

More women applying to Caltech

Admissions upping recruitment

By Chris Kennelly
STAFF WRITER

More females are clamoring to get into Caltech than ever before—this year, 34% more females applied via Early Action, an increase Director of Admissions Rick Bischoff calls “very substantial.” The total Early Action pool surged 16% from 683 applicants to 795.

Bischoff says that the increase in applicants parallels the stronger applicant pool from last year. The admissions committee is making its final decisions this week before sending out acceptance letters.

This year marks the one-year experiment without “The Box” on Caltech’s application, a square students were asked to fill with “something interesting.” In past years, the box rarely determined whether a student was offered admission.

Only “a handful of boxes...

were phenomenal and interesting,” said Bischoff. “There was a much larger group that it didn’t make a difference.”

Box submissions had been separate from the application and were cumbersome to merge back together for the students and faculty on admissions. Nixing the box this year paid off in streamlining applications—file organization and delivery to admissions readers were completed within a week of the Nov 1 Early Action deadline, as opposed to three weeks later last year.

Once the letters do go out, Admissions plans to keep in contact with accepted students. In past years, a less coordinated effort went into sustaining contact with accepted students from when they were accepted and they chose to matriculate. Last year marked the first time in which accepted students more frequently received information or were directly contacted.



Photo by Michelle Jiang

Female Early action applicants surged 34% this year, following last year’s trend of more females applying and matriculating. The class of 2011 has a record 37% females.

Tackling stem cells

Caltech joins forces with Southern California schools

By Jonathan Yeung
STAFF WRITER

When California legislators passed Proposition 71, Dr. Paul Patterson knew that the road to finding cures for many diseases had been paved.

The proposition set aside \$300 million each year for 10 years to California institutions to research stem cells. As a result, the Southern California Stem Cell Scientific Collaboration (SC3) was born.

Caltech, USC, UCLA, UCSB, Children’s Hospital Los Angeles, City of Hope, and the House Ear Institute are combining their ef-

forts to unlock the potential cures that stem cells may bring. Each institution will contribute their area of expertise as well as personnel to work in USC facilities that are under construction. Researchers are hoping that the combination of each institution’s specializations will expedite advancements in stem cell research.

Caltech’s research team, headed by Patterson, brings knowledge from many fields. Caltech has already performed much research on animal stem cells. In addition, Caltech has advanced imaging capability that can view cells in a high resolution, and has knowledge concerning the 3D matrix and artificial materials in which the cells grow in as well as in the computational area. Twenty faculty members are working on the project.

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False alarms can be fatal

Students at other schools died when they ignored real fires

By Sarah Marzen
STAFF WRITER

In the past, at other universities, students ignored fire alarms and were injured or killed due to a delayed response to real fires. The South Houses have had over a dozen false alarms in the last year.

The most notorious of these incidents was in 2000 at Seton Hall University. Students didn’t respond immediately to a real fire alarm, thinking it was another false fire alarm. Three students were killed and 58 students were injured.

Fire extinguishers and fire alarms were all working properly, and firefighters responded within minutes. However, Seton Hall did not have sprinklers installed in 2000, because the law requiring sprinklers was enacted after the dorms were built.

According to data from the latest version of the Campus Fire Safety Information Sheet, 83% of campus fires occur in off-campus housing, and 8% of all campus fires occur in residence halls. The most common causes of fire fatalities include missing or broken smoke detectors or sprinklers. Caltech dorms have sprinklers and fire alarms in the South Houses, but Marks, Braun, and the North Houses only have fire alarms.

More recent college fires include fires at South Adventist

University in 2005 and a fire at an off-campus house in Rochester, New York this year. The South Adventist University student was faced by a wall of smoke when she finally responded to the fire alarm. In the Rochester fire, the two house occupants didn’t react until the second alarm, leading to a fatal eight-minute delay in action.

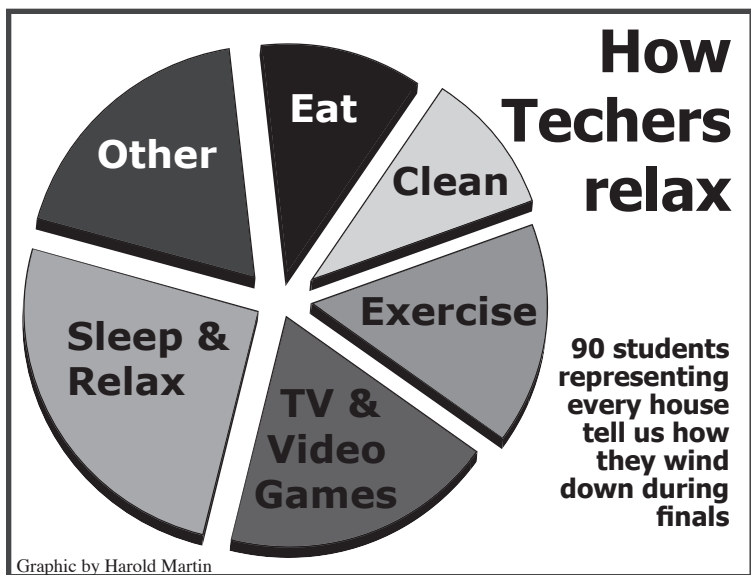
Fires in the Caltech dorms will probably spread on similarly short time scales. According to Ed Comeau of Campus Firewatch, an organization that tracks college campus fires, the question is not

how fast the actual fire spreads, but how fast the smoke spreads. “Your books, clothes, bedding... generate the toxic smoke that injures and kills people. A vast majority of the fire fatalities are from smoke inhalation, not from burns. Smoke travels far and wide, and within seconds and minutes you can be trapped.”

Although some Caltech students deride fire alarms as “Everything’s Okay” alarms, more cautious authorities question the premise of that phrase.

“I have never heard an alarm

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Student center in the works

By Joel Nikolaus
STAFF WRITER

ASCIT is forming a new committee to involve students in the construction of a new student center.

With time sensitive funding from Gordon Moore, construction of the new building is likely to begin in the near future. Although current plans for the center still remain “nebulous” according to IHC Chairman Mike Woods, he said that the best way to avoid the “same problems with the Student Center as we had with the South Houses” is for the students to take a “proactive” approach. The South Houses took six months more than expected to finish and students were upset by the painting-over of decades-old murals.

The committee will face a number of challenges. Examining student centers at other schools and investigating just what went wrong with Winnett Student Center would be among the committee’s objectives.

Definite plans are still in the works, but Woods hopes that students will be “driven by the fact that you want a really cool building” to encourage students to get the most out of the new center. Students can expect signups for the committee to go up at the beginning of next term.



Best holiday drinks near campus

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Your call: How to improve teaching

Last week, we asked for your suggestions on how to improve teaching at Caltech.

