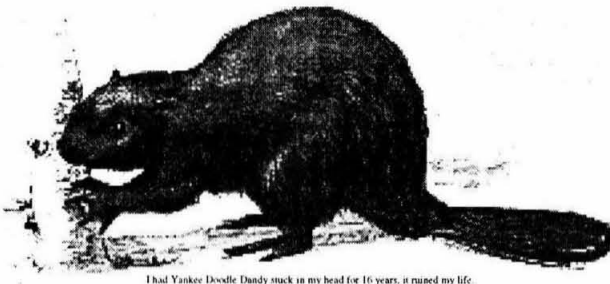
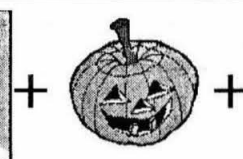


Find deeper meaning  
in the ASCIT minutes  
page 8



I had Yankee Doodle Dandy stuck in my head for 16 years. It ruined my life.



The  
Ticket  
Stub

= pages 6,7

# The California Tech

VOLUME CI, NUMBER 24

PASADENA, CALIFORNIA

APRIL 28, 2000

## IS THE UNITED STATES LOSING ITS WAY?

BY VIKRAM DENDI

Sometime back the House of Representatives passed a bill that will allow an unlimited number of H-1B visas to be issued over the next three years for hi-tech foreign workers. (H-1B visas are now annually capped at 115,000.) The lobbying for more visas for foreign workers has been mostly by the computer industry. In the United States, however, there has been a large amount of furor over this 'letting in' of foreign computer professionals, many saying that it is harming the chances of the American public to get these jobs.

The ITAA (Information Technology Association of America) has forecasted a whopping 850,000 IT professionals in the country over the next year. Even if all the people affected by the layoffs in recent times immediately found work, the industry would still be short-handed. Effectively, it seems that the USA is not producing as many computer and information technology professionals as we need. Companies have started outsourcing many projects to other countries. Many people are worried whether the USA is losing its prime position in the forefront of computer industry.

At a more personal scale, for the average college student like you and me, let's look at a trend that many have thought alarming in recent days, at programming contests. Although this trend need not necessarily have a direct correlation with the aforementioned problem, it is still worrying a lot of people who are related to Computer Science in the USA.

The Tech had in an earlier edition covered a news piece on the Caltech team winning the regional ACM programming contest and qualifying for the finals. The world finals of the ACM contest took place in Florida on March 18th. The Caltech team consisting of Chris Chang, Miroslav Dudik, Benjamin Mathews finished first in the US and 11th in the world initially. Why I say initially will become clear in a moment. But first, the Tech would like to congratulate these three achievers, and their coach David Epstein from the Computer Science department.

There is a more interesting side to this story. A few days ago, the programming contest results were re-evaluated and updated. In the

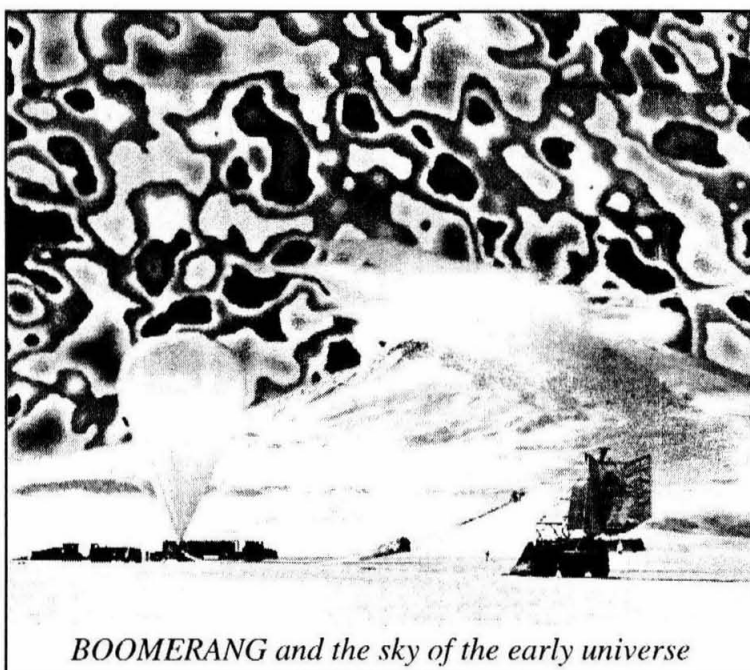
PLEASE SEE ACM ON PAGE 4

## Images of the early universe unveiled

BY ELISABETH ADAMS

Caltech cosmologists recently released images of the universe dating back to a scant few hundred thousand years after the Big Bang, a time when it was far smaller, denser, and hotter than it is today. The images, taken in collaboration with scientists from Canada, Italy, and the United Kingdom, show the universe before any stars or planets had formed, and they have already provided insight into some of the more important and interesting questions of cosmology: Is the universe "flat" or "curved"? what is the nature and quantity of dark matter and dark energy in the universe? and will the universe keep expanding, or will it eventually collapse in on itself?

The project, called BOOMERANG (Balloon Observations of Millimetric Extragalactic Radiation and Geophysics), measured minute differences in the background microwave radiation left



BOOMERANG and the sky of the early universe

over from the Big Bang. Although such cosmic microwave background, or CMB, is a nearly uniform 2.73 Kelvin in all directions of space, the project was designed to capture the complex pattern of variations in temperature on the order of one ten-thousandth of a degree. First discovered from a ground-based

telescope in 1965, the background radiation was mapped in more detail by NASA's COBE (Cosmic Background Explorer) in 1991, but it was not until BOOMERANG that scientists received the high-resolution images of minute variations that they had long sought.

Called "the ultimate limit of

our vision" by Andrew Lange, Caltech physics professor and leader of the U.S. team, these remarkable images were taken from a telescope suspended from a hot air balloon that flew in a complete circle around Antarctica in late December 1998 (hence the project name BOOMERANG). The Caltech-developed sensor flew at an altitude of 37 km (120,000 ft) and scanned about 3% of the sky at four different frequencies to ensure that it was the CMB and not other galactic emissions that was actually measured.

One of the most important results to fall out of the data recovered from the successful 10.5 day flight was evidence that we live in a flat universe. According to the inflationary theory, the universe expanded violently from a tiny sub-atomic region during a very small time period that occurred just after the Big Bang. This enormous expansion would have stretched the geom-

PLEASE SEE LANGE ON PAGE 2

## New chair for E&AS division

BY MONA SHEIKH

Richard M Murray, professor of mechanical engineering, has been appointed the new head of the Engineering and Applied Science Division here at Caltech. He will assume his new administrative duties on June 1. The E&AS division consists of 865 faculty members, graduate and undergraduate students, making it the largest of the six academic divisions at Caltech.

His appointment was approved by the Caltech Board of Trustees, and announced by Steve Koonin, vice-president and provost of Caltech on April 20. He replaces John Seinfeld, who has been the E&AS chair for the last 10 years, but is now returning to a full-time faculty and researcher post.

Prof Murray completed his undergraduate studies in Electrical Engineering at Caltech in 1985, after which he earned

PLEASE SEE MURRAY ON PAGE 2

## Jody Williams speaks at Caltech

BY ANDREW HAFFER

Jody Williams, who was named co-recipient of the 1997 Nobel Peace Prize for her work as coordinator of the International Campaign to Ban Landmines, began her talk on Friday with the claim that the Nobel was awarded to her solely for political reasons. The Nobel Committee, she said, gave it to her, an American, solely to chastise Clinton for his failure to join 137 other countries in signing the 1997 treaty banning anti-personnel landmines.

In a highly autobiographical talk, Jody Williams discussed her development as an activist and the means by which the coalition she led was able to bring about an international treaty less than five years after its founding.

Jody Williams began her career as an activist when after being leafleted in 1982 regarding the atrocities in El Salvador. Within six months, she had left her job as a teacher and was working for Medical Aid for El Salvador, a Los Angeles based non-profit organization that provided humanitarian relief. As if working in this war zone was not enough, during her time with Medical Aid Ms. Williams was even chased by Salva-

doran death squads.

Starting with just six carefully-selected non-governmental organizations, Ms. Williams realized early on that the key to keeping the momentum going in a coalition of independent organizations was communication. To accomplish this, she turned to what was at the time the cutting edge of technology: the fax machine. While at first she only needed to spend a few minutes to notify her whole coalition of new developments, as more organizations signed on, Ms. Williams found herself sending faxes for hours at a time and spending \$500 a month for her phone bill.

Although her own contribution cannot be dismissed, Jody Williams credits the Canadian foreign minister with bringing about the incredibly rapid progress the campaign experienced. He did this by

publicly challenging the rest of the world to meet in Canada to negotiate the treaty. This was particularly significant because it took the negotiations out of the hands of the U.N., where the U.S., whose generals were fearful of setting a precedent for the elimination of conventional weapons, could veto any treaty in the Security Council.

On whether or not the U.S. will join the treaty in the near future, Jody Williams was of the opinion that both Bush and Gore are more hawkish than Clinton and thus less likely to sign the treaty. She hopes, though, that after the November elections are over Clinton may sign the treaty as a part of the peace legacy he seems to be attempting to leave.

Jody Williams was the third of three speakers brought to Caltech this year by the Caltech Y Social Activism Speaker Series.

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# Opinion

## LETTERS TO THE EDITOR

### Censorship of the students is the worst image Caltech could present

In a recent letter to the Tech, Robert Enright commented on the Dean's censorship of house webpages, an apparent attempt to shield Prefrosh from the truth about life at Caltech.

Robert lamented, "Had I been honestly informed about other unpleasant issues during Prefrosh Weekend, and realized just how much I would loathe many of my days as a student here, I might have reconsidered and been happier elsewhere."

