VOLUME CXIX NUMBER 23 PASADENA, CALIFO

TECH@CALTECH.EDU

APRIL 11, 2016

# Sixth annual Undergraduate Research Week kicks off

BIANCA LEPE Contributing Writer

If you all didn't know, The Council on Undergraduate Research (CUR) has dedicated this week as the national Undergraduate Research Week. The celebration started in 2010 when the House of Representatives declared the week of April 11, 2011 as such in order to encourage research among undergraduates at academic institutions.

In celebration of this week, I want to share my own experiences with and thoughts on research.

Undergraduate Research Fellowship (SURF) here on campus for two summers. My first SURF was right after my freshman year, and I used the experience to gauge my interest in research. I also thought that the easiest way to decide between chemistry/ chemical engineering and biology/ biological engineering would be to try research in one of these areas. I worked in a synthetic chemistry lab, learning the basics of doing research. This included technical experiments, experience in group

meetings, scientific writing and how to approach research problems.

For my second SURF, I did research in synthetic biology. I was on the Caltech IGEM (International Genetically Engineered Machine Competition) and what I really liked about this experience is that we had the chance to implement an entire research project from scratch. Ilearned how to thoroughly review literature and how to write research proposals for funding. We were able to dictate exactly which experiments we wanted to do and in what order—in many ways, it was like an all-encompassing

crash course research experience. Finally, I realized that summer that I really love synthetic biology research.

SURF isn't the only way you can do a research project here at Tech. I myself have done research for work-study, as well as research for credit. Even as a frosh, you can get started immediately by volunteering in a lab, and you can extend summer work by working during the school year.

To recap, there are numerous ways to do research and many benefits to be gained. You can apply knowledge from class to a lab

setting and in the process gain an experience which enhances what you learn in the classroom, learn valuable skills in communication, critical thinking and problem solving, have publications, forge connections with others in your field, in addition to many other things.

Caltech is an institution known for amazing research opportunities; as such, I would recommend every Techer try out research at least once while here.

Congratulations to all the Techers who received a SURF for the summer!

Photoblast: Caltech community shows off talent at dance show



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# ASCIT President (2 candidates)

**SERENA DELGADILLO** ASCIT President Candidate

"Caltech is a unique place." That phrase is so fundamental to the Caltech experience, consistently appears up everything from casual conversation between friends to prefrosh scavenger hunts through the admissions office. Throughout all my time here, the amazing breadth of knowledge, strengths, and experience of Techers has never ceased to amaze me. It is to represent our remarkably diverse student body that I am running for ASCIT President.

During my time here, I've actively sought out every opportunity I could to give back to the Caltech community. I am an active member of the Board of Control, and since being on the BoC, I've gained an even deeper appreciation for how the Honor Code protects the students. Furthermore, sitting on the board, I have firsthand experienced how vital it is for us as students to be the absolute authority on our own government. It is our responsibility as students to make sure our voices are heard, and as ASCIT President, I will vehemently ensure that all students are fairly represented.

I am always looking for new opportunities to make lasting improvements on the Caltech experience. I have worked closely with the admissions office as a tour guide, panelist, coordinator to ensure Caltech continues to attract students that will add to the community. I have also been involved with diversity initiatives on campus including working directly with people on campus such Cindy Weinstein, Vice Provost and Chief Diversity Officer, and Felicia Hunt, Title IX Coordinator. I am wholly dedicated to expanding the dialogue between students and administration in each of the administrative branches.

This past summer, I was a Student-Faculty Program (SFP) House Ambassador, a position which covers everything from event coordination to direct meetings with administrators. This opportunity let me hone my organizational skills by coordinating events for the entire SURF population including managing the budget, meeting with keyadministrators in offices such as Housing and Student Affairs, and getting and responding to feedback from the summer community.

As ASCIT President, I will apply my experience with these programs to the entire undergraduate community for pressing direct student representation in the admissions process. Currently, undergrads play only a passive role in admissions, which is why I will use my position to get students back on the Admissions Committee. I will also work to secure the student voice is heard among faculty members on a more regular basis than just the Student-Faculty Conference alone.

I will also use my position as ASCIT President to address the current UASH policies and 12-term tuition policy. Already, I have worked directly with the Deans as a UCC through the Peer Academic Advising program to address concerns with these policies. In this process, it has come to my attention that the number one reason cited for academic ineligibility is "psychological factors." Since Caltech prides itself in being such a tight knit community, I propose that student programs like UCC's be given more autonomy within the houses and also more accessible resources like Counseling Center drop-in hours are expanded.

Lastly, since communication and transparency are the most important factors in effective government, when I am ASCIT President, I will bring back the Tech column "From the President's Desk," which will address current and ongoing issues of concern to the student body. I welcome feedback, and I look forward to hearing even more topic suggestions when I visit each of the houses this week. If you have any questions, comments, or concerns, please don't hesitate to email me at sdelgadi@caltech.edu or come talk to me in person. Thank you, and I look forward to hearing from you.

**JAY PALEKAR**ASCIT President Candidate

Every year before Prefrosh weekend, I end up putting together my two mental lists for the Prefrosh. In the first one, I note of all the reasons I'd encourage them to come here, and in the second, all of the reasons I would tell them to get out before its too late. Maybe I'm the magical upperclassman who overtime has somehow become less bitter, but I think my second list has been getting shorter over the years, and I want to continue that trend. I'm running for ASCIT President because I still think there are problems to be fixed, but I think my background and experience make me the best prepared to improve student-life.

