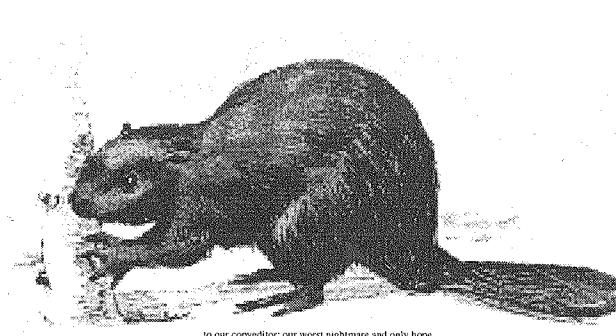


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The California Tech

VOLUME CIII, NUMBER V

PASADENA, CALIFORNIA

NOVEMBER 2, 2001

CALTECH TO HELP FOUND NEW GLOBAL COMPUTING NETWORK

BY JON FOSTER

One day running an intensive computer program will be like turning on a light. All you'll have to do is log on to a large distributed computer system and use the computing time you need, eliminating the need to buy supercomputers to perform the tremendously complex programs required by many scientific endeavors.

A first step towards this goal was recently announced by the National Science Foundation. Over five years, fifteen universities and four national labs will spend nearly \$14 million to create the International Virtual Data Grid Laboratory (iVDGL), which is being touted as the first global integrated computational resource for scientific experiments. Caltech, as one of the participating universities, will have access to a system which is projected to be able to handle several petabytes of data (1 million gigabytes), at speeds up to petaflops.

Advanced network connections and scheduling programs will connect large clusters of computing power at up to 40 locations all around the world to provide a seamless and powerful machine on which to run science experiments. One of the major experiments that will make use of this system is the Laser Interferometer Gravitational-Wave Observatory, (LIGO) a joint project of Caltech and MIT designed to detect gravitational waves. Other experiments which will make use of iVDGL are the ATLAS and CMS experiments at CERN, the Sloan Digital Sky Survey, and the proposed National Virtual Observatory.

The system is expected to begin operation next year. Eventually iVDGL will be able to support hundreds of users at a time and will rank as one of the most computationally powerful systems in the world.

Moore money given to research



Gordon and Betty Moore are the recent benefactors of Caltech. Their \$600 million donation is the largest gift given to any university.

BY IRAM PARVEEN BILAL

Most Techers received the pleasant surprise email from President David Baltimore the other day about gifts worth of a total of \$600 million to Caltech.

The gifts were given by Gordon and Betty Moore and were announced at the annual Board of Trustees meeting on Friday

Tech, everyone is curious as to where the money will be going and who will get how much of it.

Hence, there was no better choice than the President himself, to speak with on the issue.

He started off by saying, "We have no money...as of today!" Then he explained the contents of the gift package. They are split into two parts namely \$300 million from the Gordon and

October 26, 2001. Gordon Moore is not only a Caltech alumnus (Chemistry doctorate, 1954) and Chairman Emeritus of the Board of Trustees (chairing it from 1993-2000) but he was also the co-founder of the chip-making foundation Intel Corporation.

With such a great endowment on

Betty Moore Foundation and \$300 million from stock in their names. The former is strictly directed towards research, development, and education whereas the latter is to be donated over the next five years and is unrestricted in its usage. Clearly, he confirmed, that a lot of this too would go into endowment and research.

Upon my asking about how the funds would influence students, President Baltimore said, "We are yet to discuss with the foundation about exactly what areas they will consider for funding that is related to students."

However, he said that they would do so in the next few weeks.

The two major projects dealing with student life and amidst consideration as of now are the Student Houses' renovation and the building of a student union that will include a performance hall, activities rooms for music and art and so on. He said that these were both high on the priorities list and were also very intense projects with respect to finance.

Hence, the gifts would certainly help in their funding. He added that he certainly hoped to see results in this area within the next 2 to 3 years.

He commented further, "The Moore gifts should not be seen

in isolation. We have plans for a comprehensive campaign that will be announced next year and will incorporate student-related needs."

