prefrosh

The California Tech

are coming

Volume XCVI, Number 21

Pasadena, California

Friday, April 7, 1995

Symposium on Scientific Communication

from Public Relations

A distinguished group of nationally recognized print journalists and radio and television correspondents will visit Caltech on Thursday, April 20, to take part in a symposium, "Reporting Science: Fact, Skepticism, and Controversy." The seven panelists, along with the moderator, veteran KNBC news anchor Jess Marlow, will discuss ways to effectively inform the public about science news. The audience will include communications professionals from colleges, nonprofit organizations, corporations, hospitals, and research institutions. In addition, local high school and college journalism and science students will be attending.

The morning's panel discussion in Beckman Auditorium will be followed by a noon luncheon at the Athenaeum, where Robert Bazell, chief science and medical correspondent for NBC News, will deliver the keynote address and answer questions from the audience. Bazell is the recipient of several awards, including the 1994 Peabody Award, the duPont-Columbia Award, and an Emmy for his reports on NBC Nightly News.

Caltech students are invited to attend the morning session at no charge. To reserve a seat for either event, contact Susan Pitts, ext. 3227; the reservation deadline for Caltech students is April 15. Seating is limited.

Joining in the morning's discussions will be Pulitzer Prize-winner Deborah Blum, author of The Monkey Wars and science reporter for the Sacramento Bee; science journalist K. C. Cole, former senior editor at Discover magazine, now at the Los Angeles Times, physicist and Caltech vice provost David Goodstein, creator of the PBS series The Mechanical Universe; and KPCC-FM news and program director Larry Mantle, host of the nightly interview show AirTalk, which once a month devotes a show to research being done at Caltech.

Also participating as panelists are J. Madeleine Nash, science correspondent for Time magazine; physician Art Ulene, chair of the USC/ Norris Cancer Center board of trustees and a regular contributor to NBC's Today show; and Jonathan Ward, a producer of several TV series for the Discovery Channel and CBS News, including The Cronkite Report and Understanding Science.

According to Director of Media Relations Max Benavidez, "the symposium will provide a lively forum for journalists, scientists, and members of the Caltech/JPL community to explore ways to bridge the communications gap between researchers and the public. With the rapidly changing electronic news environment and the proliferation of media outlets, this is a perfect time to convene this assembly of experts."

"Blum, for example," adds Benavidez, "is an authority on the critical relationship between animal SEE SYMPOSIUM, PAGE 6

The Caltech Archives announces...

MORE FEYNMAN VIDEOS...

Fridays, noon to 1, in Beckman Room, first floor, Beckman Institute (SE corner). Seating limited to 10 seats only (reruns by request only, noon-1, the following Monday-Thursday).

April 7: The Pleasure of Finding Things Out (1981). From the BBC-Horizon series, the first of several BBC programs on Feynman. Biographical material is interspersed with Feynman talking about his life and science. 50 min.

April 14: Irreversible Process from Reversible Laws (1987). A guest lecture for Physics 2, Track C, at Caltech. Feynman addresses a fundamental and paradoxical problem in physics: natural phenomena are characterized by irreversibility, yet physics seems to explain only reversible processes. 50 min.

April 21: Fun to Imagine (1983).

Ten to twelve short programs, unedited, from a series made by the BBC and never aired in the U.S. Feynman talks about various physical phenomena. 65 min.

April 28: Infinitesimal Machinery (1987). A talk given at JPL described as a sequel to Feynman's celebrated 1959 lecture, "There's Plenty of Room at the Bottom." The historic 1/64-inch-on-a-side motor made by William McLellan is passed around the audience. Note: This talk is approximately 90 minutes in length and will be shown in its entirety.

Coming in May:

Feynman attempts to visit Tuva in Last Journey of a Genius. Watch for announcement in the Tech.

Questions? Call the Archives, x2704.

by Jon McDunn

At the next Faculty Board Meeting, Monday, April 10, there will be a vote on the proposal to begin assigning letter grades in the third term of the freshman year. The proposal, if adopted, would take effect for next year's freshman class (1995-96). It is a proposal that has been discussed on many faculty committees for at least

the last four years. This is not to say that students have been left out of the discussion. On the contrary, students have been well represented on most of the committees that have discussed this proposal.

Earlier this year ASCIT distributed a survey to find out how the undergraduates as a whole felt about this issue. Out of 221 respondents (or about 23% of the student body),

50% were opposed to the change, 38% favored it and 12% either had no opinion or felt ill-informed to make a decision.

The following table has the data broken down by class:

ag	ainst	for	no opinion
Freshman	50%	33%	17%
Sophomore	52	31	17
Junior	46	44	10
Senior	54	34	10

The next table has the data organized by major:

	against	tor	no opinion	
Bi	72%	6%	22%	
Ch/ChE	43	50	7	
E&AS	49	39	12	
GPS^*	100	0	0	
H&SS*	100	0	0	
PMA	44	44	12	
undecide	d 50	39	100	
(* GPS and H&SS had only 3 re-				
spondents each.)				

From the data, it appears that the undergraduate body is split on this issue. Based on the discussion at the March Faculty Board meeting, the faculty also have a wide range of opinions. When the decision is made, the outcome and its implications will be mentioned in *The Tech*.

NASA astronaut to visit Caltech

Astronaut John Grunsfeld will return to Caltech April 7, 1995 to visit students who have built experiments that will fly on the Space Shuttle. His visit will take place at 11 a.m. in the Synchrotron Building (the North side of California Boulevard between Wilson and Hill, just east of Arden Road, upstairs in the gallery of the Synchrotron Building).

Shuttle astronaut John Grunsfeld, who flew on the Astro 2 mission aboard the space shuttle Endeavour last month, will visit the Caltech student club he used to advise. The group of about 20 undergraduate students is winding up construction of a gamma-ray experiment that will fly on a shuttle mission scheduled for July 1995.

Astronaut Grunsfeld was a se-

nior research fellow in physics at Caltech from 1989 to 1992, and also served as advisor to the Students for the Exploration and Development of Space (SEDS). Together he and SEDS initiated construction of the gamma-ray experiment back in 1991. Grunsfeld left Caltech in August 1992 for training as a mission specialist.

SEDS, under the supervision of new faculty adviser Maarten Schmidt, has continued designing, testing, and building their gammaray detection experiment for the last four years. The student group, led by Ben McCall and Al Ratner, will ship the completed payload to Goddard Space Flight Center in Maryland on April 20th, and it will fly aboard the space shuttle Endeavour on July 20.

Citations Dismissed

On the morning of February 19, a parking control officer from the City of Pasadena issued parking citations on Caltech property. The citations were issued between 5 AM and 5:30 AM. The violations cited were for No Parking Anytime or Overnight Parking. The City of Pasadena has been spoken to, and they have stated that the citations will be dismissed. They have requested that the citations be forwarded to them. The citations issued were in series A146600 and up.

If you received a citation from the City on February 19 for parking on San Pasqual, west of Hill, or for parking on Holliston (from Del Mar south to San Pasqual), it needs to be returned to the City for dismissal. Arrangements for the return can be made by calling 577-3553.

ASCIT Notices

ASCIT Budget Meeting

The ASCIT Club Budget Meeting is set for Saturday, April 15 starting at 10AM. All clubs requesting money must submit a budget proposal by Wednesday, April 12 at noon to the ASCIT mail box in the SAC copier room. Budget proposal forms are available in the copier room.

Athletic Manager Reelection

Due to the resignation of the AS-CIT Ath Man, ASCIT will hold a special election for the new AS-CIT Ath Man. Signups for the position will be placed outside Winnett Lounge on Friday, April 7th alongside all of the signups for IHC appointed offices. Signups will come down Friday the 14th at 5:00 PM, and the election will be held on Monday the 17th. If you have any questions, please ask David Relyea, relyea@cco or x1320. Thanks.

ASCIT Donuts Update

ASCIT Donuts are now AS-CIT/DRL Donuts. The donuts will be held in front of the Residence Life Office at 8:00 AM Friday mornings. This move is to encourage student/administrator interaction and will free up some much needed money in the ASCIT budget. So stop by and grab a donut. It is still strawberry season and we should have milk, coffee and juice as well. See you there!

Features

10

The Usual Stuff

LETTERS TO THE EDITOR EDITORS' CORNER OPINION ASCIT MINUTES YNEWS FOXTROT

KREATIVE KORNER CRIME & INCIDENT BEAT MEDIA GUY DILBERT® CROSSWORD

GAMES AND PUZZLES SPORTS EVENTS & NOTICES

Neurotopology!

From your Friendly **Tech Editors**

It's finally finished!

This paper is the first Cali-

fornia Tech under the new

administration! We're

making some changes in

the way we request articles

along with some other

changes, but you won't see

these fully implemented

for another couple of

weeks. In the meantime,

keep the submissions roll-

a new column, or would

like to write anything at

editors@tech. Remember,

it's not too late to sign up

for 3 units of pass/fail

credit by taking PA 15.

please

If you have an idea for

email

Articles, News Submissions — 5 P.M. Wednesday

Events and Notices — 5 P.M. Tuesday Unsolicited Articles — 5 P.M. Tuesday Regular Columns — 5 P.M. Wednesday

Letters to the Editor — 5 P.M. Monday

Letters about Feynman

To the editors:

Many of the recent letters about Richard Feynman seem to avoid the essential question raised by the original article, namely, what is the appeal of Feynman's stories to the scientific community? One letter suggested that most scientists don't "worship" Feynman, but are merely "entertained" by his pranks, while other letters have suggested that these pranks should simply be seen a natural outgrowth of Feynman's fun, creative, and independent spirit.

"Worship" is a strong word, but it seems appropriate when describing the reverent legends currently in circulation about Feynman. He is at the very least a hero within the scientific community. To argue that Feynman is revered for his intellectual creativity alone ignores the fact that as many legends are told about Feynman's personal idiosyncrasies as are told about his intellectual career, and it ignores the fact that most scientists don't understand — and have no need to understand — QED.

To say that Feynman's stories are merely "entertaining," or should be taken light-heartedly, simply begs the question: why are these stories entertaining, and to whom? They are certainly not entertaining to the waitress who slipped in the water.

I believe the original article effectively demonstrates that Feynman's more malicious stories are "entertaining" if and only if the reader identifies with Feynman. If readers

are forced to identify with the targets of Feynman's jokes, their stomachs turn, the waitress has slipped, something has gone terribly wrong. It is then quite difficult to argue that such pranks are more an outgrowth of lighthearted "fun and creativity" than of insensitivity and the luxury of cultivated obviousness.

