Volume CXVII Number 14

Chinese New Year, Winter Olympics celebrated



Sophomore Alex Pien stands at the end of a constructed sledding hill.



Hilarity ensues while attendees to the annual Spring Festival Gala play a game of telephone charades.

-Alex Hsu

PARUL PUBBI

Staff Writer

On Saturday, February 15, ASCIT held its Winter Olympicsthemed carnival- snow machines and hay transformed the Olive Walk. Students munched on churros and corndogs as other Techers learned to curl, went down a sled, and watched the Olympics. "It's fun bringing snow and other winter-related things to campus," said Michelle Tang, ASCIT Social Director and organizer of the event. "We don't ever experience a real winter in southern California."

A curling rink was set up for students to learn the Olympic sport, as many attempted to slide rocks across the ice and into one of four rings. "It was lots of fun," said Leo Zornberg, a current

"I was terrible at it and flipped the stone over, but it was cool to try." The mound of snow allowed for

> building, and sledding in Pasadena weather.

"The carnival was great!" said Kate Lewis, a

ALEX HSU Photography Editor

On Saturday, February 8, in Ramo auditorium the Caltech Chinese Association held its annual Spring Festival Gala to celebrate Chinese New Year with the community. Local residents and their families, as well as post-docs, grad students, and undergrads were welcome. The evening consisted of two parts: a traditional Chinese new year's dinner, and later a two-hour show that involved participation from the audience.

One of the highlights of the show was telephone charades, in which members of the audience acted out Chinese New Yearthemed phrases, such as setting off he folded a card in the shape of a

fireworks and eating a watermelon with chopsticks.

So was the audience's guess for the otherwise everyday act of using "chopsticks." As this was going on, there was

an open twitter-style forum being projected onto the auditorium wall, showing audience members' reactions and responses. Most of the show was presented

in both Chinese and English, by the hosts who were fluent in both and would thus translate for each

A magician also took the stage, performing tricks such as changing five one-dollar bills into five onehundred dollar bills in front of the audience's very eyes. He closed his act by performing a trick in which frog, let a Caltech undergrad pick a card, put it back into the deck, and as she laid out each card one by one, the card she picked was nowhere to be found; the frog "jumped" onto the ground, and as the magician picked it up, he showed that it was in fact her card.

The UCLA ballroom dance team also gave a performance, as well as Caltech's own Kevin Linghu who read really fast from a Chinese commercial, supposedly imitating the end of a commercial in which the speaker states all the contractual and legal stipulations

All in all, it was definitely a nice way to welcome in the Chinese new year, whether for first-time celebrators or for those for whom this was part of their culture.

n this issue snowball fights, snowman building, and sledding in

NEWS

New course offered on entrepreneurship

OPINION

Brad gives tips on date night attire

FEATURE

Caltech Y volunteers for homeless

SPORTS

Men's tennis scores victory



News briefs from around the globe

Helping readers burst out of the Caltech bubble

Need to know

< 100 words about the world this week – topics sorted from good to bad

by The Tech Eds

US in second at Sochi

16 medals (4 gold, 4 silver, 8 bronze) won by US, tied with Russia

Hockey team triumphs

4 shootout goals made by American TJ Oshie after overtime vs. Russia [CNN]

Help for African country

2.5k troops to be sent by Europe to aid the Central African Republic [CNN]

Mars mystery solved

1.5-inch "Jelly Doughnut" on Mars identified as rock broken by rover [CNN]

Michael Dunn convicted

60 yrs. in prison given to Dunn for 3 counts of attempted 2° murder [CNN]

Drinking game spreads

4 dead from viral drinking game, in which players outdo one another [CNN]

Egyptian bus explodes 4 dead, 14 wounded in terrorist attack on tourists near Israeli border [CNN]

Food with Mannion!

Do you like eating food?

How about free food at nice restaurants?

Ever want to tell the world exactly what you think of said food?

The Tech will be beginning a new column to chronicle the foodie experiences of new writers every other week...The Catch: They'll be going head-to-head with Tom Mannion who will be reviewing the same restaurant. If you have ever thought you were more of a gourmand than our resident master chef, now's your chance to prove it!

Email us for a spot on the list at tech@caltech.edu

The California Tech

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

Write articles for the Tech

get paid up to \$30

ASCIT Minutes

ASCIT Board of Directors Meeting

Minutes for February 4, 2013. Taken by Catherine Jamshidi

Officers Present: Connor Coley, Catherine Jamshidi, Connie Hsueh, Michelle Tang, Zach Rivkin

Guests: Connor Rosen, Margaret Lee, Patrick Nikong

Call to Order: 10:03 pm President's Report (Zach):

- If you're interested in running for any ASCIT BoD positions, consider attending a BoD Meeting or talking with the person in the respective position. We meet every Tuesday at 10pm.
- Take a Professor to Lunch has been extended to Graduate student TAs. The program allows undergraduates to take an Instructor/TA to a meal with a \$75 subsidy.