While I share Robert's outrage over the Dean's comments, I believe that his above statement only helps legitimize the Dean's viewpoint that, to get the students Caltech wants, the school must lie and present a purely "wholesome" image.

Speaking personally, one of the primary reasons that I came to Caltech was the independence and autonomy enjoyed by the student body. I saw a school that was run primarily by the students for the students.

In the short time I've been here

numerous events, in particular the Dean's recent amateurish attempts at censorship, have eroded my belief in the freedom of our campus.

Let me just say that, had I seen how the administration cracked down on the free expression of students, I would have seriously reconsidered my choice to attend Caltech.

Respectfully,

Ryan Gutenkunst

### Portraying Tech realistically

While Dean Revel certainly made good points in his column last week, I feel he missed the gist of Robert's letter.

No one is extolling exerting pressure on others," and neither was Robert "complaining about... sad fate." Sure, it would be nice if Caltech were a uniformly pleasant environment, but the reality is, it isn't.

His point (and mine) is that creating a false and idealized image of Caltech, or "sweep[ing] the broken glass under the rug," is doing a disservice to both present and potential students.

As the admissions office likes to gripe, there are more qualified students than there are

spaces at Caltech.

Wouldn't it be better to have students that come to Caltech for what it is, instead of deceiving students into matriculating by superficial impressions? Superficial impressions are all that events like Prefrosh Weekend and Rotation are, when reality is hidden in favor of pleasant-ries. One might as well rely on rankings like US News and World Report; at least they're based in fact.

Justin Kao

### Regarding the Dean's corner

In last week's Tech, Dean Revel commented on the necessity of censoring the statements, opinions, and artwork in our living spaces.

While I am unqualified to comment about the legal ramifications, and would be sadly disappointed if the laws really are as restrictive as the dean makes them out to be, I can comment about the absurdity of defending censorship in an attempt to do away with peer pressure.

I would remind the dean that everyone has sexual organs and nearly everyone who doesn't go here has sex.

To depict such an act or describe it is not inherently degrading. In fact some of those other

cultures the dean is so fond of protecting don't take such a harsh view of depictions of lust and physical sexuality.

And why is it that 'kcfu' is perfectly acceptable to print in a children's magazine but if I were to rearrange the letters I couldn't write it on the wall of a college dorm?

The answer, Mr. Revel, is that these prohibitions on our speech and expressions are arbitrary and exist only because of societal pressure.

I see no large segments of society dedicated to making others swear or look at naughty magazines, but huge national groups exert their influence to stop these magazines and bad words. This begs the question: are you preventing peer pressure or giving in to it?

Merely because someone is offended does not put the speaker in the wrong.

The flat earthers are offended by much of the work we do here at Caltech but we don't abandon our research to appease their sensibilities.

It boils down to a question of what type of community you wish to live in—one which is strong enough to face unpleasant and possibly offensive ideas expressed by a minority or one which hides from these ideas by banning their public expression. I think we are better off in the former because by confronting

these thoughts we better ourselves individually and collectively. I am disappointed that you disagree.

Peter Gerdes

Please send submissions for letters to the editor to

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Pasadena, CA 91125

or by electronic mail to

editors@tech.caltech.edu.

Deadline for submissions is Monday at 5 p.m. on the week of publication.

The editors reserve the right to edit or refuse to print any letter for any reason.

## Censorship is often handled too lightly

BY DANA SADAVA

In light of the recent arguments that have risen out of issues of censorship, it is important for the administration to realize the depth of the struggle of Caltech students to express themselves.

It should realize that when it gets offended at visual or written representation of student views, students are trying to convey an offensive view of their lives here.

This is the serious matter that administrators should consider: that a lot of students here are unhappy with the school and that its environment fos-

ters bitterness which lends to unfavorable material representing their experiences here.

Administrators should not respond to inappropriate murals in Page House or slanderous articles in the BFD by simply getting rid of them.

Rather, they should question what internal conflicts in the institution perpetuate this kind of behavior and work on that root problem.

More communication between the students and the administration is necessary. Is the administration aware of how resentful many upper-classmen are of the pressures imposed on them? Probably not. Both sides are to blame, and it's going to take some breaking of communication barriers before students stop expressing themselves with offensive material.

## LANGE:

CONTINUED FROM PAGE 1

etry of space till it was precisely flat—which is almost exactly in agreement with structures observed by BOOMERANG. As Lange put it, "it is an incredible triumph of modern cosmology to have predicted their basic form so accurately."

"These measurements represent a watershed event in cosmology," commented Mark Kamionkowski, professor of astrophysics at Caltech. "The results suggest that we are on the right track with inflation—a hitherto speculative theory for the origin of the universe—and thus open up a path toward scientifically addressing what happened in the very first micro-micro-second after the Big Bang."

The announcement of the discoveries this week, of course, did not come as a surprise to Prof. Lange's Ph1b students, as he had presented his pictures and data a full two months earlier in a special lecture.

Remarkable as these images are, however, the quest for ever sharper resolution continues. Another Caltech team led by Professor Anthony Readhead is now obtaining images of the CMB from a remote site in the Chilean Andes.

## MURRAY:

CONTINUED FROM PAGE 1

both his master's and PhD degrees from UC Berkeley in 1988 and 1991 respectively. He joined Caltech as a full-time professor in 1994. His research is in the area of non-linear dynamics and control of mechanical and fluid systems, with its applications varying from aerospace vehicles to materials processing. He is also Director of Mechatronic systems at the United Technologies Research Center, where he manages a department of 80 members in the field of embedded systems and controls technology. This term he is teaching CDS 111, a course on controls technology here at Caltech.

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## CORRECTION

In the April 7th, 2000 edition of the Tech, an article stated that one should dial 911 in the event of an alcohol poisoning emergency. However, it was brought to our attention that those living on the Caltech campus should dial extension 5000 instead.

In the April 14th, 2000 edition of the Tech, a headline misreported the number of visiting Prefrosh as 212. The correct number of Prefrosh is 221.

We the editors of the California Tech greatly regret the errors.

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## Student Affairs

# 2000 Leadership award recipients announced

*Caltech upperclassmen recognized for excellence in leadership and involvement in the Caltech community*

BY SUZETTE CUMMINGS

### Bibi Jentoft-Nilsen Memorial Award

Family and friends of Bibi Jentoft-Nilsen, class of 1989, have provided this award in her memory. The cash award of \$500 is for an upperclass student who exhibits outstanding qualities of leadership and who actively contributes to the quality of student life at Caltech.

*Winner: Ian Swett, senior, Economics and Engineering & Applied Science*

Ian has given much service to the entire Caltech community by participating on many committees and working hard on behalf of all students. His service to the Caltech Y, the Food Committee, Tennis Team, as an ITS representative, and as a Freshman SURF counselor has made a difference to the quality of campus life for undergraduates.

### Mabel Beckman Prize

The Mabel Beckman Prize is given in memory of Mrs. Beckman's many years of commitment to Caltech's educational and research programs. The \$3,000 prize is awarded to an undergraduate woman who, upon completion of her junior or senior year at Caltech, has achieved academic excellence and demonstrated outstanding leadership skills, a commitment to personal excellence, good character, and a strong interest in the Caltech community. The

prize is presented at commencement.

*Winner: Eleanor Park, senior in Chemical Engineering*

Ellie was selected for the qualities of outstanding leadership and service that she has shown her four years at Caltech. Her work on the Freshman Admissions Committee, the Women's Glee Club, which she has been active with since her freshman year, and the Caltech Christian Fellowship is particularly admirable. Ellie's participation at new student orientation for two years with the Challenges and Choices program is also greatly appreciated as well as speaking to the parents at the New Student Parents' Day program for the last two years.

Those who selected her for the Mabel Beckman Prize felt that she exemplifies the qualities that the Beckmans value. Ellie's concern and support of her fellow students is greatly admired. Her outgoing personality, her sensitivity to others and her desire to improve the quality of life here have made a positive difference for the Caltech community.

### Frederic W. Hinrichs, Jr. Memorial Award

The Board of Trustees of the California Institute of Technology established the Frederic W. Hinrichs, Jr., Memorial Award in memory of the man who served for more than 20 years as Dean and professor at the Institute. In remembrance of his honor, cour-

age, and kindness, the award bearing his name is made annually to the senior who throughout his or her undergraduate years at the Institute has made the greatest contributions to the student body and whose qualities of character, leadership, and responsibility have been outstanding. At the discretion of the Deans, more than one award, or none, may be made in any year. The award, presented at commencement, consists of \$3,000 and a certificate.

*Winners: Alan Rosenwinkel, senior in Engineering and Applied Science and Jaideep Singh, senior in Physics*

Alan has held numerous important offices and served on committees. The most significant contribution that he is being recognized for is his work with the Board of Control. Alan has been ASCIT Vice President/Board of Control Chair for the last two years. In that capacity he has demonstrated extraordinary fairness and leadership in dealing with the delicate and important Board of Control proceedings. He has also served as a member of the Committee on Student Government and Administrative Action (COSGAA) which reviewed the manner in which disciplinary actions occur at Caltech, and assisted in the formulation of the Conduct Review Committee (CRC).

Jaideep was selected because of his exceptionally capable leadership and service to the stu-

dents during his years at Caltech. He has been Interhouse Committee Chair for the last two years. He has been very active in student government and instrumental in coordinating rotation to insure that the best match is found between a freshman and a House, and to oversee the selection process of student members for the Faculty-Student Committees. Jaideep has also served since 1998 as a member of the Committee on Student Government and Administrative Action (COSGAA), which reviewed the manner in which disciplinary actions occur at Caltech, and assisted in the formulation of the Conduct Review Committee (CRC).

### Deans' Cup and Residence Life and Master's Award

Two awards, selected by the Deans, the Director of Residence Life, and the Master, respectively, are presented to undergraduates who have demonstrated concern for their peers by persistent efforts to improve the quality of undergraduate life and by effective communication with members of the faculty and

administration.