As soon as I got a chance, I mentioned some of the major problems that face a majority of the undergraduate student body such as the food quality and academic concerns like CS classes. He promptly replied to both.

His comment on the food was, "I believe that a greater part of the complaints about food are to do with the way it is served and a part of the new renovation plan is significant reorganization of food service. I believe that will help a lot. In fact, I will personally look to committees that involve students, for advice on that."

Regarding the computer science department, he said, "One of the clear lacks we have is an insufficient faculty size for the interest there is in CS and we definitely want to give some contribution to it."

President Baltimore addressed the general Caltech community this Monday regarding the details surrounding the extraordinary gifts. He expressed his personal concern for the betterment of student life at Caltech and said, "We want to understand the needs of the students and see where we can respond to those."

Ell awarded 2001 Caltech Women at Work Medal of Excellence

BY PHILIP WONG

While Caltech is primarily known for its excellence in the fields of science and technology, the impact of dedicated individuals outside the scientific arena cannot be underestimated. In appreciation for her commitment, leadership, and service to Caltech, Sandra Ell, Caltech's Chief Investment Officer, was awarded the 2001 Caltech Women at Work Medal of Excellence.

Joining Caltech as an accountant for JPL in 1984, Ell's career accomplishments have been nothing short of spectacular. In 1990, Ell became the school's assistant treasurer and is now

Caltech's treasurer and CIO.

In addition to managing Caltech's foundation, endowment, and trust funds--a sum totaling \$2.3 billion--Ell is also an active member in the Pasadena community. She serves as an advisor for the mayor of Pasadena and is also the commissioner for Pasadena City's Utility Advisory Commission.

It is for her career accomplishments and devotion to the community that Ell received the Women at Work Medal of Excellence. The award, sponsored yearly by Caltech and presented by the nonprofit organization Women at Work, was first awarded in 1984. It now seeks to honor women who have im-

pacted the workplace and community by serving as an inspiration for other women in the arena of career development.

It was in celebration of this spirit that a ceremony was held on October 10, 2001, at Caltech recognizing Mrs. Ell's seventeen years of commitment and impressive accomplishments.

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News

The Outside World

- WILLIAM FONG

Anthrax Concerns Grow:

So far, there have been 16 confirmed cases of anthrax (10 inhalation and 6 skin) and 4 have died. The latest victim was a 61-year old woman from New York City whose source of infection has yet to be found. As further tests are being conducted, more sites have been found to be contaminated with anthrax including several locations in New Jersey and the Supreme Court, which was closed on Thursday. Thus far, mail has been the primary medium used to spread anthrax and it is at postal locales where most of the anthrax contaminations have been found. At this point, the FBI has been unable to pinpoint who is responsible for the anthrax attacks. Regarding the investigation, Attorney General John Ashcroft said, "We don't have any progress to report at this time."

Military Action Continues in Afghanistan:

The U.S. has begun carpet-bombing two Taliban strongholds in northern Afghanistan, Mazar-e-Sharif and the capital of Kabul. Carpet-bombing involves jets and other aircraft dropping hundreds of unguided bombs with the intent of attacking the entrenched Taliban forces. Also, the U.S. has encouraged the Northern Alliance, one of the opposition groups to the Taliban, to take military action against the Taliban; however, according to Taliban sources, all attempts by the Northern Alliance has been successfully repelled. In response, the Northern Alliance has appealed

to the U.S. for aid in support of its campaign against the Taliban.

Microsoft and Feds Reach Settlement:

On Thursday, a tentative agreement was reached by Microsoft and the Justice Department in the historic antitrust case. The deal would place Microsoft under supervision for the next five to seven years and impose restrictions on Microsoft's business practices but would allow the Windows software to remain virtually unchanged. Approval from the state attorney generals is needed to seal the agreement, but they have yet to consent. The presiding judge has set Friday as the deadline for reaching an agreement.

