

Distinguished Alumni Awards among Alumni Reunion Weekend events

NEERA SHAH
Page Editor

On May 21, the Caltech Alumni Association held the 79th Seminar Day during the annual Alumni Reunion Weekend. Among the visitors were graduates from as early as 1941 and as far as Japan, Taiwan and Australia. This year marked the 50th year for the Distinguished Alumni Awards.

Thomas F. Rosenbaum, president and the Sonja and William Davidow Presidential Chair and professor of physics, presented the six awards. The Distinguished Alumni Award is the highest honor that Caltech bestows upon its graduates. Rosenbaum also gave a nod to all of Caltech's alumni as he said, "The institute's most profound impact on the world is through its alumni, and across all sectors."

Eric Betzig (B.S. '83, physics) was recognized for his development of an improved method in optical microscopy that allowed observations on a nanoscale. Betzig also shared the Nobel Prize in

Chemistry in 2014 for this work. He is currently group leader at Janelia Research Campus at Howard Hughes Medical Institute. Rosenbaum referenced a common quote of Betzig's before handing over the award: "The struggle is its own reward." Upon receiving the award, Betzig also acknowledged this sentiment. He said that his experience at Caltech was indeed a struggle, but also said, "I look back fondly on it," exactly because that struggle is a reward in itself. He noted how Caltech prepared him for his career and affected him overall. "I fell in love with the idea of getting a clean experiment and clean data. There is no better satisfaction than that ... Much of my success and my happiness in life — which is more important — can be attributed to Caltech."

Janet C. Campagna (M.S. '85, social science) was honored for her "complex and intensely mathematical solutions," said Rosenbaum, and her contributions to the finance industry. She is now CEO of QS Investors, LLC. She founded this company and has

a majority of female employees, an uncommon feat in the finance world.

Neil Gehrels (Ph.D. '82, physics) was given the award for his leadership in the study of gamma rays and contributions to astrophysics and astronomy research. His academic career followed a slightly different path than that of most Techers: he began his collegiate studies as a music major, studying to become a music composer, at the University of Arizona. It wasn't until his junior year when he used his musical skills in a physics lab that he realized he wanted to pursue physics. After graduating with a double major in music and physics, he came to Caltech for his Ph.D. Yet another twist is that he met his wife Ellen and got married to her at Caltech, and his wife is also among the awardees this year. Gehrels presently works as chief of the Astroparticle Physics Laboratory at NASA's Goddard Space Flight Center.

Carl V. Larson (B.S. '52, mechanical engineering) was recognized for his accomplishments in the electronics industry and his

commitment to the research, students and alumni of Caltech. He originally thought about being a chemical engineer and going into industry to make money, but changed his mind after being at Caltech. He said, "Caltech did not teach me how to do anything in particular, but it gave me a good background in so many fields [so] that I was able to go on into different fields with just a little training — training which was easier than Caltech." His final remark was met with both laughter and smiles throughout the audience: "If others have wondered why they've gotten this award, I'm really wondering ... so it is with sincere gratitude and a huge dose of humility that I accept this award."

Thomas J. "Tim" Litle IV (B.S. '62, engineering and applied science) was named one of the Distinguished Alumni for his imaginative contributions to commerce, especially in making many transactions more efficient and secure. Litle's work has a major influence on our daily lives — among many others, he is responsible for the presorted

mail program used by the U.S. Postal Service and the three-digit security codes on credit cards. His present work is as the founder and chairman of Litle & Co.

Ellen D. Williams (Ph.D. '82, chemistry) was honored for her role as an industrial leader and public servant through her work in structural-surface physics. She was directly involved in research at the University of Maryland and recently left academia in 2014. Williams now serves as director of the Advanced Research Project Agency in the U.S. Department of Energy. As she has spent most of her life outside of the southwest, Williams expressed her love of the sunlight in southern California and recalled her sun-filled experience during her graduate studies here. She said that she not only appreciated the physical sunlight but also the "sunshine of this intellectual environment" at Caltech that has kept her committed to innovation, an apt concluding remark to both her acceptance speech and the awards ceremony.

Photoblast: Health Education Advisory League (HEAL) hosts 2nd annual Beaver 5K



Photos Courtesy of Hye Joon Lee

IN THIS
ISSUE

OPINION | PAGE 3
CRYSTAL REVIEWS
RADIOHEAD'S NEW-
EST RELEASE

FEATURE | PAGE 4
STUDENTS RECOG-
NIZED FOR ACADEM-
ICS AND LEADERSHIP

SPORTS | PAGE 5
ALUMNI INDUCTED
INTO 2016 ATHLETICS
HALL OF HONOR

STATEMENTS | PAGE 7
SENIOR CLASS CO-
PRESIDENT STATE-
MENTS RELEASED

Caltech Y Column

CALTECH Y

The Caltech Y Column serves to inform students of upcoming events and volunteer opportunities. The list is compiled by Neera Shah from information given by the Caltech Y and its student leaders.

Founded by students in 1916, the Y was organized to provide extracurricular activities planned and implemented by students as an opportunity to learn leadership skills and discover themselves. More information about the Caltech Y and its programs can be found at <https://caltechy.org>. The office is located at 505 S. Wilson Avenue.

Upcoming Events

1. Royal Taste Exhibition - USC Pacific Asia Museum - Caltech Y Explore LA Series

Saturday | May 28th | 10:00 a.m.-12:15 p.m. | USC Pacific Asia Museum | 46 N Los Robles Ave, Pasadena | Cost: \$8. Transportation NOT provided | Sign-up starting Friday, May 20th at the Caltech Y at 10 a.m.

Join the Caltech Y on a journey to fifteenth-century China through the USC Pacific Asia Museum's West coast exclusive exhibition of newly excavated objects from a prince's tomb in the Ming dynasty. The artifacts, which have never left China before, are coming from the Hubei Provincial Museum. Objects in the exhibition will be returned to China on June 27.

Caltech Y board member and USCPAM docent Dr. Nancy Lan will be leading the group through the Royal Taste exhibition and the museum's exhibition of permanent collections. Students who have taken Asian art history should be particularly interested in joining this group on a special exploration of ancient Chinese culture.

This offer is for students only; however students purchasing tickets are permitted to purchase tickets for up to one guest each — and that guest can be a non-student. There are a limited number of spots available. Explore LA is coordinated by the Caltech Y. The Caltech Y is located in the Tyson House 505 South Wilson (Bldg. 128).