Officer's Reports:

- V.P. of Academic Affairs (ARC Chair: Malvika):
 - O Course Capturing Website is up at http://classes.caltech.edu/
 - Several CS 21 lecture videos from this term are on the site
 - Thanks to the CTLO and IMSS for working on this!
 - Collaboration Policy Checklist and Narrative will be up on the ARC website this week. Please email Hannah Klion (hklion@caltech.edu) with any feedback.
 - Pilot program to extend model from SFP office for dinner with professors
 - Several students have expressed interest in a program which allows more time for interaction with a professor
 - The first one is scheduled on Feb 27 with Professor Alan Weinstein
 - Ombuds program
 - If you're an ombud, make sure you ask for post-midterm feedback and email/meet with the professor to relay comments
 - If you have any feedback for a course, email your ombuds or speak with your friendly local ARC rep
 - o Career Advice Resources from Alumni Association
 - Career Advice: https://alumni.caltech.edu/chat-network/
 - Find a job: https://alumni.caltech.edu/find-a-job/
 - Student-Faculty Lunch on Thursday, Feb. 13 in Ricketts
 - Start nominating professors and TAs for an ASCIT Teaching Award: http://tinyurl.com/op76nl2/

• V.P. of Non-Academic Affairs (IHC Chair: Connor):

- Housing has agreed to remove the \$5 per day storage fee so long as we are more honest about our move-in times. It is a violation of the Honor Code to lie about your check-in/check-out dates.
- O Congratulations to Lillian Tong, the newest IHC member!
- $\circ \quad \mbox{WiFi upgrades are actually happening!}$
- We are still in a drought, so be conscious of your water usage.
- \circ There is an alumni career summit on February 22^{nd} , as well as many new resources on their website. Look online or read your ug-lists for details.

• Director of Operations (Connie):

- Re-introducing Take a Professor to Lunch! You and 4-5 people can take your favorite professor or graduate TA to lunch with funding from ASCIT. Contact operations@donut.caltech.edu for more details.
- Submit your works of writing, artwork, or photography to Totem, Caltech's literary and arts magazine, at totem@caltech.edu

Treasurer (Monica):

- o If you have turned in receipts, you will receive an email in the next week telling you to pick up your money.
 - If it was greater than \$100 please check your mailbox for your check.

Social Director (Michelle):

- o If you want to join the Executive Social Committee, please contact Michelle Tang at mtang@caltech.edu
- Ice Skating at the Pasadena Ice Skating Center this past Friday
- Olympics-themed Winter Carnival this Saturday (2/15) afternoon
 - There will be a rink for curling, fake snow, food and snacks, and broadcasting of the Olympics.

• Secretary (Cat):

The Avery town hall happened this past weekend. The Student Experience town halls will be continuing through the rest of this term:

Page	Feb. 22	2:00 pm	Page Dining Hall				
Ricketts	Mar. 1	1:00 pm	Ricketts Dining Hall				
Ruddock	Mar. 1	3:00 pm	Ruddock Dining Hall				
Dahney	Mar 8	2:00 pm	Dahney Dining Hall				

- Sent out recent funding requests decisions. Please contact Connie chsueh@caltech.edu if you have further questions.
- o I will be updating the IHC Photos on the Olive Walk Board soon after elections are done.

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

Meeting Adjourned: 10:59 pm

Caltech Y Column: Look out for new events

PHOEBE ANN LAURA SANTOSO

Contributing Writers

Hi everyone! This is the Caltech Y Column, designed to inform you about the Y and the opportunities we provide for you to inspire your passions, whether by participating in our programs or leading your own!

Upcoming events:

1. Caltech Y Advocating Change Together (ACT) Award

Information and Applications available at www.caltechY.org | Applications Due March 7th by 5pm

Information Meeting: Thursday, February 20th, 4:00 pm, at the Caltech Y

Tackle homelessness, capital punishment, HIV/AIDS, immigration, poverty, or any challenge you choose – it is your opportunity to ACT! The Caltech Y ACT Award, made possible through the generous support of the Caltech Employees Federal Credit Union, offers students an opportunity to pursue and interest in community service or advocacy.

Partner with an organization that is changing the world. Explore real world issues in our local community, across the nation, or around the globe – and make a difference in the world. The \$4,500 Caltech Y ACT Award offers you an opportunity to explore an issue, engage in a cause, and lead a campaign to educate and

engage others. You determine the cause you want to address and the organization you want to partner with, and the programs you will lead on campus. Visit www.caltechY.org for applications and more information or join us at a brief information meeting Thursday, February 20th, 4:00 pm at the Caltech Y.