That Feynman was a complicated individual with a multifaceted personality is a fundamental premise of the original article — Feynman could well have chosen to develop another persona. The interesting questions are: why these are the kinds of stories Feynman chose to tell, and why are these particular stories the ones which scientists like to hear and tell about themselves. What does it say about a community of people whose legendary heroes tell such malevolent stories as these?

Mitra Hartmann

Dear California Tech:

I believe the beauty of Richard Feynman's genius lay in his ability to clearly communicate complex ideas, making them easy to understand. For example, when he testified at the Challenger disaster hearings, he cut through all the BS with a simple demonstration showing how brittle an O-ring became in icy water. Without this ability, the world would

never have known his genius nor received his contributions.

Now, contrast Feynman's style to Eric Dennis' last two letters to the Tech – pompous exercises in obfuscation. One might conclude that Mr. Dennis is an arrogant self-centered ass (or perhaps just a clever muckraker pretending to be an arrogant self-centered ass).

In short, Mr. Dennis, I remember Richard Feynman. I took a class from Richard Feynman. Mr. Dennis, you are no Richard Feynman.

A Feynman/Hartmann Fan (AKA Chris Assad)

Dear California Tech:

Thank you Rahul, thank you David, at last, a letter about Feynman I could read without pushing my blood pressure through the roof. As one who worked for Prof. Feynman for over sixteen years, I would like it noted that he was always a gentleman to me, that it was fun to have him around the 4th floor in Lauritsen, that faculty, the fortunate students, and staff would agree, and that he is truly missed as just a person. He was always generous with his time for anyone who needed his help or wanted to pick his brains.

Perhaps the people who are branding him a Neanderthal would have benefited greatly from some contact with him (FYI—he was truly great to his Mother); some of his humanity just might have rubbed off on them, one could hope! To the humorless people that have written about him, may I point out that the good far outweighed the bad, and may I wish they live absolutely perfect lives.

Helen Tuck Secretary Theoretical Physics

co Editorial co

Poisoned Without Warning

Not enough information is being released concerning the spraying of the foliage on campus. Students on campus are unaware of the contents of the spray, and that is a rather unhealthy situation. We are informed on bulletins from the physical plant that we should keep our windows closed because of the spraying. These bulletins should contain information on both the toxicity and constitution of the spray. There is obviously some fear of toxicity, as students are informed that they should close their windows.

There are also other, equally serious, problems with campus spraying. Many students go home during winter and spring vacations. I happened to be on campus a week before yesterday (since I live nearby and had business to which I had to attend) and noticed a bulletin concerning spraying that was dated March 22nd. It stated that the oak trees on campus would be sprayed on Saturday, April 1st, from 6:30 am to 1:30 pm. I was going to return during that time until I saw this notice.

People who must return to Caltech by plane, however, would be unlikely to be aware of such spraying. They could therefore arrive during the spraying and have to breathe some of this potentially toxic material. It is possible that the physical plant was assuming that nobody would arrive before Sunday, but that is not a realistic assumption. If there is to be spraying during vacation, it is imperative that the student body be informed of it before vacation begins so that everybody will have sufficient warning to deal with the problem as they see fit. Furthermore, the contents of the spray should be released with each of these bulletins. All relevant information should be released in order to keep the Caltech student body properly informed.

monon a. Porte

Mason Porter

Caltech 40-58 SAC, Pasadena, CA 91125 phone: (818) 395-6153 e-mail: editors@tech.caltech.edu ISSN 0008-1582

The California Tech

VOLUME XCVI, NUMBER 21 APRIL 7, 1995

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Warters

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Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of publication. Submit copy (preferably on Macintosh 3.5" disk) to the Tech mailbox outside SAC room 40, or e-mail to editors@tech.caltech.edu. The editors reserve the right to edit and abridge all submissions for literacy, expediency, etc. All articles are the property of the authors. Authors and columnists retain all intellectual property rights.

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ATTENTION: FINANCIAL AID RECIPIENTS

To ensure that we have sufficient funds to meet your full need for this academic year, we have established a deadline to adjust your Caltech financial aid for 1994-95.

If you wish to:

- · request a Federal Direct Stafford or PLUS loan
- request any other type of adjustment to your 1994–95 award

we strongly encourage you to request a revision by May 1 at 5:00 p.m. All requests should be made in writing and submitted to the Financial Aid Office (mail code 12-63) by this date.

Please contact the Financial Aid Office before May 1 if you have any questions.

Thank you for your cooperation.

FRIDAY, APRIL 7, 1995 / 8 PM Beckman Auditorium \$25.00 *–* 22.00 *–* 19.00 SUNDAY **APRIL 8, 1995** 3 PM Beckman Auditorium \$22.00 - 19.00 - 16.00 CALTECH CIT STUDENTS: \$8.00 CIT STAFF / FACULTY: Half price TECHTIX for both events

Call the Caltech Ticket Office at x4652

It's still not too

late to SURF!

The SURF Office has extended the deadline to apply for

Small Business Industrial Associates SURFs.

Stop by the SURF Office to look at the projects being offered

and to pick up an application.

Application Deadline:

April 12

Interviews will be scheduled shortly after

the applications have been processed.

(We also have other late SURFs available at Caltech and JPL.)

SURF Office, 137 Beckman Institute, x2885, surf@romeo

Opinion



Save the D!

by Ken Walsh, ASCIT Director of Academic Affairs

Among the recent flurry of proposed changes to the grading system here at Caltech, a proposal to eliminate the grade of "D" has arisen. The arguments in favor of this proposal are, for the most part, circular and non-sensical. I feared, however, that I was not able to properly interpret the political science mumbo-jumbo associated with the proposal and that it really did make sense. To ease my mind, I talked to a friend who is a political science major and he said that while it clearly did have the appearance of political science speak, it certainly did not make sense. This matter goes before the faculty board this Monday so after reading this editorial I encourage to talk to any faculty or members of the board to let them know your views whatever they may be. In this editorial, I will attempt to explain and debunk most of the arguments presented in favor of this proposal and offer an alternative that more logically addresses the concerns of all parties involved. Let's try answering some simple questions

Q. Where in the world did this idea come from?

A. As in most bureaucracies it came as the result of *other* proposed changes to the grading policy, namely those regarding how students and professors may designate courses as pass/fail.

Q. Wait, what the heck does a proposal about pass/fail courses have to do with the "D" *grade*?

A. O.K., so there is actually an almost logical argument to this one. This is a result of a proposal to require instructors who wish to offer courses as "letter grades only" to receive approval from the Curriculum Committee. You see, there is an upward trend in the number of courses that are going to the "grades only" option. In 1984 it was 19%, in 1991 it was 25%, and this year it is 31%. This is most obviously an "n-person

prisoner's dilemma" situation and it has to be stopped.

Q. Golly, at that rate by the year 2003 over 113% of courses will be "grades only." I guess your right, something must be done. So how is the Curriculum Committee that is composed mainly of professors that the "n-person prisoner's whatever" predicts are all dying to make their classes "grades only" going to stop this?

A. Don't worry about that.

Q. O.K., sure, whatever. So anyway, what does this have to do with eliminating the "D"?

A. Well, you see, as we dutifully force all these professors to make their courses open to pass/fail when they don't want them to be we have to appease them with a compromise. As you know there is often a tendency for students who are taking a course pass/fail to attempt to just barely squeak by with a "D" and many professors quite justifiably don't like to have students in their classes who are trying to just get 9 units of "P" instead of learning something.

Q. Well I think you are right there. I took a class in which the professor had a clever solution to this problem. If you were on grades your final grade was the average of all the parts of the class and if you were taking it pass/ fail you had to pass each part of the class individually to get a "P". I know of some other professors who simply set a slightly higher standard for getting a "P" as opposed to a "D". That way, people who are honestly trying, getting most of the material, and staking their GPA on it can pass while a lazy person on pass/fail will get his just desserts. So why can't the professors do this?

A. Oh, I forgot, this proposal also includes a clause that makes whether a student is on pass/fail or grades invisible to the professor. The professor will no longer be able to grade people who are on grades and people who are on pass/fail by different standards. Naturally the administration

and the registrar's office know how to grade students better than the highly trained faculty we have here at Caltech

Q. Hey, I get it! We want to reduce "grades only" classes and make the pass/fail option invisible to professors (even though they have to sign and approve our pass/fail card?) but if we do that then all the pass/fail people will freeload on the fact that the grade of "D" is equivalent to a "P" so we have to eliminate the "D". So what happens to the people who are on grades and would have gotten a "D"?

A. Oh, well, you see, they would probably get a "C-" instead. Isn't that

Q. But I thought that pass/fail and graded students would be indistinguishable and graded on the same standard so wouldn't all the pass/fail "D" freeloaders get "C-"'s instead and still pass? Or would you change all the "D"'s into "F"'s so that some poor biologist who barely makes it through Physics 2B will fail and never graduate.

A. Ummm..... No. You see, it's a lot like the Mc D.L.T. McDonald's puts the warm hamburger on one side of the package and the cold toppings on the other side of the package so that the hot side stays hot and the cold side stays cold. Then while they're waiting for customers they put the entire package under heat lamps and.... Oh.... Ummm....

Q. So getting back to this political science stuff, by eliminating the "D" we take our 5 bin grading system and make it into a 4 bin grading system. I thought political science predicts that most n-bin systems will work identically if they have a similar number of bins regardless of what we call

A. Well, this isn't exactly political science, you know.

Q. Then what about the n-person prisoner's dilemma?

A. Well, that part of the problem is political science and this part isn't.

Q. Why not?

A. Isn't it obvious?

Q. Yes, something is very obvious here, but it isn't that. Anyway, so regardless of whether "D"'s become "F"'s or "C-"'s won't it appear to the outside world that we are inflating grades? I mean really, we already have enough students who have trouble getting into med-schools on account of their GPA's even though they are often more qualified than other applicants. Fortunately, a few schools give us a break and realize that it's hard to get a good GPA here. Won't this apparent (whether it ends up being real or not) grade inflation jeopardize that? Not to mention, who the heck are we trying to be, Stanford? My fellow students, a number of faculty, and I often have a jolly old time laughing about the Stanford grading policy.

A. You should learn to laugh at yourself. It's good for you. Besides, don't get so worked up, as less than two percent of grades awarded are "D"'s.