*Winners of the Deans' Cup: Kevin Bradley, senior in Engineering & Applied Science and SES/HPS and Aron Meltzer, senior in Geology*

Kevin was awarded one of the Deans' Cup awards for his extensive involvement on committees and hard work on behalf of the Caltech students. He has been very active with the Board of Control, first as a BoC Representative-at-Large, and then as the Board of Control Secretary for two years. Kevin has also served as a student member of the UASH Committee for two terms. During his years at Caltech, Kevin has been consulted for his opinion on various matters by administrators, faculty, staff, and students. He has done an excellent job serving the Caltech community.

Aron was awarded a Deans' Cup for his sensitivity to others and his desire to improve the quality of student life at Caltech. He formed the Caltech Students Pride Association, which is now an official ASCIT-recognized club for the gay, lesbian, and bi-

PLEASE SEE AWARDS ON PAGE 7

## IHC looking for a few good Techers

BY CHRISTOPHER ELION

The sign-ups for the Faculty-Student Committees will go up on Friday, April 28th, and come down the following Friday, May 5th at 7:00 PM. To sign up, write your information on the door of SAC 33 and send a paragraph explaining why you would like to serve on the committee to [vsih@its](mailto:vsih@its). Interviews will be conducted the following week, from May 8th to 14th. Below is a description of each committee, for a list of current members refer to [www.ugcs.caltech.edu/~ihc](http://www.ugcs.caltech.edu/~ihc). If you have any other questions talk to your house president or email [vsih@its](mailto:vsih@its).

### Academic Policies and Curriculum

All changes to Caltech's undergraduate academic policies and curriculum is addressed by this committee, including uniting, grades vs. pass/fail, course descriptions and numbering, option requirements, procedures for obtaining double majors, and other changes to the catalog.

Some core curriculum changes are discussed, but these do not make up the majority of its work. The committee also considers student petitions: independently designed options, double options, fifth years, second bachelor's degrees, and requests for outside credit. Notable recent decisions include a change in the double-option requirements, the approval of an undergraduate minor, and the addition of the ECE option. The time commitment is an hour long meeting every few weeks.

### Educational Outreach

This committee brings together diverse campus resources emphasizing the importance of educational outreach into the surrounding community. The committee used to oversee the YESS program, works with the minority recruitment and retention office, brings speakers to campus, and organizes and publicizes various outreach opportunities for members of the Caltech community. Now that the YESS program has been in-

definitely canceled, this committee may be responsible for other activities in its place.

### Freshman Admissions

This committee works with the Admissions Office and faculty to decide which applicants will be admitted to Caltech for both early and regular decision and awards freshman scholarships. Applications are first read and commented on by admissions officers, faculty and students. Then, small groups of readers meet to decide which applications are accepted, denied, and wait-listed. This process occurs during first term for early decisions and is repeated second term for regular action. The time commitment for this committee is crucial since the more time the students devote to the committee the more their opinions are recognized. Application readings can take anywhere from 2 to 8 hours a week for the last half of both first and second term. Early action group meetings oc-

PLEASE SEE SFC ON PAGE 6

## Want A Challenge?

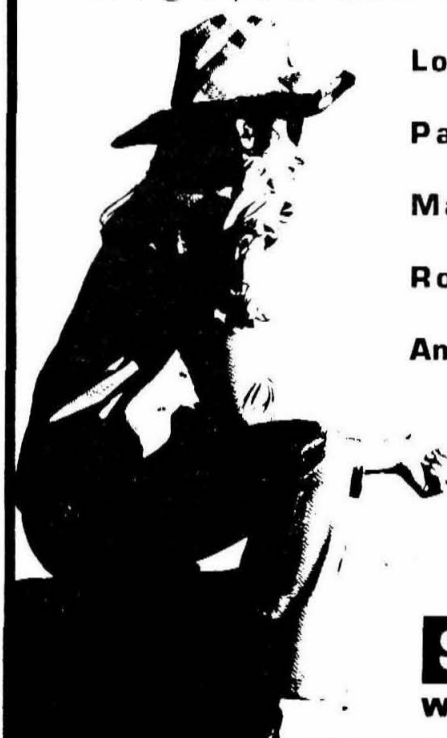
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# International Concerns

## ACM:

CONTINUED FROM PAGE 1

new rankings Caltech came 9th and qualified for the bronze medal. We still were number one in the USA, above those folks in Boston and elsewhere. St. Petersburg State University was the world champion, while initially, there had not been one school from the USA in the top ten. This last line is what is of interest for this discussion.

The rankings were updated because the contest directors finally decided to "personally re-examine all submissions of Problem F from the archives". Apparently the judges used erroneous data to test the programs that students wrote for problem F, causing considerable confusion. A spate of complaints followed, and then the said announcement. The communiqué also said that if they make any changes, teams will be bumped up to a higher position, but no team will have its position lowered. Best of all, they have changed their official policy so that in the future, teams will have access to their programs after the contest is over, and also there will be a standard procedure for regrading after the contest is over, in case this happens again.

Anyway, changes were made, scores updated and Caltech scored

a bit higher. But the essential question remains: the "take-over" by the non-US teams of the top positions in the programming contest, and why that might be happening. No other school, except Caltech, could manage to come into the top ten. There was a time when American schools totally dominated the contest. A look at the past of the ACM

has an impressive record in those times having been in the top quite consistently (we won in 1986 and 1988). Come 1998, there is a big change in the rankings (see box).

In 1999 the USA made a come back of sorts, with four universities in the bottom half of the top ten. The story for 2000 is shown in the box.

years a while back. Came in 5th one year, and 8th the other, if I remember correctly. And almost all of the top teams were US universities at the time, so what has changed?

Several things that I can think of: it was always an international competition, but I don't remember this many non-US teams in the past. In particular, when I was competing,

changed substantially, and non-US teams are now getting plenty of experience before coming to the competition.

Lastly, is it really that the non-US teams are getting that much better, or have the US teams lost something along the way? Caltech [sic] has always been good (beat my team both years I went, anyway), and they only got 4 problems, while the winner got 7? That's just not at the same standard they used to work at. Is the education failing these days, or are we not getting as many strong students in Computer Science as we used to?"

There were more comments on the lack of female programmers and on the fact that computer science doesn't seem to attract as many people in US colleges as it does elsewhere. Whatever the factor, the changes in performance are indeed alarming. As I personally noticed when I was at a smaller university, one of the other important reasons could be the scarcity of good computer science professors at such schools as most professors who were good left for more lucrative positions at companies. Doesn't that sound somewhat ironic?

Whatever the cause, I do hope that it is remedied. And in spite of everything, I am proud of Caltech's achievement.

### Results of the ACM programming contest

1999	2000
1 Charles U - Prague	1 St. Petersburg State University
2 St. Petersburg Univ.	2 The University of Melbourne
3 U Waterloo	2 University of Waterloo
4 U Umeå - Sweden	3 Albert Einstein University Ulm
5 MIT	4 St. Petersburg Institute of Fine Mechanics and Optics
6 Melbourne U	4 Tsinghua University
7 Tsing Hua U - Beijing	7 Kyoto University
8 U Alberta	7 Shanghai JiaoTong University
9 Warsaw U	8 The Chinese University of Hong Kong
10 Politehnica U Bucharest	8 University of Alberta
	9 California Institute of Technology
	10 Charles University Prague

contest on their website throws some interesting statistics. The first time that a non-US team even made an entry into the top five at the world finals was in 1990 when Technical University Eindhoven (The Netherlands) came fifth. From then until very recently (1997) there were maybe two to three foreign universities in the top ten. Caltech

There are many opinions as to why this is happening. Slashdot, an online community and news site (they qualify themselves as "News for Nerds"), had some very good ones. Such as this:

"Wow. Look at the takeover by non-US teams. This contest has been going on for a very long time, and I was involved for a couple of

the Berlin wall was still up, so we didn't have any eastern European or Russian teams! But even the non-US teams that were there were typically not very strong — in particular, at that time many schools outside the US simply didn't have the facilities for people to be as experienced as people from US schools. I would imagine that has

## The Outside World

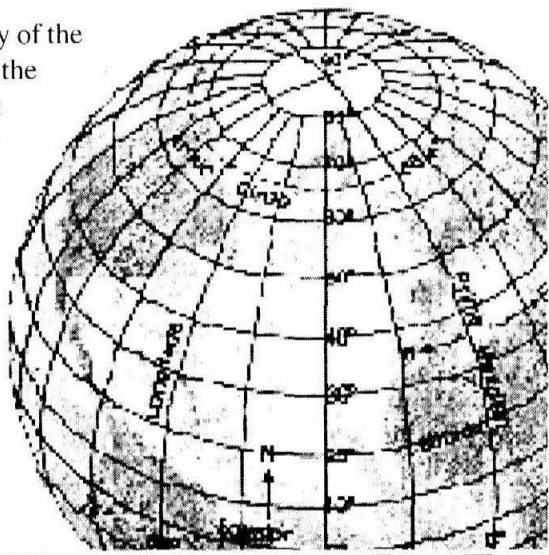
by Jonathan Foster

**United Nations:** Secretary of State Madeleine Albright spoke to the United Nations attempting to persuade them that the new antimissile defense system that the US is developing is not going to destroy nuclear weapon arms control. Recent negotiations with Russia indicate that there may be a compromise, but Russia and China still remain decidedly nervous about the US developing a defense system, which the US claims is for defense against rouge states such as North Korea.

**Miami:** On Sunday, April 22, armed agents of the United States immigration service took Elián González from his relatives house and reunited him with his father, who is currently in the United States. The Cuban-American community, Republican leaders, and many others have been strongly critical of the administration's use of force. Elián remains in the United States until the custody court case is settled. The relatives who he had been staying with have so far been stymied in their efforts to see him again. In the latest development, Elián's father has been granted the right to intervene in the asylum application case.

