



**HAPPY EARLY  
BIRTHDAY  
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we won't tell how old you are...



you don't wanna know what we had to do to this picture...

**ME 72**

**This Thursday at 2 PM,  
Beckman Auditorium!**

# The California Tech

VOLUME CIII, NUMBER 9

PASADENA, CALIFORNIA

NOVEMBER 30, 2001

## COMMUNITY SERVICE--DOES CALTECH CARE?

BY MONA SHEIKH

This summer Kaisa Taipale did a SURF on a subject that is rather unpopular at Caltech: community service. She spent time researching service programs at other schools in comparison to ours, and reasons behind the low participation of techers.

As part of her SURF, Kaisa conducted a survey of Caltech and non-Caltech students who were here for the summer. Random, but interesting facts showed up in the results; for example, several students were under the impression that working at the Y decompression counted as community service! Not surprisingly, most techers said they did more service work during the summer, while non-techers claimed the opposite. Students responding to the questionnaire indicated that a major reason which motivated them to volunteer was participation of their friends. There were some who said that community service was their break from academics, while others claimed that their extracurricular activities were already a diversion, and left them no time for service.

Tutoring seems to be the most popular form of service work. Apparently Caltech students can actually overcome their inherent apathy and haul themselves over to Winnett and sign their names. Another common means of volunteer service is the Y's 'Habitat for Humanity' program, in which volunteers build and repair a house in a low-income neighborhood, with help from future residents of the house. Other preferred types of community service include trail maintenance with the Y, serving food to the homeless at Union Station, and reading to children in downtown elementary schools (Reading To Kids). As for hospital volunteer work, sadly enough the only Caltech volunteers at Huntington are pre-med students. For those of you who are looking for community service opportunities that are not offered, bringing new ideas to the Y would be the

PLEASE SEE COMMUNITY ON PAGE 4

## Rickett's firepot under fire

BY KEVIN BARTZ

Flip to page 37 of the Ricketts House history book, and you'll see the first traces of student-run pyrotechnics. Fireballs, flaming sawdust and ten-foot bonfires in the house fire pot—"the fire policy was a lot more liberal back in the day," mused House President Rick Karnesky '02.

The Ricketts flame may not be eternal though. Nearly three generations, 70 years and countless pentagrams later, the same pot's once-blazing embers will tonight flicker and die once more—this time for good.

Pushed over the brink by continuing safety concerns and reports of a recent 10-foot-blaze in the Ricketts pot, an *ad hoc* committee of administrators and security officials handed down a pointed fiat last Monday directing House leadership to convert the courtyard centerpiece into something "not related to fire."

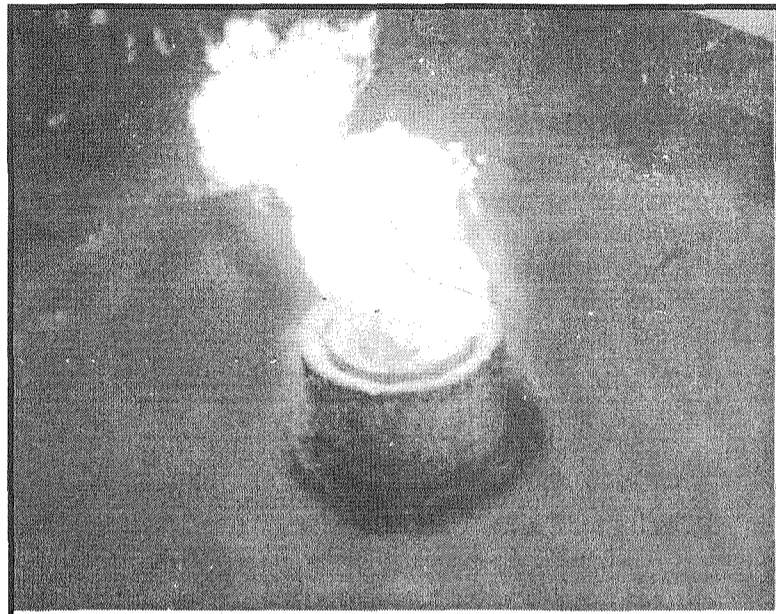
"We've had general concerns about having the pot or any container where a fire could be built in our courtyards," said Director of Residence Life Kim West. "We've already had discussions

about whether we could continue to use the pot as we had been, and the decision reflects an increasing awareness of safety issues."

Student Affairs Vice President Chris Brennen convened the committee after an Officer Sanchez of Public Safety filed an incident report alleging "a fire that was about 10 feet high" at 7:30 p.m. on October 7. The patrolman's call to Resident Associate Jessica Edwards led students to quickly extinguish the flame, but the "security report got people's attention," in the words of West.

But Karnesky dubbed the October 7 report "blatantly wrong." Instead of 7:30, he placed the alleged fire nearly two hours later and questioned its supposed height. "It was a large fire," held Edwards, "but nothing like the 10 feet in the security report."

Still, Chief of Security Operations Gregg Henderson stood by his officer's report. "No, I have never had any reason to doubt its integrity," he affirmed. But while he cited multiple officers' independent corroboration of the story, he conceded also that



*Firepot has been a longstanding symbol of the fire that burns in the hearts of every Scurve.*

"there have been some questions concerning a couple of things in it."

Whatever the case, administrators reacted swiftly. After a brief investigation of legal issues and the pot's current grill—designed to shield fires from the open—Brennen's committee concluded on October 19 that the courtyard "is not the right place for an object of this sort," in the words of committee member and Dean of

Students Jean-Paul Revel.

"I understand that it's a safety hazard," he said, "and as a result we have to consider that very seriously because we don't want to endanger the student body. Under the circumstances it's really hard to support the continuation of the fire pot as a fire pot."

Legally, the pot has existed as a "barbecue" sanctioned by state

PLEASE SEE FIREPOT ON PAGE 2

## Tuition increase to come soon

BY IRAM PARVEEN BILAL

It was shocking to hear from an anonymous student, "They want to raise tuition by \$5000 per [year]!"

Despite the reliability of the Caltech rumor mill, Director of Financial Aid David Levy commented to the contrary. He said "Discussion of \$5000 has never been on the table. The administration though, will want to increase tuition between now and January."

Professor Frautschi also confirmed, "In general terms, nobody is proposing to jump tuition to \$5000."

Thus, there are definitely talks of tuition being increased, but exactly how much and when is not known yet. This rumor has left students shocked and worried over extra financial burden and also over the reasons behind the tuition increase.

In past years, Caltech has

stood out in comparison over peer institutions such as Harvard, Stanford and MIT because of its low tuition and has hence had a competitive advantage. Since tuition forms a very low proportion of Caltech's income, increasing it seems to be of a net disadvantage to the Institute in terms of the cost-benefit analysis of the action.

However, as Professor Frautschi explained, the Institute has been facing deficits for the past few years and it all got out of control when last year, the amount of withdrawal from endowments reached 8% as opposed to a healthy 5.5% suggested by the Board of Trustees.

Hence, the withdrawal has to be cut down to maintain the value of the endowments with the long-term level of purchasing power. This has put pressures on the Institute's budgets as can be inferred by the various attempts of reducing costs

and raising revenues.

With the recent gift of \$600 million, people are getting more concerned when expenses and costs are being increased. The truth of the matter is that the donation will be received over a period of ten years and that they will have some decided purpose. After all, most donors would want his or her gift to help with something new rather than finance a large deficit though.

In Professor Steve Frautschie's own words, "it really was deficit spending in the last years

[that has motioned for some type of financial action]. To improve [the deficit problem], there will have to be belt-tightening on many fronts. And yes, it is a tough philosophical question to answer how the \$600 million endowment does not resolve these present problems."

Ways of financing these deficits are being discussed, and it seems that either tuition or room and board expenses will be the victims of an increase. The

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## News

## FIREPOT

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and campus fire codes, although Karnesky agreed that "the house wasn't using the pot only to grill food." Still, the policy specifies that any fire in a barbecue pit is legal—as long as its fuel is no more than 2 feet high, 3 feet wide and no less than 10 feet from anything combustible.

But West was still hesitant to stretch the definition of such a barbecue. "Otherwise, we're just playing games," she said, "and that's silly. I think we know that's not what it's used for 100% of the time." In contrast, freestanding recreational fires require padding of more than 25 feet, a condition unmet by the Ricketts pot. "We have no interior courtyard that meets the criteria for a true recreational fire," said Associate Director of Safety Office Casimir Scislowicz.

In fact, the strict adherence to state guidelines is a rather recent

phenomenon. Before 1997, students had always left the controversial fire pot uncovered, while administration in turn regulated with a largely *laissez-faire* hand. But a massive fireball that left then-freshman Roger O'Brien class of '01 covered in third-degree burns precipitated a flurry of public backlash ending in a signed agreement between Ricketts and Brennen that effectively made the pot a grill-covered barbecue.

And although West herself acknowledged that the House has kept to its word, she held also that "what may have been a good compromise four years ago is no more." Still, even O'Brien was slow to support her safety measures: "This is just an example of Kim West making claims she can't actually enforce in an effort to terrorize the students," he asserted.

Indeed, the crackdown came after months of what West termed a reconsideration of fire

policy. Devastating outbreaks on other college campuses, such as the residential blaze at Seton Hall last spring that led to over a dozen deaths, led Scislowicz and others to reopen the issue of fire safety—and particularly whether the Ricketts pot is in fact safe.

Compounded with the early October security report, the committee's decisive response was the result of "heightened awareness of fires at college campuses," in the words of Scislowicz. But the sudden change left Scurves, whom West agreed have "made great efforts" to adhere to the House's 1997 accord, feeling disenfranchised as students.

"If this process has been proceeding for a while," argued Ricketts Vice President Dinkar Gupta, "I wonder why none of us were contacted." Karnesky concurred, fingering a more sinister motive: "I'm very suspicious that the administration

chose to renege after all the students who remember it have graduated," he hinted.

According to numerous Ricketts folk, the social repercussions of losing their House's longstanding trademark will no doubt prove immense. "They may have a lot of angry Scurves on their hands," said Junior Aaron Stern, who spearheaded his House's correspondence with administrators. "Ricketts is a House of people who like to be different. We all enjoy fire and consider it a very social thing."

"It's a place where people gather, kind of like a campfire," offered Edwards. Gupta further noted that fire always "symbolized the mystique" of Ricketts. "Everything centered around it," said fellow resident Frosh Ali Hassani.

But whatever the case, Karnesky and company haven't set down the guns just yet. In a broad meeting slated for next

Monday to discuss the issue, he hopes to extract as many concessions as he can. "Transforming the pot into something else is uncalled for," he declared. "There's no reason just to change it because Kim West would rather see a flower pot there."

In the eyes of administrators, though, the pot has breathed its last—and the glow of orange and palls of smoke will be no more.

"There's a part of me that understands the value they see," conceded West. "That said, what you have to do is separate what you can personally understand and what's the wise and prudent thing to do in the context of our safety." Yet still others, like longtime Ricketts resident, could not share such understanding.

"It's not just a fire pot," lamented Senior David Zaragoza. "They've put out the fire in our soul."

## Security increases on campus

BY PHILIP WONG

While waves of disbelief still ripple through the international community in response to the events of September 11 and those following, countless agencies around the country, public and private, have responded to increase awareness in hopes of preventing further catastrophes.

Caltech is no different. Due to the school's prominence and worth to the scientific community, Caltech's security department is currently operating with a heightened awareness. In an effort to "provide a stable educational, research, and work environment," methods to deal with suspicious packages and individuals on campus have been re-emphasized.

Mail passing to staff, faculty, and students is screened a minimal four times, once each by major carriers such as UPS and Fedex, the local post office, the mail room at Caltech, and by those that deliver the mail. At each stage, handlers look for signs of potentially hazardous mail. "Suspicious" mail can include unusual textures, mail that lacks return addresses and marked by "Attention" or "Confidential," or excessive and bulky packaging.

