



New Introductory Chem Lab An Alternative to Ch3A Requirement

Experimental Ch3x designed for non-chemistry majors

By Wesley Yu

STAFF WRITER

This Winter Term, fifteen daring freshmen will be randomly selected to take Chemistry 3x, an introductory lab for non-chemistry majors. The new class, which was conceived a year ago and has been in development for the last quarter, fulfills the core lab requirement in lieu of Chemistry 3a.

The class was designed by Professors Harry Gray, Mitchio Okumura, and Douglas Rees, in response to students' complaints that the existing class, Ch 3a was ill-suited for non-chemistry majors. The new class will be a beta test for a curriculum that may be integrated into Ch 3a in the future.

"We're really trying to take a pioneering approach to this class," says Professor Mitchio Okumura. "Our goal is to give students enough guidance to complete the assignments without too much stress, but also to give our students enough freedom to figure things out without telling them exactly what to do. We've received enthusiastic support from the CCE Chairman, David Tirrell, and the Provost's Educational Innovation Fund. It shows that improving core course offerings is a high priority for the Institute."

Ch 3x is the result of a complete reinvention of basic laboratory chem-

istry. Instead of the traditional techniques used in Ch 3a, the new suite of experiments will include spectroscopic characterization of transition metal complexes, exploration of the properties of quantum dots, and then assembling these to construct a Graetzel Solar Cell. The planned experiments reflect the advances in modern chemistry made over the last decade, and will involve applications of chemistry in current areas of energy research.

The features of the class have been designed to appeal strongly to students. One objective is to more closely connect the experiments to material covered in Ch1lab, making it easier for students to grasp concepts.

Many of the activities will be team oriented to mimic the nature of true scientific exploration. Students may also appreciate the extra time allotted for reflection and observation. Finally, instead of focusing on post-lab write-ups, students will be required to keep a timely notebook.

Currently, four graduate students are setting up the lab and working out the details of the class, led by a veteran Ch1 TA, Craig Wiggernhorn.

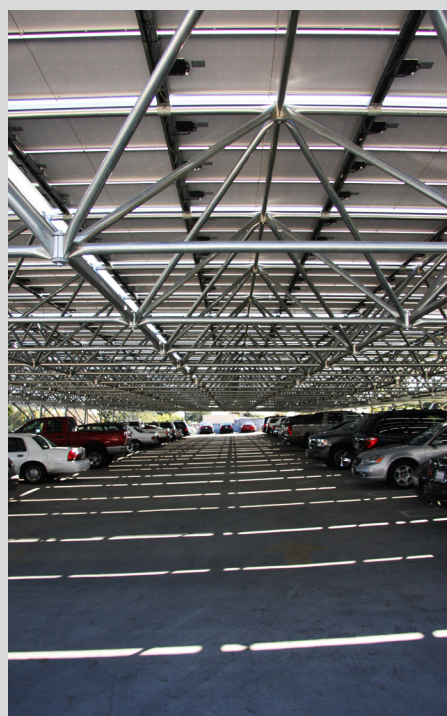
"We have a lot of work to do, but it will be awesome when it comes out," says James McKone, one of the TAs. "It's going to take as much from undergrads as from us to make this work, though. We need as much feedback and dialogue as we can get." Other TAs are Nick Boekelheide and James Beardsley.



Olive Picking Takes Over Central Campus

The 2nd Annual Caltech Olive Harvest Festival took place Nov. 7. Volunteers underwent ladder training before picking olives in 3-hour shifts all along the Olive Walk and the Court of Man.

Holliston Solar Facility Inaugurated Nov. 4



LGBT Community Shocked, Indignant Over Prop 8 Win

By Chris Kennelly

STAFF WRITER

Members of Caltech's gay, lesbian, bisexual, and transgender community were left shocked last Tuesday by Proposition 8's wide margin of victory, banning same-sex marriage in California less than six months after the Supreme Court deemed it legal. Passing with 52.3% of voters voting in its favor, the proposition amended California state constitution to define marriage as a union strictly between a man and a woman.

"My girlfriend and I spent Nov 5 at home grieving and recovering from the results of the election," wrote Amy Trangsrud, a Caltech graduate student, in an e-mail. "They took our rights – our basic human rights."