**Ethiopia:** A large drought in the northeast of Africa could bring about a major famine in Ethiopia and surrounding countries. Among other organizations who are now starting to send food into the troubled region are the United States and the European Union. There are some, however, who claim that Ethiopia has not done enough to help its own people. Ethiopia is currently engaged in a war with neighboring Eritrea, which experts say is costing Ethiopia about \$1 million a day. The situation remains severe, and only time will tell whether the food relief or a break in the drought will be able to avert a genuine famine.

**China:** April 25th, the first anniversary of the huge demonstration that first brought the Falun Gong movement to the attention of the Chinese authorities and the rest of the world, did not pass unnoticed. More than 100 followers who demonstrated in Tiananmen Square were detained by police. China has had difficulties stamping out the influence of Falun Gong; the April 25 protests showed again just how many members the group still claimed, and that they continued to be willing to be arrested on behalf of their group.



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# Entertainment

## The Ticket Stub

BY JUSTIN HO

### Black and White (B+)

rated R for: explicit sexuality, explicit language, the works

There's a difference between "nigger" and "nigga" explains the audacious upper-class Manhattan-bred teenager (Bijou Phillips). While the former enunciation is derogatory, the latter isn't. It's applied with a sense of fraternity, referring to the crew one hangs out with, like "This is my niggaz." And the rest of the film unfolds as such, introducing the slight nuances in hip-hop which yield different meaning and the growing under-current of the culture in contemporary society, with a voyeuristic perspective and almost didactic quality.

Inevitably the film will reach primarily white audiences, mimicking the plotline of the film as a dread-locked white documentarian (Brooke Shields)

follows a short period in the lives of some teenagers at the nexus of conservative white America and the inner city.

Almost blithely naive of the strain her presence

causes on those around her and making few assessments of her own, it is through her vantage that the more ignorant among us would become better-educated.

Indeed, there is a sense of realism in this film that is lacking in other urban films which tend to be misleading or teen narratives whose characters take similar transformations, where white teens opt for the speech style and gangsta arrogance which belies their often privileged beginnings.

A discursive explanation of their alternative behavior is given by the teens themselves. It is a rationale that extends beyond pure rebelliousness, though their parents are so straight-laced and unaware of the capacity of human nature to revolt under such repression that their children would be expected to rebel.

Despite such seeds of dissent, the hip-hop culture is fused into

their identity and there is a difference which separates the teens at the center of this film from other rebels in their candidness of sharing facets of their lifestyles, at one point even inviting a mother of one of the clique members into the company of their inner city companions.

Rather than guarding their activities in privacy and satisfying their need to revolt against order, they introduce a union of black and white. There is an emphasis at least in the filmmaker's minds that the teenagers should not be seen as products of conversion. Though they mimic the behaviors of their African-American counterparts, it is integration that ends bigotry, promotes understanding, and inevitably generates healthier social order.

To accentuate these greater ends, the teenagers are given more intelligence than most and endowed with out-spokenness. Their angst, is of course, universal. The film immerses these teenagers in a melange of complex characters, among them two members of the Wu-Tang clan, Mike Tyson, and Claudia Schiffer, none of whom would be in line for screen actor's guild awards, but they are able to

make powerful presences because their characters are based roughly on themselves.

It is with great intimacy with their characters that allows the actors to carry the film. Mike Tyson actually plays himself, with a self-mockery derived from his infamous past. His cognizance of the repercussions of further criminal action pervades his scenes, erupting into one of the most memorable scenes in recent cinema in which he attacks a gay character (Robert Downey, Jr.) who was making advances toward him.

The uncertainty of whether this part of the film incorporated improvisation or was contrived arises when Tyson is suddenly thrust into a cringing apology, seemingly so genuine that the thought that he believed that the scene was in fact real is inescapable, and there is an element of delight in watching a man of such machismo retrenched at the prospect of a merciless hand of law.

The film has been skewered by critics and certainly in some respects, its social message is occluded by the appearance of eye-brow raising activities.

Inter-racial sex and acceptance is perhaps the most effective means of erasing racial discrimi-

nation in creating a physical integration. Yet the movie embraces this topic while basking it with sordidness. The ménage-a-trois are too degenerate, especially with practitioners young enough to be victims of statutory rape, and too provocative to bring memory to the other more healthy relationship (between Allan Houston of the New York Knicks and Claudia Schiffer). Also, while the death of Allan Houston's character is meant for cinematic drama, it also precipitates the lack of redeeming characters.

Hypocrisy is pervasive and character is assassinated in its association with the hip-hop scene, which in the present state of the music industry may not be too far from the truth, but racial stereotypes are reinforced somewhat in the movie.

While the influence of hip-hop may not be jarring enough for everyone to refer to each other as "nigga" it is nevertheless a catalyst in mainstream society, a theme which may be overlooked as we distance ourselves from a less than exemplary music industry. With its mixture of shock and authenticity perhaps we can be brought back to our senses.

## MACHINA disappointing

BY STEPHEN SHEPHERD

Sixteen paintings, two pages, several reviews and fifteen songs later, I still have no idea what Billy Corgan is talking about on his last album, MACHINA/the machines of God.

What is clear is that Corgan's megalomaniac vision is increasingly the driving force behind Smashing Pumpkins—the band seems less relevant on this album than they have since Corgan overdubbed every instrument but drums on their masterpiece, Siamese Dream.

This doesn't necessarily imply that MACHINA is a terrible album—it isn't. Neither, however, is it the album Smashing Pumpkins needed to recover a fan base ostracized by the listless subtleties of Adore.

MACHINA's strange post-grunge classic-rock sound is unlikely to regain the attention of fans lost to rapcore or to bland Matchbox-20 guitar pop.

In grand classic rock tradition, MACHINA is a concept album about being a pissed-off rock star. Corgan has always been fascinated with the pomp and circumstance of rock, with all its arty pretensions. Likewise, the Pumpkins have regularly fallen victim to rock's dark side-in-fighting, addiction, self-indulgence, and isolation.

Here, Corgan seems to draw parallels between his experience as a rock musician and the experience of an angel rebelling against God, though I can't claim to really understand why.

Theology aside, the Pumpkins don't pull off much of a revolution on MACHINA. Corgan wears his influences on his sleeve, breaking little from past Pumpkins experiments.

At times, the album sounds

song into the scorcher it's meant to be. In fact, the only redeeming value of the tune is that it stands out as bad; other abysmal tracks, such as "Try, Try, Try" and "With Every Light", are too forgettable to stand out at all. When MACHINA is at its best, however, the songs still sound fresh. Corgan's songwriting is erratic, but occasionally he crafts successful vehicles for his distorted, overwrought sound.

Three tracks—"The Everlasting Gaze", "The Imploding Voice" and "Blue Skies from Tears"—bend Jesus-and-Mary-Chain distortion blasts to Corgan's warped classic rock aesthetic. On others, Corgan weaves 90s pretension and 70s pop together, creating satisfyingly indulgent tunes like "I of Mourning" and "The Sacred and Profane".

Ultimately, MACHINA's rewards are in the mastering. Flood and Corgan do an excellent job mixing the album, merging angular guitar distortion and electronic textures. A handful of brilliant tunes make the disc a worthwhile purchase—provided you can find it in the used bin. In the end, however, Corgan's erratic songwriting and delusions of grandeur doom the album, and perhaps the band itself.



merely like Mellon Collie's sonic bombast has been pasted over the hookless structures of Adore. At its worst, MACHINA not only fails to deliver any energy or sense of purpose but tips its hand that it really needed to be better.

The most egregious offender is the album's centerpiece, "Heavy Metal Machine". Corgan, never subtle, layers distorted, repetitive vocals over a numbing crash of white-noise riffing, but all this studio effort fails to turn the

## SFC:

CONTINUED FROM PAGE 3

cur during finals week first term and total 8 to 12 hours. Regular decision group meetings occur during finals week second term and can take up to 30 hours total. Students who apply for this committee must be able to guarantee both first and second term involvement.

### Grievance

This committee includes faculty, grad students, and an undergrad and handles grievances of any kind having to do with Caltech. The committee is convened by the Vice President for Student Affairs to deal with individual cases. It has not met in nine years.

### Institute Programs

This committee decides on speakers or performers for all educational, entertainment, and cultural programs sponsored by the Institute, such as the Watson Lecture series and OPE events. The student members make suggestions for speakers or performers, and participate in the committee's discussions. The time commitment is 6 hours a term at most.

### Scholarship and Financial Aid

This committee proposes changes to the amount charged for tuition, and minimum student contribution as well as assigning Upperclass Merit Awards. The bulk of this committee's work, reviewing

merit award applications, is done during mid-terms week in third term.

### UASH

This committee makes decisions on all UASH petitions, including reinstatements, late drops and adds, over/underloads, extra terms, etc. Also, it chooses recipients for three awards. The student members participate in the discussion and voting. The time commitment is one full-day meeting on the first day of each term in addition to one or two one-hour meetings per term.

### Upperclass Admissions

This committee is in charge of transfer and 3-2 admissions. The members of this committee will meet at the end of third term this year.

### Faculty Advisor Committee

These students work autonomously with the Deans and the Mosh to help the Faculty Advisory System work smoothly and improve knowledge and communication between the registrar, the advisors and the students. They are also starting a pilot Student Advisor Committee.

In addition to their listed responsibilities, the Academic Policies and Curriculum, Educational Outreach, and Faculty Advisor Committees will be responsible for making periodic reports to the Academics and Research Committee (ARC). This is to help create better interaction between the ARC and the committees.