World Series:

In dramatic fashion, the New York Yankees tied the best-of-seven World Series with the Arizona Diamondbacks at two games apiece on Wednesday. With two outs in the bottom of the ninth and trailing 3-1, New York's Tino Martinez hit a game-tying two-run homer to send the game to extra innings. In the bottom of the tenth, Derek Jeter hit the game-winning home run as the Yankees prevailed 4-3.

Michael Jordan Returns to NBA:

On Tuesday, Michael Jordan officially came out of his three-year retirement and at age 38 returned to the NBA as a Washington Wizard. In his first game back, Jordan played against his old rivals, the New York Knicks, where he was held to 19 points and missed a potential game-tying shot as the Wizards lost to the Knicks 93-91.

Letter to the Editors

Ask and thou shalt receive. I refer to the old proverb because Caltech stands to receive \$600 million from Gordon Moore, and we as students have much to be asking for.

As a research institution, Caltech's priorities are apparent, and they often do not include students. We need only recall our net-zero gain from the \$60 million Axeline grant, our almost nonexistent performing arts program, our dilapidated houses, archaic registration system, and faculty who are often teaching-averse.

When the IHC met with Chris Brennan last term, we discussed how funding from student affairs could help develop a stronger UCC system in the houses and increase our quality of life. Their budget was slashed this year. When I needed advice from the fellowships and study abroad program, part-time coordinator Lauren Stolper was not here. Her secretary said "[Lauren] is the only one who can help you." The deadline is today. When I went to the ceramics class (at Polytechnic), the instructor begged us to petition the institute for more resources. There were 35 people for 15 pottery wheels. Our athletic facilities are inadequate. Chandler is over capacity. Enriching music and art classes are largely ignored. Our quality of life silently suffers.

With more funding for student affairs, we can afford to fund student endeavours and enhance our nonacademic programs. Quality of life can increase. We can afford to hire faculty who care about teaching. But these changes cannot happen unless we as students unite in our desire to realize improvement. I therefore entreat each student to take five minutes and write those responsible for the disbursement of the institute's newfound wealth -- President Baltimore, Steve Koonin, Chris Brennan, Bill Jenkins, Miriam Feldblum, and the deans -- let them know that funding for student affairs is imperative to the success of the institute. If we dare call ourselves a 21st century institution, then this administration must set a precedent of concern for its students.

Respectfully,

Daniel J. Liebling
President, Lloyd House

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News

Donut snafu racks ASCIT Board of Directors

BY KEVIN BARTZ

They're suckled in syrup, cuddled in cream, deliciously dainty, and sweetly sinfully strawberry and now they may be no more. Amidst a money-strapped ASCIT board faced with far-reaching cost and safety considerations, recent donut cut-back proposals have sparked hot debate on the future of the long-time favorite of Caltech's Friday-morning, up-all-night battalion: strawberry donuts from Donut Man.

"We're trying to see if we can arrange something with Donut Man to get the donuts delivered, because I do think it's dangerous," explained ASCIT President Martha-Helene Stapleton. In light of the recent strain on ASCIT's budget, she added, the group hopes to "get students' enthusiasm focused on something that affects the whole community."

Weekly pastry runs to Donut Man have long stood, in the words of former ASCIT President Eric Tuttle, as "a nice reminder to the ASCIT president of where he/she really stands in the eyes of students"-and this year, by recently passed Resolution 20, also the President's stated duty. But with a dwindling Friday-morning crowd and a \$5000 car accident last spring, ASCIT directors are contemplating moving the donuts to commercially delivery-or perhaps changing altogether their source.

"We're already working hard on other issues," said Stapleton of the ASCIT board. "And I didn't think I'd get into a car accident." Over 15 miles from campus in the far-flung suburbs of Glendora, the hour-long ride to Donut Man has continually burdened ASCIT with a situation Vice President Joe Fassler dubbed "inconvenient." Local bakers such as Winchell's Donut House on nearby Lake Street or Mr. Good's Donuts on Colorado, some speculated, would make the run considerably easier.