Here are three ideas from undergraduates:

Put a price on teaching, then see if we can afford it

By Andrew Kositsky
STUDENT

If undergrads want better teaching, the undergrads will have to show the dough. It's difficult to convince Caltech to invest resources in teaching reform if the undergrads aren't willing to spend any of their own money.

How much is necessary? That depends on how big of a change the undergrads want to see.

Let's try an experiment. Survey the undergraduate/graduate population on teaching quality: how much would you pay in order to have some additional professors whose main job is teaching, not research, and in what department(s)?

Now survey the professors by department: "How much would you be willing to pay in order to

be exempt from teaching duties?" Zero is, of course, a valid answer for those who enjoy teaching!

The basic question is whether or not we should spend resources to reform teaching, perhaps by hiring a limited number of 'teaching professors' whose main job is teaching rather than research."

Once we know how important this or other changes are monetarily to those most affected, we will have a solid estimate of how important acquiring teaching professors or other teaching reforms are to both the students and the faculty. This is important data to have! We might learn that one or both groups are unwilling to spend money on teaching reform or we may discover that teaching reforms are important to everyone.

Since not hiring teaching professors and not providing more monetary inducements to encourage excellence in teaching is cheaper than adding to Caltech's Budget, we'll start with the null hypothesis that students and faculty don't want teaching reform badly enough to pay for it.

This is probably what Caltech's administration assumes; why spend money on trying out an expensive new teaching experiment when it's not clear more than a few people care? This is a great

chance to determine whether or not we should accept this null hypothesis. And if we reject it, we can investigate the area(s) of teaching need the most help, draw up a budget, and have the students vote about which parts are as important as their costs.

We're in a position to petition "Caltech" (whatever that means) to increase student fees and have matching (or surpassing) contributions from "Caltech" and probably from the Moore-Hufstедler Fund, etc.

If the students vote to increase their fees in order to get that

(perhaps contingent on receiving matching funds), it's a very strong message. If they're not willing to pay for part of it, it sends the message that they want this additional service without paying more.

If that's the case, where should the money come from?

With the professors, make an option for them to "buy out" their teaching by contributing from some fund (grants?) to the "teaching budget" in their area?

There are many details we need to work out, but we should head toward making strong, quantitative statements about how important teaching reforms is at Caltech. There's no reason to leave rational arguments in the lab!

Speak up, or no one will hear you

Talking to faculty directly lets them know you care about teaching; ombuds and ARC reps are here for a reason

By Csilla Felsen
STUDENT, ARC SECRETARY

Based on student nominations, the Academics and Research Committee (ARC) and ASCIT honor professors and teaching assistants who excel in teaching at an annual awards dinner. Winners say every year that the awards are meaningful because they come directly from the students. It's one of the few ways on campus that people who care about teaching are recognized for their efforts.

Consider ARC's chagrin when we heard that someone who had received a teaching award was

told, rather than receiving congratulations, that it is better to have received the award early enough in one's career that it will not come into consideration for tenure determination.

The implication here is that when Caltech places

such a high emphasis on research, if a professor devotes enough time to teaching that he/she is recognized for those efforts, he/she is too blatantly slacking off in the research.

Granted, more undergraduates, when asked why they come to Caltech, cite research than cite teaching. However, students enroll at Caltech with the (well-justified) expectation of receiving a quality education. A major part of that education depends on how well we are taught; if we could teach ourselves, we would not have to pay for a Caltech degree.

One major step towards improving teaching quality is for the Caltech culture to embrace teaching as something highly valuable. This culture shift, though an ambiguous, abstract notion, already seems to demand more from busy Caltech professors. While students can plead for better teach-

ing, we cannot provide the immediate compensations, money and career stability, that would support the energy we are asking professors to allocate in improving teaching. Student representatives on any committee that discusses teaching quality encounter this dilemma.

However, students can increase the emphasis on teaching by talking directly to faculty and expressing greater appreciation for good teaching or providing constructive feedback for less good teaching. One of the greatest problems in teaching is the student apathy that prevents us from taking action on proposals for im-

“Consider ARC's chagrin when we heard that someone who had received a teaching award was told... that it is better to have received the award early enough in one's career that it will not come into consideration for tenure determination.”

provement, or in not making any suggestions for improvement at all.

Since my freshmen year, I have heard people complain about teaching. To some extent, that is a good thing. For those of you who are not complain-

ing, use your skills as a scientist to seriously evaluate what does and does not work about teaching at Caltech, which includes filling out TQFRs, talking to your professor/ombuds/ARC, and even participating in projects with a broad scope, such as the Student-Faculty Conference.

For all who have made it past that first step of identifying problems, devise and propose solutions—speak up! Beyond that, I challenge everyone (faculty, students, administrators) to translate the discussions about teaching into positive actions.

Csilla Felsen is the current ARC Secretary and former ARC Chair. Csilla and the ARC can be reached at arc-list@donut.ugcs.caltech.edu to answer questions about this editorial or how to get involved in improving teaching quality.

Make us think

Engaging problems, not grueling ones, are the best way to excite eager minds

By Jonathan Senn
ALUMNUS

Last year I was taught Ma109b, Differential Topology, by Professor McReynolds. At the first lecture he announced that each of our weekly problem sets would have a problem or two which was far above our skill level, and which we weren't expected to be able to make significant headway. These problems wouldn't be labeled as such, and of course we were encouraged to attempt to solve all problems. On occasion he would even intentionally ask us to prove statements which were false, and he assigned a series of open problems as extra credit.

Despite the weekly double-digit number of hours required to begin to grasp the material, this was my most enjoyable class while at Caltech.

For most students, understanding the material taught in Caltech courses tends to require large

amounts of time, and for me this time felt most useful as I struggled to apply the concepts I learned to novel and difficult problems, the sort which I'm not sure whether I can solve at all. The large majority of Techers choose to attend Caltech to be trained as scientists, or at least out of a fascination

with scientific thought. In my opinion, the best courses are those which ask us to think and function most like scientists, challenging us to (re)invent difficult or elegant solutions, while the not so rewarding ones require us to in some sense mimic examples performed in class or in the text. Most classes have exams which fall into the former category, but I feel that many professors can enrich the spirit with which students attack their subjects on a weekly basis.

“On occasion he would even intentionally ask us to prove statements which were false...this was my most enjoyable class while at Caltech.”

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*Letter to the Editor***Apathy's roots in Tech culture: a supersenior's perspective****By Daniel Poon**

CONTRIBUTING WRITER

Continuing the recent rush of articles discussing the apathy which pervades Caltech, I'd like to offer my two cents on how the "nurturing" environment of Tech molds our attitudes concerning community over our Tech years. It's often said that people come to university not just to learn the techniques of their future trade, but also how to interact with people as adults. Caltech may provide one of the best educations in the world with respect to the former aim, but in the latter respect, Caltech often provides a very weak experience.

