

## A Beaver's Jale 2014–2015

VOLUME 94 California Institute of Technology 1200 E. CALIFORNIA BLVD. PASADENA, CA 91125

#### An Editor's Tale

Once upon a time, there was a school named Caltech and a yearbook named *The Big T*. The small but mighty yearbook staff wanted to make a tale of all of the magical moments from 2014-2015. They wanted to create a book to remember all the princes and princesses of Pasadena. They wanted to write about the starry nights filled with music, dancing, singing, eating and joy. Although this chosen book comes out only once a year, it comes from months of dedication and hard work. We hope you enjoy the yearbook and live happily ever after!

Soumya Kannan '16 Harinee Maiyuran '16 Meghana Pagadala '16

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## Dedication

n addition to being one of MIT's innovators under 35 and a MacArthur Fellow, Professor John Dabiri also manages to find time to do pushups with Aditya Bhattaru '15 in public. Some people go above and beyond to build lasting relationships with the people they meet; some go above and beyond to contribute to society in a larger sense. Dean Dabiri is one of the extraordinary few who manages to do both.

Born in Toledo, OH, Professor Dabiri graduated from Princeton and obtained his PhD from Caltech. By age 32, he was faculty chair of Engineering and Applied Sciences at Caltech: for many college seniors, the time scale falls within a decade of graduation.

Dean Dabiri actually became interested in his prize-winning work on jellyfish while doing a SURF under Dr. Mory Gharib, who is also currently on faculty at Caltech. His 30-page Curriculum Vitae boasts membership on the U.S. National Committee for Theoretical and Applied Mechanics, inventions for the design and execution of schools of wind farms, over 65 papers and over 100 conference abstracts. Professor Dabiri is also a fellow of the America, holds a Presidential Early Career Award for Scientists and Engineers, and started the FLOWE center to better harvest wind energy.

During his time at Caltech, Dr. Dabiri also served as Dean of Undergraduate Students, advising the student government and working to give students a say. Popular opinion? "Dabiri's just a boss." says Chris Bradley, '17. Coincidently, Dean Dabiri was also one of *Popular Science*'s "Brilliant 10" scientists.

In addition to all of his accomplishments in academics and leadership, Dean Dabiri's

<sup>(1</sup>If you're going to fail, do it quickly, and don't tie it to your self worth.<sup>(1</sup>)

also known for his sparkling personality: he's just a kind, interesting person. His favorite vacation spot is Hawaii, he was a grocery bagging champion (once bagging for Katie Holmes), and while he studies fluid dynamics, he still can't swim (though he says he's been trying

for years.) While he'll be leaving us next year (we wish him the very best in his endeavors at Stanford!), his inspirational spirit, dedication to science, and incredible way of connecting with students are all part of why we've been incredibly lucky to have learned from him: if not in class, then in life. I had the pleasure of speaking with Dean Dabiri, trying to understand his philosophy on doing something of substance. "One piece of advice for students: don't be afraid to fail. If you're going to fail, do it quickly, and don't tie it to your self worth."

I. IT'S NO SHOCK. Dean Dabiri smiles in front of an artistic rendition of his experimental subjects. 2. FAMILY TIME. Dean Dabiri poses with '18 Meera Ramakrishnan and her mother during Parents Weekend. 3. TEAM BONDING. During Frosh Camp, Dean Dabiri participates in a team-building exercise with the incoming prefrosh. 4. APPLAUSE. Dean Dabiri congratulates '15 Kerry Betz, who co-authored a study on potassium salt published in *Nature*. 5. GET SWOLE. In an effort to encourage donations to the senior class gift, Dean Dabiri matches the pushups of every participant.



john dabiri 005

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here is so much more to being a student than just learning things. Being a student is a lifestyle. You are independent and develop as a person. Beaver is so ready to be a student!

# Student Life

STUDENT LIFE **OII** 

## A Whole New World (OPY BY. Meghana Pagada)









utside Caltech is a very different world. Outside the United States is an even more different world. Caltech offers amazing study abroad programs that send students to the University of Cambridge, University of Edinburgh, University College London, Copenhagen University, Danish Technical University, Ecole Polytechnique, and University of Melbourne. Study abroad programs give students the chance to explore the world, make international connections, and grow as people. "Studying abroad was

one of the best parts of my Caltech experience," states Banca Lepe to. And many other students who studied abroad probably share the same sentiment. Whether they were drinking tea at Fitzbillies near the University of Cambridge or strolling down the streets of Copenhagen, Caltech students had the times of their lives abroad. Exploring a new culture is an adventure. Trying new things is an experience. Making new friends is priceless. However, studying abroad is also about being in a different academic setting and taking classes that Caltech does not offer. "I got to take a lot of classes in medical chemistry, which I find very interesting. Also, the classes were taught by amazing professors, so I learned a lot," Meghana Pagadala '16 remembers. Studying abroad is just one of those memories that stay forever!







I. ALL DRESSED UP. Jacqueline Maslyn '15, Jing Xu '15, Soumya Kannan '16, Caroline Werlang '15 and Jacqueline Masehi-Lano '15 attend a Christmas formal at Corpus Christi College, Cambridge. Photo credit: Soumya Kannan. 2. LET THEM EAT CAKE! Yubo Su '15, Cedric Flamant '15 and Margaux Lopez '15 visit the famous Palace of Versailles, not far from Ecole Polytechnique, where they spent fall term. Photo credit: Margaux Lopez. 3. CAPTION TITLE. Jessica Lam '16, Courtney Chen '16 and Connie Hsueh '15 visit Budapest after completing their term at Cambridge. Photo credit: Meghana Pagadala. 4. SIGH. Jacqueline Maslyn '15, Poonim Daya '15, Emily Ellsworth '15, Jing Xu '15, Harrison Miller '15 and Caroline Werlang '15 stand in front of the Bridge of Sighs at St. John's College, Cambridge. Photo credit: Emily Ellsworth. 5. FLYING BUTTRESSES. Harrison Miller '15 and Poonim Daya '15 visit a church. Photo credit: Meghana Pagadala. 7. YUMMY IN THEIR TUMMIES. Monica Li '16 and Michael Grappone '16 enjoy a delicious meal while on a trip to Sweden from their home base of Copenhagen. Photo credit: Valerie Pietrasz. 8. ENGLISH COUNTRYSIDE. Bianca Lepe '16 smiles on a particularly pastoral bridge in Cambridge as punts move slowly in the water behind her. Photo credit: Soumya Kannan.

#### Once upon a time...

Soumya Kannan

he moment I first saw Cambridge, it took my breath away. Every building is a castle and every stone in the cobbled streets is older than America. The dining hall in college looks like something straight out of the pages of Harry Potter, with vaulted ceilings, tall stained glass windows, dim lighting, portraits of old college masters staring creepily down at you while you eat, and a head table where all the college fellows sit.

England is a wonderfully *English* place. People really do drink tea at every hour of the day (and the way you take it is a constant source of debate - milk? sugar? *two* sugars? or nothing at all?), and every single meal in hall includes some kind of potato product. Cambridge itself is wonderfully aristocratic and formalized. The father of a boy who lived in my staircase is one of Prince Charles's doctors; at formal hall, it is required to wear robes over your clothing, a remnant of the days when they were the sign of an academic; when I matriculated to Corpus Christi College, I signed a book that was one in a series containing the names of every member of the college dating all the way back to 1352 - the year the college was founded.

Though I was only there for a short while, Cambridge will always remain a home to me. I will always remember the view from my little room at the top of T staircase, and one day, maybe, I'll see it again. STUDY ABROAD

OI3







I. FIRED UP. Students cheer as the Fleming cannon fires, signaling the end of Rotation. Photo credit: Auggie Nanz. 2.ROLL THAT BALL. Anne Christian '16 smiles while playing a carnival game. Photo credit: Michael Wong 3. SING YOUR HEART OUT. Andy Zhou '15 performs at the Caltech Carnival. Photo credit: Michael Wong 4. FREE FOOD! Students relax in the Court of Man while munching on barbecue food. Photo credit: Michael Wong 5. BOAT RACE. Students compete in a boat-building race at Frosh Camp. Photo credit: Emily Miao 6. TEAM ALBANIA. Sachi Kamiya '18, Emily Miao '18, Drew Schaeffer '18, Jason Huang '18 and Thom Chaffee '18 enjoy their Frosh Camp experience together. Photo credit: Emily Miao 7. HANGING AT THE BAR. Upperclassmen and prefrosh mingle at Chez Ruddock, Ruddock House's Rotation event. Photo credit: Auggie Nanz.

## Jong story short...

uring Rotation, I fell really sick with 'frosh plague' and coughed/sneezed/sniffled my way through most of my dinners, managing to stay alive. However, looking back, I find that certain defining memories stick out to me from

Jara Shankar

weltering heat. Green palm fronds atop tall palm trees swaying in the very occasional breeze. A single wispy cloud drifting lazily across the bright blue sky. Fall in Southern California is much like every other season, differentiated only by the start of another academic year.

In late September, we all return to the hallowed beige halls of Caltech to begin the school year anew, commencing the activities with Frosh Camp for the newly arrived prefrosh. The new students travel to Ventura Beach, where they meet other prefrosh, learn about Challenges and Choices, dance the night away, and get used to the great Southern California weather. In the meanwhile, upperclassmen prepare for Rotation.

Rotation is like Rush Week, but Caltech style. Prefrosh eat dinner and dessert at each of the eight houses and figure out which house they like the best. In addition, each of the houses throw a special event, so prefrosh can interact with more upperclassman. These first two weeks are packed; not only do prefrosh have to go to classes, but they also can go to Chez Ruddock and enjoy some jazz music. They can get messy at the Fleming Paint party or just Chill at Page. They can play Capture the Flag at midnight with Lloyd or indulge in delicious Boba at Avery before the upperclassman do. Or they can pretentiously drink tea at Dabney, sing at Ricketts Open Mic Night, or get some liquid nitrogen ice cream at Blacker. The possibilities are endless.

"Rotation is one of my favorite parts of Caltech," says Meghana Pagadala '16. "Not only do I think it is unique, but I think it also brings all the house members together. At Rotation, I remember why I love my house so much and I enjoy sharing that with the prefrosh. Also, I just like meeting new people, especially at a small school like Caltech." In the grand finale, Fleming cannon fires to signify the end of Rotation, welcoming the new class to their Houses and welcoming the whole student body to the start of another great year.

{014} student life

## Velcome to a Jew Lear





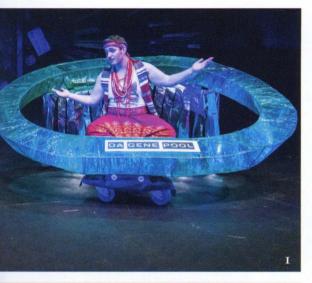




the blur. Going on a 2am house tour with some friends the night before house decisions, and climbing to the roof of East Bridge afterwards gave me a distinctly prefroshy thrill. I also clearly remember milk floating Jaden Geller during Lloyd dinner (and I'm sure he remembers it too)!



# Take





hakespeare and sonnets are often what come to mind when thinking of the theater, but here at Caltech, we are known for thinking outside the box, and the theater is no exception. This year, the Theater Arts at the California Institute of Technology, better known as TACIT, staged two main events, both highly original.

The first was the play Alice Through the Wormhole. From just reading the title, one might assume that this play was merely a dramatic retelling of Lewis Carroll's classic novel Alice in Wonderland, but in truth, it was so much more than that. Starring Caltech undergraduates and graduate students, and staff from both Caltech and JPL, this musical production put the Caltech twist on Alice in Wonderland, transforming Alice from an innocent young girl into a genius dragged through a wormhole, where logic and reality are warped. Alice finds herself caught in a battle between the Red Queen of Funding and the Dark Prince of Future Science, along the way encountering a colorful cast of characters including the White Rabbit, the Cheshire Chimp, and Tweedle Y and Tweedle Z, to name just a few.

In addition to the production of *Alice through the Wormhole*, TACIT director Brian Brophy also held a staged reading of the new original musical Boldy Go!, based on Star Trek. The cast gathered together for a readthrough/sing-through of the script, which may be produced into a fully-fledged stage production in years to come.



oté student life





1. CHILL OUT. Harrison Miller '15 relaxes in "Da Gene Pool" in TACIT's production of *Alice Through the Wormhole*. 2. DRA-MATIC FLAIR. *Alice* cast members look in every direction except towards the titular character. 3. CARROT CRAVING. True to his real-life counterpart, *Alice*'s White Rabbit munches on a carrot. 4. SUNNY YELLOW. Kelvin Bates GR takes his vocal skills from acapella to the theater during the *Boldly Go*! read-through. 5. BLUE LIPS. *Boldly Go*! cast get creatively dressed up for the script reading. 6. ...WHERE NO MAN HAS GONE BEFORE. The cast of the future Star Trek-based production *Boldly Go*! present the preliminary script read-through of the original play. 7. POINTING FINGERS. Who ate the last cookie backstage? The cast of *Alice* all attempt to blame each other. 8. THE QUEEN HAS ARRIVED. *Alice*'s Red Queen makes a fabulous entrance to the stage. Photo credits: Michael Wong



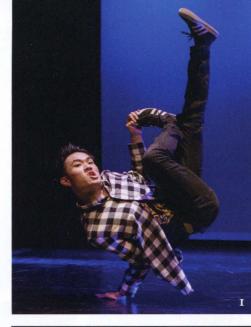




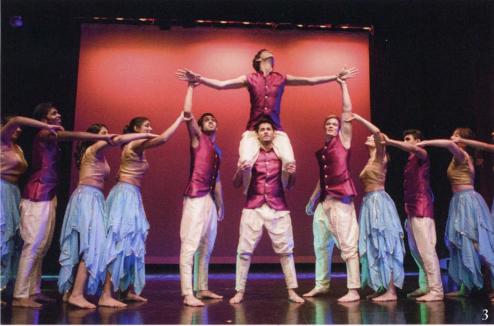




Long story short...







ne of my favorite takeaways from dance show was the amount of respect everyone had for each other whether it was dancers congratulating each other backstage or the audience being super supportive both days. There was a strong sense of community among the dancers, even though all of us were only together for a week through rehearsals and performances. Dance is a form of expression, like playing an instrument or singing, and seeing how supportive the Caltech community was of that expression was pretty special. I had a blast this year, and I'm looking forward to next year's show.

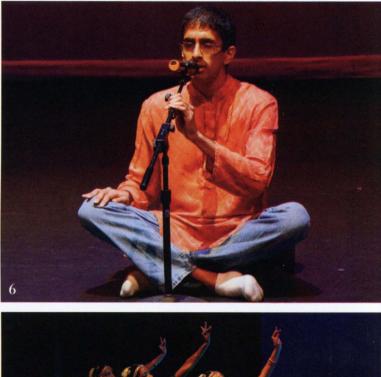
#### Anshul Ramachandran



RETZEL. Albert Ge '17 contorts himself while breakdancing during his dance show solo. Photo credit: Michael Wong 2. TOES POINT m. For a split second during the dance show, this ballet dancer holds a perfect pose midjump. Photo credit: Michael Wong Caltech Dhamaka shows the meaning of teamwork in this connected move, holding each other up during the finale of their dance show performance. Photo credit: Michael Wong Caitlyn Chen '17, Beatriz Atsavapranee '18 and their fellow dancers show off their swag moves during their hip-hop dance show performance. Photo credit: Michael Wong Janani Comar '15 performs a Bharatha Natyam solo during the OASIS show. Bharatha Natyam is a form of classical Indian dance that is now learned and practiced around the world. Photo credit: Chloe Hsu 6 Krishnan Chander '15 sings a traditional Carnatic song during the OASIS show, paying homage to the classical music form native to Southern India. Photo credit: Chloe Hsu Anjali Premkumar '17, Meghana Pagadala '16 and Uma Dingankar '18 are perfectly in sync while performing a Bharatha Natyam piece in the annual OASIS show. Photo credit: Chloe Hsu









very year, the Caltech Dance Show and OASIS show are opportunities for Caltech students to showcase their talents. This year, in 18 acts, students amazed the audiences with a variety of dance styles, such as hip hop, Indian fusion, ballet, breakdancing, contemporary, tutting, ballroom, and much more. There were performances by the Ballroom Dance Club, the Hip Hop Club, Dhamaka, Tech Naach, and Ballet club in addition to other group performances and solo performances.

The annual OASIS Show featured dance performances, singing, instrumental

pieces, a fashion show and the Dhamaka play. Krishnan Chander '15, Tara Sowrirajan '16, Chiraag Nataraj '15 and many others graced the audience with their vocal talents by singing both traditional South Indian Carnatic pieces and contemporary Bollywood ones, while Arun Chandm '16 showed off his skills on the mridangam, a traditional Indian percussion instrument. There were also classical Bharatha Natyam performance and Indian fusion dance. Everyone truly brought the spirit of India!

dance show & oasis show **019** 

T. LET'S GO, PITCHES. The Pipettes light up the stage with a rainbow of brightly colored apparel and their melodic voices. 2. ACA-MAZING. Out of Context singers Lasya Marla '16, Shalini Majumdar '15 and Ayaana Sikora '18 perform at Acapalooza while looking positively angelic. 3. KEEPING 'THE BEAT. Gloria Ha '18 keeps her cool while throwing down a Nicki Minaj rap. 4. LONG HAIR, DON'T CARE. Celeste Starrr, better known by her stage name Daniel Gomez '16, makes a special guest appearance during the Pipettes' performance at Acapalooza. 5. DO RE MEN. Jalani Williams '16 belts out his solo while his fellow Keytones back him up. Photo credits: Auggie Nanz



IN TUNE. The members of Fluid Dynamics lean in together as their voices harmonize perfectly. Photo credit: Auggie Nanz







s we all know, it's important to maintain a healthy worklife balance in order to stay focused. However, as we have probably experienced, this is near to impossible at Tech. Fortunately, I was able to find a family through my a cappella group, Out of Context.

I remember one time during my freshman year, I wanted to take my midterm during rehearsal and told Jun Chun (then co-director) that

Ruchi Jahagirdar

{020} student life

## Just Keep Singing [COY BY Sounga Kanan]

inging is a talent we all wish we had, but every member of Caltech's four a capella groups do possess this talent. A capella

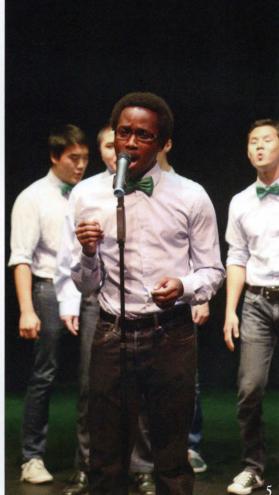
allows students to show off their vocal abilities, creating every sound with just their voices. The artists not only sing, but they also beatbox and simulate the sounds of instruments to add some flavor and spice to their arrangements.

This year, Out of Context, Fluid Dynamics, the Keytones and the Pipettes performed in several shows. They covered songs ranging from the classic "I'll Make a Man Out of You," from Disney's Mulan, to the swagger-filled "Superbass" by Nicki Minaj. The highlights of the year were the annual Love Sucks concert in March, and the end-of-year performance, Acapalooza. At Love Sucks, Caltech's groups performed alongside groups from UCLA, CSUN and USC, filling Dabney Hall with music. The year wrapped up with Acapalooza, a feature of Caltech's growing a capella community, with each of the four groups performing longer setlists and blowing away the audience with their voices.

I wouldn't be coming. He told me that scheduling time around rehearsal was a part of being in the group and that there was no excuse for missing. Resentfully, I went to rehearsal that day and surprisingly, did not regret it. Since then, I've always taken time out of my schedule to attend rehearsal, especially at my busiest. Through a cappella, I found myself a necessary respite from the stress of sets. I'm not sure if I would've made it through Tech without OoC, and I'm so glad that I had the opportunity to find a family away from home.



A CAPELLA **02 I** 





Story of my life...

usic has been a big part of my life for as long as I can remember. I have always used music as a stress reliever and way for me to relax during stressful times. When I first thought about which college I should go to, I thought that if I went to Caltech, I would have to put my passion for music down and focus only on math and science. Once I got to Caltech, I realized that my thought process was terribly wrong. Caltech has some of the greatest musicians that I have ever played with or listened to. I honestly did not play any drumset before college. One day my freshman year, a friend that I met back at my PFW hit me up saying that his friends needed a drummer for Open Mic Night and he remembered that I told him that I drummed in high school. This ended up being the first Open Mic Night that I came to/ participated in. This eventually led to me performing at every Open Mic since. Getting to play at Techstock was definitely one of the best parts of my crazy sophomore year. Performing on the stage made me feel like I was in a real band, and not a garage band with some friends.







usical talent is abound in the Caltech population. Students express their interest in music in various forms, from playing instruments in the Caltech-Occidental Concert Band to jamming out at Open Mic Nights. Two highlights of the year were the annual Bandorama and the TechStock Battle of the Bands competition. Bandorama was the final concert for the Caltech music program this year, featuring the Caltech Glee Club, the Caltech Jazz Band,

Caltech music program this year, featuring the Caltech Glee Club, the Caltech Jazz Band, and the Caltech Concert Band. The groups performed lovely classical and jazz music, show-casing the talented Caltech community, including students, staff, and faculty members all purusing their passions for music.

TechStock, on the other hand, was the first of what will hopefully become an annual event. The concert was an all-day affair, centered showcasing Caltech musical talent in

{022} student life

# Don't Stop the Usic





I. CHEETAH BOY. Chris Im '16 has the rock star look. Photo credit: Emily Miao 2. ROCKING OUT. GPS professor Konstantin Batygin and Peter Buhler GR prove that rock is not just the material forming the Earth's crust. Photo credit: Michael Wong 3. WE ARE ALL WINNERS. The TechStock finalists support each other, standing together in anticipation of the announcement of the winning band. Photo credit: Emily Miao 4. GLEE. Heather Gold '16 smiles during a glee club performance. Photo credit: Michael Wong 5. JAZZ MASTER. Jonathan Liu '15 lets the music flow through him as he pours his heart into a trumpet solo. Photo credit: Michael Wong

the Battle of the Bands competition. Students relaxed on the lawn in front of the Winnett Student Center and enjoyed music by Caltech bands. The bands competed for the \$400 grand prize, with Hot Karate emerging victorious and crowd-pleaser Blown Out taking second. The concert ended with a performance by the Downtown Fiction, a well-known Los Angelesbased band. Their setlist featured their hit single, "I Just Wanna Run," among a variety of other catchy songs.



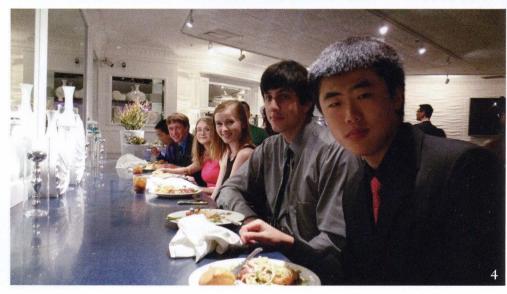
мизіс 023

### Jong story short...





<image>



I. CANDID CONVERSATION. Cameron Earl '18 and Alexa Parker '18 enjoy their time aboard the Dandeana at the FantaSea Yacht Club. 2. RED DRESSES. Tara Shankar '18 and Ayaana Sikora '18 hug in color-matched outfits aboard the yacht. 3. DRESSED TO IMPRESS. Arun Chandra '16, Sreenivas Appasani '16, Neil Kumar '16, Kevin Yu '16, Rahul Bachal '17, Ajay Mandlekar '16 pose in sharp suits inside the yacht club. 4. DINNER AND DANCING. Patrick Nikong '16, Elliot Simon '16, Anne Christian '16, Kristin Eliason '16, Tammer Eweis-Labolle '16 and Jerry Yang '16 eat dinner before heading out to the dance floor. Photo credits: Katherine Guo 5. LOOKING DOWN ON THE CROWD. Students stand on the top balcony of the Blacker-Lloyd Big I party. Photo credit: Talia Minear 6. HANGING WITH FRIENDS. Students chat and check out the interior decorations in the Blacker lounge. Photo credit: Talia Minear 7. OVER THE RAINBOW. Oriel Humes '18 and Gillian Kopp '18 are framed by rainbows and flowers in the entrance of the Dabney-Ruddock Big I party. Photo credit: Gillian Kopp

very house approaches their interhouse in a different way, so building Big I presents a unique challenge. Having to coordinate with a house whose vision of what makes a good party may differ can make the process frustrating, but ultimately the experience is rewarding. People from both houses meet to brainstorm and plan for their party and fill out all the paperwork to get administration approval. The south house courtyards reverberate with power tools as people from different houses work to finish their parties, demonstrating the strength of community and our spirit of collaboration. Seeing the four parties come together on the big night makes all the hard work worth the effort.

## Abhi Puranam

# Work Hard, Dlay Hard







hile Caltech may not be on anyone's list of top party schools, between attempting to finish problem sets at 5 AM and sleeping through class, we are occasionally known to have fun. Though interhouse parties are thrown by each house every year, this year featured two big events not put on by a single house.

First was Big Interhouse. Occurring every two years, this party is a combined effort between every house to create four simultaneous parties taking place in the courtyards of the four south houses, each thrown by a partnership of two houses. This year, Ruddock and Dabney teamed up for a Wizard of Ozthemed event, Lloyd and Blacker were paired for Space Mining, Page and Ricketts pulled off a Brazilian Carnival, and Avery and Fleming threw a Hunger Games: The Capitol-themed party. Alumni and students alike enjoyed the night.

This year also featured the return of ASCIT formal, which has slowly transformed into an annual event rather than occurring every two years. ASCIT social director/magician Annie Chen '16 planned an amazing night at the FantaSea Yacht Club in Marina del Rey, complete with a cruise aboard FantaSea's flagship yacht, the Dandeana. Students dressed up in their finest formalwear. Dinner was served in the club and dessert aboard the yacht; everyone burned off the calories from the delicious food on the dance floor.

ASCIT FORMAL & BIG I
025

# Just for Just





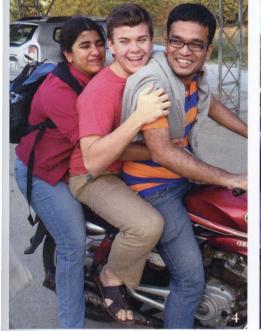


one of the benefits of being a Caltech student is all of the fun events and trips subsidized by organizations such as AS-CIT and the Caltech Y. This year, both hosted various fun and creative events, as usual.

There were a variety of ASCIT events organized on order to cater to the diverse student body, thanks to the hard work of ASCIT social director Annie Chen '16. One of the highlights was Be a Kid Again, when students headed over to Tom Mannion's house to enjoy Girl Scout cookies, play with puppies and have their faces painted with Batman masks and fairies. Another highlight was the free trip to Dodger Stadium for an exciting baseball game pitting the LA Dodgers against the St. Louis Cardinals.

The Caltech Y also continued their tradition of offering diverse and exciting events. As in previous years, the Y hosted community service trips, including the annual Make A Difference Day, and hikes in the local Los Angeles area. The main event of the Caltech Y's calendar was the India Ki Khoj trip to Ahmedabad, India, where Caltech students joined with students from the Indian Institute of Technology to tour the city and learn about life in India.