"In general, the idea that Far

Foster's donuts are the only good donuts in the area is a little extreme," said Fassler. "However, part of ASCIT's duty is to serve the needs of students, and ASCIT, if it's a neutral trade-off, should follow the will of students."

And the masses have spoken. In the last two weeks, Stapleton reported receiving over 40 personally addressed e-mails protesting any potential change. With students notably fond of Donut Man's popular strawberry donuts, opponents of such a move argue that "good donuts are what people see ASCIT as," in the words of Fleming President Sean McHugh.

"It seems to me that switching to another donut provider, especially Winchell's, is ridiculous," asserted Tuttle. "Most other donuts are crap in comparison to Donut Man." And although he took a stance somewhat more moderate, fellow former President Baldeep Sadhal (class of 2000) concurred, adding that while "sometimes things have to change in respect to the student body, I'd like to see donuts stick around in some way or another."

For others, though, the cause is sacred. McHugh, for his part, has incited a flurry of feedback in response to ASCIT's source-changing proposals, inviting everyone in his house to send a standardized message of protest to Stapleton. And while Stapleton herself was "disappointed that someone in his position would try to incite people without checking with [her] first," McHugh pegged any Winchell's donuts as the result of sluggishness among certain ASCIT officials.

"This is not a safety issue," he said. "It's a laziness issue. As president, you can get a lot of criticism and you need to know how to deal with it." He further

added that while Stapleton's car wreck raised eyebrows last spring, his own tenure as ASCIT's treasurer included "getting run over by a car while on rollerblades. But I still took ASCIT checks down to the bank to deposit them and Martha-Helene should do the same for donuts."

similarly "really tasty," namely Mr. Good's Donut House on nearby Colorado Street or Krispy Kreme in Glendora, where the Caltech Cheerleaders' Club has earned a substantial potential discount. The financial allure is obvious: Mr. Good's delivers for a flat fee of only \$25 and charges only \$6 per dozen

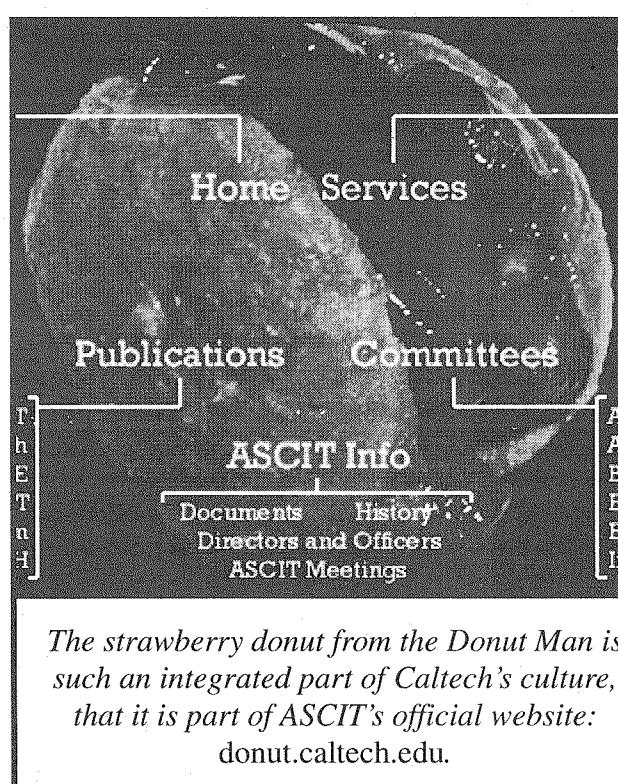
for strawberry-filled donuts-compared to \$2.10 per donut from Donut Man. As it stands, ASCIT pays \$4300 for donuts each term, excluding personal gas and transportation costs to drivers.

One more speculative proposal would involve trading Friday morning donuts for an additional coveted "midnight donut" session each term, where crowds of

undergraduates feed off several thousand evening donuts trucked in by an industrial-strength eighteen-wheeler. McHugh himself voiced support for such a plan, and Treasurer Ayeh Bandeh-Ahmadi added that ASCIT officials would never "think of getting rid of midnight donuts." Long ago, Sadhal too remembered the nighttime donuts, which run up a \$2500 bill, as "a very well-received virtual mob scene."