Q. I wonder what the percent of "A+"'s is? Maybe we should eliminate those too. Look, if you really must tie the professors' hands when it comes to having say in who passes and who doesn't in a pass/fail situation and you think people on pass/ fail are free loading on the "D" why don't you simply change the requirement for passing a pass/fail course to getting above a "C-" or a "C" or whatever grade you think is appropriate. That way hard working students on grades in core classes who just have trouble with the subject can still get their "D"'s that they earned and graduate. Leave the poor little "D" alone. After all, if it's only two percent of the grades why are you getting so worked up.

A. Look, doing that might require originality and thought. We don't want any of that here at Caltech. Simple, binary, thoughtless choices are much easier. This whole matter is causing problems and I'm sick of dealing with it. Let's just eliminate the "D" and we won't have any more problems... until the "C-" becomes the next "D" and then we'll eliminate that. It's much easier to just eliminate the problem than deal with it.

Q. I am having some problems with a lot of the new policies and proposals coming out of the administration and the board. Can I just eliminate them?

A. No, that would be silly.

In any case, it is quite apparent that this matter needs a lot more thought. I urge the Faculty Board to at the very least table this topic for further discussion or else modify it radically so that it makes some sense. I will hopefully be at the meeting in person to make this request. Until then, I would encourage all students to consider how this might affect them and to present their views to a trusted member of the faculty, or even better, a member of the Faculty Board. I invite any comments or ideas from the students, faculty, administration, and staff. Please send any comment you have, even if it just a few lines, to kwalsh@ugcs.

NOTE: The above discussion is not meant to represent any real person. It is simply a compilation of a number of discussions, arguments, and even a few as yet unexpressed sentiments that have come up in various meetings, documents, and informal discussions between faculty, administration, student leaders, and members of the student body in general.

There are additional opinion articles on the following page.

ASCIT FRIDAY NIGHT MOVIE

Robin Williams

Good Morning, Vietnam

BAXTER LECTURE HALL 7:30 & 10:00 P.M. \$1.50 for ASCIT members \$2.00 for others

Next Week

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1995–96 MERIT AWARDS

Each year, the Faculty Committee on Scholarships and Financial Aid grants a number of Merit Awards to the most academically talented of the Institute's sophomores, juniors, and, occasionally, freshmen. Merit Awards are based on outstanding scholastic achievement as demonstrated by exceptional performance in formal classes and/or independent research, and not on financial need. Last year, the Committee recommended a total of 48 Merit Awards. Awards ranged from \$6,000 to full tuition—\$16,695. The level of awards in any year is determined by the number and caliber of the applicants.

Applications are available in the Financial Aid Office (515 S. Wilson Ave.)

Deadline for submitting COMPLETED applications

APRIL 28, 1995 • 5:00 P.M.

April 7, 1995

The California Tech

elections, all during finals week, in

Official ASCIT minutes of 4/03/95

Agenda: Spring Break Summary (two weeks was nice), talk to the Tech editors about request for funding of Inside World as a separate publication.

Present: The BOD (James is late; hormones had him tied to the phone), Gavin, Charlie Bachand. If you don't know who these people are, read though the old minutes. Why should I waste my time trying to educate you if you insist upon ignorance?

Meeting starts at 10:00!!! (Yeah)
Charley proposes the Self-Defense Club. The club would have lecturers and training (more than impact) and a possible pepper-spray instructor EVEN THOUGH the Caltech Y already has one. Charley wants recognition and funding. Self-Defense Club is recognized 7-0-0 (James wasn't here and thus didn't get the weenie abstinence number). We tell Charley to draw up a budget for the budget meeting.

Laura Verhoff has officially resigned as Ath Man. ASCIT will hold a special election some time in the next few weeks for her replacement.
 Gavin enters.

We schedule the Club Funding Budget Meeting on Saturday the 15th, April, 1995, beginning at 10 AM. I KNOW this is the first day of Passover, but it was the only good day to hold it on. If you have a problem attending the meeting, come see a member of ASCIT (names are at the top of the printed minutes in the houses and the Dean's office) and we will reschedule you for a more appropriate time.

Example Ken asks if Flora is doing the Clue. We say yes. Ken says there were no second-term evaluation requests. Jon says he'll "talk" to Flora. Also Ken is doing some student/faculty meeting planning.

□ Laura sneezes at 10:21.

➡ We discuss the Faculty Board meeting. SES is an official minor, and the motion to put freshmen on grades for third term is tabled again.
 ➡ Jon McDunn, ASCIT president, reminds you to file your taxes.

He hasn't yet

Dave goes on a huge long spiel about the old ASCIT records. Apparently, some recent ASCIT records were THREE TIMES larger than the records of the prior ten years of AS-CIT records. So Dave did a little organizing (and 0 threw out approximately 5 pounds of duplicated material). Dave admires the pictures found in old ASCIT records (old fat people, sitting around a table, drinking) and has found grounds in the old records to pass a motion requiring candidates who tie in a presidential election to resolve the tie by a duel on the Olive Walk. Also, Dave notices that, according to Robert's Rules of Order, everyone in ASCIT is a screw-up and probably should be hung by the toes off of Millikan. Except, of course, for James. And why not, you ask? Well, I'll tell you. James Honaker, former PRESI-DENT OF BLACKER HOUSE, now VICE-PRESIDENT OF THE ASSOCIATED STUDENTS OF CIT AND CHAIRMAN OF THE BOARD OF CONTROL, SIGNED the leg of the secretary in order to put himself in first place in the nominations for TECH BUSI-NESS MANAGER. If you'd like to run against James in the special AS-CIT appointment procedure, sign up outside Winnett Lounge by Friday the 8th (tricky). Otherwise, congratulations to James Honaker for becoming our new Tech Business Manager.

ASCIT.

ASCIT decides that Dave spent a lot of time and effort on the maintenance of the records of ASCIT and that such maintenance should be well-preserved. If there were an earthquake, the records could fall and potentially be damaged, and the works of GREAT secretaries of the past might be mixed up with the works of flakes. The ensuing chaos might be devastating, and the resulting amendments to the ASCIT bylaws might result in 7 or 8 special

which we re-elect every member of ASCIT as well as the president of Caltech and maybe even Phil Gramm. Thus, ASCIT resolves to keep 5 copies of the records, one in the ASCIT room SAC 64, one in the steam tunnel branch they've been sitting in for 20 years, one in an undisclosed location in Los Angeles, one at the secretary's house in Waterford, CT, and one to go up in the next SEDS project to forever encircle the planet Earth and to be preserved for all time. In fact, if every page within the records of a certain prior secretary were all placed in strategic orbits, the ozone holes over the earth could be placed in perpetual shadow, and nature, humankind, and those little frogs whose eggs are being destroyed by UV radiation would be forever thankful. Especially thankful would be these little hairless Arctic mice that Jon heard about from some magazine. These naked mice burrow through the ice by melting it with this huge vein on their foreheads (similar to the motion of propulsion of many frosh without lights in the steam tunnels), and they burrow en masse under emperor penguins, melt the ice under the penguin, and rip at the fallen penguin with two inch fangs. Motion to have the ASCIT records moved to the South Pole to be protected by Arctic mice never occurs.

ASCIT tells me not to put condom directions in the minutes. If you want extra condom directions, go to Lloyd. They had lots of extra condom directions.

➡ Laura says the van has transmission problems. It stutters. It is opened up, and after the Arctic mice are subdued, a full grown penguin is discovered within the transmission. Laura also asks us about the old copier, and we decide it's not worth keeping around.

B James makes sure that pre-frosh weekend is actually on the weekend. It is, James. Greg will get ice cream for the prefrosh party. During the climax of the party, a prefrosh will be placed on the large mound of ice cream and will be quickly torn to pieces by the Arctic mice in the ice cream. The mice will then be served on Monday for dinner inside the pot stuffers/dumplings/dumplings.

Greg needs a DJ for the prefrosh party. If you're interested, let him know

© Greg says the ASCIT Formal is at the Ath on the 26th of May. Signups will come up very soon. Greg shows us the budget of the Social, and apparently we're saving about \$4000 by having the Social at the Ath instead of the Ritz.

Kanna says she will email Wart. Fire walk with me.

Example 12 Men and the ARC have decided to ignore Fleming and book their next gig at Dabney. Also, Ken says the ARC will immediately get to work on issues such as D grades, the Clue, and a possible survey on people's interactions with the registrar's office.

We can no longer apply for a 5th year at Caltech. We must separately apply for a 13th, 14th, and 15th term at the institution. This will force the stragglers to finish their work.

Meeting closes at 11:21.

■ We look around, and out the door. The Tech editors are still hiding in their little cave and are nowhere to be found. Jon, Greg, Tom, Gavin, Dave, and Laura stick around afterwards to hang out by SAC 64. ASCIT. Yeah.

Submitted with a dash of respect and two cups of tomato paste and some nutmeg.

David Relyea. ASCIT Secretary.

GRADS CHECK IT OUT!

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YNEWS

by Topher Hunter

Gooooood Morning, Caltech! (Well, afternoon, whatever.) Welcome back for yet another fun-filled term. We've got thrills, chills, and unpaid bills, so let's have some fun this

Today, at noon, there will be a concert by the Steed Woodwind Quintet in front of Winnet Center. Drop by and enjoy lunch in the sun.

Next week, on April 14th, the Y will be sponsoring an Easter Egg Hunt. Eggs will be hidden all over campus, with candy and prizes (including movie passes) inside. Details will be forthcoming, so keep your eyes peeled (a disgusting image, isn't it?) for those fluorescent eggs.

Well, that's all for now, folks. Remember, the Y Student ExComm meets every Monday at 12:00 in the Y lounge. If you have an interest in volunteer work (both for workstudy and plain volunteering), have an idea about something that the Y could do for campus, or are just curious, drop by and find out just how rewarding the Y can be.