If mail is identified as suspi-

cious, security is notified. Caltech security is trained to handle such cases and has access to equipment, such as x-ray machines, that can help determine the nature of the package or letter. If necessary, outside authorities are contacted. Caltech security reserves the right to examine and open suspicious packages.

While several cases of suspicious mail have been reported, there have been no harmful cases.

The size of the Caltech community also adds to overall security. According to Alice Edel who helps operate the Tech Express, "knowing students on a personal level provides the motivation to ensure a thorough screening process."

Gregg Henderson, Caltech's chief of security, remarks, "the size of the community allows myself and the [security] department to interact substantially easier with students, faculty, and students."

Overall, campus security awareness has increased and while the security risk at the moment is possible but not probable, essential procedures are in place to preserve the openness and safety of the Caltech community.

## TUITION

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chances of room and board being increased come from similar comparative reasoning. It has been observed that a lot of peer institutions have profit charges that get channeled back into continuous rehabilitation and repair whereas Caltech does not charge for those.

Thus, there is a huge deferred maintenance cost that will have to be financed by the Institute's endowments (possibly with a part of the very \$600 million). At present, increasing room and board charges might help towards that end.

In any case, the fact that the cost of undergraduate studies

is increasing calls for the relevant committees to make a decision fairly soon as early admission decisions need to be mailed out pretty soon as well.

The scholarships and financial aid committee will be meeting with the administration in a few weeks. It is obvious that awards that cover tuition fully will not be impacted and it remains to be decided how the other grants and scholarships will be affected.

Levy remarks towards this end, "My goal is to keep awards competitive with incoming as well as returning students!"

*The Fannie and John Hertz Foundation takes great pleasure in announcing its Fall 2001 Fellowship Awards to California Institute of Technology Department of Chemistry graduate students.*

*Mr. Joel Austin*

*Mr. Douglas Behenna*

*are two of 21 Hertz Foundation Fellows chosen from a field of 570 applicants to receive a five year, \$200,000 Graduate Fellowship Award in the Applied Physical Sciences. The Hertz Foundation would like to extend its congratulations to California Institute of Technology for attracting these Fellows to their graduate programs.*

*See [www.hertzfoundation.org](http://www.hertzfoundation.org) for more details.*

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Hall Daily

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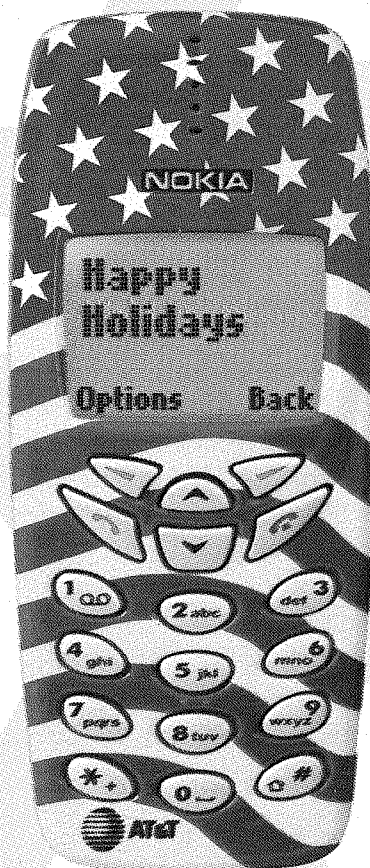
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## News

## COMMUNITY

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first step to implementing other forms of volunteer work here.

Kaisa found that MIT had an interesting public service program which uses academic courses, called "Service-learning courses", as a means of community service. In other words, students take classes which facilitate volunteer work. For example, an engineering class could be asked to design basic amenities such as a soap dispenser to meet specific needs of a nursing home, or toys to give to an orphanage; a communications class could be asked to tutor younger children. Luring Caltech students with academic units may well be the way to encourage more people into volunteer work! Another community service option initiated by MIT that would probably be equally successful at Caltech is a program in which students are given used computer parts, and asked to assemble them into working machines that are then donated to schools or underprivileged homes.

Even though federal work-study is the traditional incentive for community service, there is



Last year's Y trip to Mexico, where students helped build houses.

nevertheless a fair proportion of Teachers who would prefer not to be paid for their volunteer work. By and large Kaisa's survey found that the definition for community service was qualified by "no pay". However, it is little known that 7% of Caltech federal work-study funding is required to be earned through community service by law. If this minimum is not met, we could risk losing federal funding. Since last year, when we almost fell short of this requirement, it has become all the more essential that as many people as possible earn their work-study through volunteer work.

Do not despair--you still have a chance to redeem yourself!

The Y is offering you a chance to start volunteering: stop by the Community Service Fair TODAY (11/30) between 11:30 and 1:30 in front of Winnett, to talk to representatives from service organizations in Pasadena. Opportunities should be plentiful, and it is likely that you'll be able to find a volunteer job that is useful and enjoyable. At Caltech, where many lives revolve around problem sets and maids do everything but make our beds, it is easy to lose focus of the real world of which we are a part. It's time that we took off our rose-colored glasses and acknowledge those in need of our help in a much more responsive manner. Start today!

## IMPORTANT EXCOMM ANNOUNCEMENT

To All ASCIT Members,

The position of ASCIT Vice President (who also serves *ex officio* as Board of Control Chair) will soon be vacated and as such it is up to the Executive Committee to select a replacement. We will put a sign-up sheet up outside SAC 33 starting Friday morning at 8 AM and lasting until Monday at midnight (per the bylaws this position is only open to current Juniors and Seniors).

All eligible ASCIT members interested in being considered by the Executive Committee to fill the office of ASCIT Vice President are encouraged to sign-up.

For more information about the Executive Committee please see our website at <http://donut.caltech.edu/~excomm> or e-mail the Chair at [al@its.caltech.edu](mailto:al@its.caltech.edu).

To learn more about the position of ASCIT Vice President see the main ASCIT website at <http://donut.caltech.edu> and to learn about the responsibilities of the Board of Control Chair see the BoC website at <http://www.its.caltech.edu/~ascit/boc/boc.html>.

Al Valdivia  
Executive Committee Chair

Read an excerpt online: [www.hup.harvard.edu/spotlight/nozick](http://www.hup.harvard.edu/spotlight/nozick)

## INVARIANCES

*The Structure of the Objective World*

### Robert Nozick

In this pathbreaking book, the eminent philosopher Robert Nozick rethinks and transforms the concepts of truth, objectivity, necessity, contingency, consciousness, and ethics. Using an original method, he presents bold new philosophical theories that take account of scientific advances in physics, evolutionary biology, economics, and cognitive neuroscience, and casts current cultural controversies in a wholly new light. Nozick brings together the book's novel theories to show the extent to which there are objective ethical truths.

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### What's new at the Y?

- **Noon concert.** The Caltech Jazz Band will perform today outside of the Red Door Café. Next week's noon concert will feature David Harris.

- **Community Service Fair** Friday, November 30 from 11:30 to 1:30 outside of the bookstore. Talk to representatives of local service organizations and learn about opportunities to make a difference.

- **Reading to Kids**, Saturday, December 8, at 8:00 am. Read to children at an inner city elementary school. Contact Anita Choi ([anichoi@caltech.edu](mailto:anichoi@caltech.edu)) for more information. Advance registration is required by the school.

- **Decompression!** Next Saturday and Sunday on the second floor of Winnett starting at 7:00 pm. FREE FOOD: fruit, bagels, hamburgers, veggie burgers, hot dogs, chili (meat and vegetarian), popcorn, drinks, desserts, and more. Also enjoy live entertainment, movies, and company to get away from finals for a while. If you're interested in volunteering to help and getting a free t-shirt, look for sign-up sheets coming to your house lounge soon. Or, email [ayer@its](mailto:ayer@its) to sign up.

### Did you know?

You can earn \$15/hour for doing community service if you have Federal Work Study in your financial aid package. If you are looking for a fun and rewarding way to complete your work study hours, drop by the Y to learn about community service opportunities, including on-campus tutoring, Union Station homeless shelter, Reading to Kids, Habitat for Humanity, and much more!

The Y ExComm meets every Monday at noon in the Y Lounge to plan upcoming Y events. If you are interested in what we do, please stop by! The Y is located on the first floor the Student Services Building, south of the Holliston parking structure.

## News

## Students prepare for annual ME 72 competition

PRESS RELEASE

PASADENA-Caltech mechanical engineering students are putting in quality tool time these days to prepare for the annual ME 72 engineering design contest, a celebrated campus event in which teams of robot rovers are pitted against each other in a test of engineering design acumen, strategy, teamwork, and sheer driving skill.

This year's contest, the 17th in the annual series, will be held at 2 p.m., Thursday, December 6, in Beckman Auditorium on the Caltech campus. The design and construction of a machine is an important requirement for the Mechanical Engineering 72 design course, and the annual event has become an eagerly anticipated campus tradition among students and faculty. The media are invited to attend and cover the event, which should last about 90 minutes.

At the beginning of the 2001 fall term, the students registering for Mechanical Engineering 72 were given a design task, a "bag of junk," and 10 weeks to design and build a machine they judged capable of performing an assigned feat during a public contest at the end of the term. The students, paired up in teams, have now finished designing, prototyping, fabricating, assembling, testing, debugging, and tuning their machines and are ready to find out which team's machines are tops.

This year's contest is somewhat different in that the machines will compete on a curved, sloping series of steps, rather than a horizontal table as in many previous years, said Erik Antonsson, a professor of mechanical engineering at Caltech who is the originator of the design contest.

"The task this year is to push as many hockey pucks as possible up to the highest sloping step possible, Antonsson said. "You get more points for putting a puck higher up the steps, but you also have to contend with a steeper slope."

"Also, for the second straight year we're using wireless power controllers, so students will control their vehicles by radio instead of by an attached umbilical cord." Though the contest is entertaining for onlookers, Antonsson said the motivation is to teach students how to design complicated devices that can hold up—and perhaps even perform admirably—in the real world. "Engineering is primarily the process of creating new things to solve problems," Antonsson said. "This course and contest is one attempt to provide students with a real-world opportunity to learn about the design of new things and the solution of open-ended, ill-defined problems."

The event is sponsored by Schlumberger, Allied Signal, Northrop Grumman Corp., Applied Materials, General Motors, the San Diego Foundation, idealab!, and Hewlett-Packard Company (San Diego Division). Additional information on the course and contest can be found at: <http://www.design.caltech.edu/Courses/ME72>.

**MEDIA ACCESS:** The contest is open to the news media and Caltech community. Press will have special seating in the front rows on the left side of the auditorium, and will have supervised access to the stage and student preparation room during breaks. To ensure that the hundreds of students, faculty, and staff have a clear view of the contest, we ask that the press not stand on or in front of the stage.

## THE OUTSIDE WORLD

by William Fong

### Human Embryo Cloned:

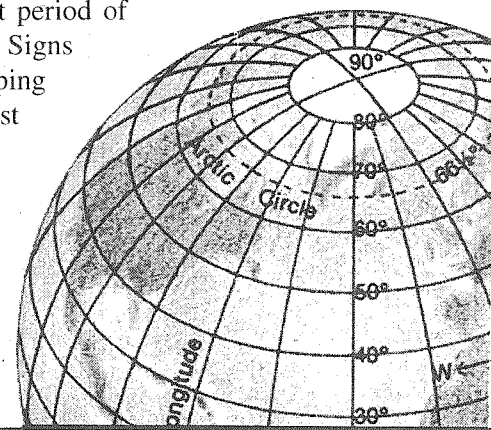
On Sunday, Advanced Cell Technologies, Inc. of Worcester, Massachusetts released a statement that the company had successfully cloned human embryos. Of eight eggs, two divided to form four-cell embryos and one made it to the six cell stage before it stopped dividing. This announcement immediately came under fire from President Bush who said that human cloning is morally wrong. Michael West, president of ACT, suggests that he is only trying to help those who are sick and in need of stem cell therapy and that his company's objective is to only mine stem cells. Nevertheless, many politicians believe that allowing the cloning of human embryos will inevitably lead to reproductive human cloning. On Monday, Clonaid, an organization founded by a religious faction, claimed that it was attempting to impregnate a woman with a cloned human embryo. Though unconfirmed, it has raised concerns in many countries about the realities of human cloning and stirred debate in many circles. Legislation on human cloning is expected to begin shortly in Congress.