But any move at all would cause a chasm in a patisserie tradition already over a decade old. Donut Man officials remember supplying Caltech for nearly the past ten years, and students, young and old, are slow to trade in a classic taste simply for added pastry pocket change.

"Just because I haven't eaten many of the ASCIT donuts doesn't mean I haven't eaten donuts," said Frosh William Young, who protested the potential change. "I've had plenty of donuts and I know very well the difference."



UID charging rules enforced

BY BINGHAI LING

Three years ago, the clubs of Caltech could charge membership fees directly to student's UID accounts. Instead of having to carry cash around, students only needed to use their UIDs as a source of money. However, as of now, clubs cannot charge directly to student UIDs anymore.

For the clubs, charging to the UIDs means it will be less work for them. Any groups formally associated with Caltech can charge amounts to UIDs, such as ASCIT and the houses. However, for the Bursar's office, which keeps track of these transactions, it would be a nightmare if the clubs were able to charge to the UIDs.

Pat Draper, Personal Account Supervisor, said that before the change came along, the clubs could get the money because there was a general pool of money that they could access. Once the clubs got their money from the general pool, the same amount could be deducted from the student's account.

Now, with a different account process and new software, this cannot be done. Every transaction has to be monitored, and that means every club needs a code. That is a lot of work for the Bursar's office to do.

Heidi Dillon, the Bursar, said that they already have a big list of all groups that have a code and adding all the codes for each club will be too much work.

The Bursar's office did make one exception: last year's ASCIT Formal. It was done because they are affiliated with ASCIT. However, no more exceptions for any clubs will be made.

They will continue the policy of not allowing clubs to charge to student accounts. "If it is to be changed, Finances and Student Affairs need to formally make a written policy," Dillon says.

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Features

Marcus in Macedonia

The latest TV show to come to Macedonia, and now the latest rage, is The Jerry Springer Show. Thank you, great giving America, for sending the one thing this country, addled by violent ethnic tension, really needs.

One friend described to me the episode he saw. "There was a girl, and no matter what her mother said, she was determined to be a prostitute. Oooh. It made me so angry! Then, at the end, Jerry had some good final thoughts." Thank you, America.

Bicycling around town I'm now offended by billboards with "The Jerry Springer Show" and Jerry's grinning face plastered above some Cyrillic explanation. Damn you, America's trash merchants. Won't you leave Macedonia alone?

The singular good I can see coming from the Jerry Springer invasion is that he may alter the unpleasant American Dream idea that too many here have swallowed. Many of my friends tell me of their burning desire to move to America, where money and jobs are plenty, to revel in the happiness they see expressed in the sitcoms and movies that come through Macedonia.

There is some truth to the dream because the opportu-

nities available to Americans are far greater than those available in Macedonia, but mostly this American Dream is a poorly-formed media dream. It bears reinforcing that it is possible to be unhappy anywhere, even in America.

Some people here, pre-Jerry Springer, have held a refreshingly opposite view, although I find this equally ill-informed and extreme. They claim that

JERRY SPRINGER COMES TO MACEDONIA

they would never want to go to America because it is a horrible, arrogant country.

"Americans think they own the world," I am told with disgust. "You think that you can bomb anywhere, that you can meddle in any country's affairs just because you're rich and powerful."

"Wait. I don't think these things."

"Yeah, but you're not really American."

This is a cold bitterness built up since NATO intervened in Macedonia on behalf of peace, which in effect was intervening to prevent the Macedonian government from wiping out the Albanian guerrilla movement—

Albanian "terrorists" in the lingo of Macedonia. But I know the Macedonians, and I hear the way they talk about how the rightful Macedonia has been chopped up and distributed to Albania, Greece, Bulgaria and Serbia, and I have little doubt that with the power of the United States they too would become a world presence.