I'm sure even the freshmen have noticed by now that Caltech is a very unsettling environment. Contrary to popular myth, it is generally neither the teachers nor the workload that makes this happen. For all the talk about "learning how to learn" at Caltech, it is apparent that the first skill that Techers learn upon coming to Tech is not how to learn from university-style lectures or how to manage their time. Instead, freshmen are taught how to gripe about everything, from issues that actually matter to the most minor and reasonable inconveniences. All of this happens while we are still on pass-fail.

Consider the traditional first-term freshman schedule. Math 1a is meant to be a weeder class for the math department, and is legitimately difficult. The rest is not a problem. Chem 1a is meant to be an easy class. Phys 1a is a joke;

so was APh 9a, although I hear that is changing. All that CS 1 requires is minimal time management, enough to get the reworks in. Compared to upperclass workloads, a typical first-term freshman schedule is minimally strenuous even before considering that the entire term is on pass-fail; yet, even with a minimal workload, much of the apathy at Tech begins in first term of freshman year. The case is therefore strong for an unrecognized social factor that engenders and perpetuates student apathy.

Cutting straight past the layers of irony and cynicism, the

"We students have a social interest in portraying ourselves as struggling with our classwork in order to elicit sympathy from our peers. I'm sure you know what I'm talking about."

real truth is simple. Gripping is respected as a form of ironic stoicism, and having something to gripe about (i.e., being "bitter") is consequently prestigious. We students have a social interest in portraying ourselves as struggling with our classwork in order to elicit sympathy from our peers. I'm sure you know what I'm talking about. However, just like injury victims who recover slower when they are still seeking compensation by lawsuit, we students adopt habits that make this struggle a reality and do worse academically as a result. It's pointless and sad, especially in an institution that seeks to cultivate

the greatest young minds in the world.

Last week, Craig's editorial put forth the thesis that our student body seems apathetic because "students put academics first". I respectfully disagree and offer the following generalization: All that students really want from their fellow students is support and prestige. To this end, individuals feign "putting academics first" by complaining about their own academic situation. Actually caring about what transpires in the campus community is tantamount to denying the paradigm of constant struggle with academics; therefore, a lack of apathy is socially shunned.

Since the Houses are the student body's best-established communities, our best shot at fighting this influence is to emphasize the positive aspects of House culture. But it's not enough to simply turn up the volume. While the Houses are centers for some of the passionate activity at Tech, it's important to acknowledge that to the extent that House cultures condone unfounded griping, they are also responsible for perpetuating apathy. The Houses often serves as a microcosm for entering freshmen, and as current culture stands, too many freshmen get trapped in that microcosm. It's our job to tweak House culture until it instead serves as a reflection of the outside world and empowers us to seek and effect change. We must emphasize to our peers that the best of us often manage to succeed because of broader perspective, not despite it.

Undergrads could make more effort to befriend grads**By Evelyn Chou**

STAFF WRITER

Interhouse had a fairly high turnout of both graduate and undergraduate students, an encouraging outcome for Caltech where the populations are equally small and generally separate. For a small campus like Caltech, parties are obvious places to get graduate and undergraduate students to interact freely, particularly when one of the more common complaints is how limited the social arena can feel.

Though the divisive structure of the House System does little to encourage campus-wide unity even between undergraduates, Caltech's size creates an environment that leaves room for many more student-organized events, allowing the grads and undergrads to mingle—if they want it enough.

In recent years, ASCIT and GSC have collaborated to organize events that allow members from both student groups to mingle, coordinating events in order to minimize conflicts and facilitate increased attendance from both student groups. Out of support for Caltech's sports teams, the grad-organized Beaver Fever pep rally drew a large number of both graduate and undergraduate students in roughly equal proportions last year, and GSC social chair Evans Boney says popular demand is bringing them back this year.

Many other events sponsored by the GSC are open to undergraduates, including term parties, GUSHes (Graduate Underground Social Hour), and off-campus trips. An off-campus trip to Magic Mountain is in the works and undergraduates are invited. Past Interhouse parties have been subsidized in part by GSC; this year, GSC subsidized big Interhouse by \$1,000. Events such as lectures, parties, and mixers get funds from GSC.

In return, ASCIT-sponsored events such as Interhouse parties are also open to the graduate community. Savvy undergraduate party organizers recognize that because the amount of alcohol allowed at a given event is proportional to the number of attendees over 21, more graduate students means more booze.

It's not hard to see that the number of graduate-undergraduate events and interested participants have gone up recently, what with

the addition of an undergraduate team to GSC's summer Gradiators event and a recent off-campus trip to the Kings vs. Sharks hockey game. These sort of events, which are specifically tailored to mix grads and undergrads, are a far cry from the interaction you'd see at a larger school like MIT, where students say the only interaction is in lab or classes. In reality, we're not so different, after all. Most grads come from a highly rigorous academic background, despite scattered complaints about graduate students who either dumb down courses in unfamiliar subjects or destroy the grading curve in undergraduate classes that they take for review. As for the rather unique quality of undergraduate culture, it's likely that anyone who loves math and science enough to come to Caltech for more was socially

"As for the rather unique quality of undergraduate culture, it's likely that anyone who loves math and science enough to come to Caltech for more was socially awkward and/or quirky enough to fit into Tech life without a hitch."

awkward and/or quirky enough to fit into Tech life without a hitch.

Still, the number of undergraduates that make an active attempt at interacting outside of their comfort zone is dismally small, though hopeful. That

is to say, despite our mutual love of math, science and masochism, the undergraduate community has yet to reach the point at which it inundates ASCIT weekly meetings with desperate requests for increased social interactions with graduates. Fortunately, though, we seem to be making headway. During Gradiators 2006, a number of Page House members expressed interest in joining the event, but an undergraduate team was not added until the subsequent year. Says Bryan, "We really liked having them there... undergrads definitely add something to the dynamic. Maybe in the future there will be more of a grad vs. undergrad element to the games...who knows?"

Of course, GSC and ASCIT make decisions based on the desires of their respective communities. If we want increased social interactions, it should be brought to the attention of our Social Directors—or at the very least, undergrads need to make a greater effort to show up at open graduate events, and vice versa. After all, we undergrads could stand to learn a thing or two about life outside of Tech, and graduate students would jump at the chance to get out of that sub-basement laboratory and dance tipsily on top of an aircraft carrier on a Saturday night. I know I would.

Skeptic Society debates the true meaning of Christmas**By Evelyn Chou**

STAFF WRITER

The holiday season brings to mind visions of sugarplums, the sharp wintry scent of crisp air and wood fires and, for better or worse, sentiments of the true meaning of Christmas. As we drive by manger after manger, endlessly counting the swaddled babes under the watchful eyes of adoring shepherds, we are reminded of the questions that mankind has asked, pondered, and warred over for millennia.

After all, one of the most hotly debated subjects throughout history has been that of the existence versus the fallacy of religion and its effects on society, although perhaps the most famous discourse on this subject has been recorded as by a certain Linus van Pelt, best friend to that perennial optimist and maladroit Charlie Brown. What better way, then, to ring in the holidays than with a theological debate over the role of religion in society?

