Juniors receive recognition from Goldwater Foundation

Dean’s Office

All four nominees from the California Institute of Technology were honored by the Barry M. Goldwater Scholarship Foundation. Three have been awarded Barry M. Goldwater Scholarships for the 2014-15 academic year and the fourth was awarded Honorable Mention.

Adam Jermyn, a junior from Longmeadow, Massachusetts, majoring in Physics, Ann Wang, a junior from Rochester, New York, majoring in Physics and Chemistry, Charles Tschirhart, a junior from Naperville, Illinois, studying Applied Physics and Chemistry were selected for this prestigious prize. Adam plans to conduct research in emergent phenomena and intends to teach at research university after earning his Ph.D. in Condensed Matter Physics.

Lawrence Wang, a junior in Biology, was awarded Honorable Mention in the competition. Lawrence plans to pursue a M.D./Ph.D. in Molecular Biology and conduct translational biomedical research. The Goldwater Foundation is a federally endowed agency established by Public Law 99-661 on November 14, 1986. The Scholarship Program honoring Senator Barry Goldwater was designed to foster and encourage outstanding students to pursue careers in the fields of mathematics, the natural sciences, and engineering. The Goldwater Scholarship is the premier undergraduate award of its type in these fields.

Since its first award in 1989, the Foundation has bestowed 7,163 scholarships, 117 Marshall Awards, 112 Churchill Scholarships, and numerous other distinguished fellowships such as the National Science Foundation Graduate Fellowships.

Caltech students explore Galápagos Islands

Let’s just say the Galápagos and I now have a pretty serious love affair going. I’ve been head over heels for the place ever since I can remember having known it existed. For at least a decade, if you’d thrown money at me and told me to go travel, the Galápagos would have been top on my list. Thanks to the new cross-listed class offering this past winter term, Bi/Ge 105, that’s pretty much exactly what happened. Eleven weeks of learning about evolution culminated in a class trip to the Galápagos so we could see the course concepts as modeled in real life.

Even having spent an entire coming-of-age building up the idea of the Galápagos in my mind, I was still constantly overwhelmed in the most beautiful of ways by the real thing. To start with, there was the size discrepancy.

In this issue

NEWS
Students volunteer for Make-A-Difference Day

FEATURE
Techer reflects on Galápagos adventure

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Nailen reviews La Dispute’s new album

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New Sudoku puzzle

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

US employment rises 192k jobs added in March, aligned with 2014 monthly expectations [BBC]

Afghan voters triumph 39 bombings by Taliban in last 2 months not enough to deter voters [NYT]

NYC law goes into effect 1.2M workers get paid sick leave, making NYC largest city to offer it [NYT]

US to deploy warships 2 missile destroyers will be sent to Japan to counter N. Korean threat [TIME]

Univ. party turns violent 100 arrested, 44 hospitalized in large Isla Vista party near UCSB [TIME]

Camp’s riot turns deadly 3 killed, 16 wounded before shooter killed himself at Fort Hood [CNN]
ASCIT Minutes

ASCIT Board of Directors Meeting
Minutes for April 1, 2014. Taken by Catherine Jamshidi

Officers Present: Connor Rosen, Zach Rivkin, Catherine Jamshidi, Connie Hsueh, Malvika Verma

Guests: Connor Coley, Patrick Nikong, Ellora Sarkar, Elliot Simon, Chris Dosen, Mateo Martinez, Adam Jermy, Aditya Karan, Nick Zolman, Parul Pubbi

Call to Order: 10:14 pm

President’s Report (Zach):
- A group of students will meet with the new President, Professor Rosenbaum, to discuss the Bechtel Residence when he visits later this month.
- It was announced that Professor Dabiri will be the new Dean of Undergraduate Students as of July 1. He is attending house dinners to best understand student life.