### War Against Terrorism:

The Northern Alliance has confined the Taliban to two cities in Afghanistan. Pro-Taliban fighters are mainly situated in Kandahar in the south and Jalalabad in the east; the stronghold of Konduz in the north fell earlier in the week. Over the past weekend, there was a prison riot in Mazar-e Sharif where captured Taliban fighters somehow smuggled weapons and explosives into the compound and attempted to escape. However, with the assistance of the U.S. military, the Northern Alliance guards were able to suppress the riot on Wednesday by eventually leveling the compound killing or trapping the prisoners in the basement where their operation was situated. This week in Bonn, Germany, the Northern Alliance along with supporters of the king and representatives of other factions met to discuss the possibilities for a government in post-Taliban Afghanistan. While a multinational peacekeeping force is being considered, there are some Afghan political leaders who are actively seeking a strictly Afghan force citing that Afghanistan was secure. Also, on Wednesday, the CIA confirmed the first American casualty in this war on terrorism; Michael Spann was a CIA operative who was killed in the prison riot in Mazar-e Sharif over the weekend.

### U.S In Recession:

Economists claimed on Monday that the U.S. economy began its current downturn in March officially ending the longest period of economic growth in U.S. history at exactly 10 years. Signs point to a larger dropoff this quarter as holiday shopping levels this year are running lower than at this time last year. Also, there have been reports that consumers are actively looking for bargains and hence are spending less than they did last year. On Thursday, numbers were released showing an increase in jobless claims. As a result, the Federal Reserve still believes the economy is weak and will considered another rate cut in its early December meeting.



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## News

A.S.C.I.T.  
Minutes

NOVEMBER 19, 2001

Present: BoD; Guest: Kevin Bartz

Meeting called to order at 5:13 pm.

**General Meeting**

**Student Health Insurance.** At a recent Health Insurance Committee meeting, Ayeh spoke as an advocate for greater student representation on the Health insurance Committee. Many undergraduates have benefited from the services provided by the Health Center and its confidentiality. The extent to which students have found help there may not be fully realized by administration, as there have not been ample opportunities for undergraduates to participate in forums on health insurance. ASCIT is concerned that significant changes to the health insurance policies were made over the summer without input from undergraduates. By the responses of some of the faculty at the meeting, it appeared that this was the first time that some members had heard about the changes as well. Since most of tuition and fees are paid by parents, ASCIT is planning to send letters home, since parents may have more influence over administrators.

**Big T.** ASCIT apologizes for the less than satisfactory con-

dition of the 1999-2000 Big T, with the absence of many senior pages. There is some speculation that the loss of some of the pages may be on the publisher's end, in which case they may publish an extra insert. While it is unfortunate that the Big T did not meet expectations of most students, it is not possible to grant refunds.

**Little t updates.** The little t was released recently, but did not include several of the latest By-laws and resolution changes concerning the Screening Room, or Clubs that were passed in the Stapleton administration. Updated By-Laws and Resolutions are available online via the donut website.

**Budget.** According to Ayeh, it appears that we are under-budget so far in this fiscal year. The ASCIT formal was slightly over-budget due to an attendance higher than anticipated but we have spent less than allocated in each of the other categories. As a reminder, we have a small sum earmarked as "prank funding", so undergraduates who wish to spend someone else's money on something mischeivous are more than welcome to propose a prank to the BoD (though, preferably not one on ASCIT). Brownie points for pranks done in the name of overturning parking and/or health insurance policy changes.

**ARC.** The ARC has sent a student representative to the Library ad hoc committee, much to the delight of student-involvement happy Dr. Peck. Plans to convert

Millikan into space for administration are being developed, which has placed the future of the present Millikan Library collection into question. The most popular solution so far is to build a new library, in the region between Winnett and Spaulding that would consolidate the book collection in space-saving, mobile shelves and also provide a cozy work environment. The floors in Millikan are incapable of supporting this equipment, which is why Millikan is not space-efficient. Transferring the book collection out of Millikan would also allow the the portion of Administration currently residing in Dabney Hall to move into Millikan, granting the Humanities Department full use of the building.

**CS1, CS2, CS3.** A large number of students have dropped CS1 this term, as compared to previous years, which will be used as support for developing a new CS sequence focussed on more practical programming skills. The ARC would like to offer a programming-friendly sequence in a different department, so that it does not conflict with the emphasis on theory placed in the CS department. Lately, there has been some trouble finding professors who would be willing to take on this new responsibility, but the ARC is working diligently to find a solution.

Meeting adjourned at 6:15 pm.

Evidently,  
In need of R & R

Why did Hitler never  
build an atom bomb?

PRESS RELEASE

Physicists, historians, and an actor will try to answer that question in "The Copenhagen Interpretation: Exploring Science on Stage," at 8 p.m., December 10, in Beckman Auditorium at the California Institute of Technology in Pasadena.

The idea for the free-flowing roundtable discussion was sparked by the staging of the play Copenhagen, by Michael Frayn, at the Wilshire Theatre, running now through January 6, 2002.

The play is inspired by an event that has intrigued and baffled historians for more than 50 years - a 1941 meeting between two brilliant physicists, longtime friends whose work together had opened the way to the atom, but who were now on opposite sides during World War II. Werner Heisenberg made a covert trip to Copenhagen, at great risk, to see his Danish counterpart Niels Bohr and his wife, Margrethe, but the meeting ended in disaster. Copenhagen explores the events of this secret meeting, and attempts to answer the questions:

Why did Heisenberg go to Denmark? What did the two men say to each other? What happened at this pivotal meeting that was a defining moment of the modern nuclear age?

The roundtable discussion will include Robert Christy, a leading researcher on the Man-

hattan Project, and an Institute Professor of Theoretical Physics, Emeritus, at Caltech; Marge Leighton, a close friend of the Bohr family; Jay Labinger, an expert on the cultural and literary aspects of science and the administrator of the Beckman Institute at Caltech; Diana Barkan Buchwald, general editor and director of the Einstein Papers Project at Caltech and an associate professor of the history of science; and Copenhagen actor Hank Stratton, who plays Werner Heisenberg. It will be moderated by Steven Koonin, Caltech provost and theoretical nuclear physicist.

The three-person play also features Len Cariou as Niels Bohr, and Mariette Hartley as Margrethe Bohr.

The roundtable discussion will explore the meeting between Heisenberg and Bohr, focusing on personal reminiscences, as well as modern interpretations of the events preceding the construction of nuclear weapons by the Allies. The participants will consider broader scientific, historical, philosophical, and artistic dimensions of this encounter and its dramatization in the play.

The event is free and open to the public. Tickets are not required.

For information, call 1-888-222-5832. Beckman Auditorium is at 332 S. Michigan Avenue, south of Del Mar.

A.S.C.I.T.  
Minutes

NOVEMBER 26, 2001

Present: BoD

Meeting called to order at 5:12pm.

**General Meeting**

**UROH.** Joe Jewell informs the BoD that he will publicize the UROH to professors and staff by next week. The Undergraduate Research Opportunities Handbook (UROH) is an online publication at the donut website where professors can list job openings for undergraduates.

**IHC Rotation Survey.** A survey has been released by the IHC annually to assess the success of rotation and student rotation approval ratings. In order to print the surveys, IHC will need a small sum to pay Graphic Arts, and there is some

question as to whether or not money for publishing surveys was budgeted this year. Producing an online survey as an alternative would be more cost-efficient, and opinions could be tallied more easily electronically than hand-counting.

**Audit.** Martha-Helene reiterates that she wants the ASCIT audit finished before the end of the present BoD's term. The audit has not been performed in the recent past, but it should be done annually, and the BoD hopes that this year will serve as a precedent.

**Big T.** Barbara Green has received many e-mails from alumni upset about the missing senior pages. Wren Montgomery, who finished the 1999-2000 Big T remembers laying out some senior pages that were not printed ultimately, suggesting that some errors may have been on the publisher's side. Todd and underlings will be searching the

computers in the publications office for missing senior pages.

**Student-Faculty Conference.** Once the planning committees for the Student-Faculty Conference are formed, announcements and minutes of the committee meetings before the date of the conference will be posted online in timely fashion to keep students informed and to encourage student involvement. A website dedicated specifically to the conference will be updated frequently and invite undergraduates to make suggestions leading up to the date of the conference. Committee topics consist of Academics and Research, the Honor Code, and the Quality of Life, which will oversee student concerns over the tuition increase, parking, and health insurance if the administration does not address these topics with undergraduates sufficiently prior to preparation for the conference.

**CRC and BoC.** The Conduct Review Committee, as a newly-formed body, needs some Resolutions and By-Laws for formal recognition. In addition to rules governing its procedures and responsibilities, a blurb about its function and the scope of its authority will be written before Joe Fassler leaves for Cambridge. Joe is also in the process of drafting amendments to the BoC By-Laws, to be voted upon by the undergraduate community, to allow Avery and the unaffiliated, off-campus population to have a BoC representative. Those who vote in the Avery/off-campus BoC elections will be prohibited from voting for a representative in the seven houses. More logistical details pending.

**Senior Co-Presidents.** By a 7-0 vote, the unspent money allocated as Multi-house funding from previous terms is siphoned to the senior class of-

ficers for the class BBQ and for providing refreshments at senior class meetings, totalling \$300.

**IHC Athman and letterman jackets.** ASCIT is reminding students that it will partially subsidize (\$50) the cost of letterman jackets. A list of eligible students will be formed by the IHC Athman.

**Parking Survey.** Joe Fassler's survey results were tallied, with 231 respondents. Of the students that participated, 138 had cars on-campus and 93 did not. Data will be consolidated into a fact sheet that will be included with letters to parents about parking changes, the tuition increase, and the higher cost of health insurance. ASCIT expresses its thanks to those who took the time to participate in the survey.

Meeting adjourned at 6:13 pm.

Evidently,  
One week left 'til Finals.

## News

## BoC Bylaw Amendments

The ASCIT BoD has approved the following bylaw amendments, which create the position of off-campus Board of Control Representative, for a vote of the student body. The reasons for the proposed amendments are that (1) students who live in Avery, Marks and the apartments have traditionally been underrepresented in student government and (2) the Board of Control sometimes has difficulty making quorum without calling past BoC Reps to hear a case. This position will supplant the current system, which requires unaffiliated students to register with a house in order to vote for a BoC Rep. It is expected that the elections would be centered in Avery house, but all off-campus students would be eligible to vote as long as they do not vote in a house BoC rep election that year. The first three amendments below will be a single item on the ballot since they are closely related.

There is another proposed amendment which limits the number of voting members on a case to nine (the current number of BoC Reps). This is intended to make sure the Board can operate in an efficient manner by preventing it from becoming too big. Most cases in the last three years have had either seven or eight voting members serving.

In order for these amendments to be incorporated into the bylaws, they must be approved by a two-thirds (2/3) vote of the student body. Voting will be done online next Friday from 10 AM to 10 PM at [donut.caltech.edu/vote](http://donut.caltech.edu/vote). All undergraduates are eligible to vote and are strongly encouraged to do so. The text of the amendments is below, with text to be added in italics and text to be removed in strikethrough.

Item one: Three amendments (Vote yes or no)

In Article VII. Board of Control, amend Section 2 to read:

SECTION 2—MEMBERSHIP. The Board of Control shall consist of the Vice President of the Corporation, who shall act as chairman, and the following members: the Secretary of the Board of Control, two members appointed by the Board of Control, and seven members, one elected in each of the seven undergraduate student Houses and one elected by students living outside of the seven Houses.

And amend subsection 2(b):

(b) A candidate may declare his candidacy in any House, but all students shall vote in the House with which they are affiliated at the time of the election. ~~Students not affiliated with~~

~~any House may register to vote in the House of their choice. Students not registered nor affiliated with a House at the time of the election may not vote.~~ Students affiliated with more than one House may only vote in one House.