{026} student life









1. 7TH INNING STRETCH. Tomas Tussie '17, Nicholas Buoniconti '17, Sandia Akhtar '16, Chris Bradley '17, Shubhankar Jain '17, Parth Shah '17, Robin Brown '18, Monica Li '16, Jenny Mok '18 and Beatriz Atsavapranee '18 enjoy the ASCIT-sponsored Dodgers game. Photo credit: Beatriz Atsavapranee 2. PUPPY LOVE. Students play with puppies at Be A Kid Again Day. Photo credit: Annie Chen 3. GIRL WITH THE DRAGON TATOO. Emily Shih '15 shows off her glittery dragon face paint while cuddling with puppies at Be A Kid Again Day. Photo credit: Annie Chen 4. FAST AND FURIOUS. Ratnalekha Viswanadan '15 and Sean McKenna '17 hop on for a speedy moped ride through Ahmedabad's crowded streets. Photo credit: Boyu Fan 5. CELEBRITIES. Emil Khaboulline '16 and Nico Salzetta '15 are flagged down by some Indian teenagers for a photo. Photo credit: Boyu Fan 6. FRIENDS FOREVER. Jackie Maslyn '15, Ann Wang '15, Boyu Fan '15, Ratnalekha Viswanadan '15, Aditya Bhattaru '15 and Emil Khaboulline '16 huddle in close with their new friends from the Indian Institute of Technology Ahmedabad. Photo credit: Pushpak Baviskar 7. HOLES. Sumana Mahata '17 and Albert Ge '17 work towards the greater good by helping fill potholes in Monrovia Canyon. Photo credit: Caltech Y 8. SCIENCE FOR THE MASSES. Edward Fouad '16 teaches children the wonders of science during the Caltech Y's annual Make A Difference Day. Photo credit: Caltech Y

Boyu Fan

nce upon time...

ndia Ki Khoj means "In Discovery of India", and was the name of our 11-day journey to Ahmedabad, a rapidly modernizing historic city in northwest India. The first day, our motley crew of Caltech and Indian Institute of Technology students ventured into the 'pols' of Ahmedabad, clusters of centuries-old urban houses in the historic sector of the city. Our tour guide, an Indian man with a Modi-like taste for fashion wearing a mustard yellow kurta and a brown tartan scarf, led us through the gateways, narrow alleys, unexpected courtyards, and secret passages that once offered to the pol's residents haven from riots and social turmoil. Walking through Ahmedabad, we sojourned to the top of the ancient city walls, gazing upon the market below, stopping to observe the occasional elephant or monkey freely roaming the city. We then ate lunch at the famed restaurant Agashiye, offering us an authentic taste of Gujarati regional cuisine. After lunch, we returned to our host university to listen to invited speakers talk about Ahmedabad's role in a rapidly modernizing India and the contemporary issues that surround it. Along the way, we discovered that we made it into the city newspaper for promoting international exchange and dialogue. And that was only the first day.

ASCIT EVENTS & CALTECH Y

## Clubbing Licov By Sound Kanas



hough Caltech has a small student body, there are still a large variety of clubs and organizations on campus that allow students to engage in their hobbies and interests, no matter what they are. Clubs span interests from community service projects, such as Engineers Without Borders, to sports, such as Aftermath, Caltech's ultimate frisbee club, to robot-building, such as the Caltech Robotics Club.

This year, there were several notable events thrown by clubs. The Student-Athlete Advisory Committee drew more attention to Caltech's athletics programs by staging Orange Out events at selected matches of various sports throughout the year to encourage student attendance. Caltech C, Caltech's Chinese student association, put on the Caltech C Moon Festival, featuring student speakers, dancers, singers and instrumentalists celebrating Chinese culture. The Caltech Sustainable Vehicle club hosted the Southern California regional race at the Rose Bowl, bringing together a variety of sustainable vehicle teams to test and compare their vehicles.

There are also many organizations that hold smaller, more regular events, such as the Women's Soccer Club, which plays in a local league every Saturday during spring term. Similarly, Caltech's ultimate frisbee team, Aftermath, regularly practices and plays matches. Interaxon, a club dedicated to teaching students about neuroscience, does regular educational outreach events to elementary, middle and high schools in the Pasadena Unified School District, and Robogals puts on engineering workshops one to three times each week for girls in grades 3-5.

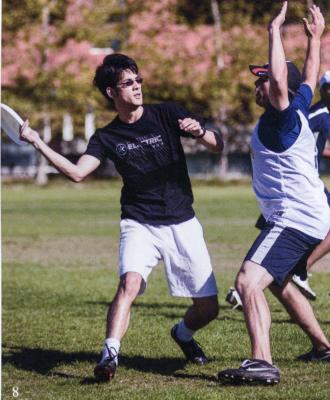
Yet more clubs take on long-term projects, such as Engineers Without Borders. A branch of a national organization, this club has teamed up with an organization in Nepal to help bring clean water to households in Nepal's Ilam District. Club leaders visited Nepal to help with the implementation of their project.

These are only a small sampling of the diverse events and projects taken on by clubs at Caltech, offering students a way to pursue their hobbies and take a break from the rigorous courseload.











I. WIN TOGETHER. Students storm the court after the women's basketball victory against Occidental during their Orange Out game. Photo credit: Michael Wong 2. HOME TEAM CROWD. Coaches and students alike bear the sweltering heat to cheer on the baseball team at their Orange Out. Photo credit: Mark Becker 3. SPLASH ZONE. Caltech students enjoy the women's water polo Orange Out with local kids from the Rose Bowl Aquatics Club. Photo credit: Mark Becker 4. BYE BYE BIRDIE. Badminton club members compete in the annual Spring Swing badminton tournament, hosted by the club. Photo credit: Caltech Badminton Club 5. BRAIN GAMES. The Interaxon Club teaches kids at Hamilton Elementary School about the intricate workings of the human brain. Photo credit: Interaxon Club 6. CRESCENT MOON. A dancer performs at the Caltech C Moon Festival. Photo credit: Michael Wong. 7. PRAYER FLAGS. Nauman Javed '16, Webster Guan '16 and club mentor/Caltech alumnus Dr. Gordon Treweek visit Kathmandu during their trip to Nepal to gather assessment data for EWB's spring water source project. Photo credit: EWB Caltech 8. FLICK IT. Aftermath members show off their frisbee-throwin skills. Photo credit: Michael Wong. 9. CRUSH. The Caltech Robotics Club shows off their robot. Photo credit: Edward Fouad.

clubs & organizations

I. GRILL MASTER. Oswaldo skillfully masters the grill with his special weapon--the spatula. 2. I CAN SEE THE LIGHT. Usually Chandler Cafe is darkened during midnight madness, but the camera flash did not fail to capture the happy faces of Mara Green '17 and Daniel Mcandrew '17. 3. WHIP IT. There is no such thing as a diet at Midnight Madness as Cameron Voloshin '17 and Kristin Eliason '16 stock up on whipped cream at the Midnight Madness crepe station. Photo credits: Jon Webster 4. TEXAS ROOTS. Harrison Miller '15 breaks out his cowboy gear for the Texas BBQ Chandler Dinner. Photo credit: Bob Paz







s senior director of Caltech Dining Services, Jon Webster handles the diets of Caltech students in addition to planning and executing CDS events.

#### How do you come up with the ideas for Chandler dinners?

We have extremely scatter-brained and off the wall brain storming sessions. There is a website of wacky holidays that is usually a starting point – we also try to make the parties opportunities for our chefs to try new things, so the menus are often dictated by our chefs' current interests.

## Jon Webster

{030} student life

## ummy in my



altech just wouln't be the same without our (in)famous culinary providers, Caltech Dining Services. Food king Jon Webster and his beloved staff are hard at work every day to provide much-needed nourishment to the tired student body, whether it be in the form of Oswaldo's delicious grilled cheeses, Tony's desserts, or a word of comfort and happiness from Elvira in the kitchens at dinnertime.

COPY BY Soumva Kannan

CDS not only cooks our dinners and stocks the kitchens, but also puts on a wide variety of dining events. CDS are known far and wide for great thematic creativity and this year lived up to their storied past. Though following up on fan favorites from previous years such as Garlic Dinner, Cheese Dinner, Ocho de Mayo and the Fire Station Dinner was no easy task, the impossible was achieved as CDS events made it to a whole new level. This year's Chandler Dinners included "Ditch Your New Year's Resolution" (who wants to lose weight anyway?), National Tortilla Day (everyone's favorite holiday), "Got Beef?" BBQ (filled with surprisingly good vegetarian food), "Cincode-Fire-oh" (combining two classics - Cinco de Mayo, this year actually on the 5th of May, and the firefighters from down the street), and many more.

In addition, an old tradition was reborn with new life this year: Midnight Madness. First term, students rushed to Chandler for waffles and mini donuts at 11:30 PM, expecting long lines and a sugar rush as per usual, but what they got was so much more. Chandler had been transformed, featuring strobe lights, glow sticks and live music, and the new format continued for the rest of the year. A particular highlight was the winter term event, which, owing to its chronological proximity to St. Patrick's Day, was themed as such, going so far as to include an Irish river-dance band. The name "Midnight Madness" now holds halftrue: though it still doesn't happen at midnight, it has, we can all agree, reached an appropriate level of madness.

immy

#### What gave you the idea for the new Midnight Madness?

President Jean-Lou Chameau was the originator – he had a conversation with Peter Daily when he first arrived about midnight breakfast during finals at his previous University. When Peter brought me the idea, I was all for it because we actually had a similar event at my college during finals. From there, we have tried to make the event our own and make it as much fun as possible. What is your favorite part about working in CDS?

That's easy – seeing students smile. While our events are certainly goofy, the point is to create a moment of levity in the lives of Caltech students who are often overly stressed. Our bar for success is the smiles on students' faces – those moments make our otherwise difficult and stressful job extremely worthwhile. What is your favorite thing about working at Caltech?

Everyone wants to be involved with an organization that is the best at what it does, so Caltech being the best University in the world helps, but the students are what keeps this job interesting. I have kept in touch with a number of students over the past 10 years, many of whom are graduated and doing amazing things – as part of Caltech Dining I am in the unique position to meet and interact with future leaders of enterprise which is insanely cool to me.

my life. CALTECH DINING SERVICES

...story of

## The End of the Beginning COV BY SUMY SAMA

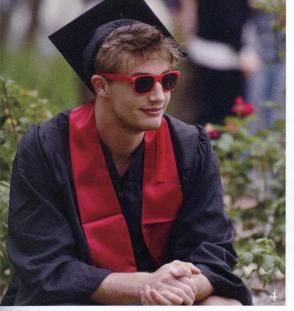




very school year is full of beginnings and endings, firsts and lasts. This year, Caltech welcomed the 9th president
of the Institute, Thomas F. Rosenbaum, on October 24th, representing a new era in Caltech's administration. In the

investiture ceremony, President Rosenbaum was presented with Robert A. Millikan's doctoral hood by Dr. David L. Lee, the chair of Caltech's Board of Trustees. President Rosenbaum followed this with an inaugural address, highlighting Caltech's storied history and outlining his vision for the future. The ceremony also included speeches by ASCIT president Catherine Jamshidi '16, Sunita Darbe, chair of the Graduate Student Council, Samantha Foster B.S. '98, president of the Caltech Alumni Association, and keynote speaker Don Michael Randel, chair of the board

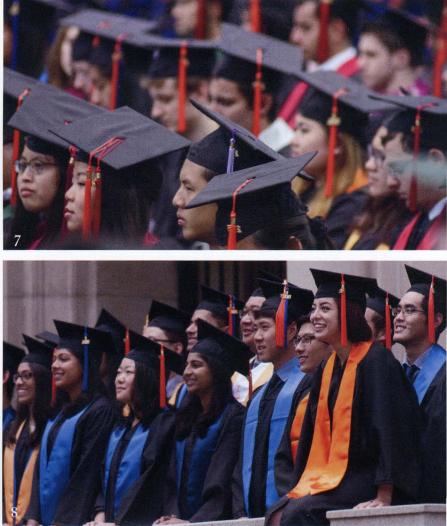
{032} student life





. SWORN IN. President Rosenbaum is presented with Dr. Millikan's doctoral hood as part of his inauguration as Caltech's 9th president. 2. FRENCH HORNS. Members of the Caltech community perform at President Rosenbaum's inauguration. 3. WARM WELCOME. Catherine Jamshidi '16 welcomes President Rosenbaum on behalf of the undergraduate students. Photo credits: Michael Wong 4. TOO COOL FOR SCHOOL. Andrew Hogue '15 relaxes in his color coordinated graduation outfit before the commencement ceremony begins. 5. (IN)TELL IT LIKE IT IS. Intel Vice President Genevieve Bell delivers the commencement address. 6. HAND IT OVER. Adam Jermyn '15 accepts his diploma from President Rosenbaum. Jermyn received the Frederic W. Hinrichs, Jr. Memorial Award and the George W. Housner Award and was also awarded the prestigious Marshall Fellowship to continue his scientific pursuits at the University of Cambridge. 7. CAPS AND GOWNS. Graduates watch their classmates receive their diplomas and wait for their turns to walk across the stage. 8. LAST ONE BEST ONE. The graduating seniors pose all together for the last time for their class photo. Photo credits: Caltech Strategic Communications





of the American Academy of Arts and Sciences and president emeritus of the University of Chicago.

However, though President Rosenbaum's inauguration was a new beginning for the Institute, this year was also an ending for the Class of 2015, who graduated on June 12, 2015. The commencement speech was given by **Dr. Genevieve Bell**, Vice President and Fellow at the Intel Corporation. Graduates walked across the stage while their families and friends proudly watched them receive their diplomas. As always, our graduates are going on to impressive careers; the Class of 2015 includes three Fulbright grantees, two recipients each of Watson Fellowships and Hertz Fellowships, one recipient each of the the Marshall Fellowship and the Gates Cambridge Scholarship, and thirteen National Science Foundation Fellowship recipients out of a total of 233 students in the class. Though this may be the end of their Caltech undergraduate careers, it is just the beginning for these students in what is sure to be a bright future for each and every one.

INAUGURATION & COMMENCEMENT

#### {AIChE}

EXCOMM. PRESIDENT Shi En Kim vice president Evelyn Chin treasurer Slava Butkovich secretary Parul Pubbi reps at large Nat Defries & Alp Sunol frosh rep Naveen Arunachalam

**DESCRIPTION.** The mission of the Caltech chapter of AIChE is to support undergraduates interested in the field of chemical engineering in both their academic and professional endeavours. Caltech AIChE aims to support students throughout their time at Caltech through activities that connect them with other fellow students, ChE faculty members, industry representatives, other student chapters of AIChE, and the national chapter of AIChE.

"Most of the time, a chemical engineer is just a glorified plumber. On the other hand, it's better than being an unglorified plumber." - Unkown

#### {Student Investment Fund]

EXCOMM. CO-CHAIRS. Grace Leishman & Caroline Werlang TREASURER. Ruchi Jahagirdar SECRETARY. Ryan Ripper DIRECTOR OF OPERATIONS. Monique Alkiewicz

DESCRIPTION. The Student Investment Fund (SIF) is an organization responsible for manging and investing about \$700,000 of Caltech's endowment. SIF holds weekly meetings to discuss market activity, portfolio performance, and investment strategies. Our meetings are open to anyone who wishes to familiarize themselves with investing, join the club, or simply hear our take on the past week's major news items. We welcome all students, faculty, and staff who have an interest in investing and financial markets, regardless of knowledge or experience.



MEMBERS. Megan Keehan, Emily Shih, Vivian Huang, Kalyn Chang, Hannah Walsh, Juan Diego Palomino, Anushka Rau, Ankita Sharma, Anvita Mishra, Stephanie Huard,

**DESCRIPTION.** Robogals teaches engineering workshops 1-3x a week to girls grades 3-5. We teach over 450 girls a year.

{Robogals}

MEMBERS. Meghan Brown, Evan Sloan, Joe Greef, Megan Keehan, Eduardo Plascencia, Ankita Sharma, Victor Venturi, Teo Wilkening, Mark Lorden, Zack Polizzi, Patrick Hsu, Nishant Desai, Robert Anderson. DESCRIPTION. The Caltech Sustainable Vehicle Club is a group of dedicated students aiming to push the limits of our engineering skills while promoting sustainability worldwide. Developing our club with the idea in mind to research the next innovations in the automotive industry, our team is working hard to build both a fuel cell and an all battery powered small Formula-style vehicle to analyze the practical applications of both systems. In order to create vehicles that will operate at peak performance, we are always looking to innovate and find new creative solutions.

{Sustainable (Vehicle Club}

#### {Robotics Club}

MEMBERS. BACK ROW. Torkom Pailevanian, Jeffrey Orenstein, Justin Koch, Tristan Murphy, Adrian Costantino, David Flicker FRONT ROW. Tyler Okamoto, Edward Fouad, Monica Li, Sarah Asano, Kushal Agarwal NOT PICTURED. Solomon Chang, Erin Evans, Jake Larson, Bryan He, Frank Zhou, Julie Kew, Roman Zograbian

**DESCRIPTION.** The Caltech Robotics Team designs and builds vehicles for various intercollegiate robotics competitions. In our fourth year as a team, we are competing in the 18th International AUVSI/ONR Underwater Vehicle Competition in San Diego, California. This competition challenges us to create an entirely autonomous underwater vehicle, and perform realistic missions in an underwater environment including navigation, identifying and shooting at targets, and maneuvering objects with high dexterity.

#### {Out of Context}

MEMBERS. BACK ROW. Kevin Chang, Vasant Iyer, Eric Liu, Krishnan Chander, Daniel Gomez, Fabio Arai FRONT ROW. Shalini Majumdar, Ruchi Jahagirdar, Ayaana Sikora, Lasya Marla, Gemma Mason, Anjali Premkumar, Linda Chio, Rachel Morton

**DESCRIPTION.** Out of Context is the oldest co-ed a cappella group at Caltech consisting of graduate and undergraduate students. We perform at various venues both at and away from Caltech.





MEMBERS. BACK ROW. Jackie Masehi-Lano, Tracey Chan, Grace Tang, Christine Tseng MIDDLE ROW. Lauren Li, Charles Wang, Anvita Mishra, Namita Ravi, Aishwarya Nene, Gauri Shastri, Sarah Cai, Sheila Lo FRONT ROW. May Hui, Nancy Wen, Jessica Lam NOT PICTURED. Stephanie Huard, Ratnalekha Viswanadham, Jalani Williams, Anthony Chen, Aileen Cheng

DESCRIPTION. We are an undergraduate neuroscience educational outreach group founded at Caltech. We are affiliated and funded by the Caltech Conte Center. Interaxon travels to local elementary schools, middle schools, and high schools in underserved communities within the Pasadena Unified School Districts to teach students about various topics in the field of neuroscience.



MEMBERS. BACK ROW. Gloria Ha, Preethi Periyakoil, Rachel Ng, Jenny He, Audrey Wang FRONT ROW. Caroline Howard, Amanda Lin, Stephanie Huard, Surya Sundararajan NOT PICTURED. Katherine Guo, Jessica Lam

**DESCRIPTION.** Founded in 2014, Caltech's newest and only all-female a cappella group!







### {ASCIT BOD}

**PRESIDENT.** Catherine Jamshidi VICE PRESIDENT OF ACADMEIC AFFAIRS. Nima Badizadigan VICE PRESIDENT OF NON-ACADEMIC AFFAIRS. Connor Rosen SECRETARY. Sean McKenna TREASURER. Patrick Nikong SOCIAL DIRECTOR. Annie Chen DIRECTOR OF OPERATIONS. Connie Hsueh DESCRIPTION. The main body of undergraduate student government is ASCIT, the Associated Students of the California Institute of Technology. ASCIT is governed by the nine elected members of the Board of Directors (BoD). The Directors set the budget, discuss and act on student concerns and issues, and represent the undergraduates to the faculty, administration, and other groups.

#### {Caltech Dhamaka}

MEMBERS. Meera Reghunathan, Meghana Pagadala, Ellora Sarkar, Avishek Dutta, Anand Poozhikunnel, Sarthak Sahu, Sumana Mahata, Anjali Premkumar, Daniel Gomez, Tara Shankar, Ishwar Subramanian, Suraj Nair, Chandru Dhandapani, Gloria Ha, Anusha Nathan, Sarang Mittal, Rahul Bachal, Jimmy Hamilton, Devi Ganapathi, Nand Kishore, Janice Jeon, Anshul Ramachandran, Namita Ravi, Uma Dingankar, Preethi Periyakoil, Aishwarya Nene, Chloe Hsu, Cameron Earl DESCRIPTION. Caltech's premier co-ed Bollywood dance team.







CHAIRMAN. Connor Rosen SECRETARY. Margaret Lee HOUSE PRESI-DENTS. AVERY. Lillian Tong BLACKER. Justin Koch DABNEY. Suraj Mirpuri FLEMING. Oliver Curtiss LLOYD. Grace Park PAGE. Ben Grabowski RICKETTS. Erin Evans RUDDOCK. Allika Walvekar

**DESCRIPTION**. The Interhouse Committee of the California Institute of Technology exists for the purpose of allowing communication between the eight student Houses towards the solution of common problems. Specific charges of the IHC include organizing Rotation, overseeing Interhouse sports and Discobolus, and selecting the student members of the Faculty-Student Committees.



EXCOMM. PRESIDENT. Kyle Seipp SECRETARY. Laura Shou TREASURER. Jerry Feng

**DESCRIPTION.** A group of people who build, modify and play games using NERF Blasters.

{Caltech NERF Club}

{036} student life

### {Fluid Dynamics}

MEMBERS. Kelvin Bates, Juliet Su, Peter Lommen, Alex Meiburg, Tiffany Zhang, Graham Schmidt, Lucy Chen, Roel Rodriguez, Casey Handmer, Audrey Wang, Catherine Pavlov

**DESCRIPTION.** Caltech's Fluid Dynamics went camping this year. We learned that we cannot start fires, are generally unable to pitch tents, and that 3/4ths of us wouldn't make it two days in the wilderness. At least we can sing.

#### {Caltech Anarchy Club}

MEMBERS. Jeff Rosenberg, Andrew Montequin, Erin Isaza DESCRIPTION. Founded in the early 1930s by Italian exchange students as a response to the growing tensions surrounding working conditions in labs, the Caltech Anarchy Club has sought liberation for all for over eight decades. So long as systematic oppression of the proletariat exists in the world, members of our club are committed to fighting back with black flags and fists held high. We shall prevail.



MEMBERS. BACK ROW. Jihoon Lee, Nauman Javed, Webster Guan, Gordon Treweek (alumnus) FRONT ROW. Katherine Guo, Tim Liu, Stephanie Huard, Anushka Rau, Rachel Ng.

**DESCRIPTION.** The mission of EWB-Caltech is to design and implement sustainable engineering projects that address pressing needs within underprivileged communities. The club aims to utilize the engineering and technical talents of Caltech students and faculty in order to help aid communities in gaining access to basic human needs such as clean drinking water, reliable access to markets, and sanitation facilities. Currently the club is working in partnership with the non-governmental organization Namsaling Community Development Center (NCDC) in Ilam District, Nepal on a spring water source project.

{Engineers Without Borders}

MEMBERS. Aileen Cheng, Larissa Charnsangavej, Shannon Stone, Megan Schmid, Jamie Rankin, Alli Akagi, Hillary Downs, Kelly Mauser, Alicia Rogers, Allie Browne, Giuliana Viglione

**DESCRIPTION**. We're a group of women that play together in a recreational adult women's soccer league in Duarte every Saturday morning.

{Women's Soccer Club}



## Our Story: Society of Women Engineers





he Society of Women Engineers, better known as SWE, is a national organization dedicated to the advancement of women in science and engineering. The Caltech chapter brings together engineering students and professional engineers through events such as lectures, workshops, community outreach and inudstry mixers. This year, SWE's two biggest events were Introduce a Girl to Engineering Day and the Engineering Open House.

I. WE ALL SCREAM FOR ICE CREAM. Allika Walvekar '15 and Connie Hsuch '15 teach girls about chemistry in the form of ice cream synthesis. 2. CHECK IN, SWE members help kids begin the ice cream project. 3. BALLOONS. At SWE's Introduce a Girl to Engineering Day, young girls participate in a contest to drop objects off of Broad. Photo credits: Caltech SWE

#### Introduce a Girl to Engineering Day

In February, SWE hosted their annual event "Introduce a Girl to Engineering Day." Fifty middle school girls were invited from various schools in the Pasadena Unified School District for an exciting initiation into a life dedicated to science. Members of SWE led the girls in small groups through various engineering design contests and scientific demonstrations. SWE invited Robogals to perform a hands on activity and called upon Dr. Karina Edmonds, Caltech's Executive Director for Institute Corporate Relations, to inspire the girls through her experiences as an engineer at JPL. Grad students from a wide variety of labs stepped up and ran demonstration booths as well as lab tours. Finally, the girls ended their day with LN2 ice cream and swag bags provided by Google.

#### **Engineering Open House**

SWE's Engineering Open House is traditionally a full day event where kids and parents are invited for demonstrations and snacks. This year, SWE worked in conjunction with the JPL Ceres event and housed two large booths of scientific demonstrations. From learning about how forensic scientists use gel electrophoresis to producing a cloud in a two-liter bottle, the children that attended the event explored various applications of science. SWE volunteers were kept busy, as the booth was rarely unoccupied due to the astounding popularity of the "Ice Cream in a Bag" demo. Armed with salt and the principle of freezing point depression, the SWE volunteers bravely tried to force some chemistry concepts onto the kids while they made their ice cream. In the end, over 200 children passed through our booths, and they all left happy with a bag of vanilla ice cream.

