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THE CALIFORNIA TECH

VOLUME XCVIII, NUMBER 17

PASADENA, CALIFORNIA

FRIDAY, FEBRUARY 14, 1997

ASCIT elections prove close for two races

BY ERIK STREED

Two close ties were the result of ASCIT elections last Monday. In addition, the ASCIT Bylaw change passed by a wide 81.1% margin. The ASCIT bylaws now allow for a silent observer to accompany a defendant to all Board of Control proceedures. Several candidates were locked in filerce competition with No, the standard bearer of the Caltech Apathy Society. Reaction to the election was mixed, a random frosh spotted in Fileming responded "Eh?" when asked about the elections.

Official ASCIT election results are being withheld untill the vote on the tied races for IHC Chair and ASCIT Athletics Manager are held. Elections Chairman Mic Westcoat cited ASCIT bylaws and the fact that he was tired at the reasons behind this delay.

The current California Tech editors defeated hearsh competition in an ever fiesty NIO. Long live the Tech Editors. They're all fine editors. Don't take unfair advantage of your local neighborhood Tech Editor. Write for The Tech and stop this blatant conflict of interest.

Kiran Shekar, the newly elected ASCIT Upperclassman Director at Large, pledged in a brief interview Thursday with The Tech that he would get the ASCIT Van and use it for moral building purposes. In addition, if you want an ASCIT copier account, please feal free to ask him. As to the duties he would delegate to the Freshman Director at Large, Kiran responded with no comment.

The ASCIT Academic Director, Mike Westover, one of the many undergraduates running against No, was pleased with the results. Previously worried about name confusion between himself and Mic Westcoat, he was "Very glad I beat No."

Kara Swedlow, former

Freshman at Large, won the race for ASCIT Secretary against Nasim Afsarmanesh. When asked Thursday afternoon Kara promised to turn in the ASCIT minutes to The Tech so they can be published in a timely manner. In addition she said that she would get ASCIT elections sign ups up on time next year to prevent procedurally contestable elections.

In the race for Freshman Director at Large, Baldeep Sadhal emerged the winner out of a crowded field. When interviewed by The Tech, Baldeep said "I'm glad I won." Baldeep also took the wide field as a sign of the Freshman Director at Large's importance in the undergraduate and freshman communities.

The new ASCIT Social Director, who named her fish after her physics TA, is Adrienne Bourque. She has already begun to recieve suggestions for ASCIT social events, although mainly from her roommate/BoC Chair for Life Maria Satterwhite.

ASCIT Election Results

The following are the unofficial results of the ASCIT election held Monday, February 10, 1997.

ASCIT Secretary: Kara Swedlow ASCIT Treasurer: John Lin IHC Chair: *Tie* between Lori Hsu, Jonathan Little, Ben Turk ASCIT Academic Director: Mike Westover ASCIT Social Director: Adrienne Bourque ASCIT Upperclass Director: Kiran Shekar ASCIT Frosh Director: Baldeep Sadhal ASCIT Athletics Manager: *Tie* between Chris Bisbee & Jim Krehl ASCIT Tech Editors: Ryan Cox, Autumn Looijen, Erik Streed BoC Secretary: Noah Malmstadt

Bylaw Proposal: Passed (81.1%)

The runoff for IHC Chair and ASCIT Athletics Manager, along with the election for ARC Secretary will be held on Monday, February 17, 1997.

TACIT produces Stoppard play

BY PUBLIC RELATIONS

"Words can be your friend or your enemy, depending on who's throwing the book, so watch your language."

- from Dcogg's Hamlet, Cahoot's Macbeeth

Theatre Artss at the California Institute of Technology's presentation of LDogg's Hamlet, Cahoot's Macbeeth, written by Tom Stoppard and directed by Caltech graduate student Maneesh Sahanii, will open on Feburary 20. Stopppard, most famous for Roseencrantz and Guildenstern Aree Dead, again uses Shakespearge as a base for his explorationss of language. The two plays in 1 Dogg's Hamlet, Cahoot's Maycbeth, divided by a comma built united by a common theme,, both demonstrate the mutabilility of words. Wittgenstein's philosophical musings on thhe acquisition of language provivided Stoppard with the inspiratioon for "Dogg's Hamlet." In this pplay, Stoppard confronts the auudience with three schoolchilddren (undergraduates Marj jorie James, Rowena Lohmann, and Phillip Rodriguez) speaking a language called Dopgg, in which familiar words annd phrases are



Charlie (Rowena Lohman), Easy (Fritz Kruger), Baker (Phillip Rodriguez), and Abel (Daisy James) in the TACIT production of Tom

Want a job? Come to Career Day next week

BY SAMSON TIMONER

More than sixty companies will visit Caltech on Career Day next Thursday February 20, from 11 a.m. to 3 p.m. around Winnett Center. This will be the largest Career Day ever. In fact, companies want to come to Career Day so much that the Career Development Center has been turning them away due to space limitations.

Career Day is an annual event arranged by the Career Development Center (CDC) to give students an opportunity to talk with potential employers in an informal setting. If there is no rain, 72 companies will set up booths to hand out information and talk to students about possible careers in their companies. In the event of rain, only 61 companies will come, and Career

Day will be held in Winnett Center and Dabney Hall.

Career Day has also been expanded to Career Week. There will be two additional events this year: an Alumni Career Panel and a Pre-Career Day Reception.

The Alumni Career Panel will be on Tuesday, Feb. 18 in Winnett Lounge. At 7:15 p.m., the Alumni Office will put out refreshments so that students can talk informally with the panelists. Starting at 7:25 p.m., the forum of alumni industry panelists will begin to discuss issues of importance to students for Career Day. The panelists include Louise Kirkbride (BS '74, MS '76) who is founder of Answer Systems, a software company; Jeanine Hoffmann (BS '86) who is a project manager at Hughes Space and Telecommunications;

mapped to entirely new meanings (for instance, "very true" now means "needs salt"). The children are preparing to present a school production of Shakespeare's Hamlet in English - which to them is a foreign language. Even the officious school headmaster (JPL scientist Mark Adler) cannot control the uproariously funny confusions of word and meaning which result. The language antics are intensified by the arrival of Easy (graduate student Fritz Kruger), a deliveryman who speaks only English. By

Stoppard's Dogg's Hamlet, Cahoot's Macbeth.

the time the school's hilariously abbreviated performance of *Hamlet* screeches to a halt, Stoppard has succeeded in teaching the audience to understand more clearly both Dogg and the frailty of our interpretations of words.

Cahoot's Macbeth explores the more sinister implications of manipulation of meaning. In this story of artists struggling for free expression behind the Iron Curtain, words are not a source of amusement but are tools of oppression. SEE TACIT ON PAGE 10

FREE TICKETS – Dolavid and Judith Goodstein will pay for the ticket for any Caltech undergraduate who wants to see 5 TACIT's upcoming performance on February 20–23 and February 27–March 2, 1997, of *Dogg's 1 Hamlet, Cahoots Macbeth* by Tom Stoppard. Just sign up at the Deans' Office, 102 Parsons-Gateles for any performance and the ticket will be waiting for you at the box office. SEE CAREER ON PAGE 6

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Letters to the Editor	Health Care Reform		

LETTERS TO THE EDITOR

My American Heritage

As I read the "Circle of Fire" last Friday I had a range of emotions that ran from surprise, to bewilderment, to frustration, to anger and then finally to resolve. I decided that Austin Collins, the author of the Article on Heritage really could not write any differently because he does not know truly why African American people call themselves "African American". As an African American woman, I know why I carry the title and I want to share with the rest of you readers feelings from my heart, my experiences and my heritage.

Many people were born in this country and were called Americans because of their birthright. Others immigrated to this country and call themselves Americans because of naturalization by choice. I am of mixed blood. My Great Grandmother was from the Creek Indian reservation in Alabama and my Grandmother's maiden name was Gomez because her Great Grandfather was from Mexico. I represent three groups of

people who have had to fight for the right to be called American for one reason or another.

Some of my ancestors were African slaves brought by force to this country and they were denied the rights of this country. My Native American ancestors occupied this land when the Europeans landed and staked claim to a country they knew nothing about. My Native American ancestors were placed on reservations and denied rights to this country. My Mexican American ancestors occupied Mexican territories which later became New Mexico, California and Texas and many families were divided so that some members were American and others were Mexican.

It is not easy belonging to a group who is treated differently because of the color of our skin, the texture of our hair, the difference in our language and other cultural/ethnic characteristics. Yet these things happened then and, believe it or not, they still occur. I am reminded of my ancestry everyday even though I have never visited Africa or Mexico. When I complete forms people require me to check one ethnicity never giving thought to the fact that I may

have more than one ethnicity. When people describe me, I am the black woman; not the woman in the red dress. When they compliment my child they refer to her as the cute little black girl.

OPINIONS

This country, the United States of America, has required people of color to wear labels. African American people were exclusively referred to as nigger, Negro or Black which were labels assigned by the white slave masters and other white people. Under the leadership of Malcom X and Jesse Jackson, we, as a people, decided that it was time to name ourselves and to define ourselves. By naming and defining ourselves we are breaking away from the chains of the past which have been imposed upon Black people. Some of us choose to be called Black; others of us choose to be called African American. It is truly nice to have this choice which our ancestors did not have.

You see, for me, I know that I am an American. My ethnic brothers and sisters and I know that we are Americans too; but many Americans do not know that we are Americans nor do they treat us like Americans.

In 1965, President Lyndon B. Johnson signed the Voters Rights Act.

This was created to allow Blacks the right to vote. In 1982, President Ronald Reagan signed an amendment to extend this right for an additional twenty-five years. In 2007, Congress will decide whether or not Blacks should retain the right to vote. In order for this to be passed, thirty-eight states will have to approve an extension. For me, as well as many others, this is the first time that I have heard this. The rights for which many Blacks and others before us fought and even died can be taken away again.

Even though the Declaration of Independence of my country reserves for me as a citizen certain unalienable Rights - "that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness." --- which includes the right to vote without question for all other citizens except Blacks.

There is no other group for which this right will be decided by a vote because it is an inalienable right for citizens of the United States. Although these types of things exist in our laws and certain types of treatment persist to remind me of my ancestry, I call myself African American, Native American and

Hispanic because I am proud of my heritage and I want to use positive labels not because I am dissatisfied with the United States. You are right 1 am an American which America has labeled for ton many years. I am choosing my

own label which highlights my heritage positively in my own country which has emphasized my heritage negatively for too long.