Officer’s Reports:
- V.P. of Academic Affairs (ARC Chair: Malvika):
  - The Option Fair was this past Thursday around lunchtime. There were many students who attended and the event was successful in helping frosh.
  - Ombuds training is this Friday, April 11 at the CTLO during lunch (3rd Floor of CSS).
- V.P. of Non-Academic Affairs (IHC Chair: Connor):
  - The FCC Reunion Proposal was approved by the Deans’ Office. More information to come regarding the details, but this will allow up to $5 per student to go out with their frosh camp groups to check in.
  - Met with the Alumni Board to talk about how to develop better connections with Alumni as well as talk about the honor system.
  - There will be a new IHC Secretary next week.
  - There was an ExComm training on Sunday to new leadership in the houses.
- Director of Operations (Connie):
  - The PFW Club Fair will be on April 18. We need your help to make it great! Sign up for a table or to volunteer. Reference email for details.
  - The Take a Professor/TA to lunch program is still ongoing. Email operations@donut.caltech.edu for questions or requests.
- Secretary (Cat):
  - Connor Coley and I have prepared a proposal to be included in the report from the Undergraduate Self-Governance Committee to the Faculty Board in May.
  - We’ve identified the inconsistencies and errors in the Bylaws/Resolutions. Changing the Resolutions will be easy – Connor Rosen and I are going to rewrite them entirely and then the BoD will be able to vote on them. We will make sure to include the new BoD members in this revision, once they are known. Updating the Bylaws will require a vote from the student body.

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: 10:46 pm
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. Students Memorial Award Applications Due | Friday, April 11th | 5:00 PM | Email to caltechy@caltech.edu in Word Format

The Students Memorial Award is a grant up to $6000 established in the memory of Paul Studenski, a Caltech student who was killed in an automobile accident while traveling across the United States in 1974. It is awarded to a Caltech undergraduate who has reached a crossroads in life and would benefit from a period away from the academic community to obtain a better understanding of self and to explore possible directions for his/her future. For more info and application guidelines please visit our website at: www.caltechy.org

2. Science Policy Speaker Series: Raymond Schmidt, Institute on Science for Global Policy

Tuesday | April 8th | 12:1-30pm | Location TBA | Lunch is provided, priority given to students. RSVP Required

Raymond Schmidt, Ph.D. (Emory Univ., Postdoc Caltech) is a Senior Fellow with the Institute on Science for Global Policy (http://scienceforglobalpolicy.org/) and a 50-year American Chemical Society alumni. Actively involved in local community issues, he is Director Emeritus of PIH Health, a member of their Community Benefits Oversight Committee serving 50+ zip codes in east/central LA and the San Gabriel Valley, a Director of the PIH Health Insurance Co. on their Claims/Risk/Underwriting and Financial Committee, a Volunteer Public Library Foundation Treasurer, YMCA Director and Finance committee, Elder/Trustee of his church, and a Rotary local club past president.

Before retirement, he was a chemistry professor and industrial R&D scientist leading interdisciplinary multi-company teams to develop new oil recovery techniques and to commercialize innovative petroleum and geothermal production methods. Discussion will focus on the Institute on Science for Global Policy, its purpose, programs and outcomes addressing science-based global, regional, and local issues (eg. diseases, food safety, fracking, climate change, GMOs, etc.).

Opportunities exist to get involved. The Science Policy Series was made possible with generous support from the George Housner Foundation. Please sign up at caltechy.org

Caltech Y Column

3. Los Angeles Lakers Game - Caltech Y Explore LA Series - Tickets on sale now at the Caltech Y

Friday, April 11th | 7:30pm Game Time | Staples Center (downtown LA) | Cost is $45

The legendary Staples Center in downtown LA, perhaps the most storied franchise in league history in the Los Angeles Lakers, and an upstart foe in the young but talented Golden State Warriors. Join us for the Lakers NBA game live. Transportation is not provided.

Tickets are available on a first-come first-served basis (tickets are still available). 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. 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).

4a. Pasadena LEARNS

Wednesday and Friday Weekly | 3:00 - 5:00pm | Madison and Jackson 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.

