



Attendees to TEDxCaltech: The Brain slowly file into the Beckman Auditorium where the main event was held. Hosted by beat poet Rives, TEDxCaltech: The Brain showcased the research and insights of a varied group of professors, scientists, students, and musicians. This was the second time that Caltech has hosted a TEDx event.

- Shannon West Photography

TEDxCaltech: The Brain brings many to campus

ERIC ZHANG

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Additional reporting by
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On the morning of January 18, Caltech's Beckman Lawn played host to more than its usual fare of

passing students and professors. With occupations ranging from doctor to journalist, psychologist to artist, crowds of people braved the chill air to gather outside the Beckman and Ramo auditoriums. They had journeyed from lands and cities as far away as Belgium and Washington D.C. to attend a one-day event at Caltech.

As early as 8 am, people began forming neat lines on Beckman lawn, eager to be among the first to enter the auditoriums. Within an hour, the lines

had stretched to more than the length of the lawn.

By 9:30, the line to enter Beckman had wrapped around the corner of Beckman Behavioral Biology, extending past Schlinger and ending past Braun.

When the ushers reminded attendees that no food or drinks were allowed in the auditorium, one enthusiastic woman threw out her coffee rather than lose her place in line.

As attendees entered the auditoriums, there was a buzz of activity and excitement. Some were

flipping through the event booklet; others were playing games on their iPads.

Several were sitting quietly with notebooks and pens at the ready.

Such was the reception for TEDxCaltech: The Brain, Caltech's second TEDx event.

Technology, Entertainment, and Design (TED) is the name of a set of conferences owned by the non-profit Sapling Foundation.

These conferences consist of talks from a wide range of topics in science and the humanities with the intent to inform, entertain, and

distribute ideas in a way that is accessible to practically everyone. According to the organization website,

"We believe passionately in the power of ideas to change attitudes, lives and ultimately, the world. So we're building here a clearinghouse that offers free knowledge and inspiration from the world's most inspired thinkers, and also a community of curious souls to engage with ideas and each other."

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Need to know

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

by *The Tech Eds*

Treaty limits mercury	140 nations make agreement to prevent emission of mercury	[NATURE]
Obama sworn in as prez	4th time Obama has been sworn in due to Judge Roberts' error	[Huff Post]
Cuba's internet cable on	1st high-speed optic cable in Cuba activated two years after creation	[BBC]
Iranian public hangings	2 hung for stabbing, gov responds harshly to crime to send message	[NYT]
Assassination attempt	20 -year political veteran Ahmet Dogan knocks gun from assailant	[CNN]
Boy kills family	15 -year old suspected of killing parents and siblings in New Mexico	[Fox]
Algerian hostage crisis	37 foreigners killed after militants attack gas plant in In Amenas	[BBC]

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ASCIT Bylaw Amendment Proposal: Amendment to Article IX, Section 5

Replace:

Each Corporation member will be assessed thirty-six dollars (\$36) for the Big T, payable on the days of registration at the rate of twelve dollars (\$12) per term.

With:

As of 2013, each Corporation member will be assessed fifty-seven dollars (\$57) for the Big T, payable the day of registration each term at a rate of nineteen dollars (\$19) per term. The values shall be adjusted in these bylaws each year by a relative amount equal to the percentage change in the average Consumer Price Index through a majority vote of the Board of Directors.

Rationale:

The current Big T dues cannot support an annual yearbook, due to an increase in publication costs and inflation. That was the main reason that the 2006-2009 yearbooks were combined into one yearbook, and that our last few yearbooks have been late. Currently, the student fee only covers half of the yearbook (approximately \$35,000 per year), which is not enough to cover printing costs (approximately \$66,000 per year). This would increase the student contribution to approximately \$55,000 per year, which combined with advertising revenue will be able to fully support the annual printing costs of the Big T in future years. Also, the dues would be updated every year to account for inflation based off of the Consumer Price Index. Each year, the BoD would vote on a change, and the dollar prices and the year would be the only thing to change in the bylaws.

This year, the BoD pulled from reserves to allow the yearbook to be published, which is not a sustainable practice. If the yearbook is to survive in its current form, the dues must be changed, and so the BoD unanimously chose to propose this amendment.

*Approximation of the inflation rate of the past 20 years based off of the Consumer Price Index from the U.S. Department of Labor http://www.bls.gov/data/inflation_calculator.htm

* <ftp://ftp.bls.gov/pub/special.requests/cpi/cpiiai.txt>

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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 business@caltech.edu. For subscription information, please send mail to "Subscriptions."

ASCIT Minutes

Minutes for January 17, 2012. Taken by Allika Walvekar

Officers present: Diego Caporale, Zach Rivkin in lieu of Christian Rivas, Pushpa Neppala, Mario Zubia, Michelle Tang, Allika Walvekar, Puikai Cheng

Call to Order: 9:02 pm

President's Report (Diego):

- Faculty Board: Sossina Haile resigned as Chair of the Faculty Board and John Dabiri is the new chair.
- Improvements to Caltech: Diego brainstormed ideas of possible improvements to the current Caltech experience, and hopes to act the ones that he has the capacity to change.
- Power Tools: If you would like to use power tools at all this year (parties, Ditch Day), you will need to attend the power tools training workshop on January 26th from 2-4pm

Officer's Reports:

V.P. of Academic Affairs (ARC Chair: Pushpa):

SFL: The next SFL is Jan 24th.