## Media guy



## ADAM VILLANI: MEDIA GUY

*Terra Nova*

I've pushed for Santa Ana's Rude Guerrilla Theater Company before, and I'm not ashamed to be doing it once again. Their newest work of amazing theater is a production of Oscar winner Ted Tally's (*The Silence of the Lambs*) *Terra Nova*, the true story of Robert Falcon Scott's ill-fated 1911 South Pole expedition. While I was already familiar with Capt. Scott's thrilling and tragic story, my attention never waned as Tally's play freely mixed dramatizations of Scott's journals with fantasy scenes of encounters with his wife and his Norwegian competitor in the race to the Pole, Roald Amundsen.

Director Sharyn Case is new to Rude Guerrilla, but she proves to be RGTC regular (and co-worker of mine) Dave Barton's equal in effective staging, good pacing, and, most of all, the ability to get passionate, believable performances out of actors. Leading man Jay Michael Fraley, who was so good as the Jesus-analogue in *Corpus Christi*, here plays Scott as a driven British patriot tinged with an appropriate streak of self-doubt, as opposed to the slightly pompous Scandinavian pragmatism of David Rousseve's Amundsen. The facts of the case require this play to be a meditation on failure and the limits of human endeavor, and the conflict between Scott's men's loyalty to the mission and growing despair over their situation is quite touching and never cliché.

Interestingly, while Rude Guerrilla has made its reputation on attention-getting political, violent, or sexual plays, *Terra Nova* is at its core a good old-fashioned manly adventure story. But Tally and Case have succeeded in making Antarctic exploration relevant to the present day. Lisa Layne Griffiths, whom we last saw in the wild *'Tis Pity She's a Whore*, presents Scott's wife Kathleen as modern-thinking foil to the Captain, whose paeans to bravery and glory seem heartfelt but a bit nostalgic in a world on the brink of the terrible Great War.

The audience sits around the bare frosted white set, its starkness offset by the cumbersome sledge the men haul across the floor which becomes the focal point of the men's fading link to civilization. The actors and the production as a whole do a good job suggesting the cold, vast, isolated wasteland; it would be a bit much to ask for the men to be completely bundled up in Antarctic gear. The acoustics and accents, however, might require a bit of a strain on the audience at times to hear the dialogue precisely. *Thursdays, Fridays, and Saturdays at 8 p.m. with Sunday 2:30 matinees, through May 7. \$12 general, \$10 students. At the Empire Theater, 200 N. Broadway, Santa Ana. (714)547-4688.*

*American Psycho*

An adaptation of Bret Easton Ellis's novel about a high-powered young Wall Street businessman who gets his kicks by murdering people had the real potential to make an awful movie, but surprisingly, director and co-screenwriter (with Guinevere Turner) Mary Harron (*I Shot Andy Warhol*) has crafted quite a good movie. The focus has been shifted from being yet another expose on the amorality of 1980s greed to being a keen and original look at that greed being a manifestation of hyper-masculinity. Christian Bale (*Little Women, Velvet Goldmine*) commands the screen with glee as the smug and hollow Patrick Bateman. Obsessed with his personal appearance and status, he's so competitive he can be sent into a murderous rage by seeing his co-workers display slightly more tasteful business cards or discovering they have an apartment with a view of Central Park. Harron wisely keeps this tale of insanity at an expressionistic, metaphorical level; this movie would have been a real drag if it were presented naturalistically. Not for the squeamish.

## AWARDS:

CONTINUED FROM PAGE 3

Through his hard work and dedication, the club has held a number of social events and campus awareness events, such as tables on the Olive Walk for Pride Month in June and National Coming Out Day in October.

Aron has also served on the SURF Student Advisory Committee (SURFSAC) this past year as Co Vice-Chair and editor of the Caltech Undergraduate Research Journal.

Winner of Residence Life and Master's Award: Amy Duello, junior in Engineering & Applied Science

Each year the Residence Life and Master's Office presents an award to a student that makes a positive impact on student life. This year the award is given to Amy Duello, junior in Engineering and Applied Science in recognition of her leadership and contributions to the quality of student life at Caltech. Amy has organized UCC training for Ruddock House, while serving as Vice President. It is easy to view her enthusiasm as the current Ruddock House President and thus it has been a joy for the Residence Life and Master's Office to work with Amy.

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# Travel back in time with ASCIT Minutes

## A.S.C.I.T. Minutes

APRIL 25, 2000

Present: BoD; Publications: Helen Claudio, Jennifer Lee, Tasha Vanesian, Dana Sadava, Dave Guskin, Nathaniel Austin, Jon Foster, Jong Oh, Katy Isaacs, Steve Muller, Erik Dill; Guests: Joseph Chang

Meeting called to order at 10:07 pm.

**Guests:** Joseph, representing APSU, comes to request \$600 towards a speaker for Asian Heritage Week (May 22 - May 26). The topic will be about twenty-first century leadership. He is also requesting the same amount from the Y and GSC since the total cost will be about \$2000.

**Publications Meeting:** Eric hands out copies of sections of the ASCIT Bylaws that pertain to publications (mainly Article XIV). Things to discuss include contracts, compensation schedules, road map/milestones, and satisfactory performance. ASCIT would like to receive information from publications on a regular basis. The Business Managers move to SAC 35 to discuss finances with Sean.

Compensation Schedules are described in Article XIV, Section 10. The schedule must include salaries, commission rates, possible bonuses, description of duties for all paid positions, and a payment schedule. Eric requests that each publication submit their compensation schedules within two weeks.

Dave remarks that the little t does not know how much they are going to have. Eric tells him to give a rough estimate. Road Maps/Milestones apply to the little t and Big T. It should include a list of all major things to be done. Dave passes out the road map for the little t. Contracts or agreements made by the Business Manager of each publication cannot go beyond the term of office. The contracts for the little t and Big T must be approved by the BoD, according to the bylaws.

The structure for reporting to ASCIT will be separate between Editors and Business Managers. The editors should report their current status as well as any problems they are encountering. The reports will be a regular (monthly) email of questions and comments. The business managers will give Sean an update of their current finances. Eric asks the publications people what they would like to put in their reports. Dana suggests informing ASCIT about external human resource problems. Erik suggests internal human resource problems that the editors are unable to address. He also suggests that the publications can deal with the administration through student government, which the BoD agrees is a good idea.

Equipment status: Dave has talked to Tom Mannion about receiving new equipment, but so far nothing has been done. The Tech editors say that they do not have a budget, just a compensation schedule that is approved by the BoD. Eric says that they should really have a budget. They do not know what contracts the Tech currently has. Dana will track down: Lexi, the ex-Business Manager, to find out. At 10:45 pm, Sean and the Business Managers return. They talked about finances and our accountant. They agreed that keeping our accountant would be a good idea right now, since the IRS audit is still going on. It would be nice for each publication to have a budget that includes estimated expenses and income (have the business managers taken BEM 103?).

The Tech reports that they are in the process of straightening out their finances. They will write up a finance report, including budget and expenses, and submit them to ASCIT by mid-May.

The next milestone for the little t will be to get advertisers, which they will be working on in the next two weeks. They ask for a loan for their operating budget now, since their only source of revenue is from ads. They will also submit a budget with estimated expenses by mid-May.

Katy says that the Big T will print out their account books each month to submit to ASCIT. They are currently in the process of getting ads. Erik has the ballpark expenses. The Big T right now is mostly concerned with ad money coming in and expenses incurred. Eric mentions that the biggest goal of our administration is to make things much easier for next year's BoD. The Totem reports that their only expenses are publication costs and possibly Totem club activities. They will submit their budget (income and expected costs) to ASCIT by mid-May.

The Tech reports that not everyone is getting paid! They will meet with the accountant on May 5 at lunch to discuss this.

**General Meeting:** Erik, Dave, and Nate stay to discuss last year's little t. Erik says that we don't owe anybody any money for unprinted ads, which means that we can finally close the books on the old little t. Though it is completely ready to be printed, it will never be in paper format. So sad. Dave says that his biggest concern for the next little t is getting new revenue. He also requests a loan for \$300, which will be used for mailing and reimbursing for submissions. The loan, which ASCIT will get back by August 15, is unanimously approved by the BoD. Sean cuts them a check. Erik presents the publishing contract for the Big T. It is almost identical to last year's contract. The BoD unanimously approves it.

Nate stays to request money for a project he is working on which involves large dolphin-like structures jumping over an undisclosed location. The BoD is concerned about allocating ASCIT money towards a house-affiliated prank. He also still needs to get approval from the administration. Nate leaves after making his presentation.

Laura says that the BoC Secretary is not in favor of the BoC By-law Amendment that was proposed by the BoD at the beginning of this term. The BoC Secretary feels that the resolution, which is based on the current ExComm ruling that allows dismissal of a BoC representative if the Chair feels that that person will not render an unbi-

ased judgment, has too much potential for abuse. The BoD thinks that the ExComm ruling is the correct one and without a bylaw amendment, it could be potentially changed by future ExComm rulings. Laura will discuss the amendment again with the BoC.

Martha-Helene will set up an email distribution list on ucs for all the club contacts. She also has an agent to find us a band for a first term social event next year. Melinda is working on the ASCIT Beach Trip, which will be at Zuma Beach on Saturday, May 13 (mark your calendars!). The Caltech Y, which had previously agreed to partially fund the trip, may not be able to. We are considering inviting Pepperdine and/or Scripps (and maybe Navy sailors). We will be providing a few buses for transportation. It will be Meghan's job to do the advertising (Emma has a really nice picture of Zuma Beach) and sign-ups and to put it on the master calendar of Caltech events. Adding to the list of Meghan's jobs, the BoD decides to also give her the position of Publications Director, which would involve emailing each publication and gathering reports.

Emma will have the ARC meeting tomorrow in the ASCIT office. She will invite the CLUE editors to the next ASCIT meeting. No one has emailed Eric yet to protest the future site of the ASCIT Screening Room in SAC 35.

