

Entrepreneurship Club hosts Getmii founder Max Meyer for guest lecture

PARUL PUBBI
Contributing Writer

Max Meyer, the 25-year-old founder of the social media app Getmii, gave a lecture on Oct. 6 during Caltech's class on entrepreneurial development, E 102b, as part of his North American

assist nearby peers. The product was test-piloted with the Red Cross Central Donation Center in Nepal last month and launched for a global release soon after. Students also learned about the nature of international product development, as the application itself was created in Singapore, and



Getmii founder Max Meyer lectures Caltech students on entrepreneurship and branding.

Photo Courtesy of Parul Pubbi

speaking tour. Led by Dr. Ken Pickar, Caltech students in the class develop their own startup plans after extensive market research. The core business plans being developed range from student pitches for products to work with research labs at Caltech. Following a reflection upon Getmii's three-month development process, Meyer extended advice for students who hope to make their market plans a reality.

In addition to racking up 1,000+ downloads in its first week, Getmii was featured in *The Boston Globe*, Product Hunt, BuzzFeed and TechCrunch Disrupt SF following its Sept. 24 launch. Meyer is continually humbled by the amount of buzz Getmii receives, but more importantly remains constantly inspired by young entrepreneurs. Students learned about the importance of branding and core company values and gained insight into revenue models in the crowd-sharing economy.

Meyer graduated from Harvard just three years prior to the launch of his company, which now employs over 20 people, and was inspired by the needs of survivors of the Nepal earthquake last April. The application displays requests of local users, allowing others to

were able to ask questions after the event.

More information on the app is available at getmii.com, and questions can be sent to press@getmii.com. For more entrepreneurship-oriented opportunities and events, contact Parul Pubbi at ppubbi@caltech.com or visit the Caltech Entrepreneurship website at www.its.caltech.edu/~eclub/.

CTLO puts a spotlight on teaching and learning

OFFICE OF STRATEGIC COMMUNICATIONS

At Caltech, innovation, creativity, and risk taking are not reserved for the laboratory only. Caltech faculty are just as ambitious and driven in the classroom as they are in their explorations of science and engineering.

As a new academic year gets under way, professors, teaching assistants, and graduate students are once again exploring – and implementing – the latest teaching methods and developing bold new approaches to enhance learning and understanding across disciplines.

It's in celebration of this work, and of Caltech's commitment to enhance teaching and learning at Caltech, that the Center for Teaching, Learning, and Outreach (CTLO) has organized the Institute's inaugural TeachWeek event. The weeklong, campus-wide celebration, which starts Oct. 19, and runs through Oct. 23, will provide a forum for conversations with Caltech faculty, students, staff and renowned guest presenters, including Harvard physicist and educator Eric Mazur, about the art of teaching and the future of the practice at Caltech. TeachWeek has been organized by the CTLO with support from the Twenty-Seven Foundation.

"This event really marks a three-year effort by the Institute and CTLO to bring more attention, support and energy to teaching at Caltech,"

said CTLO Director Cassandra Horii. "We have had some wonderful successes since our office was established. There's definitely a growing interest among Caltech faculty and TAs, who want new ideas about teaching and want to connect with what others right here at Caltech are trying in their classes."

Altogether, as many as 20 Caltech faculty members will be speaking and opening up their classes to guests during the week. Open classes are something brand new at Caltech: faculty teaching courses across campus – covering everything from Newtonian mechanics to neuroscience and entrepreneurial development – have agreed to open up regularly scheduled lectures and discussions to fellow faculty, staff and students (both graduate and undergraduate) to provide a deeper look at the variety of teaching methods and approaches being employed at Caltech.

"There were more who wanted to speak or open a class but had a conflict or aren't teaching a regular class this fall," said Horii. "Most of those speaking are faculty who haven't previously presented publicly about their teaching. The response and interest level speaks to the great amount of thought and care that Caltech faculty invest in teaching."

For a complete list of TeachWeek programs, including the schedule for open classes and RSVP information, visit teachweek.caltech.edu.

The TeachWeek program runs from Monday, Oct. 19, through Friday, Oct. 23, and includes the following panels, discussions, workshops and open classes:

Monday, Oct. 19
4 p.m.–5 p.m.: Lees-Kubota Lecture Hall

The Future of Teaching and Learning at Caltech: An Innovation Showcase

Panel discussion with faculty; TeachWeek opening reception immediately following; RSVP not required.

Tuesday, Oct. 20
Noon–2 p.m.: Dabney Lounge
Bringing Joy into Your Teaching: A Workshop by Chris Duffy

RSVP requested for lunch. Chris Duffy will be available for individual consultations on Tuesday and Wednesday.

RSVP to request a consultation. Open classes: Ch 112, Hum 9, FS 16, BEM 105

Wednesday, Oct. 21
Noon–1 p.m.: Keck Center

Engaging Students Beyond Their Field: A Discussion with 2015 Feynman Prize Recipient, Professor Kevin Gilmartin, and Colleagues

RSVP requested for lunch. 4 p.m.–5 p.m.: Beckman Institute Auditorium

The Teaching and Learning Project: A National Photographic Essay Featuring Caltech

Presentation and discussion with photographer Martin Springborg;

RSVP not required, Open classes: Ph 1a, Bi 150, ME 11a

Thursday, Oct. 22
4 p.m.–5 p.m.: 201 East Bridge

Confessions of a Converted Lecturer: Keynote by Eric Mazur

With remarks by President Thomas F. Rosenbaum; RSVP not required. Open classes: Ge 108, E 102b

Friday, Oct. 23
9 a.m.–11:30 a.m.: Winnett Lounge

Flat Space, Deep Learning: A Workshop by Eric Mazur

RSVP requested. Noon–1 p.m.: Winnett Lounge

TeachWeek Capstone Panel: with Faculty, Staff, and Students from Caltech and JPL

RSVP requested for lunch.



Cassandra Volpe Horii (on right at head table), director of the Caltech Center for Teaching, Learning, and Outreach, works with Dianne Newman (on left at head of table), professor of biology and geobiology, and her Principles of Biology course TAs to provide guidance in implementing the latest teaching methods, developing better lectures and more targeted homework assignments and exams, and obtaining and analyzing feedback from students.

