



VOLUME CXVIII NUMBER 14

PASADENA, CALIFORNIA

TECH@CALTECH.EDU

FEBRUARY 2, 2015

# Chamber music program presents winter concert series

CHING-YUN (CHLOE) HSU

Contributing Writer

After four months of practice since October, undergraduate and graduate musicians in the Caltech Chamber Music Ensembles kicked off this year's first winter concert on Saturday, Jan. 24. Followed by four concerts in two weeks, the winter series came to an end on Feb. 1 with the Super Bowl Alternative Concert as a Caltech tradition.

In groups of three to five, student performers played movements or full pieces of different styles, including Baroque works by Georg Philipp Telemann and Henry Purcell, romantic compositions by Johannes Brahms, Sergei Rachmaninoff, Franz Schubert, Antonín Dvořák, Richard Strauss, etc., as well as modern classical music by Bohuslav Martinů and others. The program also presented a variety of instruments. While violin served the main role on Jan. 25, the Jan. 30 concert included French horn, accordion, an interesting piano six hands, and a playful trio of flute, clarinet and bassoon.

Free and open to the general public, each chamber music concert attracted an audience of 100-200 from both inside and outside the Caltech community, including many regular attendees from the local Pasadena area. The audience showed respect for students' music skills not only by words, but also by 3-minute-long applause and a standing ovation.

The ensembles were coached by visiting artist Michael Kreiner, Los Angeles Philharmonic musician Martin Chalifour, Caltech faculty Robert Ward, and Chamber Music Director Delores Bing, who also played piano and cello in some of the groups. Students in the chamber music program genuinely enjoyed the performing experience, and are looking forward to playing in new groups in the upcoming season.



Freshmen Amanda Gao (violin), Janice Jeon (violin), Rachel Ng (violin), and Vincent Zhuang (piano) perform on Jan. 25.



Graduate students Kelly Kim (bottom left) plays the piano and Joe Iverson (right) plays the cello at the Jan. 25 concert.

Photos Courtesy of Ching-Yun (Chloe) Hsu



# Getting away with rape: A social epidemic

HANNALORE GERLING-DUNSMORE

Contributing Writer

On Jan. 24, the Graduate Student Council sent an email to Caltech graduate students, containing a letter written by concerned students detailing the accounts of Michael Shermer raping, sexually assaulting, and sexually harassing various women over the last several years while at various skeptical meetings and conventions. At least five people have stated that Shermer found them or put them in positions in which they could not consent (e.g., excessive alcohol consumption) and then had intercourse with them—you know, what both the law and generally decent humans would refer to as rape. Others have stated Shermer sexually harassed and assaulted them, such as groping their breasts in lieu of a handshake. Partially out of disbelief, partially out of blaming the victims, and partially out of fear for what it would do for the skeptic community, people have rallied around Shermer,

continuing to invite him as a speaker without so much as asking for acknowledgement that he may have engaged in problematic behavior. The problem is that by continuing to welcome Shermer with open arms, we implicitly tell him that what he's done isn't really that much of a problem, and tell his victims that we don't care about their suffering.

Shouldn't we be worried about these women lying, though? According to the FBI, only 2% of rape reports are false. Given the large number of claims against Shermer, particularly claims that are easily corroborated by witnesses, it's statistically incredibly unlikely that all of the women coming forward are lying. If even one of these stories is true, Shermer needs to take responsibility for his actions—apologize to the affected parties, adequately demonstrate remorse, and correct his behavior—before the skeptic community resumes accepting him as a leader.

Unfortunately, Shermer is far from an isolated case of men committing sexual violence with

few or no consequences. Film creator Roman Polanski continued to have a fruitful career after being convicted of and publicly admitting to raping a 13-year-old girl—for context, he was in his forties—after getting her drunk. Bill Cosby has been well-known in the entertainment industry for his predatory nature, with at least two dozen women coming forward with stories that line up nigh perfectly: he got them excessively drunk or drugged them, and then had non-consensual intercourse with them.

Rehtaeh Parsons, a teenage girl from Nova Scotia, committed suicide in 2013 after being gang raped by four boys at a party and then persistently bullied. Her rapists photographed her rape, and disseminated this photograph around their school. Because of this, the rapists were considered manufacturers of child pornography, and subsequently Canadian law prevents their names from being published, as they could be traced to Rehtaeh Parsons, compromising the privacy of a child pornography victim. Despite

her family attempting to waive the privacy to raise awareness of rape and bullying, the public is unlikely to know the identities of these rapists; they will be able to live their lives in relative anonymity, despite their monstrous actions. Only two of the rapists faced charges for child pornography; one will not show the conviction on his record if he does not violate probation, and the other will only have the conviction on his record for five years. Neither faced jail time.

Unfortunately, these stories are only a few of millions. The most conservative estimates, including a 2014 CDC study, find that one in five women and one in 33 men in the United States have been raped. Many experts believe the statistic for women that are raped in their lifetime is closer to one in three. Out of every 100 rapes, only 32 will ever be reported to the police. Of those reports, only seven will lead to an arrest, and three of those will get a prosecutor involved. Only two of those rapes will result in the rapist spending a single day in prison; that means 98% of rapists are walking

free, suffering no consequences for their actions while their victims have to spend the rest of their lives with the trauma. Approximately half of all rape victims develop post-traumatic stress disorder (PTSD). Recall that about 20% of American women have been raped. This means that at least 10% of American women are living with PTSD induced by rape, many of them never receiving adequate treatment due to a lack of support, while their rapists get away without even a permanent mark on their record.

You have to ask yourself, why is it so rare for rape to be reported? Why do the overwhelming majority of victims—nearly 70%—never so much as file a complaint with the police? Besides the fact that many survivors of sexual violence are told that what happened to them doesn't really count as rape, the judicial proceedings for a rape case are often as traumatic—if not more so—than the rape itself.

Continued on page 3

## IN THIS ISSUE

NEWS | PAGE 2  
MEASLES SPREADS THROUGH THE US

OPINION | PAGE 3  
BILL NYE PRESENTS IDEAS WITH POOR EXECUTION

FEATURE | PAGE 4  
APHEX TWIN RELEASES NEW EP

SPORTS | PAGE 5  
NO MORE NFL UNTIL THE FALL!

# Caltech Y Column

CALTECH Y

The Caltech Y Column serves to inform students of upcoming events and volunteer opportunities. The list is compiled by Neera Shah 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 Winter Camping Trip to Anza Borrego

Saturday, February 14th-Monday, February 16th (Presidents' Day) | Anza Borrego State Park Cost: \$70 | Sign up at the Caltech Y (505 S. Wilson)

Have you ever wanted to visit a palm tree oasis in the desert? What about hike through canyons to a scenic waterfall? Get away from the city lights and marvel at the Milky Way galaxy in the dark night sky? If you answered yes to any or all of these questions, then the Caltech Y winter camping trip is for you! The Anza Borrego Desert is a unique park in Southern California, with a variety of wildlife rarely seen elsewhere, including bighorn sheep, roadrunners (It's a real bird, not just a cartoon character!), and desert jackrabbits. The geological and cultural history of the park is also noteworthy, with famous fossil beds from the Pliocene and Pleistocene Epochs and 2000 year old rock paintings. February is the ideal time to visit the park, with daytime temperatures averaging 75-80 degrees and little chance of rain.