The Skeptic Society came to a similar conclusion this week, holding "The Great Debate" on Sunday afternoon in Beckman Auditorium. Hosted by the Skeptic Society, Caltech/JPL, and Athens & Jerusalem, the debate was open to the public and featured

two powerhouses of conservative Christianity and libertarian skepticism, Dinesh D'Souza and Michael Shermer. D'Souza is a Fellow of the Hoover Institute, has worked in the White House and is the author of many noted books including "What's So Great About America?" Shermer, a noted skeptic as well as the Publisher for Skeptic Magazine and a monthly writer for Scientific American, is also the author

"It is atheism, not religion, that is responsible for the mass murders of history."

— Dinesh D'Souza

"It's easy to pick and choose passages of the Bible to support what you believe."

— Michael Shermer

of several books, including "The Mind of the Market".

Both esteemed celebrities in their respective fields, the two debaters are also friends, an interesting development that led to several humorous exchanges throughout the afternoon. During a particularly heated discussion Shermer responded "We'll settle this with a couple of adult beverages later this evening."

Topics of the discussion focused on two of the most prevalent questions in the field: "Is Religion a Force of Good or Evil?" and "Can Good Exist Without God?", and was mediated by

noted skeptic William Lobdell. The debaters discussed examples of morality versus immorality in society throughout the ages, from the philosophies of the ancient Greeks and Romans to the current status and global effects of modern religions. Several ideologies were cited, including the ideals of Jefferson, Machiavelli, and Nietzsche, and both sides discussed the causes and effects of blood-drenched regimes such as the Salem Witch Trials, the Spanish Inquisition, and those of Hitler, Pol Pot, and Stalin.

Digging deeper, the scholars discussed the inherent nature of man and the effects of religion on morality. Finally, during the cross examination, they delved into the more general questions on the origin of life and the concepts of order versus chaos.

Despite their best attempts to remain professional, much of the discourse was interspersed with snarky quips and pointed attacks on the so-called "ridiculous claims" of the other party. Both sides spent a disappointing amount of time pandering to the audience, despite the fact that certain comments from the debaters would elicit the occasional outburst from audience members. Listeners cheered for their hero, groaned huffily at key points.

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TOP 10 HOLIDAY COFFEES

by Andrew Freddo and Dannah Almasco



Introduction: As the holiday season comes upon us, we get bombarded from every angle with holiday cheer. The nearby coffee shops try to put us in that homey holiday mood with specialty drinks. We decided to trek out and drink up at the nearby spots. Here's 10 flavors you may (or may not) want to try while finishing up your exams.

- 1. Eggnog Latte** (Peet's, \$3.30): Even though we didn't know much about eggnog going in, we found this very sweet and milky, but still with a solid coffee taste.
- 2. Blended Peppermint Mocha Trio** (SBC, \$3.65): Besides being beautifully presented, this (cold) drink was very refreshing, with a strong (but not overpowering) peppermint taste over the coffee and chocolate.
- 3. Peppermint Hot Cocoa** (Peet's, \$2.90): This drink smelled exactly like melted Andes mints, and was very rich. The mint wasn't too strong, but complemented the sweet chocolate well.
- 4. Maple White Chocolate Mocha** (SBC, \$3.60): Want a change of pace from the traditional holiday offerings? Try this drink, which smells and tastes like maple syrup, with the creamy smoothness of white chocolate in the background.
- 5. Caramel Apple Spice** (Starbucks, \$2.60): Only have this (non-coffee) drink if you are a true apple cider fan. It's very sweet with a rich spice aroma, but a bit overpowering if you're not expecting it.
- 6. Peppermint Latte** (Red Door): The peppermint flavor is subtle, with a milk aftertaste. You can drink this one faster than the other offerings, because it had a thinner texture.
- 7. Peppermint Mocha Frappuccino** (Starbucks, \$3.75): Only for the die-hard mint and chocolate fans, this drink will blow you away with mint flavor. The coffee flavor definitely takes a backseat on this one.
- 8. Holly Jolly Mocha** (Red Door): This drink has a distinct coffee aroma, but with a definite chocolate taste. The mint is much more subtle in this, but overall it's a bit too sweet.
- 9. Peppermint Latte** (Coffee Bean, \$3.50): Essentially, the only time the flavor of peppermint and white chocolate came through was on the very last sips. The drink had a very silky texture, but it basically tasted like hot chocolate milk with a hint of mint.
- 10. Gingerbread Latte** (Coffee Bean, \$3.50): This drink evolved from being way too hot and frothy to lukewarm, watery milk. Only at the very end did any gingerbread flavor come in, but then it was too much; there was no happy medium.



Don Giovanni

AT THE L.A. OPERA

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Mozart's classic opera Don Giovanni received a fresh new face at the LA Opera during its run this season at the Dorothy Chandler Pavilion in LA, which began on November 24 and will continue to run through December 15. The popular story about history's greatest playboy and miscreant is back with a vengeance and well worth the viewing. LA Opera's stark, minimalist sets speak much louder than words, putting a chilly emphasis on the phrase "dark comedy" and providing a visual and auditory tour de force that is both beautiful and terrifying.

The stage crackles with intensity even as the curtain opens; we are treated to a somber, haunting visual montage during the overture and the rest is an incredible palette of stimulating and sensual scenes, interspersed with light comedy and lots of highly enjoyable innuendo. Erwin Schrott shines as the eternally sexy and irresistibly charismatic Don Giovanni, a hedonistic nobleman with an eye for the ladies. In fact, as is revealed in the comic aria "Madamina,

il catalogo è questo" (My little lady, this is the catalogue), Don Giovanni has had no less than 2,065 lovers: 640 in Italy, 231 in Germany, 100 in France, 91 in Turkey, and 1,003 in Spain.

Most of the comic scenes in the opera are played admirably by the unquenchable Leporello, Don Giovanni's loyal manservant and occasional scapegoat, played by Kyle Ketelsen. Despite his disapproval of his master's actions, he too often finds himself an accessory to Don Giovanni's increasingly complicated schemes to bed the innocent Zerlina. However, it seems that time is up for Don Giovanni, as his past misdeeds begin to catch up to him. Don Giovanni, uncaring, continues his attempts to corrupt Zerlina, but his indifference and pride will eventually lead to his downfall.

Other characters make notable appearances throughout the story. On the bloodstained ground, Donna Anna, played by Alexandra Deshorties, kneels in tattered white rags over the prostrate body of her murdered father as the stage is suddenly drenched in crimson

light. Harsh, red lines draw the eye down a frenzied perspective to the rear of the stage, which glows with an ominous red light. Silhouetted against the haze we see the impossibly tall bodies of the pallbearers as they move slowly and inexorably closer. Charles Castronovo, as Don Ottavio, gives a powerful performance as Donna Anna's devoted fiancé, determined to avenge the death of Anna's father. These and other scenes impart an intensely emotional experience to the viewer, up until the final scene of Don Giovanni's terrifying confrontation with the ghost of the man he murdered. Tall, pale homunculi creep eerily across the stage floor under stark white light when Don Giovanni shakes hands with the dead man, fighting the cold grip of death to the last.