And insert new subsection 2(d) and reletter subsequent subsections.

(d) *Off Campus BoC Rep. Students living outside the seven houses and associated off-campus alleys shall be eligible to elect one representative in an annual election organized according to procedures determined by the electors. Ballot box(es) shall be set out in place(s) including but not limited to Avery House at the time of this election. Eligible students who choose to vote in the election for off campus Board of Control Representative may not vote for Board of Control Representative in one of the seven houses.*

Item two: One amendment (Vote yes or no)

In Section 3—Rules of Procedure, amend subsection 3(h) to read:

(h) Seven (7) voting members of the Board shall constitute a quorum. *At most nine (9) voting members shall sit on a case.*

## LUNCH WITH JOHN HUME

BY BEN LEE

Last Tuesday, Nobel Peace-prize laureate John Hume came to Caltech to speak about his involvement in the peace process in Northern Ireland. I was among a group of Caltech students, many affiliated with the Caltech Y, who met him for lunch in the Athenaeum library. Arriving in a crumpled pink shirt and greeting us with warm eyes from beneath bushy gray eyebrows, he seemed not so much a famed diplomat as a wise and grandfatherly teacher.

John Hume began his life as an Irish Catholic in Derry, at a time when the unemployment rate among the Irish Catholic majority of that Northern Ireland city was seventy percent. Discrimination from the minority Protestant population who controlled most of the businesses and the local and national assemblies kept people like John Hume's father from getting a job, even though as John recalls, "my father was evidently an intelligent man; all the people of the town would seek his help to complete legal and official forms." The poverty of Irish Catholics in Derry was stark; many families lived in huts that were constructed as temporary shelter for United States marines stationed there during the Second World War. In this atmosphere of poverty, discrimination, and distrust between the Catholic and Protestant communities, only the flag-waving politics of sectionalism prospered - Celtics vs. Rangers, Green vs. Orange, Nationalist vs. Unionist - while the people remained divided and poor.

It was this poverty that John Hume first attempted to change. Believing that his town could prosper if local people pooled their resources to invest in local businesses, he founded the first credit union in Northern Ire-

land remained blocked by sectional politics. On one side of the divide were Irish Republicans bent on achieving independence from Britain by violent revolution if necessary, on the other side were Protestant Unionists who feared for their minority culture and who would never surrender their links to Britain. Their visions for the future of Northern Ireland were polar opposites, such that victory for either side could only mean defeat for the other.

It was in this atmosphere during the 1970's that John Hume helped to found the Social Democratic and Labour Party (SDLP), which he then led as the voice of moderate Catholic nationalists in Northern Ireland. John told us how a little girl approached him at her father's funeral - he had been killed by Protestant paramilitaries - yet she told him of how her family had gathered around the casket to pray for peace, and to pray in hope for John Hume. Hume tried to make the desire of the majority for peace a reality, by advocating three principles: the cycle of violence must end, the solution must represent a compromise with no victory for either side, finally there must be a healing process between the communities.

John Hume realized that before the violence could end and the healing begin, both sides must be convinced that putting aside the guns and bombs and working together was not an act of surrender. There would be "no victory for one side at the expense of the other" in any solution. Hume needed to convince the Irish Republican Army that their justification for guns, bombs, and violent revolution no longer existed; he got the British government to declare that if the majority of people of Northern Ireland desired independence, Britain would not interfere to stop it. He needed to convince the Protestant minority that they would not be surrendering their identity and culture by including Catholics in the government; the Good Friday agreements created a system of proportional representation where both the majority and minority views would be represented, and that between the first minister and deputy minister of the government, one would be Catholic and the other Protestant.

Nelson Mandela once said that "an oppressed people do not resort to terrorism, if there is a method of dialogue between the oppressed and their oppressors." Hume helped create this dialogue between the Irish Catholic majority and the Protestant minority; moreover, he ensured that political gains for the majority did not disenfranchise the minority. It is an instructive example for the many ethnic, national, and religious conflicts in the world, from Basque separatist in Spain, to Tamils in Sri Lanka, to the question of Palestine. Hume said upon accepting the 1998 Nobel Peace prize, "I want to see Ireland as an example to men and women everywhere of what can be achieved by living for ideals, rather than fighting for them." May we see the same spirit of dialogue in resolving divisive conflicts elsewhere.

## Hume speaks at Caltech

BY JON FOSTER

What does a peacemaker look like? What is it like to listen to a voice which helped stop bitter enemies slaughtering each other?

John Hume looks like a pretty ordinary guy. His voice, a soft Irish lilt, is neither particularly forceful nor transcendently gentle. Somehow it did not take extraordinary charisma to make a difference, to heal a country. It took only a man who never intended to get into politics, but who came to firmly believe that the solution to so many of the world's problems is to get people to respect differences.

In a public interview with Kevin Cullen at the 3rd DuBridge Distinguished Lecture Series, Hume related the story of how he once stopped halfway across a bridge between France and Germany and realized that immediately after WWII no one would have believed it possible that in a short fifty years the two bitter en-

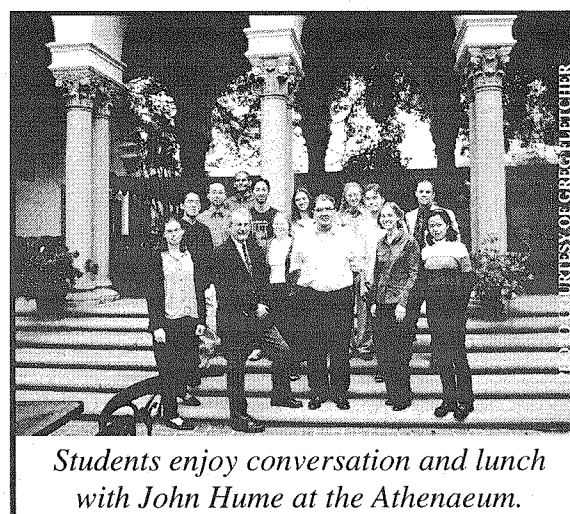
emies would be at peace, and both parts of a united Europe. Hume's hometown in Northern Ireland had been rife with contention since 1689, but he realized that while working for peace there might seem crazy, that didn't mean that peace could not be achieved.

Hume founded the Social Democrat and Labor Party which gave moderate Catholics in Northern Ireland a voice, but his main contribution to the peace process was initiating a series of talks with Sinn Fein's leader Gerry Adams. He was also instrumental in interesting many American politicians in the problems of Northern Ireland, from Ted Kennedy to Bill Clinton. Hume's work earned him the Noble Peace Prize in 1998, but if the current agreement holds it will have earned a great deal more for a country in which terrorism has killed or wounded a staggering proportion of the population.

When asked to comment on

the September 11th attacks, Hume said that they had, "Brought across to the whole world the real meaning of terrorism," and had made many people aware of how important Hume's struggle really is. "The world today is a much smaller place," he said, "and our dream of a world without conflict should be easier because of greater awareness of our common humanity." What would it take to make a world without conflict?

Not a hundred great leaders. In Hume's words, only regular people, "using their talents to build up, rather than destroy. If they spilt their sweat, not their blood". If everyone were completely ordinary but dedicated to peace, like John Hume.



Students enjoy conversation and lunch with John Hume at the Athenaeum.

land in 1961 when he was twenty-four. He also attempted to relieve the severe housing shortage by organizing the community around an effort to build affordable homes; they housed a hundred families in the first year alone. As he told us of his first forays into helping his community, I could hear his unspoken words, that concrete change happens first by people getting involved in the local community. And simple community-driven organizations like Hume's credit unions, or even the Caltech Y, are where such initiatives begin.

Even as Hume made some improvements to the quality of living in Derry, continued efforts to expand the economic opportunities of Irish Catholics in Derry and across North-

## Feature

## Hollywood comes to Pasadena

BY MICHELLE GIRON

"Hollywood came to Pasadena...and stayed." These are the words greeting visitors at the current exhibit, "Hollywood Comes to Pasadena," at the Pasadena Historical Museum. Pasadena and immediately surrounding areas, with their close proximity to Hollywood as well as their versatile backdrops, have been invaluable locations for movie and television directors. It was in this very area that movies, such as *Gone with the Wind* and *Congo*, and television series, such as *Roots II* and the *Fantasy Island*, were filmed. Not only has the Pasadena area been host to Hollywood film crews, it has also been the source of many talented individuals involved in the entertainment industry. The ex-

hibit makes an effort to recognize Pasadena's contributions, in its backdrops and its residents, to Hollywood.

Upon entering the exhibit, the visitor's attention is directed to a television screen which plays a movie accenting just some of the many locations in the area which film directors have used in their work. Clips of movies, such as *Father of the Bride* and *Jurassic Park II: the Lost World* are displayed. Moving further into the exhibit, the visitor can view a collection of movie posters and photos that line the walls as well as film props. Sections of the walls highlight the different localities of the Pasadena area and just some of the movies and television shows filmed in them. A large *Pulp Fiction* poster adorns the "Old Pasa-

dena" section as that movie made use of the Raymond Theater and Kendall Alley as two backdrops. Photos from the television shows *Charlie's Angels* and *The A-Team*, which were filmed at Alverno High School in Sierra Madre, are found within the "Sierra Madre" section. Professor Klump's experiment setup from *The Nutty Professor*, which included filming at the Huntington Library, is featured in the "San Marino" portion. All along the walls, starred messages appear, giving the visitor interesting behind-the-scene tidbits about various films.

Also included in the exhibit are sections dedicated to the various sectors of the entertainment industry and the inhabitants of the Pasadena area who have contributed

to them. The "Film Editing" section recognizes Pasadena residents Iwan and Mark Serrurier, a father-son team who ran the film editing company *Moviola* and made advances in the field of film editing. Mark Serrurier was himself a Caltech alum. Animation, aerial filming, production design, and costume design are among other sectors exhibited.

The exhibit does not fail to recognize Hollywood's impact on Pasadena. The entertainment industry employs numerous Pasadena area residents and is a source of revenue for owners of properties filmed. Owners of filmed private residents in Pasadena alone make \$2 million dollars a year for allowing use of their properties.

The exhibit lacks coherence in some respects as it is not clear

how some included artifacts relate to the theme of the exhibit. Also, more information could be included about photos and posters displayed and also about the various locations for non-local residents. The exhibit can by no means dedicate displays to all of the past filming in the area but is a survey of film and television work of various genres which have utilized the Pasadena area. The exhibit is nevertheless an ambitious display of Hollywood's effect on Pasadena.

Exhibit runs through January 6, 2002. The Pasadena Historical Museum is located at 470 W. Walnut St. in Pasadena. Exhibit hours: Wednesday through Sunday, noon-5:00 pm; Admission: general admission--\$6, students/seniors--\$5; children under 12—free.

## Caltech's "fifteen minutes" goes into overtime

BY KEVIN BARTZ

Where else can you find a *Real Genius*—not the type freckled and pale-faced with skillet-thick glasses, but a Malibu Barbie stunningly sharp and *Legally Blonde*? Or what about star-studded *Wedding Planner* Jennifer Lopez in her provocative sea green Oscar dress, mixing with the lubricious likes of Eddie Murphy's *Beverly Hills Cop*?

Beneath its facade of academia, Caltech has long housed both the virgin and the vamp, the vagrant and the virtuous, the glitter of Hollywood cops and the grit of Orange County—all in its role as what Public Events staffer Deborah White called "a campus [with] first-class landscaping."

"It's just the architecture, really," said Marisu Jimenez, who oversees commercial filming at the Athenaeum. "We have such a nice property, and we're lucky to have what we have even though filming is sometimes very intrusive." Two weeks ago, the Athenaeum was home to NBC's hit sitcom *West Wing*, the perfect backdrop for a "sophisticated, one-hour drama," in the words of a network representative.