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RF/ANALOG DESIGN ENGINEER

Requires BSCS/MSCS with emphasis in Windows/DOS, C++ and embedded software design. Will design amplifier, phase lockloop, VCO, filter and quadrature converter for R&D of new consumer-oriented audio/video products utilizing satellite communications. Dept. 403

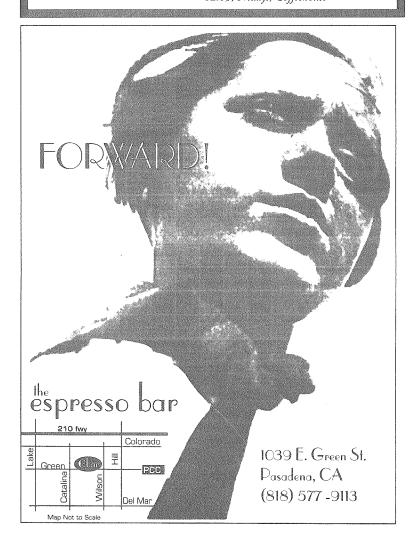
SOFTWARE DESIGN ENGINEER

■ Requires BSCS/MSCS with emphasis in Windows/DOS, C++ and embedded software design. Will design and code programming projects in MS Windows using C/C++. Involves testing and debugging. Dept. 430

■ Qualified candidates are encouraged to submit their resume referencing dept. # to: ComStream Corporation, Dept. ____, 10180 Barnes Canyon Rd., San Diego, CA 92121; FAX 619/657-5402. Equal Opportunity Employer.



WRITE FOR THE TECH 12:15, Fridays, Coffeebouse



"...AND THROUGH THE DIN, THERE WAS HEARD THIS SOUND, UNLIKE ANY OTHER ON EARTH. IT WAS A SOUND BEYOND NOISE, BEYOND NICE, BEYOND GOOD, BEYOND BEAUTY, BEYOND ART, BEYOND HEARING. AND THE GROUND TREMBLED, AND THE CLOUDS SHOOK, AND THE SLIMY NEWTS CRAWLED FROM UNDER THEIR MOSS BLANKETS AND BATHED, AND THE SUN TURNED A PECU-LIAR SHADE OF PUCE, AND THE SEAS TURNED TO GRAPE JELLO, AND THE STOCK MARKET CLOSED, AND THE WORMS IN THE GARDEN STOPPED MUNCHING ON MUD AND STARTED MUNCHING ON CHOCOLATE PUDDING, AND THE SHARKS IN THE OCEAN BECAME VEGAN, AND THE COMPUTERS ALL RAN A LITTLE FASTER FOR THAT DAY. AND THEN, DOWN FROM THE SKY CAME THE VOICE OF REASON.

'YOU! YOU ARE THE CHOSEN ONES! YOU ARE THE FEW WHO HAVE BEEN GIVEN THE GIFT BEYOND ALL EARTHLY GIFTS. DO AS I BID AND YE SHALL BE HAPPY. TUNE YOUR RADIOS TO 99.1 AND LISTENETH THEREOF, AND YOU SHALL HEAR THIS GLORIOUS SOUND. GO FORTH NOW, MY CHILDREN, AND USE MY

"AND WITH THAT, THE VOICE LEFT THE PEOPLE WITH THEIR GIFT. AND THE PEOPLE WERE HAPPY."

99.1 KURV RAD IT'S NOT JUST FOR STATIC ANYMORE!

GUITAR CLASSES AT CALTECH

CIT Guitar Classes for the spring quarter will meet on Tuesdays starting on April 11 in Room 1 of the Student Activities Center (SAC) as follows:

Beginning Guitar Class 4:30 - 5:30 P.M. Intermediate Guitar Class 3:00 - 4:00 P.M. Advanced Guitar Class 5:30 - 6:30 P.M.

Classical and Flamenco repertoires are explored but techniques can be transferred 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 at (213) 465-0881.

Kreative Korner

poem 3 by Mark Nelson

I open the window so I can listen to the falling raindrops laugh at me and my years of wasted ambition. arbitariness, confinement...

> Alice Cooper sings "I'm Eighteen", but neither of us is close to that age anymore.

They come and go without acknowledging my existence.

They left and upon their return two hours later I was still sitting in the same chair staring aimlessly at the spokes of the bicycle.

> The rain stops and I miss its companionship, for I seemingly have no other friend.

I waste all my time mulling about past mistakes...

If only I'd told her this or that?.?.?

the cynic tries not to care -

"Why ask Why? Drink Bud Dry." -

but that slogan annoys the hell out of me. I insulate myself from further suffering by my solitude,

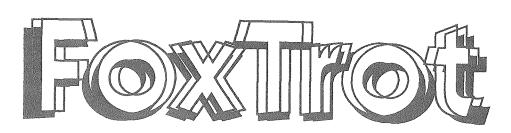
but then I accentuate that which has already occurred. If I had a TV I could stare at it instead of the walls...

The silence makes me feel justified.

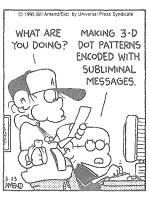
The Saturday night partiers speed down the wet streets and I bemoan my neverexistent adolescence.

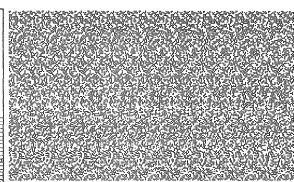
Hope is all that keeps me alive but where is the dividing line between hope and delusion?

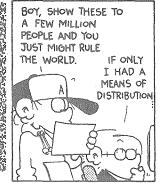
I hate school...



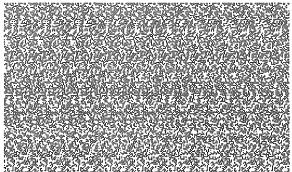
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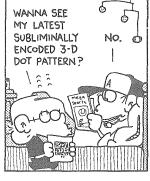


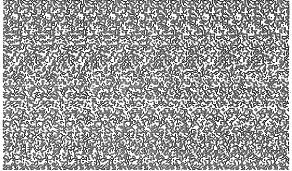






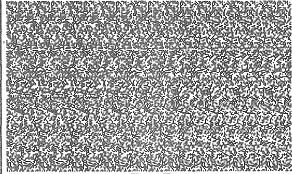




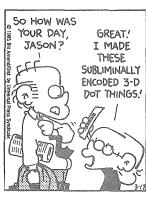


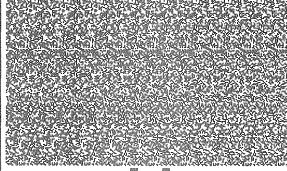




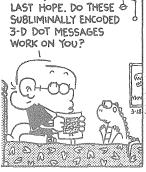




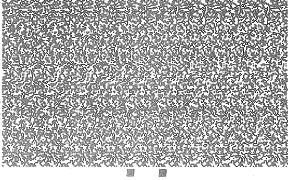








GUINCY, YOU'RE MY





March 6 Suspicious persons:

Witness observed three youths roller-blading toward the east side of Blacker House. Security responded, and escorted subjects off campus March 7

Injury.

Victim was riding a bicycle westbound as a dog ran into the bike. Victim reported injury to left leg. Security responded, information was provide for the dogs owner. Victim was referred to Huntington Memorial hospital.

Incident:

Emergency Phones # 4,5,6, and 7 activated between 9:20 pm and 9:25 pm. Security responded to the activation. Witness reported that the phones were activated by 3 males on roller blades. Subjects no longer in the area.

Off Campus Robbery.

Victim was walking on San Pasqual just west of Catalina Street when the suspect jumped from behind him. Suspect had victim face down on the ground as he demanded victims money. Suspect took his wallet and fled northbound to a early model white vehicle parked on the west side of Catalina Street. The vehicle went north on Catalina Street. Suspect was described as a Male black 20-25 years of age, 5'10", 200lbs., dark complexion. Pasadena Police was notified. Victim was not injured. March 8

Off Campus Vandalism:

Victim parked vehicle on the north side California Blvd. in the 1400 block at 11:00 am. Upon returning to his vehicle at 2:45 pm. discovered right front tire slashed.

Victim reported missing coins from office desk, valued at \$3.00. Coins were last seen on March 3, at 12:00 noon. Coins were discovered missing on March 6, at 8:00 am. Incident:

Victim stated while walking on San Pasqual and Catalina Ave. he was approached by a Male requesting money to get to the Bay area. Victim stated he did not have any money and continued to walk.

March 10

Mineral Crystal, Clamp Lamp, valued at \$60. was taken from room 357 in the Arms building. Victim last recalls seeing the items in Janu-

delighted with our food!



ary. Actual time and date of theft undetermined.

March 14 Bike Theft:

Blue ,Nishiki bike, cable and lock, valued at \$160. Victim secured bike with cable lock on the bike rack south of Booth at 10:00 am. Upon returning at 12:30 pm, discover the bike missing.

Theft:

Black bike seat, valued at \$25. Bike seat last seen on bike, March 13, at 1:00 am. near Jorgensen Lab. Discovered missing at 6:20 am.

Chemical Spill reported in Noyes Lab. room 20. Security responded. A brown substance was discovered on floor and desk. Safety notified. Substance was identified as pump oil.

Suspicious Person:

Male, white, 24, 5'10", 150 lbs. blonde hair, blue eyes, with a light complexion. Reported in the Dabney courtyard. Security responded. Subject was identified as a person previously restricted from campus. Pasadena Police notified, subject was arrested for trespassing. March 15

Suspicious Person:

Male, white, 23,5'11", 160 lbs, blond hair, brown eyes, light complexion, was reported to be in a room behind 255 S. Hill St.. Security responded and discovered subject sleeping. Subject was identified, and escorted off property. Incident:

A malfunction in an experiment caused a plastic cover to catch on fire. A cooling hose was activated inside the unit, causing water to put out the fire. Pasadena Fire department, and safety responded. No injuries reported. Vandalism:

Victim parked vehicle in the Wilson Structure on March 12, at 9:30 pm. Upon returning on March 15, at 11:10 am, discovered scratch marks on the driver's side, front panel to the driver's door and front fender. March 16

Suspicious Person:

Male, black, 18-19, 5'8", 180 lbs, black hair with a dark complexion. Subject was last seen in the area of San Pasqual and Wilson. Subject was requesting a ride home on March 15 and 16. Theft:

Red, Scott Peak, Mountain bike, valued at \$320. Victim secured bike with a chain lock to the bike rack north of the Brown's Gym on March 11 at 12:00 noon. Upon returning on March 16, at 4:00 pm, discovered bike missing.

Grand Theft Auto:

1987, 323 Mazda, white, 2 door, valued at \$2000. Victim parked vehicle in the Tournament parking lot on March 16, at 10:30 am. Upon returning at 9:15 pm, discovered vehicle missing. Stolen vehicle on Property.

Red Toyota Corolla discovered running in the Tournament Park lot at 9:15 pm. Pasadena Police identified the vehicle as stolen and removed it from Caltech property. This may be related to the grand theft auto.