UG Seminar Series: The first of two UG Seminar Series this term will feature Professor Tai of Electrical Engineering.

Professor of the Month: The Professor of the Month reception will happen on Jan 25th

Course Capturing: Puspha hired a new course capturer to document ACM 95 and Bi/Ch111.

Honor Code: Pushpa would like to encourage everyone to take the Honor Code Survey. The survey is completely anonymous and a full report will be released upon completion.

V.P. of Non-Academic Affairs (IHC Chair: Zach Rivkin): The IHC will begin its turnaround starting next week with Blacker elections.

Director of Operations (Mario):

Big T/Phoneathon: Mario is planning the Big T and Phoneathon event on Jan 27th. He is choosing the food that will be served and handling the logistics of the yearbook transportation from their storage room.

Water Coolers: He also is buying water coolers for the ASCIT Inventory that houses can sign out for parties.

Treasurer (Puikai):

Funding: The Caltech Chinese Association was granted full funding for the Chinese New Year Festival. The Veritas Event was also funded.

Budgets: Puikai set up the budgets for the various clubs with the appropriate people.

Social Director (Michelle): Michelle is planning the Winter Carnival for Feb 1st and working on planning Mudeo as well.

Secretary (Allika): Submitted feedback for the room reservation system on Donut.

Meeting Adjourned: 10:38

Overview of TEDxCaltech: The Brain (continued)

Continued from Page 1

Since its founding as a single event in 1984 in Silicon Valley, TED has spread all over the U.S. and made its way to Europe and Asia. In 2009, TED began licensing its trademark to independent TED-like events. These events are distinguished as TEDx, with the x designating its independent status.

Two years ago, Caltech held its first TEDx. Titled “Feynman’s Vision: The Next 50 Years,” this event was intended to reflect the spirit of Richard Feynman, a scientist of the 20th century and former Caltech professor, whose sense of curiosity and adventure was legendary.

This year, the theme of Caltech’s TEDx was the brain. Researchers from Caltech, the University of Toronto, and the University of Washington, among other institutions, came to share their research. Each talk explored some aspect of the human brain, from its processes of cognition and decision-making to its physical and chemical organization.

Friday’s TEDxCaltech saw the return of Rives, who had hosted the previous TEDxCaltech two years ago. A writer from Los Angeles who co-hosts the annual TEDActive conference in Palm Springs, Rives was dressed in a blue long-sleeved shirt.

He was energetic onstage, and made wide gestures with his arms. He explained how speakers would stand on the “rug of awesomeness” to give their talks and cracked jokes at the audience. Throughout the event, Rives brought up guest hosts to introduce the next speaker, often a person whom he had met while waiting in line at the beginning of the day.

From 10 am – noon, speakers such as Thomas Insel from the National Institute of Mental Health and Erin Schuman from the Max Planck Institute of Brain Research familiarized the audience with the brain’s inner workings and the relation between its structures and the phenomena of behavior and mental disease.

Each stressed in some way the incredible complexity of the brain. Some, like Allan Jones of the Allen Institute for Brain Science and Jeff Lichtman of Harvard University described current initiatives to map

and catalogue the brain in minute detail.

By the end of the first session, audience members came out with some astounding facts about their brains. According to Thomas Insel, mental disorder affects 1 in 5 and is disabling for 1 in 20. He also revealed that the 3 pound organ that sits in each human head contains about 100 billion neurons and 100 trillion connections.

At noon, attendees filed out of the auditoriums to the lawn in front of the Broad Center for Biological

Sciences for lunch and discussion. There, a white rectangular tent was set up. Inside, dining areas flanked rows of tables stacked high with lunch boxes. On the southern end, the Caltech undergraduate bands Twin Peaks and Blown Out played live music. For an entire hour, the area was filled with the excited voices of participants as they met each other and shared thoughts on what they had just heard. One boy even grabbed his father’s shoulders and bounced up and down, asking whether his ideas could work to “fix everything.”

After eating, people re-entered the auditoriums to hear speakers from the second session. This section included talks from Caltech undergraduates Ketaki Panse (biology, 2014), who studied emotion in the hungry fly brain, and Joy Lu (economics and CNS, 2013), who researched the relation between visual cues and consumer food choices.

Overall, the speakers presented research relating to how the brain learns, processes emotion, and makes decisions. Some, like Allison Doupe of the University of California, San Francisco, explored human brain processes by studying simpler organisms

like songbirds. Others, like Ralph Adolphs and Antonio Rangel of Caltech, directly observed human social and economic behavior in their methods.

Finally, after a coffee break, the last session of TEDx convened at 4 pm. This section featured research that pushed the limits of combining technology with the brain. Richard Andersen and Joel Burdick of Caltech explained and showed how technology could help people with physical disabilities. In one movie, a disabled woman was able to feed herself chocolate by simply thinking and sending mental commands to a robotic arm. This miraculous result was made possible by electronics that could convert back and forth between brain activity and electrical signals.