I've been part of numerous areas of student government. I've been on the ARC for the past three years, the BoC for the past two years, and I'm the current ASCIT Vice President of Academic Affairs and ARC Chair. Through these positions I've been a longtime advocate for the student voice. I have served on the Deans Advisory Committee, Committee for Undergraduate Education, Curriculum Committee, and was part of the selection process to pick a new undergraduate Dean. I'm also currently serving as a student advisor to the 12-**Term Tuition Policy Committee** and putting together the committee which will make recommendations for future changes to Regis. Through my experience in all of these, I already have strong working relations with the faculty and student affairs, and because of this I can get things done.

I have two projects I'd like to see implemented next year. Firstly, a change I'd like to see next year is reform of the UASH policies, and as ARC Chair I've found that the person best situated to push for those changes is the ASCIT President. Our current system needlessly penalizes students for taking E's and I's and can hinder their ability to move around campus. It's so poorly thought out that the forms to petition for reinstatement are only available through

Regis, which you don't have access to during the process. A better process should involve actually thinking about how the idiosyncrasies of Caltech's grading system interact with our eligibility policies and should have feedback from all parts of the committee. I've already met with members of the administration to begin these discussions and I've worked with administration to put together committees in the past. I think we can do better and I will do everything in my power to see us get there.

Secondly, I think the ASCIT needs to devote more effort to working with the Career Development Center and the various alumni groups to provide better career support. It should take a stake in trying to bring back more alumni, both at the career fairs and during the school year, to provide mentorship for Caltech students looking into industry, including outside of CS. I would like to see next year's ASCIT invest more time in providing resources to industry focused student clubs, which in other schools train students for interviews and provide them connections during their job search. Finally, I think the ASCIT is uniquely positioned to work on finding seniors who would later in their careers enjoy the opportunity to give advice to current Caltech students. I would hope to see next year's ASCIT actually recognize the many paths that students take when they leave this school and invest in making the transition out of here easier.

I think that next year's ASCIT president will be in a unique position to bring about positive change. Next year's administration: Vice-Provost, Vice-President of Student Affairs, and Dean's Office are the most student friendly administration that we've had in a while, and I'm the candidate they've worked with, listen to, and trust. I'm running for ASCIT President because I'm the candidate who can follow through on improving the school.

And next year, let's actually have Monday Bagels and Friday Donuts on the Olive Walk.

### ARC Chair (1)

ARC Chair Candidate

What can the ARC do for you?

I've been on the ARC for nearly two years, first as a Frosh Rep and then as the Ruddock rep. The ARC can do a lot for students (beyond just replying to your course concerns). As the next ARC Chair, I will do my best to make sure the ARC continues to serve and help undergrads.

While on the ARC, I've done a hodgepodge of different things. I ran the undergraduate seminar series program, updated the ARC's Frosh Guide to Academics, sat on the Curriculum Committee, and worked with the math department to re-unit Math 1D. I'm optimistic that students and the ARC can continue to change things for the better. Here are some of my ideas of how.

Expansion of the Ombuds Program

I worked on Course Concerns for three terms, and ombuds have been a helpful link between students, the ARC, and the professor. Right now, only core and certain other classes have ombuds. One of my plans is to expand ombuds training and enlarge the program to include any large class.

**Computing Seminars** 

Last term, I helped the ARC runaMathematicaworkshopfor undergraduates. I want the ARC to coordinate more computing seminars to introduce students to LaTex, Matlab, numpy, and other useful software. I've been in contact with the Graduate Student Council, which runs similar computing seminars, and hope that the ARC can begin rolling out these seminars starting next year.

Improving Class Registration
The current registration
system has trouble handling
the volume of requests, and
faces other issues (like being
at 8 am). I've met with the Vice
Provost several times to discuss
ways to improve registration to
make the system more fair and
stable. My goal is for the ARC
to work with other students,
faculty, and IMSS to restructure
and improve registration.

These are just a few of my plans for ARC Chair. If you want to talk to me about what I want to do as ARC chair, you can find me in Ruddock, Avery, or lurking in the Moore subbasement. The ARC's job is to help students, and if elected I will do my best to serve students and improve academics at Caltech.

Thanks! Tim

Statements continued on page 7







# Ash Koosha experiments on sophomore album IAKAI

**Contributing Writer** 

Ashkan Kooshanejad is an multi-instrumentalist, music producer and film director who first gained international recognition as the vocalist of synthrock band Font (and later Take It Easy Hospital), the members of which were arrested after a performance and sentenced to three weeks in prison in 2007. Following this, Take It Easy

Hospital members starred awardwinning movie No One Knows About PersianCats, which followed them as they explored the nation's underground m u s i c scene and attempted to find other artists to leave country them. film's reception forced band members

asylum abroad, with Kooshanejad relocating to London and beginning his career as an electronic producer under the pseudonym Ash Koosha.