Biologists Find that **Neurotrophic Factors** Can Affect Synapses in **Adult Rat Brains**

from Jay Aller

Caltech biologists have found that certain proteins in the adult rat brain can strongly enhance the strength of connections between neurons for up to an hour, an effect never before demonstrated in adult brains. This potent, long-lasting physical effect suggests to the scientists that it may play a role in the formation of memories. The study will appear in the March 17 issue of Science.

The proteins, called BDNF and NT-3 for short, belong to a class of proteins called neurotrophic factors, named for their role in nourishing nerve cells during an animal's early development and keeping nerve cells healthy in the adult animal.

Neurotrophic factors are a subject of intense interest right now because of their ability to stimulate damaged neurons to re-grow their connections both in a test tube and in animal models. Thus, they present the possibility for reversing such devastating brain disorders as Alzheimer's disease, Parkinson's disease, and Lou Gehrig's disease.

But the Caltech biologists, graduate student Hyejin Kang and Assistant Professor of Biology Erin Schuman, are looking at neurotrophic factors from a slightly different

"These proteins are usually studied by scientists interested in a developing animal, where they promote structural changes and determine which neurons survive and which will die," Schuman said. "But recently people have realized that these proteins are still active in the adult animal. And we've shown for the first time that they can have an effect on synaptic transmission in the central nervous system."

Kang and Schuman conducted their studies using slices of hippocampus from the brains of young adult rats. The hippocampus is a brain structure known to be important for memory formation, and that is also a part of the limbic system, which is associated with emotion and homeostasis-regulation of the body.

They found that bathing these

SEE "NEUROTROPHIC" PAGE 11

Caltech SEDS to Experiment in Space

Due to some last-minute changes to the March 10 California Tech, the following article was accidentally cut off. The editors regret any confusion.

by Ben McCall

Members of the Caltech Students for the Exploration and Development of Space (SEDS) have been working for over three years on the development of a Space Shuttle experiment to study gamma-ray bursts. This July 20th, their efforts will be paid off as they watch the Space Shuttle Endeavor carry their experiment into low earth orbit. Their experiment is called GAMCIT

(Gamma-ray Astrophysics Mission at cal flash is seen (this will be the first

The experiment, originally conceived in conjunction with Dr. John Grunsfeld (formerly a Senior Research Fellow at Caltech, recently aboard Endeavor), consists of a gamma-ray detector, an X-ray detector, and a Nikon F4s camera. While the Shuttle is in orbit, GAMCIT will monitor the gamma-ray background, looking for gamma-ray bursts. When a burst is detected, GAMCIT will store spectral and temporal data from 2 keV to 2 MeV and will trigger the Nikon camera to take pictures in search of an optical flash. If an opti-

simultaneous search for gamma-ray bursts and optical flashes), GAMCIT will have taken a major step towards solving the gamma-ray burst mystery, which has eluded astrophysicists for a quarter century.

GAMCIT is in the final construction stages, and must be delivered to NASA by April 24th. SEDS is currently looking for qualified machinists who can help machine some of GAMCIT's structural components. If you are interested and available during finals or spring break, please contact Ben McCall at x2902 or bjmccall@cco.



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ADAM VILLANI: MEDIA GUY

by Adam Villani

The Oscars

As expected, on March 27th Forrest Gump picked up six Academy Awards, including Best Picture, Best Director, and Best Actor. For the third straight year, a film from Miramax (Pulp Fiction) picked up the Consolation Prize (AKA Best Original Screenplay). Aside from the tie in the Live-Action Short category, probably the most surprising thing about this year's Oscars was how well the awards for the major categories jibed with the predictions; there were no major upsets like Quentin Tarantino winning Best Director or The Shawshank Redemption snagging Best Adapted Screenplay from the Gump machine. While I would have preferred seeing Pulp Fiction or Quiz Show take Best Picture, I'm not going to join the hip Gump-bashing bandwagon. Forrest Gump was a well-made, highly entertaining film with ingenious special effects that gave middle-class and middleaged baby boomers exactly what they wanted. There are a number of different ways to interpret what the film's "message" is, and while I may not agree with the sentiments in all of them, none of them spell doom for the world as we know it. If it hadn't been so successful, many of the anti-Gumpers would probably be pushing it as an original, quirky, satirical fantasy. On an interesting note, the only Foreign Film nominee that hasn't yet been released in Los Angeles, Burnt by the Sun, gave Russia its first post-USSR winner. The director's 1992 Oscar nominee Close to Eden was a fascinating and bizarre exploration of modern values creeping into the lives of Mongol nomads, and Burnt by the Sun promises to be a much-anticipated followup.

The telecast itself, hosted by David Letterman, was hilarious if, like me, you're a Letterman fan, and probably murky and unprofessional if you don't like his irreverent yet apolitical sarcasm. Neither Cher nor of showed up, so the closest thing to a fashion gaffe was Tim Robbins' blue sparkletux. And while there weren't any unplanned wacky hijinx like Sacheen Littlefeather accepting Marlon Brando's award or Richard Gere trying to use telepathy to contact Tibetans to make the show more fun, Letterman's planned hijinx kept the show rolling just fine. The Antonioni retrospective was particularly moving, and was certainly the best-edited set of clips I've seen on the Oscars in a long time.

Svankmajer-o-Rama

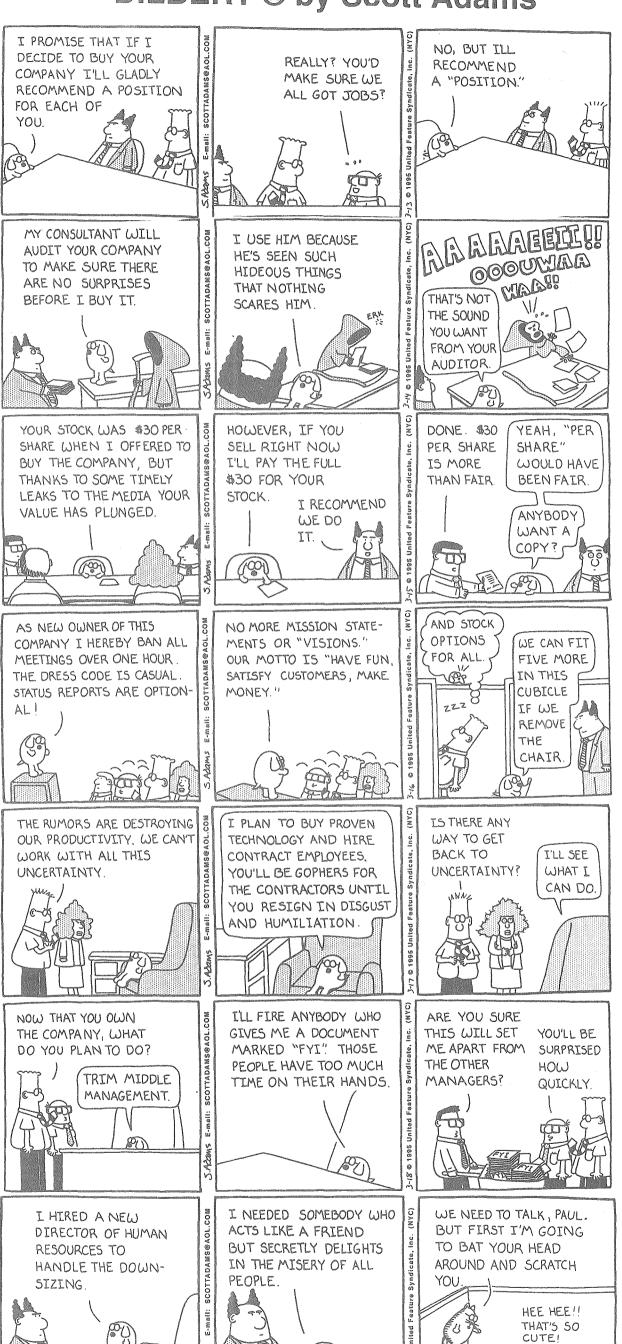
In preparation for today's opening of the one-week run of Czech animator Jan Svankmajer's version of Faust, Landmark's Nuart theatre ran a retrospective of Svankmajer's surreal creations Wednesday and Thursday, featuring Alice (1988), his full-length take on Alice's Adventures in Wonderland, three of his short films, a short documentary on the artist and his work, and The Cabinet of Ian Svankmajer (1984), an homage by the Brothers Quay. Svankmajer, a former puppeteer, animates objects, ranging from clay creations to ordinary household objects. He is an acknowledged surrealist, and as such his work is full of Freudian imagery and has a nightmarish quality to it; animated beef tongues are common and Alice's White Rabbit is an actual dead stuffed rabbit full of sawdust and fully mobile. The Brothers Quay work was markedly inferior; a pointless, pathetic imitation, it seemed to be included in the package just to make Svankmajer's films look better by comparison. Faust was the Czech Republic's official entry for the Best Foreign Language Film Oscar and was a competitor at Cannes '94; if the advance word on this movie is accurate, this could be the most fascinating film of the Spring.

Lots of Movie Reviews

Circle of Friends. This new romantic comedy from Savoy Pictures doesn't offer anything new, but the story and characters we're presented with in 1950's Ireland are undeniably charming, mostly due to bright newcomer Minnie Driver as our film's protagonist, a plain Jane falling for the most handsome boy at college (Chris O'Donnell, from Scent of a Woman) who makes for a very charismatic presence on the screen. The villains in this film are rather obvious, but it's likable nonetheless.

Blue Sky: Jessica Lange's Best Actress Oscar was quite well-deserved, playing the manic-depressive wife of an Army major in the early 60's (Tommy Lee Jones). Jones is also excellent, toned down from his usual scenery-chewing self of late, as SEE MEDIA GUY, PAGE 9

DILBERT® by Scott Adams



DILBERT® by Scott Adams

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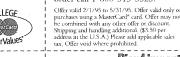
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April 7, 1995

MEDIA GUY

FROM PAGE 7

her husband trying to keep the family together and trying to get his military to recognize the dangers of nuclear testing. Even the music and the characters of the children are top-notch. As forces from outside work against them, Lange and Jones are drawn closer together. Unfortunately, as things escalate, the writers write themselves into a corner that they don't write themselves out of in a satisfactory manner. Overall the film is an overlooked piece that is thankfully getting some publicity and a limited release due to the Oscar win. The Wild Bunch (1969): This rerelease of Sam Peckinpah's violent and gritty Western has several scenes restored from the original release and is showing at the Beverly Center Cineplex. It's an exhilirating promoter of Guy Values, i.e. loyalty, bravery, getting whores in Mexico, and most of all, killin' people. Our heroes, led by William Holden and Ernest Borgnine, may be bad guys, but they're at least better than the scum hunting them in the name of the law. Certainly not a savory film, but the rapid-fire editing and extraordinary cinematography are impossible to ignore. John Woo (The Killer) and Quentin Tarantino (Reservoir Dogs) were undoubtedly influenced by this movie.