Where: Anza Borrego Desert State Park (About 125 miles Southeast of Pasadena)

When: February 14th-16th (Monday, February 16 is Presidents' Day and a Caltech holiday)

Cost: \$70, includes transportation, campsite reservations, most meals, and use of equipment from the Caltech Y

If you have any questions, email Dorothy Pan at [dpan@caltech.edu](mailto:dpan@caltech.edu) or Jeremy Sandler at [jsandler@caltech.edu](mailto:jsandler@caltech.edu)

### 2. Union Station Family Center

Sunday | February 1st | 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 Wen Min Chen at [wcchen@caltech.edu](mailto:wcchen@caltech.edu).

### 3. Alternative Spring Break

Multiple Locations | Multiple Dates | More Info Coming Soon

Explore a new place, meet new people, serve a community, and have fun! Join other Caltech Students experiencing a non-traditional spring break volunteering in the community.

Trips under consideration this year include: Peru, Catalina and Monterey Bay. Look out for more info and applications next week.

### 4a. Pasadena LEARNS

Friday | 3:00 - 5:00pm | Madison and Jackson Elementary School | 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 [vkkumar@caltech.edu](mailto:vkkumar@caltech.edu).

### 4b. Hathaway Sycamores

Monday | 5:30-8:00pm | 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:srichers@tapir.caltech.edu).

### Other Announcements - Beyond the Caltech Y

#### USC Pacific Asia Museum - Lunar New Year Festival

Saturday | January 31st | 11:00 AM - 5:00 PM

USC Pacific Asia Museum is pleased to present its 5th Annual Lunar New Year Festival on January 31, 2015, from 11 am to 5 pm. This largest free event of the museum features Asian cultural performances and activities of Lunar New Year theme, and has attracted a diverse crowd of more than 5,000 people each year and gained strong media coverage.

The success of the event won't be possible without the support of our dedicated and talented volunteers. We are in the process of recruiting volunteers and would be thrilled if Caltech student volunteers can help out at this event. Multiple shifts are available, starting as early as 9 am and finishing up by 7 pm. Each shift lasts 3 or 4 hours, depending on volunteer availability. Lunch and parking will be provided, carpool encouraged.

For volunteer registrations or questions, please contact Becky Sun at [becky.sun@pam.usc.edu](mailto:becky.sun@pam.usc.edu) or call 626.449.2742 ext 12.

# Recent measles outbreak starting in CA proves that disease continues to spread

CASEY HANDMER

Contributing Writer

How many of us personally know someone who has suffered from a vaccine-prevented disease? Ask your grandparents.

As of Jan. 30, California's very own measles outbreak has reached 91 confirmed cases. Centered at Disneyland, cases are now known in seven states. Measles, like nearly every other disease, is well controlled in the US and other developed nations. Despite its current rarity, measles remains one of the most contagious diseases, comparable to the cold. Contact with moisture containing the virus has a 90% infection rate even hours after emission, and a number of cases have originated from doctors' waiting rooms.

Before measles was controlled, it infected about 4 million people per year in the US. Roughly 1 in 100 cases required hospitalization, 1 in 1,000 led to encephalitis, and 1 in 10,000 were fatal. You might think a vaccine that reduces overall risk by even 10% on these numbers would be universally popular, but you'd be wrong.

Anti-science and anti-vaccination ideology cuts across traditional political or socio-economic lines: parental choice is to blame for these and other preventable outbreaks, including numerous fatal infant cases of whooping cough.

Modern vaccines, like any medical procedure and life in general, contain risks. We accept those risks because they're incredibly tiny and because universal vaccination prevents the disease from spreading and infecting vulnerable people. The very young, the very old, and the immunocompromised are sitting ducks and can only be protected by herd immunity.

It is not clear how to enforce vaccinations in children without legal compulsion. Parents rightly control their children's health decisions, and almost always make correct, informed choices. Yet the recurrence of preventable diseases in the US, UK, and other developed nations has failed to arrest the falling incidence of vaccinations.

It is especially mystifying when compared to the widespread hysteria surrounding the Ebola outbreak in 2014. Ebola, while much deadlier, is much less contagious than measles or flu, and comparatively easy to control, despite the lack of an effective vaccine, via contact chaining. Grounding of flights from Africa was seriously considered as a way to prevent supposed Ebola-ridden zombie hordes from overrunning the US. But any legislation that compels MMR (measles, mumps, rubella) vaccination or even protects schools' rights to restrict enrollment based on vaccination status is a political impossibility.

In contrast, the battle to control HIV/AIDS appears to be turning a corner. HIV requires specialized tools to diagnose and treat. In developed countries, case-by-case epidemiological control has kept incidence below 1 in 100, with many sufferers concentrated in certain underserved and/or high risk communities. This wasn't always the case. The 1980s saw a period of denial and false assumptions wherein people, usually of more privileged backgrounds, unaccustomed to untreatable disease, refused to accept the science and subsequently died, but usually not infecting others in the process. This began a cultural change wherein my generation assumed principles of safer sex practices as axioms ("no glove, no love") rather than an imposition.

It is sadly unclear how many babies will have to die of measles or whooping cough before failing to vaccinate children becomes as socially unacceptable as sleeping around without protection.

HIV in the developing world is a different story. Infection rates in Sub-Saharan Africa have climbed into double-digit percentages, often afflicting children since birth, due to poor access to prevention, treatment, and education. Without a vaccine, disease control strategies have focused on the distribution of antiretroviral therapy (ART) drugs which can dramatically reduce the risk of transmission, particularly mother to child, in combination with education and, where politically possible, the promotion of condoms. The process is technical, messy, complicated, and ever changing. Like vaccines, misinformation about the efficacy of condoms spread by unscrupulous or ignorant interests has an outsized effect at the global scale.

According to the Joint United Nations Programme on HIV/AIDS, 2013 was the first year in which the number of new infections was smaller than the number of infected people starting to get treatment. This is an important milestone in that the number of untreated people has peaked and will, with continued effort, continue to fall. But with 35 million people living with HIV, 13 million receiving treatment, 1.5 million deaths and 2 million new infections a year, there is a long way to go.

In the US, we enjoy a life so prosperous, healthy, and risk free it was simply unimaginable to our grandparents. This did not happen by chance. Maintenance of historical gains and continued improvement in public health will require ongoing investments of time, money, and expertise.

## News briefs from around the globe

*Here's a brief list of events from the past week, compiled by The California Tech editors:*

### Al-Jazeera journalist freed by Egypt

**400**-day captivity ended for Peter Greste, freed from Egypt and flown to Cyprus [[BBC](#)]

### Mosques have open days to "demonstrate unity"

**20+** mosques in Britain opened doors to public to reduce tensions around terrorism [[BBC](#)]

### Pope Francis to visit Sarajevo, capital of Bosnia and Herzegovina

**20** yrs. ago, Bosnia was ravaged by war; Pope plans to visit to encourage Catholics [[TIME](#)]

### Pro-democracy protesters return to Hong Kong streets

**1000s** of protesters took to the streets for their first big rally since 2014 [[CNN](#)]

### Madrid sees march for leftist party

**100k+** people marched in support of Podemos movement [[TIME](#)]

### Vehicles recalled for faulty airbags

**2** mil. Toyota, Chrysler, Honda cars recalled; airbags may inflate while car runs [[TIME](#)]

### US economic growth less than expected

**2.6%** growth reported for fourth quarter, lower than predicted 3% [[BBC](#)]

## "In Conversation" with Bill Nye offers interesting but poorly presented insights

**NEERA SHAH**  
Editor-in-Chief

On Sunday, Jan. 25, The Skeptics Society hosted an event to speak with Bill Nye the Science Guy. It was advertised to be an "enlightening" conversation in which Nye would discuss topics covered in his new book, *Undeniable: Evolution and the Science of Creation*. In the book, he discusses his thoughts on race, genetically modified organisms (GMOs), new species, and the search for alien life. However, in his "discussion" with event host and *Skeptic* magazine Editor-in-Chief Michael Shermer, Nye barely scratched the surface of these topics (with the exception of GMOs).