If you have a car and are willing to drive other participants, please indicate that on the sign-up sheet. For more information, contact Bianca Yang at byang@caltech.edu. Please plan to arrive at the museum by 10 a.m. and watch this preview video before attending:

<https://www.youtube.com/watch?v=7d8oOuhSVvs>

2. Day Hike - Mt. Islip - Caltech Y Outdoors

Saturday, May 28th | 7:30 a.m.-3:00 p.m. To sign up, visit <http://goo.gl/forms/rwBxD7ZUj3O8OI7J2>

Come join the Y outdoors group for a hike up Mount Islip on Saturday May 28. We will meet at the Caltech Y at 7:30 a.m. to beat the heat and reach the trail head before 9:00 a.m. the drive is 75 minutes. We should be back no later than 3:00 p.m. We'll start from Islip saddle and follow a predominantly shaded, gently graded route to the mostly exposed 8250 ft peak. The hike is 7 miles round trip with 1627 feet of elevation gain. There are good views of the Yerba Santa Amphitheatre and nearby middle peaks of the San Gabriels. And there is an interesting old ruined stone cabin near the top.

Because it short and not very steep, this is a good hike for people with moderate ability or those looking for a relaxing hike. Make sure to bring appropriate hiking shoes such as sneakers with good traction or hiking boots, 2L of water, snacks for the hike, sunscreen,

and a couple of bucks to reimburse your driver for gas.

Drivers are particularly needed, so please email me if you can drive (have a car) but are not yet Caltech Y approved, so you can get approved before the hike. If you have any questions email mseaman@caltech.edu.

3. Caltech Y Decompression

Saturday | June 4th | 7:00-9:00 p.m. | Winnett Lounge

Stressed during finals week? Join us to decompress with free food — burgers, hot dogs, cookies, fruit and veggies, ice cream, chips and drinks; entertainment — movies; and just hanging out with your friends. It is a great way to relax a little before the last finals of the school year! If you'd like to volunteer to help out, please fill out the form here: <http://goo.gl/forms/X1p1Xt278QfmLLx2>

The theme is Minions, and volunteers get a free gift card.

4. Voting Open for the Caltech Y Photo Contest

Voting Ends Tuesday, May 31st at Noon Choose Your Favorites in the Caltech Y Photo Contest!

For our centennial year, the Caltech Y is holding our first ever Photo Contest. Voting is now open.

Like us on Facebook then "like" your favorite photo(s) in each category: Perspective, Adventure, Service, Civic Engagement, and Leadership.

Voting will end at 12 p.m. (noon) on Tuesday, May 31. We can't wait to see which ones you pick!

5. Yosemite - Centennial Grove Camping - Hiking Trip

Tuesday to Friday | June 14th-17th | Cost \$125 | Sign-up begin Tuesday, May 24th at the Caltech Y — Spaces are limited (payment required on sign up)

Looking for a great way to kick off the summer? Why not join us on a camping and hiking trip to Yosemite National Park and the Caltech Centennial Grove in the Sierra National Forest. The Caltech Centennial Grove is a section of the Sierras containing five giant Sequoias, and Yosemite is one of the most spectacular natural places in the world. With three nights of camping and plenty of hiking available, this trip is a great getaway.

The trip is scheduled for Tuesday, June 14th to Friday, June 20th, and includes transportation, campsites, and most meals. No camping experience is necessary. The Caltech Y Yosemite Trip is open to all Caltech students. Sign up begins at the Caltech Y on Wednesday, May 28th. To secure your spot on this trip you must sign up and pay the fee (\$120) in person at the Caltech Y (505 S. Wilson the house just north of the Credit Union). Spaces are limited.

For more information contact or visit the Caltech Y or our website: www.caltechY.org. For more information on Yosemite National Park check out the National Park website at www.nps.gov/yos.

6. Hathaway Sycamores

Wednesdays | 5:30-8:00 p.m. | Highland Park

Volunteer at Hathaway-Sycamores, a group that supports local underprivileged students. There are a variety of ages and subjects being tutored. The service trip includes about an hour of travel time and 1.5 hours of tutoring. Transportation is included. For more info and to RSVP email Sherwood Richers at srichers@tapir.caltech.edu.

Music faculty Bill and Dolores Bing honored before their retirement at showcase



The Showcase featured various music groups, including the Glee Club, Jazz Band, Concert Band and the Orchestra, as well as artworks by many of Caltech's hidden artists. The showcase was also a special celebration honoring Bill and Dolores Bing, Caltech music faculty who recently announced their retirement after 75 years at Caltech.

Photos Courtesy of Hye Joon Lee

Caltechlive!

WEDNESDAY, MAY 25, 2016 • 8 PM

EARNEST C. WATSON LECTURE SERIES

DNA ORIGAMI: FOLDED DNA AS A BUILDING MATERIAL FOR MOLECULAR DEVICES



Humans have invented a new use for DNA: as a building material for molecular devices. In this talk, Rothemund will describe how complex DNA structures are designed via computer, synthesized using "kitchen chemistry," and studied with atomic force microscopes.

Paul Rothemund, Research Professor of Bioengineering, Computing and Mathematical Sciences, and Computation and Neural Systems

Free Admission

Caltech's Beckman Auditorium

www.events.caltech.edu



Call campus x 4652 for information

A Moon Shaped Pool shows new side of Radiohead

CRYSTAL LIANG
Contributing Writer

Earlier this month, the renowned English rock band Radiohead released its ninth album, *A Moon Shaped Pool*. Known for dramatic shifts in style from album to album, the band has abandoned the tribal, electronic-heavy sound of its last album, *The King of Limbs*, in favor of something more like a fusion of art rock, film soundtracks, folk and ambient music. In that respect *A Moon Shaped Pool* resembles the 2003 LP *Hail to the Thief*, which combined the disparate styles of *OK Computer*, *Kid A* and *Amnesiac*.

Over the past 15 years, the band has garnered much praise for the innovation and craftsmanship on its albums — as well as accusations of being pretentious or faux avant garde. The departure from electronics comes as a relief, as it seems to me that it is not raw experimentation that Radiohead is best at, but the eclectic use of experimental elements to achieve a certain mood. For that reason the minimal, electronic *The King of Limbs* seemed to fall flat, as the band incorporated techniques and beats from electronic artists (e.g., Burial) without doing anything particularly interesting with them.

In the past Radiohead has made sparing use of instrumental ensembles; the only instances

bottom of it all buzzes an electronic bass with no promise of catching you if you fall. The foreboding and violence juxtaposed with the sprightly energy of the song call

“The departure from electronics comes as a relief, as it seems to me that it is not raw experimentation that Radiohead is best at, but the eclectic use of experimental elements to achieve a certain mood.”

to mind Stravinsky’s *The Rite of Spring*. At the same time the song works well as a pop single, flowing from one section to another with catchy melodies and interesting transitions until the strings close in and draw the song to a horror-movie end.

