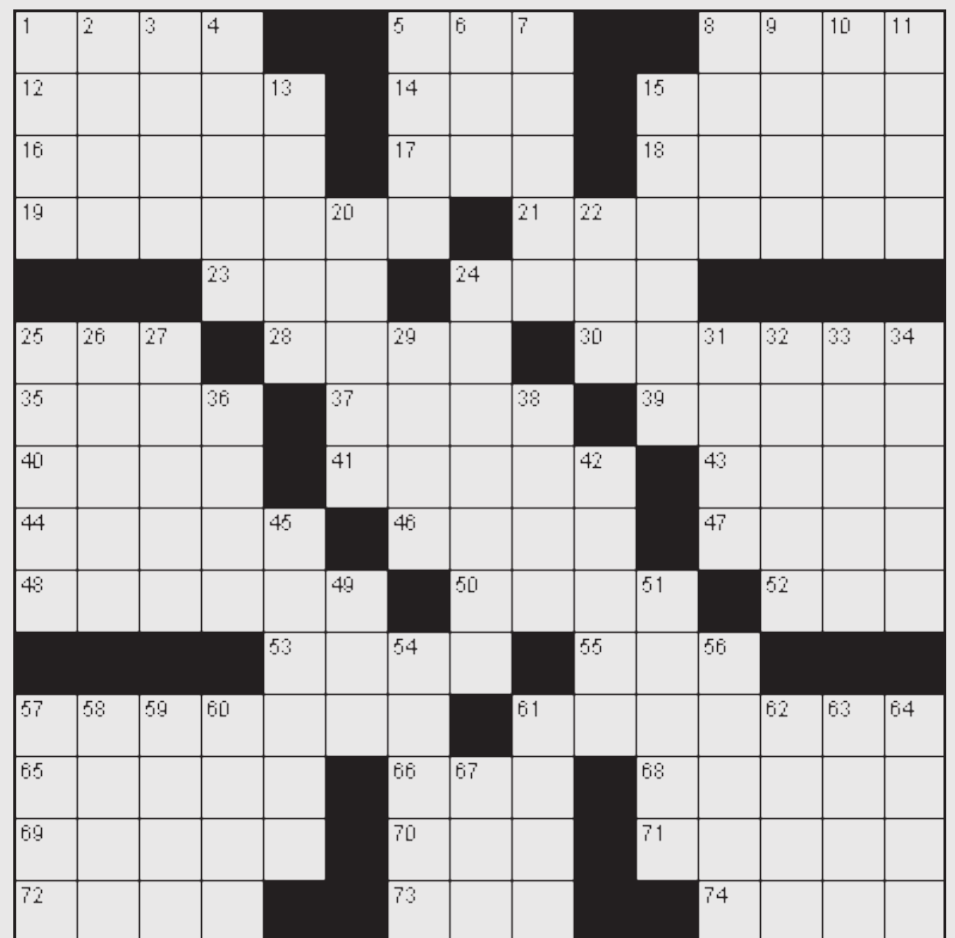
1. Travel through water
5. Large African antelope
8. Journey
12. Giant
14. Lubricant
15. Letting agreement
16. Part of a Roman amphitheater
17. Appropriate
18. Expel from a country
19. Dismissal from office
21. Pit viper
23. Dream state, initially
24. A quick run
25. Tantrum
28. Acidic fruit
30. Harry
35. Exam by word of mouth
37. Suspiration
39. Door or gate fastener
40. Lawsuit
41. Homeless cat
43. Floating mass of ice
44. Express audibly
46. Story
47. Counterweight used to obtain net weight
48. Ride on a plank
50. Lacking hearing

52. Unit of play in squash
53. Cut into cubes
55. Place seeds in the ground
57. Lean back
61. Straight section of a racetrack
65. Assumed name
66. Lair
68. Jewelled headdress
69. A drawback not immediately obvious
70. In the past
71. Mistake
72. Leg joint
73. Angry dispute
74. Simpleton