## Organizations Not Pictured

300 heroes club, Academics and Research Committe (ARC), Active Minds at Caltech, Biology Undertraduate Student Advisory Committee, Biology and Bioengineering, Black Ladies Association of Caltech, Black Students of the California Institute of Technology (BSCIT), Board of Control (BoC), Bridges at Caltech, CHMMC Management Club, Caltech Alpine Club, Caltech Anime Society, Caltech Badminton Club, Caltech Ballet Club, Caltech Ballroom Dance Club, Caltech Biotechnology Club, Caltech Bouldering, Caltech Bridge Club, Caltech C, Caltech Chemistry Club, Caltech Chess Club, Caltech Chinese Student Association (CCSA), Caltech Christian Fellowship (CCF), Caltech Club for Computer Science, Caltech Co-Ed Volleyball Club, Caltech Consulting Club, Caltech Cricket Club, Caltech Dance Show Club, Caltech Dance Team, Caltech Dance Troupe, Caltech Entrepreneurship Club, Caltech Fencing Club, Caltech Golf Club, Caltech Graduate Christian Fellowship, Caltech Juggling Club, Caltech Karate Club, Caltech Korean Student Association, Caltech Lacross Club, Caltech Latino Association of Students in Engineering and Sciences (CLASES), Caltech Latter-Day Saints Student Association, Caltech League of Legends Club, Caltech Newman Center, Caltech OSA Student Chapter, Caltech Ophthalmology Club, Caltech Premedical Association (CPMA), Caltech Russian Club, Caltech Smash Club, Caltech Soccer Club, Caltech Table Tennis Club, Caltech Tai Chi Club, Caltech Tango Club, Caltech Tea Enthusiast Assocation, Caltech Triathalon Club, Caltech Ultimate Frisbee Club, Caltech Wine Club, Caltech Women's Softball Club, Christians on Campus at Caltech, Club Latino, Corazon de Vida, DDR Club, EXPLiCIT, Encounter Jesus Fellowship, Engineers for a Sustainable World, French Club, Hillel, IEEE, Italian Club, Keytones, Korean Campus Chrusade for Christ, Life Christian Fellowship, Magic: the Gathering Club, Muslim Student Association, Organization of the Associated Students of the Indian Subcontinent (OASIS), Orienteering Club, PRISM, Paddling Club, Photography Club, Physics Club, Prank Club, Puzzle Club, Quiz Bowl, Rubik's Cube Club, S.P.E.C.T.R.E., Sargam, Science & Engineering Policy at Caltech, Science Olympiad Club, Singapore Students Society, Snow Sports Club, Strategy Games Club, Strong Ales Club, Student-Athelete Advisory Committee, Students for the Exploration and Development of Space, Techers for a Sustainable Future, The Feminist Club, The Injera Club, UAV Engineering, Workgroup on Educational Science and CLUBS & ORGANIZATIONS Technology 039 Beaver wanted to learn about science and technology. So, he worked really hard and got accepted into Caltech. At Caltech, he learned about the unimaginable and the different phenomenons of the world: the molecular orbital theory, abstract math, the cosmic web, condensed matter physics and much more!

{DRAWN BY Kevin Yei}



ACADEMICS 041

What is your favorite aspect of teaching Caltech students? I really enjoy how collegial they are. They are very supportive of each other and work together well. The result is collaborative learning, which makes my job easier and more fun. If you could take any course at Caltech (other than your own), which would it be and why?

There are so many! I'll choose two. I would take Ph 101 (Order-of-Magnitude Physics) because I really embrace that way of thinking. I would also take Bi/Ge 105 (Evolution) because evolution is at the center of biology and there is no better way to learn a topic that to experience it, which is what that class is all about. How did you become interested in biology and bioengineering? I kind of stumbled into it upon arriving at Caltech for my graduate

How did you become interested in biology and bioengineering? I kind of stumbled into it upon arriving at Caltech for my graduate study 14 years ago. I looked around me, found fascinating problems in molecular engineering in Niles Pierce's lab (where I did my Ph.D.), and have been enjoying the biological sciences ever since. What do you do in your free time?

I have played soccer and basketball my whole life, but two knee surgeries later, I now do more hiking. I prefer this nowadays, since I can do it with my wife and son. I hope to take my son to as many national parks as possible. I also LOVE to play foosball.

What is one fact that your students would never guess about you? Prior to graduating college, I worked as a painter, driving a delivery van for Hallmark stores, in a screw factory, at a company that makes machines that make paper, at a toilet paper factory, and in a cheesemaking R&D center. Oh, and I also worked as a teaching assistant, which largely inspired me to do the job I do now. What advice would you give to a student pursuing a carter in aca-

demia? Be curious and allow yourself be fascinated. Often when you have your head down doing research, you can miss the amazing things we come across as academics every day. Take a moment when you see these things and just let your jaw drop!

Story of my life...

## Justin Bois

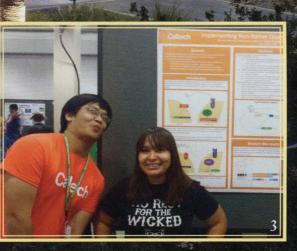
altech's Biology and Bioengineering department, fueled by the desire to achieve a deeper understanding of living systems, has grown tremendously in recent memory. Combining great knowledge of the fundamental principles of biology with the problem solving skills required of engineers, those who work in the BBE department show not only technical skill in their fields of study but also much creativity. This past year, Frances Arnold, who uses "directed evolution" to engineer new proteins in the lab, and Nobel Laureate David Baltimore, who investigates immunology and virology, were inducted into the National Academy of Inventors. Continuing the department's pattern of success, Viviana Gradinaru and Mitchell Guttman, both associate professors of biology, earned Stoan Fellowships for their work in neuroscience and molecular biology, respectively.



## In the June, forver and the Biological Sciences proto CREDIT Caltech Strategic Communications

Department of Biological Sciences and Bioengineering





1. CLASS TIME. After an informative BE/APh 161 lecture on the physical biology of the cell, students of Rob Phillips' class gather for a picture. Photo credit: Meera Reghunathan. 2. DO THE BEAVER DANCE. Soumya Kannan '16 and Galen Gao '16 had a great time at the Amgen Scholars Program Symposium in Thousand Oaks, CA, where they met Amgen Scholars from around the country and learned more about biotechnology and industry. Photo credit: Meghana Pagadala 3. ISCIENCE. Anthony Chen '16 and Monique Alkiewicz '16 are ready to present their iGem project titled *Implementing Non-Native Quorum Sensing in E. Coli* along with other team members at the iGem conference in Boston, MA. Photo credit: Bianca Lepe

> B10 & B10E 043

I LIST

What is your favorite aspect of teaching Caltech students? It's great teaching students who are already so passionate about sci-ence and engineering; I am always amazed to hear about the research many of our students have done before they even get to Caltech. It makes our job easy! If you could take any course at Caltech (other than your own),

CS1. I am embarrassed to admit it, but I can't code. And I would need

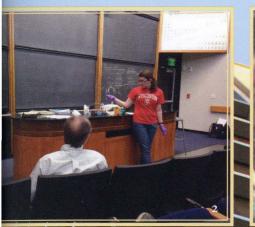
#### What advice would you give to a student pursuing a career in

First: Do what you love. Second: Find yourself a good mentor. Both my PhD and postdoctoral advisors were incredibly supportive mentors, providing me with guidance while allowing me to develop ideas



### arah Reisman

very good story requires a change. Change is particularly interesting to those in the Chemis-try and Chemical Engineering Department, as chemists seek to understand the rapidly chang-ing world around us. This past year, several notable advances in the world of chemistry have earned Caltech chemists great honors, including Caltech alum Eric Betzig (B.S. '83), who von the 2014 Nobel Prize in Chemistry for his advancements in the world of microscopy, which allowed scientists track processes occurring inside living cells. The American Association for the Advancement of Science happily elected CCE chemist Bruce Brunschwig, who studies molecular materials, this past year. Nobel Laureate Robert Grubbs also recently continued his success, having recently being elected to the prestigious National Academy of Engineering.





1. EXPLOSION. Rather than sitting in the classroom, Ch1a students take a field trip to Millikan pond to see Ch1a TAs and Nate Lewis drop water-reactive substances into the pond. The bigger the reaction the better. Photo credit: Caltech Strategic Communications 2. GOT VOLTAGE? In Ch14, a electrochemical Zn/Cu cell was constructed to see if a current would flow between the electrodes. Photo credit: Meghana Pagadala 3. PRETTY COLORS. Ch3a students had to synthesize a Co(III) complex, cobaltammine. The complex contains NH<sub>3</sub> and H<sub>2</sub>O ligands. Because the bonded NH<sub>3</sub> ligands absorb light in the yellow range, the color of the complex is purple. Photo credit: Tara Shankar.

#### Drop he Rase Department of Chemistry and Chemical Engineering

LOCKERON Schlinger Laboratories PHOTO-CREATER Caltech Strategic Communication

Снем & СпемЕ

## Story of my life...

he Engineering and Applied Sciences department proves time and time again that there are no two disparate sciences. Caltech engineers combine talents from all scientific fields, casting light on many fields of study which would otherwise remain in the dark. The EAS department saw continuing success in 2014, with theoretical physicist John Preskill being inducted to the National Academy of Sciences, bringing the total number of Caltech EAS members in the National Academy of Sciences to 12. Carver Mead and Axel Scherer were inducted into the National Academy of Inventors in 2014, while Harry Arwater, Morteza Gharib, Guruswami Ravichandran, and Robert Grubbs were elected to the National Academy of Engineering Additionally, Caltech student Jonathan H. Liu '15 has received a Fulbright Fellowship to conduct research in experimental biophysics at the Ludwig Maximilian University of Munich in Germany.

## Michael Vanier

What is your favorite aspect of teaching Caltech students? Everything. Probably the very best thing is when students bring their own interests to me and that sparks my interest to create a new course or pursue something I wouldn't have done without it. For instance, CS 115 (Functional Programming) grew out of this kind of interaction with students.

If you could take any course at Caltech (other than your own), which would it be and why?

Probably abstract algebra (relevant to category theory which is relevant to CS); also upper-level courses in CS like operating systems. How did you become interested in computer science? I got a personal computer and started programming it. I learned

I got a personal computer and started programming it. I learned almost everything on my own (outside of school) which is ironic given that I teach CS in a university setting.

What do you do in your free time?

I like to play programming games. I also like to play guitar and do yoga.

What is one fact that your students would never guess about you? I used to be passionate about skydiving. I still am, but I haven't done it in many years (it's hard to justify when you have a young child).

What advice would you give to a student pursuing a career in academia?

Not just academia, but in general: do what you love first, then worry about money. If you do that you've won before you start. T. 10<sup>+</sup>S A BOAT. Caltech students watch the ME72 competition and support their fellow friends. 2. WORK HARD. Albert Yang '16 frantically puts finishing touches on his structure. 3. ALL I DO IS WIN. Tammer Eweis-Labolle '16, Kristin Eliason '16, Sheila Lo '16, and August Nanz '16 excitedly hold the ME72 trophy. All of those months of work were worth it! Photo credits: Caltech Strategic Communications

## In the Goop Department of Engineering and Coop Applied Sciences

[COPY BY Matt Kempster LOCATION Gates-Thomas Laboratories PHOTO CREDIT Caltech Strategic Communications]







еаз **047**  **#NOFILTER.** Carly Robison '18, Anusha Nathan '18, Gillian Kopp '18, Gabby Tender '18, and Stephanie Huard '18 gather for an aesthetic picture in front of Mono Lake. 2. GEI ROCKS! GeI students make a pit stop at the cool Red Rock Canyon State Park to look at rock formations. 3. OBSI-WHAT? GeI student Tara Shankar '18 sits upon folded obsidian at Panum Crater. Photo credits: Stephanie Huard





he study of the Universe surrounding us is a profound one; those in the Geology and Planetary Sciences department are making new discoveries constantly, allowing humankind to deeply understand its place in the cosmos. The GPS department has great range, covering topics as minute as cellular biology and as grand as exoplanets. In 2015, assistant professor Heather A. Knutson received both a Sloan Fellowship and the Newton Lacy Pierce Prize of the American Astronomical Society for her studies of the structure, chemistry, and atmospheric dynamics of extrasolar planets. On the other end of the spectrum is Professor of Geobiology Victoria Orphan, who was elected to the American Academy of Microbiology. From the very big to the very small, the Geology and Planetary Sciences department has it all.

[COPY BY Matt Kempster LOCATION Linde + Robinson Laboratory PHOTO CREDIT Caltech Strategic Communications]

#### Department of Geology and Planetary Sciences



## Story of my life...

### Paul Asimow

What is your favorite aspect of teaching Caltech students? My favorite aspect of teaching Caltech students is their capacity for wonder. The best moments of teaching are when I see a student's eyes suddenly get wide as they experience a visible "A-ha!" moment. They have just the right combination of knowing enough to get to the deep thoughts and not already knowing everything or thinking that they

#### r you could take any course at Caltech (other than your own), which would it be and why?

Either ChE 164 or Ch 166, because I just don't get statistical mechanics and I really wish I did.

#### How did you become interested in geology?

The most obvious proximal cause was a class in mineralogy that I took as a freshman at Harvard. It was taught by a great and inspirational mineralogist, the last time he taught it before retiring. It was beautiful and it was interesting and it took all the math and chemistry and physics and applied it to something real (the Earth). And it was different from what everybody else was doing. I can't really point to any earlier hints that this was going to happen.

A hat do you do in your free time?

Free time? Huh? No, seriously, I play with my kids (or drive them around) and I I play tuba in the Concert Band. When the free time really gets out of control I waste some of it on modular origami. What is one fact that your students would never guess about you? I have no secrets. It's all public knowledge. Except for the fact that I'd never taught an undergraduate class before I took over Ge 1 three years ago.

What advice would you give to a student pursuing a career in academia?

Find an uncrowded field, where you can relax and do your work at its own pace. Fields that are too big or too competitive are, in my view, basically unpleasant places to be. Of course, you have to love what you do. But if you can manage to be one of only a few that love it, that would be best.

GPS 049

## Story of my

## Kevin Gilmartin

#### What is your favorite aspect of teaching Caltech students?

Their intelligence of course, but also their enthusiasm for literature, and their willingness to make it a priority despite the demands of the Caltech science curriculum.

#### If you could take any class at Calteeh (other than your own), which would it be and why?

French. I learned to read French, marginally in graduate school, but still regret not having learned to speak.

#### How did you become interested in English literature?

Like many English professors, I was always an avid reader. But it was a few extraordinary English professors in college who inspired me to make a career of English literature. And I should say, history professors as well—in my research and teaching, I've always been motivated by historical problems as well as literary and aesthetic ones. What do you like to do in your free time?

The life of a researcher leaves less free time than one might hope. But I enjoy hiking, and the outdoors generally, and travel. What is one fact that your students would not guess about you? That I escape for long weekends skiing every chance I get during winter term.

What advice would you give to a student pursuing a career in academia? Have a second options, particularly in the humanities. It's a sad fact that job opportunities are shrinking, and there just aren't enough teaching and research positions even for the best trained PhDs.

1, BY THE BOOK, Karsyn Bailey '15 and Tara Sowrirajan 16 examine the archives of the Huntington Library with Professor Kevin Gilmartin during a field trip for their Jane Austen course. Photo credit: Meghana for their Jane Au Pagadala 2. STI VT TEACHER. David Addis '16 and Valerie Pietras '15 speak abou 16 listen to student tutor Anna Liu vriting comparative papers at the Hixon Writing Center, Photo credit: Caltech HSS 3. MONEYBAGS. Students walk with William Zame, Distinguished Professor of Economics at UCLA at the first annual Caltech + Finance symposium on May 1, 2015, sponsored by the Linde Institute. The symposium featured three speakers and distinguished Institute alumni, Robert J. Barro BS '65, Robert C. Merton MS '67, and Stephen A. Ross BS '65. Photo credit: Caltech HSS

## auting

men

he human brain is one of the most complex structures in the universe, and as a result, human behavior can be hard to decode. The Division of the Humanities and Social Sciences revolves around understanding and analyzing human experience by studying economics, history, philosophy, business, and political science, and at Caltech sees frequent success.

HSS faculty member Kevin Gilmartin, professor of English, was awarded in 2015 the Richard P. Feynman Prize for Excellence in Teaching, while Linde Institute Professor of Finance Richard Roll has been named one of two recipients of the Onassis Prize in Finance. Caltech has its place in popular media, and this year, a study by J. Morgan Kousser was featured prominently in the New York Times lead editorial entitled "Voting Rights, by the Numbers."

DOK



20







## Story of my life...

halle gos



## Golwala

What is your favorite aspect of teaching Calteen storents? Seeing that a lot of them are smarter than I am! http://courcould.take.aspeciass at Calteen (other than your own), which would http://www.could.take.aspeciass at Calteen (other than your own), which would http://www.could.take.aspeciass.at Calteen (other than your own), which would

There are all kinds of physics courses I would love to take in areas I don't know very much about — advanced condensed matter theory, quantum computing. Also, mathematics courses I never got to as an undergrad. How did you become interested in English Incenture?

My high school physics class introduced me to the idea that physics could explain so much of the world we see around us. That, and some PBS shows on particle physics, got me excited about physics as a fundamental and important area to work in.

What do you like to do in your free time?

Spend time with my family.

What is one fact that your students would not guess about you? I once had hair down below my shoulders. Then I started going bald... What advice would you give to a student pursuing a career in academia? At a high level, don't take it too seriously. Focus on learning, not on jumping through hoops. But make sure you are really learning — test yourself! At a detailed level, get deeply into some research so that you can really learn how to do it and demonstrate your abilities and so a faculty member can really get to know you. A good recommendation from a Caltech faculty member will open lots of doors, but you have to earn it.

1. CSO ENDS OPERATIONS. After 29 years of superb research, the Caltech Submillimeter Observatory will end operations this year on September 18, 2015. The Observatory is located on Mauna Kea, on Hawaii's Big Island, and has been used by researchers from around the world to accomplish groundbreaking achievements in submillimeter and millimeter astronomy. Photo credit: CSO 2. RIBBON CUTTING. President Rosenbaum and colleagues perform the ribbon-cutting ceremony for Caltech's new Walter Burke Institute for Theoretical Physics on February 23, 2015. Photo credit: Caltech PMA 3. STARSTRUCK. Professor Kip Thorne speaks about the science behind the critically acclaimed film Interstellar in a special screening for Caltech students. Dr. Thorne, an emeritus professor at the Institute and Caltech alumnus, served as an executive producer and nce advisor on the film. Photo credit: Christine Chou

> LOCATION Cahill Center for Astronomy and Astrophysics PHOTO BY Caltech Strategic

> > рма 053

Conversion of the strength of

THE SCIENCE

OF INTERSTELLAR

he members of Caltech's Division of Physics, Mathematics and Astronomy each year undergo a noble journey: to use the newest technological innovations to broaden our understanding of the Universe. Undergrads, graduate students, and faculty alike work together to solve the greatest mysteries around. Caltech seniors Charles Tschirhart and Adam Jennyn won Hertz Fellowships for their graduate studies in the physical sciences. Gregg Halling, an assistant professor of astronomy, and Xinwen Zhu, an associate professor of mathematics, earned Sloan Fellowships in physics and math, respectively. Astronomist George Djorgovski has been named one of the fellows of the American Association for the Advancement of Science for 2014, while Scan Carroll, a research professor of physics, has been named a 2015 Fellow of the John Simon Guggenheim Memorial Foundation.

WALTER BURKE INSTITUTE FOR THE MEET

otta getcha head in the game! Especially at Caltech, where there is a lot of academic work. Beaver is so excited to play in his first game. Not only does he love playing the sport, but he also loves all the support from his fellow friends and school spirit. Go Beavers!





## Chris Bradley

n his sophomore campaign, Chris Bradley smashed a 28-year-old program record, scoring 131 goals this season on his way to earning an All-America Honorable Mention and being named to the All-America Academic All-District team.

What was your most memorable moment of the season?

My most memorable moment of the season came during our team trip to Annapolis for a tournament at the navel academy. It was a great opportunity to bond with my teammates as well as start off the year with a win.

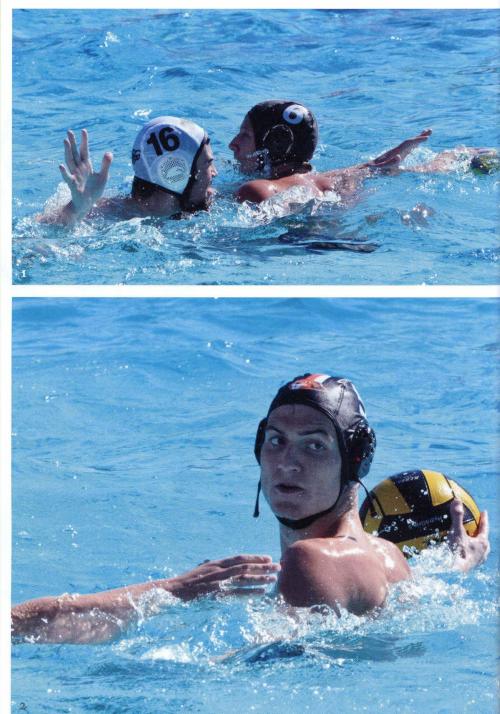
#### What did you learn this season?

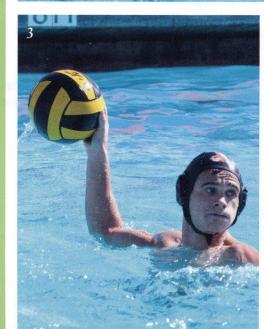
As a team we learned that we really have the ability to compete at the SCIAC level when we play smart. If we continue to build off that confidence I believe it's only a matter of time before we see even better results in the win column.

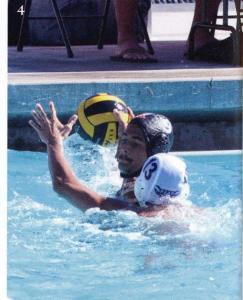
What is your favorite thing about water polo? Water polo is one of the rare sports where you can let completely go of almost all emotional restraint and have that be a good thing. In water polo, as long as you remain under control, to play angrier is to play better. The best thing about playing water polo at Caltech in particular are my teammates and coaches. We really have a great group of guys that I love spending time with in and out of the water, and I can't wait to do it all again next season.

## ...story of my life.

**I. PIROUETTE.** Jim Blackwood '16 goes for his signature turn move as the defense tries unsuccessfully to steal the ball away. 2. KEEP AWAY. CJ Culpepper '15 moves out of the reach of his defender as he looks for a teammate to make a pass. 3. SUN'S OUT, GUNS OUT, Matt Lappin '15 shows off his muscles. 4. SUPERCUTS. Parth Shah '17 intimidates his defender with his well-groomed facial hair. Photo credits: Mark Becker







You gotta Jake

[COPY BY Meghana Pagadala and Soumya Kannan]

Ithough water polo has nothing to do with horses, the men's water polo team is still filled with "knights in shining speedos." The team first rode into battle competing in the Navy Open and returned with its first win against Division II opponent Salem International University. Chris Bradley '17 led all tournament scorers with 24 goals, commenting on his performance, "You gotta take a few to

make a few." Little did he know that he would be making quite a few in the coming months. Taking the momentum from its first win, the team proceed-

ed to win three games in a row at the Citrus College Tournament, a feat that had not occurred in 22 years. However, the accomplishments did not stop there; on September 19, the Beavers won their first game at home against LA Trade Technical College with a score of 15-8.

Bradley scored his 100<sup>th</sup> goal of the season in the next win against Chaffey College; he went on to score 131 goals on the season

to break a program dating to the ancient days of 1986. Due to his efforts, he also earned an All-American Honorable Mention.

Aided by dominant offensive performances from Bradley, Jim Blackwood '16 and Patric Eck '16, the team finished with a total of 7 wins, which has not occurred in all documented history. However, great offense stems from great defense, led by goalkeeper Ben Grabowski '15, who set the record for saves in a single season with 346 stops in the cage this year, giving him a program-leading 1020 in his career at Caltech.

This band of knights always gallops to the pool ready to work and always makes a splash. Although the seniors will be missed next year, the fun in the sun will continue next year with a new cavalry and more experience.

THE TEAM. Ben Grabowski '15, Chris Bradley '17, Tomas Tussie '17, Patric Eck '16, CJ Culpepper '15, Jim Blackwood '16, Matthew Lappin '15, Parth Shah '17, Matthew Cedeno '16, Henry Baer '18, Galen Gao '16, Richard May '18, Phillip An '18, Jordan Bonilla '17

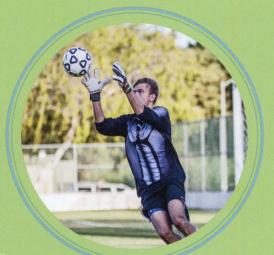


MEN'S WATER POLO



 HEADER! Teo Wilkening '16 attempts a goal using a header, while the opposing goalie stands ready.
 JOUSTING. Adam Ball '16 works to fend off his forward and send the ball up the field to his forwards.
 GETTING AIR. Evren Gokcen '17 leaps through the air as he beats his defender and is successful in moving the ball up the field. Photo credits: Michael Wong





oalkeeper JD Feist had a SCIAC-leading 126 saves on the season, earning All-SCIAC Second Team honors.

#### What was your most memorable moment of the season?

Playing against Pomona-Pitzer at home. Pomona was ranked top 25 nationally, but our team really battled. The score was 0-0 with chances

JD Feist

## Hustle Heart Set USA part

The men's soccer team had a memorable season as they continue to grow and improve both as individuals and as a team. Despite the scoreboards, the team is moving in the correct direction.

The highlight of the season was a tie game against Chapman University on October 4, in which Marec Serlin '15 and JD Feist '17 truly shone. Serlin scored his goal in the 17th minute in a penalty kick after being fouled by the Panthers' goalie, who earned a red card and left his team undermanned for the remainder of the game. Chapman's single goal was made on the rebound of a penalty kick, despite Feist's great save. Although the game went into double overtime, neither team gave in and Caltech earned its first point of the year that day.

This experience truly epitomizes Caltech soccer. In the three matches prior to the one against Chapman, the team shutout their SCIAC opponents in the first half. They also gave up 17 fewer goals this season from this same point last year.

The other highlight of the season was against Redlands University, on October 15. After a 7-0 loss in their previous meeting, the Beavers were eager to redeem themselves, and that's exactly what they did. The Beaver defensive line was solid, preventing a goal for the first 45 minutes of the game. Feist made 10 saves that day, while Kevin Gao '17 had the only attempt on goal, but his shot went right into the hands of the Bulldogs goalie.

Under Coach Rolo's leadership, the team im-

proved greatly throughout the season. As Coach Rolo leaves the Caltech community this year, he will be missed for his contributions to Caltech Athletics. The team also loses three seniors this year – Serlin, Nick Weil'15, and Juan Pablo Ocampo '15 – but leaves behind an army to fill their place. The tie against Chapman University foreshadows the success to come; this team is making strides, and will undoubtedly continue to do so.

THE TEAM. John David Feist '17, Aileen Cheng '16, Evren Gokcen '17, Ashwin Hari '18, Kevin Gao '17, Archana Chintalacharuvu '17, Jean-Alexandre Turban '16, David Luo '17, Chris Haack '18, Marec Serlin '15, Nick Weil '15, Jared Schaeffer Reed '17, David Wang '18, Bobby Sanchez '17, Teo Wilkening '16, Thomas Arnold '16, Juan Pablo Ocampo '15, Masaharu Ono '18, Adam Ball '16, Alex Pien '16, Pedro Ojeda '17, Valentin Skoutnev '16, Alp Sunol '17, Mizing Paloian '18, Joseph Roddy '17, Adrian Constantino '17, Federico Presutti '17



going both ways before Pomona scored in the closing minutes to win 1-0. What did you learn this season?

This season, I really saw how much potential our team has. I was impressed by how well we played against some very tough (and highly ranked) opponents.

My goals this season were to keep my team in as many games as possible and to be someone the team could rely on. Looking back at the season, I'm proud of the way I played, and I hope I can bring that same level next year.

What is your favorite thing about soccer?

I really love the thrill of making a big play. Nothing is better than hearing a crowd cheer after making a critical save.