Yet another group of my friends say they would never move to America because people there are too greedy and materialistic. Whether or not these people have a point, their view really can't be helped because they're anti-capitalist anarchists.

But the fundamental problem is that all these people don't know what they're talking about. Everybody is working from TV shows, Hollywood movies and news reports, which is a small step above working from ignorance. America is a complex society with lots of different ways to live, and so maybe Jerry Springer can serve a purpose.

Perhaps he will expose my comrades to a certain lesser-known side of American life. Still I shudder to think that one day my friends, in their deep rolling Macedonian accents, may be chanting, "Jerry! Jerry! Jerry!"

Are You Afraid of the Dark?

Are you afraid of the dark? Most of us were as kids, and being unable to avoid it, we somehow came to live with darkness, albeit somewhat uncomfortably. Most of us grow out of it by the time we graduate from elementary school, but once in a while we all experience that familiar dread returns as we're walking back from Ralph's at 3am or as we enter our darkened apartments after a long night. Fear of the dark is primitive and deep-rooted, and although darkness occupies at least half of our lives, that childhood fear never disappears entirely, but just gets repressed by adult rationality and composure.

In the United States we have virtually banished darkness from our cities entirely. But despite streetlamps and nightlights, we are still afraid--for what is dark is unknown, and what is unknown is uncontrollable and therefore frightening to modern urbanites.

At nighttime, ordinary activities like walking down the street can now be full of potential dangers. Any pedestrian is a likely shady character and every dark driveway a potential hiding place for muggers. Although the proper citizens who wear skirts and suits, pumps and loafers rule the daytime world, a new social order emerges at night. All of the lowlives who don't dare enter our respectable workday environments now roam free--prostitutes, pimps, villains, rodents, insects. In fact, we're in their territory when we wander the

streets at night. Our sight fails us, and we must rely on primal instincts dulled by years spent sitting in front of the television and the computer.

Darkness squares out the hierarchy in one sense, making us all just dancers at a club, singles at a bar, blind dates and partygoers. In these settings it is invisible and irrelevant who has the money and the management position. The people with the looks and the rhythm rule the club, and neither money nor status can buy those. Such events don't progress in an orderly fashion or follow a specified plan.

Thus, curiously, having a social life and having a criminal life are both associated with being active in the nighttime hours (a notable exception being Teachers, who are nocturnal and neither social nor criminal, but nevermind that). The nightscape is an environment that we are much less aware of and familiar with, an environment we associate with fear from childhood.

However, darkness also lends a layer of comfort and anonymity. Under the bright California sun, there is nowhere to hide. During the day there are many appearances to keep up for bosses and teachers, clients and parents. We are proper and well-dressed, politically correct and well-mannered. We must work hard to maintain workplace courtesy upholding the illusion of being upstanding citizens. But twilight shines a flattering glow, blurring our blemishes to the scale of statistical error and smudging our fixed identities to mere hints of character.

By the virtue of decreased visual capability, the world becomes much more private at night. Even though the streets are still considered public in name, there is much more opportunity to sneak some PDA or mug a passer-by without anyone else noticing. We can act as we please without serious consequences to our daytime lives. Unfortunately, in attending to our private desires--dancing, dating, drinking, and engaging in other forms of debauchery--we must allow others to do the same. The same freedom that makes us want to go out at night also makes us fearful of why others like to go out at night.

Thus, night is a contradiction. It makes us more comfortable, yet more afraid. We become more social and more sociopathic. It conceals by nature, and it makes us more revealing of ourselves. Night is our friend and our fear. Night happens every day of our lives, but it still scares us.

- Jialan Wang

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Features

There's more a Teacher can do than science and technology

BY MIMI HU

"This past summer really changed my career plan," said Junior Joy Qiu. "Before the summer, I did not think that I would ever end up in Wall Street, now I am seriously considering it as my plan after graduation."

Joy chose to spend an atypical Caltech-style summer in New York City, where she was an intern at the Client Services Technology Group at Salomon Smith Barney (now Corporate and Investment Bank of Citigroup).