2. Science Policy Series: Bill Foster - What it's like to be a Scientist in Congress

Friday | February 21st | 12:00 Noon to 1:30 pm | Lunch is provided (priority will be given to students) | RSVP Required

Congressman Bill Foster is a high energy particle physicist, accelerator designer and builder, and businessman who represents the 11th Congressional District of Illinois. His business career started at age 19 when he and his younger brother founded Electronic Theatre Controls Inc., a company that now manufactures 70% of the theatrical stage lighting equipment in the U.S. After obtaining a Ph.D. in physics from Harvard, Bill worked at Fermi National Accelerator Laboratory (Fermilab) where he was a part of the team which discovered the top quark. He serves on the House Committee on Financial Services, where he participated in the creation of several important reforms, most notably the Dodd-Frank Wall Street Reform and Consumer Protection Act. His talk will discuss the day-today realities of life in Congress, political campaigns, and the ways that a scientific and technical background is both useful and irrelevant to political life today. When he first ran for Congress, his campaign was endorsed by 31 Nobel Prize Winners. See the Program Flyer here.

Join us to hear Congressman Foster share what it is like to be a scientist in Congress. The series was made possible with generous support from the George Housner Fund. Please RSVP at caltechY.org

3. Bike hike along Arroyo Seco to the Heritage Square Museum

Sunday | February 23rd | 12:30 to 4:00 pm (estimated return time)

Come along with the Caltech Y Outdoor Adventure group for a nice little ride down the Arroyo Seco bike path, ending with a visit to the Heritage Square Museum. Starting at the Y, the ride is a leisurely ~7.4 miles (~40 mins), good fun for the regular and occasional cyclist. Our destination, Heritage Square, is a living history museum spread across acres of landscaped grounds that explores the first 100 years of California statehood with historically significant Victorian Era structures from different Los Angeles neighborhoods. Meet at the Y for a 12:30pm departure with a bike, bike helmet, and \$6 toward the museum entrance fee. To sign up, visit caltechY.org

4. Getty Museum Trip - Caltech Y Explore LA Series

Saturday | March 1st | 11:00 – 4:00 pm | Los Angeles | Transportation

is provided | Spaces are limited - Sign up begins Friday, February 14th via Electronic Doc, Pay at the Caltech Y (\$7) By Wednesday, February 26th at Noon.

The J. Paul Getty Museum seeks to inspire curiosity about, and enjoyment and understanding of, the visual arts by collecting, conserving, exhibiting interpreting works of art of outstanding quality and historical importance. To fulfill this mission, the Museum continues to build its collections through purchase and gifts, and develops programs of exhibitions, publications, scholarly research, public education, and the performing arts that engage our diverse local and international audiences. Visit http://www.getty. edu/visit/center/ for more info.

Sign up at caltechY.org 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. If confirmed you will be asked to pay at the Caltech Y by Noon, Wednesday, Feb 26th and may be made with cash, check, or credit card. Explore LA is coordinated by the Caltech Y with generous support from the Master of Student Houses. The Caltech Y is located in the Tyson House 505 South Wilson (Bldg. 128).

5a.Pasadena LEARNs TutoringWednesday and Friday
Weekly| 3:00 - 5:00 pm | Madison
Elementary School | Pasadena

Come volunteer at Madison Elementary School! We are partnered with the Pasadena LEARNs program at Madison and work with their Science Olympiad teams on Wednesdays and do regular tutoring on Fridays along with occasional hands-on science experiments. We volunteer from 3 to 5 PM on Wednesdays and Fridays. Volunteers should be willing to commit to one visit per week. Transportation is provided. For more information and to RSVP, contact vkkumar@caltech.edu.

5b. Hathaway Sycamores Tutoring

Saturday | February 15th | 1:30-4:30 pm | Highland Park

Volunteer at Hathaway-Sycamores, a group that supports underprivileged motivated high school students. Some of the subjects being tutored are AP Chemistry, AP Physics, and AP Calculus. The service trip includes about an hour of travel time and 2 hours of tutoring. Transportation is included. For more info and to RSVP Email Josie Kishi at jkishi@caltech.edu or Ted Xiao at gxiao89@caltech.edu. Please note that work study is no longer be offered for this service

If you have any questions at all, feel free to contact the Caltech Y at (626) 395-6163 or caltechy@ caltech.edu. Go to http://caltechy.org/lists/ to self-subscribe to announcement lists for upcoming events and sign-up information.

New course on science and entrepeneurship offered

NEHALY SHAH

News Editor

This course is designed for undergraduates (sophomores, juniors, and seniors) and graduate students who are interested in starting up companies early in their careers or who want to become key contributors in new emerging technology companies after graduation. No business or entrepreneurial background is necessary.

"The class is about how to start science and technology-based businesses, but the lessons on how to act entrepreneurially can be applied to whatever you do in your career and later in life, whether in start-ups, small companies, large companies, or academia," said Rob Chess, a professor for the course.