Photo Courtesy of Martin Springborg

IN THIS ISSUE

NEWS | PAGE 2
MIGRANT CRISIS IN EUROPE EXPLORED

OPINION | PAGE 3
NAILEN REVIEWS WAVVES' LATEST RELEASE

FEATURE | PAGE 4
CALTECH Y CEL-EBRATES 100 YEARS AT CALTECH

SPORTS | PAGE 5
REISLER MAKES HISTORY FOR WOMEN'S TENNIS

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.

Ongoing and past programs:

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

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

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

Upcoming Events

1. Lessons Learned from the Fukushima Nuclear Accident for Improving the Safety of US Nuclear Plants

California Institute of Technology
Lessons Learned from the Fukushima Nuclear Accident for Improving the Safety of US Nuclear Plants

The March 11, 2011 Tohoku-Pacific earthquake and the resulting tsunami on the northeastern shore of Honshu resulted in an unprecedented test of safety systems, severe accident management plans, and emergency response capability at the Fukushima Nuclear Power Plant (NPP) complex. Throughout the world, the reactions to these events have been varied with a number of investigations, policy studies, political decisions, and regulatory actions. In the USA, the US Nuclear Regulatory Commission sponsored a study by the National Research Council to provide an assessment of lessons learned from the Fukushima nuclear accident for improving the safety and security of nuclear plants in the United States. I was a member of the committee that carried out the study. The first phase of the study concluded in the summer of 2014 and the results were published as a 376 page report, available online from the National Academy Press. I will present a summary of the major findings and recommendations from the first phase of the study.

Lunch provided. RSVP Required: <https://goo.gl/gtAAQV>.

2. Union Station

Saturday | October 17th | 5:15 - 9:15 PM
| Pasadena

Prepare serve dinner to the residents at Union Station Adult Center in Pasadena. Food and materials are provided. The Adult Center provides shelter, meals and supportive services for more than 150 homeless men and

women each year. For more info and to RSVP email age@caltech.edu or aishwarya.nene@gmail.com

3 a . Pasadena LEARNS

Fridays |
3:00 - 5:00pm |
Pasadena

C o m m e
v o l u n t e e r
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

Photo Courtesy of Caltech Y

experiments. Transportation is provided. For more information and to RSVP, contact vkkumar@caltech.edu. Eligible for Federal Work Study.

3b. Hathaway Sycamores

Wednesdays | 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 srichers@tapir.caltech.edu. Eligible for Federal Work Study.



Vice President of Student Affairs and C.L. Kelly Johnson Professor of Aeronautics and Professor of Mechanical Engineering Joseph E. Shepherd will give a lecture on Tuesday, Oct. 13.

Tuesday, October 13th | 12:00 to 1:00 PM
| Jorgensen 109

Lunch Provided | RSVP Required: <https://goo.gl/gtAAQV>

Are you interested in nuclear energy? Come and discuss nuclear energy policy with one of the world's experts: Caltech's Vice President of Student Affairs, Professor Joseph Shepherd. He will share insights and lessons learned from the Fukushima nuclear disaster. Full abstract is below.

A discussion with:

Joseph E. Shepherd

Vice President of Student Affairs

C.L. Kelly Johnson Professor of Aeronautics and Professor of Mechanical Engineering

Migrants in Europe: How to juggle the law, common sense, and human rights

SEAN MCKENNA
Contributing Writer

Europe is facing a migrant crisis that some have claimed is the single greatest threat to European unity since World War II. As violence and instability fester in the Middle East and North Africa, millions of migrants have left home countries like Syria, Libya and Eritrea. Hundreds of thousands of them, this summer in particular, have attempted to enter Europe. Many make perilous boat crossings of the Mediterranean, particularly on Libya-Italy and Syria-Turkey-Greece routes.

Once in European countries, these migrants are subject to European laws. Europe's Dublin Regulation stipulates that migrants seeking asylum must be processed in the first European Union country they reach. However, most EU countries (including Italy and Greece) are part of the Schengen Area, and their border controls are heavily relaxed with other Schengen Area countries. Thus, migrants reaching Italy and Greece can usually travel easily to other European countries like Germany.

Say a migrant arrives in Italy via boat from Libya and then travels to Germany under the cover of Schengen. Let's consider what should happen to them according to the law, common sense and the human right of self-determination. If the migrant is seeking asylum from persecution or conflict, European law dictates the migrant's asylum

application must be processed in Italy. If the migrant does not claim asylum, or if it is not granted, the law dictates that the migrant has entered Europe illegally and must return to Libya. Common sense dictates that the migrant should not return to Libya, where their lives are in danger, nor should the migrant return to Italy since the country's economy and government can barely support its own citizens. Human self-determination dictates that a migrant, regardless of their asylum status, should be allowed to live in Germany, so long as they do not disrespect or harm those already living in Germany.

Europe's leaders must simultaneously preserve the law, common sense and human rights. The solution lies in changing the law: Europe should eliminate the requirement that asylum applications be processed in the first country a migrant reaches. It incentivizes mechanisms such as fence-building, whose sole intent is to exclude some of Earth's most vulnerable people. Furthermore, upholding this requirement ignores economic common sense, since the economies of Europe's Mediterranean periphery (Greece, Italy and Spain) will be troubled for the foreseeable future. Lifting this requirement will give maneuvering room to European policymakers. Hopefully, they can implement a lasting solution that respects the legal and human rights of existing and prospective Europeans.

Caltechlive!

SATURDAY, OCTOBER 17, 2015/8 PM

Reduced Shakespeare Company *The Complete History of Comedy (abridged)*

\$38, 33, 28 / \$10 YOUTH



It's a show about wit. About quick minds. About what makes us laugh. And what's fair game for laughter.