She typically spent eight hours a day, using company developed software to conduct project tracking and some other daily tasks relating to the company's operations. In specific, she was involved with the company's expense management in which she kept track of spending of each corporate division and conducted saving and expense analysis. Prior to last summer, Joy spent her frosh summer programming at Caltech. Though she enjoyed working with her

friends on campus, she appreciated last summer's change of setting, where she had unusual exposure to industries and enjoyed initiating projects and learning new programs at the same time.

Like every Caltech sophomore, at the start, Joy had no previous experience working at a financial institution. She added, "I knew there was Wall Street and Nasdaq (associated with stock market and such), but nothing much about how it really works or what it does in detail."

On the other hand, she admitted that she always had an interest in business and wondered what it was. It was this interest that urged her to apply to the Sponsors for Educational Opportunity Career Program (SEO), a New York based organization that provides undergraduate students of color with breakthrough internship opportunities in asset management, investment banking, management consulting, corporate law and many other most competitive industries in the economy. In recent

years, SEO has expanded its internship programs to industries such as IT, media, and philanthropy. According to Joy, an SEO internship is different from many regular internships in that an SEO intern is exposed to the industry as a whole instead of the very firm where they work. She recalled the highs of the summer to be the various SEO seminars, where interns had opportunities to talk to CEOs from Goldman Sachs, Merrill Lynch and JP Morgan. For many college undergrads, an SEO internship at a prestigious bank or consulting firm, with various summer seminars, was an excellent Wall Street 101, and many of them even had their lives changed ever since.

Joy and her exciting story, as a matter of fact, well represent the recent rise of Caltech students' interests in business and financial fields. Some new clubs such as Caltech Consulting Club have formed. Some existing clubs have gone through significant restructuring and have launched various initiatives. According to Amit

Kenjale (1st yr Grad EE & class of 2001), the President of Entrepreneur Club, "The EClub is stepping up its level of involvement and the intensity as well as the quality of its programs this year. We're going beyond 'plain-old-speaker-events' to do some business and startup related activities where students can have hands-on experience."

One of the EClub's major initiatives this year is the mentorship program in which any Caltech graduate or undergraduate with business motivations can match up with a knowledgeable businessperson who has been in the fields for years. In addition to the mentorship program, the EClub has various other activities underway, which include: participating in a \$100,000 business plan competition, hosting multiple networking events with both industries as well as with USC/UCLA/ArtCenter, and originating a 'startup-internship' program for students to get some experience working in technology related startups. Kenjale men-

tioned that the extensive network the EClub built through years would add to the success of these programs; however, he welcomed more inputs and participations from the campus, particularly from graduate students and frosh (email: eclub@caltech.edu).

On the other hand, many recruiters acknowledge that "it is the ability to think logically and analytically and to communicate effectively that will make a success at work" (Bain & Co. recruiting). The solid analytical and quantitative skills possessed by Caltech students have attracted much attention from the recruiters these days. For example, despite the discouraging turnout at their presentation last year on Caltech campus, SEO will hold a campus presentation again this year on Wednesday Nov. 7, 2001.

Joy was the only one who showed up at the SEO presentation last year. She expected to see a larger turnout next week, as she said, "I sure hope that I will not be the only one this year!"

Are you shy?

Shyness is a commonly experienced problem with an estimated of 40-50% of Americans describing themselves as shy. While many people describe themselves as shy their experience of being shy can vary quite a bit. Some people are shy when in particular social situations such as when talking with someone they might be interested in romantically, dealing with authority figures or speaking in public. Some people are shy with groups of people but not at all shy with close friends. Still others suffer from severe anxiety when confronted with any kind of social interaction, social phobia.

Shyness has come to describe a variety of experiences not all of which are actually about shyness. An introvert may appear shy but in the classic definition

of the term they aren't shy. The difference is that shy people have a desire for contact with the outside world of people but limit their interaction because of the anxiety they feel in social situations. An introvert doesn't feel the same anxiety about dealing with people they just enjoy the internal world of thoughts and ideas and that often involves more solitary activities.