Andres Lozano of the University of Toronto presented similarly astonishing research. One movie showed the audience an elderly woman with Parkinson’s. In one moment, she was shaking and twitching uncontrollably. Then, electrodes planted deep in the motion-controlling portion of her brain were activated. In that very instant, she recovered full motor control. Audience members were so astounded and moved that

many clapped and expressed their heartfelt sentiments aloud.

At the end of all the presentations, Rives finished off the night with a humorous rhyming poem that summarized the events of the day.

All in all, with an official start at 10 am, TEDxCaltech lasted for over 8 hours. Those who attended TEDxCaltech came from a variety of backgrounds. Stephanie Huard, 16, is a junior at South Lakes High school at Reston, Virginia. Because of an interest in biomedical engineering and medicine, she

had asked her parents for tickets to TEDxCaltech as a Christmas present.

Little did she know at the time that it would give her a chance to make a splash. At the event, Stephanie was spotted by Rives, the TEDx host, and asked to present a notable speaker at the conference. With flair and confidence, she introduced herself as a budding scientist with a passion for watching TED videos online. When asked onstage about her college plans, Stephanie listed Caltech as a strong interest. Whether or not her bold statement made an impression on Caltech admissions staff, she certainly impressed the audience, who applauded her onstage presence and poise.

Several alumni of Caltech attended the TEDx event. One of them, Kathleen Holland, who graduated in 1999, was ready for the long lines. Holland had attended the previous TEDxCaltech event in 2011 but only barely; she had been placed on the waiting list. As soon as she had heard about Friday’s TEDx event, Holland rushed to reserve a ticket. She quickly filled out the ticket order form, only to run into an unexpected question. “Ask me about?” she said, pointing

to her issued nametag, which had on it printed ‘Ask me about: ____’. Holland remarked, “That was the hardest part of reservations! I didn’t know what to put!”

Alumni Gary Turner (’62) and Gary Pope (’73) returned to Caltech for the TEDxCaltech event. Turner and Pope attended Caltech before the addition of biology as a core requirement for all students. “We had one of three science classes to choose from,” Turner explained. “Geology, biology and astronomy. I took geology.” Turner and Pope knew little about the brain and found TEDxCaltech to be a good opportunity to learn more.

Though the curriculum may have changed since they left, both alums are still Techers at heart and are familiar with the Caltech newspaper. “I’ve been lying to the Tech for years!” Turner laughed.

One non-Caltech-affiliated attendee was Andrew McGregor, a journalist, screenwriter, and chessboxing champ. “[In chessboxing], you alternate rounds of chess and boxing, and you win by checkmate or knockout,” he explained. McGregor is no stranger to TED events; in 2011, he spoke at TEDxUSC and TEDxOrlando about his Tiziano Project, a nonprofit organization that teaches journalism in conflict zones. On Friday, however, he was there to relax, make friends, and indulge his fascination with neuroscience.

Mike Craig, a local independent high school counselor, said he came to Friday’s event because lots of the kids he works with are interested in neuroscience. “I’m really just looking for opportunities for my kids,” he explained. Paul Harvey, a reflexologist living in the Los Angeles area, was also there for work. “Everything in my ‘art’ or ‘science’ has to do with the brain,” he said. Although the attendees of TEDxCaltech came with a variety of purposes and interests, each left with a greater appreciation of the importance of the brain and its study.

Having heard talks describing the brain’s complicated structure, its ability to perform elaborate calculations, and the efforts by scientists to unlock its secrets, each learned in no small way that, as David Anderson of Caltech put it, “The brain is not just a bag of chemical soup.”



Dr. Tom Insel of the National Institutes of Health discussed the brain’s role in mental disorders.

- Shannon West Photography

TEDxYouth@Caltech connects to younger audience

SANDHYA CHANDRASEKARAN
News Editor

Saturday, January 19, marked the first ever TEDxYouth@Caltech, which showcased a varied group of accomplished young adults who shared some personal anecdotes and advice about the steps to success. The event featured eighteen talks spanning an array of topics; local entertainment groups and past TED talk clips were interspersed amidst these blocks.

While several of the speakers had direct academic and professional ties with Caltech (three were graduates, and six are currently pursuing their Ph.D.s), quite a few claimed distinct roots. Jason Chua and Eugene Korsunskiy, graduates from Stanford University, spoke of the creation of SparkTruck, their cross-country vehicle equipped to inspire students across America to try prototyping.

Alicia Hardesty, NYC designer behind the androgynous “Original

Tomboy” clothing line has recently begun collaborating with the Caltech community to create a clothing line, which caters to the “modern geek”.

Dr. Drew, who many seniors may recognize as their freshman orientation speaker, endowed knowledge on how to best build relationships – important tools for getting the most from daily interactions.

Arguably the most relevant topic for the Caltech student

masses was the value of video games for the growing mind. Four local high school juniors – Yousuf Soliman, Omar Ozgur, Ali Raed, and Karmah Eldesouky – made convincing arguments as to the benefits of gaming; selective attention, historical education, and reflexes were among the key points.