— *Cincinnati Enquirer*

Caltech / JPL Faculty & Staff \$5 off • Students \$5

Caltech's Beckman Auditorium
www.events.caltech.edu



Call campus x 4652 for information

Wavves' boring *V* contributes to stagnation of surf pop-punk

NAILEN MATSCHKE
Contributing Writer

While rock-based genres haven't exactly been stealing the show lately, the surge of so-called "surf punk" and "surf pop" bands during the last decade has helped to extend the art form's life just a bit longer. Centered in Southern California, the bands associated with these styles are not defined by a pioneering of new territory so much as a curation and combination of their influences. Their sonic aesthetic comes from the surf rock of the early '60s, dominated by bands from the same region, driven by jangly guitar melodies and light drums that do little except keep time. To flesh this out, surf punk artists have added the more engaging riffs, power chords and lyrical themes of pop-punk, creating a sound that is bright and washed-out but at the same time conducive to mosh pits. San Diego's Wavves, the project of singer/songwriter Nathan Williams, has been at the forefront of this movement, putting five albums from 2008's *Wavves* to last week's *V*.

While the band's self-titled debut and follow-up *Wavves* fully embraced lo-fi recording and had large experimental components, Wavves' 2010 album *King of the Beach* has come to be considered the band's best work by most listeners (including me), as it cleaned up some of the distortion and disorganization while maintaining an experimental flavor

and achieving more memorable songs that also rocked harder. For the past five years, however, there has been little to suggest that the band has more to bring to the table, and far from turning this around, *V* serves to continue a string of disappointing releases from the surf pop-punk camp that seem to signify a genre stagnating at an alarming rate.

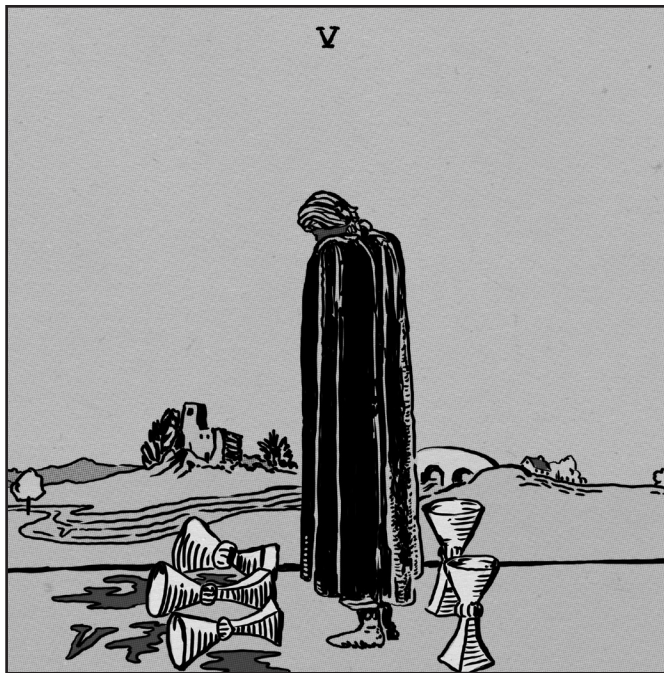
To put it bluntly, my issue with this album is that everything about it is mediocre. For example, the guitars are wholly underutilized to the point where they might as well just be synthesized instruments added by the recording engineer. It's easy, and to a degree unfair, to complain about the technical complexity of any punk-derived music, but I didn't find any riffs, harmonies or even particularly emphatic playing to write home about. Even precursors like Green Day and blink-182 were able to make respectable, multi-decade careers out of power chords plucked from the natural minor scale, and if you think that's still an unfair comparison, just look at genre-mates FIDLAR, whose most recent album falls squarely into the "stagnant 2015 release" category (though none of its or FIDLAR's self-titled album's guitar lines are

as forgettable as those Wavves has given us here). *V*'s six-strings play the right chord 16 times in a row, and have just enough extra distortion to serve as a reminder of the band's lo-fi roots, but otherwise

with *V*, but doing so was a battle never fought, as everything else is just as disappointing. The drums play almost nothing but your typical bass-bass-snare-bass rock pattern the entire time, on every

single song, save for some double-time tambourine. I know this is again "how the genre works," but even someone who has never heard a drum fill before could come up with some more variety. As with the guitars, it feels as though there is a total lack of energy and interest in the writing and playing, with the beat just being there because it has to.

The vocals suffer from the same problem, and while they stopped being much more than another box to check off after *Wavves*, they've somehow managed to continue to go down in quality on every release since then. On *V* the only choruses which really stuck with me were those on "Pony" and "My Head Hurts," and this is only the case due to their catchy tunes that have to make up for simplistic lyrics like "It gets better / It better" on the former and "My head hurts / And without you it's worse" on the latter, both of which are repeated ad nauseam. Another comparison to FIDLAR fits well here, as most songs from both groups deal with the typical problems of 20-somethings still playing punk music: pining for lost loves, stumbling through days in a haze of THC and ethanol, and depressing baths of ennui. FIDLAR, however, stands head-and-shoulders above Wavves in both the raw emotion of the lyrics and how they're presented with catchy hooks and tight verses that mesh well with the rest of the band. Even Best Coast, another group in the "stagnant" bin, writes songs that are about something, while Wavves' lyrics on *V* are just as forgettable as the rest of the music.



-<http://media.npr.org/>

they are boring and sound like they were written separately from the vocal melodies and rhythms. This latter point puts an especially noticeable hole in the album's sound, as guitars in rock music are supposed to serve as a catalyst for the band's chemistry, working in concert with the other members to produce music that's more than the sum of its parts. Here, they just sit like a layer of wet paper towels between the vocals and percussion.

This alone would have made it difficult for Wavves to win me over

much more than another box to check off after *Wavves*, they've somehow managed to continue to go down in quality on every release since then. On *V* the only choruses which really stuck with me were those on "Pony" and "My Head Hurts," and this is only the case due to their catchy tunes that have to make up for simplistic lyrics like "It gets better / It better" on the former and "My head hurts / And without you it's worse" on the latter, both of which are repeated ad nauseam. Another comparison to FIDLAR

ellen's

626.441.4415

SILKSCREENING EMBROIDERY
& PROMOTIONAL PRODUCTS

1500 MISSION ST. SOUTH PASADENA

WWW.ELLENSSILKSCREENING.COM

Show Off Your School Pride !!!