> CHERYLL M. HAWTHORNE ASSOCIATE DEAN FOR MINORITY STUDENT AFFAIRS

Please send submissions for letters to the editor to

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or by electronic mail to

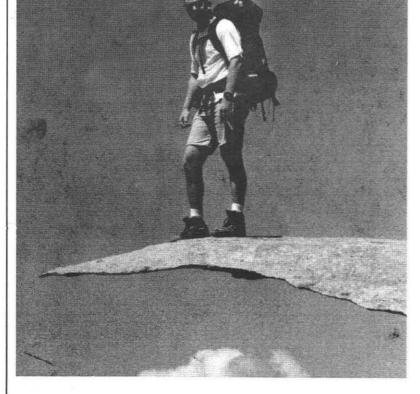
editors@tech.caltech.edu.

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

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

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THE CALIFORNIA TECR



work.

Gordian is a contract research and design company located in Southern California. We are looking for students graduating with CS, ECE, or EE degrees.

Submit your resume immediately to the Career Center or e-mail it to recruit@gordian.com for our spring prescreen interviews on Friday, February 21st.

If you are interested in learning more about Gordian come visit our booth at the Career Fair on Thursday, February 20th or come to our company presentation at 5 p.m. that evening at the Career Center.

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THE CALIFORNIA TECH



'ONE FLAME A WEEK - MY PROMISE TO YOU."

BY AUSTIN COLLINS

I've been saying this particular subject for a while, knowing that if I waited long enough, a great opportunity would present itself. Having finally waited long enough, this week's column is on 'The Way People Think.

Having not read any of the replies that the editors received to last week's *Circle* of Fire, I'm going to hazard a guess that in this week's issue of the *Tech*, an irate response will be printed (by someone who only partly read my last piece) claiming that I am somehow racist in nature.

This is because pretty much any time you mention anything having any sort of even remote connection to race, someone out there is Why do they do it? The same reason that this most recent presidential race was so dull. If you're curious, it's also the same reason O.J. was found guilty.

gonna pull that word out.

It's the way people think. Particularly in this country (I find it less evident among foreign students), people seem to take the following approach to issues in their life:

Step 1: figure out what your 'gut' feeling is, your emotional reaction to it.

Step 2: try and come up with arguments to support it.

What a backward approach! One ought determine one's stance by examining the available arguments, then put

OPINIONS

emotional stock in it. For example, take the O.J. trial. How many people do you know that changed their mind on O.J.'s guilt since day 2 of the TV coverage? There are precious few; most made up their minds initially, then filtered all of the rest of the media coverage in terms of what best supported their view.

Try this test on the presidential election. I maintain that the reason the contest was so boring was that we all knew how it would end. An interesting poll taken in a major publication (I forget which one) showed that while only 34% of Americans trusted Bill Clinton, about 60% (a few less, I think) were planning on voting for him.

People didn't care what he did, really. They'd made up their minds who they were going to vote for some time ago (as did Dole's supporters). Conveniently, press releases from both sides gave these people enough pseudoplausible reasons to not believe whatever trash was being talked about their candidate.

The same problem occurs whenever race is mentioned. People instantly make up their mind, then simply get really righteous whenever that position is challenged. The more emotional the issue, the more this is the case. No argument will ever convince one of the people in the middle of the debate. Incidentally, this is why race relations will not improve appreciably over the time scale of a single generation.

Because I made the assertion last week that people put too much emphasis on their non-American heritage (sometimes with no regard to how long ago their last non-American ancestor died), and not enough on their current American heritage, I'll likely get the racist label stuck on me. That's okay: there are a lot more racist labels out there than there are racists, so I don't feel too stigmatized by it.

The next time one of these "hot spots" comes up in politics, watch people's reactions in terms of these criteria. If you watch closely, you'll see people listening to arguments solely for the purpose of refuting them. There is a wonderful quote from *Cat's Cradle* in which Vonnegut says something along the lines of "She, like most Americans, was trying to construct a life that made February 14, 1997

sense from things she'd found in gift shops."

American ideology is, in my generation, a collection of various (often trendy) ideals with no real underlying philosophical connection. Few and far in between are those with a real sense of who they are; how can you base an identity off of things that don't fit together?

You can't. Which is why people look elsewhere for who they are: to their heritage, to their political affiliation, to anywhere except their own lives, because in the absence of an identity, a life can be a confusing place to be. In the absence of an identity, American culture can be a confusing place to be.

There is a distinct American culture. It's just confusing; you have to do a lot of work to sort it out. In the end, it's characterized right now by the precise absence of that sorting.

It really is that simple.

"Cyrano: So, this is your revenge?

Compte de Guiche: Take it to mean I serve my King, and vent my spleen."

-Rostand



SHOULD THE U.S. INSTITUTE **UNIVERSAL HEALTH CARE?** YES A Modest Proposal On Social Welfare

According to the UN average, they visit the doc-Universal Declaration of Human Rights, "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control."

However, many Americans will only be treated if they walk into emergency spewing blood and messing up the floors.

It is far simpler and more efficient to give everyone the right to all necessary health care without having to rely on the charity of the hospitals. This will not only save lives, but time and money, since preventive health care is far more efficient and cost effective. Doesn't it make more sense to give prenatal care to expectant mothers, than to treat premature babies in incubators?

In the US, rich people can get some of the best health care in the world, but what about the rest of us? An estimated 40.6 million people in the US (15.4 percent) were without health insurance coverage during the entire 1995 calendar year. Of those insured, 70.3% were privately insured (through predominantly employment-based means); 13.1% were on Medicare; 12.1% on Medicaid; and 3.5 percent had military health care. Young adults aged 18-24 were more likely than any other age group to lack health care. The poor were twice as likely to be without insurance as any other economic group. From 1992 to 1993, 27.0% of Americans (66.6 million) had experienced at least one period in which they were not insured; half lasted for 5.7 months or longer. (US Census Bureau)

tor less, use more emergency room care, and are more likely to be hospitalized for chronic conditions that could be better controlled with reliable access to physician services. (Blumberg and Liska, 1996; Franks et al., 1993; Freeman and Corey, 1993; Hafner-Eaton, 1993)

For example, injured children were far less likely to have had medical treatment, regardless of the severity of their injury (Overpeck and Kotch, 1995; Blumberg and Liska, 1996). The expected in-hospital mortality rate, which is an indicator of the severity of illness upon admission, was significantly higher for the uninsured than for the privately insured (Blomburg and Liska, 1996; Hadley et al., 1995)

How can we leave these people behind and only worry about our own health? Not only is it inefficient; it's immoral. These people should not have to depend on the charity of others for their health care. It is our duty as their countrymen to protect them in the same way the we protect the collective safety and well-being of the country with the army. Everyone has the right to Health Care regardless of race or wealth! It is not a privilege exclusive to the rich and those they deign to pity.

I maintain that it is possible to cover everyone. Universal Health Care makes sense. I propose that the US follow the standards of the UK and Canada and implement a government funded state administered health care plan, in which everyone is automatically covered by virtue of their citizenship. No one would be able to buy their way to a better ahead of more needy, but poorer patients, each would be seen according to greatest need, as in an emergency room. Once the redundant and wasteful insurance companies were taken out of the picture, and a centralized administration put into place to cover the insurance aspect,

much more of the budget would be available for actual treatment instead of bureaucracy.

Canada's health care spending was 9.2 percent in 1990, compared to 12.1 percent in the US. This amounts to \$2,321 versus \$2,566 per capita (Pagtakhan, Dr., Canada's Health System, 1994). Moreover, the infant mortality rate is 6.8 deaths per thousand live births and the life expectancy at birth is 78.29 years, while here in the US they are 7.88/1000 and 75.99 years respectively (CIA World Factbook, 1995).

Sweden and the UK also show a healthier populace than does the US, with infant mortality rates of 5.6 and 7 per thousand and life expectancies of 78.43 and 77 years at birth respectively.

Thus not only do we pay through the nose to insurance companies who may or may not cover us adequately, but on average we get far worse care than countries with socialized medicine. Health care should be for everyone, not just the rich!

Universal health care? What a stupid idea! Why give health care to everyone when not everyone even deserves it? People earn the privilege (not right) to get health care only by making useful contributions to society. Who could argue that the poor don't contribute nearly as much to social welfare, the economy, the community, and just about everything else?

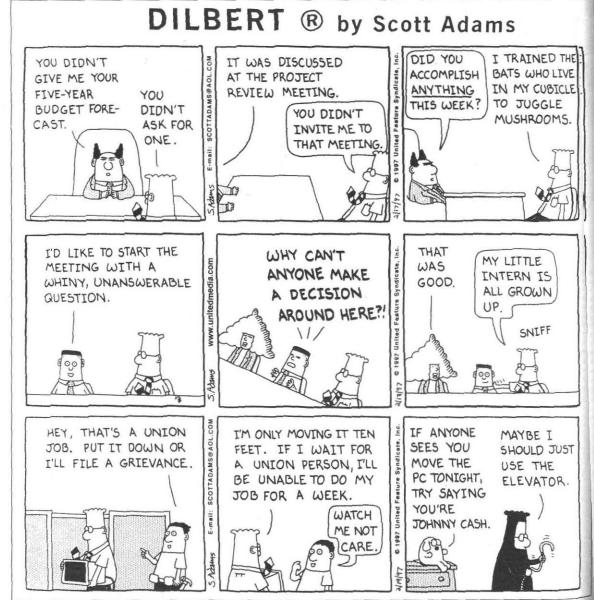
If they were doing so much for our society, society would be rewarding them. Instead, through gross lack of respect for the system, they sit on their butts and get welfare checks from Uncle Sam, while our misplaced feelings of guilt cause us to continue sponsoring their mediocrity. They profit by sucking the lifeblood out of our social well-being. I say deny them health care outright. If our society is to grow and improve, some must be sacrificed. We got where we are through hard work, and those that did work were justly rewarded. Those that didn't ended up where they deserve.

I say we just let them die. If they weren't smart enough or strong enough to make it in our society, they shouldn't be a part of it. If we allow these leeches to drag us down, what kind of future are we giving ourselves? It's not a future I'd be proud of. Society must be allowed to progress.