While the event lasted for almost two hours, there was not as much time devoted to discussing topics in-depth as expected. After taking more than 20 minutes to advertise other Skeptics Society events, Shermer finally proceeded to introduce Nye to the audience.

Nye originally had a career in mechanical engineering at Boeing after graduating from Cornell University in 1977. From there,

he took on a hobby in stand-up comedy and eventually was offered the chance to do a segment on science as "The Science Guy" in a local comedy television show. This culminated into Nye hosting his own show, *Bill Nye the Science Guy*, which ran for five seasons from 1993 to 1998. He is currently working as the chief executive officer

for the Planetary Society, a nonprofit organization with the mission to "empower the world's citizens to advance space science and exploration."

Nye released *Undeniable* in November of 2014.

It was interesting to hear Nye discuss his past debates with the likes of Ken Ham, president of Answers in Genesis (a creationist apologetics ministry). Nye is

an atheist, but has no qualms with religion or even creationist thinking, so long as it does not affect the future generations of children

this is still very possible for people of varying faiths. The central problem is when creationism is forced onto the kids and even the

mere possibility of evolution is rejected.

While I agree with Nye's stance that creationism should not be taught in such a way to discourage any sort of scientific thinking, the attitudes of Nye, Shermer, and the audience were disheartening. Throughout his discussion, and

in his later Q&A

with the audience, there was a general lack of respect that at points approached bigotry. The audience even laughed along with Nye and Shermer when discussing opposing opinions regarding creationism. Most, if not all, of the audience obviously were on the side of science, but it begs the question that if both sides could not respect each other, how could they set aside their egos to

consider the others' opinions or to objectively consider the facts?

Tying into the importance of educating youth, Nye briefly spoke on the topic of climate change. He expressed his hope for another "great generation" of young scientists to solve current problems such as inefficient desalination of water and ever-increasing carbon footprints. Nye quickly moved on from his discussion on climate change, though, which was disappointing since his approach to the topic was much milder than that to religion and creationism.

The best part was probably his take on GMOs. I expected him to be completely pro-GMO, but he is actually only a moderate supporter. His approach was very reasonable: Nye is supportive of the good that can come from GMOs, but is hesitant to embrace all GMOs before thorough testing has been completed. In his opinion, the ecological effects cannot be fully understood for at least 10 years.

I would have liked to hear Nye present his opinions on why he does not believe in race, which was the most intriguing of the topics that were said to be in his



-http://en.wikipedia.org

## Societal attitudes toward rape need to change to stop cycle of violence

Continued from page 1

That means that for every 100 rapes, there is only a 0.64 chance—less than two-thirds—of a false report. Despite this, time and time again, most people surrounding a rape investigation doesn't just question if the accused is the rapist—they question whether or not the survivor was raped in the

victim's claims, while using it to excuse the rapist's actions.

What can we do? How can we enable survivors to file reports, and how can we have more of those reports lead to arrests, more of those arrests lead to trials, and more of those trials lead to convictions? And, perhaps most importantly, how can we limit the number of rapes in the first place? Unfortunately, there is no short

of demonstrating dominance over another. In the mainstream view of dating or casual sex, we normalize not obtaining clear and enthusiastic consent. It's normalized to "need"

to drink in order to feel comfortable having sex with someone that isn't an established partner, thus making it more difficult to tell if someone is just "loosening up" or too inebriated to give informed consent. It's considered awkward and actively unsexy to actually ask someone if a given action is okay with them, making it difficult to actually tell if he or she is a willing participant or not.

Of course, until the utopia of free and enthusiastic consent for all is reached, we do have to deal with rape. Fortunately, we will get more survivors to make police reports, those reports to lead to arrests, arrests to lead to trials, and trials to lead to convictions all in the same way. First, we need to stop questioning whether or not people were really raped when they say they were raped. The odds of false reports are vastly too low to have our default response be, "But were you really raped?" You would never ask people who told you that they were mugged if they really just lost their wallet or if they gave it to someone, even if they had a history of misplacing important objects or donating money. When someone tells you about being raped, believe that person. It does no harm to you.

No individual is a court of law; we, as individuals, have no obligation to uphold innocent until proven guilty.

As we create a culture of believing survivors when they come forward, this attitude will spread to police, both by virtue of the police

being people in that culture and by the police recognizing the backlash they would face by treating rape survivors like liars right off the bat. With police sincerely looking into rapes, we will stop having warehouses full of untested rape kits. We will stop having accused rapists being let go with a simple refutation of their victims' claims, with the matter never pursued further by the police. When the police actually start looking for evidence of support, rather than accepting the first evidence of refutation, they will start finding it, and they will have grounds for an arrest and a trial. The juries will stop looking for any reason to not believe the victim, even irrelevant details like the victim's clothing or past sexual history, and thus, defense attorneys will stop using such derailing and shaming tactics. Further, if we change the narrative of how sex should occur—sober, with clear, affirmative consent—juries will start actually believing

**"First, we need to stop questioning whether or not people were really raped when they say they were raped."**

first place.

If the case ever goes to trial, the survivor is subjected to difficult interrogations by the police, often marked with shaming and attempts to persuade the survivor to recant and drop the charges; then the survivor has to face the defense attorney. The survivor must go on the stand and face his or her rapist while a defense attorney drags forward every sexual encounter the survivor has had in an attempt to color the survivor as someone too promiscuous to say "no." Despite the fact that every single study on the subject has shown that the majority of rapists do not recall what their victim was wearing—thus indicating it wasn't really a large part of the decision process to rape them—the defense will attempt to use the victim's clothing as an excuse for the rapist's behavior. The defense attorney will use judgment impairment due to alcohol as a reason to doubt the

or easy answer to any of these questions. Dozens of people could write entire dissertations on any one of these questions and still not entirely solve the situation. However, as always, each individual can take steps to solve the problem. Many studies of rapists have shown that most, if not all, rapists believe that all men rape; a major step we can take is to stop normalizing rape. For example, rape, sexual exploitation, and non-consensual domination are common motifs in pornography, thus normalizing the sexualization of unhealthy power dynamics. People use rape in their daily vernacular as a synonym for domination, giving an almost positive, smug connotation to the act of raping something (e.g., "raped that exam," "raped the other team," etc.). Even if the given person using rape in this context doesn't feel the need to actually rape another person, it establishes the idea that rape is a legitimate means

that the victim was too drunk to give consent, and that a lack of a freely given, enthusiastic yes is a lack of consent. This, in turn, will encourage more survivors to come forward. As I mentioned before, the gauntlet of shaming and blaming survivors face when they decide to press charges is one of the greatest obstructions of justice.