Eric gives us an update on ASCIT Movies. Wes is planning to show Mission Impossible 2 on opening day (Wednesday, May 24) in Baxter Lecture Hall. The show will be partially funded by Tom Mannion. The Friday before, they are planning to show Mission Impossible 1 as an outdoor movie. They are still working on the DVD library, which will be located in the coffeehouse. The current plan is to store the DVD's in a locked cabinet behind the counter and to have shelves for the empty cases in the Coffeehouse's back room, Blockbuster style.

The BoD decides that it would be all right to have a grad student in charge of the Jamroom. We will invite Rory to our next meeting to work out the details of the Jamroom resolution and appointing a new Jamroom head. Chris reports that signups for the Student-Faculty Committees under IHC will be going up this Friday, April 28 and will come down the following Friday, May 5. The ARC will sit in on the selection process but the committees will not be turned over to them until next year.

The BoD decides to give APSU \$200 towards their speaker, given that they can cover the rest of the cost. The BoD decides to wait to fund Nate's dolphins until he gets approval. When he does, he will receive funding once the dolphins are up.

This very long meeting adjourns at 12:30 am.

Respectfully submitted, Jason C. Cardema

## A.S.C.I.T. Minutes

APRIL 20, 2000

Present: BoD minus Laura; Guests: Dan Liebling, Cesar Gonzales, Nick Tanushev, Rory Sayres

Meeting called to order at 4:07 pm.

The BoD congratulates itself on a successful Prefrosh carnival. Special thanks to Melinda for all her hard work in organizing the event. Melinda reports that we went slightly over budget (by \$55).

Next week, the BoD will hold its first annual Publications Meeting. The purpose will be to open lines of communication between ASCIT and publications. The meeting will be held on Tuesday night at 10 pm.

**Guests:** Cesar and Nick pick up the ASCIT lights for testing/fixing. Dan requests \$200 for Lloyd's Capture the Flag event during Prefrosh Weekend. He receives his check and departs for Mexico under the alias "Lloyd House."

**General Meeting:** Emma updates the BoD on ARC related things. The CLUE was not up last year because of problems with the new Oracle system. The old editors are willing to work on the CLUE for one more year, but next year we will need to find new editors. By the end of this term, the first term of academic year 2000-2001 will be up on the web and the rest of the year will be completed by the end of summer. Emma would like to offer the editors a bonus of \$100 for all their hard work. She proposes that next year, the CLUE questionnaire be put on the web.

The appointment of the new ARC reps at large is coming up. The interviews will be done by ARC and the appointees will be approved by the BoD. Eric suggests that it might be a good idea to move academic-related duties from the IHC to the ARC. The academic committees currently under the IHC include: Academic Policies and Curriculum, Educational Outreach, Freshman Admissions, Scholarships and Financial Aid, UASH, and Upperclass Admissions. In the past, the ARC has had little communication with academic committees. Chris reports that signups for committee positions will be coming out soon. This year, ARC will possibly conduct the interviews. Emma will go to the IHC meeting tomorrow to discuss this with them.

Meghan reports on the ASCIT van. She has talked to the Chevy dealer, who inspected the van and suggested \$750 of work that needs to be done on it. She will talk to someone knowledgeable about cars so that we do not get ripped off. Eric will email clubs with a reminder that the ASCIT fiscal year begins third term and ends second term of the following year and that each club has to request their money each term. Each club must also have its own account.

Eric has talked to the necessary people about taking over SAC 35 for the new ASCIT Screening Room. He has also put up a sign there asking groups who use the room to email him if they have any conflicts. No one has complained so far, so SAC 35 is most likely ours. Next week, at the Publications Meeting, we will be talking about each publication's compensation schedule, road map/mile-

stones (and turnpikes with detours? I think we're taking this metaphor a little too far) on the way to completion, structure for reporting to ASCIT, and status of equipment. The Business Managers will meet with Sean to discuss finances.

The ASCIT Beach Trip has been scheduled for Saturday, May 13 at Zuma Beach. Be on the lookout for posters and signups by Meghan, coming soon. On the wall of the ASCIT office, the BoD puts up the "Tasks for Third Term" poster we made during the Capra Retreat, to remind us of what we still need to do and what we have already accomplished. Eric leaves at 4:58 pm. The rest of the BoD stays to meet with Rory, who has been invited to come at 5 pm to talk about appointing a new Jamroom head.

At exactly 5 pm, Rory comes in. He reports on the status of the Jamroom, which is all right except for its physical condition. Financially, it's in pretty good shape. Since the Jamroom has been recently acquired by ASCIT, we will need to write up a resolution for the Jamroom head, which will most likely be appointed at the beginning of third term along with the other appointed offices, with recommendation from the current Jamroom head. Rory has a few people in mind for the next Jamroom head, and he will contact us once he makes a decision.

The BoD goes over the "Tasks for Third Term" poster, crossing off several items including the Budget Meeting, and the Prefrosh Carnival.

Meeting adjourns at 5:19 pm.

Respectfully submitted, Jason C. Cardema

## A.S.C.I.T. Minutes

APRIL 11, 2000

Present: BoD; Guests: Dan Liebling  
Meeting called to order at 10:10 pm.

**Guests:** Dan comes to talk to us some more about the ASCIT lights. The ASCIT Social Team will inventory everything we have. Dan will propose a purchase plan and will come back and tell us all about it next week. He stays for the rest of the meeting because he thinks ASCIT is really, really cool.

**General Meeting:** The ASCIT Prefrosh Carnival is coming this weekend! Melinda will ask each house's social director to set up a booth, after she gets IHC approval. Chris speculates that the IHC will approve it since each house has an equal opportunity to run its own booth. Eric suggests putting an upper limit on the amount each house can spend on their prizes. The IHC will be contacted by email this week.

The Carnival will be held on the Ath lawns from 3 - 6:30 pm this Saturday (official times). We will have the Bouncing Castle, the Bungee Run, and the Dunk Tank set up there, but will have to remove them by Sunday morning, to allow filming of the movie "Murder, She Wrote." We have the events rented out for the entire weekend though, so where are we going to put them? The Dunk Tank already has a few celebrities willing to be dunked: Vice-President of Student Affairs Chris Brennan, Geology professor Joe Kirschvink, Bi 1 professor Henry Lester, Interim Director of Res. Life Sue Friedman, and AMA 95 TA Sean Mauch. The student volunteers include BoC Chair Laura Brogach, IHC Chair Chris Elion, and former ASCIT Social Director Garrett Heffner. We also have the deans, Jean-Paul Revel and Barbara Green, as bakers for the Dunk Tank. Meghan will work on the advertising flyers and most of the BoD, with a few health ads, will run the events.

ASCIT will also have midnight donuts on Thursday for Prefrosh Weekend. The order is ten times that of the normal Friday morning order and includes 150 of the famous strawberry donuts from Donut Man.

Next on the agenda is the ASCIT Screening Room. At the Capra Retreat, the BoD realized that there was no place for the average Techers to watch DVD movies outside of their own house. We proposed setting up the Screening Room to offer a place where any ASCIT member can watch movies from our DVD library in the comfort of the SAC. It will be funded entirely out of the surplus we received from previous years. Eric will organize a Screening Room Task Force, which will secure a position (possibly SAC 35) and quickly mobilize to gather the necessary equipment (TV, sound system, couches). The BoD reviews copies of the budget for fiscal year 2000-2001, which was decided at last weekend's successful 9-hour Budget Meeting. We will submit a copy of the budget to the Tech this week in addition to the lengthy and mundane ASCIT Minutes.

The BoD also decided to sponsor a beach trip this term. We will provide transportation and food and for one Saturday, we will liberate Techers from this cold, dreary existence and bring them to a place where the sun shines and the ratio is normal. The date and place are still to be decided. Melinda will organize a sub-committee for the Beach Trip. Eric and Chris give us reports from the Faculty Board Meeting. This year, 430 students were admitted (vs. 505 last year) and 210 prefrosh are coming (vs. > 300 last year).

Melinda reports on the formal. Since it will be held at the Ritzy Carlton, Huntington again this year, she may choose a theme to make it a little different. Also, professional photography at the formal may be too expensive, so she is considering alternatives. Chris reports that the IHC will release the dates for the roompick soon. Full info should be distributed to students by Monday, and will be due the second week of May. Sean will contact the business managers of the different publications to set up a meeting about publication finances.

Meeting adjourns at 11:20 pm.