However, as one of the speakers mentioned, the positives of video games can only be fully realized when done in moderation.

Speaker Bill Gross, Caltech graduate and founder of IdeaLab, ended his talk with very sound words of wisdom. He explained that a lesson he hoped to preach was to “listen, listen, listen”. Not only was his advice applicable to young adults embarking on the open ended trail of startup companies, but it was also an overarching reminder of the value of events such as TEDxYouth@Caltech on the growing and developing minds of upcoming generations.

Audience reactions to TEDxCaltech: The Brain

ELLA DODD

Contributing Writer
Additional reporting by Yan Lee and Melissa Xu

At the TEDxCaltech event on Friday, 25 professors, students, scientists, and engineers spoke passionately about the brain. This was the second TEDx conference held at Caltech, and many people hope it will become an every-other-year tradition. These talks appeal to broad audiences in over 100 countries worldwide. According to the TEDx website, 242 TEDx events will take place on six continents next month.

TEDxCaltech's first presenter, Thomas Insel of the National Institute of Mental Health, described the brain as an "organ of surreal complexity," and the audience certainly seemed to agree. When Jeff Lichtman of Harvard University described some of his work with connectomes, several audience members exclaimed "Ooh!" and "Whoa!" while others appeared to have been left speechless by the scale of his project.

During his presentation, Allan Jones of the Allen Institute for Brain Science emphasized the need for fresh, healthy brain tissue in his research. Where does his team get these brains? The medical examiner's office, of course. The ensuing nervous laughter from the audience relaxed a little when Jones spoke about a particularly memorable trip to the ME's office. A newly widowed younger woman gladly donated her husband's brain, Jones said, "She told me he wasn't using it anyway."

Mark and Amy Weidman, a middle-aged couple from San Diego, California, are long-time TED talks fans. They missed out on tickets for TEDxCaltech two years ago, but this time they registered as soon as the topic was announced to be sure that they would be able



Caltech freshmen peer at the TEDxCaltech: The Brain program in anticipation of the event.

- Melissa Xu

to get in on the excitement. Mark Weidman, a high school English teacher, said he likes the TED format because it provides "bite-sized portions for the audience to understand without being overwhelmed."

After the first session, Amy Weidman, also a high school teacher, agreed. "Presenters didn't pressure people with the nomenclature. We were able to appreciate how astonishing the topics were and how to apply this to our own students and inspire

them in class." Gloria (declined to state her last name), who described herself as a "liberal arts person" and admitted that she was largely unfamiliar with biology, also said she was able to understand and appreciate the talks.

"They were not over my head." Gloria particularly enjoyed the presentations by graduate and undergraduate students. "The undergraduates' enthusiasm was contagious," she said.

Sam Miake-Liy, the 22-year-old son of Caltech alumni, appreciated

the fact that Friday's conference was "much less competitive and much more community-driven" than others he has attended. Miake-Liy currently works at Massachusetts General Hospital, but he said the six-hour flight was well worth it. He lauded the cohesive feel of the day but wished there had been a few more breaks between the talks. They would have given the audience more time to "digest the information that was relayed and discuss the concepts with likeminded people," he said.

David Kremers, a visitor to Caltech's aerospace department, had also hoped for more breaks. When Kremers attended the first annual TED conference in 1990, breaks were more frequent. He said having more break sessions gave listeners a chance to discuss the talks while they were still fresh in their minds. "Here, you have seven talks before breakouts," he said.

The Weidmans described the day as a "whole brain experience." They appreciated the event's hospitality, aesthetics, and overall smoothness. "Everything was beautifully orchestrated," they said.

Not everyone in the audience agreed. During Moira Smiley and Voco's three-part musical performance in the first session, much of the audience grew restless. Some people began talking in quiet whispers, playing games on their phones, perusing the event booklet, and even getting up to use the restroom. Still others were sleeping, their heads nodding up and down almost in time with the music. "It got quite warm," one older woman confided to her friend. "That was my rest time."

Brian Brophy, director of the theater arts program at Caltech and emcee for the Ramo section of the event, was also somewhat disappointed by the event. He attended TEDxCaltech two years ago, when the topic was former and much admired Caltech professor Richard Feynman's vision. Brophy still remembers Curtis Wong's presentation on the World Wide Telescope, and he said "looking out into the universe like that blew my mind more than this TED event has." Still, at the end of the day when Brophy asked the attendees if they had more hope for the human race now, everyone in Ramo cheered and clapped in an enthusiastic affirmative.