Ash Koosha's debut LP GUUD was released in June 2015 on the Olde English Spelling Bee label, quickly garnering critical acclaim and easily becoming one of my favorite albums of last year. Its cold, glitchy and abstract production drew comparisons to artists like Arca and Holly Herndon, with Kooshanejad demonstrating his formal music education in the album's impressively cohesive yet diverse study of sonic textures through dense layers of synths. samples and percussion melded together to form coherent tunes out of the chaos. The release of another Ash Koosha LP less than a year later is a dream come true for many fans, but the question remained whether Kooshanejad could pull of the same magic twice without his style getting redundant. With the April 1 release of I AKA I on Ninja Tune, we finally have our answer, and I think it's safe to say that Ash Koosha is far from a onetrick pony.

I AKA I certainly bears the unique sound carved out by GUUD; the constant tension remains as minute imperfections and glitchy, repeated samples try to derail any sense of structure while layered, progressive melodies struggle to hold together, and the composition is certainly no less complex than that of its predecessor. However,

the album differentiates itself as a more than worthy sophomore effort in the growth Kooshanejad demonstrates as a producer, incorporating a wider variety of aesthetics into his music while simultaneously increasing the focus and direction of each track without sounding lost or amateur. In particular, I AKA I feels much more organic and emotional compared to the analytic, alien nature of GUUD. Make no mistake, it's still very much an electronic



-https://ninjatune.net from

album with not much change in sonic machinery, but here the vocal and instrumental samples blend together with the wide palette of synthesizers to create a sort of "bionic" mixture, while the beats take on a larger role and give the music a greater sense of momentum. A perfect example of this is "Ooh Uhh," where choral vocals and held synth chords fade in and out, trading places in the background almost imperceptibly pitched-down some singing provides the bassline to a shimmering electronic melody.

Another track that comes to mind is "Too Many," which has a distinctly mourning and apprehensive tone to it created by steady triplets traded from a piano to some synthesizers and a repeated, electronically altered vocal line repeating the song's title. It almost could have appeared on Boards of Canada's apocalyptic Tomorrow's Harvest, seasoning the same sort of analog samples the duo is famous for with Ash Koosha's trademark arrhythmic chirps and uneven beats. In general, the heavily electronic components of I AKA I don't dominate the album's sound as much as they did on GUUD, but rather fit into a more diverse mix.

The increased presence of noncomputerized elements on the album not only serves to make it more accessible to the listener, but also allows it to convey a greater sense and scope of feelings.

as a fairly dark record, with heavy, jagged beats on tracks like "Mudafossil," which sounds like it belongs on Jlin's Dark Energy, or "Make it Fast," which changes its rhythm constantly and is one of a few that make use of the harmonic minor scale to add a Middle Eastern

OPINION

However, these are a far cry from something like "Biutiful," which was released as one of the album's leading singles. Instead,

> it has a serene dreamlike quality to it, with shimmering noises in the background that could almost be birds chirping on a sunny day and a saccharine yet nostalgic melody that reminds me quite a bit of the wailing synths Shlohmo's "Buried." "Snow" fits a similar aesthetic, albeit with thematically colderandharsher instrumentation, and I wouldn't be surprised if Kooshanejad took some inspiration chiptune music with its

mix of staccato melodies, held chords and a surprisingly steady mechanical beat.

The variety present on the album would be impressive enough by itself, but it is elevated to an even higher plane by just how well the album flows. Much like those on GUUD, the songs are more of a set of interconnected explorations on certain themes rather than their own independent compositions. As a result, the stylistic similarities they share eliminate any jarring transitions or out-of-place tracks. I AKA I is an album that deserves to be listened to in its entirety for the full experience.

I certainly had high hopes for Ash Koosha's second LP, and as of yet I haven't found anything it could have done better. Everything that made GUUD a fantastic release still forms the core of the album, yet it is simultaneously more ambitious and approachable while avoiding the typical pitfalls of an artist expanding into new territory. It's possible that I might get a little tired of the less unapologetically weird tracks in the future, but there's no question in my mind that this is a stellar album and is at least on par with GUUD. I can't recommend I AKA I enough to fans of experimental electronic and beat music, but I also think that the stylistic growth represented on the album could scratch anyone's itch for some music that's a little "out there." Give it a listen; I don't think you'll be disappointed.

## It's the Economy, Bernie!

SEAN MCKENNA Contributing Writer

My friend David Wang recently convinced me to take an online test that tells you which of the presidential candidates your views best align with. I was not surprised that it gave me an 86 percent match with Hillary Clinton. However, I was very surprised that it also suggested I had an 86 percent match with Bernie Sanders. When I looked at the expanded results, one thing stood out to me: I stood with Sanders and Clinton on issues they both support such as family leave and gay marriage. However, there was critical area where I agreed with Clinton and not Sanders: economic policy.

Since economic policy is the hallmark of the Sanders campaign, my lack of enthusiasm for his policies explains why I can agree with him on so many other issues but still would never vote for him. However, the more pressing issue is whether Sanders himself understands the implications of his stance on the issues.

During an interview on April 1 with New York Daily News, Sanders was asked for specifics on his big plans, but they were few and far between. When asked exactly how he would break up the big banks, he seemed unclear as to whether his own hypothetical administration or the treasury department would have jurisdiction under current law, or whether new laws would have to be passed. When asked about the legal implications of insurer MetLife's recent court fight to prove that it was not actually too big to fail, he said that he was not familiar with what the implications might be. Clearly, Sanders is living

in a fantasy world fueled by voter anger filled with hollow phrases like "break up the big banks" and void of the requisite expertise to avoid inflicting serious damage on the economy.