Trangsrud was not the only one who was shocked and surprised by the results of the ballot. John Yong, a graduate student and member of PRISM, Caltech's

group for lesbian, gay, bisexual, and transgender (LGBT) students, faculty, and staff, as well as their straight supporters, was heavily involved in pre-election volunteering to defeat the proposition and did not expect 52% of voters to vote in favor of Prop 8.

Yong, who formally came out as gay on Nov 3, finds the Caltech environment to be generally warm and supportive to the cause of LGBT community, though not proactive and largely apathetic on a bigger scale.

"It is positive feedback that keeps us optimistic," said Yong, who came across his share of spiteful and malevolent reactions during his experience volunteering for the No For Prop 8 Campaign.

To Yong, the fact that 52% of Californian voters chose to amend the Constitution is a signal that gay marriage is not simply a legal issue, but a moral one. "It is not that all of the people who voted 'yes' did so because of hate. It takes time for people to change," said Yong, "and that's more important in long term. But of course, we want marriage to be

legal as soon as possible."

Although the proposition passed and the law has been amended, members of the LGBT community do not believe that the change is permanent. Yong embraces visibility of gays and lesbians as well as establishing personal connection with people as key tactics in altering the mindset of people who oppose gay marriage.

Trangsrud, who hopes that election of Barack Obama will advance the rights of the gay and lesbian community as well as of other minority factions, sees Proposition 8 as a measure that establishes gays and lesbians as second class citizens. "This is a major setback," she wrote, "but there is no stopping what is good and right, and equality and compassion will prevail."

Students are not the only ones surprised by the passing of the proposition. "It is a terrible thing to change a con-

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Obama Inherits Mad World

By Evans Boney
STAFF WRITER

I had a great night last night. I stood with about a thousand democrats (even though I'm not technically one of them) in the Pasadena Hilton and watched Barack Obama accept the presidency of the United States. I watched John McCain encourage his party to stand with President-Elect Obama. I watched tens of thousands of faces of all nationalities, creeds, ages, genders, sexual orientations, and religions shed the tears of a nation that has found something far more than a leader. We have found a new direction.

With that in mind, let's take a look back at this election through lens of one of my favorite movies: *Donnie Darko*. For those who don't know (and you really should watch it) this election had a lot similarities of the setting of the movie: 1988, an election year, just before Halloween. There was a struggle in the movie between a spiteful daughter voting for Dukakis and a father voting for Bush, yet another parallel. However, the similarities are more than skin deep.

First off, we have the messianic protagonist. If you've seen *Donnie Darko* and can't find this theme, you couldn't find your

nose with both hands in a room full of mirrors with a very explicit instruction book. Obama was often ridiculed by the Republican party early on in the campaign for being "The One". Unfortunately, in such a dire time, people like having this type of inspirational leader to pull them through. So Obama, simply by being a great and steady leader in a time of crisis, became our one to lead.

There was also the key battle between Fear and Love. The character played by Patrick Swayze in *Donnie Darko* is an inspirational speaker who claims that all human actions are governed by these two fundamental emotions. That made him an easy parody as a nutjob who oversimplified things, but this election crystallized these two polar opposites. On the one hand we have John McCain, who quite literally ran on a campaign of fear. It was an appeal to a fear of change, whether or not intended, that was the bedrock of his policies of free-market economics, unilateral "negotiations" with preconditions, and who could forget "drill, baby, drill". Even though these policies have led to the worst financial disaster in a generation, the worst foreign affairs debacle since Vietnam, and a crippling dependence on our worst enemies for energy, the American people were still almost scared too much to take a chance on election day. Not that everything Obama preached was taking a chance. His tax plan, yes that scary, "socialist", tax plan, is actually the same as under Clinton for the rich.