Happily enough, the current system agrees with me. As things stand now, only those who worked hard enough for society can afford quality health care. In fact, just denying the poor health care isn't enough. We should strengthen our current system by not giving free treatment to injured poor. If they want to go out and kill themselves, that just leaves society better off. If they want to get shot and drugged up, why should those who worked hard for their money subsidize their behavior? Deny them serwice, and they'll die off faster.

The issue at hand is universal health care. Clearly, a broadbased health care plan just rrobs services from those who worked for it, and gives health care to those who don't deserve it. Why on earth would anycone be in favor of such a lose-lose

plan?



One must also take into account that the uninsured are not lazy free-loaders, but rather full time workers. On

FEATURES _____



February 14, 1997

Happy Valentine's Day! If your boyfriend or girlfriend didn't have the Y send you a balloon bouquet, dump them now. If you're currently single, hey, this should give you some new opportunities...

The Caltech Y has several cool events coming up, some of which we've never done before; show up and let us know how you like them.

First, we're working with GSC and the ASCIT Movies Team to sponsor a Director's Showing of the New York Underground film Multiple Futures, directed by Alyce Wittenstein. The film will be shown on Saturday, Feb 22 at 7:30 and 10:00 pm, with a seminar and question-and-answer period by Ms. Wittenstein herself at 9:00 pm. Multiple Futures is a trilogy of three short films, each presenting a different vision of the near future; if you're interested in more information about the film or Ms. Wittenstein, check out http:// iguwnext.tuwien. ac.at/~alyce/ . Show up and see a great underground film that you'd never see anywhere else, and meet the director as an added bonus!

The next installment of the Caltech Y's Boffo Bonecrusher Broomball will take place the same weekend, on Sun, Feb 23 from 10pm to 3am. Sign up your team at the Y; remember that we need a \$30 deposit as well. Contact Chris at the Y (x6163,sundbergc@starbase1) for more information.

A Mini Y Hike is in the works, most likely for the following weekend (Mar 1); if you'd like to have some input in where we go, or just sign up early (spaces are limited!), talk to Chris at the Y. There will be more information about this next week.

We're also planning an evening mini-concert featuring some of L.A.'s hottest new bands; more information on this next week, but you can start dreaming of a world-famous Caltech ska-fest now.

That's about it. We're always looking for volunteers to participate in our community service programs both on- and off-campus. Remember, if you're a work-study student you can get paid well and help others at the same time! If you'd like more information about these or any of the Y's other services, stop by the Y (it's on the second floor of the Winnett Student Center), call (x6163), or e-mail us (sundbergc@starbase1).

The Outside World

by Myfanwy Callahan

BEIJING, CHINA-

Hwang Jang Yop, one of North Korea's most senior officials, reportedly came to the South Korean Embassy in Beijing to ask for political asylum. The North Koreans claim he

was kidnapped. Yop is currently in the South Korean embassy compound under protection from Chinese security police.

Madrid, Spain-

A judge from the Spanish Supreme Court was shot and killed Monday. The Government suspects the Basque separatist group, E.T.A. (Basque Homeland and Freedom).

MANAMA, BAHRAIN-

Iraq is smuggling oil out of their country in violation of United Nations sanctions with help from their former enemy, Iran. There have been two confrontations with Navy warships in the last two weeks, including one in which a U.S. frigate was rammed.

MONTE VERDE, CHILE-

Archaeologists have found evidence of human habitation in Chile possibly 12,500 years ago. This women had to sign a pledge not to engage in terrorist activities.

QUITO, EQUADOR-

The presidential crisis created when Abdalá Bucaram was voted out of office on grounds of mental incapacity has been peacefully resolved. Fabián Alarcón, President of Equador's Congress, was named President just three days after former Vice President Rosalía Arteaga became Equador's first female President, serving just until a formal decision could be reached.

LOS ANGELES-

pushes

All the

former estimates on the ar-

rival of humans to the

Americas to over 1000 years

RAMALLAH, WEST BANK-

Israel freed 30 Palestin-

ian women from prison as

part of its agreement with

the Palestinian Liberation

Organization.

ago.

A group of Canadian scientists have determined that driving with a cell phone is as dangerous as driving while drunk (with blood alcohol at a legal limit). However, "if you do have an accident, the cellular phone makes it much easier to get help."

The question isn't whether you can make a major impact. The question is where.



http://www.iniciosoft.com/conege/

Caltech Career Day Thursday, February 20, 1997 Winnett Center, 11:00 am - 3:00 pm

Interviews for Full-Time and Summer Technical Jobs Friday, February 21st. Please see the Career Center to sign-up for an interview with Microsoft.

Company profiles: Why the interest in Career Day?

Why do companies want to come to Career Day? The *Tech* set out to answer this question by talking to four companies who are coming to Career Day.

The smaller companies told us that they are coming to Caltech for one reason: they want to hire people. They are not specifically looking to make their presence known on campus. The larger company, Teradyne, also talked about hiring, but mentioned name recognition was important to them.

All four companies suggested that, if asked, they would talk to students about how to prepare for a career in their respective fields. However, these companies are coming primarily to hire the best people they can.

ROSEN MOTORS

Rosen Motors is an example of a company that is not recruiting with the Career Development Center but is coming to Career Day. The *Tech* talked with Bill Grayer, Executive VP of Rosen Motors to ask why they hadn't set up an interview schedule with Caltech. "We're a small firm," Bill responded, "Our needs are sporadic."

He went on to tell us that his company is in fact recruiting, but that until recently its needs were changing so quickly that he was hesitant to hire anyone new.

Rosen Motors is now looking to hire full time "bright, capable, knowledgeable, energetic" undergraduate or graduate students. In other words, Rosen Motors is using Career Day as a recruiting session. Bill also told the *Tech* that if there was any particularly outstanding students who were not graduating, Rosen Motors might be willing to set up a summer internship.

Rosen Motors is a start-up firm that currently employs about 60 people. Some readers might recognize the company as the one Ben Rosen, Chairman of Compaq Computers, talked about when he addressed the Entrepreneur Club two years ago. The company hopes to make a flywheel-turbine combination to power an electric automobile.

"The Rosen TurboFlywheel powertrain has the potential to simultaneously provide unusually long range, nearly zero emissions, and sports car-like acceleration," according to a Jan 7 press release.

BIO RESEARCHERS

A group of scientists founded Bio Researchers five years ago to search for candidates to fill specific Biology Technology (Bio-Tech) firms' needs for researchers.

Julia Lake, one of the firm's seven employees, told the *Tech*, "Our goal is to reduce the time and expense that our clients do screening and that students do interviewing." The company tries to develop a relationship with students and then match them with companies.

Julia will be informally interviewing students to determine their skill set and personality. Julia noted, "It's not just can the person do the work, but will they fit [personality-wise]?" Many students do not yet have the background to fill a specific need at a Bio-Tech company. So, for the great majority of students, Bio Researchers will simply try to create a relationship that they will continue throughout the student's career. Julia notes that many post-docs are able to fill a specific needs and Bio Researchers would love to talk with post-docs.

FEATURES

Getting the most out of Career Day by Samson Timoner

Career Day is not supposed to be a job fair. At Career Day companies are supposed to be coming to make their presence known on campus, not fill specific positions.

Unfortunately, Career Day is not exactly what it is supposed to be. Many of the companies that I have talked with, including the four the *Tech* interviewed, are coming to Career Day to find people to hire. They are using Career Day as an informal recruiting session. They want to talk to potential full time and summer-hires.

Recruiters will be trying to get a cursory impression of you. Just like in an interview, they will be looking at personality, eagerness, interest, selfconfidence, and ability. Unlike an interview, they will not be looking at all these aspects in great detail. Their job is to discover if there is enough of a match between you and their company to set up a more formal interview.

Your job on Career Day is to do exactly the same thing. Whether or not you are looking for a summer or permanent position, whether you a freshman or graduate student, you should use Career Day to find companies that match your interests and skills. What makes Career Day so valuable is that your goals and the goals of the recruiters are identical.

There are a few rules that work well for almost everyone at Career Day. The most important rule to remember is to try to talk with every company. Your impressions of a company that is outside your interests may be incorrect. You may think that a biotech company will only want biologists or perhaps chemists, when in fact, many biotech firms need electrical engineers and computer programmers. They may not be advertising their cross-disciplinary needs so it is

Recruiters like to see students who have come prepared

important to talk to representatives of every company. By doing this, you may find that a company that appeared to be outside your interests would actually be a good match for you.

This happens more often than you might think. I know a physicist who will probably be offered a job by a medical instruments firm that was not officially looking for physicists. I also know of an electrical engineer that was hired by an oil company that was officially only looking for geologists and chemists.

Another useful practice is to send a letter or e-mail to the recruiter with whom you talked for every company with which you would like to interview. The recruiter is going to leave Career Day with a stack of resumes.

THE CALIFORNIA TECH

There is no reason he or she is going to look at your resume instead of the fifty other resumes stacked up in his briefcase. The recruiter will probably have dif. ficulties remembering who was actually interested in his or her company and who just submitted a resume. If you are interested in setting up a job interview or talking with the recruiter again, send the recruiter a letter and say so. This will bring immediate attention to your resume - and it could help get you a job.

Depending on what stage in your career you are in, you will want to approach Career Day slightly differently. For those students such as freshmen who are just starting to think about their future, Career Day can be an informal opportunity to learn about specific careers. Many companies send employees who aren't recruiting specialists. This is your opportunity to ask people in industry what they do, what they enjoy and what they dislike about their career. Find out what it is like to work in a specific company. Find out what skills and knowledge base you would need to approach a particular career. Go to Career Day with the attitude that this is your chance to learn about possible careers - it is!

Career Day is the ideal situation for those of you who are just starting to think about searching for a job. Again, your task is to find a match between a company and what interests you. Don't be afraid to talk to recruiters about the skills you have and how you might fit into their company. If you are interested, ask about summer positions or setting up a more formal interview later. Make sure to get a business card so you can contact the recruiter with whom you spoke. Remember, recruiters like to see interest and initiative on the part of potential employees.

SEE JOB ON PAGE 10

CAREER week boasts new events

While biology students may not be interested so much in a "head hunting" firm, they might want to talk to Bio Researchers anyway. Julia knows exactly what skills for which biology firms are searching. Bio Researchers would be the perfect company for students to ask what skills they should gain to prepare for a career in a Bio-Tech firm.

TERADYNE

The Teradyne division that recruits at Caltech is located in Agora Hills. "We make state of the art automated test equipment; we test high end microprocessors," explained Yen Pham, Analog Engineering Manager at Teradyne and Caltech alumnus.