Another important question by the interviewer was how Sanders would deal with a Republican house of representatives. Imagine the best case scenario where Sanders wins the nomination and the presidency and where Democrats take back the Senate. Even if this were the case, Sanders would almost surely not be working with a Democrat-controlled House of Representatives, simply because the current congressional district boundaries were so gerrymandered by the Republican state legislatures and governors in office from 2010 to 2012 when the decennial redrawing occurred. Sanders did not have a practical response to this question. His simple response was that he was creating a political revolution, implying that we could be in for some electoral surprises. Do not be fooled. There is no plausible scenario where Sanders takes office under something other than a Republican-controlled House, and he does not have a plan for working around them to implement his plans. President Obama has left behind myriad unfulfilled promises, and Sanders seems posed to do the same.

Since Sanders seems to have spent all his time dreaming of new ways to shout his opinions at people instead of new practical plans for getting his way once he's president, I'll be keeping my Hillary sticker firmly affixed to my laptop for the time being.

### See page 6 for announcement regarding voting in the upcoming California primaries

# C a R e D Caltech Alliance for Reflecting on Eating Disorders Meets every other THURSDAY 12:00 - 1:00 PM https://healthpromotion.caltech.edu

### Caltech Y Column: Upcoming news, scholarships and events

**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 hosted by the Caltech Y:

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

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

#### **Upcoming Events** 1. The Studenski Award

Proposals Due Friday, April

15th at Noon Are you wondering about the next step in your life? Have you reached a crossroad where you would benefit from an opportunity to explore? Would a trip, an opportunity to volunteer with an organization, or a chance to try a new skill or interest this summer help you gain clarity? If you answered yes to any of these questions, then the Studenski Award might be for you.

Studenski Memorial Award is a grant of up to \$6000 established in the memory of Paul Studenski. It is awarded to a Caltech undergraduate who, having reached a crossroads in life, would benefit from a period away from the academic community to obtain a better understanding of self and to explore possible directions for the future.

Studenski proposals (1 to 2 pages maximum) are due Friday, April 15th by 12:00 noon to caltechY@ caltech.edu (in word format).

www.caltechY.org/ programs\_services/areas/ Studenski/index.php for proposal guidelines and sample proposals. For more information, contact Athena Castro athena@caltech. edu or Greg Fletcher gregf@ caltech.edu.

#### 2. The Caltech Y Advocating Change Together (ACT) Award

Applications due Monday, April 18th at Noon

Got an issue or cause that warrants attention? Explore the issue - by attending a conference, training, or workshop, or choosing to immerse yourself with a mentor or organization that is changing the world then plan some programs on campus to educate us all. Awardees can receive up to \$4500 to cover expenses for their educational experience. Caltech Y activists determine the cause they will address, their educational experience, and the type of programs to organize.

Visit www.caltechY.org/ programs\_services/commservice/ ACT/index.php for applications and more information, and/or stop by the Caltech Y or contact us to learn more about this exciting opportunity!

#### 3a. Pasadena LEARNS

Friday | 3:00 - 5:00p.m. | Madison, Jackson, and McKinley Elementary School

Come volunteer at Madison, Jackson, and McKinley 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 opportunity for LGBTQ individuals and to RSVP, contact Vansh Kumar.



Janani Comar (BS '15) is a past recipient of the ACT

Photo Courtesy of Caltech Y

3b. Hathaway Sycamores Wednesdays | 5:30-8:00p.m. | **Highland Park** 

Volunteer Hathawayat Sycamores, a group that supports local underprivileged 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.

#### Other Announcements -Beyond the Caltech Y

Gaypril 2016 Events | April 8th - May 25th

Every year, Caltech celebrates a month of LGBTQ Pride in April. The month of Gaypril is an

to enjoy visibility and support from

a wide community, and to celebrate the support of allies! Gaypril, During community promotes awareness issues surrounding LGBTQQIAP identities, we hope you will join us! Please see the full schedule of events activities below. **RSVP** required (contact the Caltech Diversity Center).

4/14/16 LGBTQ STEMinar: Dr. Michael Todd / CSS 2nd Floor Common Space / Noon - 1:00 p.m.

4/15/16 - Prefrosh Weekend: LGBTQ Social / CSS 2nd Floor Common Space / 7:00 p.m.

4/19 & 4/20 - Safe Zone (Students) / Avery Conference Room / Noon -1:00 p.m.

4/28 & 4/29 - Safe Zone (Staff/ Faculty) / Avery Conference Room / Noon -1:00 p.m.

4/30/16 - Drag Show / Avery Dining Hall / 7:00 p.m.

5/17/16 Coffee LGBTQ/GSRM Conversation: Identity / Morgan Library / 3:00

5/25/16 - LGBTQ STEMinar: Dr. Ben Barres / Beckman Institute Auditorium / Noon -1:00 p.m.

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Percin completed her hat trick with

the opener in the fourth quarter on

an extra man

opportunity and

senior Stephanie

Wong chipped in

with a score but

Whittier held on

Katie Johnston

assisted on four

goals and made

three steals while

five exclusions.

steals and junior

drew

each

Zemsky

Kannan

Boyajian

Percin

nabbed

Sash

Gemma Takahashi made her

Freshman

for the win.