T-Shirts, Sweats, Caps, and over 250,000 promotional items to grab their attention!

Bring your student I.D. to receive one FREE large setup (a \$25 Value)

Caltech Y celebrates centennial, premieres *PHD Movie 2*



The Caltech Y hosts a Hollywood-themed dinner for all students on the Beckman Lawn.



Attendees receive Caltech Y Centennial T-shirts at the dinner celebration.



Director Iram Parveen Bilal shares the story behind the PHD Movie 2.



Athena Castro, executive director of the Caltech Y, gives an opening speech.

Photos Courtesy of Ching-Yun (Chloe) Hsu



COME FLY WITH US!

Did you know?...

Caltech has a flying club with 140+ members?

Members have gone on to be astronauts?

El Monte (EMT) airport is 6 miles away?

Join the Aero Association of Caltech (AACIT) at our **Fabulous Fall Flying Fair** and take a free scenic flight over Caltech and JPL and learn about flying. *Caltech students can get a free ride to the event.*

FREE FLIGHTS. FREE FOOD.

Sign up at <http://picnic.aacit.aero>



**SUNDAY, OCTOBER 25, 2015
EL MONTE AIRPORT
11AM-5PM**

AACIT – Teaching Techers to fly since 1966
<http://aacit.caltech.edu>

MNOZIL BRASS
YES! YES! YES!

“Mnozil Brass is one of the funniest, and most creative, chamber groups on the planet.” - CLASSICALITE

<http://www.mnozilbrass.at/en/>



SAT • OCT 24 • 8PM

Tickets: \$36 St/Sr: \$32 16 & Under: \$15



Chris Perondi's

**EXTREME CANINES:
STUNT DOG EXPERIENCE**

With amazing tricks, big air stunts, and comic antics, these lovable (rescued) dogs provide an incredible afternoon of entertainment.



SAT • NOV 14 • 2PM

Tickets: \$30 St/Sr: \$25 16 & Under: \$15

HAUGH
PERFORMING ARTS CENTER

Citrus College
1000 W. Foothill Blvd.
Glendora, CA 91741

TICKETS:
(626) 963-9411
www.haughpac.com

Blackwood, Bradley lead men's water polo to first NCAA win of season

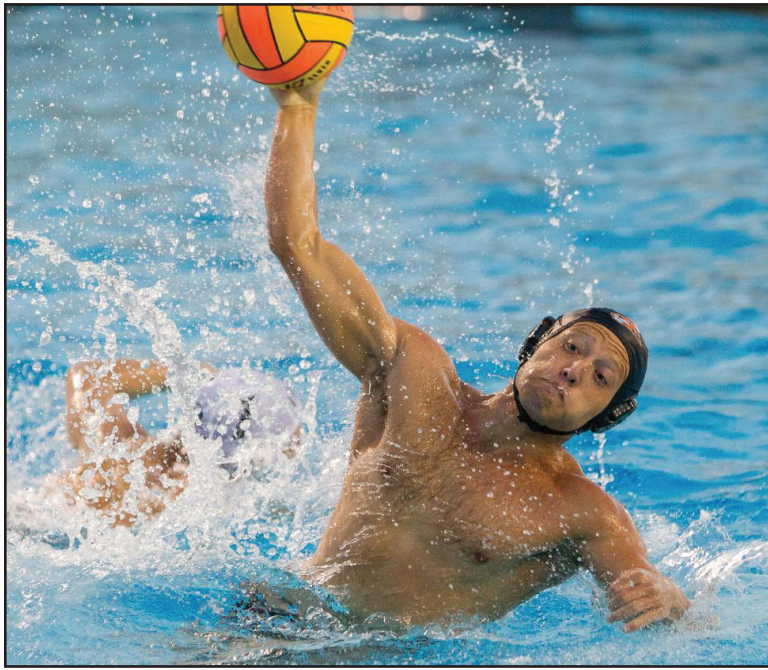
GOCALTECH.COM
Actual Sports Content Editor

CLAREMONT, Calif. (Oct. 3, 2015) – Senior James Blackwood had a hand in eight goals and SCIAC goals leader, junior Christopher Bradley, scored the Beavers' final five to lead the Caltech men's water polo team to its first NCAA victory of the season during the two-day Gary Troyer Tournament on Friday and Saturday.

The Beavers dropped games against MIT, Occidental College and Fresno Pacific University before capping the weekend with the 10-9 victory over Penn State-Behrend.

The Beavers found themselves in a surprising 3-0 hole against Penn State-Behrend right up until two seconds before the end of the first quarter, when Blackwood found the back of the net to get Caltech on the board. Caltech ripped three shots early in the second quarter before Blackwood netted twice more to tie the game with 3:51 remaining until halftime. Ross kept the score level with several crucial saves of his eventual 16 in the second quarter alone.

Caltech won the third quarter sprint but PSB forced a turnover and scored on the counter to take the 4-3 lead. After another two saves from Ross, Blackwood hit



Why is that guy swimming away from Blackwood? I don't know, because I never really know what's going on in water polo.

Photo Courtesy of Bob Palermi

Eck for the equalizer at the 6:43 mark and again at 6:09 following another Lions goal. Bradley took over from there, scoring the go-ahead goal and quickly completing the hat trick to stake Caltech to an 8-5 lead. The Beavers offense fell apart in the final minutes of the quarter, however, allowing PSB to capitalize on a pair of turnovers and make it a one-goal game going into the fourth quarter.

The Lions tied the game at 8-8 just 1:15 into the quarter. The Beavers failed to convert on two

man-up opportunities over the next two minutes, but Bradley had plenty left in the tank and all but handed Caltech the win with back-to-back strikes at 4:40 and 4:12. Two late turnovers gave PSB a chance to get back into the game, which the Lions took to make it a one-goal affair with 1:23 left on the clock. The Beavers came up empty on two further attempts, leaving 11 seconds for the Lions to take one final shot, which Ross stuffed to seal the victory.