Months before, a corps of NBC executives and *West Wing* producers approached Jimenez about filming on campus. As they would with any commercial directors, Caltech officials fired back a pointed barrage of inquiries regarding the company's for-profit filming goals.

"You call me, and we start off with whether you're planning on filming in the interior or exterior," explained White. "Then we discuss the specifics, whether it's a commercial, TV

show, or still photo, and when and where you'd like to shoot." But here, the part of filming with the least paperwork often proves also the most tiresome. With facilities ranging from a classical ladder-laden library in Gates to dust-covered steam tunnels underground, choosing a location sometimes poses quite a challenge for even the most skilled directors' creativities.

"There's Kirchoff 115, the old lecture hall, and Sharp Lecture Hall in 115 Arms, which was once a law professor's room in the series *Paper Chase*," recalled White. The underground tunnels, too, were home to RDA's popular *MacGyver* and got a look from *The X-Files* for a potential episode last fall. And if a producer wants to scout out the nooks and crannies of campus, "we go driving and see what they're looking for," said White.

In fact, *The X-Files* ultimately turned not to the tunnels for its September show but to the Athenaeum, operated independently but similarly by Jimenez. "We basically have the same contract, but we are a private club and we are here to service our members," maintained Jimenez, "so the filming schedule has to work around the schedules of our members, which is sometimes hard because filming crews come and they want to take over the club, so we have to take rules seriously." In addition to Fox's *The X-Files*, Jennifer Lopez crashed the decades old Athenaeum in *The Wedding Planner* last April, and Eddie Murphy took to the Olive Walk with high-powered weapons in his epic *Beverly Hills Cop* years ago.

But Caltech's picturesque ponds and scenic shrubbery don't come free to movie magnates. Public

Events rakes in \$5000 daily from producers for interior building shots; Jimenez placed the Athenaeum's price tag slightly higher. Metro-Goodwyn-Mayor shelled out \$8500 per day for exterior footage in *Legally Blonde* and Intel-led cameramen paid \$1500 a day for their still-photo shoot on the Caltech campus. "I increased prices when I took over at The Athenaeum," recounted Jimenez, "but I've been told by members of *West Wing* that our prices are about average for comparable properties in the area."

For interior filming, Public Events sets aside a portion of this income for associated academic departments as an incentive for otherwise movie-averse administrators.

"Departments do get part of the fee, and sometimes it's still not worth the effort, but sometimes it's an extra thousand for almost nothing," asserted White. "We provide a security officer and someone from Public Events who can make sure [the producers] are not left alone and put a stop to things if they're doing something detrimental to Caltech."

Even so, movie directors sometimes save pocket change by cutting contractual corners at Caltech's expense, White said. Filming the upcoming *Orange County*, a camera crew went six hours over its agreed 9:00 pm day-ending deadline—during the school year. The production team also overstepped its bounds by filming at Robinson Laboratory, a location not listed on the film's contract, which incited a flurry of protest from late-night researchers.

"It was hard to do anything with them yelling and screaming out there," grumbled one

such student. After the incident, White boosted security by adding a Public Events official to Caltech's movie-accompaniment squad and turning down *Orange County*'s repeated requests to return for more late-night shoots.

The Athenaeum, for its part, leaves doors open slightly longer—from 7:00 a.m. to 11:00 p.m.—and has endured few such offenses. For the most part, a parade of administrators led by Public Events Director Denise Nelson Nash scans directors' requests beforehand for potential problems. "She has final approval on everything," said fellow staffer Rita Elshout. "Others will decide if it's possible and they go from there—then bring a final proposal to her and she'll have to look it over and approve it."

And such limitations are widespread. The campus is available for exterior shots only when school is out of session; for interior footage, only during vacations. For movies with scientific content, Vice Provost David Goodstein verifies the academic credibility of any stated facts. Jimenez noted also that "we ask for the script beforehand to make sure that it's not a pornographic film or something."

"We take extra precautions so we know exactly what they're going to be doing," held Delmy Emerson, responsible for Buildings & Grounds at the Physical Plant. "If they're going to be filming around the student houses, for example, or if they say they're going to be filming around olive walk and making a lot of noise at 6 am in the morning, we should know about it."

Stopped violations are not uncommon, according to Emerson—although "we do have

to evaluate each case individually. Some time ago they wanted to do something in Dabney's olive trees and we had to say 'No!' because those olive trees are old."

But apart from the pseudo-physics of *Real Genius* and whimsical monkey experiments in the age-old *Project X*, Caltech also hosts a slew of more educationally focused documentaries, from countless earthquake reports to a special on flying cars by Fred Koolig. And unlike commercial dealers who dole out top dollar for movie time, documentaries' producers rub elbows with the cream of Caltech's scientific crop—for free.

"Because we have the highest level of technology and academics here," said Public Relations official Deborah Williams-Hedges, "what better place to come than Caltech for technology?" Indeed, despite minor altercations with lengthy films—a one-hour interview with a professor often drags into two, three or four hour-long takes—top-notch documentaries by the likes of BBC, Discovery and Jack Beacham have found Caltech to be a happy backdrop for informational shorts. "It really is good PR; it garners good exposure for the Institute," lauded White.

But as different from documentaries as its entertainment-driven audience may be, *West Wing* may signal the dawn of what White dubs "another spurt in movie production" at Caltech, although one perhaps not as much a commotion as the days of *Orange County*.

"Now, the offices, all the offices, work very closely together," said Emerson. "If we weren't working together, things wouldn't be going so well."



## Feature

Does Caltech Care about its undergraduates? Recent decisions regarding budget cuts, health care, and parking have tested the conviction of those of us who still think so and have given more ammunition to those who are discontented. Timing, in this case, seems to have been of the essence. Not only have several major changes been announced in close succession, but they also come against the backdrop of the largest donation ever to a university.

Of course, it is not fair to simply use the Moore gift as a reason Caltech should allocate more funding to undergraduates. However, its symbolic influence is powerful and makes the effect on morale more devastating. It is difficult to keep believing that Caltech cares when we see new buildings being built all around us as our own living environment continues to decay and when we hear of unprecedented generosity to the institute as our health insurance costs rise. There has been talk of using some of the gift to renovate the student houses, but now many students doubt that more than a small fraction will ever trickle down to us.

The lack of student participation or even consultation in the decisions also magnifies their impact. In the face of economic recession, we would certainly understand the need for budget cuts, and we

might even have suggestions to make the best of the new budget. Committees have been formed regarding health care and parking, but it will be at best difficult to achieve a reversal of decisions that have already been made. Other universities would not even give a thought to student involvement, but Caltech was supposed to be different. As advertised, students are supposed to be treated like intelligent adults who are given the freedom and respon-

### Does Caltech care About us?

By Jialan Wang

sibility to influence the decisions affecting them. However, not only were students not given the chance to influence recent changes, but the existence of similar policies at other universities was used as justification for both the health care and parking decisions (see [http://atc.caltech.edu/CIT\\_Parking/ParkingMemo1.pdf](http://atc.caltech.edu/CIT_Parking/ParkingMemo1.pdf) for the parking memo). This sort of decision-making smells of duplicity. Even if the same decisions were made, having student involvement before the decisions were made would have lessened our dissatisfaction instead of adding disenfranchisement to our list of grievances.

I think the problem is not that administrators intend to exploit the undergraduates, but that our values cannot be reconciled with a business strategy. Caltech's main purposes as a university are to foster world-class science and produce world-class scholars. This includes maintaining an undergraduate population, but we are just one of many of its constituents. Campus-wide decisions are made to maximize total benefit with the resources available, and words like "bottom line" and "cash flow" were undoubtedly thrown around during decision-making. However, the magic of the undergraduate experience is not something that fits into that equation. One budget cut or one less

freedom is not enough to destroy that magic, so it is just treated as a constant. But if each year a few less friendships are made because freshmen don't have cars to go to Tommy's, and a few more people have to drop out because they can't cope with medical problems and school at the same time, the effects of these decisions propagate. If decisions like these continue to be made, quietly and gradually, something beautiful and extraordinary will become prosaic. If our way of life is to continue, someone along the chain of command has to make that leap.

## INTERVIEW WITH COACH VICTOR

BY DON LY

Tech: Hi Coach, so how is the team doing this year?

Coach Victor: I think we've practiced well. There are 20 players this year and they're all very enthusiastic young men. They're a very committed bunch. We have 6 tough practices a week.

Tech: How have we been doing against other teams?

CV: We beat Cooper Union at the Chapman Tournament. We've got 1 win and 3 losses so far. We're working on depth right now. Only about 5 players on the team played basketball in high school previously. Overall I am extremely happy with the team.

Tech: There's a game against MIT tomorrow\*, do you have any predictions on how we'll do? (\* game will already have taken place by the time this goes to print).

CV: We haven't had a chance to scout them out yet. They're a much larger school so they have more diversity.

Tech: I'm confident our superior scientific abilities will prevail. Are there any outstanding players or anybody in particular you'd like to highlight?

CV: Yes, Paul Updike (JR) made the All Tournament team. Jon Bird (JR) has also been an outstanding player. He leads the team in rebounding and scoring. All the players have made an excellent contri-

bution and given lots of effort for the team though.

Tech: Do you think the cheerleaders are distracting the team at all? Personally, I find it hard to focus on the game when there are flexible girls in short skirts jumping up and down.

CV: Not at all! The team really appreciates their support.

Tech: It's probably just me then. Well, they are another reason to go to home games right? So how's the turnout been at the home games so far?

CV: It hasn't been that great so far. Of course, we've only had two games here and one of them was during midterms week.

Tech: So what you're saying is people should get off their lazy butts, forget about their problem sets for a few hours, maybe ditch some classes and come support our team?

CV: Well, more people showing up would be nice. The team really appreciates all support it can get.

Tech: Anything else you'd like to add about the team?

CV: We're going to take it one game at a time, improve every trip, step up our performance, play hard and be as good as we can be.

Tech: Thanks a lot Coach!

In case you missed it, come support our team!

Next home game: Thursday, December 6 vs. Life Bible College. All men's basketball games are at the Braun Athletics center.

Why write an article on depression? Because Caltech students do become depressed. Some students have already experienced depression before they came to Caltech while others experience their first bout of depression here. It's difficult to know the exact numbers of students at Caltech who suffer from depression because not everyone seeks help. The numbers at Caltech appear similar to the national statistics, roughly 5-6% of the population. Some students believe that the unique stresses of this environment may make them even more vulnerable to becoming depressed.

Whatever the precipitants, the impact of depression on someone's life is significant. Students who are depressed experience a decrease in motivation for work and for other activities. Some students who are depressed retreat from others and the demands of the world because they lack the emotional or physical energy to engage. Sleep can be affected, either sleeping more than usual, or less, or sometimes experi-

## Are you Depressed?

KEVIN AUSTIN, PH.D.

encing "early morning awakening" – waking up at an unusually early hour without being able to go back to sleep. Hunger can be affected as well, either eating less or more than usual or experiencing a loss of interest in food. A person's outlook on life becomes dampened and in some cases the person becomes despairing with little hope that things can change for them. When experienced on a daily basis for over two weeks these symptoms may constitute a clinical depression. Some students who are depressed do think of suicide as a means of ending their pain. Suicidal thoughts are often the direct result of the hopelessness a depressed person feels.

If treated, the vast majority of individuals can find relief from their depression, yet many individuals don't seek treatment for various reasons. Some don't seek help because they fail to recognize that what they are experiencing is actually depres-

sion. It can be hard to know if the loss of interest in science and work is a consequence of depression or burnout. For others the loss of motivation, apathy and loss of energy is a direct result of depression and actually prevents them from reaching out for help. It's especially hard for Caltech students who rely on their mental abilities to solve problems not to be able to solve the problem of depression on their own.

The stigma of needing help, whether a personal stigma or a cultural one, can also make it difficult for someone to recognize they are depressed and seek help. People who have suffered from depression in the past may find it hard to accept that they are depressed again. It can also be hard for someone who has a family member who has been depressed to seek help because they have so much invested in seeing themselves as different from that

person. The result of any of these factors is that some Caltech students delay seeking help for depression until it becomes really unbearable, which means they suffer for much longer than they need to.

