

"...and you remind me of my therapist, but you don't cost a thing."

# The California **TECH**

"We never make the same mistake twice; we make a different one every time."

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Pasadena, California

Friday, September 29, 1995

## U. S. News Lists Caltech Seventh in Annual Rankings

by Stephen D. Van Hooser

For the second consecutive year, *U. S. News and World Report* has ranked Caltech seventh on its list of the "Best National Universities."

Caltech, which tied with Dartmouth, was ranked behind Harvard, Princeton, Yale, Stanford, MIT, and Duke. Brown and Johns Hopkins rounded out the top ten.

*U. S. News* shuffled its ranking methods again this year: alumni satisfaction accounted for

5 percent, retention and reputation each represented 25 percent, financial resources contributed 10 percent, faculty resources contributed 20 percent, and selectivity accounted for 15 percent. Although many of the attributes which *U. S. News* uses to calculate a school's rank remained unchanged from the 1995 issue, a few important attributes were slightly lower for Tech, including "Faculty Resources" and "Student Selectivity."

The "Faculty Resources" at-

tribute is a combination of the student/faculty ratio, the percentage of faculty members with a Ph.D., the percentage of part-time faculty, the average faculty member's salary, and the average class size. This year, Caltech dropped from first to second; Harvard took the top spot.

"Student Selectivity" is a combination of acceptance rate, the percentage of students who matriculate after acceptance, the average or midpoint SAT score, and the high-school class standing. If a school did not provide

complete information, *U. S. News* used the lowest score for schools in its category.

Furthermore, if a school did not provide full information about class rank or test scores for each student, *U. S. News* increased the weight of the category with less information. Caltech's rank in this category dropped from 2 in 1995 to 5 in 1996.

Rankings at a school of Caltech's size, however, need to be taken with a grain of salt. For better or for worse, the actions

of one student or the addition of one professor can cause the numbers to fluctuate wildly.

*U. S. News* has provided numeric collegiate rankings for the past several years; it has also tweaked its ranking methods yearly in an effort to capture how the public views colleges and how the editors of *U. S. News* and other scholars think the public should view colleges; small changes in rank do not necessarily indicate a change in the policies, atmosphere, or performance of an institution.

## Caltech Planetary Scientist Receives National Medal of Science

by Caltech Public Relations

PASADENA — Peter M. Goldreich, the Lee A. DuBridge Professor of Astrophysics and Planetary Physics at Caltech, will receive the 1995 National Medal of Science from President Clinton at a White House ceremony on October 18.

The White House announced the eight names of this year's winners of the National Medal of Science, which is awarded periodically in special recognition of outstanding scientific contributions.

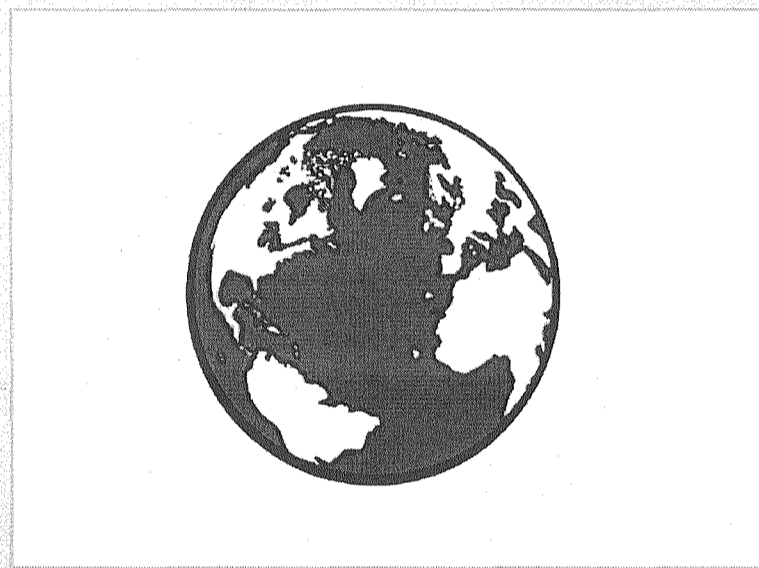
Goldreich is the nineteenth member of the Caltech faculty to be honored with this award.

In a citation that will accompany the medal, Goldreich is lauded for "his profound and lasting contributions to planetary sciences and astrophysics, providing fundamental theoretical insights for understanding the rotation of planets, the dynamics of planetary rings, pulsars, astrophysical masers, the spiral arms of galaxies, and the oscillations of the sun."

Goldreich describes himself as a general-purpose theoretician in astrophysics. He typically spends about five years working on a particular problem, writes a few papers about his findings, then moves on to another topic.

It is this purposeful rambling among many fields that has enabled him to contribute to a wide variety of problems ranging from why Saturn's rings have sharp edges to how distant stars emit microwave radiation in a coherent form, like a laser.

Even while he is working in one area, Goldreich hears about other intriguing ideas. "I always have another set of problems I'd like to solve besides the



ones I'm working on," he explains. "I like to work on problems with well-supported observational data and no theoretical explanation of any significance, so that no one has a good idea of what's going on, and I am the first one to explore it in-depth."

Goldreich says he has worked on about a half dozen of these problems where the research fell into place and his ex-

planation would enable him to solve a problem.

"I can sit in my chair for months quite happily trying to get that one little insight," he says. Though he is an astronomer, he rarely makes observations. "I've been to big telescopes, guided them a few times, and been involved in a few observing projects," Goldreich says, but he's never done data collection or analysis firsthand.

Instead, he does most of his work in a dark brown recliner in his office, where he examines the observational results of others and tries to make sense of them, making notes as he works on scraps of paper that come to

*"I can sit in my chair for months quite happily trying to get that one little insight."*

**-PETER M. GOLDREICH  
PROFESSOR OF ASTROPHYSICS  
AND PLANETARY PHYSICS**

planations turned out to be at least partially right. But for each respectable result, he examines two or three problems that lead nowhere.

"Sometimes I'll learn about something and think about it, but it goes no place. When that happens you need a good sense of when you've gone as far as you can with a problem, when it's time to quit and move on to something else." Goldreich often feels he's missing some crucial element, some essential in-

hand. These papers often disappear, but fortunately Goldreich has an excellent memory, and often works with people who are more systematic than he. These months-long sitting spells are broken up nicely by the other facets of his life: teaching, meetings, and his lifelong interest in sports.

Though both his parents enjoyed intellectual pursuits, Goldreich was more interested

SEE MEDAL ON PAGE 2

## Meetings to shape the future of Avery House

by Gary Lorden

With Avery House construction proceeding rapidly and on schedule for its opening next September, Master of Student Houses David Wales is planning a series of open meetings this term to discuss the sorts of questions that need to be addressed soon: How will students become residents of the house for next year? How will the house structure itself initially? These are the kinds of startup questions that affect the smooth integration of Avery into campus life. The MOSH is forming a small committee to help him use the results of the open meetings as a key to the formulation of policies that answer such questions, at

least for the house's first year. Of course, as undergraduates, grad students, and faculty become actively involved over the next few years as members and as residents of Avery House, they will shape the way the house evolves as a resident community and as a center for both casual and organized activities of interest to the whole campus community.

The open meetings will be advertised soon, and other events to encourage faculty and student interest in Avery House will be held throughout the year. People interested in planning events, serving on committees, etc. should contact David Wales (x6194, [dbw@pcmail.caltech.edu](mailto:dbw@pcmail.caltech.edu)) or Gary Lorden (x6321, [gary\\_lorden@starbase1.caltech.edu](mailto:gary_lorden@starbase1.caltech.edu)).

## College Bowl Revived: All Techers Invited to Compete

by Craig Leff

Caltech will host its first College Bowl matches in over eight years when an intramural tournament is held on Saturday, October 21, 1995, from 9 a.m. to 4 p.m. in Winnett Club Room 1.

College Bowl is a quiz game of general knowledge and quick recall, not unlike TV's Jeopardy!, though College Bowl games are played by two competing four-player teams. Players from the Caltech tournament will be eligible to play against other California and Nevada schools in the Regional Championship Tourna-

ment to be held in February, 1996.

The October 21st tournament is open to all members of the Caltech community, with undergraduates, graduate students, staff and faculty encouraged to play. The last tournament, in 1988, had teams from most of the houses, from departments such as computer science, and from other campus organizations such as the Seismology Lab.