This powerful chain reaction can truly occur simply by changing our personal attitudes toward how we obtain consent and by choosing

to believe the survivors. Of course, those two actions require unlearning years of socialization, and relearning healthier attitudes, tasks that are beyond the scope of this article. However, the power of living in the Information Age is that we can take to the Internet to educate ourselves on how to better understand consent and how to support survivors. Rape, Abuse & Incest National Network (RAINN) is a great resource to start with. Take Back the Night is a movement that started in the late 1960s and the 1970s to make the first push against the social acceptance of rape, and remains a great source to find ways to help fight against rape. Project Unbreakable is an art project started by Grace Brown, who photographs survivors of sexual violence holding signs upon which they have written something said to them either during or after the assault to shame them into silence, giving the survivors a chance to break their silence and stand in

defiance against their abusers. In a similar vein, I Believe You | It's Not Your Fault is a project started by a group of female writers which gives a space for survivors to share their stories and be given unconditional support and acceptance. These are but a few places for survivors and allies of all gender identities to learn, support, and help change how our society handles rape and survivors. You can be, and both survivors and future generations need you to be, part of the change.

## Welcome to India

KSHITIJ GROVER

Contributing Writer

This past winter break, I went to India—where I was born, where I grew up, and where most of my extended family is. Honestly, at first, it felt far from home.

You see, India is much different than the safe confines of Pasadena or the bustling, techy Bay Area. India is much different from most places in the US, and it's hard to even imagine sitting almost 8,000 miles away.

There are a few things that struck me by surprise, no matter how much I expected them:

### Poverty

Every time you stop on a turn signal in New Delhi, you expect a knock on your window. Sounds a little scary, right? It's a little disheartening. You can expect little children—often with their limbs amputated and wearing rags—to approach you with hands extended, asking for as much as you can give them.

The advice of many? **Don't give them anything.**

It sounds cruel, but it takes a knowledge of India's underground human trafficking practices. Most of these children are being used—specifically for their emotional value to foreigners or those who can't resist—in order to get money for an illegal operation. The money you give them will never help feed them, cure them, or help them at all. Of course, this means they still lose out in the end—immensely so.

On the other hand, India has incredible wealth. Sure, there are a lot of very rich industry tycoons, but that's not the wealth I'm talking about. India is far more cultured as a country than any other I've ever been to. New Delhi is full of cultural shows, and restaurants dazzle with cuisine from every state. India's not afraid to show its diversity—whether it's through camel rides in the rows and rows of farms on the outskirts of Delhi, or the cities full of holy sites, temples, memorials, and more.

### Quality of Life

There are plenty of very well-off homes in my hometown, but I find that there's something that equalizes everyone—traffic, pollution, corruption...the city.

Want to go to the mall? Spend 30 minutes in traffic. Want to go to that big mall across the city—or go-karting an hour away? It's a weekend: that's not going to happen.

You see, you can buy yourself most things in India—even if it's a traffic ticket (pay off the cop!)—but it's incredibly difficult to buy comfort or solitude from the bustling place lying outside the walls of your home.

It's crazy how well developed the infrastructure is in the US. India, with its rampant overpopulation and a highly underdeveloped structure, is an elephant with a couple camels on its back. It's a wonder, then, that India is still one of the leading powers and one of the most innovative nations in the world.

Traffic and pollution aside, India is about family—arguably, something that makes the quality of life better than ever. Even though I'm comfortable in the US, it often feels a bit isolated. In India, there is very little concept of independent living. Most families live either as an extended unit, or frequently visit each other. This means uncles, aunts, cousins—the whole deal. Even though the US is the most technically connected country in the world, each person is quite possibly the most isolated as well.

I went to India after four years, but I sure hope my next trip is before then. It's hard to keep your roots—it's hard to keep things in perspective with a global mindset—when living in the bubble. Pop.

## Aphex Twin takes new direction in side project EP, offering intimate experience

NAILEN MATSCHKE

Contributing Writer

Richard D. James and his Aphex Twin pseudonym are at this point so ubiquitous throughout modern electronic music that calling him anything less than a living legend is a disservice. During explosion of intelligent dance music (IDM) in the '90s, James' releases weren't just prominent—they sat at the heart of IDM's vanguard, broadening the scope of what was creatively possible with electronically-produced music, playing a critical role in moving the genre as a whole into the 21st century and the immense success it's seen since. Perhaps equally important to the Aphex Twin mythos is his nearly untouchable standard of production, with instrumental layers and one-off details engineered to feel organic while remaining precisely orchestrated and mixed as close to

perfection as I've ever heard. Aphex Twin is quintessentially electronic music—and yet on *Computer Controlled Acoustic Instruments pt2 EP*, he continues to challenge both the listener and himself, eschewing synthesizers for real, sampled instruments and exploring bits and pieces of musical ideas in this new sonic playground. The result is skeletal and sounds more like a proof of concept than anything nearly as dense as the four-month-old *Syro*, yet the result is still worth hearing. It's not the sort of thing I'd put on for fun, but "Aphex Twin done with real instruments" is a concept that works surprisingly well, and decidedly keeps the spirit of his music.

The EP begins with its longest track, the murky "diskhat ALL prepared1mixed 13," a song which comes on like a fever dream with a deep, distorted, and off-beat piano pattern taking center stage against distant clock-like beats played by some sort of mechanical percussion. While it starts to dissipate in later tracks, what immediately struck me about this song is how *human* the instruments feel, in details such as how notes aren't quite hit with the same intensity during each repetition, which is made apparent when a full drum beat starts to come in. It's disorienting at first to have all the minute manipulations and almost imperceptible layers of extra noise played out like they

would in any other Aphex Twin song, but with the unavoidable fact that everything sounds like (and presumably is) a real instrument. I'm sure I won't be the first to point out the similarities to the Squarepusher and



<http://pitchfork.com/>

Z-Machines *Music for Robots* project, but whereas Squarepusher focused on playing jazzy, human music with the impossible precision of robots, Aphex Twin almost does the opposite, sticking with his usual style but presenting it in a new package. As a result, we get moments (such as the funky, glaringly dissonant groove roughly three minutes into the first track) that have the listener nodding their head as they cover their ears, because it's just not how an ensemble is supposed to sound.

Immediately after the first song's end we are introduced to the other major component of the EP through "snar2," the first of quite a few short experiments based around a single idea. In the case of "snar2," this is a snare roll that starts off sounding like a human could have done it, and is then sped up to a superhumanly fast pace, punctuated by a couple odd clips of a dog barking. While this is the simplest example on the record, it serves as a good illustration of its purpose: this is not Aphex Twin trying to produce songs for him or anyone else to enjoy, but rather him taking an idea and seeing what he comes up with. While I'm sure many will be disappointed by this, I honestly think that side projects like this are one of the most rewarding aspects of following artists, frequently offering a more intimate and rich,

albeit imperfect experience than polished full-length releases can provide. Most of these mini-songs are also quite a bit less grating. Clocking in at 26 seconds, "0035 1-Audio" is a looped drum kit beat accompanied by a tabla, akin to an acoustic version of the end of "XMAS\_EVET10 [120] [thanaton3 mix]" on *Syro*. Tracks like these are fun to hear, and I didn't feel as though the EP was too saturated with them to be lacking substantive material.

The remainder of the songs, however, hold my largest complaints, primarily about the disappointing absence of much variety from most of them. Although it seems intentional, "diskhat ALL prepared1mixed 13" along with "diskhat1" and "diskhat2" account for almost a third of the EP's running length, and are all essentially a few piano melodies on top of a barely-varying drum kit beat. They're all enjoyable in their own right, but it strikes me as excessive to focus on one style so heavily, since just about every other song is also based on a piano accompanied by drums.

On the other hand, I enjoyed "DISKPREPT4," "DISKPREPT1," and especially "disk prep calrec2 barn dance [slo]," since all three are darker, more dissonant takes on the formula, with the third being just an incredibly heavy, nightmarish dirge. There's also "piano un10 it happened," a beautiful solo piano melody that goes on for almost two minutes; it's not quite as good as Syro's "aisatsana [102]," but nevertheless it feels as though it belongs in a movie soundtrack.