The Profound Desire of the Gods (1968): This 3-hour Japanese film, part of the Shohei Imamura retrospective that was showing at the Monica in March, is not as emotionally compelling as his brilliant 1983 Cannes winner The Ballad of Narayama, but is nevertheless a fascinating and curious film, that, like Narayama, deals with an isolated village that has developed its own religion and some truly shocking customs to maintain order, definitely a microcosm commenting on Japanese society as a whole. Imamura is not afraid to show the barbarism just slightly underneath civilization's skin.

Legends of the Fall: This sweeping epic is predictable and flawed, but has some gorgeous Oscar-winning cinematography. I admit that I'm a sucker for Westerns, and this movie has an emotional appeal that reaches beyond the rickety script and melodrama.

Interview with the Vampire: Yeah, I know it's old but I just got around to seeing it over Spring Break. This film mainly exists to be stylish and sensual, and there it succeeds quite well. The story of the struggles of a human turned vampire is intriguing, even if plausibility is stretched pretty far (I can't believe in a hundred years of living in New Orleans nobody realized there were vampires in town). The Art Direction nomination was well-deserved.

12

Games & Puzzles

by Wei-Hwa Huang

Logic Puzzle

Number	25	27	29	31	33	35
Color				4 00 MEETING AND		Brown
First Name			AND THE REPORT OF THE PROPERTY		The state of the s	TOTAL THE STATE OF
Last Name				Chernoff		
Favorite Fruit		PARTE TO POST PORTE E CONTR. EL CONT	Addressing and a program of the second secon			**************************************
Occupation	and the second s	grand govern provide a company of the company of th	And the Control of th	AND		
Pastime		Additional photography of the factor of the contract of the co		AND THE RESIDENCE OF THE PROPERTY OF THE PROPE		

This logic puzzle was generated in part by a computer shareware game called Sherlock, written by Everett Kaser. I strongly urge all of you who like this sort of puzzle to get the game and register it. Finger gp@tech for more details. I added the storyline to the puzzle, though. Use the diagram to help you solve the puzzle. Don't forget our weekly \$10 contest!

There are six houses on one side of a street, numbered from 25 to 35. They are inhabited by six beautiful bachelorettes. Please identify their full names, their house color and number, their respective occupations, and their favorite pastime and fruit by these 30 clues:

- The camp counselor lives next to Miss Darwin.
- Miss Freud has cravings for coconut shavings.
- Ingrid is happy that she doesn't live next door to the concert singer.
- The banana lover put some slices on her cereal this morn-
- Miss Einstein gets wakened by the policewoman next door every night.
- The only person on the Internet is Miss Boole.
- The bridge player lives next door to the blueberry eater.
- The apple cruncher likes to stare at the red house next door a lot.
- 9. Jasmine doesn't play bridge, but

- her neighbor does.
- 10. The orderly lives in a disorderly green house.
- 11. Miss Boole wishes she owned that green house next door.
- 12. One house recently got painted from black to white.
- 13. The crossword puzzle connoisseur only uses Simon & Schuster books for puzzling purposes. 14. The bridge player and the
- canasta player live next door to each other.
- 15. Tina works in an accounting firm.
- Bunny and Ingrid don't live in adjacent houses.
- The USENET reader has mentioned her neighbor Miss Abel in her posts.
- 18. Miss Abel has a lower house number than the chess player.
- 19. The chess player is Miss Darwin.
- 20. The woman who lives between the blue house and Uma is not Ingrid.
- 21. The yellow house is next door to the kiwifruit eater.
- 22. Miss Boole can see a pear tree in her neighbor's yard.
- 23. When Miss Chernoff looks out her east window, she can sometimes see a canasta game being played in the house next to her neighbor's apple tree.
- 24. The jigsaw puzzle player is a stewardress.
- 25. The red house is next door to the kiwifruit-eater.
- 26. Jasmine finds it hard to get fresh coconuts every day as she would
- 27. The person who send e-mail has no love for chess, unlike her next-door neighbor.
- 28. The woman who lives between Gwendolyn and the blueberry lover is not named Chernoff.
- 29. The accountant lives next to the internet freak.
- 30. Miss Chernoff in number 31 wishes she lived in that brown house so she could have the highest number on the street.

Send your correct answer to gp@tech by 8:00pm on Tuesday, April 11. The winner will be chosen by random draw among those who have the correct answer. Only one entry per person, please. The winner will win a nice, autographed \$10 check from one of the editors.

"All Alliterative" Crossword

edited by Wei-Hwa Huang

13

Across

- Worn wear
- Links lace
- Mum's man Symmetric state? 12.
- 13. Chinese cuisine?
- 14. Domestic and docile 15. Tunic type
- 16. Bert buddy
- 17. Baited breath 18. Sigmund's Studies
- 20. Dillion dude
- 22. Square straight
- Short show
- Rue remorsely Imagine insanely
- Guidonian G-note
- 32. Stiff state
- 34. Power pulse
- 35. Haughty holding
- Panama passage Wake-up whine
- 40. Flowing fabrics
- 42. Iron or iridium
- 44. Achieved ago 45. Barrel bungs
- 47. Seductive singers
- 49. Show the sights 50. Volcano vomit
- 51. Halley's herd
- 54. Military marchers
- 58. Adjoin above
- 59. Complete coverage
- 61. Teutonic three
- 62. Abundant amount
- 64. "Golly gee!"
- 65. Marvin or Majors
- 66. Root of riches
- 67. Player part

17 15 16 20 21 18 19 22 24 25 26 28 29 30 31 32 33 34 35 36 37 38 39 42 40 41 43 44 45 46 47 48 50 55 56 57 51 52 53 54 59 60 58 63 64 62 67 65 66

- 63. Escape enemies

Down

- Germanic grandsire 1.
- Ship salutation 2.
- Outfits the outfit 3.
- 4. Short seaman
- 5. Sacred shroud
- "Princess" Pavlovna

- Bangkok boarder
- Furtive form
- Hathaway's House 10. Andy's amigo
- 11. Cribbage counters
- 13. "Chicken" computer game 14. Fit and fume
- 19. Almost always 21. Eliminates entirely
- 23. Mubarak's master
- 24. Back butts 25. Ness the nabber
- 26. Gorgeous Greta
- Sups superbly
- Wore by weather Repeats...repeats...
- 30. Fixes fabrics
- Dungeons & Dragons dude
- Sets of six singers
- French finder 41. Notice nits
- 43. Swedish singer
- 46. Silver sheen 48. Ark attacker?
- 50. Back burdens
- 51. Shout soundly
- 52. Inky instrument Silent simpleton?
- 54. Deer dear
- 55. Accordingly, also
- 56. Actually authentic
- 57. Lateral loin?
- 60. Embryo encasers

SPORTS

Tracksters Defend Tech Invitational

By Dan Kleiman

While most of Caltech relaxed over its spring break, the Caltech track team returned to Pasadena early to get some work in at the Caltech Invitational. The work proved to be slight challenge for the Beavers as they won the six school meet to run their record to 25-5.

The team was led by the field athletes, who earned two of Caltech's four individual victories. Leading the way was junior Rob Nostrant, who won the high jump and finished second in the triple jump behind teammate Adrian Hightower.

The other Beaver gold-medal efforts were turned in by the middle-distance runners. Senior Ron Stieger dominated the field in the 400, winning by over two seconds in 52.11. Caltech's 4x400 relay team showed

the team's depth by powering to an easy ten points.

Caltech's distance runners contributed their share to the team win through their performances. Senior Schuyler Cullen took sixth place in the 1500 in spite of struggling with an injury over break. Steeplechaser Chris Cary and 10K runner Harmesh Lad took a pair of second places in their events.

Next up for the track team is a conference matchup this afternoon against Cal Lutheran, La Verne, and Occidental. Solid performances from last week's heroes, combined with the help of others who returned late or sick from vacation will put the Beavers into position to add three more victories to their impressive record. The conference season ends in four weeks at the league championships.

Caltech Volleyball Team 4-2 Over Spring Break

by Rich Chin

The Caltech Men's Volleyball Club team worked hard over the month of March as its schedule included six matches over the period of three weeks. On March 7, the team traveled to Claremont McKenna to meet its volleyball squad and returned triumphant. From the previous meeting between the two at the Pomona tournament, Caltech knew exactly how to shut down the Claremont offense, and proceeded to do just that. With strong contributions from all members of the team, the match went quickly as Caltech dispatched its opponents in straight sets.

On the 10th, Caltech played host to Cal Poly Pomona. This match turned out to be a five-game thriller lasting two hours and twenty minutes. Caltech started slowly in the first game, giving CPP a 9-3 lead. After a time-out to regroup and refocus, Caltech came back with smart serving, good blocking, and a scrappy defense to score 12 unanswered points and win it, 15-9. However, CPP showed its mettle in games two and three, as both were intense sideout battles which it won 15-13, 15-11. Caltech found its rhythm in game four with the unstoppable Andreas Masuhr. Coach Aaron Kiely later said, "I don't know how to stop [Masuhr's] attack. Fortunately, neither do our opponents." Not that they did not try. CPP re-arranged its front line to stack their best blockers against him, and even tried benching their best passer just to put up a taller block. Nothing helped as Masuhr racked up kill after kill and led Caltech to a 15-4 blowout of the fourth game. The fifth game was another see-saw battle, but with Masuhr still hot and the team determined to win, Caltech was able to pull ahead to take it, 15-12.

On Monday the 13th, Caltech went to UC Riverside. Personnel problems presented a challenge for the team, as it had to play without three of its starters, reducing the average height by more than two inches. However, inconsistency and poor ball control proved to be much more of a factor as Caltech took an ugly loss, 16-14, 7-15, 6-15, 7-15.