Much of what follows focuses on the experience of the alienated or threatened individual, a classic Radiohead theme. The music video, directed by Paul Thomas Anderson, for the second song and single, “Daydreaming,” is so evocative that it is difficult to separate from the song itself. The video depicts a lost-looking Yorke entering and leaving various places, indifferent to and unacknowledged by other people like a ghost or, obviously, a dreamer, searching for something he cannot find. A plodding piano, which seems to rise out of the mist, guides you through a fluid mélange of bells, distorted chimes and hypnagogic murmurings and warbles, all of which seem to slip by like details in a dream. It ends with a distorted, almost demonic voice, which fans have reversed and pitch-shifted to reveal that it is saying, “Half of my life,” alluding both to Yorke’s music career and to his recent breakup with his girlfriend, with whom he spent 23 years and had two children.

The separation casts a pall over *A Moon Shaped Pool*, but it is far from just a breakup album. There are as many songs in the societal vein of “Burn the Witch” as there are in the personal vein of “Daydreaming.” Most notable is the climate change-themed “The Numbers,” which veers into cheesiness at times. It features a folky guitar, children’s choir (used, rather heavy-handedly, to remind us of our responsibility to our descendants) and dramatic orchestra. Still, the tune is undeniably catchy, the refrain

“One day at a time”) memorable and inspiring and the arrangement concerted with piano, drums and guitar satisfyingly working in tandem as they ought to in this kind of anthemic rock song.

The “Numbers” contrasts with the more fragmented, moody songs on the album. The gorgeous “Glass Eyes,” which marks a midpoint,

movingly describes the experience of alienation through ambient means as opposed to the more straightforward conventions of rock. A soft, sparse piano meanders through a cold and shifting soundscape, made otherworldly through glitchy effects and audio panning, while Yorke describes arriving at a train station and being surrounded by “concrete gray” faces. The strings, initially mournful, transform to convey wonder when Yorke begins to sing about escaping into nature. There is such a stark beauty to the string arrangement that Yorke’s voice almost sullies it. That is perhaps just a consequence of the band’s collective skill at crafting music at this point, which is especially evident on songs that have been played live first: the relatively simple “Identikit” has been reworked into a truly nightmarish, atmospheric piece with sickened moans and crashing industrial noises; the fan-favorite “True Love Waits,” which dates back to 1995, has transformed from a touching but otherwise unremarkable acoustic guitar song to a subdued, haunting impression of the ruins of a relationship.

While it lacks the groundbreaking energy of Radiohead’s most well-known releases, *A Moon Shaped Pool* possesses a singularly eerie and spectral beauty, and it clearly bears the mark of mastery. If this turned out to be the band’s last album, it would be an admirable last act. But the creativity here, which is impressive especially in light of the band’s age,

From the President’s Desk: Sleep, and why we need more

SERENA DELGADILLO
ASCIT President

The Tech Column entitled “From the President’s Desk” first appeared several years ago and has been sporadically revived by presidents and interim presidents alike. This column will be a mixture of updates on current policies, events, etc. concerning the undergraduate body or entire Caltech community and my own personal views on such issues. I hope most of you read my statement in The Tech a while back, but if you didn’t, let me tell you that there are a lot of things to be done within the next year. As always, if you have any questions, please contact me via Facebook or my email, sdelgadi@caltech.edu.

Sleep is one of the most underrated things at this school. To say Caltech is difficult is an understatement, and as Techers, we take pride in knowing that we make our own lives harder for the sake of science, athletics, student government, personal projects, House life, etc. It’s amazing how much we can accomplish in such a short amount of time, whether it’s day to day, term to term, or in all of our years here. However, and I know I’m a hypocrite for saying this: We really need to get more sleep.

Just typing in “effects of sleep deprivation” into Google, you can

find page after page that tells us all the same thing. Sleep deprivation affects our entire bodies. There’s the obvious impairment of cognitive functioning (often compared to being constantly intoxicated). There are other fun physical effects like increased risk of obesity, high blood pressure and even stroke. At this point, I expect most of you healthy teens and twenty-somethings to be blowing that point off, just like I would on most other days. These are things that will come back to bite.

Personally, I find the most catastrophic effect to be on one’s mental and emotional well-being. Consider those late nights we all pulled for midterms a couple weeks ago. Think about if it was worth all that stress, just for another hour and a half with your notes. If you had made the choice to sleep before taking your exam, maybe it would have caused you less anxiety? Maybe even helped your grade?

Every time I meet with an administrator or staff or faculty member, the number one piece of unsolicited advice I receive is to get more sleep. So please consider doing yourself a favor and going from six hours a night to eight. Even from three hours to four is a step in the right direction. And remember, taking care of yourself is everyone’s top priority.

“While it lacks the groundbreaking energy of Radiohead’s most well-known releases, A Moon Shaped Pool possesses a singularly eerie and spectral beauty, and it clearly bears the mark of mastery.”

that come to mind are the film-noir jazz band in “Life in a Glasshouse,” the brass cacophony in “The National Anthem” and the dramatic orchestra in “Spectre,” the band’s rejected submission for the newest Bond theme song, which they released to the public around Christmastime last year. Brooding and cinematic, “Spectre” seems to have foreshadowed the band’s latest evolution in style. *A Moon Shaped Pool* features orchestral arrangements by Jonny Greenwood, the lead guitarist who has a solo career as a film soundtrack composer (*There Will Be Blood*, *Bodysong*).

The first track, “Burn the Witch,” makes the heaviest use of strings on the album. The topography of the song works to create a feeling of paranoia and instability: at the highest level the strings saw to an inexorable rhythm, Thom Yorke’s ghostly voice croons just below, warning of witch hunts, and at the

suggests that there may very well be more to come.

Best tracks: “Burn the Witch,” “Daydreaming,” “Glass Eyes,” “Tinker Tailor Soldier Sailor Rich

Man Poor Man Beggar Man Thief,” “True Love Waits”

Worst tracks: “Ful Stop,” “Present Tense”



Students recognized for excellence in academics, leadership

DEANS' OFFICE

The Housner, Froehlich, Haagen-Smit, Zeigler and Green Awards were presented during a luncheon at the Athenaeum on May 5 hosted by Interim Dean Barbara Green.

Nicholas Schiefer, a senior majoring physics, will receive this year's **George W. Housner Prize for Academic Excellence and Original Research** at commencement. This award is given to a senior or seniors in the upper 20 percent of their class for an outstanding piece of original scientific research.

The **Jack E. Froehlich Memorial Award** is for outstanding juniors in the top 5 percent of the class who show outstanding promise for a creative professional career.