The entirety of the EP was enjoyable to listen to and I didn't really find myself becoming bored, but in an ideal world I would have liked to see Aphex Twin take the piano and drum combo in a few more directions. It's difficult not to get excited when Richard D. James decides to release so much new Aphex Twin material, and with *Computer Controlled Acoustic Instruments pt2 EP*, I was not disappointed. It was certainly an unusual direction for him to take, but I think the EP format is perfect for this sort of collection of musical building blocks, and they're all just as masterfully composed and produced as one would expect from Aphex Twin. This EP probably won't make anyone an Aphex Twin fan, but I definitely recommend it as an interesting listen to those already familiar with more of his work.

## Students compete at Perpall Speaking Competition



(From left) Sean McKenna (tied for 2nd place), Benjamin Wang (1st place), and Adam Jermyn (tied for 2nd place) stand with Toni Perpall.



All finalists (from left): Gerrie Roberts, Sean McKenna, Benjamin Wang, Lilly Luo, Jiemin Sheng, and Adam Jermyn meet Toni Perpall.

Photos Courtesy of Andrea Arias

# SPORTS

THE CALIFORNIA TECH

FEBRUARY 2, 2015 5

## Men's swim/dive team does swimmingly against Chapman

GOCALTECH.COM  
Actual Sports Content Editor

ORANGE, Calif. (Jan. 31, 2015) – The Caltech men's swimming and diving team recorded its first win of the season in a resounding 167-116 victory at Chapman University on Saturday morning.

"We've had a lot of very close battles all season, but we've kept working extremely hard and deserved to get a win like this," Head Coach Jack Leavitt said. "Our depth allowed us to really distance ourselves in the events we won and it didn't let them get too far ahead in the few we lost."

Senior Benjamin Grabowski (Lake Forest Park, Wash. / Inglemoor) and freshman Alexander Bourzutschky (Potomac, Md. / Montgomery Blair) turned up the intensity right away on the 3-meter board. Although the pair would finish a distant second behind Chapman's Joey Luba, each improved on last week's showing. Grabowski netted an additional six points thanks to an impressive forward one-and-a-half tuck and back somersault straight that both earning 30-plus points, while Bourzutschky posted a 128.9 for a whopping 40-point improvement, including a season-best score of 25.5 on his reverse somersault tuck.

"The divers upped their degree of difficulty on many dives today and overall saw the

improvement we wanted," Diving Coach Ute Zimmerman said.

Caltech caught a big break in the first swimming event as Chapman's 400 Medley Relay team was disqualified, essentially spotting the Beavers 15 points heading into the rest of the meet. The Panthers pulled back three with a first-place finish in the 1000 Free, but both freshman Avikar Periwal (Potomac, Md. / Montgomery Blair) and senior C.J. Culpepper (Leonardtown, Md. / Leonardtown) easily outdistanced the next Chapman swimmer for second and third place, with Periwal dropping four seconds for a career-best 11:12.70 to edge out Culpepper by .33.

The Beavers got a big boost from a sweep of the 200 Free by sophomore Chris Bradley (Half Moon Bay, Calif. / Serra), Culpepper and freshman Richard May (Guilford, Conn. / Choate Rosemary Hall), who shaved one second for a career best.

A 1-2 finish in the 100 Back brought Chapman back within 20 at 53-35, with freshman Philip An (Troy, Mich. / Troy) dropping over a second to break the 1:00 barrier for the first time, but junior Kevin Yu (Seattle, Wash. / Lakeside) stepped up in the 100 Breast, out-touching the Panthers' top finisher by a mere .15 to take first place.

"Kevin was huge in the 100 Breast and later in the 100 Fly," Leavitt said.



GoCaltech apparently didn't get an action shot, but here's the team celebrating their hard work.

-<http://gocaltech.com>

The Panthers bounced right back with a win in the 200 Fly, but freshman Henry Baer (Lafayette, Calif. / Acalanes) matched that in the 50 Free and followed that with another win in the 100 Free after the break. An kept the momentum going in the 200 Back, dropping another two seconds off his best time to lead a sweep of the event. Chapman took first in the 200 Breast but with no other swimmer entered, allowed the Beavers to cancel out the nine points with a 2-3-4 finish.

"We were definitely counting on our medley relay and the sprints coming into today," Leavitt said.

Culpepper and Yu notched wins in the 500 Free and 100 Fly, respectively, extending the margin to a nearly insurmountable lead. The Panthers gained two points on the Beavers with the 1-meter competition, with Bourzutschky continuing his rapid improvement with a personal-best 128.90 (with a new season-best 27.2 coming on his inward somersault tuck), but with just two events remaining, even a 1-2 finish in the 200 IM and 1-3 in the 400 Free Relay would not put a dent in the final score.

## Ochse attempts to wreck Cal Lutheran

GOCALTECH.COM  
Actual Sports Content Editor

THOUSAND OAKS, Calif. (Jan. 31, 2015) – Freshman Ty Ochse (Tucson, Ariz. / Canyon Del Oro) enjoyed a breakout coming off the bench for the Caltech men's basketball team in a 72-52 loss at California Lutheran University on Saturday afternoon.

Ochse netted a career-best nine points while doubling his previous high in minutes played (23), adding one rebound, one assist and one steal while committing just a single turnover.

"Ty played some good minutes today," Head Coach Oliver Eslinger said. "He played tough and scored – that's something you love to see from a freshman."

Similarly to the previous matchup between the SCIAC rivals, the Kingsmen could not miss a shot as they hit 53 percent from the field. The Beavers posted a +3 rebounding margin, which was especially evident on the offensive glass, as Caltech scored 14 second-chance points to CLU's six, but suffered from a -8 turnover differential that led to a 29-18 CLU edge in points off turnovers.

"Cal Lu was clocking, feeling good after knocking off undefeated No. 15 Chapman, and even after a sloppy first half, we were still in the game. We had several moments to get it to a slim margin, but we didn't execute as well as we needed to. We did well attacking the rim though, and once again came out with fewer free throw attempts than I thought we deserved."

The teams traded baskets through the first five minutes before Cal Lu exploded for 10 unanswered points in just three minutes to lead 14-6. The Kingsmen slowly increased the margin to 12 at halftime and kept it going in the second, eventually reaching a high of 28 with just 3:12 left to play.

The light went on for Ochse in the final seconds as he scored six points in exactly one minute on three consecutive possessions, but could only trim the final deficit to 20.

"Again, Ty played well late, and Naveen and Matt [Edwards] played tough as well," Eslinger said. "I asked the guys at the end to

finish the game with toughness, and they did. It says a lot about our team."

Senior Andrew Hogue (Arroyo Grande, Calif. / Arroyo Grande) just missed a double-double with 10 points and eight rebounds while dishing out a team-high two assists. Junior Kc Emezie (Waxhaw, N.C. / Marvin Ridge) matched him for the scoring lead with 10 points and two steals, while sophomore Nasser Al-Rayes (Doha, Qatar / American School of Doha) blocked a pair of shots. Junior Naveen Tadepalli (Calabasas, Calif. / Agoura) also saw his first action of the season.



Tynan Ochse keeps his moves funky and fresh because that's what Snoop would want.