Obama's policies were, like it or not, appealing to something higher from the populace, something slightly different than change itself: love. It's idealistic, and that brought much scoffing from Republicans, but being willing to negotiate with any country is showing love to the people of the world. Saying that, regardless of the past ills of your country, if you make an effort

to improve things that we want, we can help you get what you want, is far more compassionate than the "give us what we want before we 'negotiate'" strategy that has worked so flawlessly. His healthcare policy is similarly compassionate, as it is universal. While McCain was trying to get you scared of that change, what was lost in the shuffle were the millions of uninsured that would now receive proper medical care. As opposed to some 20 million people losing healthcare under McCain's plan, a similar number will gain it under Obama's plan. Finally, his entire campaign underscored this "love" theme. I joined 140 other volunteers at the Caltech Y on Tuesday to make 11,000 calls, and the net cost of this to Obama's campaign was \$0. I learned that well over 99% of the people working for Obama on election day were working for no monetary gain. He had over 3 million different people contribute to his campaign's coffers, which led Republicans, who could never dream of this support, to levy accusations of corruption.

I hope that President Obama will take advantage of this support and ask us to make some sacrifices for our country. We are a country with perilously high debt, rising unemployment, and a tsunami of foreclosures that has yet to fully pass. It is a fool's errand to continue pretending we can fix these problems without major sacrifice; to continue pretending that we can be citizens and expect only tax breaks and to get rich quick; to continue pretending that all it means to be a citizen is to own a flag, buy US-made products, and cheer at a rally; to continue pretending that nothing has to change, that we've paid our \$700 billion and now everything is fixed. Being a citizen of these United States should mean more than that.

It's a mad world, but President Obama can help bring back some sanity.

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

Letters and submissions are welcome; 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. 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 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 business@caltech.edu. For subscription information, please send mail to "Subscriptions."

The exchange students at Caltech proudly present

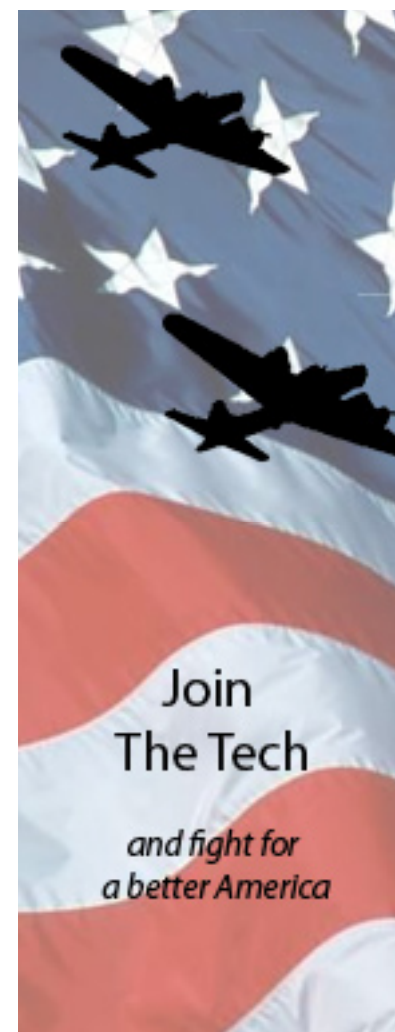
Euro Party

9 pm Friday November 14 on Winnett Patio

Chart House Electro Techno

Entrance → 

Please RSVP on Facebook event "Caltech Euro Party 2008"



Join
The Tech

and fight for
a better America

52% of CA for banning gay marriage

CONTINUED FROM PG. 1

tution for the purpose of taking away rights," said Catherine Jurca, an English professor who serves as a liaison between Student Affairs and LGBTQ Techers, "and we hope that the equal rights of gays and lesbians to marry will be restored."

A study by UCLA estimates that approximately 18,000 same sex couples were married since June 17, 2008, when same sex marriages were deemed legal, and November 5, on which Proposition 8 went into effect. The question of whether these marriages will remain in effect or whether they are going to be annulled is currently pending.

The Death of the Bradley Effect

By Evans Boney
STAFF WRITER

Before this election there was much discussion of the Bradley effect, which suggested white voters were more likely to tell pollsters they supported a black candidate than they were to actually vote for him. According to Princeton Professor and former Caltech student Sam Wang, who runs election.princeton.edu, President-Elect Barack Obama outperformed the average poll by 1%. In other words, the effect that once dashed the California gubernatorial hopes of Tom Bradley, is gone.