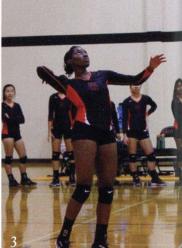
...story of my life.

soccer 059





I. AIRBUD. Catherine Jamshidi '16 finds the set for the kill. 2. SAY CHEESE. The whole team smiles for a group photo. 3. SERVING. Amarise Little '16 tosses the ball up for a hard serve. 4. THREE CHEERS Juliet Su '16 celebrates her ace with the team. 5. BACK SET. Harinee Maiyuran '16 back sets her right side hitter, Amy Hu '16. "I loved back sets by the end of my sophomore season, and I was able to improve throughout this season. A skill that seemed impossible quickly became my favorite set," said Maiyuran. Photo credits: Mark Becker



The women's volleyball team celebrates its victory at its final match of the season against West Coast Baptist. Photo credit: Mark Becker





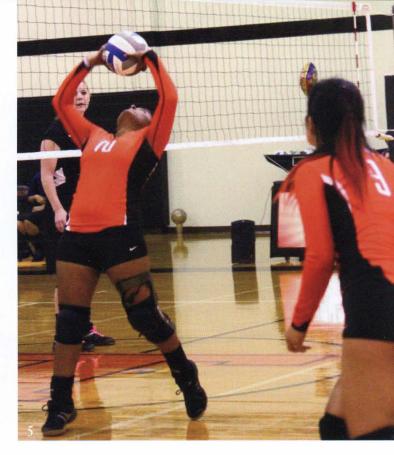
s the lone senior on the team, Connie Hsueh was critical in the team's victory against West Coast Baptist and led the team in blocks per set, with .64.

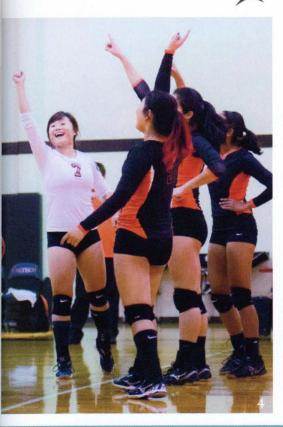
#### What was your most memorable moment of the season?

definitely our last game of the season, which was against West Coast Baptist College and also our senior night! We played the game to 5 sets and narrowly pulled the win on the last set, 15-13. It was incredibly inspiring and heartwarming to see the team come together and play smartly and aggressively. It was also a bittersweet game for me, being my last time playing for Caltech. It was overall such an emotional night for me, and I actually burst into tears after the final whistle blew.

## Bump

Spike (COPY BY Harinee Maiyuran)





he Caltech women's volleyball truly came full circle as they won their final game of the season in a thrilling five set match against West Coast Baptist. After losing to West Coast Baptist in their first game, the team came together fabulously to end up victorious at the end of their season. That experience is a true indication of the growth of this incredibly young team. With its lone senior Connie Hsueh '15 graduating, the team will use this momentum moving forward, armed with six returning as seniors, four as juniors, and three as sophomores. This season also included another win, against Mills College on Saturday, October 11, in another five set match at the end of a two-match day in Braun Gym. Caltech won its first set 25-18. Mills fought to win the next, but the Beavers dug in and won the third at 25-20. Mills came back with a win

in the fourth set with another 5 point margin. In the final set, the Beavers jumped to a 10-3 lead, but Mills came back to tie the game at 12-12. Strong serving led to a 15-12 win. The win was the first of the season and the first under head coach Tom Gardner at the helm. It was matches such as these that showed the vigor and tenacity of the team, and clearly set the stage for future success. Together, the women's volleyball team is making strides, growing into positions, bonding as a single unit, and improving its skills on the court.

THE TEAM. Catherine Jamshidi, Meghana Pagadala, Amarise Little, Ciara Ordner, Suzannah Osekowsky, Alison Lui, Juliet Su, Harinee Maiyuran, Jenny He, Anna Winnicki, Amy Hu, Mayra Melendez, Ker Lee Yap, Connie Hsueh

#### What did you learn this season?

I started volleyball as a freshman as a complete newbie. I was timid and lacked confidence, and I looked up to the upperclassmen that seemed to know what they were doing. At some point during this season, it dawned on me that now, I'm the upperclassman that can mentor the newbies, and after 3 seasons, I have a slightly better idea of what I'm doing. I've enjoyed supporting and encouraging our underclassman, and I look forward to seeing them develop as players.

Connie Hsueh

...story of my life.

> volleyball 061



# One Hill of a Sport

hy would anyone want to get up at 7:30 in the morning on a Saturday? To train for a big meet, of course, and that's exactly what the Caltech women's cross country team did.

This season, the women's cross country team hit the ground running with its first meet at the Redlands Invitational. Stephanie Reynolds '15 set the tone for the season by finishing the 4.5k course in 18:02, a personal course best time for her. Emily Mazo '17 followed suit with a time of 20:09, lowering her course best time by nearly one minute. The next three scorers for the team were Emily Jensen '16 (23:45), Sheila Lo '16 (24:26), and Carla Watson '15 (26:42). Under new head coach Ben Raphelson, the Beavers traveled next to the UC Riverside Invitational, where two runners, Caroline Atyeo '18 and Gauri Shastri '17, made their collegiate cross country debuts.

Leading the way for the women's cross country team was Reynolds, who finished the 5k course in 20:27.9, followed by Atyeo (21:21.0) and Shastri (23:19.3). After three weeks of training, the team headed to the Pomona-Pitzer Invitational, where they placed 14th overall to beat SCIAC rival Whittier College. Next up was the SCIAC Multi-Duals on October 17, where Reynolds set a new school 6k record of 23:00.45. On November 1, the women's cross country team took on the SCIAC Championships. Despite a muddied course due to overnight rain, the team persevered and finished strong. In addition, Reynolds was honored with the Celia Peterson Sportsmanship Award for her leadership as team captain. The team concluded the season by traveling to Salem, Oregon for the NCAA West Regional at Willamette University, where they finished 18th overall, a tangible culmination of all the hard work put in during the season.

THE TEAM. Caroline Atyco '18, Kate Evans '17, Caroline Howard '18, Emily Jensen '16, Gillian Kopp '18, Sheila Lo '16, Emily Mazo '17, Stephanie Reynolds '15, Gauri Shastri '17, Carla Watson '15, Yixiao Yan '18, Tiffany Zhang '18

I. GETTING PUMPED The women's cross country team gathers prior to a meet to come up with a plan of action to earn a victoy. 2. FAREWELL, CMS. Gillian Kopp '18 annhilates the Claremont-Mudd-Scripps runner behind her at the conclusion of her race. 3. LEAPING. Tiffany Zhang '18 leaps over the blades of grass as she runs with no opponents in sight. 4. POSING. The runners pose happily as they prep for their race. 5. LEADING THE PACK. Stephanie Reynolds '15 leads the Caltech women's cross country team as she pumps her arms to victory. 6. FOCUSED. Gauri Shastri '17 leads her La Verne opponent with determination clearly on her face. Photo credits: Sheila Lo













## Story of my life...



## Stephanie Reynolds

enior Stephanie Reynolds closed out her impressive collegiate cross country career by winning the Celia Peterson Award, given to a single senior in the SCIAC,

for her athletic ability, sportsmanship, leadership, and academic success.

What was your most memorable moment of the season?

The night before NCAA regionals in Oregon, we shared our goals for the next day. It was great seeing all of the excitement and determination in the room. It gave me goosebumps.

What did you learn this season?

Over the past four years, I learned that Caltech athletics are really special. Not many universities let just any student compete, but that fact makes the Caltech experience a lot richer. People bring in different skill sets (which may or may not have to do with the sport), so everyone has something to bring to the team to make it a lot more fun.

What is your favorite thing about cross country? Usually about once or twice a season, everyone pulls together a great race on the same day. There's so much energy and excitement, and everyone's in a great mood afterward. Even if one or two people had bad races, they can't help but feel happy about the team performance as a whole.

women's cross country 063





1. FINISHING STRONG. Alexander Anemogiannis '16 outruns a Redlands opponent as he thinks about the feast he will indulge in following the race. 2. GETTING AIR DURING HIS FRESHMAN YEAR. Mason MacDougall '18 basically defines running as he has both feet off the ground during his race at the Pomona-Pitzer Invitational. 3. THINNING THE HERD. Jared Forte '15 races to escape the pack, scorching California Lutheran opponents in his tracks. This tenacious athlete refuses to allow anything to stop him. 4. FINDING HIS STRIDE. Gene Vaughan '18 sets a comfortable pace in the Pomona-Pitzer Invitational. 5. MAN OF THE HOUR. Aditya Bhagavathi '16 leads the pack, and the Claremont-Mudd-Scripps runner behind him, as he sets the pace for the rest of the men's cross country team, both in that race and throughout the season. Photo credits: Sheila Lo



prior to a race on an early Saturday morning. Photo credit: Sheila Lo







ditya Bhagavathi placed 12th at the NCAA West Regional, qualifying for the NCAA Championships in Plainsboro, New Jersey, where he placed 139th and broke his own program record.

#### What was your most memorable moment of the season?

My most memorable moment was during the night before regionals in Oregon. Our whole team gathered together in a cozy motel room and we shared our goals for the race the next day. Having heard everyone's response, I was inspired by how far we had progressed over the season and how hungry we were for success.





> t the first meet of the season while most of the student body was finishing up SURFs and pen's cross country toor

lounging about, the men's cross country team was back at it and ready to impress at the Redlands Invitational. The Beavers were led by senior Ian Koss '15, who set a personal best in the 6k. The first 8k race of the year brought with it Aditya Bhagavathi '16, who ran a brilliant tactical race which would set the stage for his memorable season. Long term results were the primary goal throughout much of the season, as head coach Ben Raphelson said that week that "We introduced a lot of new elements to training over the past week with our long term goals in mind." It was clear that this team was here to make an impact, and soon.

With the rest of campus finally arriving, the third meet of the season was the Pomona-Pitzer Invitational, where Bhagavathi and Koss both set new personal bests. This race was a big one for many, including Joel Kosmatka '17, Gene Vaughan '18, Mason MacDougall '18, and Alex Port '15, who each also set personal bests. The team placed 13th overall.

Midterms weekend – if not a hurdle in itself – brought with it more challenges on the

cross country course in Chino, as overnight rain and torrential downpour over the first mile, albeit not a hurdle large enough to affect Bhagavathi, who earned the program's first All-Conference honor since 2009.

The team then headed to Salem, Oregon, where Bhagavathi qualified for the Championships with a top-seven finish on a nonqualifying team. Seniors Jared Forte '15, Koss, Eric Martin '15, and Juan Adame '15 followed, all posting career-bests in their final collegiate race. The team placed 14th, just three points behind SCIAC foe the University of Redlands.

The season ended with an appearance by Bhagavathi at NCAA Championships in Plainsboro, N.J., where he placed 139th and broke his own program record. That cap to the season foreshadows success for the men's cross country team in the coming years.

#### What is your favorite thing about cross country?

Cross country has taught me more about life than any other activity. The years of training have taught me the amount effort and commitment it takes to achieve excellence. The hard moments in race, like when I'm alone in the middle miles and coming up against a big hill, have exposed my character and forced me to develop toughness. I will cherish the lessons and character building of cross country.

## Aditya Bhagavathi

...story of my life.

MEN'S CROSS COUNTRY

THE TEAM. Juan Adame '15, Alexander Anemogiannis '16, Aditya Bhagavathi '16, Fabian Boemer '17, Jared Forte '15, Nick Haliday '17, Joel Kosmatka '17, Ian Koss '15, Mark Lorden '16, Mason MacDougall '18, Eric Martin '15, John McDaniel '18, Rishabh Pipada '18, Alex Port '15, Elliot Simon '16, Gene Vaughan '18



outpaces two Occidental swimmers. 2. TAKING FLIGHT. Kevin Yu '16 leaps powerfully from the starting block. 3. IN THE ZONE. Chris Bradley '17 mentally prepares for the 800 free relay on day 1 of SCIAC championships. The relay team of Bradley, Eric Lin '18, CJ Culpepper '15 and Patric Eck '16 ultimately smashed the school record in a time of 7:18.88. 4. SUPERMAN. Ben Grabowski '15 flies gracefully through the air, toes pointed and legs straight, like a superhero off to save the world. Photo credits: Mark Becker CHEERLEADERS. Beaver swimmers encour-

I. AHEAD OF THE CROWD. Patric Eck '16







to earn an All-SCIAC honor since 2008 with a third place finish in the 100 freestyle, one of seven school records he contributed to this season, including three I four relay events.

Watching the meteoric rise of Alex Bourzutschky, who mastered 12 dives within a few days despite never having dove in his life.

Henry Baer



## Need for Speed

e are going to rewrite the record boards this season."This was the line from Coach

Jack Leavitt that inspired a breakout season. His prophecy came true: 9 of the possible 21 records were broken in the the grand finale of the Beavers' season at the SCIAC championship meet, some new and some reset from previous efforts in the season.

Rewind. Our story commences on a cold, rainy December day, when our heroes were detained on the road to the University of Redlands by the evil and notorious Los Angeles traffic (you know the deal - a drop of rain and suddenly everyone loses the ability to drive). However, they made it in the nick of time, and so began a historic season for the Beavers.

At the second meet of the season, it seemed like the pinnacle had been reached: the team of Henry Baer '18, Chris Bradley '17, Kevin Yu '16 and Patric Eck '16 slaughtered a 33 year old record in the 400 freestyle relay by over 2 seconds. However, returning from winter break, Yu re-set his own record in the 100 butterfly to open a legendary second half of the season, in which the Beavers recorded their first dual meet win over Chapman, and Baer continued to dominate, winning event after event. Every swimmer kept dropping time, building up to what would be a memorable finish.

And so, we finally arrive at the final battle: SCIAC championships. Baer led the charge, taking down the 50 and 100 freestyle and 100 backstroke records himself, while Yu broke his own 100 butterfly record once more. All five relay records were also broken, with a diverse set of swimmers participating; in addition to Baer and Yu, Eck, Bradley, CJ Culpepper '15, and Eric Lin '18 also contributed. As Coach Leavitt correctly foretold, the record board will be undergoing some major renovations during the offseason.

THE TEAM. Juan Adame '15, Phillip An '18, Henry Baer '18, Jordan Bonilla '17, Alexander Bourzutschky '18, Chris Bradley '17, Matthew Cedeno '16, CJ Culpepper '15, Patric Eck '16, Galen Gao '16, Benjamin Grabowski '15, Matthew Lappin '15, Eric Lin '18, Richard May '18, Avikar Periwal '18, Ishwar Subramanian '18, Kevin Yu '16



MEN'S SWIMMING & DIVING

067

#### What was one of your goals this season?

My objective for the past few seasons has been to break 46 seconds in my 100 Free - I just barely achieved my goal in my last individual race of the season by a few hundredths of a second, and it was definitely worth the wait.

#### What did you learn this season?

That even though we're in a drought and in SoCal, there's no getting by the fact that every meet is going to take place in a torrential downpour. What is your favorite thing about swimming? The tan.

## ...story of my life.

## Story of my life...



## Alex Ilic

eam captain Alex Ilic recorded personal bests in several events this season, while leading her teammates to a great season finish.

#### What was your most memorable moment?

My most memorable moment of the season was swimming the 100 fly for the first time. I'd never done it in competition before, but I still managed to beat the girl from Mills!

What was one of your goals this past season? Last season I swam the mile and I barely survived. This season I swam the mile twice and even though it was still awful, it was a lot better than last year and I was quicker too!

What is your favorite thing about swimming? My favorite thing about swimming is the appetite that comes with it. I can eat whatever I want whenever I want and I'm basically never full!





and the second sec



1. HIGH FLYER. Zofii Kaczmarek '17 competes in the 3-meter diving event at the SCIAC championship meet at Whittier. Kaczmarek improved her mark from last season in the event by almost 50 points. 2. JUST KEEP SWIMMING. Katherine Guo '18, pops up for a breath during the 100 breastroke. 3. PLANKING IN MIDAIR. Shalini Majumdar '15 makes a perfectly timed relay start over teammate Alex Ilic '16. 4. READY, SET, GO. Beaver swimmer await the starting beep on the blocks. Photo credits: Mark Becker.



GO THE DISTANCE. Alex Ilic '16 swims the last 50 of the 200 IM at a tri-meet versus Occidental and Mills. Photo credit: Mark Becker



espite its small size, the underdog women's swim team fought valiantly throughout the season,

shedding blood, sweat and tears every day at practice.

Though they suffered a loss against the University of Redlands to open the season, the Beavers quickly bounced back at the Collegiate Winter Invite, where Alex Ilic '16 scored in four events as the Beavers edged out Claremont-Mudd-Scripps to take eighth place.

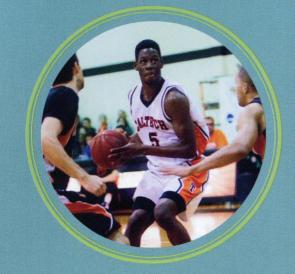
After winter break, the Beavers came back stronger than ever. In their first home

meet of the season against Occidental and Mills College, Ilic once again led the charge, taking first against Mills in two events, backed by teammates Kate Evans '17, Grace Lee '16, Katherine Guo '18, Shalini Majumdar '15, Robin Brown '18 and Zofii Kaczmarek '17, all of whom scored points in the meet.

After a hard fought season, every swimmer finished out the year with personal bests at the SCIAC championships to end the season on a high note.

THE TEAM. Robin Brown '18, Kate Evans '17, Katherine Guo '18, Alexandra Ilic '16, Zofii Kaczmarek '17, Grace Lee '16, Shalini Majumdar '15

women's swimming & diving **669** 



unior Kc Emezie led the team in points, points per game, three-point percentage, free throws made, and minutes played, among several other stats categories, acting as an integral part to the team's success.

What was your most memorable moment of the season? First conference win against Redlands. What was one of your goals this past season?

To be contenders for a conference championship. Although we were out of the mix late n the season I was proud of the way we rallied and pulled out a few conference wins.



{070} athletics

#### What was your biggest challenge this season?

Our biggest challenge this season was coming together as a team. It is really hard to make basketball a priority at a tough institution like Caltech, especially given the history of Caltech athletics, but once we were able to rally together special things started to happen.

What is your favorite thing about basketball: My teammates. They are my best friends.

Kc Emezie

## ...story of my life.

The Proud The Proud The Brave

aster than a speeding bullet! More powerful than a locomotive! Able to leap tall buildings at a single bound! No, not Superman - the Caltech men's basketball team!

This season, the team played at a high level and always challenged its opponents. The season began with a game against rivals Occidental College, which resulted in a tight loss of 90-81. Then, the Beavers travelled up to Oregon to play George Fox University, Willamette Unviersity, and Pacific University. Despite disappointing back-to-back losses, the Beavers came back to Caltech to keep working and learning from their games. The team earned its first win on December 18 against Mount Aloysius College.

However, this win would not be their last, as they won the first SCIAC game on February 3 against Redlands with Kc Emezie '16's buzzer-beater basket helping the team break a 55-game SCIAC losing streak. However, they did not stop there. The Beavers won against the Whittier Poets and the game wasn't even "dam" close. This time though, the Beavers accomplished something that hadn't occurred in 44 years - winning 2 SCIAC conference games in one season. The streak continued on February 17 when the Men's Basketball team beat the University of La Verne, earning a record 3 SCIAC wins, matching the number of SCIAC wins over the last 43 years. Everyone at Caltech celebrated this exciting part of Caltech's athletic history.

The men's basketball team seems to have a magic formula that just works. On February 21, the team celebrated Senior Night to thank seniors and co-captains Andrew Hogue and Bryan Joel for their leadership as captains and committment to the program. Caltech basektball is getting super exciting! THE TEAM. Kc Emezie '16, Bryan Joel '15, Naveen Tadepalli '16, David Kawashima '18, Rob Anderson '16, David LeBaron '17, Ricky Galliani '17, Ty Ochse '18, Lawrence Lee '17, Matthew Edwards '17, Nick Buoniconti '17,

THATPOWER. Ricky Galliani '17 makes a hard drive to the basket, leaving his opponent in the dust and scoring the layup. 2.
 FOCUSED. Co-captain Bryan Joel '15 dribbles as he looks up at his team to figure out what to do next. Joel's quick thinking was instrumental to the team's success. 3. NOT IN MY HOUSE. Co-captain Andrew Hogue '15 uses his hard earned upper body strength to pass his defender and get a closer look at the basket for a layup. Photo credits: Michael Wong 4. HUDDLE UP. The men's basketball team huddles up prior to their game, encouraging each other to have a great game and play strong. Photo credit: Nhi Casey

Andrew Hogue '15, Nasser Al-Rayes '17



MEN'S BASKETBALL





1. TEAM HUDDLE Coach Sandra Marbut gives her team a rousing speech as the team listens eagerly, excited to put her advice into action at the end of the time out. 2. CUT AND DRIVE. Stephanie Wong '16 cuts in the middle of her drive, attempting to beat her defender and attack the basket with ease. 3. LEADING THE PACK. Primary point guard Esther Du '16 drives forward in order to beat her defender and give herself an opportunity to pass or shoot. 4. DECISIONS, DECISIONS.

Michelle Wong '17 dribbles down the court and makes a quick decision about her next move: continue dribbling, pass, or shoot? 5. VICTORIOUS. Bridget Connor '15 embraces her head coach of four years at the end of her final home game, which culminated in victory . Photo credits: Michael Wong



Story of my life... s the fastest Beaver to score 1000 career points (and only the second ever to reach this benchmark with another full season left to go), Stephanie Wong is a dominant force on the basketball court.

What was your most memorable moment of the season?
Most memorable moments were winning against LaVerne and Oxy
What did you learn this season?
I learned that Caltech fans are excellent at rooting us on.
What was one of your goals this past season?
One of my goals was to win a conference game and we did so spectacularly.

# Win at a

nce upon a time, there was a women's basketball team led by its lone senior co-captain, Bridget Con-

nor '15, who took her team to two consecutive wins to in the conclusion of the season. After its last conference win in 2009, the team was hungry for another to send off Bridget, and that is exactly what it did.

ne

After a long season plagued by the typical struggles of a small roster with 8 regularly playing members, it was the Beavers' tenacity and drive that took the team to its greatest heights. Kate Lewis '17 and co-captain Stephanie Wong '16 joined Bridget in leading the team, with Lewis and Wong earning Second Team All-SCIAC honors, and Connor honored with the Ed Baldwin Award.

Losing its one senior, the women's basketball team has a bright future with returning captains and guards Wong and Lewis, along with Michelle Wong '17, Annie Chen '17, Mary Boyajian '17, and Esther Du '16, and lone forward Kristin Anderson '16. This team is one to watch.

THE TEAM. Yanbing Zhu '18, Kristin Anderson '16, Michelle Wong '17, Annie Chen '16, Kate Lewis '17, Bridget Connor '15, Mary Boyajian '17, Esther Du '16, Stephanie Wong '16







me

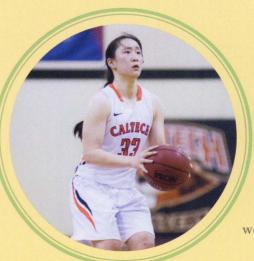
{COPY BY Harinee Maiyuran}

What was your team's biggest challenge this season?

Our biggest challenge was continuing to work hard even though we had many setbacks and challenges.

What is your favorite thing about basketball? My favorite thing about basketball is the team that I get to be so close to.





women's basketball

I. ADVANCE! A fencer advances towards his opponent in an intense offensive stance, as his opposition stands back in fear. 2. ENGAGE-MENT. Constance Robinson '17 is engaged in a joust with her opponent. 3. TOO CLOSE FOR COMFORT. A fencer stands in close proximity to his attacker, successfully fending his opposition off. 4. READY POSITION. A fencer stands in ready position, awaiting a chance to attack or defend. Photo credits: Michael Wong







PREPRING. Shi En Kim '16 prepares



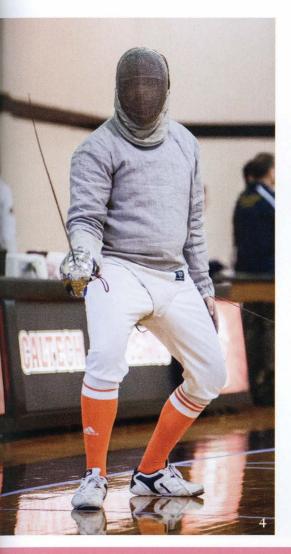




eam captain and MVP Katie Fisher ended her stellar collegiate career with 3 victories at the NCAA West Regional in foil, taking seventh place overall.

Our women's foil squad beating Stanford at the Western Invitational was a really memorable moment for me. They were short one person on their team, so all we had to do was win two of 6 bouts. I came back from being down 1-4 to win 5-4, and then two bouts later, one of my teammates did the exact same thing. It was a pretty cool moment.

ompetitive tabbing



he Caltech fencing team kicked off the season with the Collegiate Open at UCLA on October 26. The men placed fencers in the Top 6 in two events, while the women finished no worse than second in any event. Highlights included Katie Fisher '15 winning the gold in the foil, and Matthew Jin '17 tying for the bronze in the foil. The Beavers then returned to Caltech to host a Mini Mega Meet on November 2, where the women had a perfect 6-0 record, and the men recorded an impressive 4-2. Next, both teams made their first appearances at the BladeRunner US Fencing Regional Open Circuit on November 19. The men's team was represented by Jin, Ethan Lo '18 and Spencer Strumwasser '18, with Lo finishing 30th in a 97-player epée field. On the women's team, the three team captains--Fisher, Shi En Kim '16, and Christina Meyer '17 - fenced for the Beavers. Fisher placed 23rd overall in the foil, and Meyer finished in 26th place for the epée. Kim, in her first nationallevel tournament, won her first two bouts in the sabre and had a narrow defeat in the direct elimination round with a final score of 15-14.

The fencers kept up their hard work in the new year. On January 17, both teams

headed to the United States Air Force Academy to compete in the Western Invitational. The men's epée squad, composed of Strumwasser, Lo, and Johnathan Stauffer '17, were able to get wins against every team, including top teams like Duke and the University of Florida, with a 6-3 victory against the latter. Jin and fellow sophomore Colin Murphy '17 fronted the saber team, with Murphy barely dropping a 5-4 bout in the final round. The women's epée team of Meyer, Constance Robinson '17, and Catherine Pavlov '16 had a combined 14 individual wins. However, the finale that captured everyone's attention was the saber matchup against the hosting Falcons. Kim and Jenny Mok '18 fought their way to a 4-4 tie, with Kim going out on the final touch. This season has been rampant with victories for the Beavers, some against top D1 schools, so be on the lookout next season for more exciting wins!

THE TEAM. WOMEN. Katie Fisher '15, Emilia Hernandez '16, Shi En Kim '16, Sheila Lo '16, Christina Meyer '17, Jenny Mok '18, Stephanie Moon '17, Catherine Pavlov '16, Constance Robinson '17, Sonia Kim '17 MEN. Chris Couste '16, Marco Cruz-Heredia '17, Jimmy Hamilton '18, Matthew Jin '17, Anup Kishore '16, Alex Lew '16, Ethan Lo '18, Keegan Mendonca '17, Colin Murphy '18, Yu Han Nam '18, Auggie Nanz '16, Abhijitkrishna Puranam '17, Jonathan Stauffer '17, Spencer Strumwasser '18, William Yu '18

#### What is your favorite thing about fencing?

My favorite thing about fencing is how it combines athleticism and tactics. I'm not the most athletic person on the team, but I can compensate for that by out-thinking my opponent on a tactical level. I also love how, even though fencing is an individual sport, team dynamics can play a huge role. We build on each other's momentum, give each other advice, and help each other get back up after a tough loss.