The course is "hands-on" and practical, but provides students with several important conceptual frameworks and analytical techniques. Students will be introduced to the analysis and actions required to launch a successful high tech company. Specifically, the course addresses challenges of evaluating new technologies and business ideas for commercial feasibility, determining how best to implement those ideas, attracting the resources needed to start a new venture (e.g., key people, corporate partners, and venture capital), preparing comprehensive yet focused

business plans, structuring and negotiating important business relationships, and managing early stage companies toward "launch velocity." The course also touches on "harvesting" the value of a successful company through the acquisition of the young firm by an established company.

The primary technique is the "case method" in which students read and analyze prior to class "cases" describing real situations that confronted high tech entrepreneurs and then discuss in class, with the guidance of the instructor, how they would have addressed those situations and what lessons can be learned from them. Study questions are provided to guide the students' preparation of the cases, but students are encouraged to be creative with their own analyses and action

"The style of studying cases and discussing them is very interactive and is an engaging way to learn. Students hopefully will find not only the content but also the teaching style very stimulating. Looking at the actual situations helps students develop judgment and pattern recognition so they can make good decisions when faced with real world questions such as if a specific idea or new technology is promising enough to start a business around, whether to bring on co-founders and how to divide the equity, how to raise

money for a new venture, how to get real market feedback on a product concept, or what business model to employ," said Chess.

In addition to preparing the cases, there are required readings for some classes to provide conceptual frameworks, analytical techniques, background information, and guidelines for addressing issues raised in the cases. Some classes include "lecturettes" and discussions to highlight key techniques, and several classes feature visits by technologists, entrepreneurs, and investors who can provide current "real world" insight and guidance.

The most powerful learning opportunities are provided by the two written assignments. The mid-term paper gives each student the chance to apply what has been discussed in the early part of the course to finding a new technology and assessing its commercial feasibility. The final project provides the chance to study and analyze in depth a real startup company.

"We are very excited to bring the class to Caltech because students here are so bright and often are involved in gamechanging, cutting-edge science and technologies at Caltech and later in their careers. Many of these discoveries and technologies can serve as the basis for successful businesses with products and services that advance the state of the art commercially and greatly benefit society," said Chess.

The class will be co-taught by Ed Zschau, Chuck Holloway, and Rob Chess. The instructors bring practical experience from having founded, led, funded, advised, and overseen numerous technology and science-based companies. In addition, each instructor has extensive experience in teaching entrepreneurship. The course will also feature guest entrepreneurs sharing their personal stories and thelearning from their experiences.

Chess is an experienced serial entrepreneur and CEO, Stanford Graduate School of Business entrepreneurship lecturer, and Caltech alumnus and Trustee. His entrepreneurial career spans 30 years and includes starting and/or leading successful private and public companies in the biotechnology, medical technology, cleantech, and computer fields. He received his BS in Engineering with Honors at Caltech and an MBA from Harvard.

Zschau has started and led several technology companies over the past 45 years and has served as head of the \$6.5 billion IBM Storage Systems Division in the 1990s. He has taught for several years at the Stanford Graduate School of Business and the Harvard Business School, and, for the past 16 years, he has offered a high tech entrepreneurship course in the Engineering School at Princeton

University. Zschau served in the US House of Representatives, representing the Silicon Valley area of California for two terms in the 1980s. He received his AB degree with honors in Philosophy from Princeton University and his MBA, MS, and Ph.D. degrees from Stanford.

Holloway is the holder of the Kleiner Perkins Caufield and Byers Professorship in Management Emeritus at the Stanford Graduate School of Business and is a leader in the study and teaching of entrepreneurship, supply networks, and technology management. He is the founding co-director of the Stanford Center for Entrepreneurial Studies at the Graduate School of Business aimed at curriculum development and research on smaller, rapidly growing companies. He has served on the Boards of ten emerging companies and has advised many others. Professor Holloway has a BS in electrical engineering from the University of California, Berkeley and an MS in nuclear engineering and Ph.D. in business administration from the University of California, Los Angeles.

The course will meet on Mondays and Wednesdays (1:00-2:30PM) during spring quarter.

Note: This class is substituting in spring for E102, which in past years was taught by Professor Ken Pickar, who will resume Entrepreneurship in the fall quarter, teaching E102b.

Brad/Chad Couture: How to get dressed up for date night

BRAD CHATTERGOON

Staff Writer

Hey ladies and gents. It's week 7 so we're about three quarters of the way to end of term! As you all may know, Valentine's Day was last Friday. Hopefully some of

you finally got up the courage to profess your undying love to some lucky techer even if I didn't. Since that means that some of you might be getting ready to go on your first or second date, here's how to dress for said date!