# Boyajian breaks women's Liu's eighth straight water polo assists record helps men's tennis

GOCALTECH.COM Actual Sports Content Editor

WHITTIER, Calif. (Apr. 9, 2016) -Junior Mary Boyajian broke the Caltech women's water polo single-season record for assists with her 32nd of the spring in a well-fought 15-6 defeat at Division III No. 1 Whittier College on Saturday morning.

The hosts opened up a 3-0 lead in the first quarter and traded goals with the Beavers in the second quarter to hold just a 4-1 lead at halftime. Senior

Soumya Kannan notched Caltech's goal. The Beavers cut the deficit to two on a Boyajian strike to open the third quarter and Percin canceled another tally to lead by seven, 11-4. out a Poets goal 12 seconds later with her first of the day.



Mary is such a helpful person, it seems only fitting that she breaks this particular record.

Photo Courtesy of Michael L. Wong

Whittier's offense finally clicked recorded an assist while freshman to rattle off five unanswered goals and traded scores as Percin notched season debut with a field block.

# to 8-1 win over Oxy

**GOCALTECH.COM** 

Actual Sports Content Editor

LOS ANGELES, Calif. (Apr. 2, 2016) – Freshman Andre Liu recorded his eighth straight singles win and is already just one victory shy of the single-season Caltech men's tennis record after the Beavers' 8-1 victory over Occidental College on Saturday.

**Box Score** 

The Beavers, ranked a programbest No. 12 in the West Region last week, improve to 8-5 overall and 2-1 in the SCIAC. The squad is now 7-1 against unranked NCAA opponents and 6-4 in regional play this season.

Caltech opened the match with quick victories at both #2 and #3 doubles, but the host Tigers defended #1 doubles ferociously, taking the Beavers to a tiebreak and escaping with the win to halve the deficit going into singles.

The Beavers took the first set in five singles matches, with only senior Rushikesh Joshi dropping

the first at #1 in a 7-4 tiebreak. The veteran came roaring back with a dominant 6-1 win in the second set, but Oxy forced a superbreaker at #2 after a narrow first-set win for junior Ruthwick Pathireddy as

Meanwhile, Caltech clinched the match with straight-set victories at the bottom four courts, including freshman Zixiao Li posting his fourth win in five matches at #4 with a 6-o, 6-o score. Liu and junior Ramsathwick Pathireddy won their eighth and fifth straight matches, respectively, at #5 and #6 to clinch. Freshman Derik Nguyen soon followed with a 6-4, 6-2 edge for his second win in as many chances at #3.

The superbreakers at #1 and #2 would both break Caltech's way, with Joshi giving up just a single point in the 10-1 victory and Ruthwick earning his seventh straight win in a hard-fought 12-10 breaker over Oxy's most successful player this season, Cameron Coe.

# Chen, Hill, Marasigan climb top lists at SCIAC Multi-Dual

GOCALTECH.COM **Actual Sports Content Editor** 

CLAREMONT, Calif. (Apr. 2, 2016) - Junior Lucy Chen and senior Morgan Hill each recorded significant personal-best marks to move up the their respective Caltech track & field Top 10 lists at the SCIAC Multi-Dual #2 in Claremont on Saturday.

Chen, just a week after tying her previous career-best mark in the triple jump, cleared a halfmeter more to leap into fifth place all-time at 32 feet. Soon after, she chopped off over a quarter of a second in the 100-meter dash to clock another personal-best with a 14.63.

Hill, meanwhile, continued his impressive senior-year surge as he unleashed a massive hammer And for her first trick, Lucy Chen will throw to claim first place in the meet with a mark of 145 feet, two inches - the fifth-best in the SCIAC this season. He moved up another spot on the program's all-time list

inches shy of second. Hill also recorded a narrow PR in the shot put, clearing 34 feet, one and one-



make a chair appear underneath her! -http://gocaltech.com

"Morgan has worked hard for his improvements this season." Head Coach Ben Raphelson said. "His

and now ranks third while just 10 focus on consistency in practice has really paid off."

> Multiple other Beavers experienced highlights as well. Freshman Michelle Marasigan debuted in the steeplechase and, despite an early fall, ranked seventh in program history with a 13:19.30. Freshman Rohan Doshi shaved four seconds in the 1500m to record a solid 4:12.03 alongside a two-second drop in the same event by sophomore Gene Vaughan, who timed in at 4:51.25. Sophomore Alex Bourzutschky also trimmed almost a second in the 200m (24.39) while junior Lilly Luo ran her first 800m of the season, clocking a 2:53.62, and freshman Ben Calvin made his spring debut. The men's 4x100 relay also cut off over half a second from its last time out for a 47.69.

> "We're entering the stage where we're fine-tuning things," Raphelson said. "Our fitness is there, so we're working on overall

explodes



Apparently the trick to being really good at tennis is blowing the ball to the

-http://gocaltech.com

# Basebal

GOCALTECH.COM **Actual Sports Content Editor** 

CLAREMONT, Calif. (Apr. 2, 2016) - The Caltech baseball offense exploded for the most runs in a SCIAC series since 1999, scoring 19 and holding a lead in extra innings against Claremont-Mudd-Scripps Colleges this past weekend.

The Beavers last scored even 15 runs in a series against the University of Redlands from Apr. 23-24, 1999, when they plated 20. Five batters hit .300 or above as Caltech smacked nine doubles, drew 14 walks and took seven hitby-pitches.