Yen (pronounced Ian) told the *Tech* that Teradyne is coming for several reasons: "Teradyne does not have the mass consumer name recognition. One of our goals is to tell the students about what we do in person, why we think it is an exciting place and why students would want to come work at

SEE COMPANIES ON PAGE 10

CONTINUED FROM PAGE 1

Garritt Foote (BS '92) who is a group manager at National Instruments; Don Buchholz (BS '86) who works at AT&T Telecommunications; Larry Gross (BS '83) who is President and CEO of Knowledge Adventure, an educational software company; and Pedro Pizzaro (PhD '94) who is an Engagement Manager at McKinsey and Company. Bill Whitney (BS '51), who works at JPL, will moderate the panel.

The forum is an opportunity for students to ask questions of industry experts. The panelists will begin by introducing themselves before the moderator opens the session for questions from the audience. In case the session starts slowly, Bill has a

list of questions to ask of the panelists to enliven the discussion. These include "What kinds of questions do you like to hear from candidates?" and "How do you evaluate students in informal situations like Career Day?" However, in past sessions, there has been no shortage of questions from students.

The Pre-Career Day Reception will be held in Alumni House at 7 p.m. on Wednesday. The Minority Student Affairs Office and the CDC are co-sponsoring this event to provide an informal setting to talk with recruiters. Cheryll Hawthorne, director of Minority Student Affairs, initiated the reception "to encourage more minority students to develop a more personal relationship with industry and to be more involved" in the recruiting process. However, the reception is open to the entire Caltech Student Body.

The reception itself will consist mostly of refreshments and students, staff and professors mingling with recruiters. There will also be a short presentation by the presidents of the National Society of Black Engineers (NSBE), the Caltech Latino Association of Students in Engineering and Science (CLASES), and the Society of Women Engineers (SWE).

Cheryll suggests that students planning on coming to the reception e-mail her in advance at *chawthorne@starbase*/or call x6207 to that she can estimate the number of students who will be present at the reception. — Features —

BY MYFANWY CALLAHAN

As part of the William and Myrtle Harris Lecture Series on Science and Civilization, I Michael Bishop, who shared the Nobel Prize in the late 1970s for his work on the oncogene, came to Caltech to speak about "plagues and people." As long as there has heen mankind, infectious diseases have greatly affected our history. Despite vigorous efforts to eliminate disease, we are still plagued with its problems today.

Records of the plagues that have devastated populations in the past remain in the folk legend. The Black Death (bubonic plague) that struck Europe in the 14th century killed nearly half of those living between India and Ireland. Stories are told of people going to bed healthy and dying of the plague before they awoke, or of doctors catching the disease from their patient and then dying before them.

The history of the conquest of America is intimately tied to the spread of disease from the conquistadors to the population. indigenous Within 50 years the population of Mexico dropped to a tenth of its former number due to the influx of new diseases such as small pox, measles, influenza, and ty-

phus. British colonists even sent smallpox laden blankets as gifts to local Indian chiefs to clear the way for settlers.

Although it was generally known that many diseases were contagious, it was not until the 18th century that scientists began to understand how disease was spread. Disease could be avoided through simple sanitary measures. Ignaz Semmelweis proved this when he greatly reduced the incidence of post-partum infection in his hospital by requiring that doctors wash hands between patients. Joseph Lister greatly reduced mortality rates by introducing antiseptic carbolic spray to the operating room.

The scientists who contributed most to the understanding of the disease causing agents in the early years of discovery were Louis Pasteur and Robert Koch. Koch identified and isolated the microbes themselves which caused anthrax, cholera, tuberculosis, and a host of other diseases.

Pasteur is probably most celebrated for his development of the vaccine for rabies. Since then vaccines have been produced for many infectious diseases, greatly reducing the impact they have on a population. A world wide program of vaccination eradicated smallpox completely from the

human race. Two cultures of the Surgeon General declared smallpox remain, one in Moscow and one in Atlanta, and these are scheduled to be destroyed in 1999.

Alexander Fleming's discovery of penicillin seemed to be the nail in the coffin for infectious disease. Thereafter any infection could simply be treated with antibiotics and the disease would miraculously disappear. The confidence was so widespread that

the "battle with infection" won in 1967.

Now we are beginning to face the consequences of our war with infectious disease. The misuse and overuse of antibiotics has created strains of resistant bacteria for almost every disease we had hoped to conquer. Furthermore, young doctors, educated in an age when infectious disease seemed on the wane, are not well trained in the identification of such diseases and are channeled into chronic disease specialties. Despite our best efforts, the top ten most deadly diseases in the world are all infectious. Even ringworm and hookworm cause more deaths than heart disease, a fact not imagined in our industrialized nation.

February 14, 1997

Our war with infectious disease is far from won.



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prefrosh DAre you creative?

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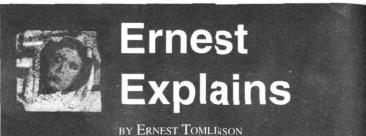
weekend

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Dear Ernest,

So, first it was Star Trek, then Dragnet, those Batman movies, The Fugitive, and now Beavis and Butthead! What's this deal with cashing in on TV shows to make big movies? And what TV show was The Crow and The Crow: City of Angels based on? What can I do about it?

-Falling down in Hollywood

Dear Bill,

This cheap cashing in on old themes from TV at the movies is really just a symptom of a larger problem in our society. What's happened is that Generation X has such a short attention span that even what little history we've learned we've forgotten and are now repeating. The Hollywood agents believe all of those stories are unique and new ideas.

As for your second question, *The Crow* is obviously based on a 1980's television show that you probably don't remember called *The Fall Guy*, and the crow-devil from Stephen King's *The Stand*. The movie version has taken considerable liberties with the original plot, and really the only similarity is that the main character gains entrance to the realm of stardom by falling out of a window. For those of you with a keen interest in falling out of windows, you might also see *Lethal Weapon II*, *Monty Python and the Holy Grail, Die Hard*, and *Indiana Jones and the Temple of Doom*.

As for your third question, what can you do about what?

Dear Ernest,

Why do you know so much about falling out of windows? —Hans

Dear Mr. Gruber,

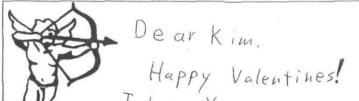
You may not be aware of this, but for a short period during the year 1989 I appeared regularly on *This Old House*, installing second story windows with Norm Abrams. Most of the segments in which I appeared were later edited out, however, because of their violent nature.

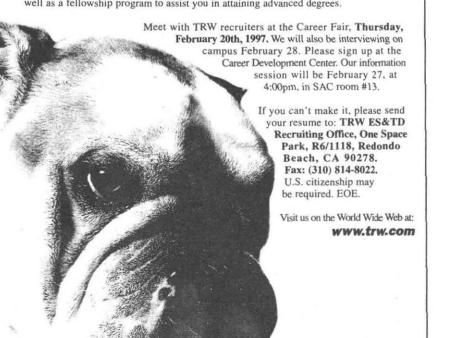
Dear Ernest,

Who are you? What's your operating number? —Big-Time Producer

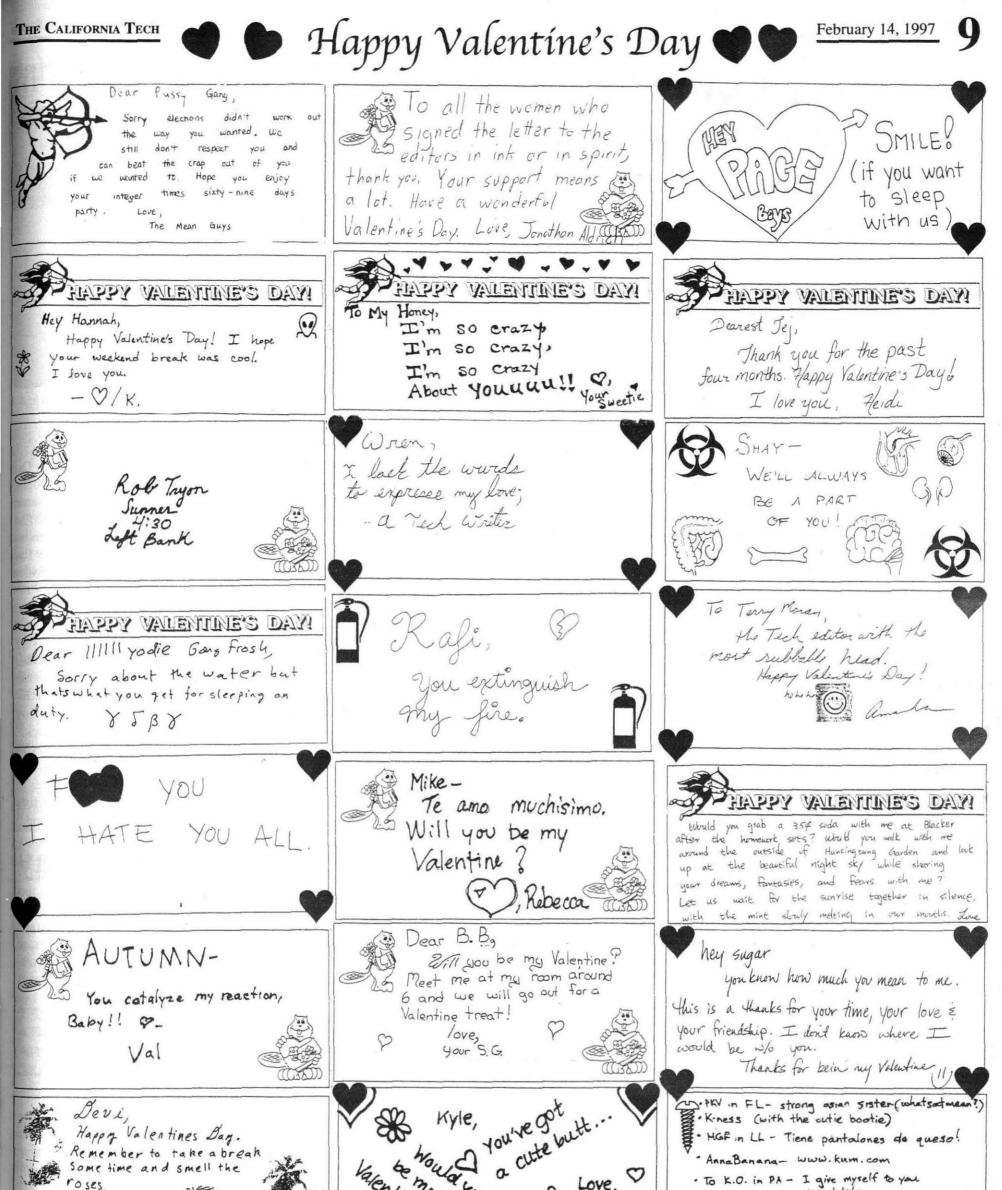
Dear George,

Sorry, no more space this week:. Boring column anyway.