Little keys volleyball run against No. 6 Cal Lutheran

GOCALTECH.COM
Actual Sports Content Editor

PASADENA, Calif. (Oct. 8, 2015) – Senior Amarise Little keyed a strong showing in the second set as the Caltech volleyball team fell, 3-0, to No. 6 California Lutheran University on Thursday night.

The Regals improve to 18-2 overall and 8-0 in the SCIAC while the Beavers are now 0-14 (0-9).

The visitors stormed out to a 9-2 lead and cruised to a 25-9 victory in the first set, surrendering consecutive points just once. Caltech turned the match completely around to open the second set, scoring the first four

points on a kill and block assist by Little and a service ace by senior Meghana Pagadala. CLU scored six of the next seven points, with another kill from Little allowing the Beavers to stay within one, but Caltech responded with a 4-1 run of its own to retake the lead at 9-7. Senior Cat Jamshidi kicked things off with a kill, followed by an ace from junior Kate Lewis and another ace by Jamshidi to cap the run.

CLU's offense came alive at that point, rattling off five straight points and another eight unanswered soon after to close out the set at 25-14. The Regals then took the third set, 25-8, including 12 of the final 13 points.



"Little Keys" sounds like an indie band name.

-<http://gocaltech.com>

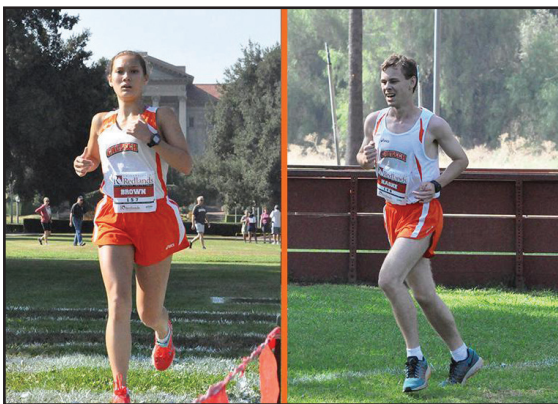
Depth shines for cross country at Pomona-Pitzer Invitational

GOCALTECH.COM
Actual Sports Content Editor

CLAREMONT, Calif. (Oct. 3, 2015) – Several Caltech men's and women's cross country runners underlined the Beavers' depth with big improvements at the Pomona-Pitzer Cross Country Invitational early Saturday morning.

"We were looking to build on our experience from two weeks ago and gain some experience on this year's West Regionals course," Head Coach Ben Raphelson said. "It also provided a good opportunity to test ourselves against most of the SCIAC. Both teams are getting closer to what we want to become by the end of October. It will take more smart and hard work between now and then, but it's starting to take shape."

Senior Aditya Bhagavathi continued his steady progression with a team-best 21st-place finish to lead the men to the fourth-fastest average time in program history



Hashe and Brown (hehe) look pretty tired, but they also look like they're still running pretty fast, so kudos to them.

-<http://gocaltech.com>

(27:34.17). The 2014 NCAA qualifier sat off the main pack early once again yet still trimmed 41 seconds off his season debut two weeks ago and came in under his time at last

Other notable performances included freshman Michael Hashe dropping an astounding 1:20 (32:33.40) in just two weeks and sophomore Mason MacDougall cutting another 51 seconds to record a 33:03.65 – 3:30 faster than last year. Still not at full strength due to some injury management concerns, the women's team nevertheless found positives to take away from its first 6k of the year. Freshman Melissa Gutierrez stood out (25:20.83) with a mile pace that bettered her performance in the Mustang Challenge despite going the extra kilometer. Freshmen Ariel Hasse and Lilly Luo placed third and fourth, respectively, among Beavers in their collegiate debuts with times of 29:07.66 and 29:09.02. Rookie Robin Brown, in just her third career race, continued a trend of rapid improvement as she paced a full 30 seconds faster per mile than on the shorter course two weeks prior to clock a 29:47.30. Senior Alice Michel made her season debut with a 30:19.51.

"We had several surprise themselves, especially Lilly and Ariel in their first races," Raphelson said. "Those two, along with Robin and Alice, got to showcase the tremendous progress they've made in training."

Reisler reaches consolation semis in unprecedented ITA regional for women's tennis

GOCALTECH.COM
Actual Sports Content Editor

CLAREMONT, Calif. (Oct. 4, 2015) – Freshman Julia Reisler reached the semifinals of the consolation bracket at the USTA/ITA Division III West Regional Championships for the first time in Caltech women's tennis history as a quintet of Beavers competed in the weekend tournament.

Junior Sophia Chen and freshman Kana Moriyama kicked things off on Friday morning with wins over SCIAC foes from the University of La Verne and Whittier College. Chen topped ULV junior Areli Martinez, 6-3, 6-1, while Moriyama rallied from a tiebreak loss in the first set to edge out Whittier #2 singles junior Gabi Etchegaray, 6-7 (3), 6-4, 6-0. Both would fall in the next round.

Sophomore Vinci Chen and freshman Cece Andrews were swept by a pair of very tough opponents in Pomona-Pitzer #9 seed and #4 singles sophomore Grace Hruska and three-star CMS freshman Jessie Cruz, respectively.

Reisler, meanwhile, faced the

toughest draw in former four-star Pomona-Pitzer sophomore and second consolation bracket favorite Emily Kuo, who came out on top, 6-1, 6-1. The Caltech rookie was not fazed, however, as she went on to make the deepest run in program history through the first consolation bracket. Reisler started by pulling an upset against CMS sophomore Lauren Livingston with a thrilling two-tiebreak superbreaker, 6-7 (6), 7-6 (8), 10-8. Reisler then steamrolled Redlands senior Alyssa Gilbert, 6-1, 6-2, and recovered from a brief lapse to cruise through another superbreaker against Pomona-Pitzer rookie Jessica Folsom, 6-3, 2-6, 10-1 before finally ending her brilliant run in the semifinals against the eventual champion, Sagehens senior Marie Fleming (6-2, 6-0).