Mount San Antonio Junior College again invited the Caltech squad out for a challenge on the 15th. This time, instead of playing their club team, Caltech was to play their varsity squad. Though the faces were different and the hitting was harder, the results were the same. Outside hitter Andy Berkin continued to demonstrate his command of the finesse game as he tooled the block without mercy. Masuhr presented a different technique, going over the block for several kills. Jack Prater showed yet another philosophy: swing hard no matter what. Ken Wiberg and Stuart Demcak put up imposing blocks in the middle, and defensive specialist Rich Chin again showed his mastery of the serve, picking apart Mount SAC's passing game. The contrast between the brash Mount SAC team and the focused Caltech team was perhaps best displayed during a rally in the third game: Mount SAC's middle hitter faked a quick hit, drawing two Caltech blockers and eliciting laughter from the Mount SAC back row as they anticipated a kill by the second attacker. But the play isn't over until the ball hits the ground, and it soon did as Mark Lonergan stuffed the Mount SAC hitter for a point, giving Caltech the last laugh. Caltech won in four games, 15-4, 9-15, 15-12, 15-4.

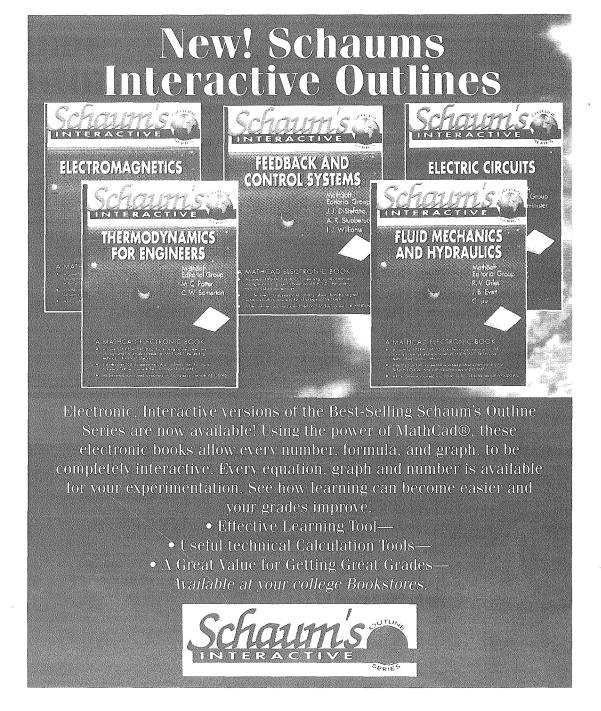
Caltech did not play a match again until a week later, on the 22nd, at Azusa Pacific University. Missing star hitter Masuhr and setter Chad Edwards, and plagued by recurrent injuries, the team lost an ugly match in four games, 11-15, 15-11, 7-15, 7-15. Lonergan was a bright spot, hitting well from both the front and back rows. Brendan McKenney also came alive, racking up his kill count. However, a sluggish defense and the inability to establish a good passing rhythm spelled doom for the Caltech squad.

Finally, on Friday the 24th, Caltech hosted Pomona-Pitzer in a re-match of Caltech's season opener. Avenging its close loss from that match, Caltech won in an equally tight five-game marathon, 15-12, 5-15, 13-15, 21-19, 15-8. Lonergan continued to dominate at the net, and was an unstoppable weapon in the Caltech offense. The passing improved dramatically Wednesday's loss, allowing Edwards to pick and choose between his hitting options. Perkel and Chin helped score points in bursts as their serves danced through the air, catching the Pomona passers off-guard. But it was Caltech's focused confidence that allowed it to triumph in the grueling fourth game and demoralize the Pomona squad into giving up a crucial five straight points in the fifth to Perkel's serve.

This Friday, Caltech plays PCC at PCC. It is sure to be a fast-paced, hard-hitting, action-packed match as Caltech is out to avenge its early-season loss. Come out and support the team at its last match near home!







FROM PAGE 6

hippocampus neurons in a solution containing tiny amounts of either of the two neurotrophic factors caused a dramatic and rapid increase in the size of the electric potential of the postsynaptic cells-those cells on the receiving end of signals transmitted from one cell across a synapse to a second cell. The researchers believe this change is due to a direct and persistent strengthening of transmission across synapses.

The scientists also looked at the interaction between changes induced by the neurotrophic factors-BDNF and NT-3, and long term potentiation, a different type of long-lasting strengthening of the connections between neurons. They found that neither interfered significantly with the other, which suggests that at least two independent mechanisms exist for boosting synaptic strength.

In fact, the two mechanisms may work together, with the synaptic enhancement reported here contributing to later phases of long term potentiation. The study suggests that one action of neurotrophic factors may be to sharply alter synaptic strength in the period of time before longer-term structural changes occur in the brain.

Or as Schuman put it simply, "these proteins might actually be involved in encoding memories in brains."

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SYMPOSIUM

FROM PAGE 1

research and the public. Nash, who writes the science cover stories for Time, will bring more than 25 years of experience to the panel. Ward, who served as executive producer of the CBS Evening News for several years, will offer his broadcast news savvy to the mix. Finally, Bazell will give us an inside look at how stories

are selected and put together for national network news broadcasts."

Benavidez concludes, "This is a rare chance to see how top-notch professionals think about the news and make decisions about coverage."

Registration for the symposium will start at 8:30 a.m., with welcoming remarks at 9:15 a.m. by Provost Steven Koonin. After introductions, each panelist will make an opening statement; then the group will recount successful and unsuccessful interactions between scientists and members of the news media. The discussion will then be opened to audience participation and questions. The morning session will end at noon.

According to President Tom Everhart, who will introduce keynote speaker Bazell, it is especially appropriate that Caltech host this symposium. "Some members of the general public see science as contributing to social problems, and for that reason, do not support federal funding for

science. We think it's both in our interest as an educational institution and in the public interest to help citizens see science and technology as making a valuable contribution to our society. This symposium will help build positive attitudes toward research and science. It's part of our effort to say we believe science can be part of the solution."

Pasanena L'omputer



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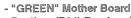
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Notices

♥The Deans are interested in hearing from you if you would like to attend New Student Orientation Camp as a UCC-at-Large and have not already been selected by your House. Camp is scheduled for Wednesday through Friday, September 20th through 22nd, 1995. The Deans are accepting nominations for these seven Upperclass Camp Counselors-at-Large positions through April 17th. They will also need some additional student participants to perform special functions such as audio visual specialists, kitchen coordinator, and photographer. If you are interested, please submit a brief written description of your unique qualifications as a UCC-at-Large and/or Deans' Helper to the Deans' Office, 102 Parsons-Gates, by Monday, April 17th.

♥Sign-ups for the IHC Secretary and for Student-Faculty Committees have been posted on the Winnett wall. Interview times have yet to be determined.

♥Donate Blood! A two-day blood drive will be held in the Winnett Student Lounge. On April 11th, the hours will be from 9:15 a.m. to 2:30 p.m., and from 12:15 p.m. to 5:30 p.m. on April 12th Please contact Vilia Zmuidzinas at extension 6001 for an appointment, although walk-ins are welcome.

♥Guitar classes are now being offered for the Spring term for all levels of guitar players. Held in the Student Activities Center Room 1 each Tuesday, Darryl Denning will offer beginning lessons from 4:30-5:30 p.m., intermediate from 3:00-4:00 p.m., and advance lessons from 5:30-6:30 p.m. For more information, please call (213) 465-0881.

The Caltech Y's Second Annual Egg Hunt will be held all day on Friday. April 14th in the Winnett Quad. Eggs will be distributed throughout the campus, and remember there's an Easter surprise in each one!

♥The Caltech Bookstore will be holding its annual Spring Faire Sidewalk Sale from April 12th through the 14th from 10:00 a.m. to 4:00 p.m.

All Ye Net Surfers: The J. Paul Getty Museum now offers internet access for art-historic information, including nearly 50,000 records from everything from the Avery Index to the Architectural Periodicals to the International Repertoire of the Literature of Arts. The Getty Museum's web site is: http://www.ahip.getty.edu/ahip/home.html.

The Totem is now accepting submissions! All undergraduates, graduates, and faculty are welcome to submit poems, short stories, essays, photos, art, music, or any original compositions. The Totem is also looking for a creative cover design for this year's volume. Designs should be drawn in ink and be 8 1/2" x 11". Please limit designs to two colors. The winner will receive \$25 and a free, autographed copy of The Totem!! The deadline for both talent searches is April

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Announcements Announcements

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14th. Send all submissions either by e-mail (totem@tech.caltech.edu), mail (MSC 990), or by foot (Page, room 132).

Sharyn Slavin, Assistant Vice President for Student Affairs, and Stan Borodinsky, Student Affairs Administrator, invite you to stop by the Coffeehouse on Friday afternoons from 2 to 4 p.m. to talk with hem. All students are welcome, and free drinks will be available. Please drop by and get to know Sharyn and Stan. They will be happy to answer questions or provide assistance.

The Caltech Muslim Student Association will hold Muslim Friday Prayers weekly in the Y-lounge at 12:15 p.m.

"Take a Break and Spend Some Time with Friends." The office of the International Student Programs would like to invite you to our Open House for coffee, tea and conversation. Every Wednesday from 4:00 p.m. - 5:30 p.m. at the office of International Student Programs, Olive Walk. Open to the entire Caltech community.

From the Counseling Center

The Gay, Lesbian and Bisexual Support Group meets the first and third Tuesdays of each month at 7:30 p.m. in the Health Center Lounge. This confidential meeting is open to all Caltech community members looking for a supportive context in which to address questions and concerns about sexual orientation – including coming out, being out, self-discovery, coping with families... We begin with a focus topic but move to whatever is feeling most relevant to the group that night. Refreshments are served. For information, please call 395-8331.

Coming Events

♥Robin Williams narrates the Armchair Adventure "Amedeus—A Traveler in Italy" on Friday, April 21st at 8 p.m. at the Beckman Auditorium. Admission prices range from \$8.00 to \$6.50 through the Caltech ticket Office (x4652), with a \$2.00 discount to Caltech students and faculty, and half price TECHTIX on Friday, April 22nd.

♥The New Vic Theatre of London presents a satirical version of *The Hunchback of Notre Dame* on Saturday, April 22nd at 8 p.m. in the Beckman Auditorium. Ticket prices will range from \$25.00 to \$31.00, with a \$2.00 Caltech discount and half price tickets on April 22nd.

PROBERT Haag. pianist, will perform a Paco A. Lagerstrom Chamber Music Concert featuring Beethoven's Sonatas Op. 109, 110, and 111 on Sunday, April 23rd at 3:30 p.m. in the Dabney Lounge. Admission is free.