Soon Wei Daniel Lim, junior in physics, is this year's recipient.

Kristie Bo Chi Yu, a junior in biology, and Suchita Nety, a junior in chemistry, are the recipients of the 2016 **Arie J. Haagen-Smit Memorial Award**, which is given to a chemist or biologist who has shown academic promise and has made recognized contributions to Caltech.

Celia Zhang, a sophomore in applied and computational mathematics, and Yujie Xu, a junior in mathematics, were chosen as the

joint winners of the 2016 **Fredrick J. Zeigler Memorial Award**. This award recognizes students who are studying pure or applied mathematics in their sophomore or junior year and who have shown excellence in scholarship as demonstrated in class activities or in preparation of an original paper or essay in any subject area.

Kurtis Carsch, a senior in chemistry, received the 2016

Catherine Jamshidi will receive the 2016 **Hinrichs Memorial Awards**. This award is given in memory of Frederic W. Hinrichs, Jr., who served for more than 20 years as dean and professor at the Institute. The award bearing his name is made annually to the senior who throughout his or her undergraduate years have made the greatest contributions to the student body and whose

Amarise Little is this year's winner of the **Bibi Jentoft-Nilsen Memorial Award**. This prize is given in memory of Bibi Jentoft-Nilsen ('89) an exceptional student leader. After her untimely death in 1990, a fund was established to recognize outstanding student leaders.

Nima Badizadegan was selected as the recipient of the **Doris Everhart Service Award**. This

communication with members of the faculty and administration.

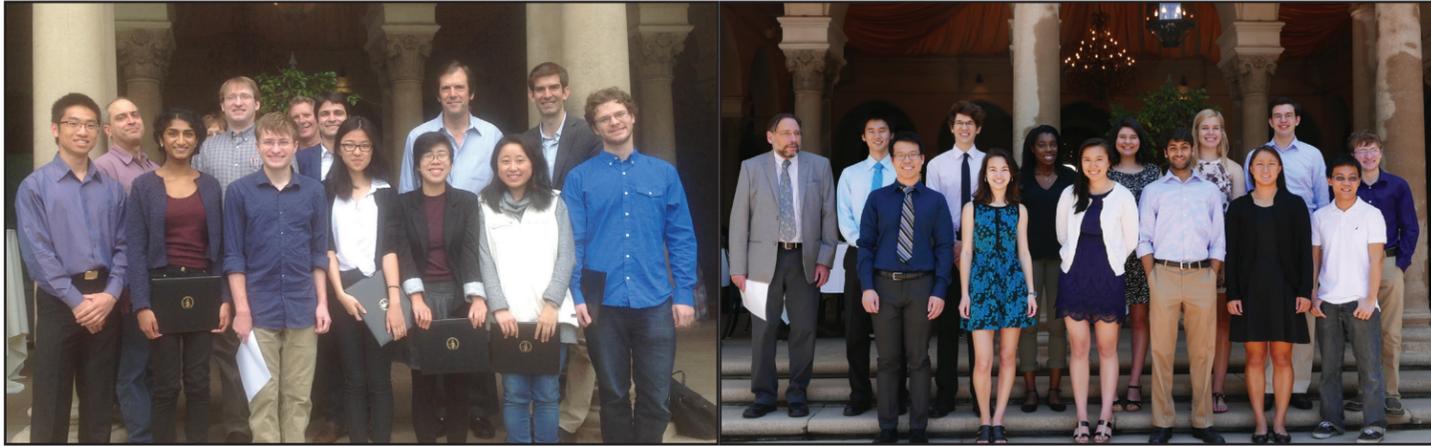
Margaret Lee and Anthony Zhang received the 2016 **Deans' Cup**. Annie Chen, Galen Gao and Stephanie Wong were awarded the **Campus Life and Master's Award**.

Nicholas Zolman was selected as the recipient of this year's **Mari Peterson Ligocki '81 Memorial Award**. This award is made to one

student who, through his or her personal character, has improved the quality of student life at Caltech. It recognizes the student who provides quiet support and kind encouragement to peers. This fund was established by Mr. José F. Helú Jr. ('79) to honor the memory

of Ligocki, who possessed these qualities.

Peter Hung was the recipient of this year's **Lucy Guernsey Service Award**. The Lucy Guernsey Service Award was established by the Caltech Y ExComm in honor of Lucy Guernsey, the Y's Executive Director from 1989 to 1991. The award is given annually to one or two students who have provided exceptional service to the Y and/or the community and exemplify a spirit of service.



(From left) The academic and leadership award recipients are recognized at the Athenaeum for their achievements (Joe Shepherd not pictured on left, Catherine Jamshidi not pictured on right).

Photos Courtesy of Deans' Office

George W. and Bernice E. Green Prize. The Green Prize is awarded to an undergraduate or undergraduates in any class for original research, an original paper or essay, or other evidence of creative scholarship beyond the normal requirements of specific courses.

The Dean of Undergraduate Students hosted a lunch at the Athenaeum on May 12 to honor and recognize this year's winners of the leadership awards.

qualities of character, leadership and responsibility have been outstanding.

Bianca Lepe is the recipient of the 2016 **Mabel Beckman Prize**. This award is given in memory of Mrs. Beckman's many years of commitment to Caltech's educational and research programs. This award is for academic excellence and outstanding leadership skills, a commitment to personal excellence, good character and a strong interest in the Caltech community.

award is given annually to an undergraduate who has actively supported and willingly worked for organizations that enrich student life and the campus or community as a whole and who has exhibited care and concern for the welfare of students on a personal basis.

The Deans' Cup and Campus Life and Master's Award are presented to undergraduates whose concern for their fellow students has been demonstrated by persistent efforts to improve the quality of undergraduate life and by effective

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



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



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

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



⁶² Smarter ¹⁶ Solutions. ⁵⁹ Proven ⁷⁵ Results.

Campus Office 515 S. Wilson Ave. (physical address) • **Campus ATMs** Winnett Center & Keith Spalding Building

626/395-6300 • 800/592-3328 • www.cefcu.org

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

Alumni inducted into 2016 Athletics Hall of Honor

GOCALTECH.COM

Actual Sports Content Editor

PASADENA, Calif. (Mar. 15, 2016) – The 2016 Caltech Athletics Hall of Honor class of inductees has been released. Five individual athletes, one coach and a championship-winning team make up the third induction group, joining 14 other athletes, two pioneers, one coach and one team already enshrined.

The class of 2016 consists of Jim Hamrick '86, Cailin Henderson (Sibley) '97, Chris McKinnon '83, Folke Karl Skoog '32, Gregg Wright '69, 25-year coach Bert LaBrucherie and the 1953-54 Men's Basketball team.