Friends and family members are often in the best position to help by talking directly and with care to someone they fear may be depressed. It's not always easy to raise the issue but it's important to do so because the depressed person may not be able to mobilize themselves to get help. Helping a friend who may be depressed involves listening and providing support and encouragement. The depressed person may be tempted to isolate, which often amplifies negative feelings. Encourage your friend to talk and do things that may help them, such as getting regular sleep, eating, exercising if they can, and taking action to resolve any issues that seem to be weighing on them. If they

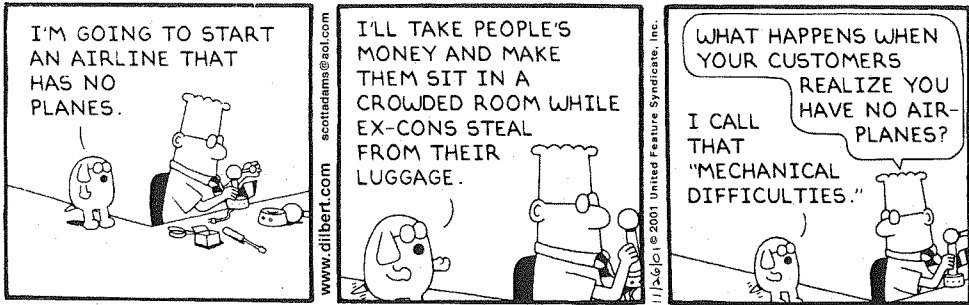
aren't able to do these things or they don't result in your friend feeling less depressed, then encouraging them to get help is how you can best be a friend to them. If you would like more information on the symptoms of depression or how to help someone you know who maybe depressed check out the counseling center's web page at <http://www.counseling.caltech.edu/>. There you will find articles that describe the symptoms of depression, an on-line anonymous survey to assess for depressive symptoms and an article that talks in more detail about how to help someone who may be depressed. There are also resources on bipolar or manic depressive disorder, which is a form of mood disorders that can have very damaging effects on an individual but for which highly effective treatment is available.

You can also talk with someone here at the Counseling Center if you are concerned that you may be depressed or someone you know is depressed. There is help.....come talk to us. Call us at x8331.

# Comics

## DILBERT<sup>®</sup> by Scott Adams

## FoxTrot by Bill Amend



I'M GOING TO START AN AIRLINE THAT HAS NO PLANES.

I'LL TAKE PEOPLE'S MONEY AND MAKE THEM SIT IN A CROWDED ROOM WHILE EX-CONS STEAL FROM THEIR LUGGAGE.

WHAT HAPPENS WHEN YOUR CUSTOMERS REALIZE YOU HAVE NO AIRPLANES? I CALL THAT "MECHANICAL DIFFICULTIES."



OK, I'VE WRITTEN NOTES IN ALL THE CHRISTMAS CARDS, ATTACHED A PHOTO OF THE KIDS, AND STAMPED AND ADDRESSED ALL THE ENVELOPES.

ALL THAT'S LEFT TO DO IS FOR YOU TO SIGN THEM.

IT'S NOT EVEN DECEMBER YET. WHAT'S THE RUSH?

THIS IS WHY TWO PROCRASTINATORS SHOULDN'T MARRY.

SAY, WHY IS JASON WEARING A DIAPER IN THIS PHOTO?

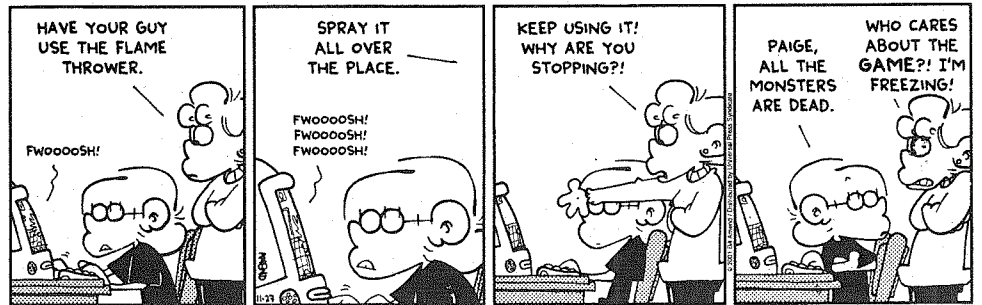


DOGBERT AIRLINES

I'VE BEEN WAITING FOR 35 HOURS. ARE YOU SURE MY FLIGHT EXISTS?

ACCORDING TO MY COMPUTER YOUR FLIGHT IS DELAYED BY WEATHER.

WHAT KIND OF WEATHER? OUR PLANES CAN'T HANDLE DIRECT SUNLIGHT.



HAVE YOUR GUY USE THE FLAME THROWER.

FWOOOSH!

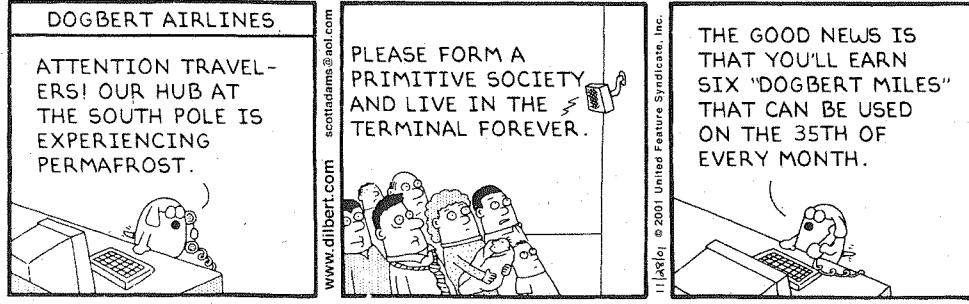
SPRAY IT ALL OVER THE PLACE.

FWOOOSH! FWOOOSH! FWOOOSH!

KEEP USING IT! WHY ARE YOU STOPPING?!

PAIGE, ALL THE MONSTERS ARE DEAD.

WHO CARES ABOUT THE GAME?! I'M FREEZING!



DOGBERT AIRLINES

ATTENTION TRAVELERS! OUR HUB AT THE SOUTH POLE IS EXPERIENCING PERMAFROST.

PLEASE FORM A PRIMITIVE SOCIETY AND LIVE IN THE TERMINAL FOREVER.

THE GOOD NEWS IS THAT YOU'LL EARN SIX "DOGBERT MILES" THAT CAN BE USED ON THE 35TH OF EVERY MONTH.



HOLD THE BALL WHILE I KICK IT.

YOU WANT ME TO WHAT??

WHAT'S YOUR PROBLEM? IT'S THE EASIEST THING IN FOOTBALL!

ARE YOU INSANE?!

THIS GAME IS INSANE, THEN.

I MEANT HOLD IT LOOSELY.

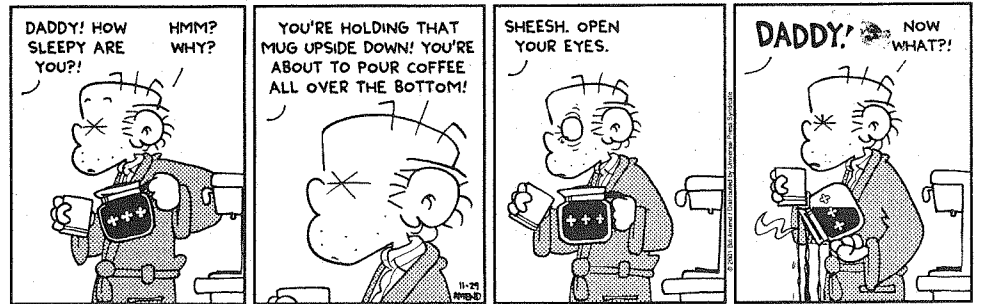


CONGRESSIONAL HEARINGS

YOUR AIRLINE IS ACCUSED OF PROVIDING INHUMANE SERVICE. HOW DO YOU RESPOND?

SOMETIMES I WAG AND SOMETIMES I HOLD UP MY PAW AND SAY, "BAH!"

YOU'RE NOT ALLOWED TO SAY BAH. TAKE IT BACK.



DADDY! HOW SLEEPY ARE YOU?!

HMM? WHY?

YOU'RE HOLDING THAT MUG UPSIDE DOWN! YOU'RE ABOUT TO POUR COFFEE ALL OVER THE BOTTOM!

SHEESH. OPEN YOUR EYES.

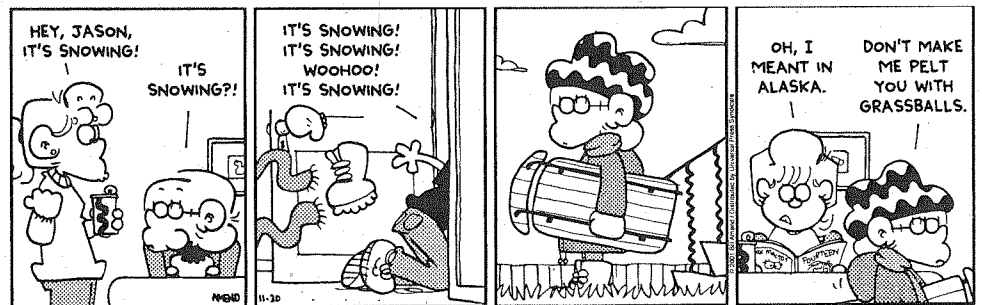
DADDY! NOW WHAT?!



OKAY, LET ME THINK ALOUD FOR A MINUTE.

THE COST WILL BE \$3,000... LOSING FOCUS... MONKEYS ARE FUNNY... MY TONGUE IS DIGESTING IN MY MOUTH.

THAT DIDN'T HELP AS MUCH AS I HAD HOPED.



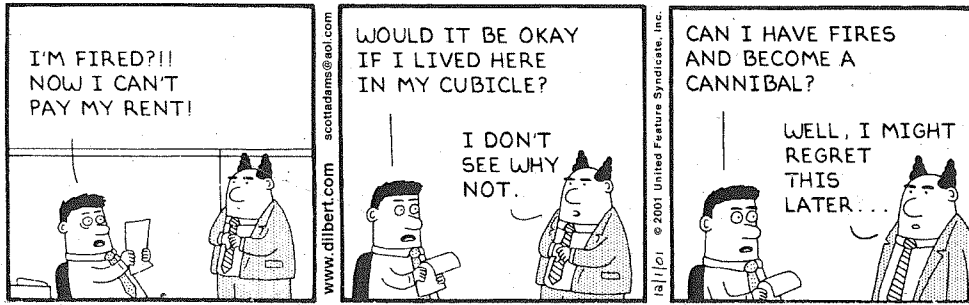
HEY, JASON, IT'S SNOWING!

IT'S SNOWING?!

IT'S SNOWING! IT'S SNOWING! WOHOHO! IT'S SNOWING!

OH, I MEANT IN ALASKA.

DON'T MAKE ME PELT YOU WITH GRASSBALLS.



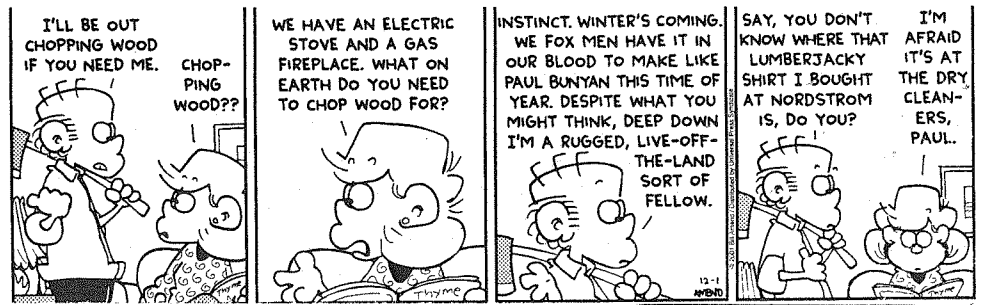
I'M FIRED?! NOW I CAN'T PAY MY RENT!