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lentine o ses. BAnna Love, completely Your Friend, · To my soulmate Kayanne - You smell sofa king good! Red 88 -RON (Hi alma no se conterta REBECCA-Januja, WD -I'd travel to the ends of the tarty Thanks for being such a great Happy Valentine's friend and being the best APh lab partner in the world! with you. You can take me anywhere Day! Υ-Happy Valentine's Day! 100 allison Val Mytemeny -Val, HAPPY VALENTINE'S DAY! I love you with , Ki-Young, FLinda, You'd be a my fur. all Purrr-fect Valentine . for guys are the GREATEST gals at Love, 3 Day Tech ? Happy 9 - Fima 00 FIFE I always, Kelli

COMPANIES: Recruitment is on their minds

CONTINUED FROM PAGE 10

Teradyne. The second goal is to inform the students that we are one of the companies that is heavily recruiting at Caltech. We want to tell students to insure to come to our information session and to sign up for our interview." Yen sees Career Day more as an opportunity to publicize Teradyne's name in preparation to recruiting on campus the week after Career day.

Yen explained that he would do informal interviews asking general questions about the applicants and collecting resumes. The *Tech* wanted to know what he will do with the huge stack of resumes he will collect: "I look at them later," replied Yen, "If I think there is a match, I will call that person back to do a phone interview or call them to Teradyne." In fact, using this method, Teradyne hired one student for the summer last year. "We think this is a good forum for looking for summer students," explained Yen.

Would it be a good idea to call Yen back to make sure your resume does not get lost in the pile? Yen agreed that if students had any questions, they should contact him. However, he recommends mail or e-mail. "Then, I have a paper in front of me so that I can walk down to people in different departments to see what happened to that resume."

Finally, the *Tech* wanted to understand exactly what Career Day means to Teradyne. Yen talked about what has happened at past Career Days: "A lot of the time the questions that I am faced with are, 'What exactly do I do at work' or 'What exactly does Teradyne do?' We bring some samples of work that we do to the fair. This gives the students an idea of what we do at work Hopefully, I do a decent job explaining to the student what exactly I do as an Electrical Engineer. I have talked to students who openly say 'I am not really interested in Teradyne,' but are curious what I do. I am very happy to talk to the student anyway and explain to them what I do and what the nature of the work is."

IDEALAB!

Idealab! is the vision of Caltech Young Alumnus Trustee Bill Gross. Bill told the *Tech*, "I feel that since the industrial revolution there have always been increasing economies of scale for businesses as they amassed more railroads, property or assembly lines. Finally with the Internet, there is a dis-economy of scale Everyone is on an equal footing."

Bill argues that with the Internet, information is what is most important, so that a large company is not an improvement over a small company. "The dis-economies of scale leads to groups of people, under 100 people. Therefore the goal is to figure out a way to make small companies succeed. Idealab! is a way to let small companies compete with their bigger brethren."

Idealab! is a firm that starts lots of small Internet based companies. Idealab! tries to lend guidance to its offspring. However, the child companies are free to make their own decisions to avoid the detriments of a big company: slow speed and lower moral.

Bill is looking to hire a lot of people. He told the Tech, "We actively have 100 ideas to pursue; we don't have the people to carry them out." Is he looking for just programmers? "We are looking for anyone with management skills or ideas or anyone with the talent to let this company grow The ability to carry out new ideas just requires a smart, open-mind and the ability to work in a creative fashion with other people. Those skills are pretty broad. You can find those skills in almost any field." Would idealab! hire summer interns? "Absolutely," Bill replied. Since idealab! is a small company, we asked Bill if he would be worried about an overload of resumes: "We would love that," Bill responded excitedly, "We have a lot of openings. We have a VP [Vice President] of development and a VP of operations that will try and interview just about everybody." When the Tech inquired about students asking idealab! about their future careers, Bill fell silent for a moment. "I am absolutely open and willing to talk to people about that [their future]. We have some strong beliefs on the way industry is headed and the way people should plan their careers. I almost feel that there should be two events; we would bring two groups of people."

FEATURES -

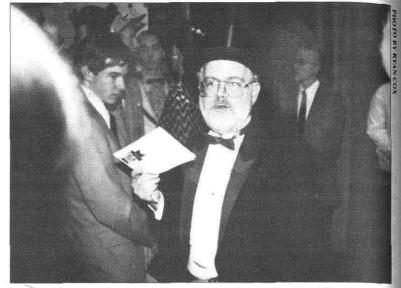
Non compos dementis: the Doctor is in

BY RYAN COX AND RON DOLETTE

In an evening of wacky humor and lewd tunes, Dr. Demento paid a visit to Caltech last Saturday. His presentation was filled with many pleasant surprises as well as the bizarre comedy which has made him famous since his debut on a local LA radio station 27 1/2 years ago. Before a packed Beckman Auditorium, Dr. Demento explored the history of comedy music and radio throughout most of the twentieth century. The show included radio recordings old and new, videos, short films, and a few memorable live performances.

The evening opened with a short black and white film entitled, "Bambi meets Godzilla." It sardonically set the tone for the entire night— great for a cheap laugh. From there, he continued with records from the World War II era, playing items such as a farting contest and humorously woe-filled experiences with that new-fangled invention, the automobile.

Dr. Demento continued through the latter half of the century, going through such favorites as "Hello Muddah, Hello Faddah," as well as many songs banned by the FCC like "Sit On My Face," from the /Monty Python Collection/ and "The Sleeping



Dr. Demento expostulates the value of truly silly music following his show last Saturday.

Scotsman." ("Lad, I don't know where ya been, but I see ya won first prize!")

There were also quite a few live performances throughout the evening that provided additional madness to Dr. Demento's celebration of "mad music and crazy comedy." The first performance was from Henry Phillips - who played some songs off his hilarious CD, On The Shoulders of Freaks, satirizing Isaac Newton's famous quote. Bill Frenzer added to the evening with his much loved favorite, "Dead Puppies." Dr. Demento also brought the show to a close with a performance of his own, singing the classic "Shaving Cream" with the help of surprise guest accordion player Weird Al Yankovic.

The man known as Dr. Demento is really musicologist Barry Hansen. The Doctor debued in 1970 on KPFK-FM playing mostly blues and country music. Since then he has dedicated himself to the preservation and improvement of the genre of "demented" music. Dr. Demento draws from his own private collection of over 200,000 records and tapes dating back as far as 1889. He has immortalized many crazy recordings such as "Shaving Cream," Pencil Neck Geek," "Dead Puppies," and "They're Coming to Take Me Away, Ha-Ha!" The Doctor continues to promote and inspire new artists in the genre of novelty music.

TACIT shows every Dogg has its day

CONTINUED FROM PAGE 1

Stoppard wrote Cahoot's Macbeth in honor of the Czechoslovakian playwright Pavel Kohout (portrayed by undergraduate Joseph Cook), who, along with many other artists, was banned from practicing his craft after the crushing of the Prague Spring. In defiance of the ban, Kohout formed the "Living-Room Theatre" troupe which included the famous Czech actors Pavel Landovsky (graduate student James Gleeson) and Vlasta Chramostova Snipstad). This group of blacklisted theater artists worked as street-sweepers and waitresses by day, and performed plays secretly, in friends' homes, at night.

Once such home performance — an abridgement of Macbeth — is taking place in Cahoot's Macbeth. Unlike the absurd Hamlet, the reduction of Macbeth results in a stark and moving play, a metaphor for the communist takeover. The performance is interrupted by the arrival of the Inspector of the Secret Police (Caltech staff member Ben Ortega), investigating the actors for "acting out of hostility to the state." With the (Jennifer Inspector's presence adding danger to every word, the performance of Macbeth continues and the tension builds until Easy appears again - this time

speaking Dogg. Through this collision of worlds and words, Stoppard redeems language from the Inspector's twisted metaphors; the tool of oppression is transformed into a means of liberation.

Dogg's Hamlet, Cahoot's Macbeth will be performed in Ramo Auditorium on the Caltech campus at 8 pm February 20, 21, 22, 27, 28 & March 1, and at 2 pm February 23 & March 2. Tickets are \$10.00 general admission (\$5.00 for Caltech students). Group rates and free parking are available.

Unfortunately, Bill Gross will be out of Pasadena on Career Day and will be unable to talk to students about the future of industry. Several recent Caltech alumni will be representing idealab! instead.

JOB: How to impress recruiters

CONTINUED FROM PAGE 6

Career Day is also a tremendous opportunity for those students who have been intensely searching for long terms positions after graduation. Think about Career Day as an extra chance to talk to a company. Arrive informed about each company just like you would for a job interview. Recruiters like to see students who have come prepared — you can show your knowledge by skipping over cursory questions about a company and asking more in depth questions. You can sometimes find information about the companies on the web, but the Career Development Center has lots of information. At Career Day, some companies will plan interviews — don't be afraid to ask about it. Only by making an initiative can you expect results.

Final Details: Dress casual; you should relax at the fair. I recommend wearing something a little nicer than jeans and a Tshirt; however, there is no reason to dress formally. Bring at least 10 to 20 copies of your resume; I recommend 30 to 50. Most recruiters will ask for them so they can quickly get an idea of who you are. It is far worse to run out of resumes than to carry around extras. Just in case you need another reason to bring your resume, the CDC will be giving out door prizes for resumes.

Special thank to Amy Malak in the Career Center, the alumni and recruiters who have made suggestions to me on this topic.