Jim Hamrick '86

Baseball

Hamrick is the most lauded player in Caltech baseball history, having earned All-SCIAC honors all four years and set 10 single-season and career program records in 1985 alone. A two-time winner of the Alumni Baseball Trophy, he also earned the John C. Peterson Freshman Trophy and was named the Caltech Outstanding Athlete as a senior. Hamrick made First Team All-SCIAC once and was recognized by the conference as a catcher, pitcher and utility player at least once each. He still holds eight program records, including both single-season and career marks in runs, RBI and home runs.

Cailin Henderson '97

Cross Country, Track & Field

Henderson competed at the NCAA Championships in both cross country and track & field, including becoming the program's first-ever female representative in track & field and placing 115th in cross country. A three-time First Team All-SCIAC cross country runner, she placed fourth in the NCAA West Regional 5k and claimed the individual SCIAC title in the 3000m, running a 10:06.78, which is still a program record by more than 30 seconds. She finished her career ranking second all-time in both the 5000m and 1500m, respectively. Henderson garnered 10 Coach's Awards between the two sports as well as four Most Outstanding Runner honors (the only Beaver with more than two), three Outstanding Female Track Athlete accolades, one Francis W. Davis Female Athlete of the Year honor and the Basil Katem Golden Ankle Dedication Award as one of just four females to be recognized in a 19-year span. She led the cross country team to its first winning

season in 1995, placing fifth in the SCIAC and sixth in the West region, and served as team captain of track & field for three years.

Chris McKinnon '83

Swimming & Diving, Water Polo

McKinnon accomplished the rare feat of qualifying for the NCAA Championships in each of his four years at Caltech, swimming a total of nine events at the national meet. One of just four swimmers in history to represent the Beavers on the national NCAA scene, he placed a high of fourth in the 400 IM, along with a seventh-place finish in the 200 IM and back-to-back eighth places in the 400 IM. Upon completion of his career, he held 14 program records simultaneously and still retained four entering the 2015-16 academic year. He was a six-time SCIAC champ, including sweeping all three individual events in both 1981 and 1982, and a two-time runner-up. One of just two former swimmers to earn the Campbell Trophy all four years and a two-year captain, he also starred on the water polo team, earning All-SCIAC honors three times and one Coach's Cup, capping his career with Caltech Outstanding Athlete recognition.

Folke Karl Skoog '32

Cross Country, Track & Field

One of three documented Olympians in Caltech Track & Field history, Skoog, who emigrated to the United States in 1925, was a three-time SCIAC champion in track & field and claimed one cross country title before going on to represent his home country of Sweden in the 1932 Summer Olympics hosted in Los Angeles. He placed sixth in his heat of the 1500-meter run, missing out on fourth and a place in the Final by just 0.8 of a second, while his time of 3:59.6 would have placed second in either of the other two heats. During his collegiate career, Skoog set track & field program records in the 1-mile and 880-yard runs twice each, as well as the 3-mile record in cross country. As a rookie, he set both the 1- and 2-mile freshman records and led the Beavers to their first championship in team history. Skoog won his only cross country title and completed the 1- and 2-mile track & field double at SCIACs as a senior after finishing runner-up in the 2-mile and placing fourth in cross country the year before.

Following his athletic career, Skoog pioneered a number of breakthroughs in plant physiology, namely the discovery

of cytokinins and soon earned his PhD in biology from Caltech for his work with auxin, a plant hormone. He continued his career at the University of Wisconsin-Madison, where he taught and eventually co-published one of the most-cited papers in plant tissue culture concerning a then-unknown plant growth regulator in tobacco juice. His extensive list of accolades includes a National Medal of Science, election as a foreign member to the Royal Swedish Academy of Sciences and membership in the American Academy of Arts and Sciences.

Gregg Wright '69

Swimming & Diving, Water Polo

A two-time All-American and two-time SCIAC champion in the 200 Back, Wright became the first Beaver to represent Caltech at the NCAA Championships in 1966-67, placing 10th. Besides his two individual titles, Wright recorded a further five runner-up and two third-place finishes between the 200 Back, 200 and 400 IM. He also swam the backstroke leg of the 400 Medley Relay that placed fourth and sixth at the NAIA Nationals, in addition to individual places of third, fourth and fifth in two years across the 100 and 200 Back events. He served as team captain, won the Campbell Trophy once and set five different program records over his career. Wright also starred on the water polo team, garnering First Team All-SCIAC and NAIA District 3 honors once while leading the team to a second-place finish. A co-captain as a senior, he also earned the Coach's Cup once and was named Caltech Outstanding Athlete.

Wright went on to receive his M.D. from Case Western Reserve and M.Ed. from the University of Massachusetts Amherst and now works in child welfare in a variety of educational settings. He is a member of the Medical and Environmental Work Group National Alliance for Drug Endangered Children, a board member of the Nebraska Alliance for Drug Endangered Children, worked on the Lincoln, Nebraska Mayor's Blue Ribbon Task Force on the Healthcare Safety Net 2009 and participated in myriad projects with the University of Nebraska-Lincoln Center on Children, Families and the Law. Also an accomplished Masters swimmer, Wright has recorded several USMS Top 10 times in his age bracket.

1953-54 Men's Basketball

Coach: Carl L. Shy

Players: Fred Anson '54,

William "Bill" Chambers '55, Dan Chilton, hin-Kuang Jack Chow, Phil Conley, James "Jim" Koontz '56, James "Jim" Tyler, Richard "Dick" Smith '54, Howard "Howie" Shanks, Eugene "Gene" Nelson '56, George Madsen '55 and Paul Lindfors

Managers: James Higgins, Milton Kimmel

The 1953-54 men's basketball team won the only outright conference title in program history, claiming the SCIAC crown with a 6-2 record – a high-water mark for wins that stood until the 2015-16 team's record seven. Having previously tied for the four-team conference title with Occidental in 1943, Head Coach Carl Shy led the Beavers to the undisputed championship by beating every conference opponent at least once, along with scoring a record 112 points in a 50-point win over then-non-conference La Verne, both records which still stand today against NCAA competition. Caltech was led by First Team All-SCIAC wing and Rhodes scholarship finalist Fred Anson, Second Team All-SCIAC forward Bill Chambers and Second Team All-SCIAC guard Howie Shanks, a junior transfer after graduating from PCC in 1952. Anson, a member of the inaugural Hall of Honor class in 2014, held the program career scoring record for 40 years and still boasts the highest points-per-game average in both a career (20.7) and season (22.8). Shy boasted quite the résumé as well, having earned a gold medal in the 1936 Summer Olympics after playing college basketball at UCLA. While serving as the coach at Caltech, he was also captain of the narcotic division of the LA Police Department.