Techerland: Reevaluating the word "nerd"

NINA BUDAIEVA
Staff Writer

"Ugh, what's wrong with this place?" I heard Chelsea complaining to Lily as they hunched over spinach salads outside of Chandler Hall. "Chels, you're not being fair. We're in a very special place and you should be honored to be here," Lily was arguing, "and that's why people here might be different. But I think it's a good sort of different." "But no one here is normal!" Chelsea retorted. "No one is ever normal, and you're even less normal by trying to be normal, so be proud of who you are - an attractive nerd!" Lily tried to calm Chelsea. "Look, I could have gone to any other school, full of 'cool' kids, but I didn't want to. I went to a high school like that, and honestly, I prefer it here! Alright, worst case,

we're here to study and do research so that we may be happy with our lives later. You're still very nerdy at the core - and I think that's really good -- so if you really can't stand it here socially, just study here, and don't ask for much else! The good thing is, Caltech has so much to offer academically that I don't think anyone will ever be able to take full advantage of the opportunities!" Chelsea shook her head. "But Lily, I have to live here for four years and I can't stand it that I put so much effort into being sociable and into looking good, and barely anyone else here seems to notice or care. And everyone is so awkward!" Just as Chelsea said this, Christian stopped by my table and since my table happened to be near theirs, both girls turned around and I saw Lily give the astonished Chelsea a disapproving glance.

Christian was the exact antithesis to all of Chelsea's complaints. He was suave, he was athletic, he was good-looking, and he was a nerd. A serious nerd.

Now one thing I do not understand is the usage of the word "nerd". It seems that many people, even Techers themselves, use it primarily as a derogatory term for an awkward, four-eyed, pasty guy who lives in numbers and does not see daylight.

Having been at Caltech for some time now, I've run into many varieties of nerds and I cannot bring myself to use the term with a negative meaning. Chelsea seems to have forgotten who she is at heart, and if she hadn't deleted all of her photos from before December, she would have recognized herself as exactly the same nerd that she is now scoffing at.

All the while that Christian and I were chatting, I kept catching Chelsea's glance as she tried to get a better look at Christian. When he left, he walked past her and I saw her duck over the remains of her spinach and sneak one last peek at this phenomenon. Now is that not awkward? Lily smiled at poor Chelsea, while her eyes and her face seemed to say, "told you!"

I left soon after that and hurried off to prepare for my Physics 1B recitation section. On my way, I was thinking about how to best explain velocity transformations in special relativity to my section, but my thoughts were interrupted when I almost collided with Joe, zooming off to his next class. Good old Joe. Always thinking hard about something, always focused. He doesn't care much for his interactions with others, but he

is one great student, and he will be one great scientist. Perhaps he's cooped himself up in his studies because of what Chelsea was complaining about. He decided to focus on his work while he's here, to get the most of the best out of Caltech and once he graduates, we will see him unfold his wings and become a full citizen, with a very good education. But perhaps, he will get caught up in the bubble he's created and remain in it even after graduating. Only time will tell. Thinking of this, I got completely confused because next I thought of Christian. As far as I know, he's no worse a student than Joe, but yet he's already very open and sociable. This contrast still confuses me. I caught myself in these thoughts when I realized I was already in the lecture hall and had to refocus on special relativity.



Caltech Library

Study Spaces

The library is a good place to visit when you want to study. Whether you want to work collaboratively or independently, there is a study space that will meet your needs.

- Group study rooms in the Sherman Fairchild Library (SFL) can be reserved online.
- There is silent study space on SFL-2
- Millikan 7 offers lovely views from the study carrels
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Zero Dark Thirty is a thrilling, must-see film

MALVIKA VERMA
Contributing Writer

DISCLAIMER: THIS REVIEW CONTAINS SPOILERS. READ AT YOUR OWN RISK.

"Where do you want to go?"

Maya, a CIA operative and the heroine of Zero Dark Thirty, never answers, and the film ends as she stares at the other end of the cargo hold. She sits alone, and the audience can only wonder if her personal struggle is over.

Kathryn Bigelow, director of the Oscar Best Picture The Hurt Locker, returns with a thrilling story about the chase for Osama Bin Laden, known as "UBL" (Usama Bin Laden) by the FBI and CIA.

The film takes viewers on a decade-long journey with the lonely CIA operative Maya (Jessica Chastain) from Sept. 11, 2001 until May 2, 2011.

In 2003, Maya is assigned to work at the U.S. embassy in Pakistan with fellow officer Dan (Jason Clarke).

In a CIA-operated black site, a location outside US legal jurisdiction, Dan interrogates Ammar, a detainee with connections to Saudi terrorists, and uses torture and humiliation to extract information from him. Maya stands masked in the "torture room", where Ammar is waterboarded, deprived of food and water, and beaten.

After a short break outside, Maya returns with Dan to talk to Ammar, but with her mask off. She tricks him into obtaining information about "Abu Ahmed", the personal courier for UBL. Maya believes that if she can find Abu Ahmed, she can find UBL. As she transitions to a veteran officer, Maya survives many attacks including the 2008 Islamabad Marriott Hotel bombing and an attack at her home.

She finds Abu Ahmed in his vehicle outside a large suburban compound in Abbottabad, Pakistan. As the compound is placed under heavy surveillance by the CIA for months, Maya attends a meeting with the President's National Security Advisor and confidently states that there is a 100% chance that UBL in the Abbottabad compound.

With President Obama's approval, a U.S. Navy SEAL team raids the compounds on May 2, 2011. This last hour of the film is one of the most gripping film sequences I have ever seen.

Innocent lives are taken, a helicopter crashes, and as we are told by the government, UBL is found and killed. Maya visually confirms the body as that of Osama bin Laden and then boards the cargo hold to take her somewhere she must decide.