This week I'll be telling a story of what I think a date looks like in order to get across what to wear. Picture this:

Gents:

It's 2 hours before your big date and it's time to get ready to impress. (Yes, you're going to start getting ready 2 hours in advance.) Step 1: Shower time. Time to lather up that AXE detailing tool with Bath and Body Works' body wash for men, because guys deserve to smell good too. Step 2: Wash your face with a scrub so that your date sees fresh glowing skin while staring into your eyes. Moisturize to maintain that glow. Step 3: Clip your fingernails so that you're not cutting your date's hand when you go for the always-intimidating first hand-hold. Step 4: Style your freshly cut hair. You did get a haircut recently right?

Step 5: Time to pick that outfit.

You're probably stuck deciding

between the star wars bathrobe

and a cool button down. Against

your better judgment you go with the button down. Next you

pull on your 2nd favorite pair

of skinny jeans. Second favorite

because you probably wear your

favorite everyday and they're all

worn out. You're thinking, "skinny

jeans are pretty tough to take off

if things get steamy..." but then

you realize it's only the first date,

so you're probably not getting any

anyway, might as well just look

good instead. With that in mind

you reach for your brown leather

just look good instead.

...realize it's only the first date, so you're

probably not getting any anyway, might as well

belt. The next item you reach for Rolled up sleeves show will be your casual blazer, probably in a light shade such as sky gray or khaki.

There are two reasons for this, (1) blazers make you look amazing and (2) it's cold during winter. To finish up is shoe choice. Since it is a

> going to class up a bit and don that pair of loafers that your m o m convinced you to buy

date you're

"just in case" (Editor's Note: She clearly had faith that you'd get a date eventually. Be sure to send her a card for mother's day).

Step 6: Onto the restaurant! Before you sit down (and after you pull out your date's chair because chivalry and all that... unless she's a "strong independent woman that don't need no man") you take off your blazer and drape it over her chair, then take your seat, undo your cuff buttons and proceed to roll up your sleeves to just below your elbow for two reasons: (1) You're eating, so you want to avoid getting your shirt messy and (2) off those sexy forearms you've working on at the gym.

Step 7: Dinner is over! Time to go for a walk. As you're leaving the restaurant you drape your blazer over your arm instead of putting it on.

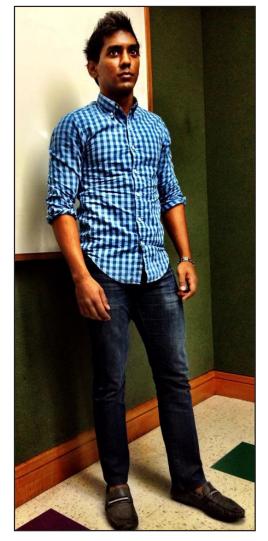
As you get a little ways from the restaurant, you notice it's a bit chilly and drape your blazer over your jacket-less date (the blazer makes sense now huh?).

Step 8: See where the night takes you.

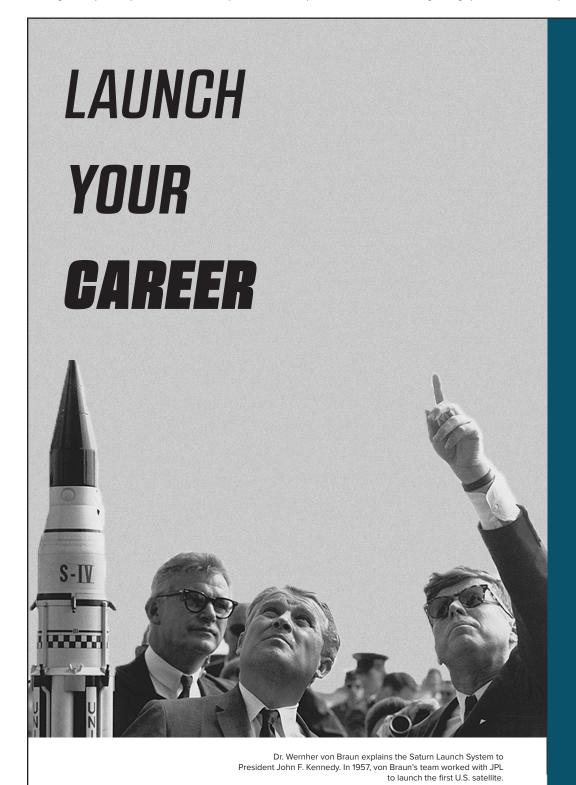
Ladies:

I'm sure you already know how this whole getting dressed for a date thing goes.

Hope you enjoyed my little monologue and that it helps with that date you surely have lined up. If there are any topics that you want covered feel free to email bchatter@caltech.



Resident fashionista Brad Chattergoon showcases a classy example of date attire. -Brad Chattergoon



The Caltech Career Development Center and The Caltech Alumni Association present the

Caltech SUMMIT

Saturday, Feb. 22 1:00 –7:00 p.m.

Access a professional network like no other.

Join Caltech Alumni to hear about their experiences in a broad range of careers in science, technology, entrepreneurship, and more. Connect with other Techers. Launch your career on the right trajectory.