#### Caltech 9, CMS 12 (10 inn.)

offense

The Beavers faced another early deficit to begin the Saturday doubleheader, but once again made the most of their first hit of the game as Kirk sent a twoout single to left field to score Harrison Jacobs in the top of the third inning. CMS extended the lead to four at 5-1 after the fourth inning, but Caltech's bats struck again in the sixth. Garrett Levine and Mark Burleson each wore a pitch to reach base before a fielder's choice put runners on the corners. David Watson then drew a walk to load the bases, but the Stags pulled their starter and the

reliever struck out the first batter he faced to record the second out of the inning. Jacobs came up clutch once again with a two-RBI double and Chris McCarren matched that immediately after to plate four runs and tie the game at 5-5.

CMS scratched out two more runs on a double in the bottom of the sixth to regain the lead, but Caltech answered right back with three in the seventh to move ahead by one, 8-7. Levine walked with one out and advanced to third on another double by Burleson, then scored on an error. Watson smacked a single off the ensuing reliever to plate Burleson and senior Daniel Chou loaded the

bases with another single up the middle. Jacobs smacked a sacrifice fly for his third RBI of the game and the Beavers held the lead with just two-and-a-half innings to play. Kai Kirk gave up a single and stolen base in the bottom of the seventh, but McCarren caught the runner at third on a grounder to retain the lead. The Beavers put men on first and second with two outs in the top of the eighth, but a sharp grounder by Tucker Reese was picked up by the first baseman to end the inning.

The Stags drew a leadoff walk in the eighth to chase Kirk from the game and moved runners up to second and third with one out. MacKenzie Menthen continued

to crush the Beavers' pitching with a sacrifice fly to tie the game and both teams had each of their baserunners erased on steal attempts in the ninth inning to send the game to extra innings.

The Beavers immediately jumped onto the board as McCarren led off with a double and scored on an error, but Kirk was gunned down at home trying to tag up on a shallow fly out to centerfield. The lead would be short-lived, however, as CMS drew three walks to load the bases with none out in the bottom of the 10th and Menthen smacked a walk-off grand slam to dash the Beavers' dreams of victory.

# **ASCIT Minutes**

Meetings are every Wednesday at 4 p.m. in SAC 13

#### **ASCIT Board of Directors Meeting**

Minutes for 7 April 2016. Taken by Phillip An.

**Officers Present:** Nima Badizadegan, Kalyn Chang, Jay Palekar, Sean McKenna, Bobby Sanzhez, Phillip An

Call to Order: 12:02 pm

Guests: Bobby Sanchez (IHC-Chair elect), Ethan

Pronovost, Vaishnavi Shrivastava

#### **President's Report (Nima):**

- Round food event -- Thursday night
- Pre-frosh weekend is next week -- Club fair will be hosted by ASCIT
- Yearbook -- will try to be done by graduation
- BOC amendment passed for number of at-large members on the BOC

#### **Officer's Reports:**

#### V.P. of Academic Affairs (ARC Chair: Jay):

- ARC had a meeting regarding improvement of classes
- Option Fair happened
- Potential committee for registration staggering

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

• IHC secretary has been appointed

#### **Director of Operations (Sean):**

• Club fair at prefrosh weekend on Friday --ASCIT table will present!

#### **Treasurer (Kalyn):**

Techstock budget will be determined

#### **Social Director (Annie):**

Absent

#### **Secretary (Phillip):**

- Will send out emails regarding Pre-frosh weekend events
- Nomination deadline for ASCIT positions are Friday at 5pm

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: 12:25 pm

The 2016 CA presidential primary is on June 7, but it's best to get registered in advance to ensure that you can cast your vote. If you haven't already voted in this election cycle and are a US citizen, you can vote here in CA!

We will be hosting a voter registration drive from 12-4 p.m. on April 12th in front of the Caltech Bookstore.

If you have a CA state ID or licence: register at http://registertovote.ca.gov/ (and request a mail-in ballot!). You can check your LA County registration status at https://www.lavote.net/ vrstatus.

*If you don't have a state ID/license, come to* this event and we will get you registered to vote through paper forms! We will have both registration forms and mail-in ballot forms available (since June 7 is during finals week). Everyone is welcome to approach us for help and/ or forms, regardless of party affiliation.

- Caltech Students for Bernie

#### **REMINDER FROM COUNSELING CENTER:**

### Meditation Mob

(drop-in mindfulness meditation group)

Meets every Tuesday, 12:00-12:50 p.m.

Bottom floor of Winnett

#### The California Tech

#### **Editors-in-Chief**

Jon Cotler Katherine Guo

#### **Page Editors**

Ida Huang Hye Joon Lee Ciara Ordner Neera Shah

**Copy Editor** Nehaly Shah

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

Letters and submissions are welcome; email 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

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

### VICE PROVOST'S OFFICE HOURS

Vice Provost, Chief Diversity Officer and Professor of English, Cindy Weinstein, holds regular office hours. This is an opportunity for undergraduate, graduate students and postdocs to meet and discuss what they'd like pertaining to the Council on Undergraduate Education, Caltech accreditation, the Staff and Faculty Consultation Center, Student-Faculty Programs, the Center for Teaching, Learning and Outreach, the Caltech Diversity Center and the libraries.