♥The Capitol Steps will perform on Friday and Saturday, April 28th and 29th, at 8 p.m. in the Beckman Auditorium. A group of current and former Congressional staffers who first began performing their musical satire as entertainment for a Capitol Hill office party, The Capitol Steps have recorded a number of albums including "Workin' Nine to Ten," "Sheik, Rattle and Roll" and "The Joy of Sax." Ticket will be priced from \$25.00 to \$31.00, with \$8.00 tickets being sold one-half hour before the performance subject to availability.

♥The Coleman Chamber Ensemble Competition Winners Concert will be held in Sunday, April 30th at 3:30 p.m. in the Ramo Auditorium. Winners from four categories of the competition will perform. Fifty free tickets to this concert will be available to Caltech Students with I.D. from the Caltech ticket Office (x4652). Tickets are regularly priced at \$10.00 a piece.

WThe Caltech Y presents The Steed Woodwind Quintet as the next performing group in the Caltech Y noon Concert Series on Friday, April 7th at 12 noon in the Winnett Quad. The Y and the Caltech Community Service/Volunteer Program will also be hosting "Cookies on the Walk" at 12 noon on the Olive Walk

♥The Caltech Jazz Band will once again perform at the world famous jazz club, the Baked Potato in Old town Pasadena on Sunday, April 23rd at 8:30 p.m. The last two years the band played to a sold out audience, so reservations are recommended. General admission is \$8, students only \$4.

The Caltech-Occidental Symphony Orchestra will be holding a concert in the Ramo Auditorium on Tuesday, April 11th. Under the direction of Allen Robert Gross, the orchestra will perform Humperdink's Overture to "Hansel and Gretel," Katherine Hoover's "Eleni: A Greek Tragedy" and Berlioz' Harold in Italy. Kazi Pitelka will be featured violist in this free concert.

This concert will be followed by a joint concert of the Caltech-Occidental Concert Band and the USC Wind Ensemble on April 12th at 8:00 p.m. at Thorne Hall on the Occidental College campus. This free concert will feature music by Gordon Jacob, Russell Peck, J.S. Bach, and Percy Grainger.

The Friends of Caltech Libraries (FOCAL) Book Drive will be conducted throughout the month of April. Any and all kinds of books, records, and tapes are being sought in preparation for the Friends' Jumbo "Pre-Owned" Book Sale (an annual fundraiser sponsored by the group), which will be held this year on Friday, May 5th. Please bring your donations to Millikan Library (first floor) during weekday business hours.

Talks, Lectures, and Seminars

♥Dr. Rosa Haritos, Andrew W. Mellon Fellow of the Program in History and Philosophy of Science at Stanford University, will hold a Seminar on Science, Ethics, and Public Policy entitled "Villified or Vindicated: The Gallo Misconduct Case" on Thursday, April 13th at 4:00 p.m. in the Judy Library.

Club Announcements

♥Learn what it takes to be a success in today's entrepreneurial world! The Entrepreneur Club invites you to join us with Mr. Chuck Cole to find out what the "Characteristics of a Successful Entrepreneur" are. Mr. Cole is a venture capitalist and has been involved with numerous startups. He is founder and President of Cole Consultants for the past fifteen years. The club hopes to see you on Thursday, April 13th, at 4:30 p.m. in Baxter Lecture Hall for this seminar. Refreshments will be served.

♥The Caltech Ballroom Dance Club offers free beginning classes to all. Beginning classes are Wednesdays at 7:00 p.m., usually in Winnett Lounge. This week, April 12th, the location is yet to be determined. People are welcome to join the classes any time; no experience is required. Students are welcome to attend with or without a partner. Classes in the near future will be learning the east coast swing.

The Caltech Ballroom Dance Club Friday beginning and intermediate west coast swing classes continue this Friday. April 7th in Dabney Lounge. Intermediate class is from 7:00 to 8:20 p.m., and beginning class is from 8:30 to 9:45 p.m. The classes will be taught by professional instructor Enio Cordoba. Note: it's not too late to register! No experience needed for beginning class: six months prior dance experience recommended for the intermediate class. No partner is required. Register at the door. For more information about either course, please contact Bob Herman at either rherman@arms.gps.caltech.edu, or 393-4720.

Caltech Shaolin Kung-Fu Club: learn & develop usage of classical kung-fu techniques, Chinese weapons, qi-gong, iron body training, meditation, proper stretching & holistic health practices. For further information, please contact Sifu Gene Black at (818) 359-1270, or Professor Steve Wiggins at 395-4127.

Internships and Competitions

VIBM Research Division solicits proposals from students interested in working on computational Science Projects each summer starting this year. Prospective candidates should be students within one year of their Ph.D. and beyond. The projects can be in any of a wide range of areas such as Astrophysics, Biology, Chemistry, Computer Science, Engineering, geology, Mathematics and Physics. The deadline for applications is May 5th for the summer of 1995. Apply through e-mail to epytte@watson.ibm.com.

WThe Mathematics Department is pleased to announce two categories of prizes offered to Caltech undergraduates: the E.T. Bell Undergraduate Mathematics Research prize of \$500 to a junior or senior for the best original mathematics paper, and The Morgan Ward Competition for freshmen and/or sophomores. \$75 will be awarded for the two to four best entries of a mathematical problem with a solution or significant contribution toward a solution. Complete details will be mailed and are also available in the mathematics department at 253 Sloan

♥Each summer a student-run internship placement program at the University of California at Berkeley offers students at other universities the opportunity to take advantage of housing and travel accommodations in Washington, D.C. A summer internship in Washington, D.C. is an invaluable experience. "Cal in the Capital" Internship Program encourages students who are interested in working and living in the nation's capital for the summer to contact "Cal in the Capital" at (510) 642-2920 for further information.

The Literature faculty is pleased to announce the 49th Annual McKinney Competition. The Mary A. Earl McKinney Prize is awarded each year for excellence in writing. Only full-time students officially registered at Caltech as undergraduates are eligible to enter the competition. This year prizes will be given in three categories: poetry, prose fiction, and non-fiction essays. All submissions must be typewritten and double-spaced. In the poetry category, entrants may submit up to three poems. Submissions of prose fiction should not exceed 12,000 words. Essays may be ones prepared for a humanities class or any good piece of original writing on a topic relevant to the humanities. The prizes in each category will be \$300. Each student is entitled to only one entry in each category. All contestants must submit their work to Professor Jenijoy La Belle, Division of the Humanities and Social Sciences, 101-40, by no later than May 4, 1995. No entries will be returned. Each category will be judged by a committee from the Literature faculty. Essays will be judged on the quality of thought and the effectiveness of the writing. Winners will be announced the last week of May, and the names of the winners will appear in the commencement program. The Committee may divide the award in each category in case of more than one outstanding submission. Previous winners in any one category are not eligible for the competition in that category. If you have any questions, contact Prof. La Belle, extension 3605, or Barbara DiPalma, extenThe Beckman Internship will be available for the summer of 1995. The internship, supported by friends of Arnold Beckman, will pay a stipend of \$3600. It allows a selected intern to spend the summer working in the office of a politician and to set the inside process of government. The intern is expected to make arrangements with the appropriate political persons. It is open to any undergraduate who intends to be a Caltech student next year. If interested, submit a brief proposal describing where and how you would use the stipend, to the Deans' Office, 102 Parsons-Gates, by Monday, April 10th, 1995.

Fellowships and Scholarships

The Financial Aid Office has applications and/or information on the following and additional scholarships. All qualified students are encouraged to apply. The Financial Aid Office is located at 515 S. Wilson, second floor.

The Sunkyong Group of Korea presents its Third Annual Essay Contest for undergraduate and graduate students in the areas of business, government/law, science, and journalism. There will be four \$500 awards, four \$1,000 awards, and four \$2,500 awards. The \$2,500 award winners will also receive a one-week trip to Korea. Past winners of the essay contest are not eligible to compete. Guidelines for the essay contest are available at the Financial Aid Office. All contest entries must be postmarked no later than April 7, 1995.

The Chinese-American Educational Foundation is offering scholarships to graduate and undergraduate students of Chinese descent. All applicants must be full-time students in 1995-96, and have at least a 3.0 GPA, and undergraduates must have completed at least one year of study. Completed applications must be received by April 10, 1995.

The Jewish Community Foundation and The Jewish Vocational Service have scholarship applications available now for several different scholarships under their administration. The scholarships are designed to provide financial assistance to Jewish students who are legal residents of Los Angeles County, enrolled full-time, and are able to document significant financial need. Application forms may be obtained from Jewish Vocational Service until March 1, 1995. Write to: Room 303, 6505 Wilshire Blvd., Los Angeles, CA 90048, or call (213) 653-2858. Completed applications are due April 13, 1995.

The American Women's Club in Sweden announces that a travel grant will be awarded for study and research in Sweden. The amount of the grant will be equivalent to the cost of an APEX round-trip ticket between New York and Stockholm. To qualify you must be: an American citizen; female, age 18 or over; accepted for a period of study or research at a Swedish educational institution or agency; and show evidence of need. The completed application and all supporting documents are due no later than April 15, 1995.

The American Electroplaters and Surface Finishers Society is offering scholarships to upper class undergraduate and graduate students who are interested in careers in the surface finishing field. This includes those majoring in the fields of Chemistry, Chemical Engineering, Environmental Engineering, Materials Science, Materials Engineering, Metallurgy, or Metallurgical Engineering. Applications and all requested documents must be postmarked by April 15, 1995.

The John Gyles Education Fund is again this yea offering financial assistance to students in the United States. Canadian or American citizenship is a requirement. Awards are available for all areas of postsecondary study. A minimum GPA of 2.7 is required. Criteria other than strictly academic ability and financial need are considered in the selection process, Selected students will receive up to \$2,500. Deadlines for 1995 are April 15th, June 15th, and November 30th. Applications must be mailed by those dates. Students may receive applications by sending their request, along with a self-addressed, stamped (US 32 cent) No. 10 envelope to: The John Gyles Education Fund, Attention: R. James Cougle, Administrator, P.O. Box 4808, 712 Riverside Dr., Fredericton, New Brunswick, Canada E3B 5G4.

The meeting for Fellowships and Scholarships has been moved from March 24th to April 17th due to a conflict with spring break. All Juniors and Seniors are highly encouraged to attend this meeting at 12:00 noon in Winnett Club Room 1; Fellowships such as the NSF, Marshall, Rhodes, Hertz, and Fulbright will be discussed, and a pizza lunch will follow. If you would like to attend, please e-mail your name, class, and major area of study to: Lauren_Stolper@starbase1. callech.edu by April 13th. If you have any questions, please call x2150 or e-mail to the address above.

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