After posting a 5-3 record in 1952-53 and with the majority of the team returning, expectations were high entering the historic season despite the Beavers playing their home games at PCC and other local gymnasiums, with Brown Gymnasium construction not finished until the following year. A 2-0 start to conference play with narrow wins over Occidental and Pomona-Claremont had Caltech in a tie with defending champion Whittier, but the Beavers fell in their next game to Redlands, 59-56. After a four-game non-conference break, the Beavers crushed Whittier, 68-53, to hand the Poets their first SCIAC loss of the year and force another tie atop the standings at 2-1. Whittier avenged the defeat barely a week later, but Caltech kept its hopes of a title alive with

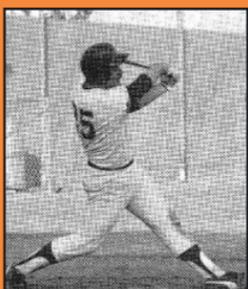
a thrilling 74-72 victory over then-first place Redlands and sealed at least a share of the championship with a 76-59 thrashing of Oxy in the following game. With the Beavers and Bulldogs tied atop the standings at 5-2 and Whittier finished for the season at 5-3, Caltech needed to beat last-place Pomona-Claremont along with an Oxy upset of Redlands. The Bengals from Eagle Rock obliged while the Beavers posted their largest margin of victory in the conference, 67-43, over the Tigers to claim the championship outright. Three-time SCIAC scoring champion Anson poured in 26 points while Chambers and Phil Conley scored 15 and 11, respectively, to account for more than three-quarters of Caltech's total, with George Madsen and Shanks rounding out Shy's regular starting five. The team and student body celebrated the championship with a bonfire on California Blvd.

Bert LaBrucherie

Football, Track & Field, Cross Country

LaBrucherie took the reins of the football program in 1949 as well as track & field the following year, embarking on a 25-year career which ended with him also coaching cross country once the football program was relegated from varsity status in 1968. His tenure was highlighted by the football program's 4-3 record in 1957 – its first winning season since 1945 – and a career 107-105 record in track & field dual meets, including a second-place finish in the SCIAC in his first year. LaBrucherie arrived at Caltech after three years as head coach at his alma mater of UCLA, where he led the Bruins to the 1947 Rose Bowl and was later inducted into their Hall of Fame in 1987. He led the football team to a fourth-place finish in 1951 – its best in 10 years – and its first SCIAC win since 1946. He helmed track & field to its best finish (second) in the SCIAC since its 1942 title, in addition to a remarkable six program records from his time still standing, and compiled a 13-27 dual meet record over five years coaching cross country. A total of 47 football players earned All-SCIAC honors under his tutelage, including 23 First Team selections, while track & field athletes racked up 139 top-5 finishes at the conference meet. The extensive list of elite athletes he coached includes six who have already been inducted to the Hall of Honor – Manny Bass, Phil Conley, Alan Kleinsasser, Fred Newman, Howell Tyson and Dick Van Kirk.

Caltech Class of 2016 Inductees



Jim Hamrick
1986



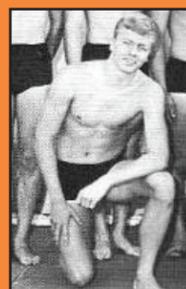
Cailin Henderson
1997



Chris McKinnon
1983



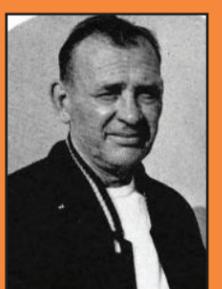
Folke Karl Skoog
1932



Gregg Wright
1969



Men's Basketball
1953-54



Bert LaBrucherie
1949-1974

-<http://gocaltech.com>

ASCIT Minutes

Meetings are every week in SAC 13

ASCIT Meeting 5.19.16

Officers: Serena Delgadillo, Sakthi Vetrivel, Robin Brown, Tim Liu, Bobby Sanchez

Others: Vaishnavi Shrivastava, Ethan Pronovost

Start: 12:08pm

I. President Updates: Serena

- Midnight Donuts last night went well.
- People seem to want bagels as well.
- Gilmartin is the new dean for next year.

II. ARC Chair updates: Tim

- Committee appointments on Sunday
- Student Faculty lunch on Monday

III. IHC Chair updates: Bobby

- Meeting with Joe next Tuesday about Rotation activities/videos/dinners.
Bechtel: Introducing 18 person suites.
- IHC wants t-shirts

IV. Director of Ops Updates: Sakthi

- Signups for ASCIT appointed positions are up.
- No budget for yearbook, so hard copy for seniors only and electronic copies for everyone else.

V. Social Director Updates: Robin

- Possible Dodgers events.
- Maybe food during finals weeks.

End: 12:47pm

REMINDER FROM COUNSELING CENTER:

Meditation Mob

(drop-in mindfulness
meditation group)

Meets every Tuesday

12:00-12:50 p.m.

Bottom floor of Winnett

VICE PROVOST'S OFFICE HOURS

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

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

Spring Term Office Hours

12 p.m. - 1 p.m.

Tuesday, May 24

Friday, June 3

Caltech Public Events Hiring Ushers

Flexible hours.

No experience needed.

Outgoing Personality.

Pay Rate:

\$15 per hour

**Caltech Students
only!!**

Contact: Adam Jacobo

626.395.5907

ajacobo@caltech.edu

The California Tech

Editors-in-Chief

Jon Cotler
Katherine Guo

Page Editors

Chloe Hsu
Ida Huang
Hye Joon Lee
Ciara Ordner
Neera Shah

Copy Editor

Nehaly Shah

Contributing Writers

Serena Delgadillo
Crystal Liang

Circulation Manager

Kit Chinetti

Advisor

Richard Kipling

Caltech 40-58, Pasadena, CA 91125
Contact tech@caltech.edu

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

Letters and submissions are welcome; e-mail submissions to tech@caltech.edu as plain-text attachments, including the author's name, by Friday of the week before publication. *The Tech* does accept anonymous contributions under special circumstances. The editors reserve the right to edit and abridge all submissions for any reason. All written work remains property of its author.

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

Senior class co-president candidacy statements

**SEAN MCKENNA,
MICHELLE WONG**

Hello, Class of 2017! Ditch Day is Tomorrow, and there is still a lot of work left to be done!