House rivalries are again encouraged. A round-robin tournament is planned, so teams will

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# Opinion: From the President

## Let's Think Twice Before Cutting Research Funding

by Thomas E. Everhart

America's position as the undisputed world leader in scientific and engineering research is in jeopardy. The threat is the congressional budget pressure to cut billions of dollars of funding from the fundamental component of technological progress—basic research. If this happens, America may soon lose one of its most valuable assets—its technical preeminence, and it may take generations to reclaim that leadership.

As a nation, we cannot escape the need to balance our accounts. And no one would dispute the urgency of making

sound decisions about the priorities associated with continued spending of taxpayer dollars. But unless we invest some federal dollars toward our children's future, they may inherit a weak and dispirited country.

Fifty years ago, a conscious decision to establish a federally sponsored program linking government and universities in fundamental research helped usher in a period of optimism and prosperity never before seen in history. This partnership simultaneously trained the next generation of inquiring minds, expanded humankind's base of knowledge, and led directly to improvements in our quality of life and standard of living. It also produced major advances in many areas of science and engi-

neering. This research led to whole new branches of science—molecular biology, cybernetics, solid-state physics—and whole new industries— aerospace, pharmaceuticals, biotechnology, magnetic resonance imaging, and computers, to name a few.

In 1945, Vannevar Bush wrote in a presidential report that "without scientific progress, no amount of achievement in other directions can insure our health, prosperity and security as a nation in the modern world." A little more than ten years later Sputnik was launched and sent back its radio beeps. Those little beeps served as a wake-up call that U.S. science had fallen behind. We marshaled our resources, redesigned our education system with an emphasis on science and math, and by superb efforts in science and engineering, were able to put men on the moon before the end of the next decade. It is unimaginable we could have accomplished this magnificent achievement without our

investment in federal support for university-based research. We went on to develop the best system of graduate education in science and engineering in the world.

There are countless examples of the societal benefits of scientific applications which were born of basic research. The 30-year, \$5 billion federal investment in computer research has produced the people who made the technological breakthroughs

which led directly to the development of many of the nation's computer and communications industries—industries that now account for \$500 billion of the our Gross Domestic Product and employ millions of Americans. We can attribute the open, non-proprietary design of the Internet to a federally funded program originally designed to help scientists and engineers to communicate with each other.

Scientific and engineering research has also led to applications which help us contend with the elements. A network of weather satellites now warns of approaching storms. Our own institution, Caltech, is collaborating with the U.S. Geological Survey on a system to monitor and study earthquakes. This work could eventually lead to an early warning system that could save many lives. The House has passed an appropriations bill which would effectively terminate this productive partnership.

Perhaps no better example of the utility of scientific research exists than the field of human health. Without government funded basic research it is doubtful the late Dr. Jonas Salk would have created the vaccine for the worldwide scourge of polio. Basic research has also led to treatments and devices which extend the lives, and the quality of lives, of millions of Americans with heart disease. Other examples abound.

Congress is currently focused on budget cutting. But

some of these cuts do not make economic sense. We must remember that saving billions of dollars by not funding research pales in comparison with the trillions of dollars that could be saved by developing new medical treatments, new energy sources, and new methods of cleaning up environmental waste. Speaking of waste, one of the worst cases of "waste, fraud and abuse" that a society can commit is the failure to invest in its own future sustainability.

We have a long tradition in this country of supporting a broad spectrum of research, a policy that has developed excellent leaders in science and engineering and has paid rich dividends to our society. We also have a parallel tradition of facilitating the transition of these discoveries to useful applications which can be produced by industries in the private sector. Our leading competitors, Japan and Europe, have now established similar policies to foster partnerships that provide support for basic research by linking universities, government and industry.

Cutting funding for basic research at this time would severely jeopardize our ability to compete in the global marketplaces of the future. Without first-class science, we can look forward only to a second-class economy and a second-class standard of living in the world of the next century. Let us think twice before allowing the heat of the moment to dictate the shape of our future.

*This article appeared in the Washington Post on August 29, 1995 - Eds.*

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## MEDAL: Tech Professor Honored

CONTINUED FROM PAGE 1

in sports than in science when he was in high school, a passion he maintains today. He played baseball at the Bronx High School of Science in New York City, and both baseball and soccer in college. It was only as an undergraduate at Cornell University that he developed a strong interest in physics, and to some degree in mathematics, which led him to earn a BS in engineering in 1960.

Goldreich recalls spending "a lot more time than required" thinking about physics problems as an undergraduate, and he stayed highly motivated through graduate school, also at Cornell. He lived for three years with Thomas Gold and his family, who was then on the physics faculty at Cornell and who later became his advisor. Gold had very good physical intuition and an excellent knack for raising interesting questions, and he and Goldreich would often have long discussions about these problems. Within a year and a half, Goldreich had worked out solutions to three of these puzzles, which was sufficient for his doctorate. He wrote them up as a thesis, and finished his Ph.D. in theoretical physics in less than two-and-a-half years.

Interestingly, Goldreich's sporting pursuits have roughly paralleled his intellectual wan-

derings, shifting focus every five years or so. In graduate school he took up competitive judo, and over the years he has also competed in wrestling, running, and racquet sports. He now plays a lot of tennis and squash, and is a member of the faculty group that plays the Caltech undergraduate team each year.

Goldreich's constant curiosity about new fields, which has led him to investigate so many different problems, also influences his teaching assignments. He finds teaching Caltech students to be very intellectually stimulating, and he often chooses to teach courses about which he knows little. "I like to teach new material just for the pleasure of learning," he explains.

He is now working on the phenomenon of turbulence in magnetized fluids, and hopes next to have the pleasure of studying cosmology, which he sees as the current frontier in astronomy. Like most frontiers, this one is crowded with explorers, so it's tough to find a distinctive problem. But he thinks he has a pretty good one picked out to work on, and is excited to get to work on it.

After all, says Goldreich, "When you're ambitious and you do science, you're always behind schedule. The only thing that arrives ahead of time is death."

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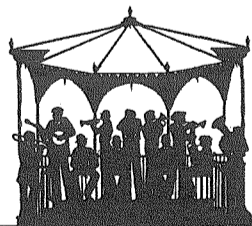
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CALTECH  
public events

## EXPECT THE UNEXPECTED



SAT., SEPT. 30, 1995 / 8 PM  
Beckman Auditorium

Caltech Students: \$8.00 RUSH tickets now on sale  
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# Calendar

by Terry Moran

For the avid fun-seeker, the *LA Weekly* out this week is their annual "Best of LA" edition out this week, which gives as close to a complete guided tour possible to Los Angeles. It's worth securing an edition for when you get board SURFing in the future; after all, it's free.

## Concerts

October has truly bloomed into being *the* month to go to a concert. In fact, if you can't find a concert to go to and love this month, I'll openly offer you my job at the Tech as well as an award for being the most lifeless, depressed soul on campus. At least eight Billboard tops of the past couple years will be performing this month at Southland venues, with the list topped by our soon to be disorganized friends from Boingo. Oingo Boingo's final concert tour has recently added their *final* final Southland show, to be held at Irvine Meadows on October 26th at 8pm. Many of my friends have seen Boingo at Irvine Meadows before, and none have ever gone home disappointed. What's more, Boingo will likely play their best songs, not their most recent ones alone, so this show should be the best of the season by far. Tickets go on sale on this Saturday at all Ticket-Master locations between 10:00 and 10:01am. Also showing: Blind Melon with Dishwalla Wednesday October 11th at the Palace; Soul Asylum and Radiohead on Monday, October 16th at the Hollywood Palladium; KMFD with God Lives Underwater & Genitorturers on Sunday, November 5th at the Palace; Sonic Youth-"The Washing Machine Tour" with the Amps, and Bikini Kill on Friday, November 10th at the Hollywood Palladium; Sublime Saturday, October 21st at the Palace; White Zombie with the Cramps, Toadies, and the Voluptuous Horror of Karen Black at Irvine Meadows; Letters to Cleo with Fig Dish on October 19th at 8pm at the Hollywood Grand; and Elastica on Tuesday, October 17th at the John Anson.

## Movies

I've heard some good words for *To Die For*: directed by Gus Van Sant, this "black comedy" stars Nicole Kidman as a slightly over-aggressive aspiring journalist. It looks to be a very talented work from what I have heard, especially in comparison to its current screen rivals: other new releases include John Candy's swan song, written and directed by the creator of *Roger & Me* Michael Moore, called *Canadian Bacon*, which has gotten reviews of mixed amounts of disappoint-

ment; and *Meet the Feebles*, the muppets version of the "Sick and Twisted Festival"; Realistically, I recommend satisfying your movie-going needs with a round or three of *Ghostbusters*, the ASCIT movie this Friday from 7:30 to 10pm for \$1.50 for ASCIT members and \$2.00 for non-members. This is a guaranteed hit, albeit one from ten years ago.