Fascinating and moving, this opera is an experience you won't want to miss. LA Opera's unique take on a classic story is a work of art that will leave you feeling enlightened and perhaps a little bit naughty.

- Evelyn Chou

"In fact, as is revealed in the comic aria "Madamina, il catalogo è questo" (My little lady, this is the catalogue), Don Giovanni has had no less than 2,065 lovers: 640 in Italy, 231 in Germany, 100 in France, 91 in Turkey, and 1,003 in Spain."

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HOW TO SURVIVE FINALS



Try these easy beginner yoga positions to help center and calm yourself:

Downward Facing Dog: This pose stretches and strengthens the body, it is usually the first pose done in the practice, and is done throughout as a transitional/resting pose. Keep your hands and feet shoulder length apart, engage your forearms and spread the fingers. Bring your shoulder blades more onto your back in the direction of your hips rather than your ears; try to sink your heels to the floor.



Standing Forward Bend: A standing pose that lengthens hamstrings. Some tips: fold from your hips forward, not so much bending with your back; almost shift your weight forward over the balls of your feet (keeps your hips over your ankles); use your fingertips or palms to keep your balance; bend your knees if you need to.



Child's Pose: Resting pose that gently stretches the hips, thighs and ankles. From downward facing dog, drop your knees to the floor as wide as your mat, your big toes touching. Rest your belly between your thighs as close to the ground as you can, and your forehead on the floor. Outstretch your arms in front of you, your palms facing the floor.



food for thought

Almonds

With vitamin B2, E, magnesium, and zinc, they can regulate mood and stress. They help in the production of serotonin, while also destroying free radicals.

Sushi

In addition to the fish (which is also helpful for de-stressing!), seaweed has magnesium, pantothenic acid, and vitamin B2. Never heard of pantothenic acid? If you're deficient in times of stress, you'll feel even more anxious, so eat up!

Milk

Drink at least 3 servings a day so you can keep up with vitamins B2 and B12 along with antioxidants.

Fortified Breakfast Cereals

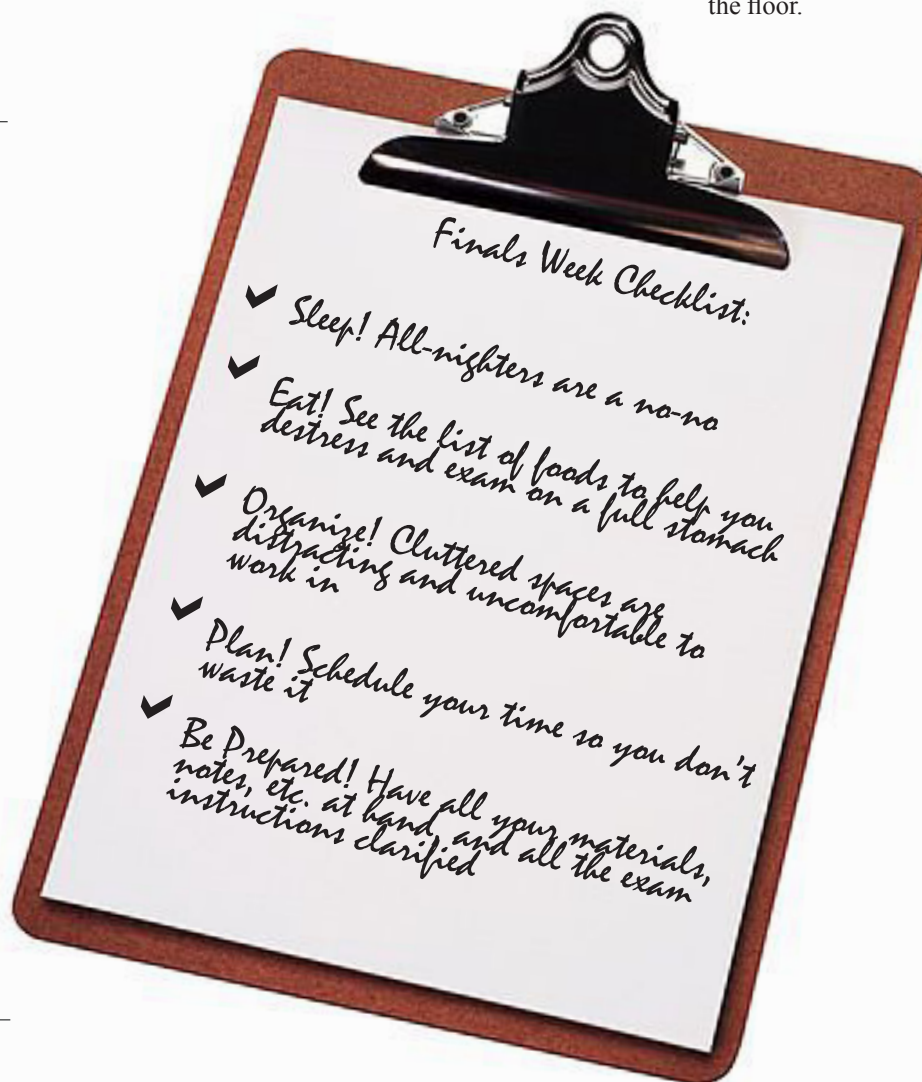
These serve as another great way to get B vitamins, folic acid, vitamin C, and fiber and get you off to a great start to your day.

Blueberries

Now it's just getting repetitive...but these are full of antioxidants and vitamin C. They're also easy to incorporate into a midday (or midnight!) snack.

Avoid fried and fatty foods. Even though they may taste good going down, these may actually increase your anxiety level.

Adapted from: http://www.askmen.com/sports/fitness_top_ten/45_fitness_list.html



MON	TUES	WED	THU	FRI	SAT	SUN
C-store open until 2 AM all week	Snake kits in North kitchens 8 - 10 PM	Midnight Madness in Chandler at 11:30 PM	Snake kits in North kitchens 8 - 10 PM	Snake kits in North kitchens 8 - 10 PM	Last day of board dinners	Declining Balance ends

Crime sees a spike around campus

By Andrea Dubin
STAFF WRITER

Crime around Caltech has been increasing recently--within the last 3 weeks, two robberies were reported on the perimeter of campus. In one, a non-student member of the Caltech community was struck on Arden Road and his wallet stolen. Six days later, a victim was stopped by two men at Chester and Cordova and told to hand over his backpack. The suspects returned the backpack after they found nothing of value, but fifteen minutes later, a biker was accosted on Del Mar Blvd. and Sierra Bonita Ave. by what Security believes to be the same suspects, leaving the biker with minor injuries on his knee.