If it was ever there. On a post-election conference call this morning, Caltech Prof. Jonathan Katz, co-director of Caltech/MIT Voting Technology Project, questioned whether or not the effect was ever truly established. "Polls are not a simple snapshot" said Katz,

"they allow 'I don't know' as a response, but 'I don't know' is not on the ballot". Without forcing people to decide, this raises the question of whether or not the baseline poll support for Bradley was ever accurate. Concerns of sparse polling close to election day have also been voiced by others who deny the existence of the Bradley effect.

What could possibly explain the 1% difference from the polls this time? Well, it could have been chance. The odds, however, are against that. A reverse Bradley effect? Probably not. "Differential cell phone use could be responsible" postulated MIT Prof. Charles Stewart III, MIT director of the Caltech/MIT Voting Technology Project. Pollsters typically do not call cell phones, the primary means of communication for many young voters. These voters supported Obama more than 2:1 over McCain, possibly explaining the difference.

The Caltech/MIT Voting Technology Project will likely not play an integral role in the aftermath of this election as voting irregularities were scarcely reported in this election and the use of electronic voting machines is on the decline. What does the future of voting technology hold?

"Voting Technology tends to follow the underlying technology of the day" said MIT Viterbi Professor of Computer Science Ron Rivest, "We'll probably see a push for internet or cell phone voting in some places".

Hopefully, lessons have been learned from the introduction of electronic voting machines. One such lesson is software independence, according to members of the project. "People are being more careful about this", said Prof. Rivest, "The election should not be dependent on software working flawlessly".

ASCIT Board of Directors Meeting – Minutes November 5, 2008

Officers Present: Caleb E. Ng, Zachary Higbee, Angela Zah, Christopher Watson, Tzong-Lian 'Will' Tsay, Ekta Bhojwani, Matt Czubakowski, Michelle Jiang

Officers Absent: Swati Bhanderi

Guests: Anthony Chong, Noah Tanabe

Call to order: 10:10 pm

President's Report:

- **Publication of Minutes:** Caleb apologizes that the minutes were not published in the Tech for a third consecutive week. The miscommunication was due to the process of preparing the minutes.
- **Health Committee Representatives:** Two of the student representatives to the Health Committee have stepped down due to other commitments. Swati Bhanderi and Liuyi Pei have already been involved in the issues currently before the committee, so Caleb suggested they be asked to step in. The Board expressed general consent.
- **ASCIT BoD Resolutions:** Caleb wants to rewrite the resolutions and requested help and suggestions. It was noted that the ExComm should be considering this in its bylaw review and restructuring project, and that the basic resolutions should be at least drafted for the next Board.

Vice President's Report:

- **Honor Code Task Force:** A draft of the change for the task force is distributed to the Board with instructions to direct suggestions and comments to Zack and Caleb.

Treasurer's Report:

- **little t:** Angela recommends paying the little t editors the full salary of \$300. Motion PASSES (7-0-1). Angela also recommends paying the staff a collective bonus of \$600 for this year's excellent product. Motion PASSES (7-0-1).
- **Europarty:** Angela reports the organizers have secured \$3000 from Campus Life and have \$900 remaining from last year. It is unclear whether they are receiving funding from the GSC. They are requesting \$500. The Board asks Angela to contact the GSC and proposes funding it at \$300 for now. Motion PASSES (7-0-1).
- **Men's Ultimate Frisbee:** The team requests \$500 for new jerseys. The Board asks Angela to study the issue to provide a recommendation and tables it until next week.

IHC Chairman's Report:

- **House dues:** Student Affairs would like house dues standardized, but the IHC has raised concerns and heard student complaints.
- **Alcohol policy:** A revised policy has been proposed, but the IHC has yet come to a consensus on it.
- **Meal plan:** Chris reports that the student meal plan is being reviewed again.
- **MOSH:** The IHC has recommended its own shortlist of students and faculty for the MOSH search committee.

ARC Chairman's Report:

- **Undergraduate Research Opportunities Handbook:** UROH still needs more advertising. Will is going to next week's Faculty Board meeting to announce it.
- **Student-Faculty Conference:** ARC is still looking for a few more students to serve on committees. They are aiming for four to six students per committee.