## Sports

Men's Soccer against Whittier will be held at home on Wednesday, September 27th at 4 p.m. Go. Fight. Win. Maybe.

## Restaurants

There may be a whole hell of a lot of good, expensive, fancy restaurants that one could go to, but I'd have to have dined at them to offer a recommendation, and the Tech doesn't pay *that* much. But this weeks restaurant spotlights a neat little dinery, El Tepeyac, which is by no means expensive, but by all means completely good, authentic (and inexpensive) Mexican Food. At El Tepeyac, Mercedes Benz park next to '74 Novas as the patrons come for the food from far and near. Shabby looking in some respects, the restaurant offers side window and inside eating areas, and the meals range normally between \$2-\$6, and have most definitely the most authentic gourmet Mexican food in LA, from their Grande Burrito to their tortillas to their lip smacking/burning Chile Rellenos. Of course, to find the most authentic gourmet, it is often best to go to the most authentic neighborhoods, so El Tepiyacs is located right smack in the middle of downtown, at 7222 S. Broadway, so it is better if you don't get lost on your way there. But the food is by far worth the drive.

## Music

Out this week: Blur's new album, *Great Escape*, is just out; punk music-ish, I have heard the single off of Rodney on the ROQ (which is also highly recommended if you want to actually hear music that is popular independent of how good it us, but instead on how much air-time it gets) called "Top Man," and was quite impressed. Blur will be playing with Whale at the John Anson Ford on Tuesday, October 10th. Big Audio Dynamite has an impending release "Punk" which will likely be reviewed next week in the Tech. Granted, my music recommendations are biased: deal with it.

## Theater

*Stomp* returns for the second time in their four-year career for

a limited engagement through October 15th at UCLA's Wadsworth Theater-V.A. Grounds. The British eight member crew of mimes is being hailed as "ingenious, explosive, mesmerizing, must-see" by LA reader and as having "spiritual antecedents in Mummenschanz, Cirque du Soleil, David Van Tiegham and the Three Stooges" by the LA Weekly. The show works through multiples of comedy skits in which the every-day becomes extra-ordinary in a ocular & physical representation of Seinfeld-type comedy. The crew works together in a spectacular harmony in order to stimulate not only our ears with their symphony of crude instruments, but also our eyes and minds with their graceful moves that makes their actions almost seem impulsive instead of practiced. If you are tired of the archetypical theater performances that are all too common and instead are seeking a show that showcases the extraordinary, this show will impress as it will fulfill.

## Art Exhibits

Through October 2nd, the Huntington Library will be showing the exhibit "Drawing Fire: Paul Conrad and the American Editorial Cartoon." Showcasing thirty years of the three time Pulitzer prize-winning LA times cartoonist's works, the exhibit also includes some of Conrad's correspondences with his political targets. The Huntington Museum is just south-east of campus in riding distance at 1151 Oxford Road in San Marino.

## Night Activities

Playboy has just announced a competition open to all of the public to star in their own "Naughtiest Home Video" and win up to \$1,000 and have their video aired nationwide on Playboy Television. The Playboy Naughtiest Home Videos Show is asking all applicants to keep their videos to 15 minutes or less to be judged in one of the following categories: strip tease video, outdoor/adventure video (car, camping, wilderness, etc.), most daring video (elevator, restaurants, airplanes, etc.), romantic seduction video (couples), fantasy role play video (playful, uniforms) and all other videos. Each video played on the show will win \$100, the top two \$500 a piece, and the best video in each show a grand prize of \$1000. To compete, simply send legible copies of two valid ID's for all participants and your video by October 15th to Pinto Productions, 8033 Sunset Blvd., Ste #30, Los Angeles, CA, 90046.

# YNEWS

by Donna Ebenstein

Welcome back! This is just a reminder that the Caltech Y is here to serve you again this year. We sell discount tickets to movie theaters and theme parks and rent camping equipment in a addition to our larger campus activities. If you can think of anything you would like the Y to do or if you are just interested in learning more about the Y, drop by our Excomm meetings on Mondays at noon in the Y Lounge. Everyone is welcome! Check out our calendar in this and future Techs. Any questions? Call Chris Sundberg at x6163.



Here He is, ladies and gentlemen and freshmen:  
The God of Food

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# TechnoGeeks

The newly released PC/Mac cd-rom game Burn: Cycle is a port from the cd-i home machine by Phillips Electronics. The first response to the game is that the resolution used for game play is very low for a cd-rom: 320x200 with 256 colors just makes the full screen video look pixelated. Granted this makes the game run smooth on machines with low cd-rom access time and

poor CPU speed, there should have been a high resolution option included for the techno geeks with excessively fast machines. Despite this, we were very happy with the game. The one cd-rom disk will run in both PC's (under Win 3.1 or Win 95) and Mac's. It combines an energetic soundtrack (in fact the "limited edition" we reviewed came with a separate sound-

only cd) with very smooth full screen video. The plot begins with your character, Cutter, breaking into Softech, the worldwide technology/communication conglomerate of the future, inadvertently getting infected with a neural virus. You have two hours before your brain gets fried to remove the virus and untangle the mystery behind the slaying of your partner/ girl-

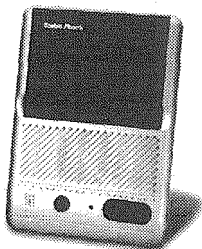
friend Kris. The format of the game is reminiscent of The Seventh Guest in that you guide your character through an already rendered landscape solving occasional puzzles. The major difference is that this game actually has a good plot and includes a few action scenes. The best part of this game is the story line which is interesting, intriguing, and even somewhat origi-

nal. The game took approximately 8 hours of playing time to finish which was helped along by saving and reloading often (AKA cheating). All in all, if you are looking for a flick that will pass the time enjoyably, we recommend Burn: Cycle from Phillips Media. List price: \$49.99 (if you cannot find it for less we pity you).

6 bits out of 8.

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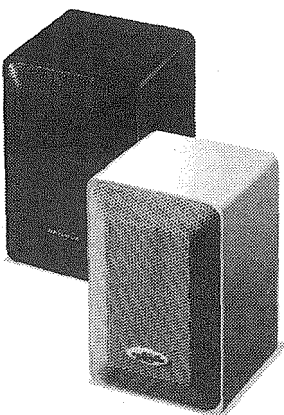
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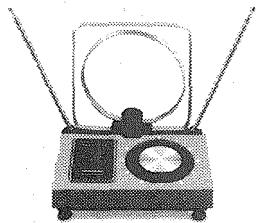
Compact speakers let you share the music, headphones let you listen privately. #14-1209MB



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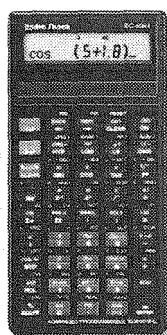
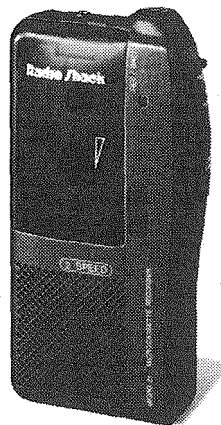


### IN THE CLASSROOM

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**Microcassette recorder**

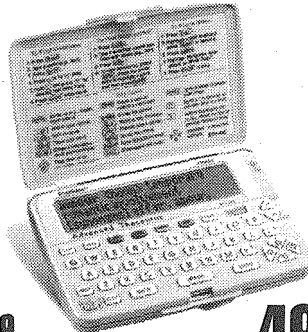
Great for recording class notes. Easy one-hand operation. Two speeds. #14-1159MB



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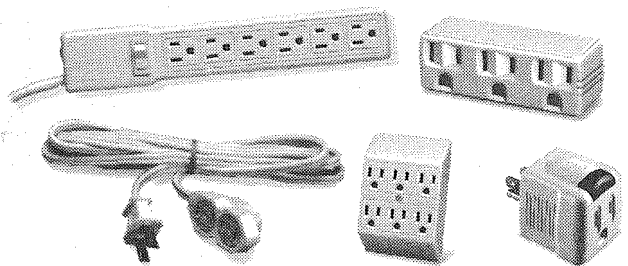
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# Computer Problems Plague Microsoft, Netscape

*Microsoft Math*

When does 1.4073748-8355328 = 0.64? When you're a user of Microsoft's Excel spreadsheet.