Between organizing Ditch Day, planning the senior trip, and choosing a senior gift, the memories that we will form at Caltech are far from complete. We would be honored to serve as your Senior Class Co-Presidents in order to make senior year as memorable as possible. Our ultimate goal is that you look back on your senior year fondly as a time when you participated in many of



Caltech's best traditions. If we successfully accomplish that, we will inspire future classes to invest the same time and energy into these projects in order to maintain these traditions.

During our first three years, we, Sean McKenna and Michelle Wong, have gained valuable tools through our experiences that will help us successfully execute the responsibilities associated with this job. The most important skill for this job is to solicit and integrate the opinions of all seniors. Doing so will ensure that the vision that we have for the 2017 iteration of Caltech's senior traditions is realized. Both of us have learned to be in tune with the sentiments of those around us through our training as UCCs, and Michelle will continue to do so as the Head UCC of Page next year. To turn these plans into action, our experience

with campus organizations will be helpful. Sean has experience working with administrators, writing MHF grants for ASCIT equipment, and sending great ASCIT emails. We also have a close relationship with the Caltech Fund and will effectively work with them to fundraise for the senior gift.

Beyond our experience, we also have a vision of success that we'd like to put into action, manifesting Caltech's traditions at a standard that will inspire the underclassmen to pursue them as vigorously as ourselves. For Ditch Day, we hope to support the fantastic creativity displayed every year by seniors as much as possible. This support will come through planning Tomorrow itself, and we'll get campus pumped for Tomorrow by planning campus-wide fakes that will have students glad that they were woken up early. For our senior trip, we will incorporate the ideas and wishes of all participants in order to provide a memorable experience. Additionally, we recognize that our senior gift is our first chance as alums of Caltech to give back to the school, so it's important to make the fundraising campaign a positive experience. We hope that the senior gift campaign can be excited relative to its current near-ground state. For both the trip and gift, we understand that the best ideas for new approaches will come from the senior class itself, and we are comfortable reaching out to everyone to make sure that all voices are brought into the decision-making process.

Senior year only happens once. It's our turn to make a lasting impression for ourselves and our school. Like everything at Caltech, pulling it off will require a lot of work. We are the candidates qualified to do the work and dedicated to making it happen. We look forward to sharing the senior year experience with all of you, and we hope you will trust us to handle some of its most important details.

If you have any comments or questions feel free to contact Sean McKenna (smckenna@caltech.edu) or Michelle Wong (mwong3@caltech.edu). Thank you!

CHRIS DOSEN, COLE ALLEN

Hello Class of 2017, we are Chris Dosen and Cole Allen, and we are running to be your Senior Class Co-Presidents. We want to help everybody have the best experience possible as we go through this final year together.

We have one main goal for Ditch Day 2017: we want to ensure that it can be built with minimal hassle for our fellow seniors. As a means to accomplish this, we will work to ensure that Ditch Day and all campus fakes are planned well in advance. We will also happily assist individual seniors and Houses in planning Ditch Day activities. In order to make planning more convenient, we will create an easily accessible guide for seniors to reserve rooms for Ditch Day, as well as keep an updated list of what rooms are available. Finally, we will endeavor to reduce the monetary burden of Ditch Day on all seniors. Seniors traditionally get funding for Ditch Day from the Houses and the Caltech Fund's Penny Press. However, this is often only a fraction of the costs. As your Class Co-Presidents, we will actively search for additional funding from organizations such as ASCIT and the Alumni Association.

For Senior Trip and Senior Gift, we will request information



from all the seniors as to what we should do, not just ask the senior house reps. After finding candidate choices which are both popular and practical, we will then present them to the senior class for a vote, allowing all seniors direct input in the final decisions.

Chris has served as a BoC rep, as RevComm chair, and as a UCC. He has great organizational experience and a good working relationship with many Caltech administrators. Cole has served as a Large Group Coordinator for CCF and has helped lead design teams in ME 14 and ME 72. From these experiences, he has gained practice on working with outside groups, keeping projects on budget, and making sure projects are fully functional by deadlines.

We care a lot about Ditch Day and all senior activities, and together, as your Senior Class Co-Presidents, we can ensure an excellent senior year.

ANGELA GUI, KATE LEWIS

Tomorrow is near,
It's almost our final year,
So let's prepare now.

Our turn is coming.
Let's go out with a bang! Yeah!!
Let's make it awesome!

Seniors will be ghosts;
It will be our time to plan
Ditch day, trips, and more.

To fill '16s shoes
Will be hard work. Lots to do,
And we are your team.

With Angie and Kate,
decisions will always be
transparent and sound.

We are qualified.
From Lloyd Social Director
To Head UCC,

We've worked with students
From all of the fine houses

And Tom and the deans.

We've planned trips, events.
Facilitated cross-house
communication.

We are organized,
Creative, adventurous,
And dedicated.

Our priority:
Efficiency, quality,
Lasting memories.

Our campus wide stacks
Will be more exciting than
Chandler Interhouse.

With our senior gift,
We will leave a legacy
Chosen by us all.
The banquet must have
Fantastic food and good booze:
A priority.

To wrap it all up,
We will make our senior trip
Unforgettable.

Next year is our year.
Together we'll make it great.
We want your input.

We want what you want.
A vote for Angie and Kate
Is a vote for you.

Let our final year
Be a year to remember.
Refrigerator.

If you are unsure,
Contact us with your questions.
Thank you for your time!



Crossword

Across

- 1. Complementary ticket
- 5. Unit of weight for precious stones
- 10. Health resort
- 13. Snow leopard
- 15. Mindful
- 16. Distant but within sight
- 17. Reversal of direction
- 18. Relating to the kidneys
- 19. Horse-drawn vehicle
- 20. Nicotiana tabacum
- 22. Top worn by women
- 24. A tame parrot
- 25. Item of footwear
- 26. Particular environment or walk of life
- 29. Portable shelter
- 30. Beer
- 31. Bird of prey