Upperclass Director's Report:

- **Copier:** No update.
- **Screening Room:** The remote has been sent in and should be back within a week.

Discussion:

- **Student Activities Storage:** Chris asks whether this is being actively pursued, since a number of clubs have been asking about it. Caleb notes that Daryl is serving point on this.
- **Public Events Committee:** Chris reports that the committee might have to consider ways to cut costs. One possibility that has been raised is decreasing the number of days reserved for free student use. However, this is still very much in the early stages.

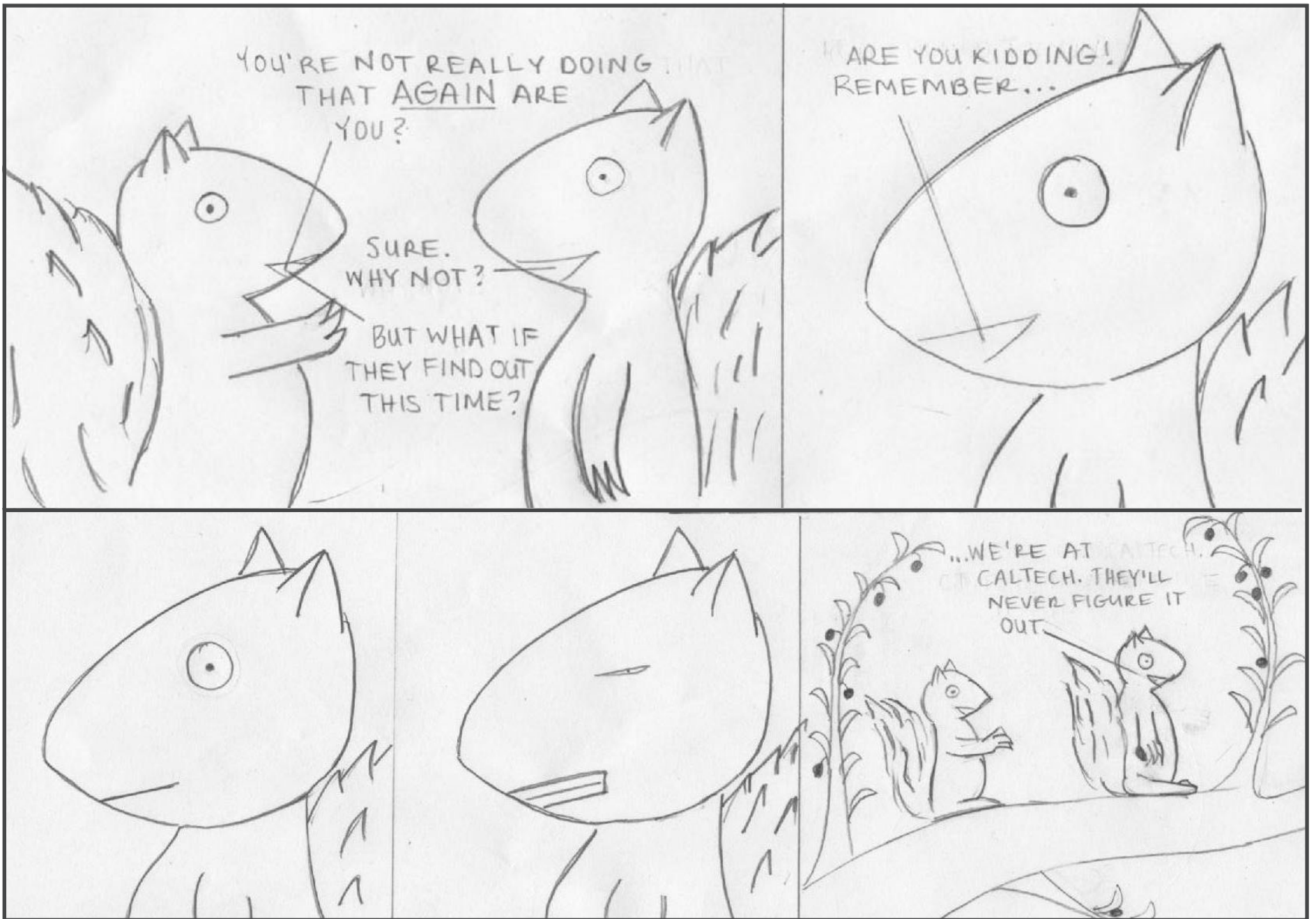
Meeting adjourned: 10:50

Submitted by Michelle Jiang, Freshman Director at Large.