For several years a (now well known) math bug existed in the Calculator applet that came bundled with Microsoft Windows. This remained uncorrected in several releases over a considerable period of time.

A new math related bug has now surfaced in another Microsoft product. Type or

paste 1.40737488355328 into a cell in a copy of Microsoft's Excel spreadsheet and you will be rewarded, not with the number you expect but with 0.64.

If you perform arithmetic with this it will act as if 0.64 had been entered so it is not simply a display error. When the number is used as part of a formula the error is not apparent.

*Netscape Security Woes*

Two Berkeley computer science graduate students in-

terested in cryptography have identified a serious security flaw in the Netscape software for browsing the World Wide Web. Netscape says a repaired version will be available for free downloading from < <http://home.netscape.com> > within a week. (John Markoff, *The New York Times*, 19 Sep 1995 A1)

[This flaw has been widely reported elsewhere on the net, and involved a weakness in the use of a pseudorandom number generator to create

the crypto seed. Knowledge of the weakness enables the key to be reverse-engineered with significantly less than exhaustive effort. PGN.]

*More Netscape Security Woes*

Yet another weakness was discovered in Netscape's Internet software, found by the "Cypherpunks". This flaw can crash the Navigator browser software. "The flawed software isn't able to read very long numbers. An Internet user could exploit the flaw by planting a bit of

text containing a long number, causing computers used by unsuspecting readers to crash the text to crash." This one also being repaired. [Abstracted by PGN from "Netscape Says Hackers Uncover 3rd Flaw in Its Internet Software", By Heather Green, *Bloomberg Business News*, 2 Sep 1995, in *The New York Times*. The first weakness was the French and British cracking of Netscape's 40-bit crypto, in RISK: 17.27,28,29.]

The reason guys never catch women checking them out is because women always know when to look.

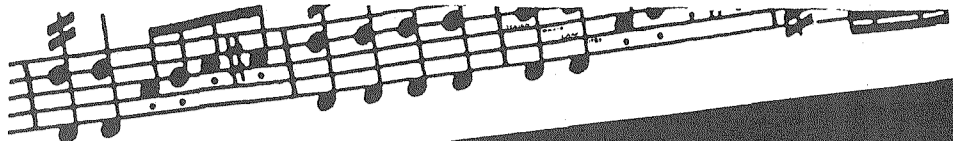
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**MARIA NEWMAN: "Peccavi",**  
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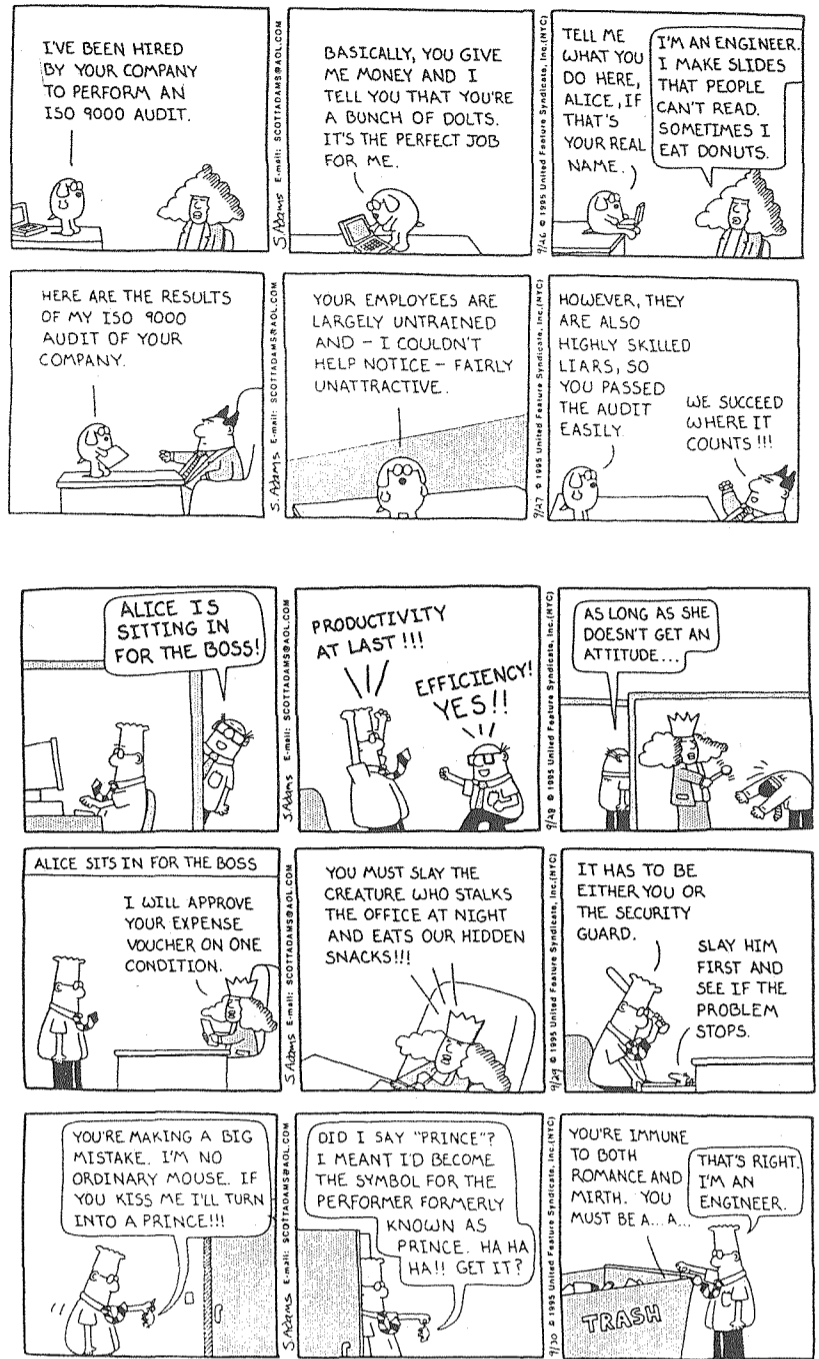
**MOZART: Symphony No. 40**  
in G minor, K. 550

Saturday, September 30, 1995  
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Information: 213/259-2785

Sunday, October 1, 1995  
3:30 p.m.  
Ramo Auditorium, Caltech  
Information: 818/395-4652

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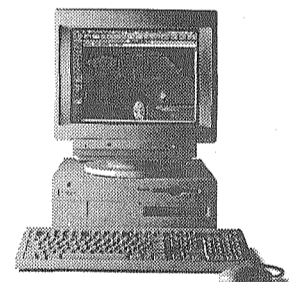
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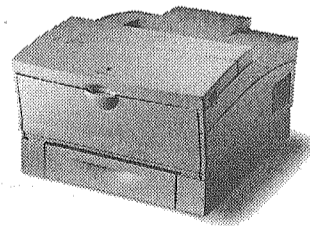
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# Official ASCIT Minutes: Summer 1995

## Les minuits officielles d'ete d'ASCIT BOD or, The Official duh ASCIT BOD duh 1995 Summer Minutes

Present and accounted for: Jon McDunn (ASCIT Pres.), James Honaker (ASCIT V-Pres AND BOC Chair), Dave Relyea (ASCIT Sec.), Kanna Shimizu (ASCIT Treasurer), Tom Maccarone (IHC Chair), Ken Walsh (Director for Academic Affairs), and Laura Munoz (Upperclass Director at Large)

NOTE: Laura is still at large. If you have any information concerning her whereabouts, phone (818) 395-6203. Ask for Bruce.

NOT present: Greg Steiert (ASCIT Social Director) and Melissa Saenz (Freshman Director at Large).

Special Guest Stars: Kristie Armentrout (ASCIT Social Team), Marty "Jon Allen" O'Brien (ditto), Robert Duff (ditto), Ken's dog, Jon's cat, Laura Verhoff (former ASCIT Ath Man), Grace Yang (ASCIT Ath Man), Micah Barclay (ASCIT Doughboy), Miguelito "Mikey" Herrera (the name says it all), Izzy (the old ASCIT copier), Laura Brady (IHC Secretary), and Darth (the cumulative evil that openly stands against the ASCIT BOD and threatens our very ways. Very, very ways.)