-<http://gocaltech.com>

## Monica reviews season finale of Football

MONICA ENLOW  
Completely Biased Sports Contributor

In this year's season finale of America's most watched show, the Seattle Seachickens took on the New Ugh-land Patriots. They proved week after week to be the strong characters, so it is only fitting that the season finale feature a duel between the two. Move aside *Game of Thrones*, your drama has nothing on Pete Carroll and Bill Ballshould-have-been-checked. Pete Carroll and his reigning champion team play the team he was fired from, facing the coach that replaced him. Now, the build-up to the finale was beautiful: Deflategate. The initial drama this season involving Ray Rice and domestic violence can't compare to the scandal that Deflategate provided the NFL. I think that the studio did a marvelous job of setting up a situation that added nothing to the overall atmosphere of the episode. If you're like me, you might have been hoping for the big, bad Tom Brady to get kicked out and for Andrew Luck to attempt to take the Indianapolis Colts to the promised land. Much to my dismay, Deflategate got deflated and the season finale, aptly titled "Super Bowl XLIX," continued with the expected cast.

Early in the episode, golden boy, Brady, threw an interception. His melodramatic sulking led the Patriots to a 10-point deficit, while oddly bearded Russell Wilson and Marshawn Lynch put the Seachickens on



My favorite moment of the entire episode. Would you believe he actually caught the ball?

-<https://thenypost.files.wordpress.com>

their backs. I didn't find the rest of the episode interesting...that is, until the 4th quarter came around. After multiple failed third down conversions, Brady and his band of brothers managed to pull out two touchdowns and put their team in the lead. The Seachickens weren't ready to give up this blood feud, though. Wilson was doing his best to move his team quickly down the field to raise the score once more. His efforts involved a stunning pass to Kearse that was caught despite bouncing off of two New Ugh-land defenders. I have to say, that was an elegant recovery.

The score is 28-24 New Ugh-land, with less than a minute to play. The ball is snapped. The highly biased Seachickens fan base that filled the stadium gasped in horror and fell silent as dark horse (like that Katy Perry reference?). Malcolm Butler brings the episode-changing surprise. Wilson is intercepted at the 1-yard line with less than a minute to play and his team is down by four points. That was truly an interesting twist. I had my cup ready to drink Brady's tears, but Butler, who we haven't seen much from this season, provides the game winning play for New Ugh-land. Now we have to wait until the next season to see if Butler has any actual significance in the overall *Football* series. Thanks for leaving us with a cliff-hanger, NFL.

Also, shout out to Missy Elliot for saving the halftime show. Luv u, Missy.

# ASCIT Minutes

## ASCIT Board of Directors Meeting

Minutes for 30 January 2015. Taken by Sean McKenna.

**Officers Present:** Cat Jamshidi, Annie Chen, Patrick Nikong, Sean McKenna

**Guests:** None

**Call to Order:** 9:04

### President's Report (Cat):

- ASCIT and IHC are working to improve the library hours situation.
- Faculty Board meeting will talk about Dabiri's article.
- Cat and Annie will check if we can set up regular Rathskeller nights for undergrads.

### Officer's Reports:

- V.P. of Academic Affairs (ARC Chair: Nima):**
  - Student Faculty Conference is happening on February 12th.
  - New ARC reps are being elected as part of house election season.
  - Freshman advising and grad school advising by alums will be the topic of a meeting to take place with the deans next week.
- V.P. of Non-Academic Affairs (IHC Chair: Connor):**
  - Absent
- Interim Director of Operations (Sean):**
  - Alex Ryan is taking charge of a fix to the ASCIT Screening Room equipment.
  - MHF-funded projector/screen/sound system materials are arriving and will be available for student use soon.
- Treasurer (Patrick):**
  - Nothing to report.
- Social Director (Annie):**
  - Annie is going to make Caltech/Harvey Mudd party happen if we can find a date that works (potentially in May).
  - Pasadena ice skating rink rental for Caltech will happen next weekend.
- Secretary (Sean):**
  - 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. The next meeting will take place on **February 6th at 8pm** in **SAC 15**.

YOU ARE NEVER ALONE.

### REMINDER FROM THE COUNSELING CENTER:

*Meditation Mob*  
(drop-in mindfulness  
meditation group)

meets every Tuesday  
Bottom floor of Winnett  
from 12:00-12:50 pm

## WRITE FOR THE TECH!

THE CALIFORNIA TECH IS ALWAYS LOOKING FOR NEW WRITERS! WE ACCEPT REVIEWS, OPINION PIECES, RESEARCH, NEWS STORIES, COMICS AND MORE!

WE PAY FOR QUALITY ARTICLES, SO JOIN THE STAFF TODAY!

EMAIL TECH@CALTECH.EDU WITH QUESTIONS.

CALTECH THEATER offers several chances to branch out and take chances, have fun and expand your social network this year!

WANTED: Actors, singers, musicians, technical personnel, and designers for new, original Caltech musical *Alice Through the Wormhole!* This musical is currently in the development phase with a world premiere run February 20-March 1, 2015!

If you are interested in any facet of production, including script development, contact Brian Brophy directly ([brophy@caltech.edu](mailto:brophy@caltech.edu)).

## Caltech

## Public Events

## Hiring Ushers

**Flexible hours.**

**No experience needed.**

**Outgoing Personality.**

**Pay Rate:**

**\$15 per hour**

*The California Tech*

**Editors-in-Chief**  
Monica Enlow  
Liz Lawler  
Neera Shah  
Nehaly Shah

**Advisor**  
Richard Kipling

**Contributing Writers**  
Brad Chattergoon  
Hannalore Gerling-Dunsmore  
Casey Handmer  
Ching-Yun (Chloe) Hsu  
Nailen Matschke

**Circulation Manager**  
Kit Chinetti

Caltech 40-58, Pasadena, CA 91125  
Contact [tech@caltech.edu](mailto:tech@caltech.edu)

*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.

Letters and submissions are welcome; e-mail submissions to [tech@caltech.edu](mailto: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.

The advertising deadline is 5 PM 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](mailto:tech@caltech.edu). For subscription information, please send mail to "Subscriptions."

**Caltech Students  
only!!**

**Contact: Adam Jacobo**

**626.395.5907**

**[ajacobo@caltech.edu](mailto:ajacobo@caltech.edu)**

# FEATURE

THE CALIFORNIA TECH

FEBRUARY 2, 2015 7

## Brad/Chad Business Tutorial: Marketing Management

**BRAD CHATTERGOON**  
Contributing Writer

Hey guys and girls. In case you haven't been keeping track, it's currently week five. Yup we're that much closer to spring but not quite as close as I'd like to be. This past week I realized that this Brad/Chad guy is way more famous than I am. If I introduce myself as Brad/Chad I get significantly more recognition than as plain old Brad. Case in point, I was at party this week and met some of the frosh. After swapping names I could see the following expression on their faces,

"Who is this creepy Brad character and why should I care?" but then when I say Brad/Chad their faces light up and they exclaim, "Oh YOU'RE Brad/Chad". It's weird.

Last week's article focused on the four P's of what I like to view as the consumer side of marketing. As promised,

this week I will be looking into the four P's of the firm side of marketing, or what might be more formally described as Marketing Management.

**People:** At the core of a marketing strategy are the people behind it. A marketing manager should be aware of how to best align people and support collaboration across the marketing eco-system. This can mean including human capital outside of marketing, such as the product development side which can provide an idea for what the vision of the product is

or what its intended uses are. It can also be extended to include customer relationships, especially in business to business markets, since without customers, we have no business.

**Processes:** Marketing is not as simple as saying "buy our product." A successful marketing campaign is usually a large enterprise. As part of improving on marketing it is important to define the processes that make up the marketing matrix. These kinds of segmentation can take the form of "Media Relations," "Brand/Logo Design,"

or "Customer Relationship Management."