There are four appointments per hour, 15 min. each. Sign up the morning of the office hour in 104 Parsons Gates, Vice Provosts' Offices (x6339).

#### **Spring Term Office Hours** 12 p.m. - 1 p.m.

Tuesday, April 12 Wednesday, April 20 Tuesday, April 26 Friday, May 6

Thursday, May 12 Wednesday, May 18 Tuesday, May 24 Friday, June 3

# STATEMENTS

# Director of Operations (2)

ANNE DORSEY

Director of Operations Candidate

Hello, everyone! My name is Anne, and I hope to be your next Director of Operations. Although I haven't had direct experience as a member of the BoD, I feel that I've had more than enough experience to be able to take on whatever challenges the Caltech community wants to throw my way! :)

As RevComm Chair, I have had the pleasure of working closely with the BoD to make sure that appointed offices, elected campus positions, and ASCIT subcommittees continue to run smoothly. I've also helped maintain the ASCIT website, Donut, to make sure that students can access information about the BoD, other campus offices, the bylaws, elections, and ASCIT committees like the ARC.

I look forward to helping campus publications get the resources they need, so they can continue to provide you with awesome photos in the yearbook, useful information in the Little T, engaging articles in the Tech, and, of course, Monday Punday and all of our favorite weekly comics.

Through my work with admissions, I have helped organize the PFW club fair for the past two years. I love helping with club-related activities, since the clubs and extracurriculars we have on campus are one of the things that make Caltech such a great place to live! I want to make sure the club application process is clear to students, especially frosh, since the community has so many great ideas and quirky interests that deserve to be officially recognized and encouraged.

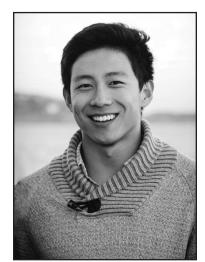
Before coming to Tech, I



technical liaison for a theater and event venue in my city. A lot of my responsibilities there mirrored responsibilities of Director of Operations, including resource management, keeping track of and taking care of equipment, and generally making sure that the logistics were under control for a large group of people with a lot of different needs. In particular, I would like to make it easier for smaller, less funded gatherings (like several Houses' frosh parties or the CCD's Pride Prom) to still deliver a memorable and high-quality experience for the campus community.

I'm also already in the process of creating a simple, easy-tounderstand guide to using the ASCIT lights for parties. Often, students are not getting the full range of possible benefit from the ASCIT equipment since many students do not have experience using productionquality lights and sound setups. I started putting the guide together after doing lights for Ruddock's OPI this year, when I realized that the lights that ASCIT owns are versatile but not immediately intuitive to set up and use. The main job of D Ops, in my opinion, is making sure that ASCIT not only has the resources and equipment its students need and want, but also ensuring that using these resources is both approachable and convenient.

If anyone has any questions or is interested in some of the projects I mentioned, please don't hesitate to drop by my room for a chat, or reach out to me at adorsey@caltech.edu. I look forward to serving you, whether it's as a member of the ASCIT BoD or simply as another member of the Caltech community!



Voting for ASCIT President, ARC Chair, Director of Operations, ASCIT Treasurer, and Social Director will be on Monday, April 18th from 10:00 a.m. to 11:59 p.m. PHILLIP AN

Director of Operations Candidate

Hey guys, I'm Phillip and I want to serve as your next ASCIT Director of Operations.

Honestly, I won't claim that I'll be the perfect candidate and not make mistakes, but I'll certainly try and do my best to learn and improve. I believe honesty and transparency are the best policies for someone who wants to represent your interests.

This being said, serving on the ASCIT BoD this past year has given me momentum going into this next one. As ASCIT secretary, I've experienced the club funding process and managed affairs with Caltech's Publications - two major responsibilities of the Director of Ops. I've worked very closely with Sean, the previous director, and have actively participated in talks with administration on issues such as curriculum, alcohol policy, and housing. I'm very involved in leadership, and I've served as President of the Caltech Entrepreneurship Club and on the board of the Student Investment Fund. From chamber music, athletics, and research, my diverse experience represents the interests of the students.

Most importantly, my goal to serve on ASCIT is to fight for the interests of the student body. Caltech, one of the most rigorous institutions in the world, is certainly not an easy experience to navigate — I want to ensure students have a voice during their time here. Whether it be negotiating with administrators for more lenient policy or supporting the interests of clubs and organizations, I will strive to be the best candidate for Director of Ops.

I look forward to bringing my experience with students and faculty to the ASCIT BoD. If you have any questions or suggestions, stop me if you see around campus or email me at phillip@caltech.edu.

# Treasurer (1 candidate)

ASCIT Treasurer Candidate

Hi, I'm Kalyn!:) I served as last year's ASCIT Treasurer and I am running for reelection. I am responsible, organized, friendly, and approachable. If elected, my goals as ASCIT Treasurer will be creating and managing the ASCIT budget fairly and effectively, reimbursing clubs and student houses in as fast a time as possible, and being an active voice on the ASCIT Board of Directors.