### When we met:

- I have no idea. I missed a meeting. We held three. Maybe four. I don't remember. I'm sitting in Connecticut, writing this in Word Perfect on a computer so old it loads something called "Deskmate" and won't run Windows.

### What we did:

- We discussed finances with the ASCIT Ath Man (see above). We had to pay for some banners and trophies just because some fencing team of ours won the NCAA division title or

something a few years ago. We vow never to let this happen again.

- We drank Kool Aid. Red Kool Aid. We sat in Red chairs around a RED desk and DRANK RED KOOL AID. You WISH you were there.

We held a party without a social director. We set the land-speed record for moving the (house name deleted) bar down the Olive Walk. Shhhhhh. We got a big inflatable thing you could bounce around in. NOTE: The only way human beings will ever achieve flight independently of wings is to get in such a thing with Sean Mauch.

- We watered the Jam Room speakers. They didn't grow. We (No. Not we. Kanna. Kanna Shimizu did this.) projected Prince videos on a wall. People drank and were merry. We made about 2000 fliers. I threw about 1800 fliers out. Mike Davies (who I should have mentioned above) sacrificed HIS towels for US. We only spent a FEW hundred dollars. I think. Greg plans on eating the people responsible for this event for dinner.

- Kanna says an interim budget report will soon be out via the Tech and the Web.

- Nobody launched an anti-tank

grenade through the window of the office.

### What we DISCUSSED:

- Ath budgeting. Grace still has more than enough money to buy

Freshmen. Don't pick into Avery House. It isn't built yet. And there will NEVER be refrigerators there. Aves will eat dirt. Aves will sleep in BOXES! Their two courtyards will burn in hellfire. Somebody will choke

from their house, to SOCIALIZE with their fellow brothers at our CAMPUS SOCIAL CENTER. Our social center, ever so CONVENIENTLY located a few tenths of a mile away from our student houses. Glory to Avery House! Hallelujah! Mathematical note: A "center" is normally defined as the place located somewhere IN or NEAR the middle of something. We ALSO discussed: ASCIT funding. Raise dues? Not yet. ASCIT Movies. Nobody stole anything from anybody. Yet. ASCIT Pizza. No such thing. Ignore this. The possibility of SAC 64 acquiring some new furniture. Couches. The possibility of us getting some food with our meetings. The ASCIT computer (a 486. With Windows 95. Runs slower than what I'm on right now.) AND other things.

Respectfully submitted,

(the signature would normally go here)

(or so you would think)

Dave Relyea

"Official" ASCIT Secretary

## ASCIT Meeting

The first meeting of the ASCIT BOD with new couches will take place on Friday, September 29th at 2 p.m. Anybody (freshmen especially) is welcome to attend. Jon McDunn will not be giving out signatures. Stop by SAC 64 (between the laundry room and arcade) sometime after 2 p.m. but before 3 p.m.

Athletics stuff with.

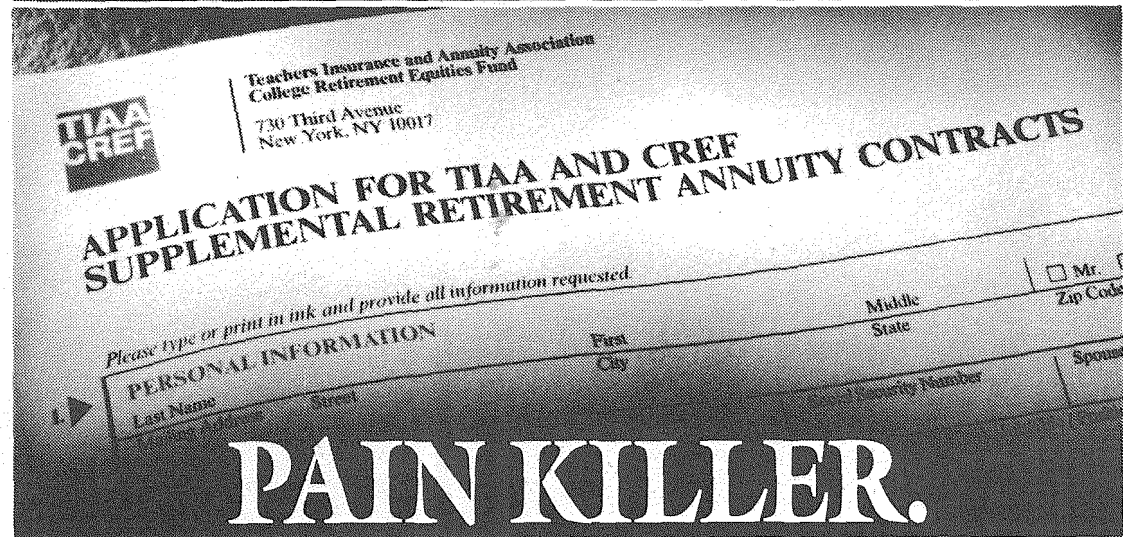
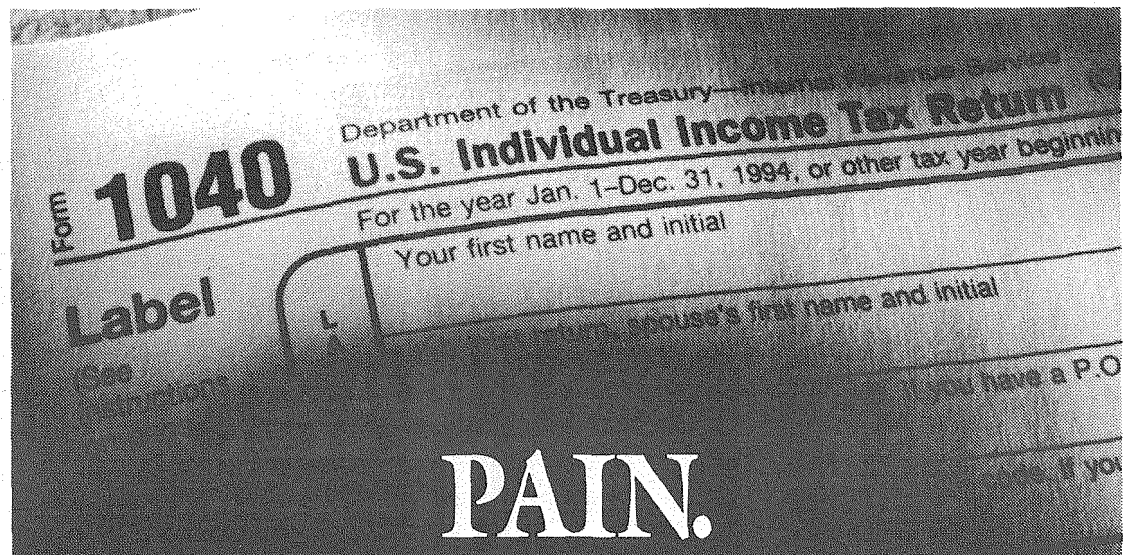
- Diversity. Mikey and Jon talked about diversity. We might have campus diversity meetings/events/other next year as a result.

- Kanna says an interim budget report will soon be out via the Tech and the Web.

- Nobody launched an anti-tank

to death on a fish bone. Yet, yet for some reason, I have had a vision. I have SEEN every member of the student body, people that have NEVER been able to lift their REARS off a couch to visit their friendly neighbors standing TENS of feet away, people without the effort to SPIT, walk HUNDREDS of feet away

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# ADAM VILLANI: MEDIA GUY

by Adam Villani



Hi, I'm Adam Villani, Media Guy. I started writing this column two years ago because I felt like it. I think I'm a better writer now than I was when I began, but I've received criticism that the column is increasingly more just a bunch of movie reviews and less the ravings of an opinionated, self-centered jerk. The reason for this is that I've been writing the column less often lately than when I started (every two to three weeks as opposed to weekly), and since the *Tech* only reimburses me for movies that I write reviews of, my financial situation compels me to write about every movie I see. Ergo, there isn't much space left to tell you about the latest bit of idiocy in *Rolling Stone* magazine. So I'll try to write Media Guy more frequently to spread the movie reviews out more evenly.

## Radio in the Forsaken Land

I recently returned from a two-week Geology field trip to the White

Mountains, in Inyo County near Nevada. Being the middle of nowhere, the only radio stations we could pick up were KBOV, or "music for old people," and KIBS, a country station from Bishop. As a long-time Southern Californian, this was really my first "opportunity" to listen to much country and discover that "today's hot new country" has got to be the only genre of music designed specifically for morons. This crap actually had me yearning for Willie Nelson and Hank Williams; give me some lonesome cowboy and a guitar any day over a clown like Garth Brooks. If you're looking for something to make you feel good about Los Angeles radio, these down-home equivalents to 80s glam-metal can do the trick.