**Performance:** One of the most important questions for a marketing campaign is, "Has it generated profits/increased sales?" No one wants to spend money on a marketing strategy that has no effect on their bottom line (i.e., profit margins). Managers today need to work with finance and business intelligence to design key performance indicators in order to measure the progress of a marketing campaign as well as get feedback on how successful it

has been. Even the best marketing campaign is useless if it does not get to the right audience. Testing of these types of events is essential, otherwise a marketing strategy effectively becomes a black box.

**Profit:** Traditionally marketing can be a cost center but it is time to stop treating it as a cost and start viewing it as an investment. Related to performance, it is useful to start measuring the return on marketing investment (ROMI). Through financial management, it is possible to aggregate marketing costs and make models on how much contribution to sales the marketing has provided. This can help to tweak future investments in marketing and optimize for ROI by manipulating marketing investments.

Midterms should be starting pretty soon, so good luck, Caltech. I believe in you.

-Brad/Chad



Photo Courtesy of Dilbert Comics by Scott Adams

## Crossword

### Across

- Speech loss condition
- Org. for the Lakers and Clippers
- Crime scene drama with NY and MIA spinoffs
- What may bring Tom Brady or Russell Wilson to his knees?
- "You've Got Mail" company
- "Atlas Shrugged" author Rand
- Techer's basis... for both answers? (see 35-Across)
- FDR successor
- Remove stitches from
- What one does on a couch to help tell the truth in therapy, stereotypically?
- Adjective defining the group that you originally needed eight badges to fight
- Youtube time waster... for both answers? (See 35-Across)
- High level H.S. 63-Across class
- Kingdoms
- Youth organization with a pledge involving one's head, heart, hands, and health
- (In the) eye of the storm... or a hint to the location of each second answer clued by 17-, 24-, 47-, and 59-Across, literally
- One of multiple structurally different configurations of the same element
- Coyote cousin
- The \_\_\_\_ weensy spider..."
- Laser beam target... for both answers? (See 35-Across)
- Cul - \_\_\_\_

52: Rower's tool

53: "I \_\_\_\_ message on your machine" (rare comment these days)

58: Famous letters in an equation by 59-Across's namesake

59: German mixologist's element... for both answers? (See 35-Across)

62: Runner-up Sanchez for Miss Universe 2015

63: The second half of 27-Across, e.g.

64: Caltech's additions to Sloan, Bridge, and Gates

65: Starter for Juan or Diego?

66: Fraction of a min.

67: World's tallest mountain

### Down

1: Jesus or Moises of baseball

2: The "it" of Justice Potter's famous quote, "I know it when I see it."

3: Abbr. for "Household Water Treatment and Safe Storage"

4: Tennis great Arthur \_\_\_\_

5: Arctic finch

6: Fleming (the James Bond creator, not the house)

7: Speed Skater \_\_\_\_ Anton

Ohno

8: "He-Who-Must-Not-Be-\_\_\_\_"

9: Constrictor

10: Outwardly claim

11: Office location for Caltech's Sargent? (not at Arms)

12: 11-Down scientists study the Solar one

13: Puts 6 feet under

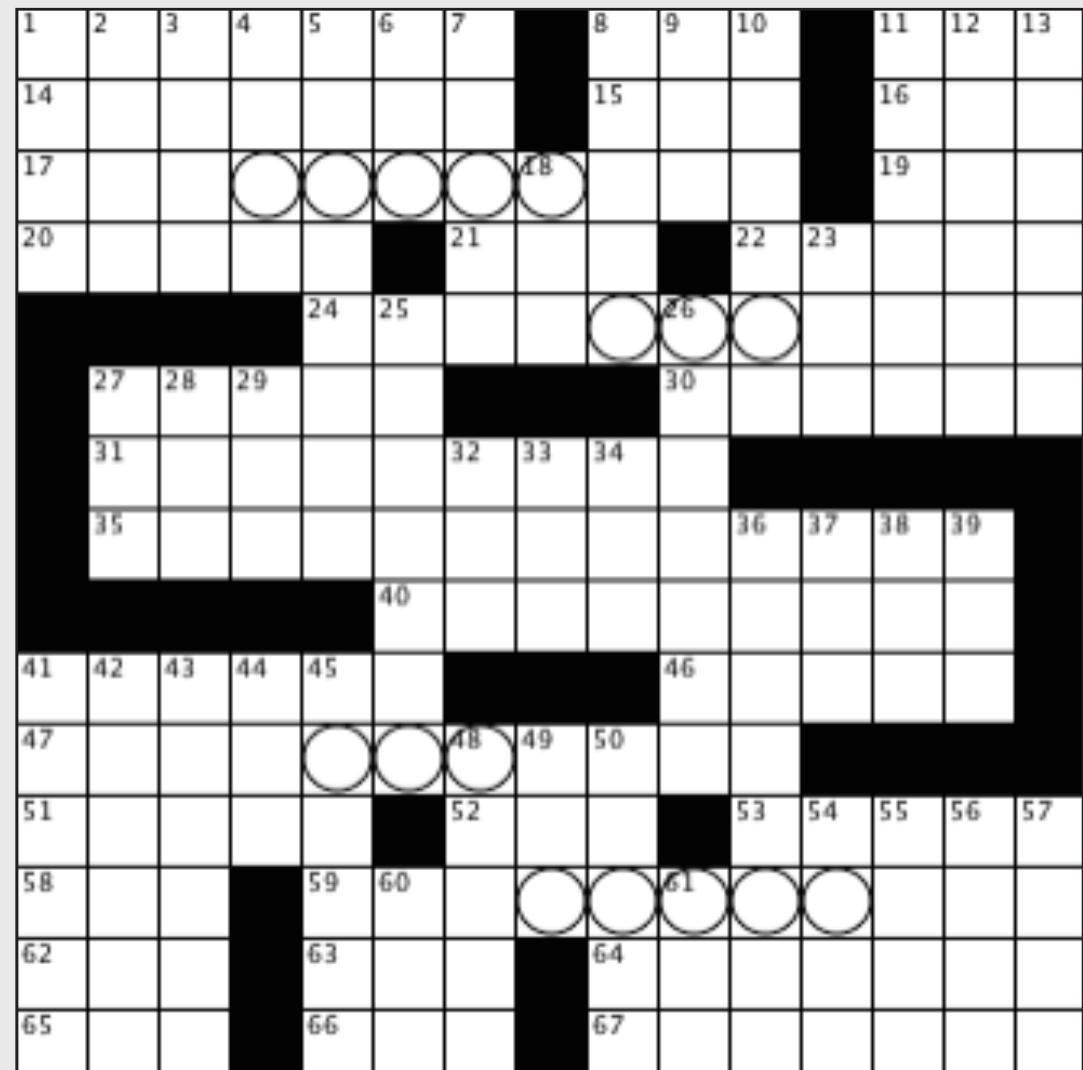
18: \_\_\_\_ Tin Tin

23: JFK's neighbor airport

25: "Hey there sexy!"