HUMOR

“Olives 101”

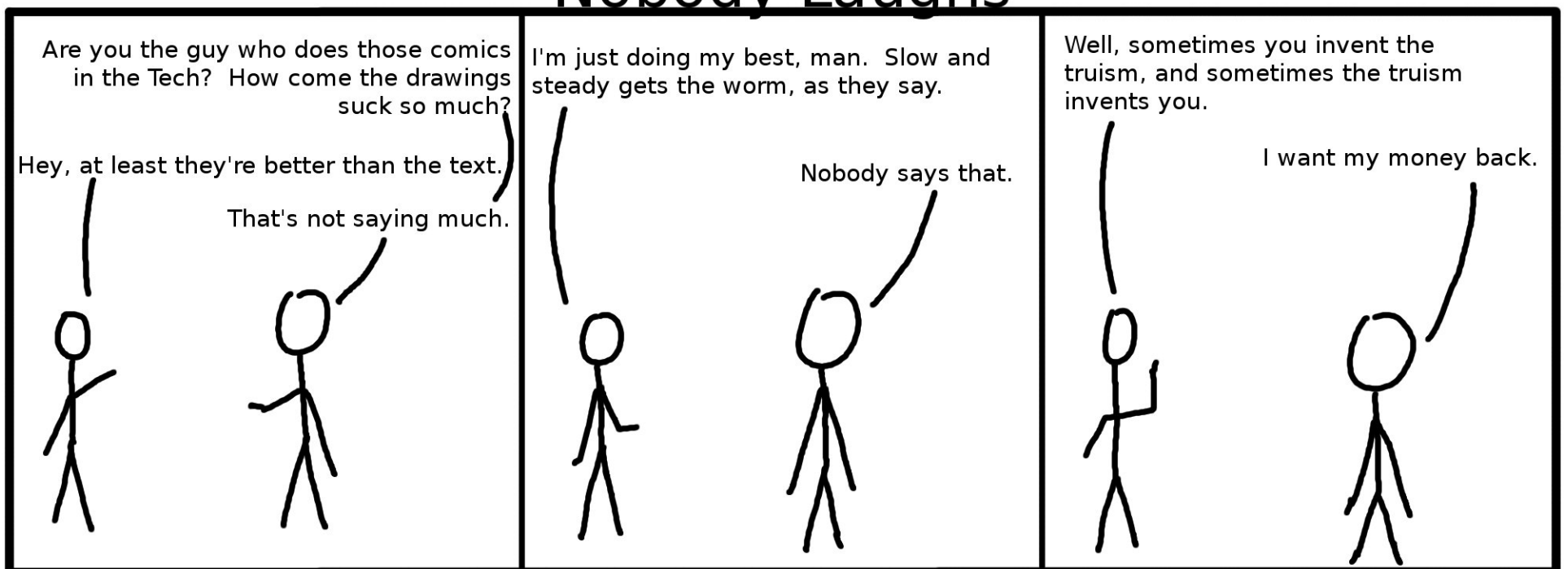
by Anonymous



Sine Error

"Nobody Laughs"

by Mark Eichenlaub



Counseling Center presents:
Understanding Attention Deficit Disorder
With Ken Herman, Ph.D.

Thursday, November 13th at Noon
Caltech Y Multipurpose Room

FREE LUNCH PROVIDED

Does your mind wanders off task? Are you struggling with organization, time management, focusing, and self-discipline? If you, or anyone you know has difficulties in these areas, you may want to come to find out more about Attention Deficit Hyperactivity Disorder (ADHD). In this workshop, Dr. Herman will discuss the importance of self care, medication management, behavioral interventions to help maintain attention, techniques to aid memory, and general tips for mood management.

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