Full schedule and registration available at

alumni.caltech.edu/career-summit

Caltech Y Volunteers help homeless at Union Station shelter

WEN MIN CHEN Contributing Writer

Twice a month, Caltech is called upon to help out at the local homeless shelters. A volunteer group composed of Caltech students, staff, and affiliated volunteers travel to the Adult and Family Centers located in Pasadena to cook dinner for the residents. The Caltech Y helps recruit volunteers and provides the food to make dinner. However, waning interest in this program might lead to a reduction in the frequency of these visits.

Union Station Homeless Services runs several programs that aim to help homeless community members become stable and selfsufficient. This is accomplished though counseling, shelter housing, assistance in benefits enrollment, other programs. These services have become increasingly important—while the national rate of homelessness was 0.2% in 2012 and has been moderately decreasing¹, Los Angeles County's homeless population increased by 15% in recent years². Additionally, the proportion of homeless families has grown as well, and nearly a quarter of the homeless are under the age of 183. Los Angeles has

an increasing need for homeless services, and Caltech helps out by volunteering at a few of Union Station's shelters.

Both the Adult and Family Centers are located less than 2

Caltech. They both provide nutritious meals, shelter, health services, and adult classes topics money management and life skills. Residents of both the Centers stay for an average of three months, during which they save 70%

of their income towards future

Finding stable housing in the future is vital as it is difficult to receive public assistance without a permanent address, not to mention obtaining a job.

Additionally, the Family Center is one of the few shelters in Los Angeles County that accepts single fathers with children.

The shelters depend heavily on volunteers to prepare meals, provide child care, and perform office work. Caltech helps out through Adopt-A-Meal program, where we visit each Center once



A group of Caltech volunteers poses after cooking dinner and cleaning up the kitchen at Union Station Adult Center.

-Wen Min Chen

a month to prepare dinner for the residents. Each dinner includes a main entrée, starch, vegetable, and dessert. About 60 people are served at the Adult Center, while at the Family center about 30 people are served. The group leader will have the necessary groceries and recipes to prepare the meals, and

volunteers do not need to have

prior cooking experience to help

the volunteers eat alongside the residents and chat with them. It's very interesting to meet people from different walks of life; many people had exhausted their savings

out. After everyone is served,

during economic downturn after being laid off, while others were crippled medical debt.

Katherine Lee, a junior studying Chemistry, is a frequent volunteer for Union Station. "It's really, really fun to cook meals for people. You also get to meet different people in your volunteer group, from grad

students and Caltech staff to people from other houses," says Katherine. In fact, volunteers have ranged from foreign exchange students to the families of Caltech

Liz Jackman, the Student Programs Coordinator for the Caltech Y, oversees the volunteer groups. She says that, "Union Station gives Caltech students,

staff and faculty an opportunity to serve their community, interact with people from different walks of life, and understand some of the social issues that we face as a country. It's a great way to give back and one can't help but feel a sense of accomplishment after cooking, serving and washing dishes for a group of 60 thankful people."

The Caltech Y's volunteering program with Union Station spans nearly 20 years, and is the Y's longest standing community service program. However, it needs your help to keep it program running. The time commitment for one trip is about four hours, and trips occur every first Sunday and third Saturday of each month. Volunteer spots are on a firstcome, first-served basis. Sign up for reminders at http://caltechy. org/lists/, and make a difference in your community!

1.http://www.endhomelessness. org/library/entry/the-state-ofhomelessness-2013

2.http://articles.latimes. com/2013/nov/21/local/la-me-lnhud-homeless-20131121

3.https://www.onecpd.info/ resources/documents/AHAR-2013-Part1.pdf

LA Philharmonic concertmaster teaches and performs at Caltech

JONATHAN SCHOR

Editor-in-Chief

At Caltech, it's not uncommon to interact with Nobel Laureates and other renowned scientific minds. This year, though, studentmusicians are privileged in a different way: Martin Chalifour, the concertmaster for the LA Philharmonic, is a Visiting

secondary schooling he envisioned himself as a member of the Montreal Symphony and a math teacher, melding the two in fruitful ways. Upon graduating, though, he had to make a decision: Attend the world-renowned Curtis Institute to continue his musical training, or study mathematics at a university in Montreal. Though the choice was not easy, Chalifour sided with

Angeles to assume the position of Principle Concertmaster. He's been here ever since, both in his capacity as a performer and as a teacher at the USC Thorton School of Music.

Chalifour's most recent foray into teaching at Caltech is due to a number of factors, among them his love for amateur musicians, his passion for math and science, and his proximity to the school. According to Chalifour, there's very little difference when it comes to teaching science students as opposed to music students. As he notes, "any good scientific mind uses intuition and feeling," two key elements of successful musicianship.

As such, he has thoroughly enjoyed interacting with and coaching Caltech students and hopes to continue doing so.