"This was easily our best tournament ever," Head Coach Mandy Gamble said. "We've had some individual successes in the past, but never as deep a run as Julia or as many wins and competitive matches overall. We're excited to get to work ahead of the spring."

ASCIT Minutes

ASCIT Board of Directors Meeting

Minutes for 06 October 2015. Taken by Phillip An.

Officers Present: Nima Badizadegan, Sean McKenna, Kalyn Chang, Jay Palekar, Catherine Jamshidi, Phillip An

Guests: None.

Call to Order: 12:05 pm

President's Report (Nima):

- Attended the Faculty Board Meeting, key issues discussed were regarding disaster planning and faculty diversity
- Club Fair is 4:30 to 7:00 pm on Wednesday
- Nima and Jay will meet with the Center for Teaching Learning and Outreach to discuss future plans and ASCIT collaboration

Officer's Reports:

- **V.P. of Academic Affairs (ARC Chair: Jay):**
 - BOC and ARC representative training sessions will be set up at every house
 - BOC lunches to train new faculty
- **V.P. of Non-Academic Affairs (IHC Chair: Cat):**
 - Rotation survey will be sent out to new students regarding the pre-frosh experience in their houses
 - IHC proposes a budget for multi-house events that award up to \$800 to two houses to host a collaborative event. This funding would be available for each house up to three times per term. This request was approved.
- **Director of Operations (Sean):**
 - MHF proposal to purchase more lights for ASCIT
 - ASCIT will review club funding proposals on Sunday the 25th from 11:00pm to 5:00pm. Interviews will be scheduled for amounts over \$200.
- **Treasurer (Kalyn):**
 - Nima and Kalyn have made changes to the 2015-15 budget
 - If you want to apply for ASCIT funding, come to our weekly ASCIT meetings. Reimbursement forms for ASCIT are located on DONUT
- **Social Director (Robin):**
 - Absent
- **Secretary (Phillip):**
 - Meeting with Joe Shepherd on Wednesday October 7th. Dean Green and Facilities will also be there to discuss future projects with ASCIT.
 - Club Funding interview times will be sent out soon

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

Meeting Adjourned: 12:30 pm

VICE PROVOST'S OFFICE HOURS

Vice Provost, Chief Diversity Officer and Professor of English, Cindy Weinstein, offers weekly office hours beginning Thursday, October 15, in Room 104 Parsons Gates. She views these hours as an opportunity for undergraduates, graduate students and postdocs to meet and discuss whatever you'd like to talk about. Professor Weinstein oversees 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 appointments per hour, 15 min. each. Sign up the day of the meeting in 104 Parsons Gates, Vice Provosts' Offices (x6339).

Fall Term Hours:

Thursday, Oct. 15, 12pm-1pm	Tuesday, Nov. 10, 12pm-1pm
Monday, Oct. 19, 12pm-1pm	Thursday, Nov. 19, 12pm-1pm
Wednesday, Oct. 28, 12pm-1pm	Monday, Nov. 23, 12pm-1pm
Thursday, Nov. 5, 12pm-1pm	Tuesday, Dec. 1, 12pm-1pm
	Wednesday, Dec. 9, 12pm-1pm

The Caltech-Occidental Concert Band, directed by William Bing Annual Fall Concert Series

Friday, November 20 and Saturday, November 21st

The concert on Friday, November 20th is in Thorne Hall at 7:30 PM at Occidental College in Eagle Rock. The concert on Saturday, November 21st is at 8:00 PM, in Ramo Auditorium, on the Caltech campus in Pasadena. Both concerts are free and open to the public. No tickets are required, but early arrival is recommended to get a good seat, especially for the Caltech concert.

This concert will feature the four professional coaches of the ensemble. Lynne Snyder will perform Viktor's Tale by John Williams from the movie "The Terminal". Gabriel and Leighanna Sears will perform "Tubby the Tubba". Scott Babcock will perform the Concerto for Tympani" by Alexander Tcherepnin. Hye Sung Choe will perform the Chaminade "Flute Concerto.

The band will also perform music by Bartok, Robert Jager, and John McKay. Armenian Dances by Alfred Reed will complete the program.

For further information, please contact Caltech Performing and Visual Arts at 626 395-3295 or visit bands.caltech.edu.

Caltech Public Events Hiring Ushers

**Flexible hours.
No experience needed.
Outgoing Personality.
Pay Rate:
\$15 per hour**

**Caltech Students
only!!**

**Contact: Adam Jacobo
626.395.5907
ajacobo@caltech.edu**

The California Tech

Editors-in-Chief

Neera Shah
Nehaly Shah

Page Editors

Katherine Guo
Ching-Yun (Chloe) Hsu
Valerie Pietrasz

Contributing Writers

Nailen Matschke
Sean McKenna
Parul Pubbi

Circulation Manager

Kit Chinetti

Advisor

Richard Kipling

Caltech 40-58, Pasadena, CA 91125
Contact 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 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.