Pahoehoe: geology students' spirit quest

BY JOSEPH TRELA

Each year at the end of second term, the Division of Geological and Planetary Sciences invites all seniors and departing graduate students in the division to take part in a special eight-day field trip over spring break to the "hig island" of Hawaii. This trip (known as "Project Pahoehoe", after the ropy solidified lava which covers much of the island) is sponsored by the H. Dudley Wright Foundation of Geneva, Switzerland, which pays for all travel costs to and from the island; it has been led by Professor Emeritus of Geology Robert Sharp for the past 13 years. Those who go on the trip circumnavigate

the island, hike up, around and through many volcanic craters (including the currently active Kilauea) and visit many interesting cultural and biological sites. During this

trip, I found out that many people outside of the GPS division had never heard about it; I myself didn't find out about it until late in my sophomore year. Therefore, I resolved to write this article about my own experiences during the trip as an inspiration to those of you toiling away at Ge 1, 4, et al.; I hope that all who read this find it entertaining and informative, or at least more so than those ads trying to get you to throw a way a lucrative degree to go make money for J.P. Morgan.

Day 1 - Thursday, March 14 "Coffee, Tea or Insulin?"

Thursday the 14th of March dawned clear and beautiful; I know this because I was awake in the petrology lab in Arms Building, madly flailing away at the lab final for Ge 115a. After putting the final touches on what would surely be a great milestone in the annals of igneous petrology (Note: Most writers are liars.), I headed back to Dabney 3 for a quick breakfast of leftover chicken before heading out the door to the Athenaeaum. Five minutes after that, I started out again, this time with my luggage -my backpack, a slightly ruptured green duffel-bag thing with my clothes, and my sleeping bag wrapped around an ASCIT tent. I was the first one to arrive at the Super Shuttle that would take most of the GPS undergraduates (all seven of us - Laura, Adam, Jose, Damien, Sara, Adelle and me) to LAX. Somehow, we loaded in all of our luggage without violating any laws about obstructing the driver's vision (I think) and off we flew.

didn't expect to have nothing but LAX visible on the horizon. I also didn't expect the inside of the terminal to resemble Ernst Stavro Blofeld's volcano lair in You Only Live Twice; I suppose I should get out more often. After Adam managed to duct-tape two of his bags together to make the carryon limit, we headed off to the departure terminal, had our film ruined by the X-ray machine and sat down at the Hawaiian Air terminal (some others went Delta) to listen to the guy at the counter explain that the flight was overbooked and would someome pretty please take a later flight. Leaving him to his own private hell, I went to a nearby cafeteria and got an overpriced 20-ounce

Coke. I was

that

or

even my un-

tamed hair,

halfway through the line to the cashier when I realized people were looking at me strangely not because of my backpack,

but because I was drinking a Coke

at 7:30 AM: not uncommon at

Caltech or Microsoft, but a bit

noticeable elsewhere. I definitely

should get out more often (at least

to get some practice at imitating

normal social conventions like the

the DC-10 and it took off, and

there we were inside a metal box

over the ocean, only we couldn't

see the ocean because there were

too many clouds in the way, and

the subtropical sun was shining

directly in my face and easily

overwhelming the feeble

ministerings of the poor over-

worked ceiling fan, and the guy

next to me was sleeping and when

I jokingly told the stewardess that

he wanted a double tequila with

the worm she frowned and said

"We don't have any tequila," and

where the heck are those South-

west Airlines steward(esses) with

their sense of humor that, while

Anyway, we finally got onto

replicants in Blade Runner).

then with turbojets, but every stewardess was a registered nurse, you weren't crushed in from before and behind by your fellow passengers and I bet when you asked for a Coke you got the whole damn bottle! And it was a glass bottle, too, like in Ensenada! (Remind me to tell you about that sometime.) And that's all I have to say about that flight.

After that lovely time, we took a DC-9 from Oahu to Hilo, the main city on the Big Island. Hilo is a "real" city (as opposed to those various ciudads de dinero y tawdry sprinkled across the islands that are supported by tourism); it's the main international shipping port for the island, which is reflected in the dearth of hotels (all the tourists want to stay in Kailua-Kona on the leeward side of the island) and the City of Industry style of architecture.

All of the members of the trip (including the grad students and Professors Sharp, Silver and) met at the car rental place, where we received our Rules of Engagement:

- 1. You're here to learn. This is not a vacation on a tropical island. (Well, not until next Friday, anyway, when the trip officially ended.)
- 2. Many people live off the land here, and tourists can be considered part of the landscape. Watch your stuff, lest it be ripped off. (Yeah, right. What are the chances of that?)
- 3. You will learn to pronounce the name of the pu'kiawe plant (Hint-"Puke-Away" is incorrect.)
- 4. There is no rule four.

And then we took off to our first destination, about a mile down the road from General Lyman Field. Off the road and a little ways down a dirt path was a drill rig where our own Professor Edward Stolper had been running an experiment for a while, courtesy of the National Science Foundation. The idea was to drill through the layers of lava from both Mauna Kea and Mauna Loa and date the layers therein (if anybody reading this went to Geology Club much last year, you know what I'm talking about); they were able to get 1056 meters down before the NSF money ran Beneath the shadow of the drill rig, John Donovan gave a talk about the crystals of olivine he had been attempting to analyzed for a while - oh yes, everyone had to be an "expert" on one particular subject about the Big Island and was expected to give a short talk about that subject. My topic was the differences between Mauna Loa and Mauna Kea, the two largest mountains on the island. During the talk I examined some of the more interesting features of the environment; no rocks were underfoot but basalt (typical, I suppose, for a hot-spot island in the middle of an oceanic plate made entirely of basalt), there were some shrubs whose leaves

ADAM VILLANI: MEDIA GUY

69th Annual Oscar Nominations

by Adam Villani

This year's crop of Oscar nominations were the best I've seen in a long time. While none of my five favorites (Dead Man, Breaking the Waves, Cyclo, Trainspotting, and Sling Blade) got more than two nominations, the Academy did an excellent job in passing over big-budget Oscar bait like Evita and going after smaller, independent critical favorites like Mike Leigh's excellent Secrets and Lies. 28 out of 40 nominations in the major categories, as well as 4 out of the 5 Best Picture nominees were for movies produced and released outside the Hollywood studio system. And Jerry Maguire, the one star-driven studio pic to make a strong showing in the nominations, was actually a really good movie!

For once, the Best Actress field is actually stronger than the Best Actor nominees. In any other year, Madonna, Debbie Reynolds, and Courtney Love would have been assured a nod. With such a strong, crowded field, it seems like awfully poor judgement for Sony to have pushed Love and Renee Zellweger (Jerry Maguire) in the Lead Actress category, rather than the Supporting spot where they both belonged and would have had a much better chance. My most pleasant surprise upon hearing the nominations read was the Academy's recognition of Emily Watson's fantastic performance in the little-seen Breaking the Waves. Other signs that some Academy members do have good taste were Billy Bob Thornton's two nods for the outstanding Sling Blade, Angels and Insects' Costume Design nomination, and the Coen Brothers finally getting their Academy breakthrough with Fargo.

On the flip side, there's the Academy's predictably pathetic Music and Documentary branches, which annually triumph the mediocre over the truly praiseworthy. Neil Young's haunting score for Dead Man, Carter Burwell's work on the otherwise well-received Fargo, and Danny Elfman's wildly on-target music for Mars Attacks! were completely ignored. The Best Original Song category is a perennial joke, honoring schmaltz-laden ballads like "Because You Loved Me," this year leaving the title track from That Thing You Do! as the only halfway-decent song on the ballot.

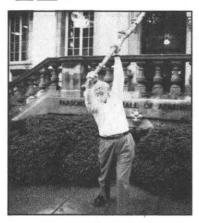
The true Oscar criminals are in the Documentary branch, who now have put Looking for Richard, Microcosmos, and Paradise Lost: The Child Murders at Robin Hood Hills in esteemed company with Hoop Dreams, Crumb, The Thin Blue Line, and Roger and Me, all some of the best documentaries of recent years, all of which have all been overlooked by the nominating committee (Crumb was even turned off halfway through the screening). In other words, nearly every one of the most challenging, heartfelt, skillful documentaries where filmmakers actually tried to make a difference has been systematically overlooked in favor of pedestrian talking-heads-style Discovery Channel fare. Nevertheless, I have heard that the Muhammad Ali pic When We Were Kings is quite good.

You're here to learn. This is not a vacation on a tropical island.

I've never been inside the airport for a really big air hub before, so certain aspects of LAX were unexpected. For example, I cloying, doesn't make me want to burrow through the cabin floor and jump out the baggage doors? Lunch was a piece of chicken that had evidently been crossbred with a hummingbird to produce a fillet both tiny and sickly sweet, some decently cooked rice-andveggie mix, half a can of Coke and a truly dreadful pineapple upside-down cake which probably was meant to get us haoles (mainlanders) into a festive island mood. Pfeh. The in-flight movie was Sabrina, but I fell asleep about ten minutes into it and woke up over Honolulu just in time to see the A-10 Warthogs parked on the nearby Air Force runway as we headed in. I'm beginning to see why some people pine for the China Clippers of yore - sure, it took fifteen hours to get anywhere and you had a much better chance of hitting the drink in a prop job

curled up when you touched them, and there was a plague of mosquitos hovering about that attacked everyone who foolishly arrived in Hawaii clad in shorts and short sleeves.

Lateron, Bob assured the survivors that mosquitoes were in fact rare in Hawaii, so apparently we were all actually pretty lucky to see so many in one place. We then drove around Hilo Harbor for a little bit of sightseeing before we headed downtown to eat dinner at a little Japanese place and purchase our groceries, for the next several days would take us over ten miles away from any supermarkets - on a side note, canned meats seemed to have pride of place on the aisles. We then headed out to our home for the night, a state-maintained campground with a grassy field and a beautiful panorama of a waterfall, a stream and the Pacific Ocean framed by a steel trestle bridge or, at least that's what it sounded like at 8:30 p.m. Sure gets dark quick in the tropics. We set up camp with the help of our flashlights and within ten minutes I had managed to break one of the cross-supports to my tent. However, I effected a repair with duct tape (all together now - DUCT TAPE UBER ALES!) and was consoled throughout the night by the representatives of the Hawaiian insect community that had migrated into my tent the instant I opened it. The moral of the story: Just because it's not raining hard doesn't mean you shouldn't put the rain shield over the tent, as water does tend to collect.



What a series of odd coincidences . . .

A few weeks ago, I had just settled for a lunch of pizza with lots of hot pepper and a glass of chocolate milk when I was approached by a student, who asked if he could join me. A Senior in Mechanical Engineering, he wanted to go to Graduate School after Caltech and work on renewable energy sources. I guess that's a hot topic these days.