26: Went around a planet

27: High resolution scanning technique, briefly



Courtesy of Zach Rivkin ('14)

- Luau staple food
- Air \_\_\_, sports playing retriever of movies
- Transparent collectible of animation films
- Species of cat?
- Alien's transportation
- No foliage grows above it
- I got an \_\_\_\_ my test!"
- 33 1/3 rpm records
- Bob of ESPN's Outside the Lines
- First names of Smith and Yuki (of "Karate Kid" and "Yugioh" respectively)
- Disease reducing the blood's ability to carry oxygen ("Sickle Cell \_\_\_\_")
- Alternative to an MRI
- Alternative to Hyundai
- Can be granted, denied, or random
- Common mixer with Gin
- "Everyone \_\_\_\_ a plan until they get punched in the mouth" -- Mike Tyson
- Arterial suffix for "a-"
- The E of D.O.E.
- "Prix \_\_\_\_ menu"
- Typical weekday for U.S. elections
- Cptl. of the Netherlands
- \_\_\_\_ King, Adventure Time character
- A handwritten ltr. goes in one of these

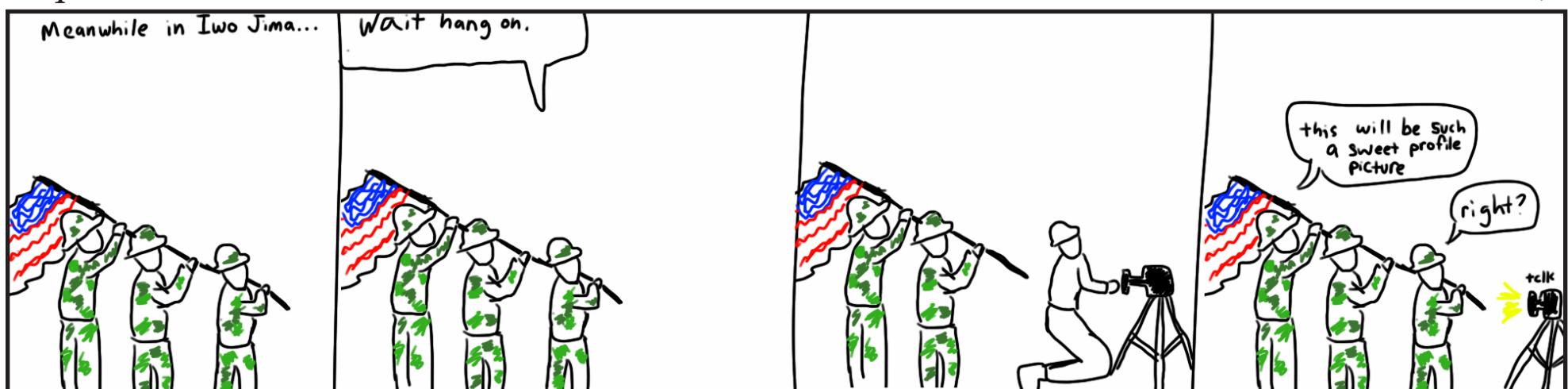
# HUMOR

8 FEBRUARY 2, 2015

THE CALIFORNIA TECH

## Acquired Taste

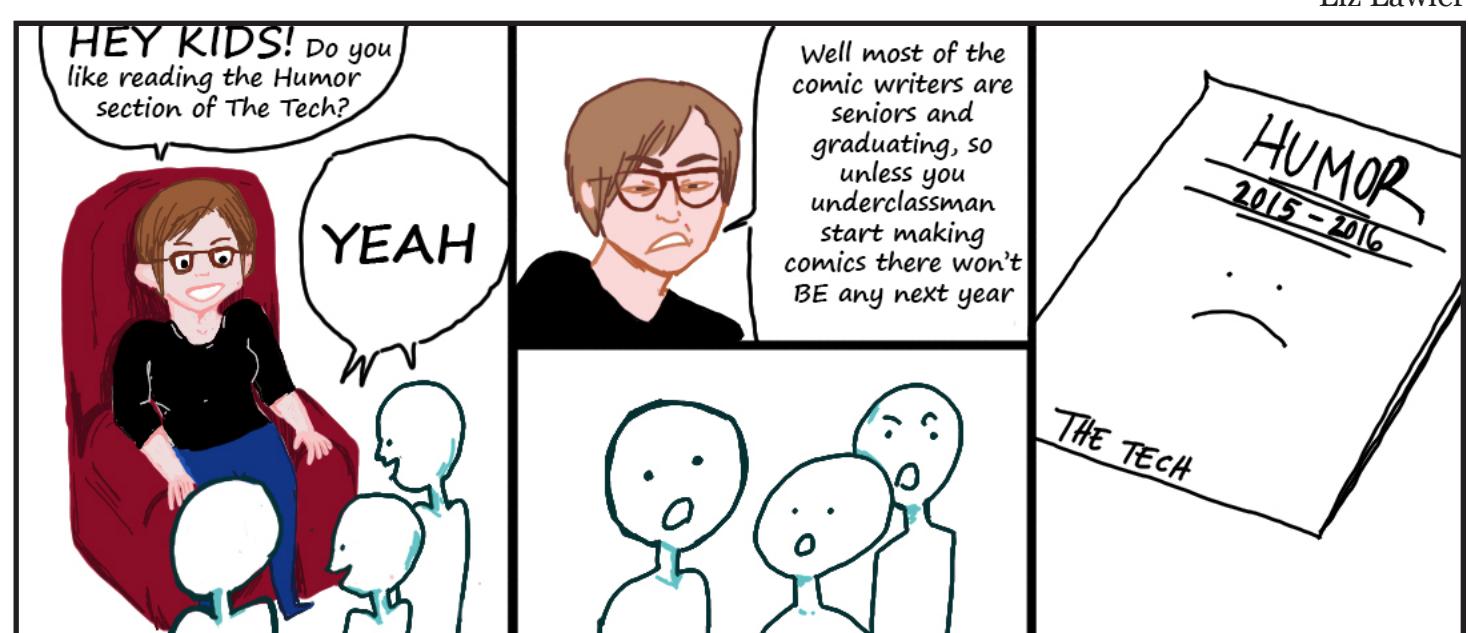
Dr. Z



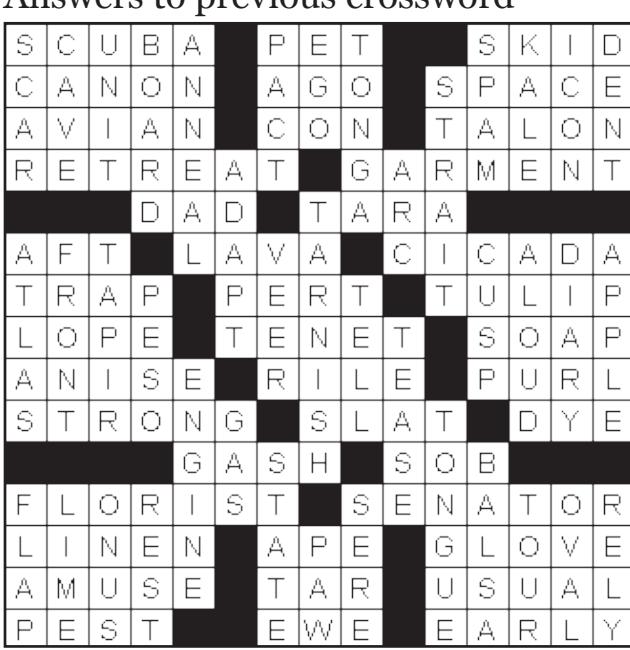
Rochelle Weber



LONG CAT  
SAYS:  
"WRITE  
FOR THE  
TECH:  
EARN  
DOLLA  
DOLLA  
BILLZ  
Y'ALL"



Answers to previous crossword



-puzzlechoice.com

The California Tech  
Caltech 40-58  
Pasadena, CA 91125