...story of my life.

FENCING 075

1. HOVER HAND. Mary Boyajian '17 outswims two defenders as she races to score. 2. ON THE GAIN TRAIN. Jing Xu '15 uses her superior strength to dominate her opponent. 3. UP AND AWAY. Emily Shih '15 pushes away from the defense and looks towards the goal. 4. SPOTTED. Soumya Kannan '16 sees a teammate to make a pass. Photo credits: Mark Becker.



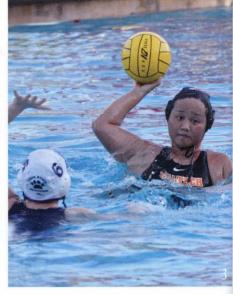






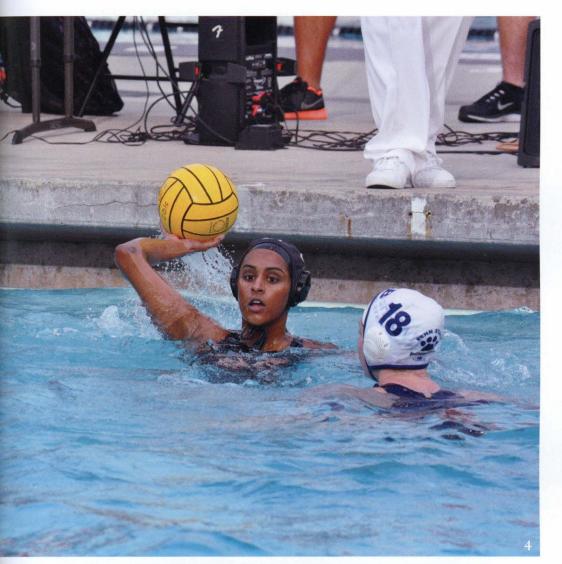
Photo credit: Mark Becker

enior and team assists and was season with the

#### What was your most memorable moment?

I think the most memorable moment for me was in the 2nd day of our tournament at the beginning of the season. I scored 2 goals in the first game and 3 in the second, and it took me a few hours before I realized that the number of goals I scored that day equaled the number of goals I scored in all of last year's season. It was so rewarding to see real, concrete proof of my improvement over the last year!

Ander the Sea



ooking at the pool on any spring day between 4 and 6 PM, one can view the women's water polo team gliding gracefully through the

water like mermaids swimming in the ocean. Though almost half the team consisted of new players this year, every one stepped up to the challenge, dedicating themselves to improving their swimming, fitness, and water polo skills every single day.

Overall, both offense and defense improved, with co-captains Shalini Majumdar '15 and Soumya Kannan '16 combining on offense to produce 80% of the team's scoring for the season. Both Sasha Zemsky '17 and Stephanie Wong '16 held down the fort in goal, despite no prior experience in the position.

Though the Beavers bid farewell to five seniors - Majumdar, Emily Shih '15, Monica Enlow '15, Liz Lawler '15 and Jing Xu '15 - they look ahead to the future with optimism in their eyes as they work hard in the offseason to prepare for next year.

THE TEAM. Sasha Zemsky '17, Stephanie Wong '16, Liz Lawler '15, Shalini Majumdar '15, Soumya Kannan '16, Devi Ganapathi '18, Cameron Earl '18, Alexandra Ilic '16, Carly Robison '18, Monica Enlow '15, Emily Shih '15, Ciara Ordner '18, Jing Xu '15, Mary Boyajian '17

#### What did you learn this season?

#### What is your favorite thing about water polo?

My favorite thing about water polo is that the only rules that matter are

Shalini Majumdar ...story of my life. WOMEN'S WATER POLO

# o ake me out to the Ball Game





{078} athletics

ith eight new players - five freshman, one sophomore and two juniors - Beavers

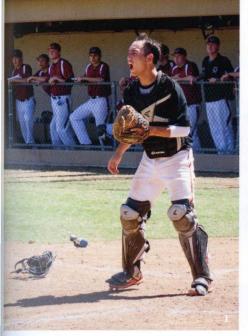
baseball truly began a fresh chapter this year.

The season opened with two very close losses to St. Katherine's, but this first trial only showed promise of greater things to come, and the successes were quick to follow. On Valentine's Day, David Watson '18 hit the Beavers' first home run in two years, and his impressive feat was succeeded by close games against SCIAC opponents Occidental and Chapman.

However, the pinnacle of the season finally arrived on a sunny Thursday. The Beavers walked on the field with determination and walked off with two wins under their belt, aided by contributions from the whole team. Strong pitching performances from Daniel Chou '16, Garrett Levine '17 and Derek Kearney '15 were backed by Watson, Oliver Curtiss '15, Harrison Jacobs '17, Chris McCarren '18, and Chou and Levine themselves, all of whom had RBI's in Caltech's first back-to-back wins since 2000.

The boys continued to remain competitive during SCIAC play for the rest of the season, and are looking forward to building on this year's improvements in the future.

THE TEAM. Chris McCarren '18, Ryan Casey '15, Oliver Curtiss '15, Chris Bradley '17, Daniel Chou '16, Schaeffer Reed '17, Garrett Levine '18, Harrison Jacobs '17, Dylan Schultz '16, Derek Kearney '15, John Galden '17, David Watson '18, Tim Menninger '17, Michael Klionsky '16









r. SCREAM AND SHOUT. Ryan Casey '15 lets out all his feelings. 2. WIND UP. Derek Kearney '15 pitches to a La Verne batter. Kearney finished the season with the third lowest single-season ERA in program history. 3. #WINNING. The boys beam with pride, celebrating their pair of wins in a doubleheader over Drew University. 4. YOU'RE OUT! Chris McCarren '18 tags a CMS runner out at second. 5. SWING, BATTER BATTER. David Watson '18 sends the ball flying into the outfield. Photo credits: Nhi Casey

## Story of my life...



R yan Casey

enior Ryan Casey has been a dedicated member of Beavers baseball for four years. In his first year. he won Most Valuable Freshman and has never looked back, continuing to contribute both offensively and defensively every season. **What was one of your goals this past season?** One of my goals was to finish my senior season with no regrets, and I'd say I accomplished that - I left everything on the field and played each game like it was my last.

What was your most memorable moment? My most memorable moment was sweeping Drew on March 12, when we won each game of the doubleheader by 1 run.

What is your favorite thing about baseball? I've always loved baseball because it's the sport where you don't have to be the biggest, strongest, or fastest guy on the field to have success. You just have to be focused and have your mind in the game at all times, so you can make the plays that are asked of you and do the little things to help your team win. My favorite play in baseball is a diving catch in the outfield – it's an amazing feeling to rob someone of a hit and help your pitcher out!

baseball 079

# ueens of the

GAME FACE. Vinci Chen '18 focuses on her opponents across the net while doubles partner Grace Yao '18 makes a smashing serve. Photo Credit: Nhi Casey



ophomore Sophia Chen stepped up as team captain, winning five singles matches and five doubles matches.

What was your most memorable moment of the season? My most memorable moment was definitely when I won my first round match at Ojai. I didn't go last year, so this was my first time at the tournament, and I was so nervous since it's such a prestigious tournament.

{COPY BY Lani Kim}

Sophia Chen

ou just got served - by none other than the Caltech women's tennis team. The Beavers opened their season with a 6-2 victory over Biola University, with Monica Li '16 and Erin Wang '18 winning both of their singles and doubles matches. Next, they hosted Hope International and triumphed with an 8-1 win. Four players - Wang, Grace Yao '18, Vinci Chen '18, and Sophia Chen '17 - recorded wins in both singles and doubles matches. Sarah Cai '18 also won her first career match at #1 singles. The SCIAC Opener on February 14 was a 6-3 loss for the Beavers against Whittier, but Wang continued her 3-0 undefeated streak by winning all of her matches. Hosting Principia College on March 7, the women's team had a dominant 8-1 victory, where they dominated in singles play. The Beavers faced Pacific University on March 23, where Rachel Morton '18 clinched the match at #5 singles, leading to a 5-4 win for the team. They next faced Willamette University on home court, where Katie Antilla '17 won her first singles match of the season by winning five straight games in the third set. On March 27, as the Beavers hosted SCIAC rival Chapman, Vinci Chen and Yao beat the #14 ranked doubles team in the Western region; however, the women's team eventually fell to an 8-1 deficit. The team had its first SCIAC victory over Occidental College on April 4, leading 2-1 in doubles and sweeping the bottom four spots for singles. Playing against #4 ranked Claremont-Mudd-Scripps, the Beavers put up a strong fight but





eventually fell 9-0. The women's team finished conference play with a 1-7 record, after losing to California Lutheran; Wang provided the team's sole victory during the match by winning #4 singles in an extended superbreaker. At the Ojai Tennis Tournament on April 23, Sophia Chen emerged victorious from the first round after a three-set match, but faced a narrow one-game defeat in the second round. The 2015 season came to a close at the SCIAC Championships Play-In Game on April 28. While the team fell 6-3 to Occidental, Yao won both her singles and doubles matches for the fifth time this season. With a strong lineup featuring several freshmen in the roster, the future is bright for the Caltech women's tennis team.

THE TEAM. Katie Antilla '17, Sarah Antilla '18, Sarah Cai '18, Sophia Chen '17, Vinci Chen '18, Monica Li '16, Rachel Morton '18, Erin Wang '18, Grace Yao '18

1. SWING. Rachel Morton '18 steps to hit the ball. Photo credit: Nhi Casey 2. ACE. Sophia Chen '17 readies herself to make a perfect serve. 3. CROUCHING TIGER. Erin Wang '18 reaches low to make difficult forehand stroke. Photo credits: Mark Becker.



Fittingly, my first match was very close, taking three and a half hours (pretty long for even a three-set match), and the final score was 5-7, 6-3, 7-6 (2). After I was done, I was so tired that I basically gave away my next match, but I was still so happy that I won my first match at Ojai, and it is definitely one of my biggest accomplishments in tennis. What is your favorite thing about tennis?

My favorite thing about tennis is bonding with my team. As one of the only returning players, I was team captain to the best team ever. I loved going to practice, just because it meant more time with my teammates, and we always had fun and goofed off at matches. I think we are definitely the happiest team in the conference. ...story of my life.

WOEMNS TENNIS

aking

n the shadow of the San Gabriel mountains, a league of champions armed in bright, white uniforms rose from the Caltech dirt. They aced their opponents and played within the lines, using a magical weapon—the racquet. The Caltech men's tennis team members are not only individually impressive, but they also jive well as team.

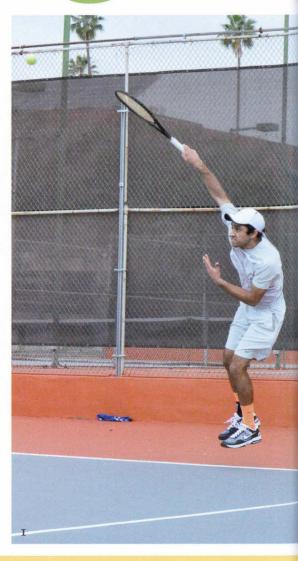
The season opened with a match against No. 21 team University of Redlands. Although the Beavers lost 8-1, Morgan Lebby '15 snatched his first win of the season. Next, the Beavers hosted the Occidental Tigers. The day ended with Caltech winning two doubles matches and one singles match. #1 doubles team Ruthwick Pathireddy '17 and Sathwick Pathireddy '17 and #3 doubles team Morgan Lebby '17 and Leonardo Zornberg '16 defeated their opponents, while #2 singles player Sathwick won his singles match.

The team finally earned its first victory on February 27 against Hope International University with a score of 8-1. The overall win came from Caltech's victory in all doubles matches and 5 out of 6 singles matches. The Beavers carried this momentum through to pick up their second win of the season against Clark University. However, this win would not be the last, as the Beavers won again against Principia College, Pacific Lutheran University, and Willamette University in a span of two weeks. After their victory against Willamette University, the Beavers boasted an impressive 0.500 record.

Although the Willamette victory would be the last, the Beavers fought passionately against some tough foes. They faced No. 1 team Claremont-Mudd-Scripps Colleges and No. 3 Pomona-Pitzer Colleges on the same weekend. However, the Beavers did not waver. **Rushikesh Joshi '16** challenged his opponent in his singles match against CMS, but narrowly lost 6-4 and 6-3. **Ishan Mehta '16** and **Alexander Henny '16** took 4 games at the #3 spot and Ruthwick barely lost in his two tiebreakers (7-6, 7-6) against Pomona-Pitzer College.

The Beavers season came to a close at the SCIAC championships, where Sathwick won his singles match at the #2 spot and extended his program record along with twin brother Ruthwick for most doubles wins in a single season when the pair won its eleventh doubles match over Chapman.

THE TEAM. Fabio Arai '18, Alexander Henny '16, Rushikesh Joshi '16, Morgan Lebby '17, Zachary Lipel '18, Ishan Mehta '16, Ruthwick Pathireddy '17, Sathwick Pathireddy '17, Leonardo Zornberg '16



acket

COPY BY Meghana Pagadala

Ruthwick Sathwick Pathireddy ...story of our lives.



wins Ruthwick and Sathwick Pathireddy '17 were a magical doubles duo, surpassing the program doubles single season wins record during the regular season with 10 victories.

#### What was your most memorable moment of the season?

R: My most memorable moment of this season is winning against the singles 1 player of Whittier. It has been several years since our school won at the #1 spot against a conference team.

S: My most memorable moment was winning 17-15 in the 3rd set tiebreaker against Willamette. It was mentally tough but I was glad I got through it.





I. SMASHING. Rushikesh Joshi '16 makes a hard serve. 2. AIR-BORNE. Ruthwick Pathireddy '17 jumps to make a tight hit. 3. STRETCH. Sathwick Pathireddy '17 keeps his balance while stretching to reach the ball. 4. PARTNERS. Ishan Mehta '16 makes a backhand stroke while doubles partner Alex Henny '16 lies in wait for the next shot. Photo credits: Mark Becker



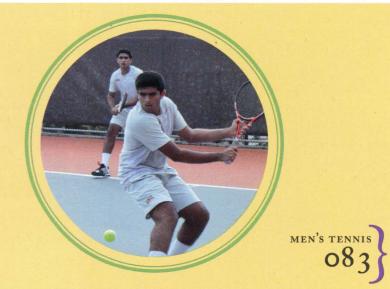


#### What did you learn this season?

R: I learned that always maintaining focus and positive attitude pays dividends in a long match.

S: I learned that matches are not won by the better player or by the person with greater physique but through tactics and pattern play. What is your favorite thing about tennis?

R: In tennis, no one can replace you or pull you out of the court. You are all alone, without time limit, battling physically and mentally for hours against your opponent until the match is over.S: Winning.





success throughout the rest of the race. Photo credit: Mark Becker. Inder new head coach Ben Raphelson, the Caltech track and field team started the season strong by hosting the All-Comers Meet on February 7. In her collegiate debut, Serena Delgadillo '18 threw the hammer an impressive

ON YOUR MARK, GEF SET, GOI. Victor Duan 15 starts his-race against Chapman and Pomona Pitzer, getting a strong start in order to ensure

53 feet,  $\overline{2}$  inches to rank #8 in program history, and in the first 1500m race of the day, Caroline Atyeo '18 placed second, with a time of 5:23.92. On the men's side, Kevin Yei '16 clocked a 25.84 in the 200m, one full second faster than his previous season-opening time.

At the Annual Alyssa Sialaris Memorial Meet on February 14, Delgadillo improved on her throw from the week before by 26 feet, moving up the program rankings to #5. In addition, both Daniel Gawerc '18 and Lucy Chen '17 competed in the javelin for the first time. The Beavers headed next to Pomona-Pitzer for their All-Comers meet on February 24, where Aditya Bhagavathi '16 clocked in at 8:43.28 for the 3000m, ranking in the top three in Caltech history. Alex Anemogiannis '16 also posted a career-best time in the 3000m, his first race in almost two years after facing an injury.

On February 28 at the Rossi Relays, Delgadillo improved her hammer throw yet again, reaching 89 feet and now ranking #3 in program history. The men's team dominated in the 4x400m relay, topping out SCIAC rivals Chapman, Pomona-Pitzer, and California Lutheran.

The first SCIAC Multi-Dual on March 6 featured the season debuts of Bridget Connor '15, Ben Grabowski '15, and Alex Bourzutschky '18. Bourzutschky competed in three events in his first meet and scored in the pole vault, clearing 7 feet, 6 inches. At the Oxy Distance Carnival on March 13, Bhagavathi shaved a second off his personal best time for the 1500m to rank #5 in program history; in addition, Anup Kishore '16 made his season debut by pole vaulting 9 feet, 11 inches. Bhagavathi continued his streak of running into the record books by clocking a 15:13.51 in the 5000m at the second SCIAC Multi-Dual on March 28. Kishore finished in 2nd place for both the pole vault and the triple jump; Atyeo also took over the #8 spot in program history for the 800m dash. One of the biggest highlights this season was the victory of the men's team at the third SCIAC Multi-Dual, 92-48 over Chapman, their first since 2011. Reflecting back on this season, it has certainly been a successful one for the Beavers, as several athletes broke program records and improved their personal best times.

THE TEAM. Juan Adame '15, Alex Anemogiannis '16, Aditya Bhagavathi '16, Jordan Bonilla '17, Alex Bourzutschky '18, Lucy Chen '17, Bridget Connor '15, Serena Delgadillo '18, Victor Duan '15, Jared Forte '15, Ben Grabowski '15, Christopher Haack '18, Morgan Hill '16, Alec Ho '18, Anup Kishore '16, Eric Martin '15, Stephanie Reynolds '15, Elliot Simon '16, Kevin Yei '16







I. JAVELIN THROW. Ben Grabowski '15 sprints down the field as he prepares to throw the javelin to record breaking distances. 2. PUT YOUR HANDS IN THE AIR. Alex Bourzutschky '18 starts his race off with perfect form. 3. RIPPED. Bridget Connor '15 shows off her incredible physique as she gains momentum prior to throwing the javelin. 4. REEPING UP THE PACE. Caroline Ateyo '18 competes against Redlands runners, keeping up with the rest of the pack and preparing to pass them as the race continues. Photo credits: Mark Becker

# Story of my life...



## Chris Haack

ual member of the soccer and track and field teams, Chris Haack was the lone freshman running distance races for the

men. Testing his running and fitness from soccer season, Chris was an important part of the team as he placed in the top 20 in many of his races.

#### What did you learn this season?

I learned a lot about sticking through when it isn't easy especially from our captains Steph and Eric who spent almost the entirety of the season injured and then ran incredible times at championships. What is your favorite thing about track?

I think my favorite thing about track is that everything is proper in time or length. That is everyone observes the same times, it's a cruel fact, but everyone sees the time you have ran and that number is accurate and verified and it shows you exactly how good you are. In my experience with soccer you never know exactly how good you are, but in track you know what you did and can feel accomplished and sleep well.

track & field 085



ne of Beaver's favorite parts of Caltech is the House system. Right when he got into Caltech, he went through a process of Rotation where he ate dessert and dinner at each of the eight houses: Avery, Blacker, Dabney, Ricketts, Lloyd, Page, Fleming, and Ruddock. He then attended a bunch of cool events. At the end, he had to make a huge decision about what house to choose. Should he play sports with the Flems or construct with the Moles? Should he chill with the Pageboys or play Capture the Flag with the Lloydies? Should he study with the Slaves or join student government with Rudds? Should he rebel with the Skurves or take a nice hot tub bath with the Darbs? Even though Beaver rotated into only one house, he loves the whole House System. No matter what House (or Hovse) he rotated into, everyone is a Caltech Beaver.

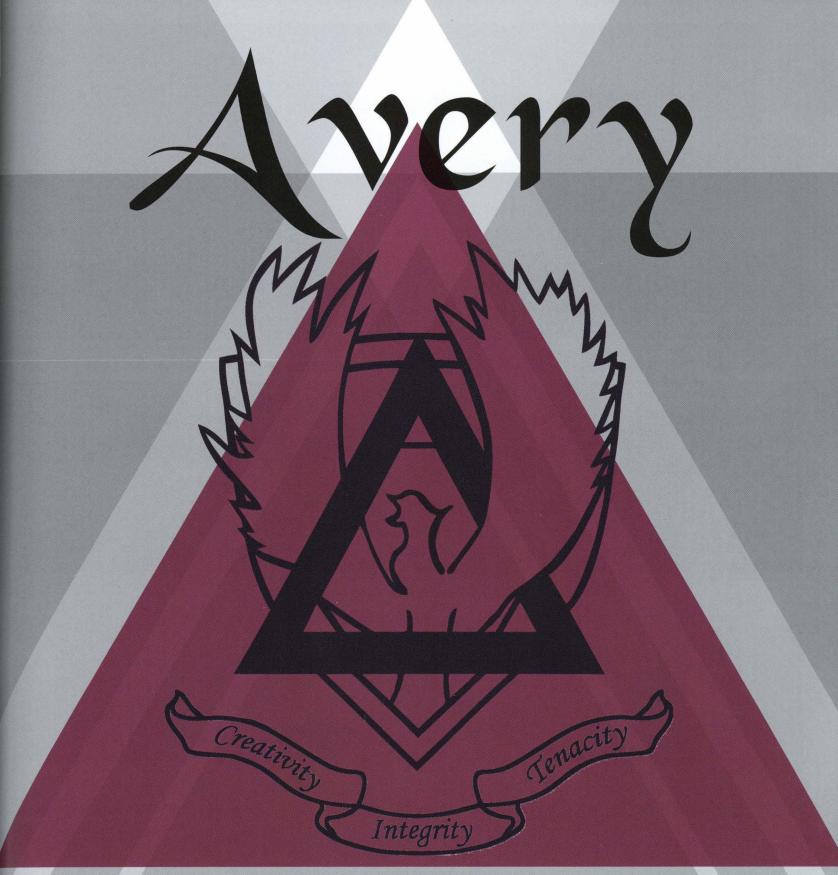
# Houses

#### THE HOUSE SYSTEM: A BRIEF TALE

10

n 1931, in an effort to provide oncampus housing to the majority of students, the Institute built four student dormitories. Before that time, a single domitory housed about 60 students on campus, with the remaining students distributed through a variety of off-campus housing, including the five fraternities. The fraternities agreed with little resistance to become the nuclei for the development of the new Houses; Blacker, Dabney, Fleming, and Ricketts House were each colonized by the existing student fraternities and operated as self-governing communities, and thus the House system was born. In 1933, freshmen were allowed to tour each of the Houses and choose which ones they liked best in a process known as Rotation. Rotation became the foremost responsibility of the Interhouse Committee, a group of representatives from each House that oversaw the House system. In 1960, three new student Houses were constructed: Lloyd, Page, and Ruddock. Page House became a colony of Ricketts and Ruddock a colony of Dabney. Lloyd House was populated primarily by off-campus students. The last House to come into existence was Avery House. Originally built as dormitory housing for upperclassmen, graduate students and faculty, Avery participated in Rotation for the first time in 2005, becoming a fully-fledged house on its own.

ht Noble



A

in December, 1996. It was funded by R. Stanton Avery, the creator of the Avery Company that is known for producing adhesive labels. Avery was designed as a community in which undergraduates, graduate students, and faculty could live together. It was founded under the

very House was

opened as an experi-

mental housing facility

on the Caltech campus

principles of Creativity, Integrity, and Tenacity—three words that Avery still adheres to today. In 1997, there appeared Avery's first flame war over (you guessed it) roompicks, where people argued whether current Avery members would have housing priority over newer members. Following suite, Avery adopted its first Constitution.

At the turn of the century, Avery had a large discussion about admitting

frosh into Avery house. After much debate internally, as well as within the IHC, Avery had decided to become a fullfledged house. In 2004, a UCC system was established in Avery house and the first Chancellor was elected as a representative of Avery house at the IHC, and began participating in inter-house atheletic events. In 2005 Avery participated in rotation and received their first frosh class.

## The Many Faces Of









chancellor The Rangels



oobacosAyyy



Glor Men's Calendar WHO DID THIS? ki trip Spring Break ski trip White Day open kitchen Series of Misfortunate Events 300 flamewars Super Smash Melee spaghetti problem sets ultimate frisbee

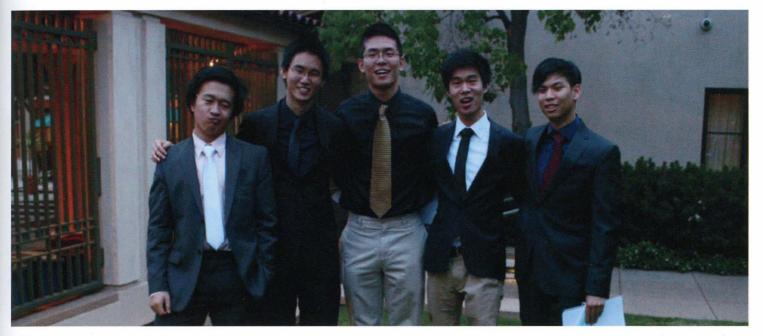
SMD League of Legends Big Hero 6 UGT boba crawl The Snowbergs Victoria Secret Fashion Show Benzi's Calves LMAO avery-disc

insanity









**Excom:** Richard Zhu (Social Director), Tony Zhang (Chancellor), Dan Chui (Ath Man), John Li (Vice Chancellor), Timothy Chou (Secretary)



**Soc Team:** Sean McKenna, Patrick Yu, John Li, Richard Zhu, Jerry Feng, Charlie Tong, Ellen Chuan, Amanda Lin Supervised by the almighty Tony Zhang and Nick Zolman







**The Freshmen** 



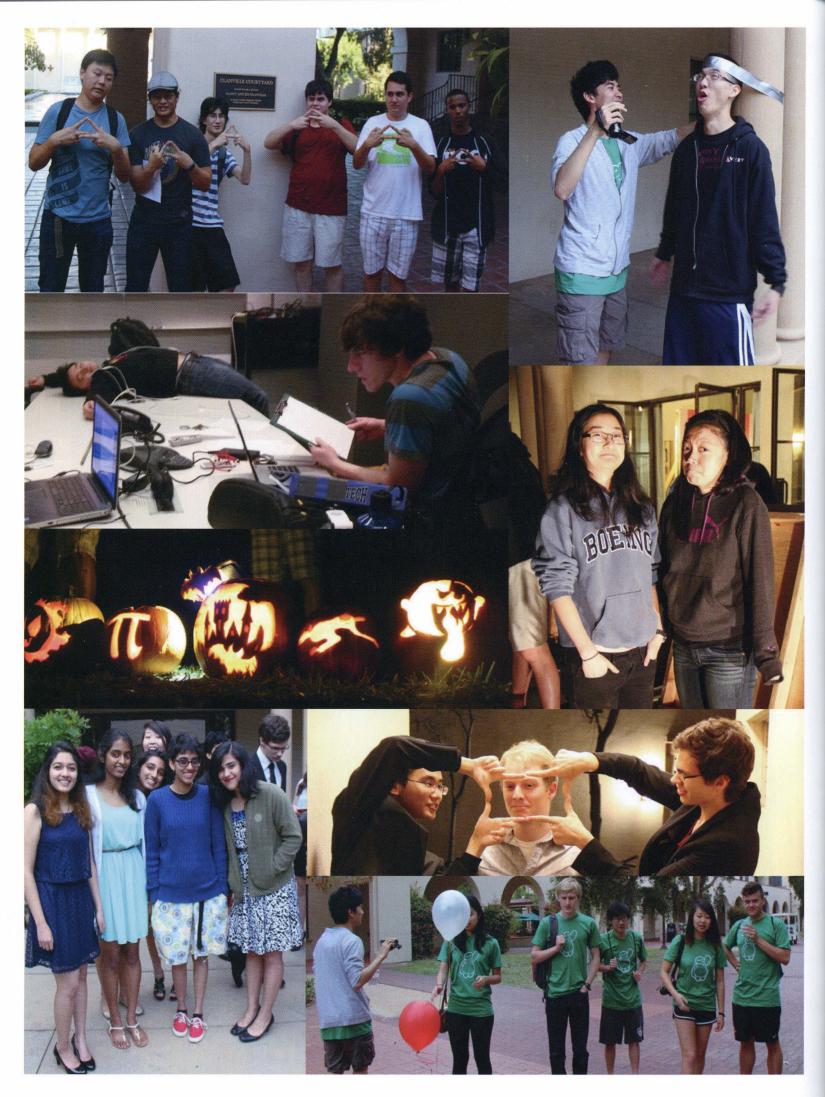




### **The Juniors**



### **The Seniors**



# Blacker



lacker Hovse was founded in 1931 as one of the four South Houses and was populated by the Pharos fraternity when it was formed. Members of Blacker Hovse are called "moles" and often sign their pranks and constructions with  $\gamma\delta\beta\gamma$ , short for 'God Damn Blacker Gang', a phrase that originated in the 1970's when a group of moles hiding on top of an elevator heard security guards referring to them as such.