"We've been seeing more activity around campus, but I don't know what's causing it," says Gregg Henderson, Chief of Campus Security. "Sometimes there are spikes, but then it seems to calm down again. Right now we have more crime than we usually have."

Burglary is the most common crime that happens on campus. "We primarily deal with property type crimes," reported Henderson. According to the annual security report, 65 burglaries occurred on campus in 2006. The most common stolen item is bicycles.

While this and a few other incidents that have occurred recently have affected students, very few accidents involving students actually occur each year. According to Henderson, there are at

most 4 or 5 incidents each year. "Last year we had two robberies involving students on the perimeter of campus," he said.

Students say they recognize the security threat. When traveling off-campus, junior Jason Cerundolo says he tries "not to walk alone." The Caltech women's center offers self-defense classes to the female community a couple times per term and the athletics program offers 3 unit PE classes in Karate and Tai-Chi Chuan.

Despite these offerings, some students still don't feel that self-defense is emphasized enough, especially for the male students. "I would like if the self-defense classes were available to men as well as women," said Cerundolo.

Alumnus Joe Carroll ('05) says

he remembers being mugged a block off-campus while walking home from his job in Old Town several years ago. "Caltech security was really responsive even though the incident didn't occur on campus."

Security offers a free escort service around campus--in fact, they give over 5000 escorts each year anywhere on campus and to some off-campus locations like 150 S. Chester. Escorts can be requested 24 hours a day by calling Caltech security at extension x4701.

But according to security, Caltech is still a relatively safe campus.

"Caltech sees a lot less crime than the rest of Pasadena," said Henderson.

Staying safe

- ◆ Avoid walking alone, especially at night
- ◆ Be aware of your surroundings, and move to a well-lit and populated area if you feel uneasy.
- ◆ Request an escort by calling x4701.
- ◆ Learn some basic self-defense.

News Briefs

- The Gordan and Betty Moore Foundation has pledged \$200 million in support of the Thirty-Meter Telescope. When built, it will be the largest optical-infrared telescope in the world and will peer into the Big Bang's first light and galaxy and planet formation.
- The Caltech Undergraduate Research Journal (CURJ) is one of the 2007 recipients of the Pacemaker award, the highest honor in college magazine and newspaper media.

Join the Tech for lunch next term! Meetings are from 12-1 PM at the Broad Cafe

Caltech devoting more to stem cell research

STEM CELLS, FROM PAGE 1

Caltech is taking an active role in educating people about stem cells. Patterson is training 10 post-doctorate fellows in Caltech labs for future work in the USC facilities. A course that is taught in conjunction with USC and Children's Hospital Los Angeles will be offered later this year to undergraduates. Furthermore, Caltech held an annual symposium regarding stem cells just last month.

SC3 and stem cell research in general faces many barriers. Primarily, some legislators in Washington disapprove of embryonic stem cell research because of ethical concerns. Last year and again this summer, President Bush vetoed bills that would have lifted funding restrictions for research and refused to lift a ban on using unapproved cell lines.

However, ethical concerns may

be circumvented by taking different approaches using stem cells that are not created from human embryos. Researchers have recently been able to convert adult skin cells into stem cells, while other groups are working to stimulate unused stem cells in the body to transform into the desired cell type. "There is a lot of work to do; it's complicated," said Patterson. "We don't know which approach is the best one, so SC3 must research all of them. That's why this additional money from the state is so important."

Despite their highly ambitious goals to find cures for diseases that affect the lives of so many people all over the world, Patterson is confident that the collaboration will succeed: "This technology is going to happen, without a doubt. In the lifetime of our younger generations, these cures will be found."

False alarms absent at other schools

FIRE, FROM PAGE 1

referred to as an 'Everything's Okay' alarm," said Comeau. "They are going off for a reason.... they could be going off for real fire situations."

Some other top-tier college dorms don't have frequent fire alarms. Menyung Lee, an undergraduate at Harvard University, can only remember one fire alarm in his dorm this term, and says that everyone evacuated. Students at Yale, Stanford, and Princeton say similar things. On the other hand, MIT undergraduate Caroline Bogdan and Cornell undergraduate Svetlana Ikonova report that fire alarms go off frequently in response to kitchen smoke, but that students that are awake enough to hear the alarms and evacuate.

ASCIT minutes: 12-05-07

Student Center in the works; WASC accreditation; DVD library used by grads

Present: Chris Gonzales, Mike Grinolds, Andrea Dubin, Mike Woods, Ekta Bhojwani, Daryl Coleman, Patrick Herring, Zack Higbee, Dan Lo
Absent: Mike Forte
Guests: Joel Nikolaus, Craig Montouri

*Student Center Planning
-Mike brings the idea up again of getting a student committee for helping to plan the student center. Mike suggests having this committee going before the next BoD takes over. There is a time-limited donation by Gordan Moore so it's better to get student input sooner. Mike argues that it would be good to figure out what students want to see in the student center before the administration asks us. The committee would figure out what sort of things are planned to be in there (which is rather nebulous right now) and they would figure out what students really want to see in it. Winnet was originally

designed to be a student center but it failed, so it might be a good idea to figure out why it failed. Mike suggests that the committee should also make sure there won't be construction problems like there were in the south houses. Patrick suggested that the committee should also look into what other schools have in their student centers. The committee will be asked to make a presentation to the administration at the end.
-The BoD agrees that we need somebody very proactive to head this.
-Mike suggests that they could get it done by the end of the year
-Sign ups will probably go up at the beginning of second term, interviews will happen shortly after
-After we select them we'll give them a direction with specific goals and time line and final deadline.
-Mike will send John Hall an email and let him know that we intend to form this committee.

He will also tell President Chameau.

*Elections Chair
-Zack is currently the elections chair, but he thinks that he wants to run for something again this new elections, so we will need a new elections chair.
-Signups will go up at the start of next term.

*Club list
-Jed, Andrea, and Craig are working on cleaning up the club list on donut. It should be done before the end of winter break.

*SAC
-Mike Forte will move the ASCIT TV to the SAC.

*DVDs
-Daryl reports that the DVDs are in good shape!
-A couple have been damaged, but we've also had 6 donations to the library.

-We are using it at about the same rate as the grad students. We've been funding it at about \$2000 each year, so we will probably ask the GSC to do the same.

*Legal
-Gonzo met with Tom yesterday to discuss some legal stuff. If ASCIT funds a club to go on a field trip, if something happens we might be liable. They discussed the possibility of having to sign waivers. Tom is currently trying to work out what exactly needs to be done. Gonzo assures us that Tom doesn't want to make this a burden to us.

*Interhouse
-Tom can only reimburse alcohol to matching the food receipts. If alcohol doesn't match the food receipts, social team should go out and buy food so we can match it.