WOULD IT BE OKAY IF I LIVED HERE IN MY CUBICLE?

I DON'T SEE WHY NOT.

CAN I HAVE FIRES AND BECOME A CANNIBAL?

WELL, I MIGHT REGRET THIS LATER...



I'LL BE OUT CHOPPING WOOD IF YOU NEED ME.

CHOPPING WOOD??

WE HAVE AN ELECTRIC STOVE AND A GAS FIREPLACE. WHAT ON EARTH DO YOU NEED TO CHOP WOOD FOR?

INSTINCT. WINTER'S COMING. WE FOX MEN HAVE IT IN OUR BLOOD TO MAKE LIKE PAUL BUNYAN THIS TIME OF YEAR. DESPITE WHAT YOU MIGHT THINK, DEEP DOWN I'M A RUGGED, LIVE-OFF-THE-LAND SORT OF FELLOW.

SAY, YOU DON'T KNOW WHERE THAT LUMBERJACKY SHIRT I BOUGHT AT NORDSTROM IS, DO YOU?

I'M AFRAID IT'S AT THE DRY CLEANERS, PAUL.

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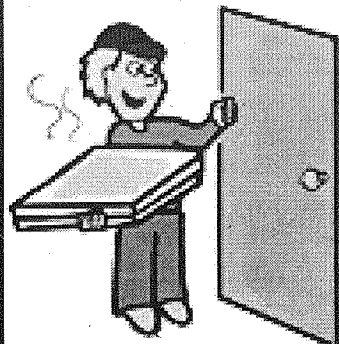
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BURNT MONEY (NR)	[1:00] 7:00
THE AUDITION (NR)	[4:00] 9:50
ENDURANCE (G)	[12:00] 2:25 4:50 7:15 9:40
MULHOLLAND DRIVE (R)	[1:30] 5:00 8:30
MAN WHO WASN'T THERE (R)	[1:30] 4:15 7:00 9:45
HEIST (R)	[11:30] 2:10 4:50 7:30 10:00
NOVOCAINE (R)	[12:45] 3:05 5:25 7:45 10:05

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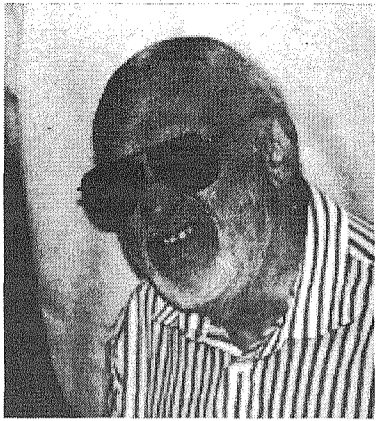
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# Dean's

## Dean's Corner

### Thanks for the Memories

by Jean-Paul Revel



The Thanksgiving holidays were a welcome break. Four days off, and a chance to sleep, never mind the cranberry sauce. But if it was a welcome break for me, it is the students, I expect, who really needed the breather. The break came right on the heels of midterms, only a short time away from finals, a time of year when sleep is in particularly short supply. Although we need sleep, it is not completely clear what all sleep is for. Deprivation leads to lectures and labs missed, reduced ability to concentrate, impairment of arithmetic ability<sup>3</sup>, and generally inefficient behavior.

NASA is concerned because of the dangers to which sleeplessness exposes astronauts, the Armed Forces because of the consequences to the outcome of military operations<sup>4</sup>, and you, you should be aware of the reduced efficiency in study and multiple potential dangers to health.

We all know that sleep deprivation has unpleasant consequences even if not all of the consequences are immediately obvious. But look how much time seems (I emphasize, seems) wasted. A non-sleep deprived person living the canonical 3 scores and ten will have slept through some 204 000 hrs of it before entering eternal sleep! Now if there are no deleterious consequences to lack of sleep, why spend 1/3 of a life in an inactivity, however pleasant? On top of that one could imagine that sleep could be a rather dangerous state to be in, dangerous enough to be counterproductive.

Of course today the dangers include falling asleep while driving (20% of drivers do), or getting caught in machinery. In the course of time our sleeping ancestors could have been a potentially easy prey for less sleep-needy bands of other protohumans, for prides of hungry nocturnal carnivores, or fail to notice passing herds of trampling mammoths. How can it be evolutionarily valuable to spend so much time as inattentive, snoring preys.

Of course one answer might be the snoring, which might have repelled would be diners. Also there might have been some secondary benefits such as encouraging those of our predecessors who were wily enough to make fires, to hide in caves or take whatever other protective measures, exercising their brain cells in the process. That would make it more likely that the imaginative, bright ones would survive.

Maybe, but there are plenty of animals which sleep a lot, yet are not outstandingly astute. Take the big brown bat (bats are among the beasts using sonar to catch their prey and dodge obstacles, but that does not allow them to be characterized as smart). They sleep almost 20 hrs a

day, the thick tailed Opossum, 18 hrs a day, the Armadillo 17 hrs and the Platypus, 14. Since none of these beasts display any particular scintillas of intelligence my hypothesis (such as it is) may be a bit simplistic, probably not worth considering further. It is interesting to note that the sheep, that great sleep facilitator, invoked by millions of insomniacs every night, itself spends only 5.9 hrs in this inactivity<sup>5</sup>. We don't know all of the things that sleep is for, but a favorite theory today is that it has something to do with consolidating memory.

While cautioning that there is no conclusive evidence, a recent reviewer<sup>1</sup> states "the memory trace stays in a fragile state until the first post-exposure sleep has occurred." Robert Stickgold and colleagues from Harvard Medical School used sleep deprivation to test the importance of sleep for memory and learning. In one of their experiments a group of subjects was trained to do a visual task and then sleep-deprived, with a second group (serving as control) was allowed to sleep normally. Both groups were allowed to sleep for two further nights, so that when retested on the third day, there was no residual stress from the sleepless post-training night. "Subjects who were sleep deprived on the first night after training showed no significant improvement in task performance on the third day, while control subjects who were allowed sleep on the first night showed a substantial improvement."

There are many more reports tending to the same conclusion and further evidence that a particular phase of sleep in which rapid eye movements take place (REM sleep, when dreaming commonly takes place) is particularly important in consolidating memory, although the issue is far from settled. We actually know a lot about the cell and molecular biology of how memories are made, see for example Eric Kandel's 2000 Nobel Prize lecture<sup>2</sup>.

In his studies Kandel made use of a simple behavior, which could be learned by a giant marine snail, the sea hare, *Aplysia Californica*. A light touch to the siphon of the animal causes it to contract its siphon, and its gill to withdraw out of harm's way.

The behavior is controlled by giant (i.e. easy to manipulate) nerve cells. This "simple reflex could be modified by different forms of learning which have close equivalents in higher vertebrates." In one of these, sensitization, an unrelated stimulus becomes associated with the reflex. For example a shock to the tail causes the siphon and gill to be withdrawn. The animal remembers the shock, so that, later, even a minor stimulation of the tail can produce the reflex. "...The duration of the memory is a function of the number of repetitions of the noxious experience." A single

shock is forgotten after a few minutes. Multiple shocks however are remembered for days, even weeks. As in vertebrates, forming this long-term memory requires that protein synthesis take place but the short-term memory does not.

It turns out that single or widely spaced shocks cause temporary changes at the membrane and in the cytoplasm of the sensory neurons, making later firings of synapses between sensory and motor neurons (needed for the gill reflex) to occur with a lesser stimulus: that is the ba-

sis for the short-term memory.

Long-term memory depends on effects in the nucleus of sensory neurons. A protein which modulates the activity of genes involved in the formation of synapses between sensory and motor neurons becomes active after repeated stimulation. Making the additional new synapses requires synthesis of new protein. Once established these extra connections are quite durable and forms a long lasting basis for stimulation of motor neurons (long term memory). As memory fades, the number of connections diminishes.

So perhaps learning how to stimulate this pathway pharmacologically would allow us to form long term memories, even after a brief exposure.

Before that happens however we'll have to do with sleep, and in fact, now that I think of it, there is as yet no indication of where or how sleep and dreaming come into the cellular and molecular mechanisms we just mentioned.

A bientot

*Jean Paul Revel*

Jean-Paul Revel  
Dean of Students

1. P. Maquet, Science, 294, 1048 (2001)
2. E. Kandel, Science, 294, 1030 (2001)
3. www.sciencedaily.com/releases/2000/02/000209215957.htm
4. www.usafa.af.mil/jscope/JSCOPE97/Belenky97/Belenky97.htm
5. J. Siegel, Science, 294, 1058 (2001)

# CRIPPLING DEPRESSION goes Shopping

www.CripplingDepression.com

By Mike Yeh, Ben Lee, and Tim Wan

All characters are fictional. Any resemblance to anybody is purely coincidental. Comics represent the views of the authors and not the tech staff. Contact feedback@cripplingdepression.com

**COMIC STRIP TRANSCRIPT:**

**Panel 1:** Mike Yeh: YOU'VE BEEN COMPLAINING ABOUT WAKING UP THIS ENTIRE TERM... EXPLAIN TO ME WHY YOU WOKE ME UP AT 6:30 AM AGAIN???

**Panel 2:** Ben Lee: IT'S THE BIGGEST SHOPPING DAY OF THE YEAR!! I NEED YOU TO DRIVE ME PLACES!

**Panel 3:** Ben Lee: WHY DIDN'T YOU GET MIKE? HE'S GOT A CAR!

**Panel 4:** Mike Yeh: MIKE'S SHORTER THAN YOU. YOU CAN CARRY MORE STUFF!

**Panel 5:** Mike Yeh: SO EVERY YEAR, RETAILERS GO FROM LOSSES TO PROFIT ON THIS DAY. THEY EXPECT US TO PURCHASE A SLEW OF CRAP JUST BECAUSE THERE'S A SALE.

**Panel 6:** Ben Lee: PEOPLE AREN'T EVEN BUYING THINGS THAT THEY NEED!!! THEY'RE JUST STUFFING RANDOM ITEMS INTO THEIR CARTS!!

**Panel 7:** Mike Yeh: ?? TIM ??

**Panel 8:** Ben Lee: YOU SAY SOMETHING?

**Panel 9:** Mike Yeh: I GOT THE NEW BABBLIN' BOO DOLL!

**Panel 10:** Ben Lee: THEY'RE THIS YEAR'S HOTTEST TOY! SHE GIGGLES, BABBLES, AND CRIES!!

**Panel 11:** Ben Lee: WOW! CONGRATULATIONS! I BET YOUR SISTER'S GOING TO LOVE THAT!

**Panel 12:** Mike Yeh: ...SISTER?

**Panel 13:** Mike Yeh: EXCELLENT! THE LAST CHEAP MP3 PLAYER!!!

**Panel 14:** Ben Lee: FINALLY, SOMETHING I WANT!!

**Panel 15:** Ben Lee: HEY SUE!! THEY'RE OVER HERE!

**Panel 16:** Ben Lee: YOU BEST PUT THAT BOX DOWN, OR I'LL TAKE PLEASURE IN GLUTTONY YOU, BOY.

**Panel 17:** Mike Yeh: MAN, SHOPPERS ARE PUSHIER THIS YEAR...

**Panel 18:** Mike Yeh: BEN! BEN! LOOK WHAT I FOUND THE NEW SUPERMAN ACTION FIGURES AND A T-SHIRT FOR EILENE!

**Panel 19:** Ben Lee: DUDE, THEY BOTH COST 110 YOU'VE ONLY GOT 15 LEFT. YOU'RE GOING TO HAVE TO CHOOSE.

**Panel 20:** Ben Lee: ...OR...

**Panel 21:** Ben Lee: ...CHOOSE??

**Panel 22:** Ben Lee: I GOT YOU DIET COKE!! CAUSE YOU'RE FAT!

**Panel 23:** Ben Lee: JIMMIE JULIENERS!! TO BE CONTINUED...

## Mints



## Announcements

To ensure that everyone has a safe and merry holiday the **Environment, Health and Safety Office** (EH&S Office) has put together some helpful holiday decoration tips that are useful for work and home. Find out where to get a flame-retardant tree, what kind of lights to use, and how to hang the tinsel! Go to the EH&S Office web site at <http://www.safety.caltech.edu> to get more info. Happy Holidays!