I also went to Seattle this Summer—radio there isn't any better than it is here. The supposedly cool station, "The End," is like KROQ with more grunge, if such a thing can be imagined. A public station there did have a great six-hour industrial music show on Sunday nights, however.

## Showgirls

This movie about Las Vegas nude dancers wasn't nearly as bad as it could have been, but considering that screenwriter Joe Eszterhas is responsible for such train wrecks as *Basic Instinct* and *Sliver*, that's faint praise indeed. The story and dialogue are ludicrous at times, the acting is at the level of a cheap sitcom (not surprising, considering "Saved By the Bell's" Elizabeth Berkley has the lead), and the sex scenes are more humorous than erotic. So, yeah, it was really bad. I guess the best thing I can say about it is that it had reasonably competent direction and was decent from a technical standpoint, which I can't say about *Sliver*. What's really sad is that Paul Verhoeven (*Soldier of Orange*, *Robocop*) could make good movies if he stopped working from the scripts of an overpaid no-talent like Eszterhas.

I paid to see this movie mostly to support the Motion Picture Association of America's NC-17 rating, which has gotten a bad reputation as being some kind of commercial kiss of death. Entertainment industry types aren't rigorous scientists, however; the conventional wisdom that no NC-17 film can get box office results had arisen without a single attempt to put a film with the rating into wide release. Every major studio picture to receive the rating (which prohibits children under 17 from

seeing the film) has been recut to get an R; everything before *Showgirls* to be released in theatres with an NC-17 has been a low-budget independent or foreign film which wouldn't have attracted much of an audience regardless of the MPAA rating. My only hope is that *Showgirls* is financially successful enough to open the door for better adult-oriented movies to reach a national audience in the future.

## Seven

*Seven* is one grim motion picture. This David Fincher-directed feature stars Brad Pitt and Morgan Freeman as homicide detectives tracking a serial killer who selects his victims based on the Seven Deadly Sins: envy, gluttony, greed, lust, pride, sloth, and wrath. Cinematographer Darius Khondji (*Delicatessen*) is as much responsible for the success of this picture as anyone else; this literally very dark movie's photography is as stunningly beautiful as it is revolting. We see just enough of the results of the gruesome murders to let our minds fill in the gory details. Pitt, Freeman, and Gwyneth Paltrow (as Pitt's morose wife) are dim beacons of light in this story's unnamed city filled with decay and sadness. The nevertheless thrilling feel-bad movie of the season is filled with excellent performances, and former Madonna video director Fincher has a great career ahead of him.

## My Life With the Thrill Kill Kult, Hit and Run Holiday

Be warned: this album is terrible. The new CD from the Thrill Kill Kult is a pale shadow of their former records. The pounding bass and hard, dark rhythms of days past is gone; in their place is a collection of stale, formless melodies with TTK's trademark whiny vocals and campy lyrics brought to center stage rather than the background where they used to provide a fun counterpoint to the driving beat, which was much more important. Not a single one of the songs is memorable; the album is downright boring. It's all image and nothing to back it up; buy a copy of *13 Above the Night* or *Confessions of a Knife* to hear the real Thrill Kill Kult.

## Shameless Plug

You can check out my movie-oriented lists and links to some good movie and music-oriented sites on the World Wide Web at <http://www.uges.caltech.edu/~addam>. If you want up-to-date listings for local movie theatres and reviews of current films (many written by yours truly) you can check out Mike Benedetti's Pasadena Area Film Guide at <http://www.uges.caltech.edu/~benedett/movies/>.

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MIKE ROGERS'S WEEKLY

**HORROSCOPE**

**Aries (March 21-April 19):**

You will receive unwanted junk mail.

**Taurus (April 20-May 20):**

You will receive wanted junk mail.

**Gemini (May 21-June 20):**

You (and millions like you) will win \$10 million in the American Family Sweepstakes.

**Cancer (June 21-July 22):**

You will consider playing the lottery.

**Leo (July 23-Aug. 22):**

You will not play the lottery today.

**Virgo (Aug. 23-Sept. 22):**

Someone who knows someone you know will win the lottery.

**Libra (Sept. 23-Oct. 22):**

You will receive an unwanted phone call.

**Scorpio (Oct. 23-Nov. 21):**

No one will call you today.

**Sagittarius (Nov. 22-Dec. 21):**

You will receive a phone bill.

**Capricorn (Dec. 22-Jan. 19):**

You will consider paying a bill early.

**Aquarius (Jan. 20-Feb. 18):**

Your utility rates will increase.

**Pisces (Feb. 19-March 20):**

You will consider never paying your bills again and letting your life fall into disarray.

**BOWL: Do you know more than your prof?**

FROM PAGE 1

play at least 3 matches, regardless of their win-loss record. The numbers of games played could increase, depending on the number of teams entered.

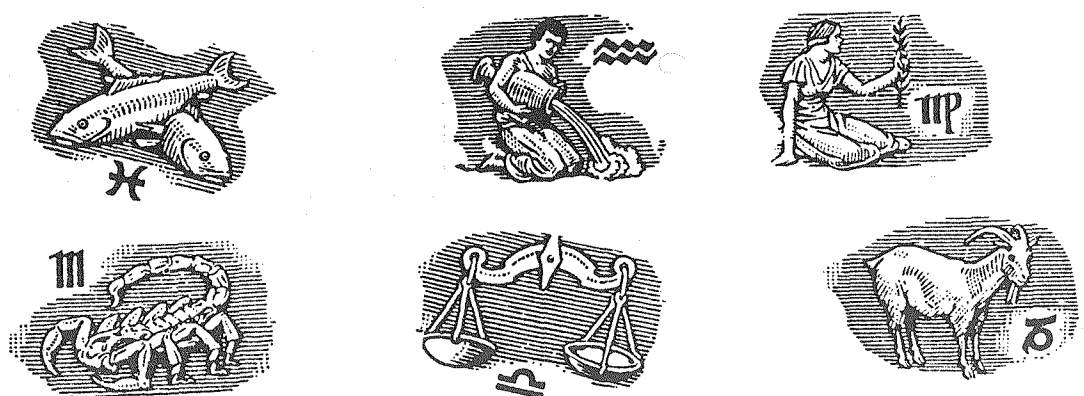
Volunteers are also needed to serve as scorekeepers, judges, timekeepers, and moderators

(question readers). Scorekeepers keep scoring statistics for the matches, judges help adjudicate answers and match play, and moderators read questions, thus controlling the flow of the match.

To register your team, or for more information, interested teams/players should contact:

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**U.S. NEWS & WORLD REPORT**

# Caltech Teams Impress in Home Meet

by Brian Barris

Saturday, September 23 saw several cross-country teams from around the area journey to Arroyo Park for the annual Caltech Invitational Dual Meet Challenge. The meet was scored in both a dual meet and invitational system, enabling the teams to determine how they fared against the other schools individually and against the field as a whole. There were a total of eight men's teams and seven women's teams, and the Caltech entries in each division fared quite well, signaling good things for the upcoming season.

The women's team finished in fourth place as a team with a 3-3 dual meet record. Cailin Henderson led the way with a time of 20:26 for the course, just missing out on first place. Next came Janet Sun, finishing just out of medal contention in twelfth place. The top five was rounded out by Gretchen Larson, Phyllis Chen, and Karen Bletzer, who finished the race with an impressive kick. The race was also memorable for the debuts of two more frosh, Aimee Pierce and Amy Dullard, and for the astonishing personal bests recorded by Katie Stofer and Keely Walker. The women's team can look forward to a very strong season after this meet. Against the two conference teams entered, Caltech dominated Cal Lutheran and was narrowly defeated by La Verne.

The men's team sent out a warning to the SCIAAC that Caltech can't be taken lightly this year. Tom Meyer blazed the first mile on his way to a tenth place time of 30:10, good enough to take home a medal. The top four were rounded out by the usual suspects, in yet another order



Tom Meyer churns up the hill at 2 1/2 miles on his way to a 10th place finish, leading the team to 2nd place.

this week. This time it was Brian Barris in second, Tom Dmukauskus in third, and Brad Nakatani in fourth. Not far behind was another pack of Caltech runners. In order, the rest of the team finishers were Conrad Ziesler, Chris Cary, Dave Richard, Harmesh Lad, Leonard Sung, and Ben Siron. I hate to mention them, but James Dooley and Tom Collier were beaten by the crazy old guy once again. Now for the impressive numbers. The men finished in second place, with a 6-1 dual meet

record. They dominated Cal Lutheran and La Verne and every other team in the field except PCC. With two-a-days over now, fresh legs will lead to even better performances and hopefully an outstanding showing in the conference.