4b. Hathaway Sycamores Tutoring

Saturday | April 5th | 1:30-4:30pm | Highland Park

Volunteer at Hathaway-Sycamores, a group that supports local underprivileged but 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 information and to RSVP, email Josie Kishi at jkishi@caltech.edu or Ted Xiao at gtaoa@caltech.edu. Please note that this week’s study is no longer being offered for this service trip.

If you have any questions at all, feel free to contact the Caltech Y at (626) 395-6163 or caltechy@caltech.edu. Feel free to drop by at one of our weekly meetings at the Caltech Y at the Caltech Y (503 S. Wilson, next to CEFCU), time to be provided. Go to http://caltechy.org/lists/ to subscribe to announcement lists for upcoming events and sign-up information.

For a student’s perspective, feel free to contact Phoebe Ann at phoebe.ann2@gmail.com.

Are you interested in feeling more successful during grad term?

This weekly group sponsored by the Counseling Center will offer practical, actionable tips for developing new skills to manage emotions, improving focus, and integrate mindfulness into your everyday life. Students may join any time in the series, and new content will be provided each week. Attending each skill session (4 weeks) is recommended but not required.

Tuesday evenings, 8-9:30pm in the common area of the Center for Diversity (CSS 2nd floor).

April 8 Emotional Regulation - calming yourself down when you’re feeling overwhelmed
April 15 Distress Tolerance - managing difficult situations
April 22 Interpersonal Effectiveness - setting boundaries and asking for what you want
April 29 Mindfulness
May 6 Emotional Regulation
May 13 Distress Tolerance
May 20 Interpersonal Effectiveness
May 27 Mindfulness
June 3 Emotional Regulation
June 10 Series Wrap Up/Review

More information is available at the Caltech Counseling Center website: www.counseling.caltech.edu.
On a world map, the islands are barely more than crumbs dawdling off the coast of South America. They looked so small, compared to the rest of the global behemoth. I expected them to feel comparatively small, too.

Nope, nope, and more nope. You can stand on the coast; you can stand on the lava fields; you can stand on the plains; you can stand on the forest; you can even stand on the top of the volcano — no matter where you stand, the islands will still be huge. Most of them, anyway.

Just the locations in that list — coast, lava fields, plains, forest, volcano — they can all occur on the same “crumb-sized” island. Face one way on a volcano, and you see a lava-covered wasteland. Face the other way, and you see uncountable numbers of lush greens sprawling down to the coast, where a pretty bustling town has cropped up. On the same island, you can find virtually untouched national park land on one side and a stretch of urban living, complete with graffiti and litter, on the other. And neither location, while you’re there, will give even the merest hint at the existence of the other.

I expected wonder from the Galápagos. I certainly got it. The sheer diversity everywhere we went was baffling.

On one island, I could sit in one place and stare straight ahead and just within that limited span of vision see piles of marine iguanas, a handful of flightless cormorants, another handful of crabs scuttling every which way, and the occasional sea lion passerby every few minutes. All that, and I didn’t even have to use my peripheral vision.

In a single snorkeling trip, I was able to get footage of sea turtles, sea lions, ctinophores, cnidarians, sting rays, penguins, a flightless cormorant, multiple sea strs, and more types of fish than I was able to keep count of. All in all, I swam less than a mile.

It’s almost absurd, how much diversity so small a patch of this world is able to support. But hey, I guess that’s island biogeography for you. Monoculture isn’t really their style.

Even now, with all the native species that have radiated and all the invasive species that have gotten their foot in the door and all the niches that have been divided and sub-divided and sub-sub-divided still, the islands are changing. The usual unfortunate consequences of human impact, yes, but there’s more than just the hominid brand of doom and destruction going on. Native species are hopping islands. New eruptions are happening. Old eruptions are showing signs of primary succession.

Population dynamics are changing. There are more than ten different species of Galápagos finch, yet the entirety of the trip, we saw maybe five that weren’t some size of ground finch. And those five were all tree finches. Where have all the rest gone? Why such skew in observation?