Two women have made this film amazing – Kathryn Bigelow and Jessica Chastain. Times critic Manohla Dargis describes Bigelow's

direction as bold and intimate, as it fuses large-scale action sequences with a human element.

Jessica Chastain's "single-minded ferocity and stubbornness not only prove essential in the hunt, but also make up the emotional through line that engages us," Los Angeles Times critic Kenneth Turan says.

I enjoyed several more things about the film. I liked that there is no back-story offered for Maya – she does not have any friends, and is simply the "killer" from Washington D. C. and the "chosen

one" to find bin Laden. Without a back-story to explain Maya's uniqueness, Bigelow is telling us that Maya, which means "illusion" in Hindu mythology, is just a symbol for any one of us.

I also enjoyed the scenes set in Pakistan (but shot in Chandigarh, India) that add to the hustle-and-bustle in the chase sequences for Abu Ahmed.

The film raises several questions aside from the ethics of torture. When and how will the war on terror draw to a close? Was bin Laden's death worth the price we

paid? How many "bin Ladens" are there for Maya to find?

Just as I prefer happy endings to movies, this review deserves a happy ending. 2012 was a great year for film, as good films actually made money (Argo, Lincoln, Skyfall, and Life of Pi for example). Go watch Zero Dark Thirty, and set your 2013 in film to a winning start.

Rating: 8/10

Note: This film is rated R. There are torture scenes and some language you may be uncomfortable with.



Reactions to Issue 10's Caltech Couture

KIRBY SIKES
Contributing Writer

In a recent Caltech Couture article, writer Nina Budaeva described one person as “Not a ‘man-girl’ who is only feminine by the biological definition, ... but a true girl.”

I was not sure what Ms. Budaeva meant by this because there is not a biological definition for “feminine.” maybe the word Ms. Budaeva was looking for here is “female.” People who are only female by the biological definition, and nothing else are usually called “genderqueer,” not “man-girls.”

“

I want to be able to focus my energies on furthering my education instead of styling my hair...

”

However, Ms. Budaeva was not referring to genderqueer people when she said “man-girls.” She was referring to women who choose not to conform to the rather narrow definition of femininity that our culture has created. One aspect of Caltech culture is the dismissal of many social norms and an overall acceptance of other lifestyles, so I was surprised and offended by Ms. Budaeva's statement.

We, as Techers, are smart people, and we are usually able to distinguish important values like integrity from morals that don't really make sense like an aversion to homosexuality or an overemphasis on personal appearance. To me, Caltech is a community in which I can participate in generally socially unacceptable, but not ethically wrong behavior. Caltech is a place where I can be different without feeling judged, and where I can escape from the rigid and unreasonable social expectations of the rest of the world.

I, personally, felt attacked by Ms. Budaeva's article. I shower

often, brush my teeth, and keep generally good hygiene. I also shave my armpits and legs, and on occasion enjoy wearing clothes that draw attention to my secondary sex organs.

I don't consider these things an important part of who I am. I want to be able to focus my energies on furthering my education instead of styling my hair, on sharpening my social skills instead of accenting my facial features, and on messing around with science instead of selecting a wardrobe. I don't think this makes me less of a woman.

I'm not really angry at Ms. Budaeva. To put it in her own

words, “even the wise and practical Techers sometimes succumb” to absurd American cultural traditions. Maybe being a sexist bigot is just as much a result of being surrounded by stupid nonscientists as irrationally waiting for January 1 to implement big life changes. It is not her fault.

I do have something to say to her though: If you want to call me a “man-girl” go ahead. I don't want to spend inordinate amounts of time on my appearance, and if that makes me manly so be it.

Let me just say though, that the expectation that “true girl[s]” spend time on their appearance, and “man-girl[s]” do not highlights the idea that women should focus on looking good, while men can focus on other, more important things.

Perhaps it is this stereotyping, along with other things, that has resulted in women's lower role in the economy.

You know what? I'm proud to be a man-girl and to stand up to sexist stereotypes.

KATHERINE KNOX
Contributing Writer

I don't know what the reaction to the new Caltech Couture articles is like in other houses, but in my house, let's call it “Buddock” to protect its identity, we have discussions whenever a new issue of The Tech comes out about how ridiculous and offensive these articles are to any woman who doesn't derive her entire self-worth from her looks. According to the most recent edition of Caltech Couture, which used to be about techers' individual styles, you can't be a “real girl” unless you spend an equal or greater amount of time on your looks as you do with your books.

The last edition of this wonderful testament to the creativity and varied skills present at Caltech admonished “Chelsea” for trying to impress her crush by excelling in the realm of academics instead of just being pretty. Sure it might be easier for someone to find a man if she spends all her time primping and doing her hair and makeup, and just rapidly following him around and giggling at everything he says, but who wants a man who falls for that? If it's acceptable for a man to wait for a woman who appreciates him for his personality and his intellect, why would it be any less acceptable for a woman to do the same? If all you're looking for is physical attractiveness, then go ahead and make yourself physically attractive so you can attract someone with similar desires. But don't tell the rest of us we're wrong for trying for something more meaningful.