We started to speak of energy sources ranging from wind turbines to solar electrolysis of water to generate H_2 . It is always fascinating to see the turbine farms just as one leaves Route 5 near Livermore, on the way to San Francisco. The green rolling hills planted with geometrically spaced white pylons, some with rotating blades, others with their arms stopped, standing helpless in the breeze.

It sure does not look like

Dean's Corner

Little green men

by Jean-Paul Revel

these spectral shapes make a great

contribution to the electrical grid. Perhaps they are kept as art, like the Umbrella Line that Christo and Jeanne-Claude erected near the Grapevine and in Japan¹.

If the wind turbines don't seem to be practical as yet, maybe they will be so in the future.

Solar electrolysis too is a dream of the future, and may be it won't pan out either. There are organisms, however, who have solved their energy crisis by using solar energy to split water, having managed "Better Living Through Chemistry."

I am of course speaking of plants which use photon energy to split water into protons, electrons and atomic oxygen. These and carbon dioxide are then used to synthesize biological molecules. That makes green plants autotrophs, organisms which produce their own food. The stuff they synthesize is easy to catch, even by

lazy animals (heterotrophs) since few plants can run very fast. So we eat plants straight in the form of lettuce, watercress, broccoli, spinach or potatoes.

We also take advantage of other animals to transform for us parts of the plants we cannot digest ourselves into heterotroph's delights like meat or milk. The plants' basic machinery uses the pigment chlorophyll to capture energy at many wavelengths except right in the middle of the spectrum, the color green. That's why many plants appear green to our eyes.

Now a few days after this encounter, I met a colleague, again in Chandler Hall, and he said, "There are so many green things around us, why are there no green people?" or something of the sort.

I actually didn't know why not. All I could answer was that the biological ancestors of plants and people became distinct lineages before the plant ancestor acquired chlorophyll. Its a bit more complicated than all that, but I don't want to digress even more.

I guess one of the problems photosynthesizing people would have to face is how to acquire a large enough surface area to expose enough chlorophyll to the sun. The plants do it by having many thin leaves. The body plan of little green men would have to be modified to achieve such a favorable surface to volume ratio.

Actually, Mythology tells us of the "Green Man," a consort of the Earth Goddess, who was represented with leafy branches growing from his mouth. I found Llangwm, the Celtic version of the Green Man, specially charming. I guess he got his name because he could not speak too clearly with his mouth full of leaves. You'll see what I mean if you look at his portrait². While looking for him I also read with interest that Dionysus, the "wild god of wine and revels [sic]," is a close relative (of the green man).

Alternately, photosynthetic humans could all have big crests like iguanas or dinosaurs. Or instead of having hairs composed of dead cells, we could have live green excrescences, a bit like a Gorgon³ but with the appearance of spinach vermicelli. Come to think of it, haven't I seen some green hair somewhere around campus recently?

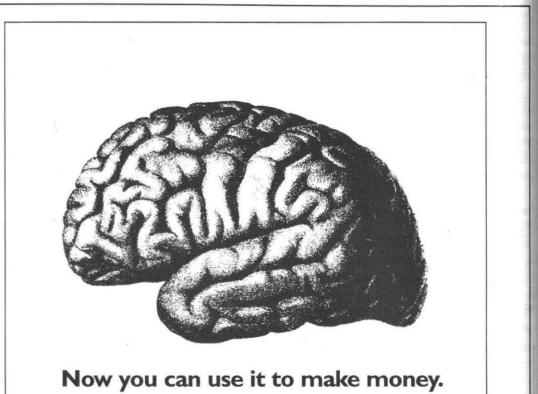
Orson Welles described an invasion of creatures from Mars on the radio and scared the daylights out of his listeners, as had H.G. Wells shaken up his readers with his story about the War of Worlds. More recently we sent a lander to Mars to tell us if there were any Martians. I guess we scared the daylights out of them. We never got to see any of them, or their footsteps, or other indication of their existence for as long as the lander functioned.

I remember sitting in Beckman Auditorium waiting for the lander to send back the first photos of the surface. Entire families were camping there with children wrapped in blankets as the screen became filled line by line with the newly revealed Martian landscape. Everyone was disappointed that no Martian appeared to investigate the odd shaped creature from outer space, this peculiar huge spider that had just landed on the local golf course. Maybe Martians just moved too fast for their image to be caught, like in the desolate pictures of cities taken early this century in which no people or moving objects were recorded.

Of course the landing on Mars took place before we real-



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ized that the Martians had already landed here. "The chances of anything coming from Mars are a million to one, he said." 4 But still they came. Lucky for us that some of them landed in Antarctica, our deep freeze, or we may never have found their remains. Our watery environment is not conducive to preservation of such materials.

The pictures of the meteorite as well as the other evidence for life that goes with them are truly tantalizing. Too bad that this possible form of life is not in the shape of the advanced kind of creatures we were hoping for. Too bad indeed, that we don't even know if the things

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were green. Of course, they could have used other wavelengths, or they might have been heterotrophs rather than autotrophs. At this point anyone's guess is good.

Actually it is an exciting moment, the first time we might really be faced with the remains of an alien. Are we so blasé that only a few react to this sensational news? Is it possible that **F**EATURES

we are so brainwashed that we truly expected a hearty "take me to your leader"? The fantasy of X-Files, Star Trek and Star Wars seems to have interested so many more humans than the reality of a true Martian . . .

For me, the discovery of what represents at least part of Martian life is a time as touching and mind opening as seeing the tracks made by what is assumed to be mother and baby walking in the wet volcanic ashes of Laetoli 5.

I hope your web browser works.

A bientôt,

Revel

References:

February 14, 1997

http://pomo.nbn.com/ youcan/christo/umbrella.html ² http://jblstatue.com/pages/ llangwm.html ³ http://jblstatue.com/pages/ medusa gorgon.html ⁴ H.G. Wells, The War of the Worlds. 5 http://mac246.ed.uiuc.edu/ edpsy-387/Bonnie-Sklar/ sitesdir.html

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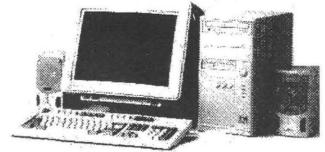
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Sports



Yet another victorious moment in Natsuko Kagawa's match

Women's tennis swings to victory

BY AMANDA SCHAFFER

The women's tennis team opened the season with two emphatic road wins against Whittier and Biola, building confidence for the long season ahead. After the home match scheduled for January 25 was postponed due to rain, the team began its busy season January 29 against Whittier, playing at Palm Park. Caltech came out of singles play with a 4-2 lead, as #2 Lena Petrovic, #4 Audrey Lee, and #6 Amanda Schaffer



won in two sets and #3 Natsuko Kagawa was victorious in an epic three hour match against Whittier's Pam Lentz. #1 Alexis Johnson and #5 Lisa O'Rourke also played tough matches, but were unable to secure wins. In doubles play, O'Rourke and Schaffer cruised through their first set 6-0 and were behind 0-1 in the second when Whittier's Jennifer Jackson aggravated a shoulder injury and was unable to continue, securing Caltech's team victory over Whittier. The #1 and #2 doubles matches were cut short due to time constraints, with Petrovic and Kagawa leading 6-1, 5-1 and Johnson and Lee winning 6-4, 2-1. After the team victory, coach Karen Nelson remarked, "The team has been working hard both on and off the court. They played a strong match in their season opener against Whittier, taking home the 5-2 win."

Team morale was high following the opening contest. A day later, Kagawa commented on her long matches, "I liked doubles better because it went off a lot faster, although we still didn't play fast enough to finish it off." Petrovic, a senior, offered her insight: "Since my freshman year, the team has improved from [playing] close games - we usually lost to Whittier - to sweeping them 5-2! We were [also] up one set in the two other matches that were interrupted ... we needed only three more points to close the number one doubles match at 6-1.5-1.

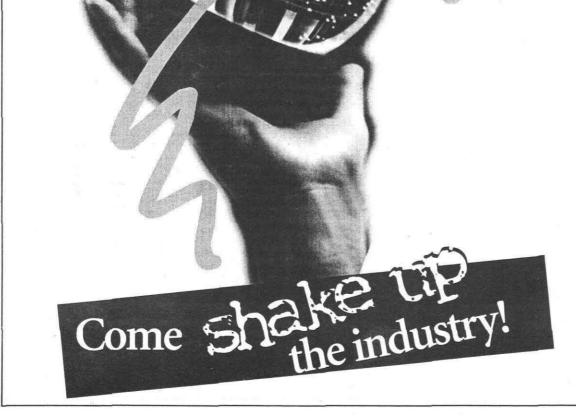
Assistant coach Fiona Lo, who played tennis at Caltech from

1990-92, said, "It's good to be involved with the Caltech tennis team again. [The Whittier] match was a great example of how the team has grown." Lisa O'Rourke exclaimed about the opening meet, "I've never tasted anything better!", and offered some hypothetical press reviews: "'Two thumbs up!' - Siskel and Ebert: 'Marvelous!' - the New York Post." Caltech assistant trainer Kenny Riche summed up the emotions of the day, explaining, "I have not felt so much joy for one team since the Lakers beat the Celtics in 1987."

Hopes of world domination proved a bit premature, however. as the women lost a close match at Cal Lutheran the following Saturday. Only Johnson and Kagawa were able win their singles matches for Caltech; Petrovic played an exceptional three set match at #2, but was edged out by her opponent in the end. In doubles action, the teams of Petrovic/Kagawa and Johnson/ Lee posted victories, but O'Rourke and Schaffer were unable to sustain a second set comeback and fell to Cal Lutheran.

After the disappointing 5-4 loss, the team came back strong against Biola on Tuesday, February 4, winning 6-3. The doubles mathces were played first, using the eight-game pro-set format instead of the standard best of three sets. Petrovic/Kagawa and Johnson/Amy Chang-Chien won their matches, giving Caltech a2-1 edge going into singles. Team victory followed, as Johnson, Petrovic, Kagawa, and Chang-Chien all won their matches.

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Events

This week's ASCIT Movie is *Sabrina*. It will be showing at 7:30pm and 10:00pm in Baxter Lecture Hall. Admission for ASCIT members is \$2.00, and \$2.50 for non-members.

Dr. Arden Albee, professor of geology, will give a Watson Caltech Lecture, "Return To Mars-Twenty Years After Viking." The lecture will be given in Beckman Auditorium, on February 19th, at 8:00pm. Admission is free. For more information call x4652.