Recently, Chalifour awed the Caltech community in a Valentine's Day performance at Dabney

The hall was packed with students and community members, all of whom were eager to hear an assortment of romantic pieces.

Among these was Faure's Sonata 1 for violin and piano, as well as "History of Tango" by Astor Piazzolla for violin and guitar. The concert seemed to be very well received by all in attendance.

Chalifour will be coaching chamber groups through the remainder of the school year, and hopes to continue to inspire Caltech musicians to new heights of musicality.



Caltech's counseling center has designed an exciting series of 3 workshops to help you understand your emotional life better, to improve your relationships, and to help you make smarter choices. Here's what's in store:

- Tuesday, February 18th: Reading the Emotions of Others, presented by Maria Y, Oh, Ph.D., and Wendy Lopata, LCSW. This fun and exciting workshop will help you get even better at understanding how other people are probably feeling. We'll use examples from real life and from videos to help you build some of these valuable skills.
- Thursday, February 27th: Emotionally Intelligent Problem Solving, presented by Charisma Bartlett, Ph.D. This workshop caps off the series, and focuses on practical skills for using your emotions to your advantage when you feel stuck or confused.

All workshops are in the Winnett Lounge and run from 12:00 - 1:00. Free lunch is provided!



According to Chalifour, there's very little difference when it comes to teaching science students as opposed to music students.

Associate and has been spending his time coaching chamber groups to achieve musical excellence.

In many ways, Martin Chalifour exemplifies the oft-cited connection between music and science. As a boy growing up in Quebec, he began playing violin at his parents' suggestion. Violin was at first merely a hobby, but as Chalifour became more interested in music he looked to it as a potential career. At the age of 12 he joined the Montreal Conservatory and graduated with honors at the age of 18.

In parallel with his growth as a musician, Chalifour also developed a keen interest in mathematics. Throughout his

music; by the time he had gotten to his third calculus class he had gotten "tired of having to prove every little thing," and found that his passion truly lay with music.

After graduating from the Curtis Institute, Chalifour served as Associate Concertmaster of the Atlanta Symphony for six years. He then moved to Ohio to occupy the same position at the Cleveland Orchestra, spending part of his time teaching at the Cleveland Institute of Music. After a number of concert tours throughout the US and Europe, performances at summer music festivals, and the founding of the Cleveland Orchestra Piano Trio, in 1995 Chalifour made the move to Los

Today's Puzzle: Crossword

1	2	3	4	5		6	7	8	9		10	11	12	13
14		-	+	1		15	1	+	1		16	1	1	-
17			1			18	+			19		H		
20				21	22		1			23			+	
			24						25					
26	27	28		1		25	29	30				31	32	33
34			1	1		35	i	+				36		
37			1		38		1				39			
40		0		41	1			+		42		+	+	9
43		0		44	1	0	1		45		t	t	+	100
			46				- 277	47			t		710	(a)
48	49	50				51	52					53	54	55
56	+			0:	57	2	10	1	•	58	59			83
60	+		+		61	10	+	+		62	+	1		
63			+		64		+	+		65	+	-		

[www.puzzlechoice.com]

Across

- 1. Subject
- 6. Breed of dog
- 10. Fit
- 14. Ice hut
- 15. Halo
- 16. Remunerated 17. Swiss currency
- 18. Toy
- 20. Elfin
- 21. Hummock
- 23. Cleverly humorous
- 24. Tournament for
- professionals and amateurs
- 25. A stratum of rock
- 26. Laporid
- 29. Musical instrument
- 31. Administrative division
- 34. Heron
- 35. Lieu
- 36. Fish eggs
- 37. Soil used in pottery 38. Essential fluid
- 39. Ring recurrently
- 40. Drag behind
- 41. Cut off
- 42. Taut
- 43. Nocturnal bird
- 44. Wharf
- 45. Leave empty
- 46. A great distance 47. Musteline mammal

- 48. Sweetner
- 51. Creep
- 53. Male title
- 56. Practical joker
- 58. Legal excuse
- 60. Look at amorously
- 61. Juicy fruit
- 62. Inflexible
- 63. Animal hide
- 64. Amiss
- 65. Impenetrable

Down

- 1. Squabble
- 2. Fiend
- 3. Dramatic work
- 4. Electrically charged particle
- 5. Pilot enclosure
- 6. Male chicken
- 7. Body of a ship
- 8. Examination by word
- of mouth
- 9. Manner
- 10. Garden pest
- 11. Lure 12. Fabric used to dress
- wounds
- 13. Highly strung
- 19. Thick woolen fabric 22. Mesh
- 24. Take orders
- 25. Male hog
- 26. Right-hand page