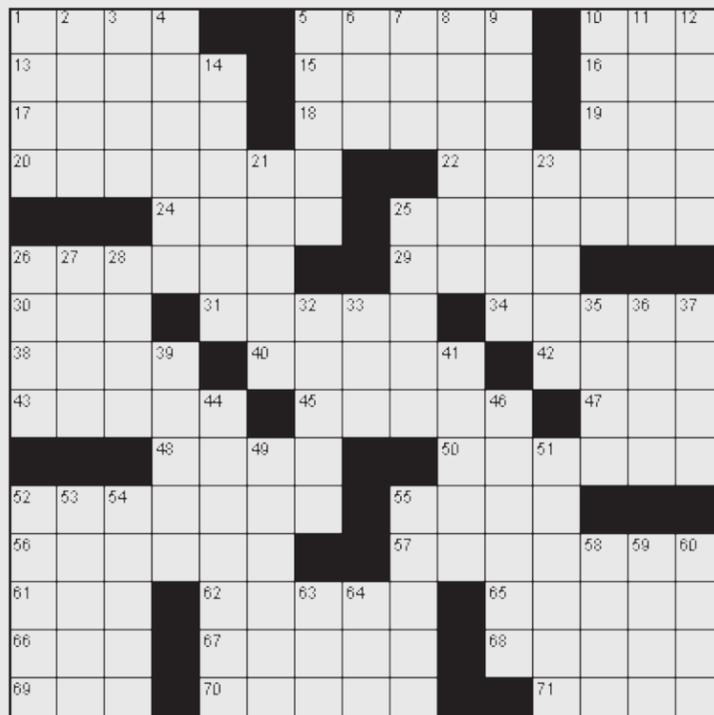
- 34. Band that holds a saddle in place

- 38. Seabird
- 40. Delicacy
- 42. Remedy
- 43. Savory jelly
- 45. Book of maps
- 47. Division of an ocean
- 48. Part of a boot or shoe
- 50. Annoy persistently
- 52. Clique
- 55. Plant tissue
- 56. A kind of heavy jacket
- 57. Skilled worker
- 61. Uncooked
- 62. Wheeled vehicle
- 65. Call forth
- 66. Compete
- 67. Worship
- 68. Suggestive of the supernatural
- 69. Wander off course
- 70. Warble
- 71. Rive

Down

- 1. Moue
- 2. Motor vehicle
- 3. Ignore
- 4. Abrasion
- 5. Religious song
- 6. Veneration
- 7. Operated
- 8. Suitable for cultivation
- 9. Cogent
- 10. Sweet, sticky liquid
- 11. Sang-froid
- 12. A strong emotion
- 14. Extra or repeated performance
- 21. A fastener
- 23. Eye
- 25. Take without the owner's consent
- 26. Heroic tale
- 27. Useful or valuable quality
- 28. Assist
- 32. Juicy fruit
- 33. Allow

- 35. Corrode
- 36. Large woody plant
- 37. Perceive via the auditory sense
- 39. Internal organ
- 41. Large, mainly nocturnal ungulate
- 44. Leaves used in soups and stews
- 46. Small sofa
- 49. Gilbert and Sullivan opera, The ____
- 51. Tremble
- 52. Engrave
- 53. Live broadcast sign
- 54. Tall structure
- 55. A list of jurors
- 58. Painful
- 59. Similar
- 60. Requirement
- 63. Deity
- 64. Metal-bearing mineral



Room with a View of a Party

G. Kuo

10 p.m. The party is starting, but I've put off this essay for far too long. I buckle down and sit in front of an empty Word document, but the music starts. It's the top hits from when I was in middle school. How weird is it listening to a song and catching whiffs of the past or, in my case, the unignorable stench of middle school? I bask in an unplaceable sense of discomfort highlighted by angsty pop hooks.

10:05 p.m. I wander down to the lounge in search of snacks. I hope for mozzarella sticks, but it is in fact chips and cookies. I shovel an unhealthy serving of potato chips onto a paper plate. The plate buckles and drops a chip, but I know it was only trying its best.

10:07 p.m. I'm back in my room. I'm just about to gather up my will to write a paper. I look out the window at the courtyard and the constructed party. It's so earnest. An eager child ready for his first day of school. I can't wait for people to stand around on you uncomfortably, I say to my anthropomorphized vision of the party construction. Maybe they'll even jump rhythmically on you. I'm so proud of you.

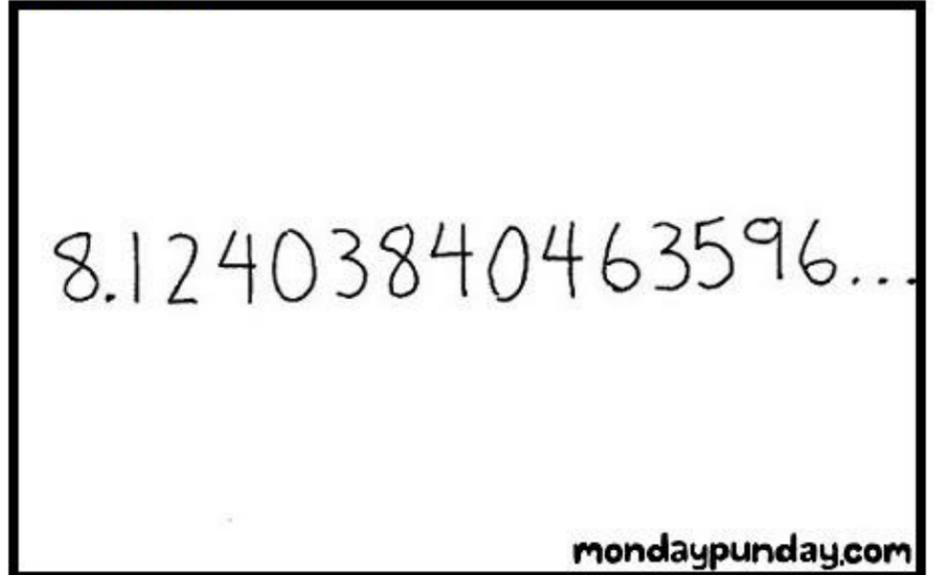
10:08 p.m. I glance the other way toward the bike racks. I should get a bike, I think. That'd be so healthy.

A quaint little bike with a basket in the front, like for deliveries. I could be a delivery girl. Delivering flowers ... kittens ... other happy things. I ding the bell in greeting as I ride down Main Street giving flowers to my regulars, who all greet me with warm smiles. One of my favorite regulars is a kindly old man who runs a bookstore. His wife died long ago, and he purchases flowers every week from my store for her gravestone. He and his wife co-founded the bookstore, and it reminds him of her constantly ...

10:10 p.m. I stretch and accidentally graze my warm laptop charger with my hand. I mistake the heat for the warmth of the human touch and jolt out of my fantasy. Fortunately, I was alone.

1:00 a.m. After a huge timeskip involving lying on the floor in desperation and actual writing, the essay is finished. I stroll through the house and see a trash can in the middle of the hallway. I look inside it. It's filled with vomit. I don't know what I was expecting. To make up for this experience, I try to imagine I'm Will Smith in *I Am Legend*.

Monday Punday



This picture represents a common phrase, title, or person.

Think you know the answer? Take a guess at mondaypunday.com/6

Answers to current crossword (p. 7)

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

<http://puzzlechoice.com>

The California Tech

Caltech 40-58

Pasadena, CA 91125