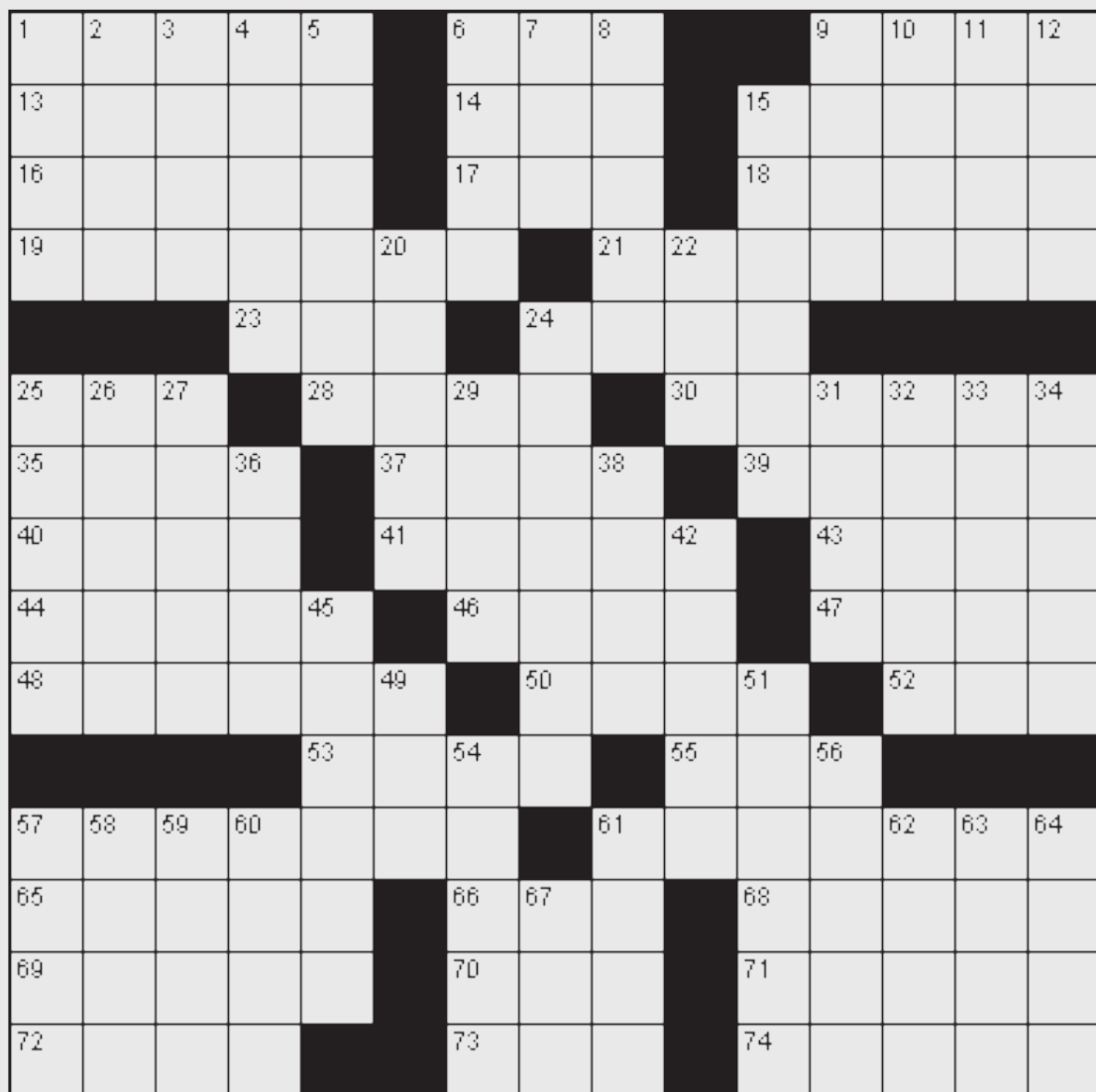
The advertising deadline is 5 PM Friday; all advertising should be submitted electronically or as camera-ready art, but *The Tech* can also do simple typesetting and arrangement. All advertising inquiries should be directed to the business manager at tech@caltech.edu. For subscription information, please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

REMINDER FROM COUNSELING CENTER:

Meditation Mob

(drop-in mindfulness meditation group)
Meets every Tuesday, 12:00-12:50 p.m.
Bottom floor of Winnett

Crossword



-http://puzzlechoice.com

Across

- 1. Theme
- 6. A small drink
- 9. Financial obligation
- 13. Worship
- 14. Playing card
- 15. Jockey
- 16. Tooth
- 17. Pasture
- 18. Bird of prey
- 19. Defend
- 21. Full
- 23. Organ of hearing
- 24. Parasitic insect
- 25. Vehicle
- 28. Child's plastic construction set
- 30. Mollusk with a conical shell
- 35. Highly excited
- 37. Swill
- 39. Established line of travel
- 40. Fabric interwoven with threads of metal
- 41. Vegetarian food
- 43. Rotated
- 44. A choice or delicious dish
- 46. Prima donna
- 47. Team
- 48. Make attractive or lovable
- 50. Transmitted
- 52. Allowed
- 53. Near

- 55. Taxi
- 57. Eight-sided polygon
- 61. Produced from nonmetallic minerals and fired at high temperatures
- 65. Inexperienced
- 66. Fuss
- 68. Garbage
- 69. Below
- 70. Distilled from fermented molasses
- 71. Spry
- 72. Oracle
- 73. Tennis stroke
- 74. Regenerate

Down

- 1. Pack together
- 2. Aroma
- 3. Field sport
- 4. Very Angry
- 5. Breakfast food
- 6. Sodium chloride
- 7. Frozen water
- 8. Jewel
- 9. Clock face
- 10. A slight competitive advantage
- 11. Accessory
- 12. Large woody plant
- 15. Mend
- 20. Cruciferous plant
- 22. Fish
- 24. Anserine
- 25. Part of a brass wind instrument
- 26. Once more
- 27. Wanderer
- 29. Happy
- 31. Nonvascular plant
- 32. Student
- 33. Musical composition
- 34. Religious doctrine
- 36. DNA segment
- 38. Cover with stone or concrete
- 42. Terpsichore
- 45. Peril
- 49. South American city, in short
- 51. Salt used in baking powder
- 54. Twist into a state of deformity
- 56. Flatbottom boat
- 57. Burden
- 58. Walking stick
- 59. Periodic rise and fall of sea level
- 60. Avow
- 61. Crest
- 62. Briny
- 63. Small island
- 64. Masticate
- 67. Singing pair

You chose one of the most trusted institutions in **SCIENCE**.



Now choose one of the most trusted institutions in **FINANCE**.



When you want unsurpassed stability, integrity and value for your money, Caltech Employees Federal Credit Union offers an honest alternative. There are no gimmicks. No annual fees. No harsh penalties.

Just some of the lowest lending rates and highest savings rates in the nation... and a state-of-the-art eBranch for easy, convenient online and/or mobile access to your account. We're the overwhelming choice for financial services among the entire Caltech family. If you haven't yet joined, call or visit us online or in person today. You belong here.