Blacker 095

























## FROSH

TOP ROW: ALEX MEIBURG, FRANCESCO MACAGNO, TYLER Middleton, Robert Eng, Chen Chang, Paige Gannon, Erich Herzig

CENTER ROW: NATHAN BARTON, JAKE KETCHUM, DAVID WU, ANNIE Chang, Anusha Nathan, Brian Lee, Stephanie Kwan, Lucille Wells, Caroline Howard, Ruoqi Shen, Avinash Agrawal, Kevin Shu

FRONT ROW: CARLY ROBISON, WILLIAM LAKE, NICK MEYER, ALISON DUGAS, MAYRA MELENDEZ, THOM CHAFFEE, MARK GILLESPIE FABULOUS: TYLER PEREZ













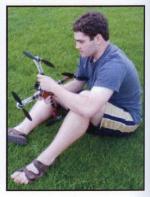


THE GONDOR DUO









{096} houses



## **SMORES**

LEFT TO RIGHT: FABIAN BOEMER, ALEX PLACE, EMILY MEANY, JESSICA LI, WILL YU, MICHAEL BAUER, DANIIL LUKIN, HARRISON KROWAS, MILICA KOLUNDŽIJA, TALIA MINEAR, MARY DO, VICTOR HAN, JULIE KEW, CHARLES WANG

NOT PICTURED: KUSHAL AGARWAL, KIT CHINETTI, SANJI DEWAN, KATE EVANS, MICHAEL FELDMAN, ANGIE GUI, BELLA GUO, ALLISON PENN, JEFF ROSENBERG, MARGARET WALTER, XI XU, CHADD YOU





















... AND WILL'S A MONKEY





















097





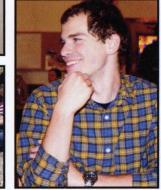


















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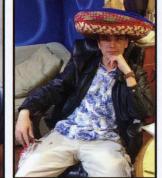
NIMA ON THE JAMES BOND STACK



BLACKERWISE FROM RIGHT: CATHERINE PAVLOV, JALEN GREEN AARON FELDMAN, KEEGAN RYAN, MELISSA CRONIN, CALLI MEYER John Naruk, Sarah Asano, Sean Mendoza, Valentin Skoutnev Andrew Romine Not Pictured: Nima Badizadegan, Emory Brown Chris Cannella, Andre Comella, Evan Davis, Gabe Foster Edward Fouad, Iulia Gheorghita, Sheila Handler Torkom Pailevanian, Tots Roy, Sam Savitz, Elly Shao Kirby Sikes, Matt Smalley, Becky Tang























{098} houses



















## SENIORS (BOTTOM LEFT) FROM TOP LEFT: CHEN, JUSTIN KO PICARD, ELIZA T **CLASS OF 2015**

FROM TOP LEFT: MOYA

CHEN, JUSTIN KOCH, ANDY KELLER, JEFF PICARD, ELIZA TERLINDEN, XANDER RUDELIS, KATHY GARCIA, DHIRAJ HOLDEN, TIM BENNETT, MATTHIAS RAIVES, INGRID FIEDLER, SVEN BOEMER, CHAS BLAKEMORE, SOLOMON CHANG, LINUS ZIEMBA, DAVID FLICKER, ERIC

MARTIN, RACHEL GATES, BELEN ALVAREZ-VILLALONGA, LIZ LAWLER, LESLIE TIMMS, ROCHELLE WEBER, KERRY BETZ, LIZ SCHRODER, MADELEINE YOUNGS, GALINA MALAKHOVA, MATT QUEEN, MICHAEL JENSON

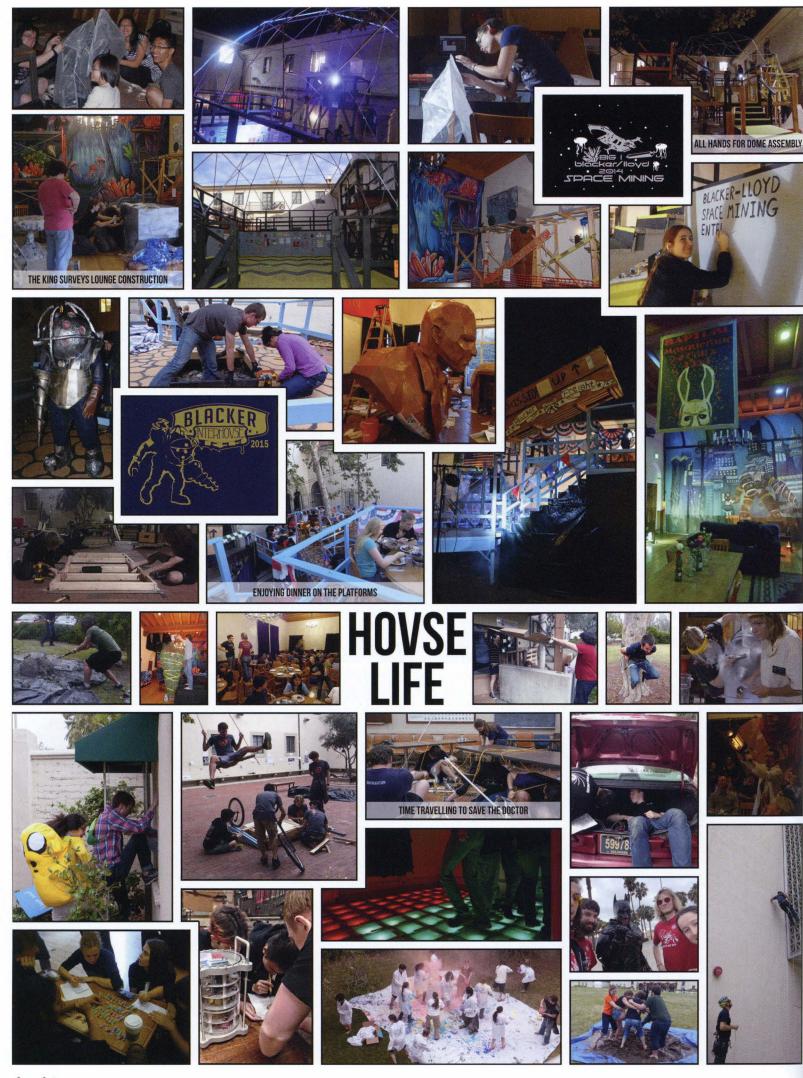








099



{100} houses

# Dabney

ou don't need wood to enter a woodworking competition. All the wood you need is within you, in your heart. With this wood, we will create the woodworking competition entry that this godforsaken world needs. But we need something more powerful than just a carving. We need a symbol of hope. A symbol for everything that is good and just and righteous."

06

The bearded boy, grasped his solder-

ing iron, and the electrons in the ash below began to move, until suddenly, the carbon atoms had been soldered back into wood. The bearded boy took the plank of wood he had made and stuck it into the ground.

GR

ET

"This is only the start. We will create a beacon of light. A gathering place where Peace, Love, Hope, and Joy, can gush out and sweep away the despair from this land. This place will be our new home, Dabney House."

DABNEY IOI

# 2015-16 \$ CEOMM

**CONNIE ROBINSON** 

TREASURER

## JALEX STARK SOCIAL VP

## SYLVIA HÜRLIMANN SECRETARY

### NICK SCHIEFER PRESIDENT

# HARTING SOCIAL VP

ALEX MUN VICE PRESIDENT

{102} houses

## SENIORS SE

0/

# JUNIORS

DABNEY IO3

#### ALWAYS: i wanna b w/u & make believ w/u &live in harmony harm oh luv

BIE NIGH

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FALL 2014

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PUMPKIN DROP

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**FIRE FROSH** 

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## WINTER 2015 JUST LET IT GO

DRESS DINNER

GRIZNITE

DOMMMEEEE

DAY

DD

Nintender

GO DYEEOM



# Joyd

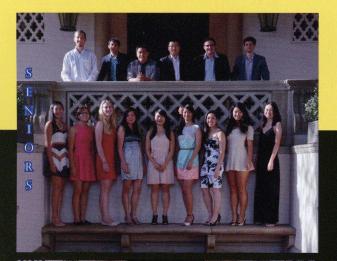
here was once this magical dragon who laid golden eggs. One day, Lord Lloyd of the land

FOR THOSE I LOVE

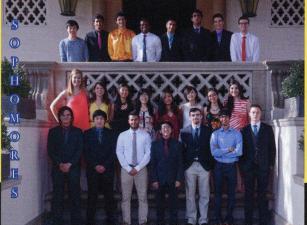
beyond the seas decided he was going to fight off the dragon and take one of the magical golden eggs. He fought four long days and four long nights and finally thought he had slain the dragon. He secured the egg, and brought it back to his home. However, the dragon was not dead, and the dragon was angry his egg was stolen, so the dragon hunted down Lord Lloyd and set fire to all of his home and all of the surrounding village (what is now known as Caltech). Lord Lloyd wasn't able to save the magic golden egg from the fire, and when the fire burned off, the village was completely destroyed, but the magic golden egg had transformed into a golden house. The villagers were so happy they decided to name the golden house Lloyd House in honor of Lord Lloyd.

LLOYD

107









PRESIDENT GRACE PARK

SECRETARY

UDAYA GHAI

SUPERINTENDENT



EDWARD GARZA

TREASURER SIDNEY BUCHBINDER

**ATHMAN** SARTHAK SAHU

**SUPERINTENDENT** KATIE CHING

EMILY ELLSWORTH, MAX & VANSH KUMAR WANG, & JACKIE MASLYN

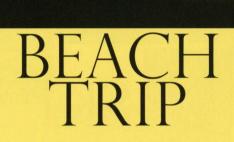
SOCIAL DIRECTORS



{108} houses



T









A Besti













LLOYD 109













# SKI TRIP

SECRET SANTA





















### BUBBLE SENIOR-FROSH SOCCER



Lloyd IIII

























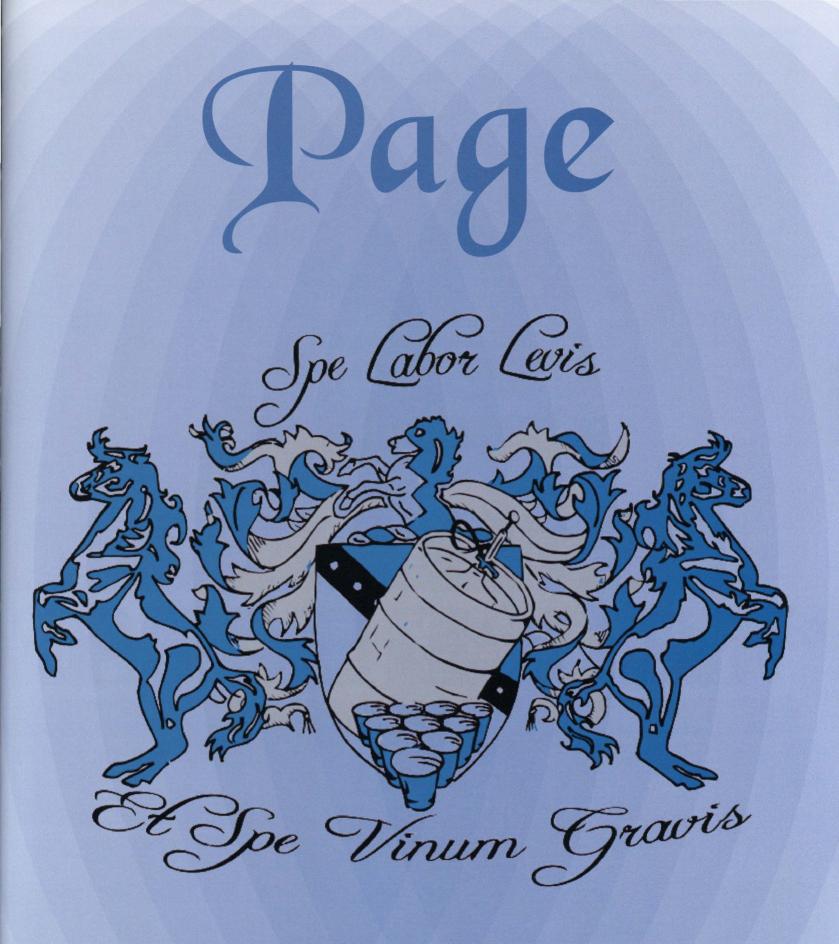












his rich dude named James R. Page donated a bunch of money to Caltech, said, "Let there be drinks," and the house was born.

# Santa Ana Hiking Trip



# WHOSE HOUSE





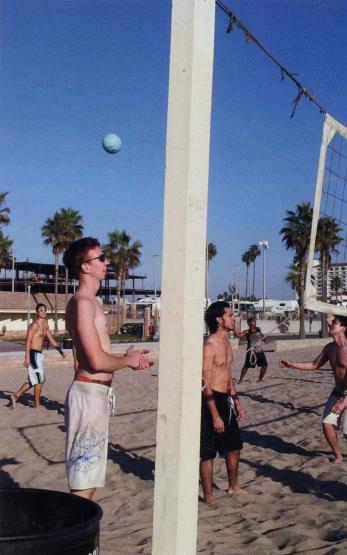






{II4} houses





## PAGE HOUSE

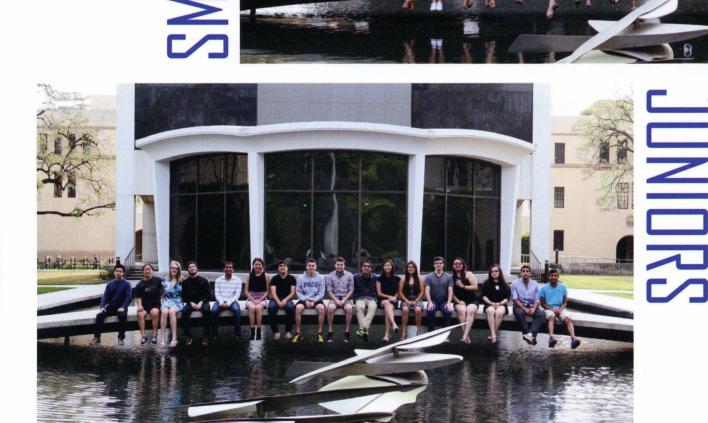


**Cocktail Party** 

PAGE II5

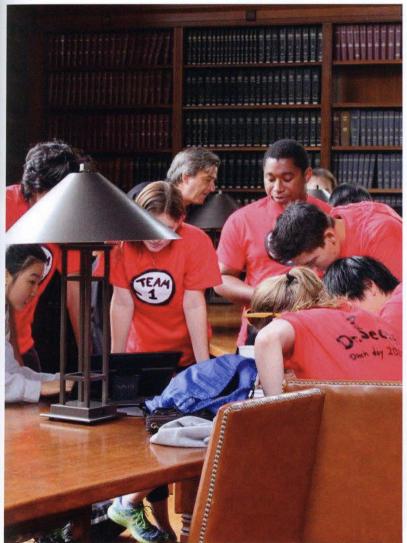


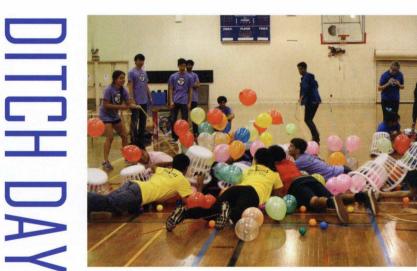
# Sabores and the second second





## SENIORS







PAGE 117



## PAGE HOUSE

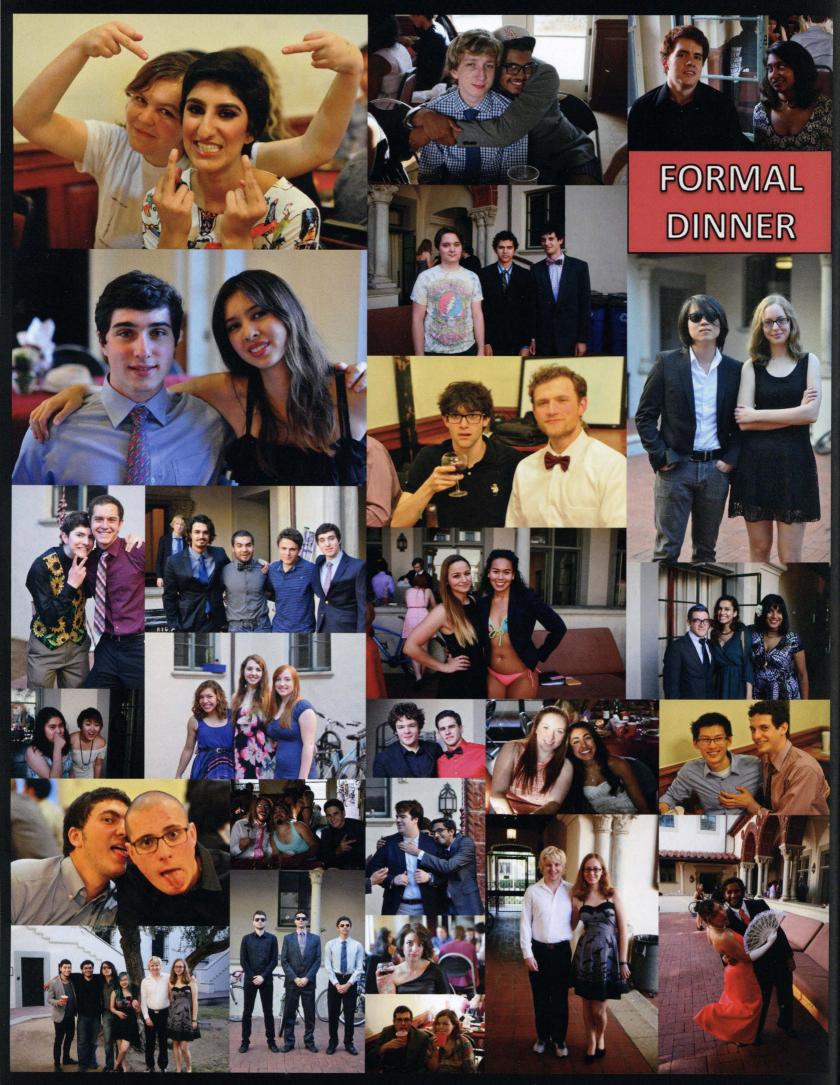


# Ricketts

he history of all hitherto existing society is the history of class struggles. Freeman and slave, patrician and plebeian, lord and serf, guild-master and journeyman, in a word, oppressor and oppressed, stood in constant opposition to one another, carried on an uninterrupted, now hidden, now open fight, a fight that each time ended, either in a revolutionary reconstitution of society at large, or in the common ruin of the contending classes."—Karl Marx

ARAND MOI TEL QUE JE SUIS

RICKETTS II9



#### ROTATION

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#### **OPEN MIC NIGHT**



G







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PAVILION





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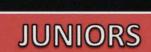




#### FROSH









SENIORS



# Ruddock

n the beginning, there was void. And then Frink Almighty said, "Let there be Tech!" And so there was Tech. And He saw that Tech was good. On the next day, He saw that Tech was formless and empty and created the Hovses. And so there were the Hovses. And He saw that the Hovses were good. He named each Hovse according to His whims. In fits of thunderous laughter, He called His favorite Hovse "Ruddock," which rhymed with His posterior. On the third day, He saw that Ruddock was empty and bare. So He created six alleys in

which Frinkish competition was to occur. And He saw that Ruddock was becoming very, very good. On the fourth day, He saw that Ruddock was quiet and clean. So He proclaimed, "Let Ruddock teem with masses of animals and plants." And so became the primordial life of Ruddock: the Frosh. Frink agonized over His newest creations. Eventually He decided that the Frosh were fairly good. On the Fifth day, Frink said "I shall create a Techer in my likeness and image." Thus, He created Jose. Almighty Frink placed Him in that paradise called Ruddock House. And Frink declared that His creation was extremely good. And then Frink saw that Jose was lonely, spending hours at night on His computer with the lights extinguished, and so He created a woman from Jose's coccyx, and called her Lola. And He saw that She was very, very good. And Frink blessed them: "Be fruitful and multiply, and fill Ruddock with Rudds, and subdue the land. Rule over the Frosh of who-knows-where, and every living thing that roams Ruddock." And so it was done. And Ruddock prospered.

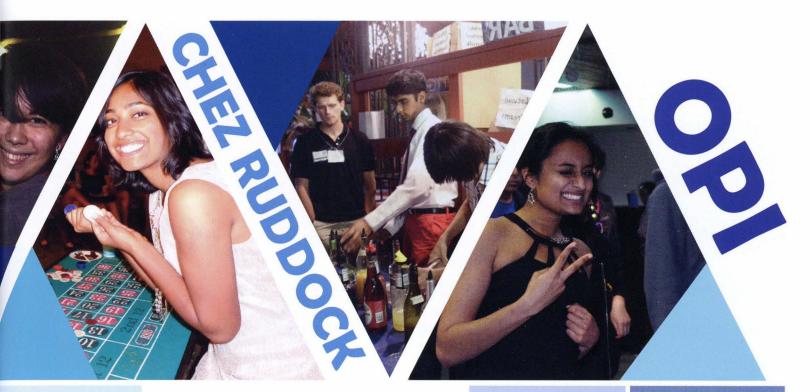
RUDDOCK





#### INSTALLATIONS~PFW~INITIATIONS~ALLEY













#### This isn't Montana. This is Ruddock House. We have rules.





Ruddock House



Freshmen



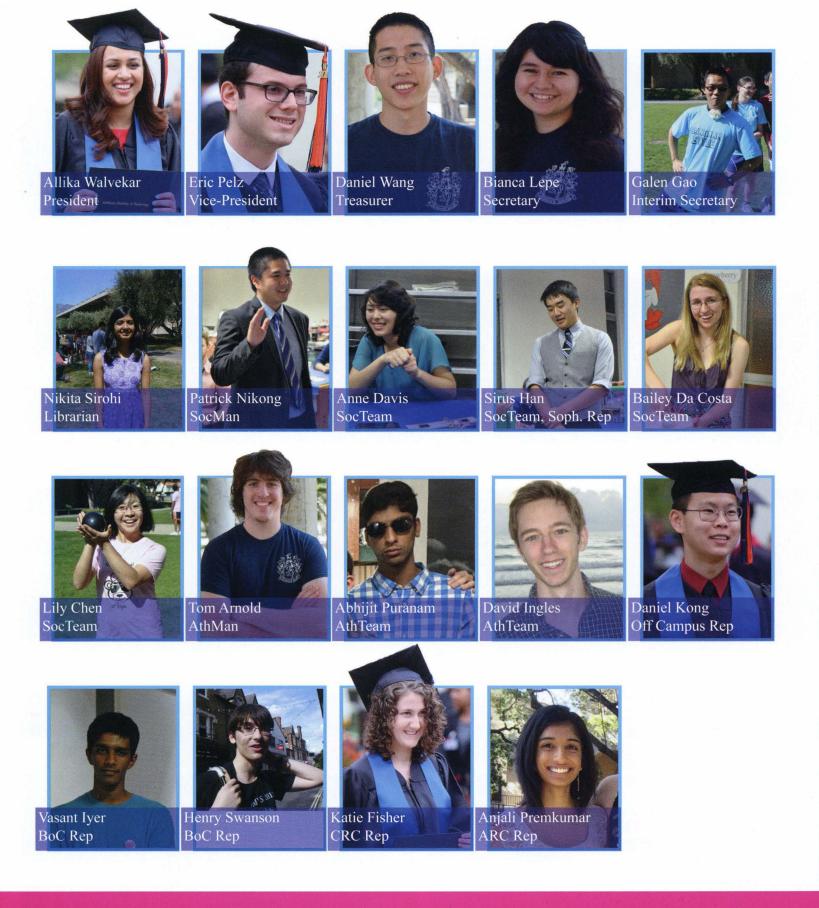
Juniors



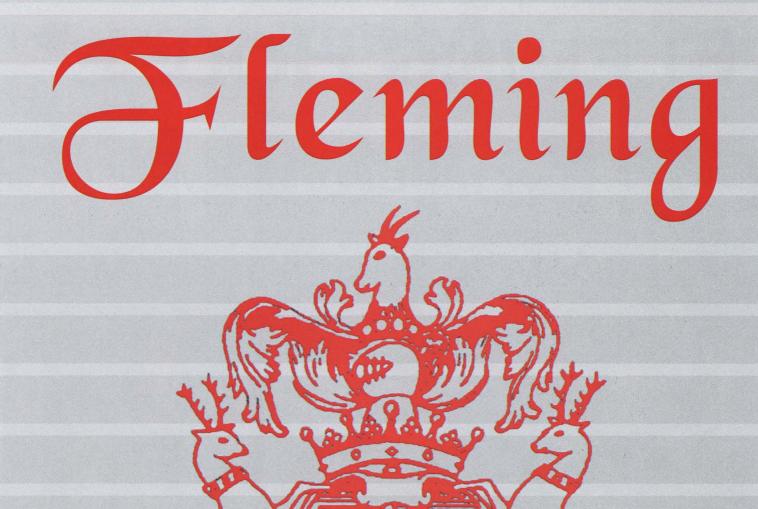
Sophomores



Seniors







nce upon a time, the citizens at Caltech realized they were in dire need of a house, a band of brothers brave enough to begin the quest of getting swole while pursuing higher education. The fraternities Sigma Alpha Pi and Pi Alpha Tau merged to create a house where "men are men, giants walk the

earth, and the thundering herd is real": known today as Fleming House.