Respectfully submitted, Jason C. Cardema



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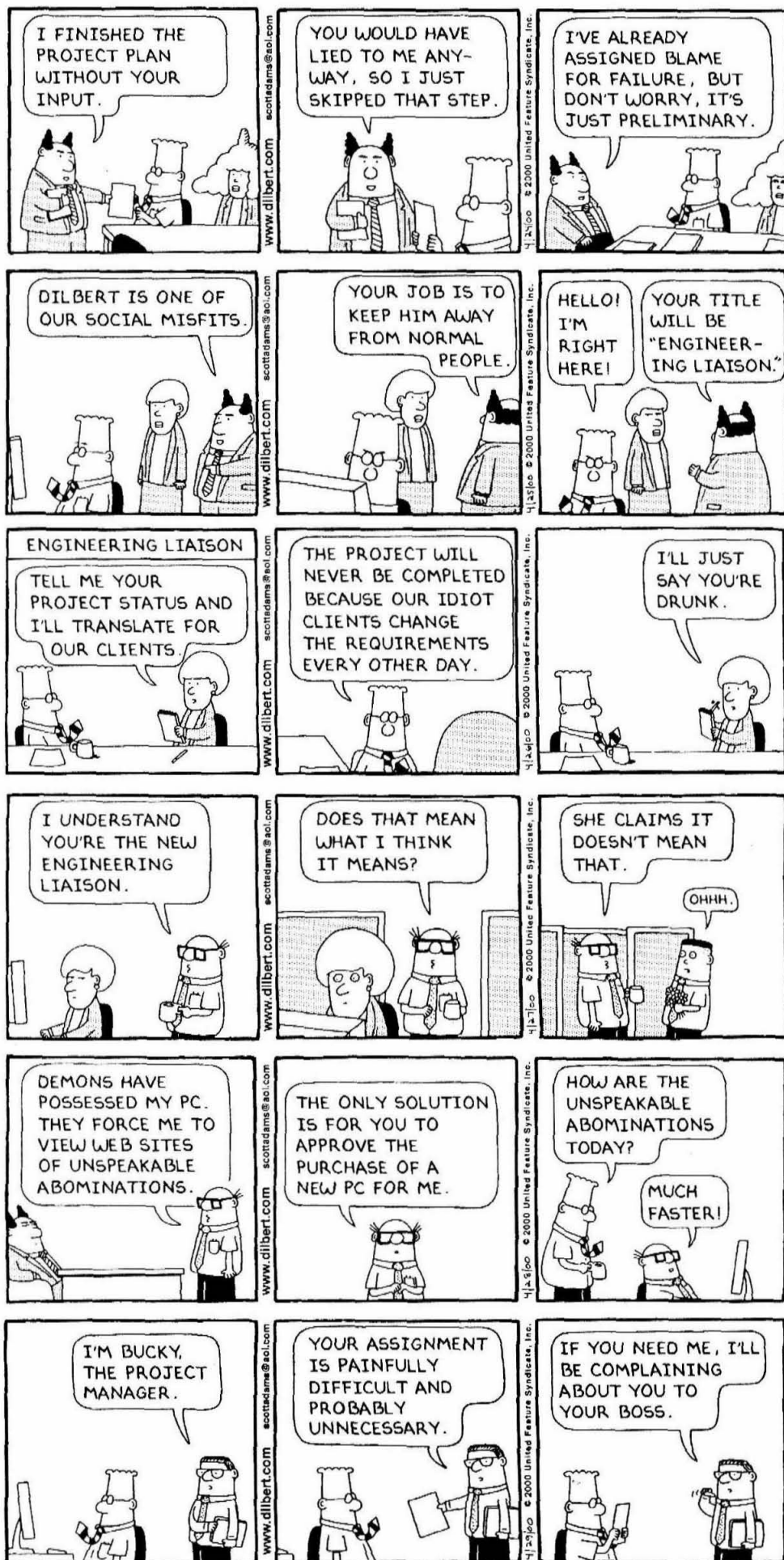
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[11:30] 2:10 4:50 7:30 10:10

**JOE GOULD'S SECRET (R)**  
[11:30] 2:05 4:40 7:15 9:50

**ALL ABOUT MY MOTHER (R)**  
[12:30] 3:00 5:30 8:00 10:20

**THE FILTH AND THE FURY (R)**  
[11:45] 2:20 4:55 7:30 10:00

**THE VIRGIN SUICIDES (R)**  
[11:45] 2:15 4:45 7:15 9:45

**WHERE THE MONEY IS (PG-13)**  
[12:00] 2:25 4:50 7:15 9:40

**WINTER SLEEPERS (NR)**  
[1:10] 4:05 7:00 9:55

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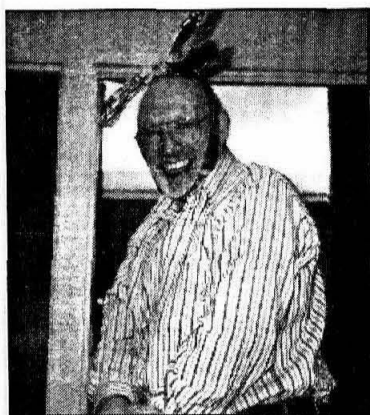
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# This is the Dean (in case you forgot)



## Dean's Corner

### Doogie Mouse

by Jean-Paul Revel

While one often hears that science fiction eventually becomes mundane reality, such an outcome seemed pretty improbable for "Flowers for Algernon", a story first published in 1959 (1). It recounts the tribulations of Charlie Gordon, a mentally retarded baker's helper. Based on their success in smartening a mouse, Prof. Nemur, the chairman of Psychology at Beekman U. and Dr. Strauss (he of the Neuropsychiatry Center) decide to operate on Charlie using the procedure they had used on mice. Miracle of miracles, it works in humans! Charlie becomes increasingly aware of everything around him, with his mental speedometer zooming up to an IQ of 185. Caltech material! Unfortunately for Charlie, Strauss and Nemur jumped the gun. In their rush to fame they disregarded the fact that they had had many failures before their one mouse success, Algernon. Too late they discover that the gains are only temporary. Algernon eventually loses its smarts, declines and, yes, dies (hence the flowers). The effects of the operation are short lived in people too, and Charlie soon reverts to his former state, sadly aware of what is happening to him as he regresses. A heartrending end to an improbable story!

Well, surprise, surprise, it now looks like that, true to the saying, this improbable fiction may be turning into reality, the good part of the story, anyway. There is news of a super smart mouse nicknamed Doogie Howser, after the TV genius. The new mouse was produced not by coarse intervention with trephine and scalpel, but by exquisitely specific molecular surgery. To tell the truth, I don't really know if this engineered mouse is specially intelligent. What has been changed is its ability to remember things, and it seems safe to assume that a good memory is at least one of the basic requirements for intelligence. Although different kinds of memories are localized in different regions of the brain, one specific structure, the hippocampus, is essential

for their formation. The nerve cells of the hippocampus display a behavior, called long term potentiation (LTP) (on which Prof. E. Schuman has worked), which seems well suited to be involved in the formation of memories. In LTP, stimulation of cells at high frequency leads to a great increase in the strength of the connection between the stimulated cells and the cells they are connected to. This effect last for hours, even days. Because connections between neurons are involved, the search for understanding the mechanism of LTP has focused on changes in the places where cells actually touch each other, the contact specializations called synapses. Each nerve cell in a pair furnishes half of the synaptic structure. A synapse consists of a tiny balloon at the end of a cell process, which often looks partially flattened where it attaches on the other cell. There are thousands such contacts on each nerve cell, allowing the formation of complex networks. But we'll gloss over this and concentrate on a single synapse. Neuron #1 gives a message to #2 by releasing a molecule (called a neurotransmitter molecule) in the narrow space between the two halves of the synapse. In the brain, the most common transmitter is glutamate, yes, the oft deplored MSG! How does neuron #2 know that neuron #1 has been saying something (has been spewing out glutamate)? Well the membrane of cell #2 contains receptors, clusters of several protein molecules to which the neurotransmitter specifically binds. The proteins of interest here are called NMDA receptors, because they also bind N-Methyl-D-Aspartate, a look-alike. The proteins "subunits" of the NMDA receptor are arranged so as to form a tiny pore across the membrane of cell #2 at the level of a synapse. As it binds glutamate, the pore relaxes a bit and allows the entry of calcium ions into cell #2's synaptic half, and the entering calcium is the message that neuron #2 perceives.

The calcium ions that have leaked into the synapse, after a few adventures of their own which we will skip for now, end up stimulating a molecule

called "CAM kinase II." (Prof. M. Kennedy in Biology, was a pioneer in the field.) CAM kinase II adds phosphate groups to another ion channel of the synaptic membrane of cell #2, the AMPA channel (if you must know, it binds to alpha-Amino-3-hydroxy-5-MethylisoxazolePropionic Acid). As a result the AMPA channels open in turn, causing an electrical signal to travel along the neuron, telling other cells the great news that cell #1 had something to say. With stimulation, more AMPA receptors are added to the membrane, thus strengthening the signal. In addition, CAM kinase II autophosphorylates (attaches a phosphate group to itself), and that allows it to keep on working even as the calcium concentration around it returns to normal. In other words autophosphorylation "reminds" CAM Kinase II that calcium had reached it at some point in the past, even after the calcium has been removed again. As a result the electric signal continues in the absence of a continuing stimulus, one of the essential traits of memory. But how do we really know that this Rube Goldberg

cascade has anything to do with memory? Part of the evidence comes from "knock out" mice, in which the genetic information needed to make particular proteins has been, you know, knocked out. Mice lacking NMDA receptors display memory defects. The critters have abnormal spatial perceptions, cannot remember their way in a watermaze and fail at a number of other memory tasks. So it looks like loss of NMDA channels "dumbs up" animals. To test if an increase in receptor makes the mice brighter(2), researchers took advantage of the fact that the type of proteins which form the NMDA receptors changes with age. In young animals the NMDA receptors are rich in NR2b subunits, while older animals switch to using NR2a subunits instead. It turns out that young animals learn faster (have better memory?) than old ones (hmmm...). Mice into which additional NR2b genes have been introduced keep on making NR2b protein even in adulthood, and so they have "young"-behaving receptors. Such mice seem to be super brainy, and so were dubbed "Doogie" mice. When they are presented with an environment containing a mix of objects they have seen before and of new objects, Doogie mice spend most of their time investigating only the new objects, the others being recognized as

familiar after merely cursory inspection. Normal, NR2a mice on the other hand, very rapidly forget what they have seen before, and after even a short period have to reinvestigate anew all objects they are given to play with. Doogie mice also do much better on mazes, and learn much faster to deal with the other tricks that scientists throw at them. And so maybe the latter day Algernons provide a beginning of understanding of the events which underlie memory. It will still be a long time, if ever, before people will have their brains genetically engineered. There are ethical considerations, and there are many technical problems. Besides, intelligence surely is more than just good memory. It is possible, however, that the new understanding will allow the development of drugs to help people with Alzheimer's or other such diseases. I hope researchers hurry up!

Don't forget.. à bientôt!