**TACIT Auditions.** All members of the Caltech Community are invited to audition for the TACIT production of Shakespeare's *Love's Labour's Lost*. Auditions will be held as follows:  
Wed., Nov. 28, 7:30-10:00 pm (Ramo);  
Thurs., Nov. 29, 7:30-10:00 pm (Dabney Lounge);  
Fri., Nov. 30, 7:30-10:00 pm (Ramo);  
Sat. Dec. 1, 1:30-4:00 pm (Ramo).  
See [www.its.caltech.edu/~tacit](http://www.its.caltech.edu/~tacit) for related information as it becomes available. The play will be performed during winter term on three consecutive weekends beginning February 22.

**Work-Study Opportunity at JPL.** Compton Gamma-Ray Observatory Archival Data Analysis for Studying Temporal and Spectral Properties of Gamma-Ray Sources. This is an announcement of opportunity for one or two undergraduate students in physics or astronomy to participate in a part-time work-study research program to process and analyze archival data obtained by the Burst and Transient Spectroscopy Experiment (BATSE) onboard the NASA Compton Gamma-Ray Observatory. The major scientific objective is to study the properties of gamma-ray emission from cosmic sources including black holes and active galactic nuclei and neutron-star systems. For this research, it would be useful if the student had some experience with programming as well as working with the Interactive Data Language (IDL) package. Employment would be on a part-time work-study basis during the school year and possibly up to 40 hours per week during the summer. If interested, or for further information, contact Dr. James C. Ling, JPL 169-327, (818)354-2819, [james.c.ling@jpl.nasa.gov](mailto:james.c.ling@jpl.nasa.gov).

The **Caltech Ballroom Dance Club** is offering two five-week class series this month: Samba and Waltz. This week will be the fifth week of classes, but if you know the basic steps you can come learn new figures. SAMBA, taught by professional instructor Andre Fortin, takes place on Mondays (through Dec. 3). Classes are \$6/lesson for Caltech students; \$8/lesson for others. WALTZ (Wednesday evenings through Dec. 5) is amateur taught and costs \$1/lesson (free for freshmen or PE credit). All classes are held in Winnett Lounge from 7:30-9 pm, followed by a half-hour practice session. Refreshments provided; no partner or experience is required. On Mondays from 9-11 pm we offer a mini-ballroom dance party (first half-hour is coincident with practice session) - request or bring your own music! for more information, contact Megan Knight at [knight@its.caltech.edu](mailto:knight@its.caltech.edu) or visit our web page at <http://www.its.caltech.edu/~ballroom/>.

As a result of **Irvine Foundation** funding, Caltech has a limited amount of money available for diversity programs related to underrepresented minorities and women for academic year 2001-2002. Proposals from students, faculty, and staff are welcome and should clearly address how the program relates to issues of diversity. Proposals should also include a description of the event, including purpose, audience, date, location, and budget. Application forms can be picked up at the Caltech Y. An Institute committee will review the applications and make the awards. For more information, contact Athena Castro ([athena@caltech.edu](mailto:athena@caltech.edu)) or Greg Fletcher ([gregf@caltech.edu](mailto:gregf@caltech.edu)) at ext. 6163.

**Student Programming Board.** The Caltech Women's Center invites you to be part of the new and exciting changes taking place in our office. Our new staff is interested in working with you to develop programs and services that meet your needs and interests. Get involved now! Take on a leadership role in deciding how the Women's Center addresses the issues you are interested in. Be a part of designing, developing and implementing programs and events focused on women's and gender issues. Undergraduate and graduate students, women and men encouraged to get involved. Contact the Women's Center at ext. 3221 or stop by our office in room 265 of the Center for Student Services.

The **Caltech Dance Troupe** will be sponsoring Beginners' Hip-Hop Dance Classes on Tuesdays, 9-10:30 pm, Braun multipurpose room beginning October 9. No experience is needed and no special clothing or shoes are required. There is a \$2 fee for the introductory class. This fee will be credited to the fall quarter fee if you decide to join the class for the rest of the term. The term fee for students is \$10 and for non-students is \$20. To register, email [troupe@caltech.edu](mailto:troupe@caltech.edu). Free ballet classes sponsored by the Caltech Dance Troupe start Saturday, October 6. No special clothing or shoes are required for the beginners' class. All classes meet at Braun multipurpose room. Beginners meet from 1-2:00 pm, intermediate from 2-3:30 pm, advanced from 3:30-4:30 pm. For more info, see our website: <http://www.its.caltech.edu/~troupe>. Questions or comments? Email: [troupe@caltech.edu](mailto:troupe@caltech.edu).

**Feeling stressed???** Sign up for the Stress Management Workshop offered by the Student Counseling Center. This workshop will include a mixture of informal lecture and experiential exercises focusing primarily on basic relaxation techniques and stress management skills. The three-session workshop will meet on consecutive Mondays (November 5th, 12th, and 19th) from 12-1 pm in the Health Center Lounge. Space is limited, so please call ext. 8331 to reserve your place in the group.

**Athenaeum Tennis Ladder.** All Athenaeum members, ages 18 and older, are invited to join a new managed tennis ladder. Once per month, ladder managers will post matches to be completed by the end of the month. Players call each other to arrange mutually agreeable date and time to play. The ladder includes both men and women, but matches will be formed between players within a few ladder rungs of one another. Each of year trophies will be awarded. Signups welcome at any time. For more information, contact Jane Wider at (818) 952-0941 or Rich Dekany at (626) 395-6798 or email to [athtennis@caltech.edu](mailto:athtennis@caltech.edu).

Are you interested in discussing life at Caltech and in the United States? If so, the **Intercultural Discussion and Support Group** provides a forum for Caltech students to explore the process of cultural adjustment and relating across cultures. The group will meet every Monday beginning October 22 from 12-1 pm in the Women's Center Lounge. (265-86, 2nd floor of the Center for Student Services). This group is facilitated by the Counseling Center and International Student Programs, and is open to ALL Caltech students, graduate and undergraduate, American and international. Drop-ins welcome. Since lunch is provided, please contact Jim at [endrizzi@caltech.edu](mailto:endrizzi@caltech.edu) if you plan on attending one of the meetings, this will guarantee that we have enough food!

The **Dean of Students Office** needs tutors in all areas--help is especially needed with the main Institute requirements e.g., MA1, MA2, PH1, PH2, CH1, etc. The pay is \$10.00 an hour. A strong understanding of the subject matter, patience, and the ability to communicate well are the qualities needed as a tutor. If you are an upperclassman and would like to be a Deans' tutor please stop by the Deans' Office to see Sandra located in 102 Parsons-Gates.

### Community Service Opportunities Abound!

The Caltech Y offers students and staff a variety of ways to participate in community service. Opportunities include working with Habitat for Humanity, Union Station Homeless Shelter, math tutoring (on or off campus), reading tutoring, and working at local hospitals. One-time community service events are planned each term and opportunities for service on a regular basis exist. Undergraduates with federal work-study can receive \$15/hr for their community service work. To be added to the community service interest email list, or for more information about the Community Service Program, please contact Greg Fletcher at [gregf@caltech.edu](mailto:gregf@caltech.edu) ext. 6163. Or, stop by the Caltech Y in the Center for Student Services (formerly Keck House) for a complete listing of opportunities.

### Les-Bi-Gay-Trans Discussion Group

Whether you are out and proud, exploring your sexual identity, coming out, or anywhere in-between, we invite you to our Discussion Group, which meets on the 1st and 3rd Tuesdays of each month from 8:15 until 10:15 pm in the Health Center Lounge. The group is a great place to meet new friends and the atmosphere is generally very relaxed; at the same time, more personal and "serious" discussion topics can be addressed. This is a confidential meeting and attendance does not imply anything about a person's sexual orientation; supportive students and staff are welcome as well. And refreshments are served! For more information call ext. 8331. To find out about LBGT events on campus, please visit the Caltech Student Pride Association (CSPA) calendar at <http://www.ugcs.caltech.edu/~cspa/>.



## Scholarships

For information on available scholarships, please visit the Financial Aid web site at <http://www.finaid.caltech.edu/news.html> All qualified students are encouraged to apply!



## Upcoming Events

The **Caltech Jazz Bands**, featuring Louis Armstrong, Charlie Parker, John Coltrane, and Kenny G will perform this Friday (Nov. 30) at noon, in front of the famous Red Door Cafe.

The renowned **Pasadena Youth Symphony Orchestra and Prelude Strings**, sponsored by The Pasadena Symphony, will present a free holiday concert on Monday, December 3, 7:30 pm at Wilson Middle School. The first of two free programs given by the orchestra annually, the concert will feature an array of classical works. PYSO Conductor Richard Meyer and Prelude Strings Conductor Pat Van Der Veer will conduct their respective groups. The featured works will include Bach's *Jesu, Joy of Man's Desiring*, *Pavane* by Debussy and *Sarandole* by Bizet. Wilson Middle School is located at 300 South Madre in Pasadena. Reservations are not necessary for the Holiday concert, but for more information on the Pasadena Youth Symphony Orchestra, please call (626) 793-7172 ext. 10 or visit [www.pasadenasympphony.org](http://www.pasadenasympphony.org).

The California Institute of Technology Division of the Humanities and Social Sciences **Seminar on Science, Ethics, and Public Policy** will present a talk on "The Pyramids and Prehistory: A Battle Royale in the Early Development of Scientific Archaeology." The talk will be given by Dr. David McGee, a Sloan/Dibner Fellow, Dibner Institute for the History of Science and Technology, Massachusetts Institute of Technology on Thursday, December 6, 4 pm in Baxter Building room 25. Seminars are on the Caltech campus and are open to the community at no charge. For information, contact Michelle Reinschmidt at (626) 395-3563 or [michelle@hss.caltech.edu](mailto:michelle@hss.caltech.edu). For a complete list of SEPP Seminars and Harris Lectures schedule for this academic year, visit our web stie: <http://www.hss.caltech.edu/ses/SEPP.html>.

**Women in Science** is a new group on the Caltech campus. It was started by a group of concerned female graduate students, and we are now looking for new members. The group will be hosting Lunch With Faculty #3 on December 4 at noon at the Carriage House. Professors Jackie Barton and Sossina Haile will share their experiences about being women in science. Lunch will be provided; however, space is limited so please RSVP by sending email to Cynthia Collins at [cynthiac@its.caltech.edu](mailto:cynthiac@its.caltech.edu). If you would like to find out more about the Women in Science group, feel free to contact us at [cynthiac@its.caltech.edu](mailto:cynthiac@its.caltech.edu).

**Caltech Library System Presents:** "Copyright for Researchers in Academia." December 4th, in the Sherman Fairchild Library Multimedia Conference Room 328, Noon. Presented by Kimberly Doublas, Director of the Sherman Fairchild Library and Peggy Luh, Office for the General Counsel. In the scholarly community researchers are active authors and readers, producers and consumers. This seminar will discuss the rights and responsibilities of these roles as governed by U.S. Copyright Law. Issues of photocopying, fair use and scholarly publisher copyright agreements will be included. The following session beings at Noon. Walk-ins are welcome, but pre-registration is preferred. You may register for this session at: <http://library.caltech.edu/learning/default.htm>. For further information, please contact Kathleen McGregor at ext. 6713 or [kathleen@library.caltech.edu](mailto:kathleen@library.caltech.edu).

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To submit a Mint, e-mail [mints@tech.caltech.edu](mailto:mints@tech.caltech.edu) or mail your announcement to Caltech 40-58 Attn: Mints. Submissions should be no longer than 150 words. Email is preferred. The editors reserve the right to edit and abridge all material. Deadline is noon Wednesday. Unless specified, all mints will run for two weeks.