The next meet is this Saturday at Redlands. With much more rested teams, with Brad perhaps backing up his talk for once, and with the possible return of Dan Kliemann, it promises to be yet another success for Caltech cross-country.

# Caltech Kicks off Fall Sports Season

From the Caltech Department of Athletics

## WOMEN'S VOLLEYBALL

This year's volleyball season opens up under the leadership of a new coach. Maureen Burl has taken the head coach position with Richard Chin as her assistant. They have 7 returnees this year including seniors and 4 year players, Angie Bealko, and Laura Verhoff; junior Jennifer Holland; sophomores Eve Dillman, Emily Ho, Diana King, and Grace Yang. Two new upperclassman have joined the team this year, seniors Stephanie Haussman and Ellis Meng.

Grace is taking on the responsibilities of setter, with the team running a 5-1. coach Burl stated that Jen Holland returns as our strongest hitter and that Angie (who has moved from setter to outside hitter), has adapted very well to this position. Emily is playing the opposite position and back-up setter; while Eve and Diana are playing middle, providing the team with some big blockers. Laura is the team's defensive specialist, playing very well in the middle back. Stephanie and Ellis are both being utilized in many positions and have added to the teams depth. The team opened up the season with a loss to L.I.F.E. Bible. Although they played well, they lost in sets. They came back in their next match-up with Southwestern to win in 3. They have been improving with each practice. "Our team has been working very hard all preseason practices and I have seen great improvement in just that short time," commented Coach Burl. The team most recently won their latest match in 4 sets against California Christian.

## MEN'S CROSS COUNTRY

This year's men's cross country team opened up its 1995 season at the Whittier Invitational on September 9th. Nine members of the squad competed giving Caltech two respectable team scores, even without the aid of top runner Dan Kleiman, who missed the meet due to an injury. Senior Tom Dmukauskas lead the Beavers with a time of 22:29. Senior Tom Meyer and sophomore Brian Barris finished shortly behind Dmukauskas, clocking in at 22:33 and 23:18. The team welcomes back ten returnees including sophomores, Brian Barris, Dan Kleiman, Harmesh Lad, Brad Nakatani; juniors Chris Cary, James Dooley, Ben Siron; and seniors Seth Blumberg, Tom D. and Tom M. Newcomers to the team include freshman Kurt Campbell, Tom Collier, Jeff Mendez, Conrad Ziesler; sophomore Leonard Sung; and senior Daniel Richard.

In the Beaver's second meet, the Westmont Invitational, Brian Barris, Tom Meyer, Brad Nakatani, Tom Dmukauskas, Conrad Ziesler, and Dan Richard all finished in the top 25. While

the team was still competing without the injured Dan Kleiman, they secured an overall 3rd place finish in a 6 team field.

With an abundance of talent and healthy runners, the men's cross country team look to make a strong showing this season.

## WOMEN'S CROSS COUNTRY

What this year's women's cross country team lacks in numbers will be more than made up for in determination. Only five returnees are running for Caltech this year, including sophomore Katie Stofer; juniors Heidi Eldenburg, Gretchen Larson, Keely Walker, and last year's NCAA Championships qualifier, Cailin Henderson. Two new faces have joined the squad to add some depth; senior Janet Sun, and freshman Phyllis Chen. Henderson, Larson, and Chen were the only Caltech runners in the Beaver's opening meet at the Whittier Invitational. Cailin made a spectacular showing, finishing fifth overall and second amongst collegiate athletes. Gretchen and Phyllis also ran strong races, both finishing around the 30 minute mark.

In the second meet of the season, the Westmont Invitational, Cailin Henderson dominated the competition, finishing first with a time of 20:37. Janet Sun, Phyllis Chen, Keely Walker, and Katie Stofer also ran well to help place Caltech 3rd overall among 6 teams in the meet.

Look for the women to gain some ground in the upcoming months as they add more runners to their line-up and strengthen their team.

## MEN'S SOCCER

The men's soccer team begins the '95 season conditioning much harder, and longer before their first competition. Head coach Phil Howell's states, "With new assistant coach Ken Kiessling on board, we are going to be much fitter this year." The team has 14 returnees from last year. Leading the returnees are team captain Rob Bergeron (4th year player) being positioned at sweeper, Albert Ramirez (Jr.) at forward/mid-field, Clay Kishiyama (Jr.) at mid-field/forward, and Rob Sides (Jr.) at mid-field. Also returning is Chris Marsh (4th year player), Carlos Aldana (Jr.), and Mike Vogel (Sr.). Big things are expected this year from all the returnees. Two year all conference player Bryce Engelbrecht has been side-lined with an injury for the first part of the season, but there is hope he will be back before the season's end. Sophomore Jorge Palamara, and freshmen Matt Barnett and Francisco Dias-Laurenco will add some strength and speed to this year's team. Also joining the team this year are two women athletes; sophomore Alexis Johnson and freshman Peggy Gabriel. Coach Howell's is hoping for a produc-

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# SPORTS:

CONTINUED FROM PREVIOUS PAGE

tive and enjoyable season for everyone.

## WATER POLO

The Caltech water polo team will add an important element to its arsenal of talents, namely experience. Lead by All conference player Mike Greene (Sr.), setter Jason Hong (Jr.) and Donovan Stevens (Sr.), these core players were starters their freshmen year and bring tons of experience. Greene and Hong were the second and third leading scorers last year, while Donovan is returning to the team after a two year absence. Other starters will be Sooketoo Bhuta (Sr.) and goalie Brian Bircumshaw (Jr.), who both started the last two years and Steve Glista (So.) who rotated into the starting group last year. The final member of the starting squad will be Brian Collins who was a starter for his high school team. Other members of the team that will be rotating into the starting group will be setter Phil Rodriguez (So.), Jim Pierce (So.) and Casey Huang (So.).

Any team looking past Caltech will find themselves badly mauled. This year's schedule finds a lot of Caltech games played at home. This home pool advantage will be needed as Caltech will be hosting Villanova, PA, and Loyola Marymount during the pre SCIAC conference season. Two of Caltech's important games will be against the Alumni and a match against Cal Maritime. The series against the Alumni finds the varsity holding on to a four year winning streak which they would love to extend to five. Also, the varsity would like some revenge against Cal Maritime after losing a slugfest last year 18-2 1.

Coach Dodd is starting his sixteenth season at Caltech and is pleased with this year's group of athletes. "Mike Greene is arguably one of the fastest players in the conference and most of the offense will be centered upon his ability." Jason Hong and Phil Rodriguez will be handling the important set position. The nicest surprise has been the play of Sooketoo Bhuta and Steve Glista. "Both players have done things that takes an average player years to master. A lot of our success will depend on how they perform," related Coach Dodd.

### Deadlines for Submission to The Tech

- Letters to the Editor — 5 P.M. Monday
- Events and Notices — 5 P.M. Tuesday
- Unsolicited Articles — 5 P.M. Tuesday
- Regular/Semi-Regular Columns — 5 P.M. Wednesday
- Articles, News Submissions — 5 P.M. Wednesday
- Art/Photo Submissions — 5 P.M. Thursday

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## Class Additions/ Changes

**CIT Guitar Classes** for the Fall quarter will meet on Tuesdays starting October 3rd in Room 1 of the Student Activities Center (SAC) as follows: beginning classes will be held from 4:30 to 5:30pm, 3:00 to 4:00pm for intermediate students, and from 5:30 to 6:30pm for advanced students. 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). Undergraduates can receive 3 units of credit if they choose. Private instruction on any level can also be arranged. The instructor, Classical Guitarist Darryl Denning has an international background in performance, teaching and recording and can be reached by phone at (213) 465-0881 or by email at: [ddenning@cco.caltech.edu](mailto:ddenning@cco.caltech.edu)

Three **H&SS** courses have been added to this fall's class offerings. While Ec 161 has been moved to third term, Professor Caroline Fohlin will be teaching Ec 162, Monetary Theory this fall. An organizational meeting will be held on Tuesday at 1:00pm. Professor Martin Ridge is offering H 146, American Biography Tuesday evenings at 7:30pm. H 161, Culture and Society in the English Speaking World, 1660-1830, will be taught Thursday evenings at 7:30 by Professor John Styles, a visiting professor of history from Victoria and Albert Museum in London. This course will consider the cultural dimension of the rags-to-riches transformation in English fortunes between 1660, when England was a minor European country, to 1830, when it had become the dominant European nation and the center of the world economy. A full schedule of courses to be taught in the Humanities & Social Sciences Department in the 1995-1996 year are available in 228 Baxter.