*Jean Paul Revel*

Jean-Paul Revel  
Dean of Students

1. Keyes, D. "Flowers for Algernon", Bantam, NY 1975
2. Tsien, J.Z. Building a brainier mouse, Sci. Am. 282 (April), 62-68, 2000

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## Mints

## ANNOUNCEMENTS

**CIM Vision International**, an E-Commerce company based in Long Beach, California, is seeking talented individuals with a passion for software development in Windows 2000 COM+/Java/ASP. Immediate openings are available. Candidates must show attention to detail in their work, have good oral and written communication skills and demonstrate that they work well under pressure as well as in a fast paced team environment. Preference will be given to those candidates that have experience with C++, MFC, COM/DCOM/COM+, ATL, Java, SQL and UML. Please send resume and a cover letter to: Human resources, CIM Vision International, 300 Oceangate, Suite 1500, Long Beach, CA 90802.

**Beginning Night Club Two Step**, 7:30-9:00 p.m. for five successive Mon. starting Mon., May 1: [taught by a professional dance instructor, \$30.00 except \$20.00 to Caltech undergraduates] Beginning Salsa, 7:30-9:00 p.m. for five successive Wed. starting Wed., May 3: [student taught, free to students, suggested nominal \$1.00/lesson donation for others] Both lessons in Winnett Lounge on the Caltech campus. No partner is required. Refreshments and dance practice time are provided after each class. For last minute changes see [www.its.caltech.edu/~ballroom](http://www.its.caltech.edu/~ballroom) or call Don at 626/791-3103.

**Free mid-term ballroom dance party** with refreshments, 8 p.m. until midnight Sat. May 6 in dining area of Avery; sponsored by the Caltech Ballroom Dance Club. Refreshments and dancing starts at 8 p.m. From 8:30-9:00 p.m. there will be an introductory Merenge lesson. No partners are required. In addition to the Waltz there will be music for the waltz, fox trot, tango, cha cha, salsa and others as requested [or bring your own music]. For last minute changes see [www.caltech.edu/~ballroom](http://www.caltech.edu/~ballroom) or call Don at 626/791-3103.

**The CBDC hosts a series of weekly "mini-parties"**, i.e., no lesson/demonstration or theme as done for the "regular" parties. The parties are free and take place in Winnett Lounge after each pro-taught class on Mon. from 9:00-11:00 p.m. Refreshments are provided and no partner is required. From 9:00 to 9:30 p.m.

music pertaining to the previous class will be played, but after 9:30 p.m. feel free to make requests or bring your own music.

**CIT Guitar Classes for the spring term** will meet on Tuesdays in SAC Room 1, starting on Apr. 4. Beginning, 4:30 - 5:30 p.m. Intermediate, 3:00 - 4:00 p.m. Advanced 5:30 - 6:30 p.m. Classical and flamenco repertoires are explored, but techniques transfer to other styles of guitar. The Beginning Class includes a jazz/folk chord system. Classes are free to Caltech students and other members of the Caltech community (space permitting). Undergrads can receive 3 units of credit. For more information, contact Darryl Denning at (323) 465-0881 or by email at [ddenning@caltech.edu](mailto:ddenning@caltech.edu), or visit [www.cco.caltech.edu/~musicpgm/guitar.html](http://www.cco.caltech.edu/~musicpgm/guitar.html)

**Due to recent vandalism, Cleveland Elementary School in Pasadena** is seeking donations of books and equipment for the school's library. Specifically, the school is in need of two overhead projectors and books appropriate for grades K-6 to replace those stolen or destroyed. Donations may be made directly to Cleveland Elementary School at 524 Palisade Street, Pasadena, California, 91103. For questions or further information, please contact Principal Abel Quesada at 626-794-7169 or Laura Biedebach in the office of Congressman James E. Rogan at 626-577-3969.

**Ride your bicycle to Caltech?** Register with Caltech's CYCLOCOMMUTERS. Website: <http://www.its.caltech.edu/~cyclocom> or email: [cyclocom@caltech.edu](mailto:cyclocom@caltech.edu). Monthly random drawing for a \$30.00 gift certificate to a local bike store and free tune up and extras at the Commuter Fair Day, on May 19th! If you are a distance rider, log in your miles for an extra chance to win additional prizes every 6 months.

## EVENTS

**Earnest C. Watson Lecture** Wed., May 3, 8 to 9 p.m. "Images of the Early Universe," presented by Andrew Lange, professor of physics, Caltech. Admission is free. For information call 1-888-2CALTECH.

**Earthquake Preparedness Training** will be offered by the Pasadena Fire Department

through the Safety Office. Training will be from 9:00 a.m. to 12:00 Noon in the Baxter Lecture Hall on Thu., May 18th. Learn what to do before, during, and after an earthquake. The session is limited to the first 100 people who sign up. For reservations call Caprice Anderson at x6727.

**Garry Krinsky will present a family program** entitled *Toy-ing with Science* on Sat., Apr. 29, at 2 p.m. in Beckman Auditorium. The program explores the scientific principles of gravity and leverage, simple machines, human imagination, and more. Tickets are \$10 for adult and \$5 for children. For more information, call 1-888-2CALTECH.

**"The Technology and Commerce of Music Synthesis: The E-mu Systems Story"** presented by Dave Rossum (B.S., Biology, '70) Co-Founder, E-mu Systems Chief Scientist, Creative Technology Ltd. Wednesday, May 10, at Avery Library. Dinner: 6 p.m. Talk: 7 p.m. Dave will discuss the entrepreneurial aspects of E-mu Systems from its inception in 1972 through its acquisition by Creative Technology (makers of the Sound Blaster) in 1993. All those interested in entrepreneurial case studies and/or audio synthesizer technology are encouraged to attend.

**Finland-Land of Contrasts**, Beckman Auditorium, Fri., May 12, 8 p.m. Ed Lark will narrate this Armchair Adventures travel film. Admission: \$8, \$7. For information call 1-888-2CALTECH.

**Spring Concert**, Ramo Auditorium, Fri., May 12, and Sat., May 13, at 8 p.m. The combined Caltech Glee Clubs and the Caltech-Occidental Orchestra will perform a program that includes Ralph Vaughan Williams's "In Windsor Forest" from his opera "Sir John in Love." Free admission, for more information call 1-888-2CALTECH

## SCHOLARSHIP

**The Collegiate Inventors Competition**, a program of the

National Inventors Hall of Fame, is handing out money—big money—to college inventors and their advisors. Each winning student - or student team - receives a \$20,000 cash prize. Faculty advisors each receive a \$10,000 cash prize. The competition, open all full-time college students and judged by distinguished scientists and inventors from across the country, awards up to six prizes each year. The deadline for applications is June 1, 2000. In addition to cash prizes, winners and their advisors will travel to the induction ceremony of the National Inventors Hall of Fame on September 8-9, 2000. During the weekend, winners will be honored and have the chance to learn from the greatest scientific minds of our time who visit the Hall of Fame each year for the induction festivities. Applications are available at [www.invent.org/collegiate](http://www.invent.org/collegiate).

**The Jewish Loan Association** is offering interest-free student loans to qualified individuals for tuition, books and supplies, and living expenses. Applicants must have completed a minimum of one year of undergraduate study and have a 2.5 GPA or above. For further information, please contact the Jewish Free Loan Association at 213-761-8830 or 818-464-3331.

**The P.L.A.T.O. Education Loan Program** is offering students a chance to receive up to \$10,000 in scholarship for college. Any student enrolled in an accredited two- for four-year college or university is eligible to apply. Scholarships are meri-based and applicants must have a grade point average of 2.75 or higher (on a 4.0 scale). Winners will be chosen by Citizen's Scholarship Foundation of America (CSFA), an independent third party, and scholarships will be awarded August 2000. All information and application material can be accessed, 24 hours a day, at [www.plato.org](http://www.plato.org). Applications must be submitted online by April 30, 2000.

**The John Gyles Education Fund** is offering scholarship awards up to \$3,000 for the

2000-01 academic year. Applicants must be Canadian or U.S. citizens, have a 2.7 GPA or above, and demonstrate financial need. Criteria other than strictly academic ability and financial need are considered in the selection process. To request an application, send self-addressed, stamped envelope to: The John Gyles Education Fund, Attn: The Secretary, P.O. Box 4808, 712 Riverside Dr. Fredericton, New Brunswick, Canada E3B 5G4. Filing dates for mailing documents in 2000 are April 1, June 1, and November 15.

**The Department of Defense** hosts three student internship programs at the Lawrence Livermore National Laboratory. These include Internships in Terascale Simulation Technology ([www.llnl.gov/str/str.html](http://www.llnl.gov/str/str.html)), Accelerated Strategic Computing Initiative (ASCI) Pipeline Program ([www.llnl.gov/asci/index.html](http://www.llnl.gov/asci/index.html)), and Graduate Interns in Nuclear Weapons ([www.education.llnl.gov/gint](http://www.education.llnl.gov/gint)). Housing and salary are at competitive rates. For more information, contact Barry Goldman, 925-422-5177, or [goldman1@llnl.gov](mailto:goldman1@llnl.gov).

**Information and applications for 2000 Summer Work-Study** are available in the Financial Aid Office. If you are interested in Summer Word-Study, please submit the required application as soon as possible, **but no later than June 1, 2000**. If awarded, work-study funding will begin July 5, 2000.

**The last date to request any change** to your 1999-2000 Financial Aid Award is Monday, May 1, 2000. Requests for 1999-2000 made after May 1, 2000 will not be considered. Please contact the Financial Aid Office at x6280 if you have any questions.

To submit an event for the Mints, contact [tech@ugcs.caltech.edu](mailto:tech@ugcs.caltech.edu) or mail your announcement to Caltech 40-58 Attn: Mints. Submissions should be brief and concise. 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.

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