*Retreat
-Everyone should tell Gonzo what

weekend is good and what kind of activity they would like to do. We could do anything from dinner at Tom's house to getting the retreat funding and going somewhere

*Honor Keys
-Craig reports that the list is still changing. Craig will talk to Tom about the budget and will come to us about it. We need to settle on a final point system and send off an order shortly after winter break. We will have a separate meeting to discuss the point system.

*Other stuff
-The CUE is meeting on Friday to talk about outcomes and objectives relating to the WASC accreditation. Carol Carmichael and President Chameau will be there.
-Finance seminars will start second term.

Women's bball suffers blowout loss to La Sierra

By Yang Yang
SPORTS EDITOR

The Caltech women's basketball team suffered its second straight road loss 90-57 at La Sierra on Sunday.

Three Beavers broke double digits in scoring, led by senior captain Lindsay King with 24. Senior co-captain Rene Davis scored 12 points and sophomore Lisa Yee contributed 10.

Both King and Yee gathered a team-high nine rebounds for the Beavers, but Caltech was still outrebounded 46-27 by a taller La Sierra squad.

Caltech put up 27 fewer shots than La Sierra, partially due to 16 offensive rebounds. The Golden Eagles had multiple looks on offensive possessions.

Poor free throw shooting plagued the Beavers again - Caltech shot better from the field (34.6 percent) than from the line (33.3 percent) in the first half. The team did manage to get to the free throw line with regularity, shooting 37 free throws compared to La Sierra's 10.

The lopsided loss was extremely frustrating for the Beavers, who had scrimmaged against La Sierra in the pre-season and lost by only three points.

"We're really not worse than

By the numbers:

Caltech	La Sierra
Total Points:	
57	90
3-pointers made:	
0/2	12/25
Total Rebounds:	
27	46
Free Throws:	
19/37	2/10

them," King said. "We were playing almost scared at some points. We get down by a little bit [and become] a bit frenzies and unproductive. They made a couple of baskets and we'd get down on ourselves."

The contest was never close as the Golden Eagles jumped out to an early 14-2 lead and never looked back. The lead bulged to 20 points by halftime. La Sierra extended its lead in the second half on 7-of-12 shooting from beyond the three-point arc.

"We got off to a slow start again," Yee said. "That's one of our biggest problems, we're usually a second-half time and dig ourselves out of the hole. But this game the hole just kept getting deeper."

"They hit the first few shots and that boosted their confidence, which made it easier for them to shoot later."

The team will have a week to build on the lessons learned from two consecutive road games at Southwestern and La Sierra. Caltech is scheduled to play Montana State Northern on Sunday. The Skylights come in with an 8-3 record and a three-game winning streak.

"We understand what we did wrong and what we have to do," Yee said. "We just have to go out and do it."

Just keep swimming

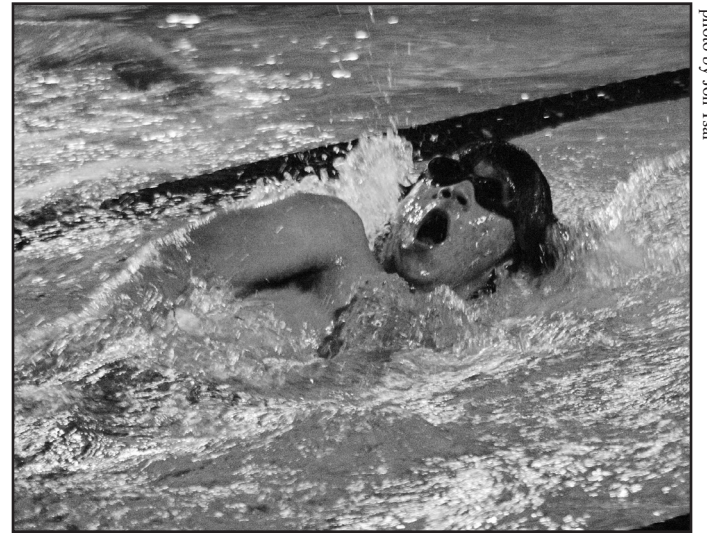


photo by Jon Tsai

Freshman D. J. Seo gasps for a breath during the interhouse swim meet.

Upcoming Games

December 16, 2007
Women's Basketball vs. Montana State Northern

December 17, 2007
Men's Basketball vs. Gallaudet

Happy Holidays!
from the Tech Staff

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Natalya says: things only idiots would buy

By Natalya Kostandova
COLUMNIST

Last week, Japanese scientists conducted a series of memory tests on both chimpanzees and college students, only to find that the apes performed significantly better. The smartest of the chimps, Ayumu, had almost twice the accuracy and more of a speed than the human subjects in one of the tests. This result, challenging the belief that chimpanzees are inferior to humans in all cognitive functions, leads to a natural conclusion – people are dumb.

Not that we need the reminder, of course. The obvious stupidity present in political, economical, and formal circles of our lives aside, let's consider some of the less obvious and well-known examples of human incompetence.

For instance, making money always seems to be an issue. As a common scenario, as soon as a child is born, he or she is expected to go through school, take all the advanced courses possible, push

other kids off the swings if necessary, get into the Ivy Leagues, go to the grad school and/or secure a high-paying job. The path to money is therefore not easy, and if one does manage to surmount the challenges (and does not burn out, drop out of school, or randomly decide to become a philosophizing hobo), it'd only be common sense to spend the money wisely.

Instead, here are some things that people are selling (and sometimes buying):

-A Dessert containing shavings of real gold, cocoa, and truffle.

Cost: \$25,000

Why you would want to chew on metal, even if it is precious. If you are really into that, might as well just chew on a fork. Or aluminum cans, for that matter. If you really want to spend \$25,000, you could buy a Nissan Altima 2.5 S for under \$24,000, spend a thousand dollars on ice cream, beer, and caviar, and enjoy a similarly exclusive meal with a shiny car as an added bonus.

- Uranium ore

Cost: \$22.95 + shipping and handling for a sample registering at 776 counts/minute on a Geiger counter

The purpose of this purchase is not entire clear. In legal sense, that is. Coming from a country that experienced Chernobyl, I am slightly concerned (and to a certain extent intrigued).

-JL421 Badonkadonk Land Cruiser/Tank

Cost: \$19,999.95 + shipping and handling (may be pricey)

Only two left in stock on Amazon, so order soon! Then you could also drive this beauty to the grocery store, local pharmacist, and a coffee shop. You may get shot down with a bazooka by the National Guard, but at least you'll show the soccer moms who is the boss.

-Wedding Chapel

Cost: \$21,420.47 (Priest not included)

Perfect for your emergency marriages (or more likely, divorces). For instance, imagine trapping the man of your dreams on top of a snow-covered moun-



For the low, low price of \$19,999.95, you could have either 40,000 Krispy Kreme glazed donuts... or this junkyard reject

tain surrounded by nothing but hungry wolves and evil elves. You have a rifle in your hands. The man agrees to marry you to save his life, but alas, there is no chapel in sight. To solve this problem, you can now just have this chapel shipped in (usually

within six to ten days). Feed your beloved with freshly killed wolves, and you will be fine.