## Notices

The Caltech Y presents "Ocho-X" to perform the first Noon Concert of the year this Friday at noon in the Winnett Quad. "Eat lunch outside and listen to some beautiful music."

The Yalso presents "Cookies on the Walk" concurrently to give students a chance to sign up for a diversity of volunteer activities.

The Registrar's office will be open during lunch this year. Now you can come by for one more hour each day (12:00 - 1:00 p.m.) to turn in your yellow cards, get transcripts, pick up a catalog, or just hang out.

The Caltech Folk Music Society is look-

ing for volunteers. If you like the sound of acoustic guitars, singer-songwriters, tight harmonies, and a whole host of other things that get lumped into the term "folk music," they invite you to give them a call at 791-4583 to find out about volunteering, or to get your name on the mailing list to find out about upcoming events.

The Caltech Women's Glee Club is now welcoming new members for their 1995-96 Concert Season. Additional sign-ups are to be held in the SAC 1 at 7:00pm on Monday, October 2nd and at 4:30pm on Wednesday, October 4th. All women on campus are welcome to join this 24 year-old choir; no previous singing experience is necessary. Regular rehearsals are held on Monday nights from 7:30 to 9:30pm and on Wednesday afternoons from 5 to 6pm. The group will be performing three major campus concerts this year, including a performance of Beethoven 9th Symphony with four other Los Angeles choruses and the Santa Monica Symphony this season. For further information, please contact the Glee Club President, Jennifer Miller ([jam@uags](mailto:jam@uags), 577-4637) or the Graduate Liaison, Kitty Erkkila ([kitty@cco](mailto:kitty@cco), X6370).

All experienced and perspective Badminton players are invited to come and play in the Brown Gymnasium on Friday and Monday Mornings from 9:15am to 12 noon BYOR (i.e., bring your own racket). For more information, please call Cherrie Leighton at 355-6158.

Join the Caltech Entrepreneur Club! We welcome you to have free pizza with us on Thursday the 5th at 6:30pm in Winnett Clubroom #1. Get involved and be part of the most exciting club on campus! For more information email [jessica@cco](mailto:jessica@cco).

One gray sweatshirt, one teal colored t-shirt, and one flashlight were found from Frosh Camp. If any of these items belong to you, please come to the Deans' Office, 102 Parsons-Gates.

## From the Counseling Center

The Counseling Center is offering a **Women's Therapy Group For Graduate Students** to begin in the fall term. The group is designed as an expansion of the women's group offered last year which provided an opportunity for women to examine a range of personal and professional issues in a confidential setting.

# Announcements

☞ denotes a new announcement.

## Competitions

Disc Makers is giving a chance in a lifetime for unsigned bands to get signed! **The Disc Makers' 1995 Los Angeles Unsigned Band World Series** is open to all unsigned Southern Californian bands. The six finalist of this competition will be given the chance to perform for music industry's leaders at the Troubadour on November 30th, while the top band will be given the chance to record their album to be mastered, manufacturing, and promoted as a major-label-quality CD (a prize valued at \$10,000). The contest is open to all Southern California bands that submit either a demo or CD by November 9th, along with a \$15.00 cover charge to: Disc Makers' 1995 Los Angeles Unsigned Band World Series, 213 W. Alameda, Suite 101, Burbank, Ca 91502.

## Fellowships and Scholarships

From the Deans Office:

An Urgent reminder to all interested seniors: A one to three-page project proposal draft for the **Watson Fellowships** is due in the Deans' Office (102 Parsons-Gates) on this coming Monday, October 9th, 1995. Keep in mind that successful proposals generally have a single topic of study or investigation that reflects a student's long-standing interest in that area. The Watson Foundation provides fellowships of \$16,000 for a year of independent study and travel after graduation. They are designed to encourage an informal break in the normal sequence of undergraduate-postgraduate education and are a marvelous opportunity to travel outside of North America. Caltech nominates 2 seniors each year for this fellowship.

Applications are available in the Deans' Office, 102 Parsons-Gates for the **Churchill Scholarship Program**. The one-year graduate study award is available to graduating seniors and graduate students. It includes full tuition, \$6,000 living allowance for a full-year program, and a \$500 travel allowance. At current exchange rates, the value of a Churchill Scholarship is approximately \$20,000. Churchill College is a predominately engineering and science-oriented college at Cambridge University. Applicants must be U.S. citizens between the ages of 19 and 26. The deadline to submit a complete application to the Deans' Office is November 13, 1995. Caltech can nominate two candidates to the Churchill Foundation.

The **Harry S. Truman Scholarship Foundation** awards scholarships to juniors who have outstanding leadership potential and intend to pursue careers in public service.

If interested, please stop by the Deans' Office, 102 Parsons-Gates for more information. The deadline for receipt of nominations for this scholarship is the first of December.

From the Financial Aid Office: Applications and/or information on the following and additional undergraduate scholarships are available at the Financial Aid Office at 515 S. Wilson, second floor. All qualified students are encouraged to apply.

The **National Hispanic Scholarship Fund** is offering awards ranging from \$500 - \$1,000 to full-time undergraduates who

are of Hispanic parentage and who are U.S. citizens or permanent residents. Applicants must have completed at least 1 term of study and, to be competitive, should have a GPA of 3.0 or higher. Applications are due no later than October 1, 1995.

The **California Park and Recreation Society Aging Services and Activities Section** announces its scholarship competition. Undergraduates and graduates may apply for the \$250 awards. Applicants need to be full-time students in the areas of recreation, leisure studies, or in an aging-related field. Applicants also must have GPAs of 3.0 or above and must have financial need. The deadline to submit applications is **November 30, 1995**.

The **American Society of Heating, Refrigerating and Air Conditioning Engineers, Inc.** is offering nonrenewable scholarships in the amount of \$2,500 to full-time engineering students in the final two years of undergraduate study. Students must have a GPA of 3.25 or above and must be involved in the fields of heating, ventilation, air conditioning, or refrigeration, or in related areas including indoor air quality, energy conservation, human comfort, or HVAC system design, operation, or maintenance. Applications are available at the Financial Aid Office, and are due **December 15, 1995**.

The **Elie Wiesel Foundation for Humanity** is sponsoring their annual essay contest for full-time undergraduate juniors and seniors. Students are challenged to examine and analyze urgent ethical issues in essays of 3,000 - 4,000 words. First prize is \$5,000, second prize is \$2,500, and third prize is \$1,500. Essays must be **postmarked by January 12, 1996**. For essay guidelines and additional information, come to the Financial Aid Office.

The **American Concrete Institute (ACI)** is offering several awards. The Peter D. Courtois Concrete Construction Scholarships are two \$1000 awards for undergraduate study in concrete construction for the 1996-97 academic year. Eligible students must be enrolled at least half-time and must be seniors in 1996-97. The application, available at the Financial Aid Office, with all required supporting documents is due **January 15, 1996**. The ACI Committee is also offering one **ACI-James Instruments Student Award** in the amount of \$800, for original student research on nondestructive testing of concrete. Applicants must submit a technical paper describing the research. The award is open to undergraduates or graduates, and the research work must have been completed within two years of the submission date. Completed technical papers must be received by ACI Committee no later than **November 30, 1995** at the following address: c/o Dr. Allen Davis, Madsen, Kneppers and Associates, 9 East Exchange Place, Suite 900, Salt Lake City, UT 84111, (Telephone (801) 533-2888). ACI is also sponsoring three different competitions: the Concrete Cube Competition, the Concrete Egg Protection Device Competition, and the Concrete Projects Competition. For complete rules, call the ACI Education Department, at (313) 532-2600.

Looking for outside scholarships to assist with the cost of your Caltech education? Check out the **Fund Finder** in the Caltech Career Center. There are more than 3,000 listings for both undergraduate and graduate study opportunities. The Career Center is located in Room 8 of Parsons Gates and is open from 8-12 noon and 1-5pm, Monday - Friday. The Fund Finder is a free service provided by the Caltech Financial Aid Office and Career Center Office.



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