Evolution on the Galápagos is not a happened. It is a happening. A happening I now only want more to be a part of. Of course, I’ll be going back. Somehow. I knew that before I’d even left.
La Dispute branches out from previous music style

Contributing Writer

Grand Rapids, Michigan’s La Dispute is part of “The Wave of Post-Hardcore” (or simply “The Wave”), and its eclectic and unconventional sound has made them a group to watch since their formation in 2004. After releasing their aggressive debut EP “A Piece in a million” in 2006, La Dispute went on to produce two studio albums, Somewhere at the Bottom of the River Between Vega and Altair (2008) and Rooms of the House (2011), as well as several EPs. Somewhere at the Bottom of the River was immediately well-received as a combination of post-hardcore with poetry, metal-core, emo, and even progressive influences, most notably in the vocals which range from calm talking to frenetic screaming. Wildlife then expanded further on this style, with the band recording the album themselves in order to achieve a more intimate and raw aesthetic. On March 18, La Dispute released their third studio album, Rooms of the House, and while it’s a larger departure from their predecessor than Wildlife, there’s still a lot to like.

The album opens up with “Hudsonville, MI 1956,” a disturbingly catchy song about the April 1956 flash flood in the upper Midwest, with the lyrics switching perspectives as they tell the story of a mother and her son who were killed in the flooding in Indiana as her husband remains in Hudsonville. The imagery presented by the vocals is not only vivid but delivered emotionally, which is unsurprising for La Dispute but adds a feeling of meaning that not many other artists achieve. Besides an increase in production quality, this track also presents a refinement in the band’s musical complexity, with verses that showcase both guitars and the bass, a flawless build-up to a driving chorus, and an outro that gradually deconstructs the song both instrumentally and lyrically.

This is followed by “First Reactions After Falling Through the Ice,” a song whose lyrics compare the falling through of plans to falling through the ice, contemplating the irony of saving one’s phone being their first reaction and whether the risk of trusting is worth the reward. The energetic guitars of this song then stand in stark contrast to those of “Woman (In Mirror),” whose mellow, bittersweet tones complement almost spoken lyrics that describe examples of “all the motions of ordinary love.”

“Scenes From Highways 1981-2009” is an interesting track, as its lyrics are exactly what the title describes, presented with an uneasy, restless air, yet the actual music sounds like a post-hardcore blink182, which I found out of place. “For Mayor in Splitsville” is a similar case, with some of what I feel are the best lyrics on the album, examining nostalgia scenes with hindsight over music that sounds like a slower, sadder My Chemical Romance.

Fortunately, the album picks up after these two, with “35” focusing on the 2007 135W bridge collapse with the bleak influence of heavily post-rock influenced instrumental parts, and “Stay Happy There” desperately recalling the thoughts and words of someone in a collapsing relationship, ending with a praised “everything is happening at once!”

The Child We Lost 1963 continues the album with quiet guitar passages building into powerful choruses that tell the story of a stillbirth from the perspective of what would have been the child’s sibling. “Woman (Reading)” then recalls memories of a woman with whom the speaker was once in a relationship and has musical backing reminiscent of “Woman (In Mirror),” while the penultimate track “Extraordinary Dinner Party” discusses the nostalgic memories of childhood and contrasts them with the singer’s regret that he was afraid to change, all on top of a remarkably bright alt-rock beat.

Finally, the album is capped off by “Objects in Space;” a clever summation-up of the record which has us listening as the speaker tells of taking out all of his old keepakes and scrapbooks, laying them around the whole house as “a memorial,” and then concluding by saying “and I put them in boxes.” I’ve talked to friends who are more invested in La Dispute than I, and we had some differing opinions. I’m glad that the group decided to branch out musically, as it’s always interesting when any band does, but the energy of their earlier releases is a little too absent for me in Rooms of the House. Where this album really stands out to me, though, are the lyrics. Some of their topics may seem a little cliche, but on the other hand I feel like only a band with the sheer emotional impact of La Dispute could pull some of these songs off. Others I’ve discussed this with were more enthusiastic about the refined and expanded sonic range, but felt that La Dispute’s first two LPs told better stories.