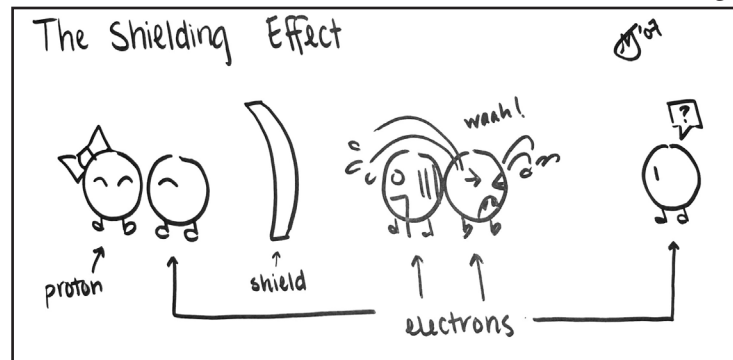
-A Perfect Record at Caltech

Cost: Priceless.

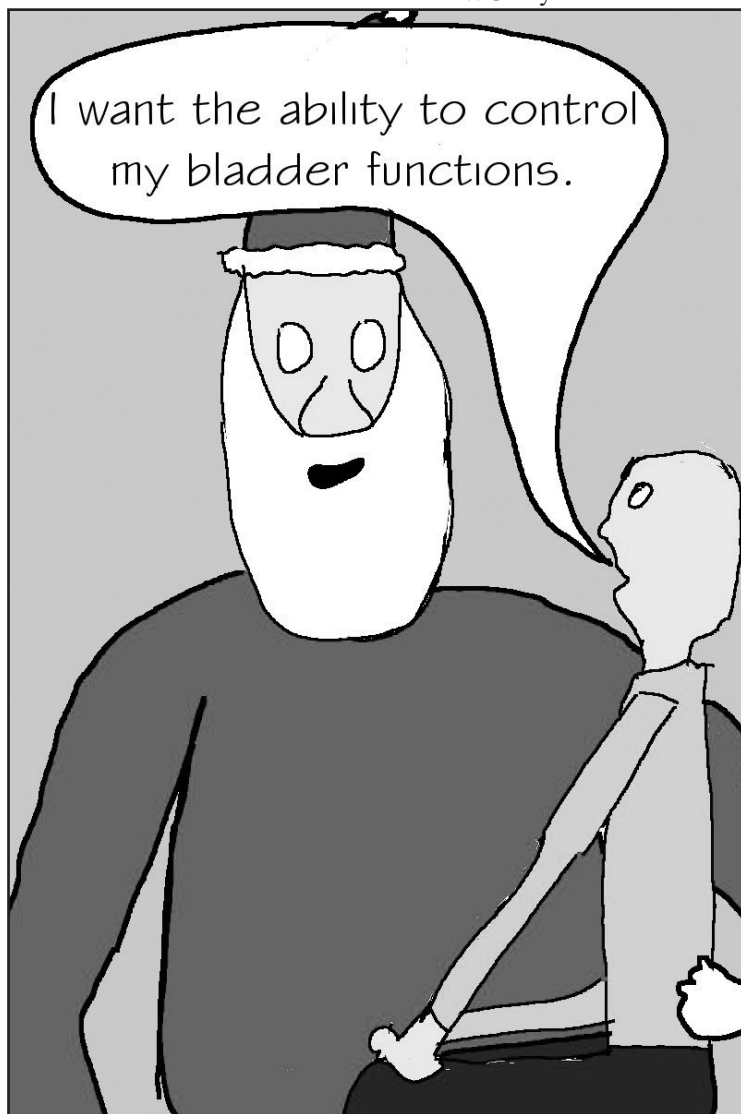
Haha, just kidding. You can't have one.

Comics

Michelle Jiang



WGP by Mark Eichenlaub



XKCD by Randall Munroe



Letters to the Editor

Revolt against the fire alarms

Dear Editor,

You are not fucking kidding about the fire alarms! This is utter insanity, I can't believe how long this has gone on. Two weeks ago I remember having two of them in one day!

The problem is aggravated by Housing's refusal to bring us our due each time the alarm goes off. When I was a freshman I remember each house receiving several boxes of donuts with each alarm. It was great! No matter what you were doing, the alarms went off and you would go out for a donut break. As I recall, Douglas Hanley would begin salivating whenever the donut alarm would go off, because he had been so thoroughly trained! This was the implicit agreement between the students and housing, which now has been breached in the extreme. By my count, Housing now owes each of the south houses about 34 boxes of fresh donuts.

To truly illustrate the moral outrage of housings continued negligence to fix the fire alarms, please read this email from January 29th of last year, which I and my roommate Michael Rule sent to the company which manufactured the fire alarms:

Hello,
We believe this company to be primarily responsible for

the fire alarm/security system implemented in our place of residence. Based on this assumption, we hold you personally responsible for the near constant stream of ear piercing loud and obnoxious alarms that plague us day and night.

We are university students, half crazed and mostly dead as it is...this alarm system is making us all fail classes and want to kill ourselves.

This is also your fault.

Every time it goes off we are filled with unquenchable rage and begin punching the walls until we bleed.

It's as though you are torturing a dying panda.

A sad and lonely panda with no prospects for mating, trapped in a foreign land. (Caltech students)

We take small consolation in that the alarms indicate no real fire danger. Every alarm thus far has been a false one.

I understand that the tone of this message might lead you to disregard our plea for help; I assure you that we wish to launch a legitimate complaint about real design flaws, but are actually quite mad and incapable of normal communication.

My one-eyed grandma could make a better fire system than you. My grandma is also dead.

Ok but seriously,
Somehow the alarms are tied into the shower system such that the water pressure chang-

es (I assume this is the cause) trigger them. This means that they go off nearly every morning and at random intervals day and night.

WHY DID YOU DO THIS TO US YOU NEGLIGENT FOOLS?!!!!!!!

think: What Would Jesus Do?

He would design a system marginally better than yours and thus undercut your market in all thirteen colonies and several small countries, while feeding the entire populace of Africa on the bloated remains of your marketing department.

thank you and good night,

The entire undergraduate population of the California Institute of Technology.

I say to the students, we have had enough! We must unite together against the administration and demand that housing mend this barbarous imposition upon our safety and comfort! If Tim Chang's house had a fire alarm every time the South house fire alarms went off, there would immediately be a redress and a massive repair job undertaken. We must stop at nothing until they give in to our reasonable demands, including the 34 dozen donuts per house that are rightfully ours!

Viva La Revolucion!
Chris Beck

The California Tech
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Pasadena, CA 91125