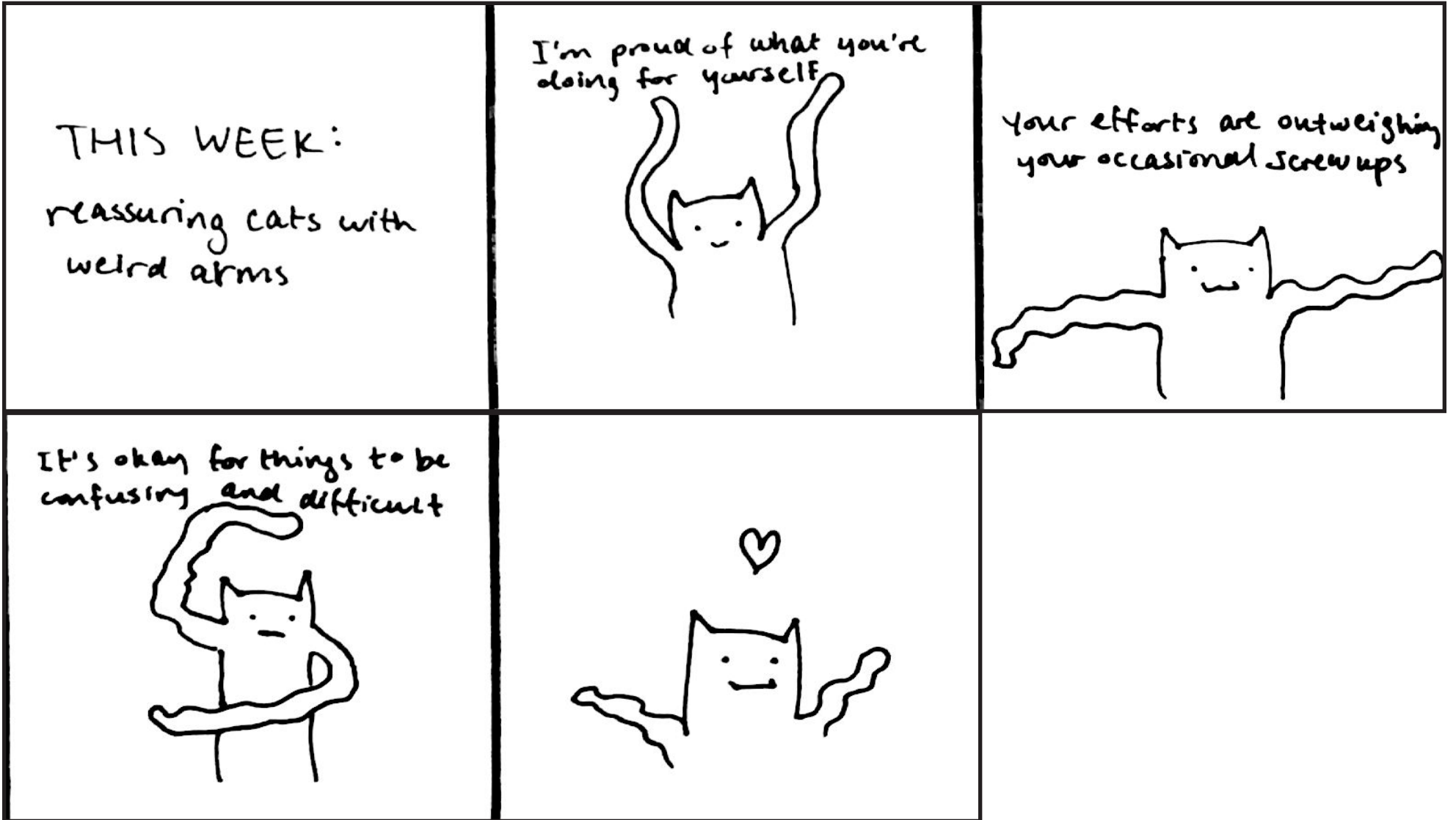
⁶²Smarter ¹⁶Solutions. ⁵⁹Proven ⁷⁵Results.

Campus Office 515 S.Wilson Ave. (physical address) • **Campus ATMs** Winnett Center & Keith Spalding Building
626/395-6300 • 800/592-3328 • www.cefcu.org

Must qualify for CEFCU membership to join. Minimum \$5 deposit and one-time \$5 membership fee due upon opening any CEFCU account. **Federally insured by NCUA.**

Go0000

K. Guo



Answers to previous crossword

S	H	A	R	P		S	T	A	Y		S	H	A	M
C	A	V	I	L		W	A	V	E		T	A	R	E
A	R	O	M	A		E	X	I	S	T	E	N	C	E
N	E	W		C	U	P	I	D		R	I	G	H	T
			C	A	S	T			S	O	N			
E	R	R	A	T	A		A	L	T	O		A	L	E
M	O	U	S	E		C	R	E	E	P		L	E	I
O	G	L	E		S	L	E	E	P		L	E	A	D
T	E	E		S	L	I	N	K		C	A	R	V	E
E	R	R		P	U	P	A		T	A	T	T	E	R
			P	E	R			D	A	L	E			
T	I	A	R	A		F	I	E	R	Y		G	A	G
A	C	C	O	R	D	I	O	N		P	E	R	I	L
C	O	R	N		A	N	T	I		S	L	I	D	E
K	N	E	E		B	E	A	M		O	F	T	E	N

-http://puzzlechoice.com

Understanding Europe's migrant crisis

Sean McKenna

PCC students, fleeing unprecedented liberal arts brainwashing, flood to the southwest from their campus in search of a more STEM-oriented education. After making the treacherous crossing of Hill and Del Mar, they infiltrate Avery, setting up a tent city in the courtyard. Upon hearing rumors of Page's larger House Endowment fund, they continue southward. As the migrants set up a new tent city in the Page Courtyard, the pre-law Pageboys encourage ExComm to "deport them to Avery!" as the other house members chant, "Deport them to PCC!" All the while, Page's fearless president, Nishant Desai, suspends House membership rules and tries to remind his subjects, "PCC students are people too. They deserve the joy of science just as much as we do. Let's show them the compassion of the Caltech community."

The California Tech
 Caltech 40-58
 Pasadena, CA 91125