However, we all agreed that the album is definitely a solid and enjoyable release, and I think that not just fans but also anyone looking for a thought-provoking album to digest would enjoy it a great deal.

BRAD CHATTERGOON
Contributing Writer

Hey guys and girls. Hopefully all of you survived spring break… my condolences to those of you who didn’t make it back in one piece on account of partying too hard. Welcome to spring term, the last hurdle before summer and to you freshmen, the first term on grades. So I know many of you are thinking, “Man, I wish my boyfriend could be more like Brad/Chad” (although plaid is different, but the same rules but I almost always go for polo shirts, which are a better alternative to tees. I avoid the big bold prints of the malls and I wanted to try it out) (we don’t have this in Trinidad’s line to sit on Santa’s lap at the mall in with all the 8 year olds waiting in line to see Santa’s lap at the mall). Unless I’m trying to blend in with all the 8 year olds waiting in line to see Santa’s lap at the mall (we don’t have this in Trinidad’s malls and I wanted to try it out) I avoid the big bold prints of the flash logo and stick with solids or simple stripe patterns. The same goes for polo shirts, which are a better alternative to tees.

Well that’s all for this week folks. I’ll continue with the rules next week. Hope that you guys enjoyed the brief look into my personal style. Shameless Plug: I’m going to be running for ASCIT Social Director in the coming election and I would love your support. My goal is to make Caltech social life, in a word, better. I’ll be more details in my candidate statement and I’ll also be rotating through house dinners if anyone wants to talk to me in person. See you at dinner!
Today’s Puzzle: Crossword

Answers to last week’s crossword puzzle

Across
1. Bite or chew
5. Mineral
9. Group of hunting animals
13. Halo
14. Fragrance
16. Kitchen appliance
17. Potter’s clay
18. Mineral used as a gemstone
19. Traveled by horse
20. Extensive tract of level open land
22. Bird shelter
23. Prim
24. Apex
26. Oracle
28. Mannerism
33. Grip
36. Beverage
37. Electronic communication
39. Arithmetic operation
41. Burden
43. Zeal
45. Civil wrong
46. Moved around slowly and aimlessly
48. Lukewarm

Down
1. Breathe noisily
2. Without legal or binding force
3. Elaborate song for solo voice
4. Large North American deer
5. Floor covering
6. Type of golf club
7. Manage
8. Accumulate
9. Form of painting
10. Solemn pledge
11. Relinquish possession or control over
12. Log joint
15. Ancient Mexican empire
21. Short message
25. Large American feline
27. Hard tough wood
28. Molecule
29. Male singing voice
30. Greyish brown
31. Flit
32. Duck
34. Proboscis
35. Pocketbook
38. Canter
40. Celestial body
42. Academic term
44. Mature
47. Lacking in light
49. Student residence
52. Colossus
54. Dried grape
56. Large striped
e1ne
58. Contemplate
59. Afresh
60. Father
62. Square root of twenty-five
63. Parasitic insect
65. Ill-mannered
66. Large woody plant
67. Chief
70. Make a mistake

Sudoku

7 2 4
6 5 3
9 8 2 9 6
5 3 8 7 1
4 6 9 3
LOST: Many Memory Cards
(for a video camera)

They’re about the size of a postage stamp and were stored in clear Ziploc bags.

They were lost at the Caltech recycling center in late February.

Many random videos and priceless family videos.
(I’m in the doghouse, please help!)

REWARD: $1000

If you don’t have them but can help me track them down, $500.

If you only have some of the cards, I will pay $50 per card.

CONTACT: Steve
858-442-4729
smcgibbons@gmail.com

Thanks!
Not frat, bro  

Liz Lawler

Acquired Taste  

Dr. Z

Did you hear the awesome news?

OMG what?!

OMG wow

New changes are coming to The Tech

The California Tech  
Caltech 40-58  
Pasadena, CA 91125