On the subject of “Lily's” tutelage to “Chelsea,” while it may be true that “no one knows who's hiding under that t-shirt,” the solution is not just to wear a tighter t-shirt. No woman is defined by the combination of her boobs, waist, hips, and ass. Emphasizing your feminine traits and hiding your less attractive traits as “Lily” would suggest would not make it any easier for a stranger to get a concept of who you are. If the implication

in the article was that enhancing your femininity was just one of the ways to attract someone's attention before you get to know them better through conversation, it wouldn't be a problem.

But the scorn for the girl who works hard on problem sets to get attention makes it clear that enhancing your physical traits is the only method endorsed. As mentioned before, some women prefer men who appreciate more than their physical attributes. Why would those women spend time on things that would attract a shallow, immature guy when they can just demonstrate their talents and personality and let things happen naturally?

Now that I'm ranting about the advice in the column I may as well get into “Lily's” advice about not being a “man-girl.” Talk about offensive.

Apparently any girl who doesn't spend all her time preening and trying to attract a man is not really feminine. It's not even the description of which actions distinguish a “true girl” from the brutish “man-girl” which is offensive. There's no problem with wanting to be pretty.

I'm willing to admit that I hate my body hair, and I spend time removing it because I greatly prefer my skin being soft and smooth.

However, it is the idea that telling a girl to shave or wax is socially polite, or even that it's acceptable to tell someone she needs to shave, which is sickening to me.

The problem I have with the description of a “man-girl” is that she is looked down upon for not following the idea of beauty being extolled by society and the new Caltech Couture. If doing what I like, and looking how I want, and spending time doing things that I enjoy instead of learning how to apply makeup properly and finding clothes that will make me fit in with the kind of people who find this article to be more than verbal diarrhea makes me a man-girl, then I am proud to say that I'm a man-girl.

In addition, I don't know of anyone who decided to come to Caltech to get a MRS. As far as I know, everyone is here to learn science and engineering and do something meaningful and fulfilling with their lives. If someone simply wanted to ensnare a man with her feminine wiles, she could probably find somewhere to do that without spending \$55,000 a year. Unlike “Chelsea,” I don't know of anyone who is merely becoming a scientist in between “nourishing her real dream” of becoming a beautiful fairy tale princess.

My studies here are what I'm passionate about.

The Caltech Couture articles suggest that this is abnormal, or something to be ashamed of, which makes me wonder if we've gone back in time to the 1950s every time I pick up the new issue of The Tech.

If Caltech Couture went back to what it was last year, a celebration of the multitude of unique styles present on campus, I think we could all be a little prouder of our newspaper.

Even if the tips, which are buried within the preaching, were dug out and placed in a more prominent light we could count that as an improvement. There is certainly merit within the bulk of vitriol-inducing rubbish.

For one thing, the suggestion that we should take it upon ourselves to change when we first feel the desire rather than waiting for the new year is valid and something we should all take into consideration. And the tips on makeup are good, and if I were so inclined I would like to have a source to teach me how to enhance the features of my face.

However, any inclination I may have had to follow these tips is immediately stifled by the outrage I have at the insistence that I must follow these tips or else I'm some kind of monstrosity.

I also applaud the effort to make the issue of depression more widely known, although I'm not sure how that fits into an article on fashion.

Three-in-one Professor of the Month Reception

October



November



December



Join Professors of the Month Michael Vanier, Joel Tropp, and Jason Alicea on January 25 from noon to 1 on the Olive Walk.

Caltech men's basketball team battles CMS in hard fought, thrilling OT game

FROM GOCALTECH.COM

PASADENA, CA – In a game that saw 10 lead changes and eight ties the ClaremontMuddScripps men's basketball team pulled out a thrilling and hard fought overtime win over Caltech 69-65.

The Stags, who won the league's regular season and tournament title last season, came into the game in the top half of all major statistical categories in the league.

"The three underclassmen really stepped-up and played hard this evening. Probably the best game we have played since I have been here and we showed what we are made of," fifth year head coach Oliver Eslinger said. "Also, being alumni weekend, it was great for them to see us battle hard against the SCIAC's top team."

The first two minutes of the extra session were played at a back-and-forth clip until the Stags took the lead for good with 2:57 left. Kevin Sullivan hit a driving lay-up to give ClaremontMuddScripps a 62-61 lead they wouldn't relinquish. The Beavers turned it over on their ensuing possession which enabled the Stags to spread their advantage when Sullivan grabbed an offensive rebound and banked in another lay-up.

Still down by just one possession Caltech came-up empty when Michael Edwards missed a jumper with 1:42 left on the clock. Chris Rama made two foul shots to spread the Stags lead to five points (66-61). Edwards came down and hit jumper on the Beavers next chance with the ball but the Stags were equal to the challenge as Remy Pinson converted a lay-up with 34 seconds left.

Edwards got Caltech within three points once again as he nailed a jump shot with 21 ticks on the clock. Forced to foul, the Beavers sent Jack Grodahl to the foul line but he missed both free throws.