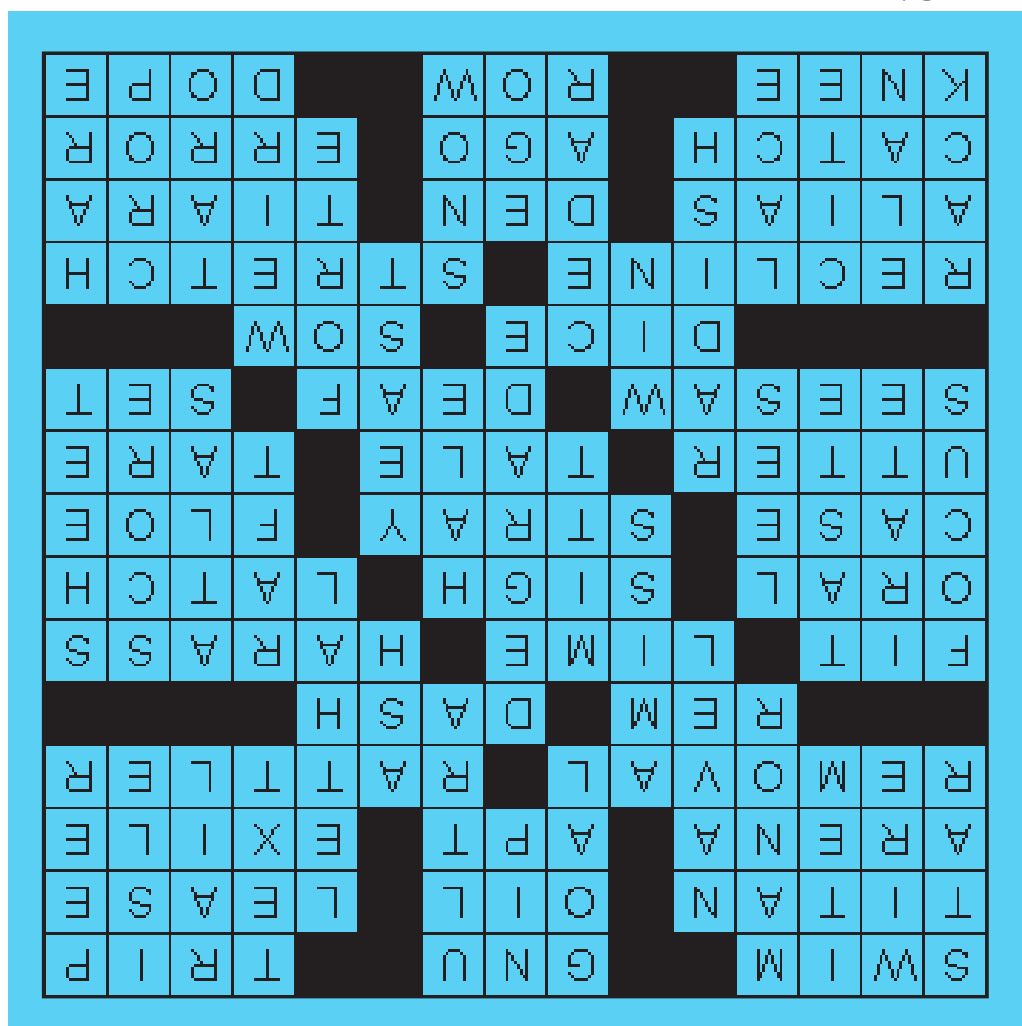
Down

1. Celestial body
2. Finishing line
3. Part of a list or collection
4. Landed estate of a lord
5. Successful scoring attempt
6. Pinch
7. Radical
8. Written matter
9. Complain bitterly
10. Small island
11. Look searchingly
13. Umbilicus
15. Deadly
20. Awry

22. Residue from burning
24. Demean
25. Concentrate
26. Very angry
27. One of the senses
29. Baseball glove
31. A flat float
32. Mythological Titan
33. Set of twenty
34. Bed linen
36. Sediment from fermentation of an alcoholic beverage
38. Showing vigorous good health
42. Leavening agent used to raise bread
45. Pungent edible root
49. Be victorious
51. With great loudness (music)
54. Durable aromatic wood
56. Uncanny
57. Cut of meat
58. Zeal
59. Make reference to
60. Delicate woven fabric
61. Form of precipitation
62. Starchy tuberous root
63. Harvest
64. Leporid mammal
67. Self



Answers to current crossword (pg 7)



-<http://puzzlechoice.com>

The California Tech

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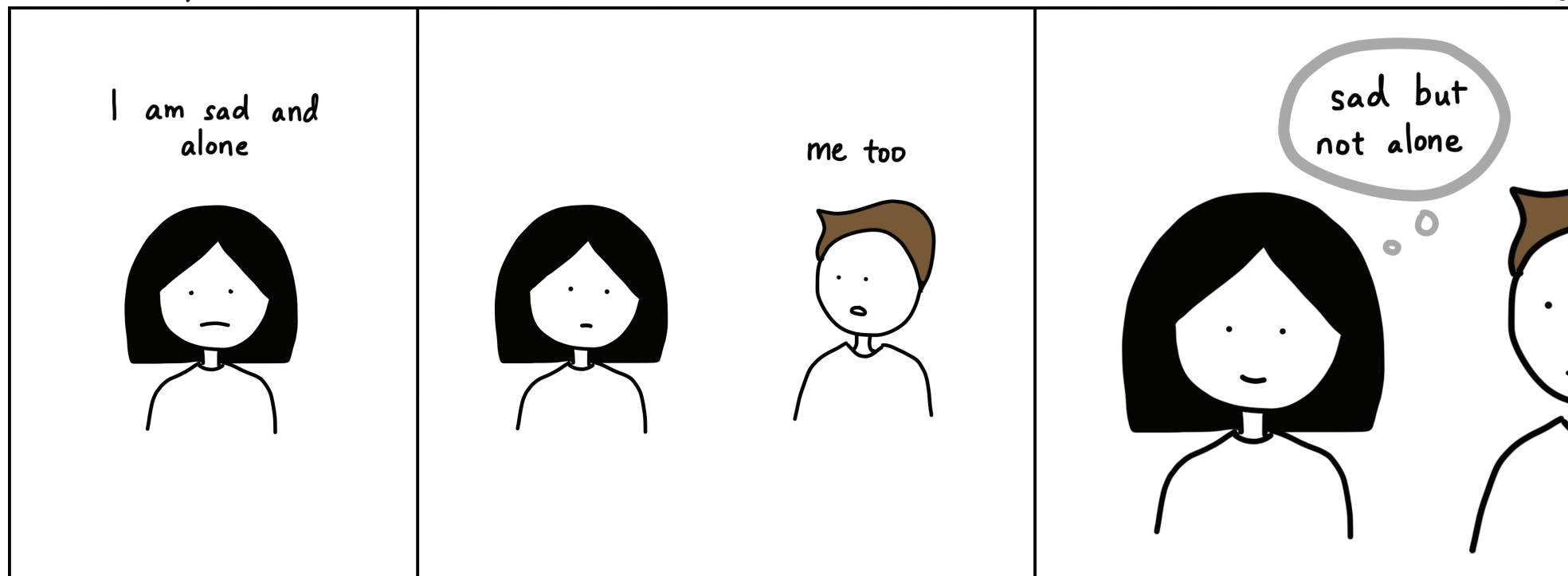
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