Over the years, the traditions of the noble House of Fleming have lived on: alumni fight in a battle of the fittest at the Rose Bowl each year, the house bell is rung at the end of each dinner, and Flems refuse to be counted (a group of Flems has a worth too large to be quantified by integers). As each incoming class quickly learns, Flems stick together, from initiation to graduation. Winning victories in interhouse athletics has been trivial for the Big Red, and the Fleming cannon fires to commemorate the end of each term.

Today, Fleming House is more than a house: it's a family.

FLEMING I 3 I



#### LET THE DEED SHAW

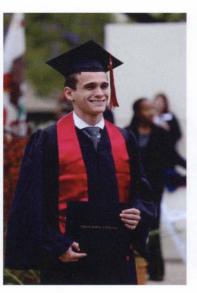


*\*arguably the best* 

#### IN FLEXCOMM WE TRUST



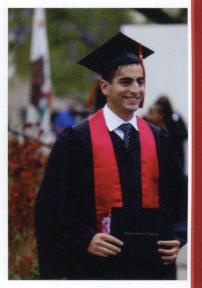
Oliver Curtiss President



Matt Lappin Vice President



CJ Culpepper Treasurer



ЈР Осатро Secretary



Ath 1



Ath 2



Soc 1



Monica Li

Soc 2

Sandia Akhtar Head UCC



Ricky Galliani UCC Alley 1



Grace Leishman UCC Alley 2



Kevin Yei UCC Alley 3



Paric Eck. UCC Alley 4



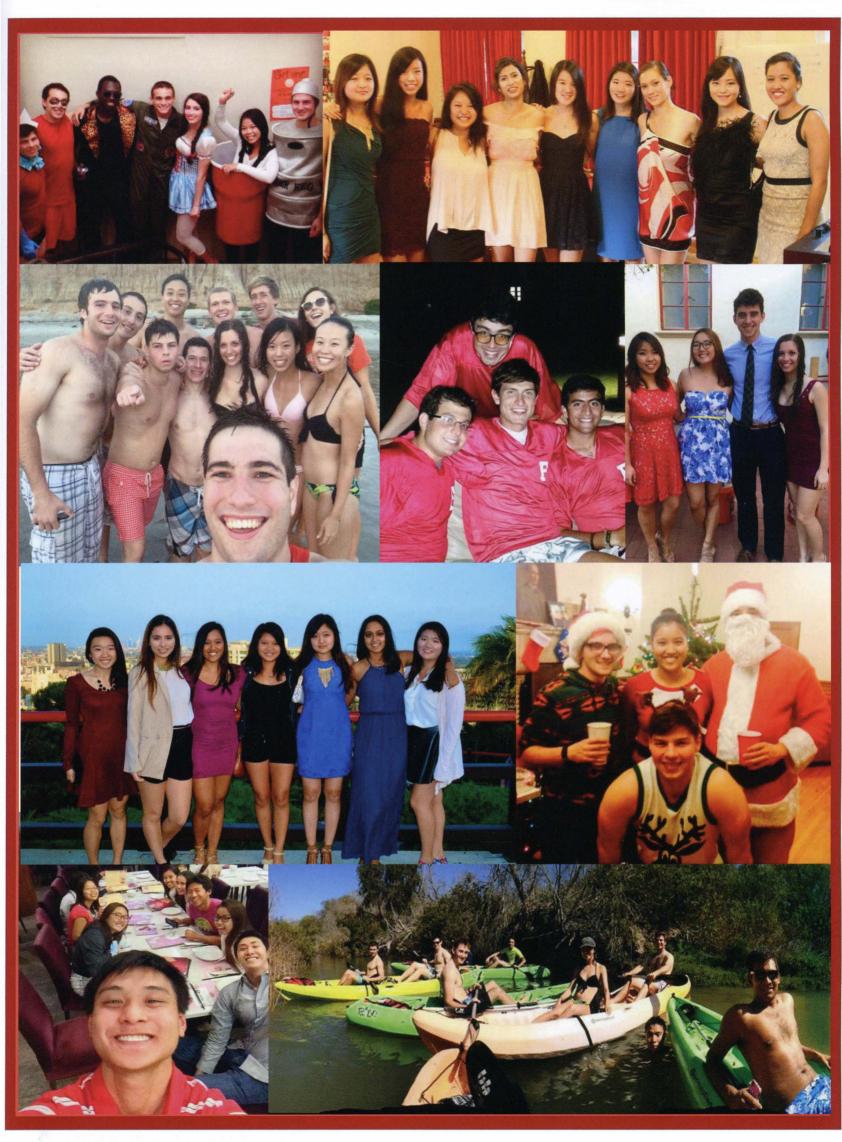
UCC Alley 5



Kristin Anderson UCC Alley 8

FLEMING









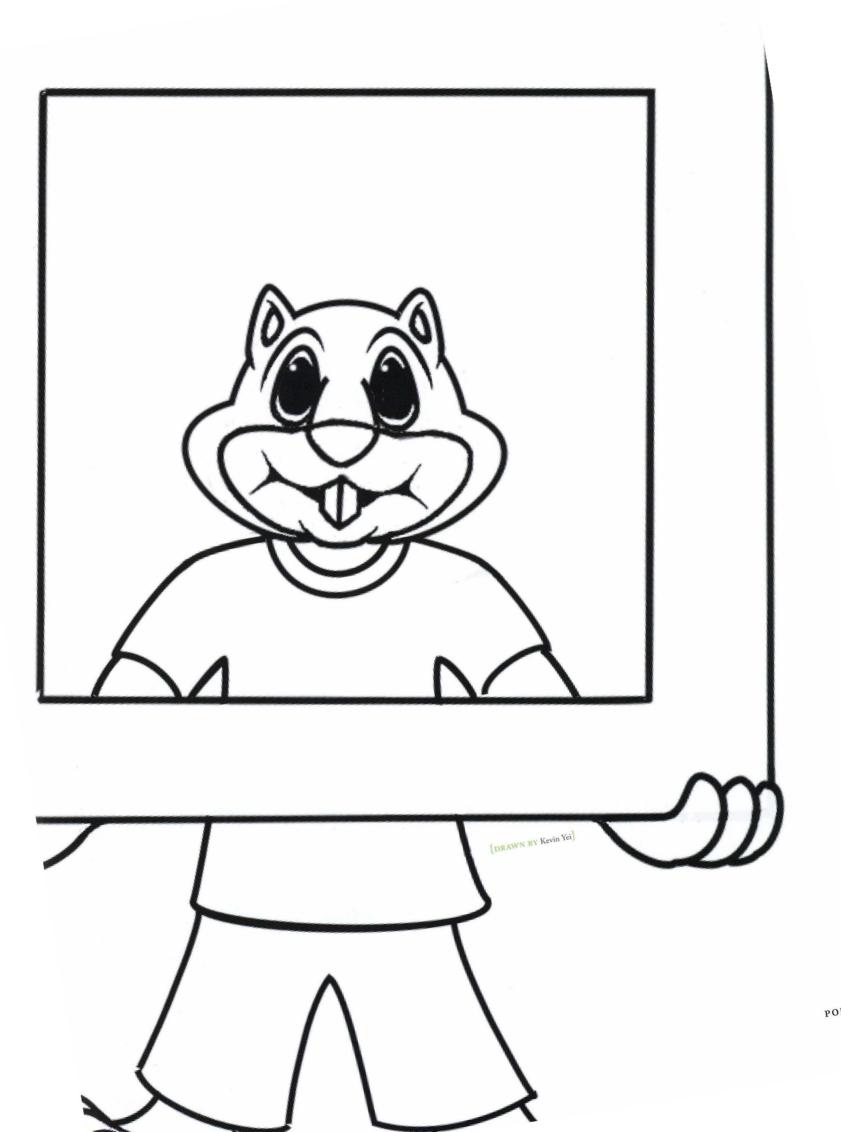
# Dabney

# Ricketts Ruddock

lacker

icture time! Some could argue that Caltech is the most attractive college (just kidding!). But, one thing is certain, Caltech students know how to take great pictures. I mean, look at Beaver, he is dam pretty!

Portraits



### Keeping it Class of 2018 resh, man

Carson Adams Gavy Aggarwal Avinash Agrawal Junedh Amrute Guangning An Aaron Anderson Sarah Antilla Richard Antonello

Fabio Arai Naveen Arunachalam Beatriz Atsavapranee Caroline Atyeo Henry Baer Ashwin Balakrishna William Ballinger Sam Bardwell-Evans

Victor Baules Frederick Berl Arjun Bose Alexander Bourzutschky Kabir Brar Eduardo Bravo-Escudero Alex Brinson Robin Brown

Ryan Burns Nina Butkovich Sarah Cai Thomas Chaffee Annie Chang Chen Chang Advitheey Chelikani Vinciane Chen

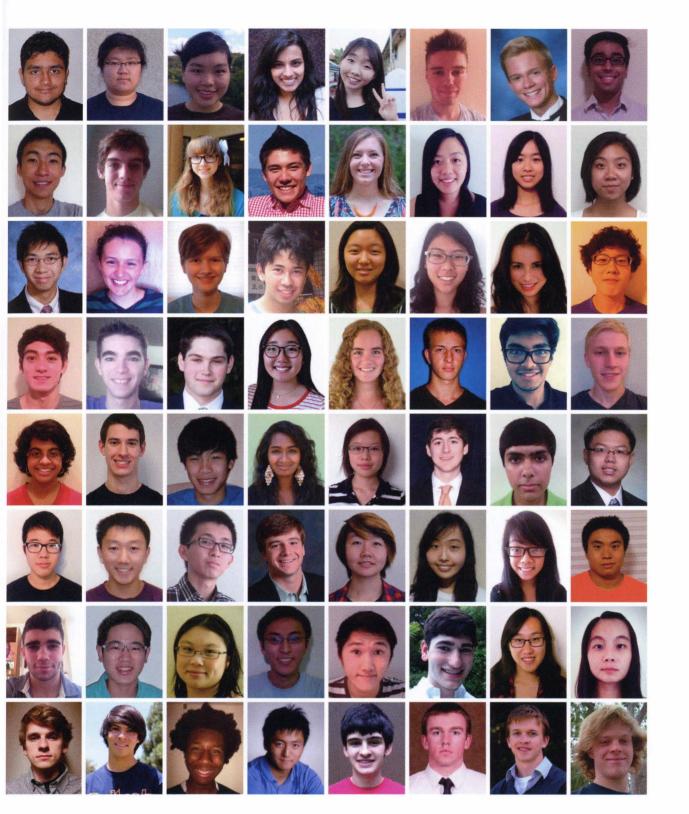
Nicholas Cho Yunsang Choi Timothy Chou Edward Chu Ya Lun Chuan Jonathan Clements Adrian Costantino Daniel Cushey

Roohi Dalal Collin Davda Serena Delgadillo Anant Desai Weiyi Ding Uma Dingankar Stephen Dolbier Joseph Donermeyer

> Anne Dorsey Alison Dugas Cameron Earl Egon Einoder Angel Elizondo Robert Eng Alix Espino Marlon Facey

Jared Filseth Devi Ganapathi Siva Gangavarapu Paige Gannon Amanda Gao Daniel Gawerc Mark Gillespie Miguel Gonzalez





Arjun Goswami Stephanie Gu Katherine Guo Saloni Gupta Gloria Ha Christopher Haack James Hamilton Ashwin Hari

Kevin He Erich Herzig Olivia Hindera Alec Ho Caroline Howard Jenny Hsin Ching Yun Hsu Ida Huang

Jason Huang Stephanie Huard Olivia Humes Nicholas Hutchins Janice Jeon Yiwei Jiang Sachi Kamiya Andrew Eun Kyu Kang

David Kawashima Matthew Kempster Jake Ketchum Lani Kim Gilian Kopp Giacomo Koszegi Nikhil Krishnan Ian Kuehne

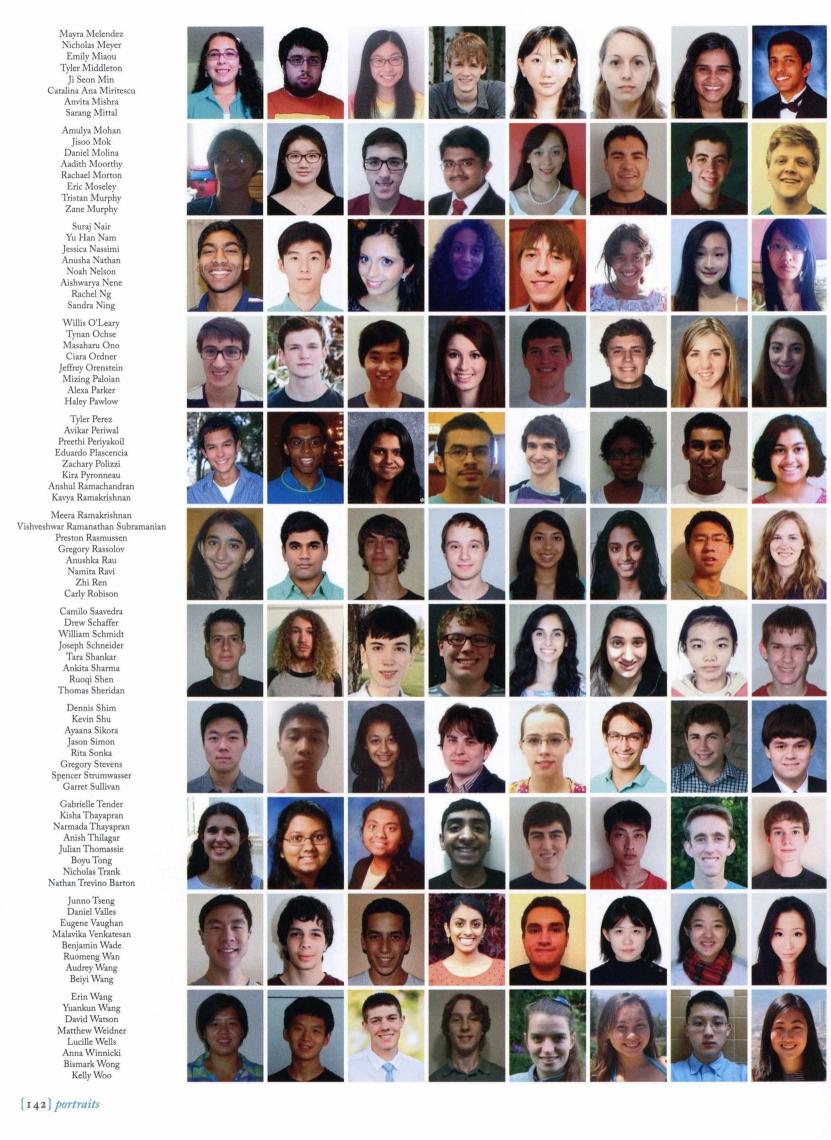
Anita Kulkarni Peter Kundzicz Lokbondo Kung Abirami Kurinchi-Vendhan Stephanie Kwan Frederick Lake Karim Lakhani Brian Lee

> Joon Lee Richard Lee Wen-Hua Lee William Levine Jessica Li Crystal Liang Amanda Lin Hanzhi Lin

Zachary Lipel Phillip Liu Sandra Liu Timothy Liu Ethan Lo Parker Lowe Catherine Ma Yuan Ma

Francesco MacAgno Mason MacDougall Avery Marshall Richard May Christopher McCarren Aaron McCartney John McDaniel Alexander Meiburg

> CLASS OF 2018 I4I







David Wu Ruyue Xu Yujie Xu Yixiao Yan Sherrie Yang Grace Yao Kevin Ye Samuel Yee

Brian Zdeb Max Zhan Celia Zhang Tiffany Zhang Albert Zhao Christopher Zhen Licheng Zhu Haojie Zhuang

Vincent Zhuang



People are nicer than I expected – not that I expected them to be mean, but they went above and beyond.

Gloria Ha Ruddock How humble a lot of people are here--given how smart a lot of Techers are, I expected them to be a lot more arrogant.

Preethi Periyakoil Lloyd Everyone is pretty smart and engaging. Avikar Periwal Page

#### What surprised you about Caltech?



# Great to the core: Class of 2017 Sophomore

Jacob Abrahams Kushal Agarwal Pallavi Aggarwal Yury Aglyamov Jagriti Agrawal Roshan Agrawal Saaket Agrawal Elliot Ahn

Nasser Al-Rayes Cole Allen Jeffrey An Ritwik Anand Alexander Anferov Katie Antilla Diana Ardelean Manasa Ashok

Rahul Bachal Bolton Bailey Benjamin Bartlett Rohan Batra Michael Bauer Marcus Bintz Aritra Biswas Fabian Boemer

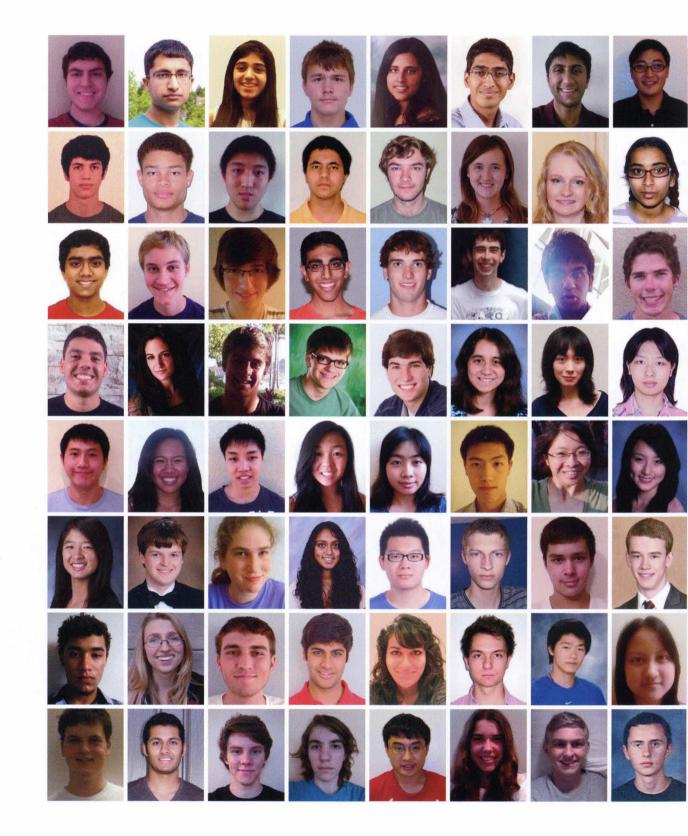
Jordan Bonilla Mary Boyajian Christopher Bradley Alec Brenner Nicholas Buoniconti Slava Butkovich Chuxiao Cao Chien Yi Chang

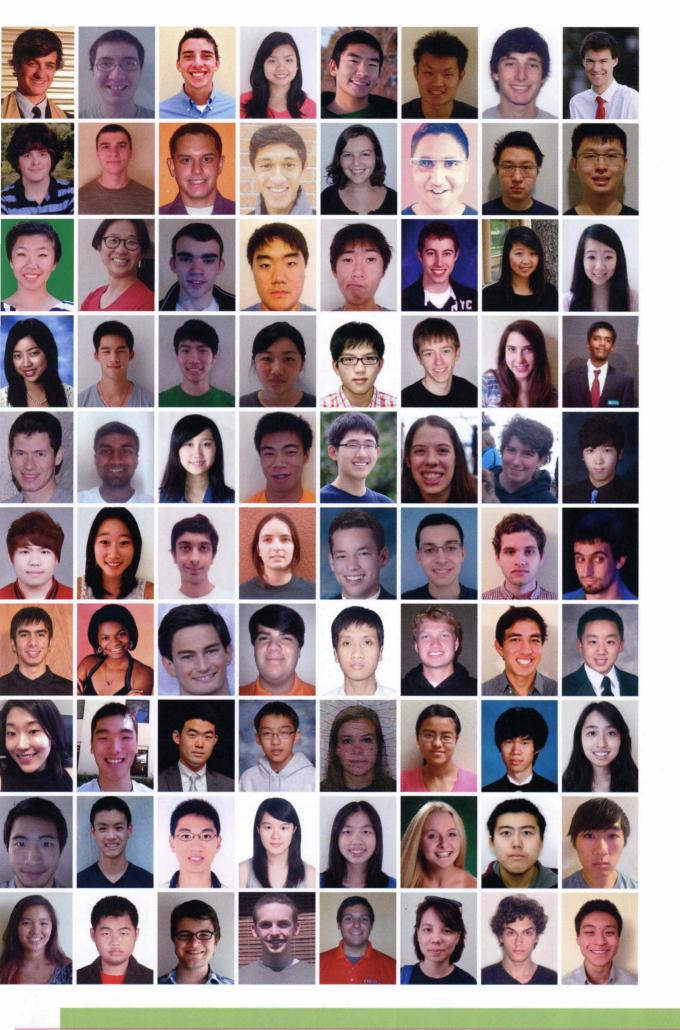
Kai-Tang Chang Kalyn Chang Caitlin Chen Ching-Hwa Chen Kevin Chen Lily Chen Lucy Chen

Sophia Chen Andrew Chico Kathleen Chinetti Archana Chintalacharuvu Nelson Chou Adam Collins Paulo Costa Connor Crowley

Marco Cruz Heredia Bailey Da Costa Ryan Dempsey Nishant Desai Sanjana Dewan Bogdan Dimitriu Leon Ding Mary Do

Christopher Dosen Avishek Dutta Matthew Edwards Henry Elbaum Benzi Estipona Katherine Evans John Feist Michael Feldman





Luke Frankiw John Galden Patrick Galliani Amanda Gao Kevin Gao Albert Ge Alex Geffner-Mihlsten Jaden Geller Christopher Gheorghiu Evren Gokcen Carlos Gonzalez Ashay Gore Mara Green Kshitij Grover Daniel Gu Jeffrey Gu Yi Gui Songshan Guo Nicholas Haliday Sirus Han Victor Han Jacob Harmon Jianing He Vivian He Stephanie Hong Patrick Hsu Richard Hu Audrey Huang Xiangyi Huang David Inglis Erin Isaza Vasant Iyer Harrison Jacobs Shubhankar Jain Tiantian Jiao Matthew Jin Jonathan Joo Zofii Kaczmarek Juliana Kew Hyun Min Kim Jaebin Kim Seohyun Kim Nand Kishore Milica Kolundzija Joel Kosmatka Ross Koval Harrison Krowas Aaron Krupp Ankit Kumar Netgie Laguerre Luke Lango Jake Larson Minh Nhat Le David Lebaron Morgan Lebby Connor Lee Ga Yeong Lee Lawrence Lee Yoon Lee Justin Leong Kate Lewis Jessica Li

Halston Lim Matthew Lim Soon Wei Daniel Lim Chih Wen Lin Christina Lin Sierra Lincoln Albert Liu Eric Liu

John Li Lauren Li

Kimberly Liu Yuxi Liu Peter Lommen Andrew Lucas Michaelangelo Lucas Alison Lui Daniil Lukin David Luo Lilly Luo Shaoxiong Luo David MacE Sumana Mahata Chanukya Malla Nailen Matschke Emily Mazo Daniel McAndrew

Sean McKenna Emily Meany Keegan Mendonca Timothy Menninger Christina Meyer Talia Minear Andrew Montequin Stephanie Moon



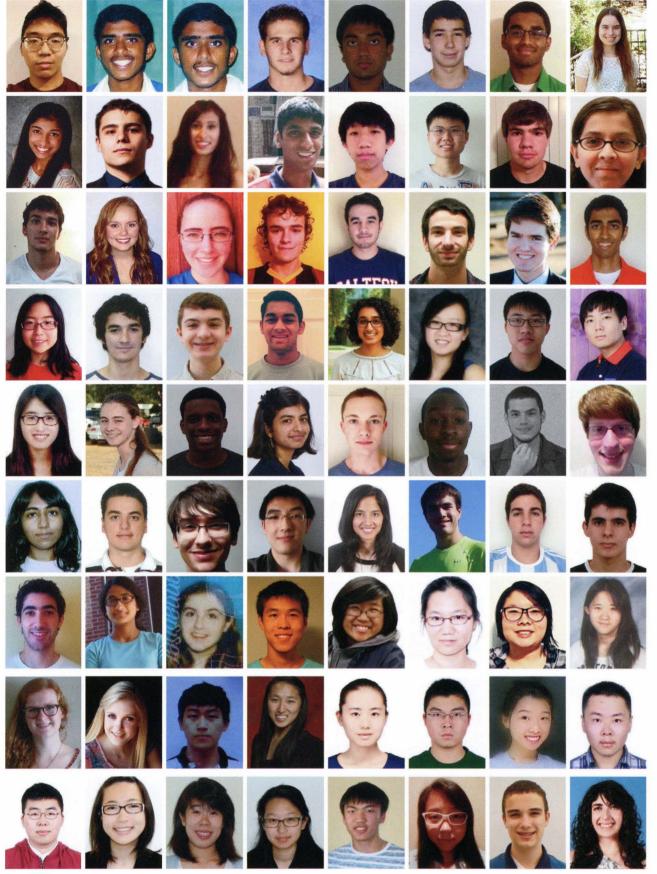
# What was your favorite CDS Dinner?

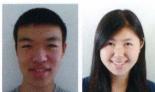
My favorite CDS dinner was Cinco de Fire-oh because they always do Mexican food well.