In addition to serving as last year's ASCIT Treasurer, I was the Page House Treasurer two years ago, and I was also my high school's junior class treasurer. I have a wide range of budgeting experience – I've managed last year's ASCIT budget, the Page House budget, and the budget for my high school's prom at the Aquarium of the Pacific. The ASCIT budget goes toward funding events and clubs on campus. I want to make Caltech more fun and give Techers more opportunities to pursue their interests by keeping student input in mind while making funding decisions. I will work with next year's social director to put on events such as Rath nights, ASCIT formal at a cool venue, and more. I'm eager to hear your opinions on what your money should be going towards and I will do my best to make that happen.

complete try to reimbursements as quickly as possible on my end and to keep people informed about the state of their reimbursements. Since I don't actually have any of the ASCIT money, I can't always reimburse people as quickly as I'd like; ASCIT reimbursements have to go through administration. When I was Page's treasurer, I would almost always reimburse people in less than a day. I have never lost anyone's receipts before. I organize receipts by date and in alphabetical order by last name of the person being reimbursed so that I can always find the appropriate receipt if needed. I understand how frustrating it can be to have to wait a long time to be reimbursed because I've been there. I will work hard to get reimbursements back to individuals, clubs, and houses in a timely fashion.

Finally, I want to make students' opinions heard! I'm pretty outgoing and I interact with people from a lot of different houses on a regular basis. I'm always willing to talk and listen to others, and I hope to help bridge the gap between students and administrators by accurately representing students' thoughts on important issues.

I will put in the necessary time and effort needed to be a great ASCIT Treasurer, and I hope to serve the Caltech community next year on the ASCIT Board of Directors. Thanks for reading, and have a great rest of the day!



# Social Director (1)

ROBIN BROWN Social Director Candidate

In the past year, I have become familiar with the responsibilities and challenges faced by the ASCIT Social Director. I have been involved in numerous campus-wide and ASCIT events, including those over the summer (ie. weekly ice cream socials, and the East Coast Crab Bake), Be a Kid Again, and ASCIT formal. Furthermore, during first term, I had the opportunity to take over as the interim ASCIT Social Director. In this time, I planned End of Rotation party, and the Hunger Games movie night. As Interim Social Director, I not only gained experience planning social events, but worked with members of the BoD, Tom Mannion, the deans, security, and other member of administration, all of which are crucial to planning a successful social event.

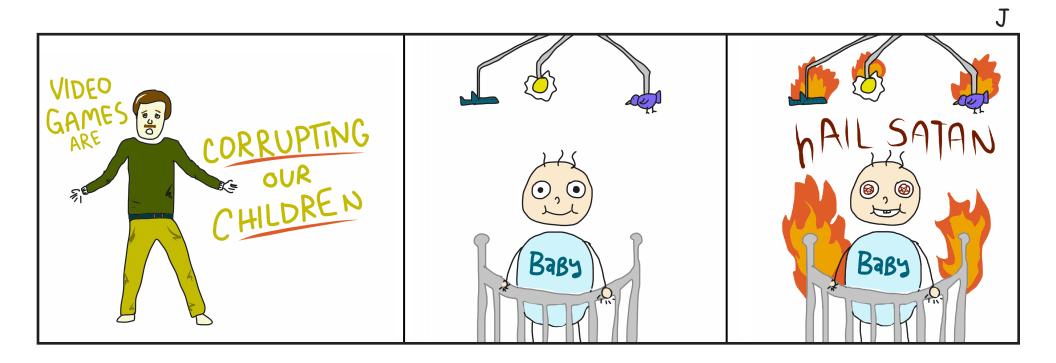
As Social Director, I would work to ensure that there is no weekend where there is nothing going on. In order to do so, I plan on reinstating the Executive Social Committee to give me a better understanding of when house events are occurring, and when an ASCIT social event would be welcome. I would also like to give students opportunities to get off campus and explore Los Angeles and the surrounding areas. If elected, I intend on planning an ASCIT movie night to see Captain America: Civil War, a Dodgers game event, and an End of the Year party. I would continue to run popular events like trivia nights at Chouse, and Be a Kid Again, as well as new events.

Maintaining a balance between academics social life a problem for many students, and I hope to plan events that will make this as easy as possible. Social events are not just opportunities to have fun, but serve as outlets for stress, which is crucial for the mental health of students. With that in mind, I believe social events should be accessible to even the busiest of students. They should also cater to a variety of student interests. Accordingly, I am receptive to any suggestions or ideas people may have.

Thankyou for reading! I hope you will give me the honor of serving as your Social Director.

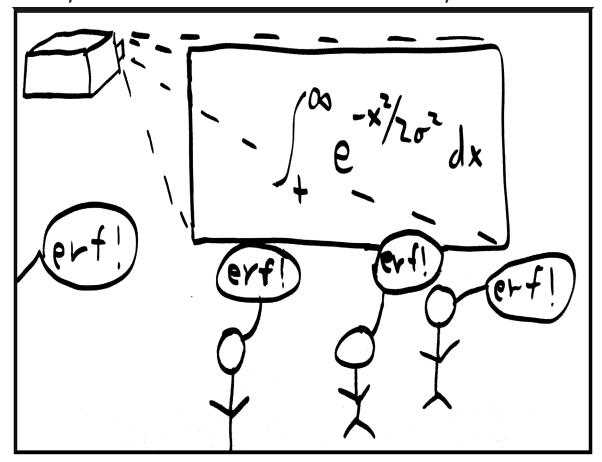






### Sanity Considered Harmful

### p-adic Larson



Suddenly, all of the statisticians were dogs.

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