Caltech's offense raced down the court but Bryan Joel missed a lay-up with 10 seconds left and the Stags grabbed the rebound. Caltech was forced to foul and when Jack Earley made the second of two free throws with five seconds left it sealed the win.

The Stags led the game for most of the second half but a hard fighting Caltech squad never let the game get out of reach. Andrew Hogue's three-pointer with 4:20 left gave the Beavers their first lead of the second frame at 51-48. ClaremontMuddScripps retook the lead at 53-52 when Grodahl hit a three-pointer with 2:01 left.

The score stayed that way until Grodahl hit two free throws with 23 seconds left to increase the visitors lead to 55-52. Hogue brought Caltech within 55-53 with 10 ticks remaining. After the Stags missed two free throws two seconds later the Beavers were able to force OT when Joel calmly nailed two shots from the charity stripe with four seconds left. An off balance three-pointer by the Stags didn't draw iron at the buzzer.

The first half was low scoring as each team played solid defense but, in what proved to be a pivotal play in the contest, Pinson hit a running 25 footer as the halftime horn sounded. The off balance shot gave the visitors a 28-21 lead at intermission.

Each team placed four players in double figures.

Joel's 16 points off the bench led all scorers. Edwards chipped in a 14-point evening while Hogue and Kc Emezie each added 13 points. Alex Runkel set a school record with seven steals while grabbing 10 rebounds and scoring five points.

Caltech held a 42-38 rebounding edge over the SCIAC's top rebounding team.

The Stags scoring was led by Sullivan's and Pinson's 13 point evenings.



I think this is the athletics department's stock photo for the men's basketball team. I couldn't have chosen a better one, myself.

- gocaltech.com

Weekly Scoreboard

*Women's Swimming and Diving
vs. Mills College
W, 152-56 Final*

*Women's Basketball
vs. Claremont-M-S
L, 63-40 Final*

*Women's Basketball
at La Verne
L, 105-45 Final*

*Men's Basketball
at La Verne
L, 90-66 Final*

Upcoming Games

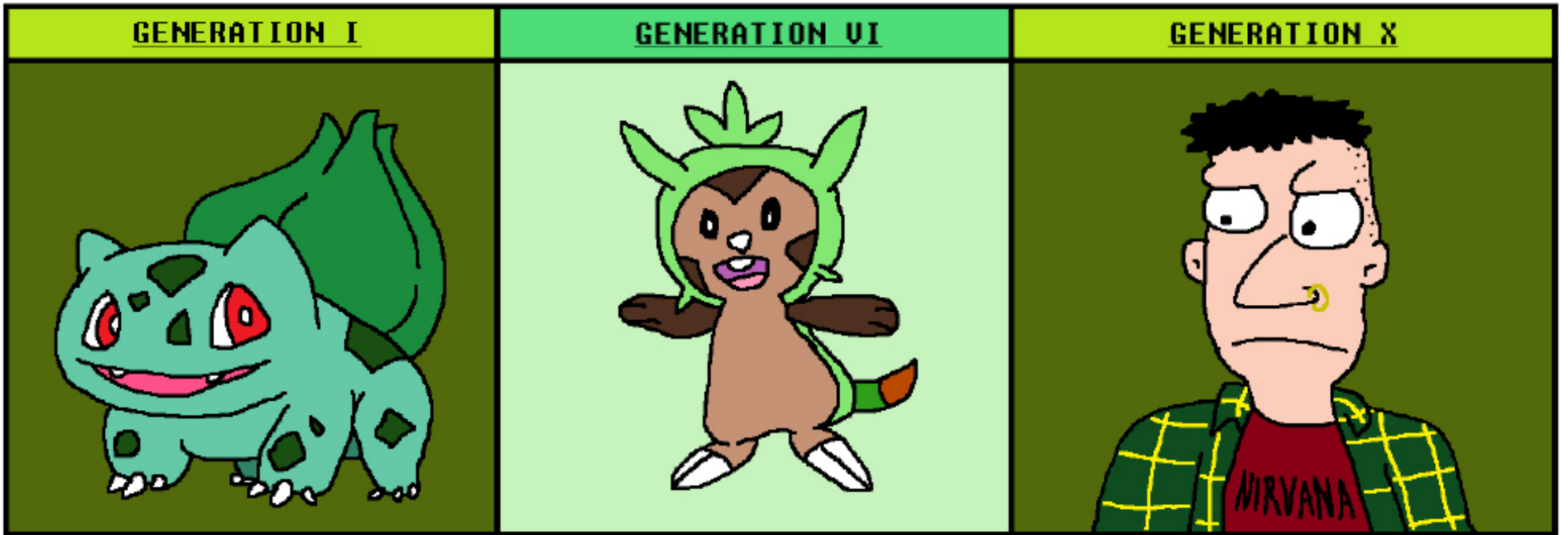
*January 23, 2013
Men's Basketball
at Chapman
7:30 PM*

*January 24, 2013
Women's Basketball
at Chapman
7:30 PM*

*January 26, 2013
Fencing
vs. IFCSC South vs. South @ UCSD
10:00 a.m.*

GRASS-TYPE STARTERS

BY ALEC KRISTUFFU



TECHSTONIC

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

tech.caltech.edu

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