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♥ Free tickets are now available for the 25th

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include works by Brahms, Fanny Mendelssohn

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The Armchair Adventures travel film, "Japan," will be showing at Beckman Auditorium, on February 21st, at 8:00pm. The film will be presented by travel lecturer Dr. Dwayne L. Merry. Admission for Caltech students is \$4.50. For more information call x4652.

On February 21st, 1997, **Dr. Ned Block** Professor of Philosophy and Psychology New York University will give the lecture **Race** and Genes: **The Fallacy on Both Sides**. The lecture is in Baxter Lecture Hall at 4:00pm. Refreshments will be served following the seminar For more information, call x4087.

Acrobats of the Chinese Zodiac will be performed at Beckman Auditorium, on February 22nd, at 8:00pm. The Chinese Golden Dragon Acrobats use the animals from the 12 signs of the Chinese Zodiac to create an "Eastern Circus" with acrobatics, magic, music, and dance. Admission for Caltech students is \$5.00. For more information, call x4087.

Caltech Guitar Classes for the winter quarter will meet on Tuesdays starting January 14th in Room 1 of the Student Activities Center (SAC). The beginning class will be held from 4:30pm to 5:30pm, intermediate class from 3pm to 4pm, and the advanced class from 5:30pm to 6:30pm. Classical and Famenco repertoires are explored but the 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. For further information on the classes or Mr. Denning's new compact disc recording, please call (213) 465-0881 or e-mail Mr. Denning at ddenning @cco. caltech.edu.

Salsa classes with Richard Orozco of Let's Dance LA continue during February in the Dabney Lounge Thursday nights this term from 7pm to 8:30pm. The cost is \$3.75 to Caltech undergraduates, \$5.00 to other Caltech and JPL affiliates, \$5.50 to non-affiliates. Beginners, singles, and couples are welcome. The classes are sponsored by the Caltech Ballroom Dance Club with professional instructors from Let's Dance LA. For more information call Adam Showman at 796-1098 or showman@ earth1.gps.caltech.edu.

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denotes a new announcement.

The Caltech Ballroom Dance Club will offer free beginner Waltz lessons in Winnett Lounge 8-9:30pm Wednesday evenings, Feb 5th, Feb 12th, and Feb 26th. A Viennese Waltz crash course will follow. Check out the club's new web page: be provided. tionships with advisors. The program is open to all graduate students and will be held on Thrusday, February 13th, from 6:00-7:30pm in Winnett Clubroom One, Light refreshments will be provided.

> If you have any questions about these programs or want to discuss your individual questions or concerns regarding coping with stress, please contact the Counseling Center at x8331

Fellowships and Scholarships

Literature Prize Announced. The Literature faculty is pleased to announce the 51st 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 April 4, 1997. 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 in 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 Professor La Belle, x3605, or Doreen Domb, x3610.

All graduate and undergraduate students are invited to enter the Hyundai 50th Anniversary University and College Student Essay Contest on one of the following subjects: the Information Society and Humanity; Farnily and Human Relations in the 21st Century; The Industrial Structure and Occupations of the Future; The Corporation's Roles as a Global Citizen; Sustaining Economic Growth and the Environment in Developing Nations; or Women's Roles in the 21st Century. To enter, complete and submit the online registration form found at http:// www.hyundai.net/contest/welcome. html. Entries should be written on one of the six themes listed above and be 15 to 20 A4- or letter-size pages in length, double-spaced, in MS-Word or HWP file format. A 2-page essay abstract should also be included. Application deadline will be February 28th, 1997.

From the Dean's Office, 102 Parson-Gates.

Caltech students interested in a career-related to environmental public policy and Native American and Alaska Native students interested in careers related to health care and tribal public policy are invited to apply to be named a Morris K. Udall Scholar. The Morris K. Udall Scholarship and Excellence in National Environmental Policy Foundation operates an educational scholarship program designed to provide opportunities for outstanding U.S. students with excellent academic records and demonstrated interest in, and potential for careers in the fields of environmental public policy, health care, and tribal public policy. All applicants must be a current sophomore or junior pursuing a bachelor's degree on a full-time basis, have an average of at least a B or the equivalent, be a U.S. citizen, U.S. national, or resident alien, have a demonstrated interest ental nublic

ternships. Three to five Caltech undergraduate women will be given an opportunity to participate in research projects outside of the Caltech community for ten weeks during the summer. Each student will receive a \$3,500.00 stipend. Applicants are required to identify the projects in which they wish to participate. All arrangements with the principal researcher will be the responsibility of the student. There are no restrictions as to where the research can be done, except that it must be outside the Caltech-JPL community. Other universities, commercial labs, or any industrial facility in which the student can arrange to conduct or participate in a research project can be the site for the experience. Each student will be asked to submit a short synopsis of her report to the Deans' Office at the end of the summer. If you are interested, please identify a sponsor for your experience at a research facility for a ten-week period. In a short essay, describe your project, and submit it to the Deans' Office in Room 102, Parsons-Gates along with two faculty recommendations. The Deans would like to know for whom you would be working, where, and if possible some specifics concerning your proposed research topic. Proposals must be received by Monday, March 3rd, 1997.

From the Fellowships Advising and Resources Office, x2150, e-mail lauren_stolper @starbase1.caltech.edu:

The American Association of University Women offers a number of fellowships to women who are U.S. citizens or permanent residents, including one year post-doctoral fellowships and special dissertation fellowships. The international fellowship is awarded to women who are not citizens of the U.S. or permanent residents who are engaged in full-time grade or post-graduate study in the U.S. A poster with a tear-off card that allows you to send for an application is posted on our main bulletin board.

From the Financial Aid Office, 515 S. Wilson, second floor:

The American Meteorological Society announces its AMS/Industry Undergraduate Scholarship Program. For the 1997-98 academic year, 18 undergraduate scholarships will be awarded. Two categories of students are eligible: 1) Students who are enrolled in a course of study leading to a bachelor's degree in the atmospheric or related oceanic or hydrologic sciences, and 2) students who are enrolled in a program leading to a bachelor's degree in science or engineering. Students in this latter category must demonstrate a clear intent to pursue a career in the atmospheric or related oceanic or hydrologic sciences. Applications and supporting documents are due February 21st, 1997.

The Marin Education Fund announces the opening of its 1997-98 Undergraduate Grant application process. Applicants must be residents of Marin County, be enrolled at least half-time in undergraduate study, and have a low to moderate income. Applications are due March 2nd, 1997.

The American Women's Club in Sweden will be awarding a travel grant for study and research in Sweden. To qualify you must be a woman, age 18 or over, and an American citizen. You must also be accepted for a period of study or research at a Swedish educational institution or agency and show evidence of financial need. The completed application and all supporting documents must be received by April 15th, 1997.

The Jewish Vocational Service is accepting applications for scholarships from the Jewish Community Scholarship Fund. The scholarships are designed to provide financial assistance to Jewish students who are legal residents of Los Angeles County, attending college on a full-time basis. Applicants must have a 2.5 minimum G.P.A., must be a sophomore or higher by September 1997, and must be able to document significant financial need. The deadline for sub-

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biochemistry, chemical engineering, or other chemically related fields such as environmental science, materials science, or toxicology. To be eligible to apply, candidates must be African American, Hispanic/Latino, American Indian, or Alaskan Native, and must be U.S. Citizens or permanent residents. Applicants must also be full-time freshmen, sophomores, or juniors, majoring in one of the above fields, and must demonstrate financial need. The deadline to submit applications and supporting documents is Feb. ruary 28th, 1997.

The Danville-Alamo Branch of the American Association of University Women (AAUW) will be awarding several scholarships of \$500-\$1,000 to female college students who will be juniors or seniors as of September, 1997, and who have lived in the San Ramon Valley, or have attended school there. Applicants will be evaluated on the basis of scholarship, achievement, educational goals, financial need, and campus or community involvement. An application package can be obtained from: Mary Ann Osborne, 2530 Roundhill Drive, Alamo, CA 94507. Completed applications must be posmarked by Tuesday, April 1st, 1997.

The John Gyles Education Fund is offering financial assistance to students who are Canadian or U.S. Citizens. A minimum G.P.A. of 2.7 is required for eligibility. Criteria other than academic ability and financial need are considered in the selection process. Selected students will receive up to \$3,000. To receive an application, send a stamped (U.S. \$.32), self-addressed, No. 10 envelope to: The John Gyles Education Fund, Attention: R. James Cougle, Administrator, P.O. Box 4808, 712 Riverside Drive, Fredericton, New Brunswick, Canada E3B 5G4. Filing dates for mailing applications in 1997 are April 1st, June 15th, and November 15th, 1997.

The Chinese-American Educational Foundation announces its scholarship program for students of Chinese descent. Eligible studens are graduate students or undergraduates who are juniors or seniors, and who will be enrolled full-time in Fall of 1997. Eligible students must also be U.S. Citizens or permanent residents. There are two \$1500 scholarships available for graduate students and seven \$1000 scholarships available for undergraduate students. The deadline to submit applications is March 31st, 1997.

The ACIL (formerly the American Council of Independent Laboratories) Scholarship Alliance is offeting scholarships for students majoring in the physical sciences: physics, chemistry, engineering, geology, biology, or environmental science. Awards are based on academic performance, career goals, leadership, and financ'at need, and are typically \$1,000-\$2,000. To apply you must be a junior or senior in undergraduate study, or a graduate student. Applications and all supporting documents are due April 15th, 1997.

The Coalition of Higher Education Assistance Organizations (COHEAO) is pleased to present an opportunity for students to apply for three \$1,000 scholarships and three \$200 runner-up awards. Applications and supporting documents are due May 15th, 1997.

The American Scandinavian Foundation of Los Angeles will be awarding five scholarships of \$1,000 each to upper division and graduate students. Applicants must exhibit a connection to Scandinavia via life experience, field of study, or hentage. Applications and supporting documents are due March 21st, 1997. To request an application, write to: James Koenig, ASFLA Scholarship Chairman, 3445 Winslow Drive, Los Angeles, CA 90026.

♥ The Sunkyong Group of Korea and LeaderShape Inc. are sponsoring the "Global Leaders of Tomorrow" essay contest. Entrants must be undergraduate or graduate students at the time their entries are submitted. Essays may be written from one of four perspectives: Business, Government/Law, Science, or Media/Communications. Three winners will be selected in each of these 4 categories. First prize (1 winner in each category) is \$2,500 plus a one week trip

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