Connie Robinson Dabney The cowboy one because Anusha and I arrested people, 'cause we're the sheriffs in town

Jake Larson Ricketts Thanksgiving dinner. It tastes better. Jaden Geller Lloyd







Vincent Park Ramruthwick Pathireddy Ramsathwick Pathireddy David Pena Rishabh Pipada Alexander Place Anand-Markose Poozhikunnel Juliane Preimesberger

> Anjali Premkumar Federico Presutti Parul Pubbi Abhijitkrishna Puranam Eric Qiao David Qu Andre Ramos Bianca Ray Avalani

Jared Reed Gerri Roberts Constance Robinson Joseph Roddy Roel Rodriguez Jeffrey Rosenberg Alexander Ryan Sarthak Sahu

> Yuka Sakazaki Robert Sanchez Kyle Seipp Parth Shah Gauri Shastri Jiemin Sheng Jingwei Shi Ji-Soo Shin

Dayeon Shon Emma Shupper Darius Simons Nikita Sirohi Evan Sloan Mojolaoluwa Sonola Jacob Stark Johnathan Stauffer

Surya Sundararajan Alp Sunol Henry Swanson Lee Tang Amal Tariq Nicholas Tillotson Tomas Tussie

Tomas Tussie Victor Venturi Cameron Voloshin Mugdha Walke

Margaret Walter Charles Wang Michelle Wang Shannon Wang Shen Ting Wang Ting Wang

Laura Watson Lindsey Whitesides Jong Seok Won Michelle Wong Jiyun Xiao Xi Xu Ker Lee Yap Kexin Yi

> Chenchao You Ellen Yu Kristie Yu Lidan Yu Yizhen Yu Yi Yuan Dominic Yurk Sasha Zemsky

Frank Zhou Yanbing Zhu

CLASS OF 2017 I47

# No Fear! Class of 2016 It's Our Ohird Year!

Amir Abdolrahim Poorheravi David Addis Aman Agarwal Sandia Akhtar Monique Alkiewicz Chongxuan An Kristin Anderson Robert Anderson

Alexander Anemogiannis Sreenivas Appasani Elaine Arbaugh Thomas Arnold Sarah Keiko Asano Nima Badizadegan Adam Ball Elizabeth Beaver

> Lisa Beckmann Joseph Berleant Aditya Bhagavathi Laksh Bhasin Moriah Bischann James Blackwood Dryden Bouamalay Sarah Brandsen

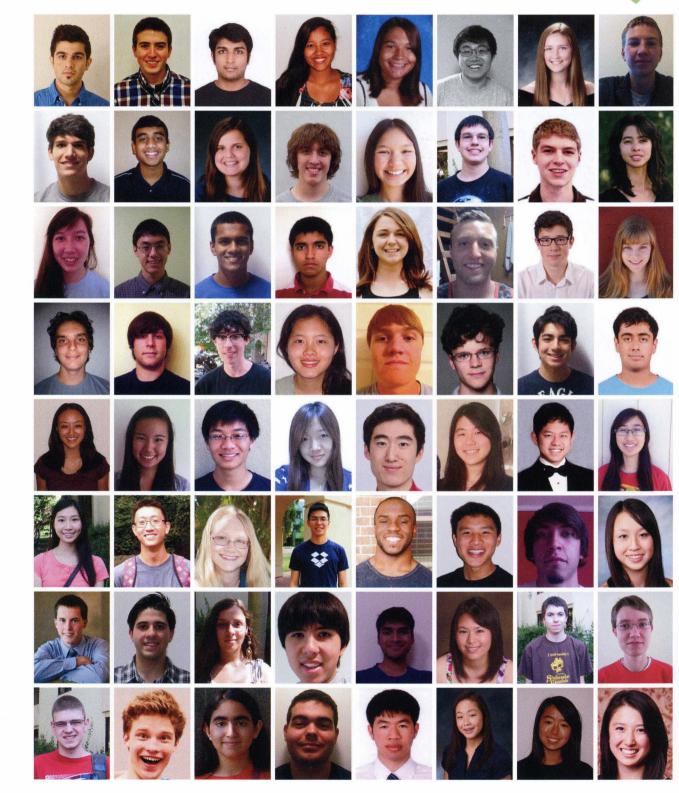
Emory Brown Eugene Bulkin Christopher Cannella Nancy Cao Grant Carlson Kurtis Carsch Matthew Cedeno Arun Chandra

> Melissa Chang Ann Chen Anthony Chen Oliver Chen Aileen Cheng David Cheng Evelyn Chin

Christine Chou Daniel Chou Anne Christian Daniel Chui John Clark John Co-Reyes Andre Comella Ming Cong

Matthew Conroy Christopher Couste Melissa Cronin Peter Cuy Shival Dasu Anne Davis Evan Davis Natalie Defries

Joshua Dement Paul Dieterle Kayane Dingilian Sean Dolan Sith Domrongkitchaiporn Esther Du Rebecca Du Xiaomi Du





Patric Eck Kristin Eliason Kelechukwu Emezie Clarke Esmerian Jonathan Eweis-Labolle Basith Fahumy Wentao Fan Tianhao Fang

> Zachary Fein Aaron Feldman Jerry Feng Gabriel Foster Edward Fouad Constance Fu Galen Gao Edward Garza

Temesgen Gebrekristos Iulia Gheorghita Heather Gold Daniel Gomez Eric Gorlin Stefan Grampp Joseph Grappone Jalen Green

Webster Guan Ayush Gupta Albert Gural Daniel Guth James Ha Cody Han Sheila Handler Christopher Hazard

Alexander Henny Emilia Hernandez Morgan Hill Timothy Holland Samuel Holo Andrew Hou William Hoza Alexander Hsu

Tianyi Hu May Hui Sylvia Hurlimann Vy-Luan Huynh Alexandra Ilic Aakash Indurkhya Catherine Jamshidi Nauman Javed

Emily Lara Jensen Cynthia Jiang Katherine Jiang Bhavana Jonnalagadda Rushikesh Joshi Soumya Kannan Sean Kanne Aditya Karan

Megan Keehan Emil Khabiboulline Kyu Bin Kim Shi En Kim Anup Kishore Michael Klionsky Matthew Klucher Nikola Kovachki

Brian Kubisiak Meera Kumar Neil Kumar Snigdha Kumar Vansh Kumar Vibhor Kumar Jessica Lam Lance Le Febvrier

Cheng Yi Lee Grace Lee Jihoon Lee Margaret Lee Grace Leishman Bianca Lepe Alex Lew Jiaxin Li

CLASS OF 2016

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Joanne Li Kevin Li Kevin Li Dennis Liao David Lichko Binjih Lin Bryant Lin

Xintong Lin Amarise Little Catharine Lo Sheila Lo Mark Lorden Anthony Lutz Harinee Maiyuran Chaitanya Malladi

Ajay Mandlekar Aashrita Mangu Lasya Marla Ishan Mehta Sean Mendoza Calli Meyer Alice Michel Walker Mills

Ritvik Mishra Madhav Mohandas Matthew Morgan Alexander Mun August Nanz John Naruk Santiago Navonne Katherine Nguyen

Tian Nie Patrick Nikong Ariel O'Neill Meghana Pagadala Juan Diego Palomino Grace Park Hong Joon Park Catherine Pavlov

Thomas Peterson Alexander Pien Valerie Pietrasz Riley Pinkerton Patrick Rall Meera Reghunathan William Reichard William Rieger

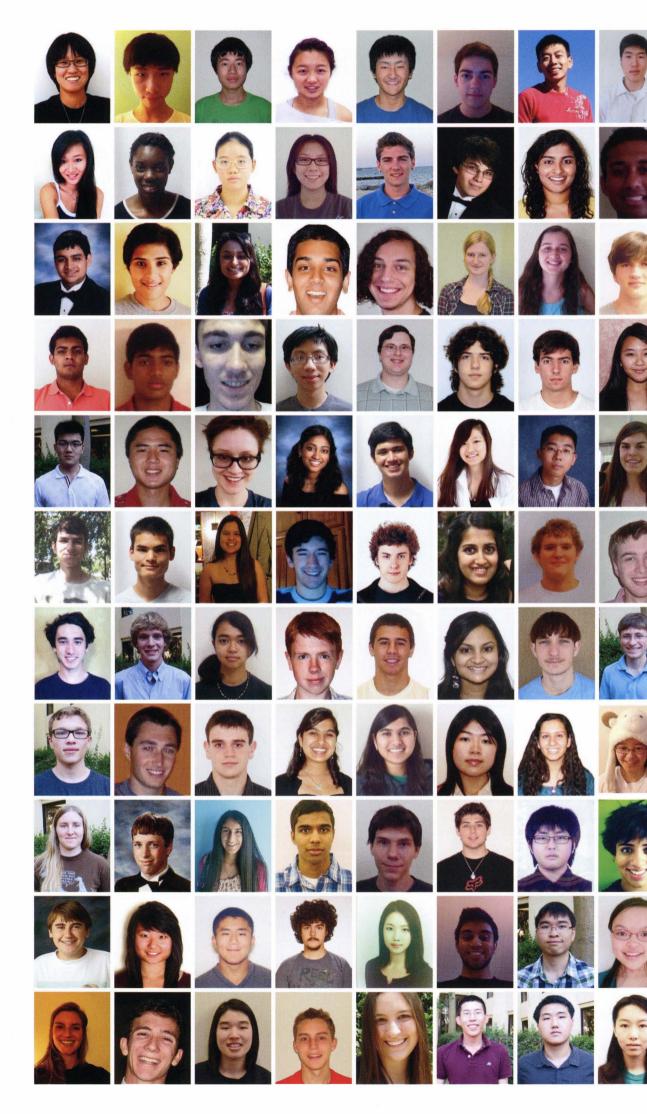
Ryan Ripper Andrew Romine Tatiana Roy Keegan Ryan Alec Sands Ellora Sarkar Samuel Savitz Nicholas Schiefer

Graham Schmidt Dylan Schultz Daniel Seabra De Andrade Neera Shah Nehaly Shah Elly Shao Samriddhi Sharma Laura Shou

Kirby Sikes Elliot Simon Anusha Sinha Karthik Siva Valentin Skoutnev Matthew Smalley Jun Ho Son Tara Sowrirajan

Taylor Strumwasser Ye Su Yubo Su Omer Subasi Cynthia Sung Naveen Tadepalli Kevin Tang Rebecca Tang Rachel Thorp Torin Thosath Christing Tagag

Christine Tseng Jean- Alexandre Turban Hannah Walsh Daniel Wang Jack Wang Jingwen Wang



{150} portraits



Sharon Wang Siyuan Wang David Warrick Michael Wheeler Jalani Williams Stephanie Wong Yuanyuan Xu Albert Yang

Cassidy Yang Sharon Yang Kevin Yei Patrick Yu Shengyang Yu Kevin Yuh Anthony Zhang Jerry Zhang

Andrew Zhao Taokun Zheng Tiffany Zhou Nicholas Zolman Leonardo Zornberg



I would have Chandler breakfast incorporated into open kitchen and have the C-store open longer.

Samriddhi Sharma Fleming I would make sure professors got paid according to how well they do.

Sith Domrongkitchaiporn Page I would make sure that we didn't have to pay for all 4 years of Caltech.

Monique Alkiewicz Ruddock If you were the Dean of Caltech what would you do?

> CLASS OF 2016 I 5 I

# Ye Olde Ones, Class of 2015 Seniors

Juan Adame Belen Alvarez-Villalonga Keshav Amla Da An Luc Angel Phoebe Ann Arun Asundi Sharjeel Aziz

Karsyn Bailey Alexander Ball Sophianna Banholzer William Bao Alexander Barreiro Richard Barz Ryan Batterman Jonathan Bayless

Aleksander Bello Timothy Bennett James Bern Kerry Betz Srinivasa Bhattaru Charles Blakemore Eric Bobrow Sven Boemer

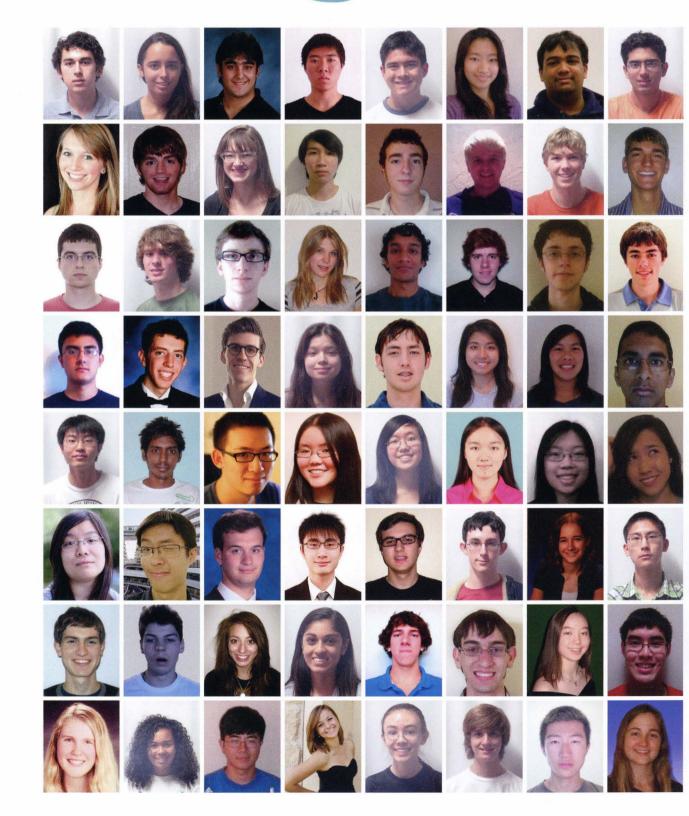
Ronnel Boettcher Sidney Buchbinder William Bunting Jennifer Caseres Ryan Casey Doreen Chan Tracey Chan Krishnan Chander

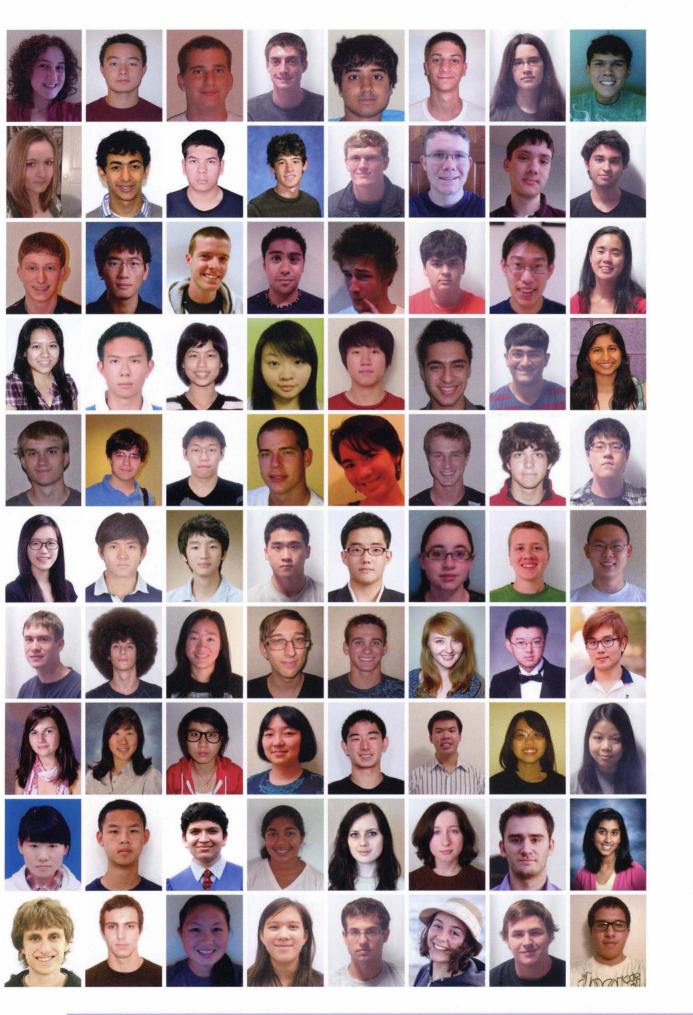
Solomon Chang Brad Chattergoon Jianchi Chen Moya Chen Wen Min Chen Lin Cheng Yintong Cheng Kaitlin Ching

Linda Chio Joseph Choi John Christian Meng Shuen Chua Alexandru Cioc Matthew Clark Bridget Connor Timothy Cui

Christopher Culpepper Oliver Curtiss Lorinda Dajose Poonim Daya Maxwell De Jong Daniel Defelippis Hannah Dotson Victor Duan

> Emily Ellsworth Monica Enlow Naoki Eto Erin Evans Helen Evans Martin Fabbri Boyu Fan Ingrid Fiedler





Katherine Fisher Cedric Flamant David Flicker Jared Forte Neelay Fruitwala Joaquin Gabaldon Katharyn Garcia Christopher Gardner

Rachel Gates Udaya Ghai Harry Golash Emmett Goodman Benjamin Grabowski Joseph Greef Mark Greenfield Ali Harb

Alexander Hartz Bryan He Peter Henry Richie Hernandez Andrew Hogue Dhiraj Holden Daniel Hsu Connie Hsueh

Rebecca Hu Edward Huang Vivian Huang Alina Hwang Seong Bin Im Muneeb Imtiaz Rycen Islam Ruchi Jahagirdar

Michael Jenson Adam Jermyn Zhaorong Jin Bryan Joel Jennifer Karolewski Derek Kearney Thomas Keller Dae Hyun Kim

Do Hee Kim Joon Sik Kim Minsoo Kim Won Jun Kim Young Min Kim Hannah Klion Justin Koch Daniel Kong

Ian Koss Lev Krayzman Katherine Lai Ryan Langman Matthew Lappin Elizabeth Lawler Barclay Lee Jong Yeon Lee

Katherine Lee Michelle Lee Eileen Li Fanfei Li Andrew Liang Wilton Liano Chloe Ling Anna Liu

Hui Liu Jonathan Liu Archan Luhar Shalini Majumdar Allison Maker Galina Malakhova Michael Malek Janani Mandayam Comar

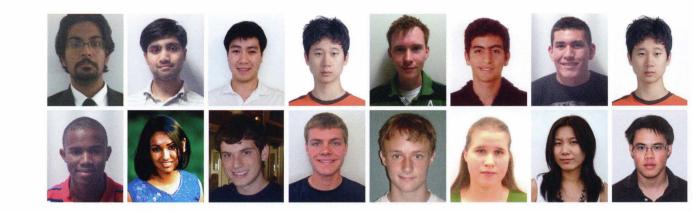
Jake Marcinek Eric Martin Jacqueline Masehi-Lano Jacqueline Maslyn Austin Mayron Kayla McCue Harrison Miller Ismael Mireles

CLASS OF 2015

153

Suraj Mirpuri Chiraag Nataraj Loc Nguyen Lauren Niu Louis O'Bryan Juan Ocampo Abraham Ortega Jeong Joon Park Nicholas Parker

Nicholas Parker Aleena Patel Eric Pelz Jeffrey Picard Alexander Port Ellen Price Shuyang Qin Brynan Qiu



What are your plans after Caltech?

Getting out of here! Mark Greenfield Dabney

ATHENATICS

Seeking out Cortez's lost city of gold.

Harrison Miller Lloyd Physics at JHU. Eric Bobrow Dabney

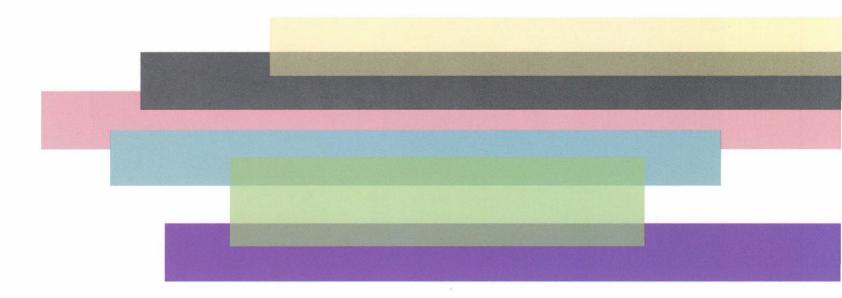






Linus Ziemba

Allen Yu





# CONGRATULATIONS TO THE GRADUATES OF 2015!



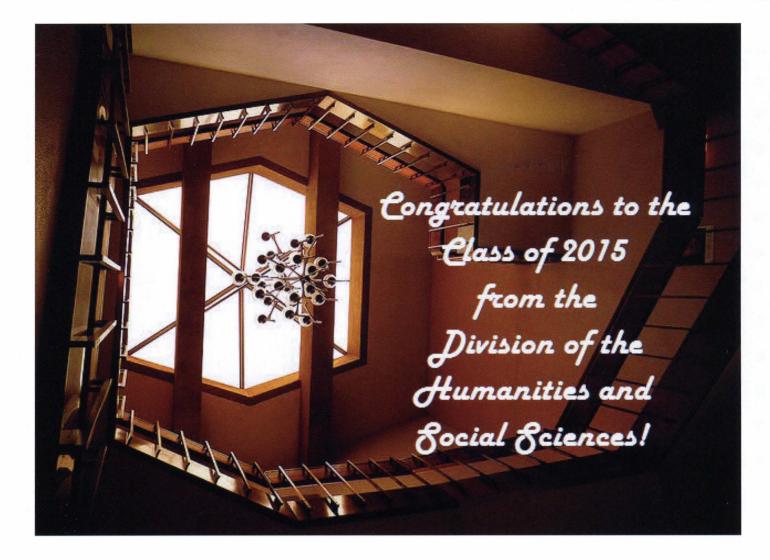
As a part of the Caltech family, we wish the Class of 2015 a successful and rewarding future!



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#### Where Your Membership Lasts a Lifetime!

Thanks to you, your immediate family is eligible to join CEFCU. Once they join, they too will be members for life and can pass on the benefits to their family.

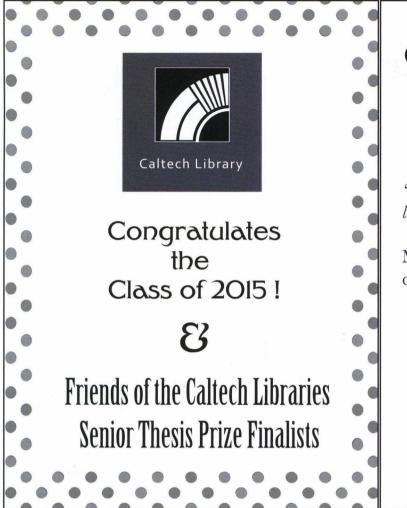


#### **CONGRATULATIONS TO THE CLASS OF 2015!**



FROM THE OFFICES OF THE PROVOST AND VICE PROVOSTS

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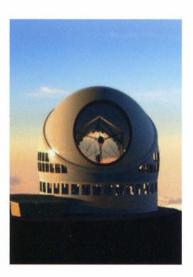
#### CONGRATULATIONS 2015 GRADS!

"Imagination is everything. It is the preview of life's coming attractions." - Albert Einstein

May there always be art, music, and theater close to your lives and in your hearts.

From the Music, Theater and Art Department





Congratulations & all the best to the Class of 2015 Physics, Mathematics & Astronomy Division



### **Congratulations Class of 2015!**

Advertisements I 59

# Congratulations Class of 2015!

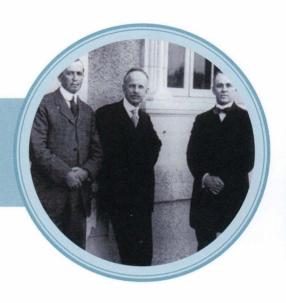
## The Caltech Parents Program and Caltech Fund

{160} advertisements



#### 1917

altech has such a rich history filled with amazing scientists who have changed the world. Fortuantely, Caltech was founded by 3 scientific giants: George E. Hale, Arthur A. Noyes, and Robert Millikan (L to R). This gem of a photo shows the Caltech Triumvirate seeing its dream of establishing a school focused on science hnology come true.





#### 1922

his aerial view of campus makes your realize how much Caltech has changed. (1)Throop Hall (now Throop Garden). (2) Gates Chemical Laboratory (now Parsons-Gates Hall). (3) Bridge Physical Laboratory. (4) Culbertson Hall (now surrounded by North and South Mudd Laboratories). (5) Hydraulics and Steam Laboratory (now Spalding Laboratory). (6) The Dormitory (now Winnett Center). (7) Athletic Field (now Keith Spalding and AThletic Facilities)

#### 1959

ack when California was not in drought, there was enough rain such that mud pits would form around campus. Caltech students would team up, get down and dirty, and compete against other teams in the Mudeo challenge. In these mud-wrestling matches, students try to retrieve tires from a mudpit and many awards are given out. Shouldn't we bring this tradition back?





### 1996

n 1996, Avery House construction was nearing completion and it was part of Caltech's expansion. In 1946, Caltech had 1391 students on a 30-acre campus. The campus almost quadrupled in size in 1996, but enrollment only increased 1.5 times. A testament to Caltech's committment to that special character that makes Caltech unique.

# The Caltech Big T congratulates The Class of 2015

"You have brains in your head. You have feet in your shoes. You can steer yourself any direction you choose.

SALLAN)

You're on your own. And you know what you know. And YOU are the one who'll decide where to go..." -Dr. Seuss, *Ob, The Places You'll Go!* 

SENIOR DEDICATION

# Oct. 10, 2014

02

eventeen-year-old Malala Yousafzai is awarded the Nobel Peace Prize for her efforts in promoting education after surviving a Taliban shooting, becoming the youngest-ever recipient of the award. Photo credit: Daily Mail



## Oct. 24, 2014

he Institute welcomes its 9th president, Thomas F. Rosenbaum. Photo credit: Michael Wong

### Nov. 12, 2014

he European Space Agency's Rosetta mission achieves the first-ever contact with the nucleus of a comet when its Philae lander successfully touches down on comet 67P/Churyumov–Gerasimenko. Photo credit: ESA - C. Carreau





# -Dec. 7, 2014-

he Obama Administration announces an agreement to begin the resumption of normal relations with Cuba and end the longstanding trade embargo. Photo credit: Reuters

{164} year in review

## Jan. 7, 2015

he French satirical magazine, Charlie Hebdo, is attacked by gunmen, who killed twelve and injured ten, as a result of a 2011 issue depicting the Islamic prophet Mohammed in a cartoon. Photo credit: Wall Street Journal





#### Apr. 24, 201

aitlyn Jenner, formerly Bruce, comes out as a transgender woman in an interview with Diane Sawyer on ABC's 20/20, sparking a national discussion on gender identity and sexuality. Photo credit: Vanity Fair

## Apr. 25, 2015

magnitude 7.8 earthquake rocks Nepal and surrounding areas, killing 9,000 and injuring 23,000. The earthquake devastated the country, triggering avaanches and landslides in the Himalayas, destroying thousands of homes and lattenin villages. Photo credit: CNN





### =June 2015=

he Golden State Warriors are the unlikely winners of the NBA championships, their first victory in 40 years and the just the fourth in franchise history. NBA MVP Stephen Curry spearheaded the Warriors' six-game defeat of Cleveland Cavaliers, led by Lebron James. Photo credit: ABC News

#### June. 12, 2015

altech celebrates the graduation of the Class of 2015. Photo credit: Caltech Strategic Communications



# The Cast of Characters The Big T Staff

Harinee Maiyuron '16 Editor "Photochop" Meghana Pagadala '16 Editor "Cutout Maniac"

Amarise Little '16 Staff "Adobe InStyle"



Soumya Kannan '16 Editor "DJ"

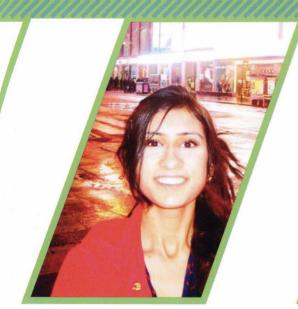


Michael Wong Layout Designer "The All-Knowing"



Lani Kim '18 Writer "Life Saver" We thank all the staff, photographers, writers, and editors for all of their work. In addition, we would like to thank Debra Tuttle, Tom Mannion, Catherine Jamshidi '16, Corey Mundwiler, and Jasmine Safaeian for all of their extra help.





Parul Pubbi '17 Writer "Krave Krazy"



Meera Reghunathan '15 Staff "House(pages) Bunny"



Kevin Yei '16 Staff "Picasso"