- 27. Lambent
- 28. Free-for-all
- 29. Freshwater
- carnivorous
- mammal
- 30. Alcoholic beverage
- 31. Structure for open-
- sports 32. Cook with dry heat
- 33. Noisy riotous fight
- 35. Rescue
- 38. Low dam
- 39. Eat like a bird
- 41. Flicker
- 42. Large drinking vessel
- 45. By way of
- 46. Aspect
- 47. Jovial 48. Halt
- 49. Exhort
- 50. Respiratory organ of a fish
- 51. Cook slowly in
- a liquid
- 52. Close
- 53. One of the twelve
- divisions of the zodiac
- 54. Wading bird
- 55. Travel by horse
- 57. Health spring
- 59. Prevarication

Send in your

and crocne knit and cro cspoetry drawings o afts poe art scul

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ngs pnotograpt avs short storie ndering origan ік раіці rt storie jami cei

*images must be at least 300dpi

to totem@caltech.edu by March 1st for your work to be featured in



GoCaltech

The Beavers started their home schedule in grand fashion by taking out Occidental 6-3 on Saturday afternoon.

A huge difference for Caltech in posting the win was the play of its three first-years. The trio combined to go undefeated in their five matches.

Sathwick and Ruthwick Pathireddy teamed up to win the second doubles match 8-3. In singles play Sathwick posted a 7-5, 6-3 victory at the No. 3 singles position while his twin brother won 6-0, 7-6 (2) at the No. 4 slot.

Fellow first-year Morgan Lebby joined forces with Rushikesh Joshi to win the third doubles match 8-5. Lebby

continued his winning ways with a 6-4, 6-4 win at the sixth singles position.

Men's tennis defeats Occidental

Luka Mernik won 6-3, 7-6 (6) at the No. 5 singles position.

It is the first time since the 2004 season the Beavers knocked off Occidental.

While the two teams are SCIAC foes, this match does not count in the league standings. Their April 4th match will be a conference match.

Tennis Match Results

SINGLES

- 1. Josh Dancu (OXY) def. Devashish Joshi (CALTECH) 6-2, 6-1
- 2. Kevin Siebs (OXY) def. Rushikesh Joshi (CALTECH) 1-6, 6-1, 6-3

- 3. Sathwick Pathireddy (CALTECH) def. Avery Howard (OXY) 7-5, 6-3
- 4. Ruthwick Pathireddy (CALTECH) def. Jack Streeters (OXY) 6-0, 7-6 (7-2)
- 5. Luka Mernik (CALTECH) def. Jessie Kreger (OXY) 6-3, 7-6 (8-6)
- 6. Morgan Lebby (CALTECH) def. David Cotton (OXY) 6-4, 6-4

DOUBLES

- 1. Josh Dancu/Avery Howard (OXY) def. Devashish Joshi/Luka Mernik (CALTECH) 8-4
- 2. Sathwick Pathireddy/Ruthwick Pathireddy (CALTECH) def. Kevin Siebs/Jack Streeters (OXY) 8-3
- 3. Morgan Lebby/Rushikesh Joshi (CALTECH) def. Jessie Kreger/Trevor Brown (OXY) 8-5



Freshman twins Sathwick and Ruthwick Pathireddy take on Occidental in a doubles match that ended with an 8-3 victory.



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Weekly Scoreboard

Women's Basketball vs. Redlands L, 77-55 Final

Men's Basketball vs. Redlands L, 76-70 Final

Women's Tennis at Claremont-M-S L, 8-1 Final

Men's Baseball at Whittier L, 16-1 Final

Men's Baseball at Whittier L, 14-3 Final

Men's Baseball vs. Whittier L, 14-2 Final

Women's Basketball vs. Claremont-M-S L, 66-37 Final

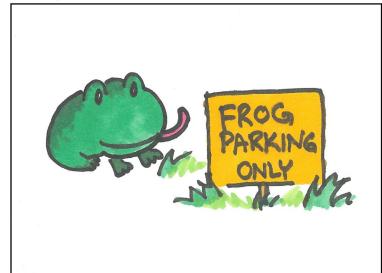
Men's Basketball vs. Claremont-M-S L, 83-52 Final

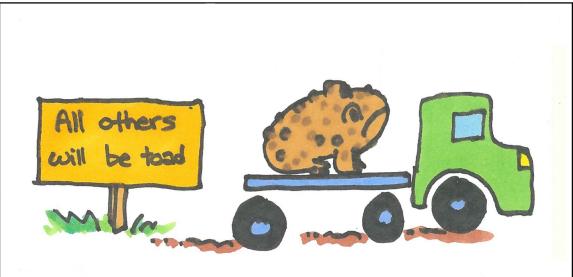
> Men's Baseball vs. Pacifica L, 9-3 Final

> Men's Baseball vs. Pacifica L, 9-3 Final

Humor

Unoriginal Jokes Kerry Betz





A Sense of Humor



Audrey Liu

For more photos, videos, and archives of previous issues, check out the Tech website!

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The California Tech

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