Other people shy away from people when they are depressed, not having the emotional energy to engage with others.

Shyness is also culture bound. Some cultures place a strong value on what would be described as being very social while other cultures place value on respecting others in a way that can look like shyness when it is more similar to deference. Differences in cultural norms

regarding body language, smiling, and volume of talking all influence how people relate and define shyness within their culture.

Shyness is meant to describe people who wish to have more interaction with people than they do but feel inhibited or uncomfortable in doing so. A shy person's anxiety about social situations often is the result of excessive self-focus and worry. Shy people tend to think about how they are going to perform in a social situation and evaluate themselves negatively (e.g. I won't know what to say, I'll say the wrong thing, people won't be interested in what I have to say). The experience of relating becomes more about the "performance" for the shy person than actually relating to another person. People who might be described as outgoing aren't inhibited by thoughts of failing in a social situation. They focus more on the other person or their own more positive feelings about an interaction than the

negative self-appraisals of a shy person.

How can you overcome your shyness?

Anxiety is one of the major components of shyness and has to be addressed in order to overcome shyness. As explained, shy people often think in terms of negative performance in social situations and that leads to their feeling badly about themselves and anxious about social situations. They avoid social situations to avoid the anxiety and self-reproach they feel. Professional help for shyness usually involves helping the person reframe the way they think of social interactions and focus less on themselves and more on the other person(s). People who suffer from speech anxiety or social phobia can experience anxiety that sometimes reaches the level of panic. Medications can be useful to them to help manage the physical symptoms of

anxiety in situations when they are likely to feel anxious or taken prophylactically. Medication is meant to manage the anxiety so the person is freed up to actually give their speech or engage in the act of relating rather than being so focused on the anxiety they feel. The work for those suffering from social phobia and speech anxiety also involves shifting their focus to what they have to say and away from how they will be judged. Because people vary in how they experience shyness and the accompanying anxiety, help regarding shyness has to be tailored to the individual.

If you think of yourself as shy and would like some help you can check out the Counseling Center's web page <http://www.counseling.caltech.edu/> for more information. You can also talk with one of the Counseling Center staff for more individualized help.x8331.

Are you as passionate about performance as we are?

Find out more at www.pimco.com

Come see us on campus
3:30 - 5:00 p.m., Monday, November 5, 2001
Center for Student Services, 3rd Floor Conference Room

P I M C O

Announcements

IHC Announcement

To All ASCIT Members,

The position of Interhouse Committee Chairman has been recently vacated and as such it is the responsibility of the Executive Committee to select a replacement, in accordance with Article VIII, Section 9 of our bylaws. There will be a signup sheet posted outside SAC 33 starting Friday morning at 8 AM and lasting until Monday at midnight. All ASCIT members interested in being interviewed by the Executive Committee to fill the office of IHC Chairman are encouraged to sign-up. For more information about the Executive Committee please see our website at <http://donut.caltech.edu/~excomm> or e-mail the Chairman at al@its.caltech.edu. To learn more about the position of IHC Chairman and the committee itself, see their website at <http://www.ugcs.caltech.edu/~ihc>.

Al Valdivia
Executive Committee Chairman

The notebook of Trigorin

Theater Arts at Caltech (TACIT) presents one of Tennessee Williams's final plays, The Notebook of Trigorin, a free adaptation of Chekhov's The Sea Gull. Featured in the cast are junior Oana Tocoian as Nina, sophomore Suzana Sburlan as Masha, and senior Michael Shulman as Medvedenko.

Performances are in Dabney Gardens & Dabney Lounge, weekend afternoons at 3 p.m., on Saturday, Nov. 3, 10, 17, and Sunday, Nov. 4, 11, 18. Tickets for Caltech students are only \$5, available at the Caltech Ticket Office (x4652).

The Journal of Young Investigators (JYI), Inc. is an international, entirely student-run, non-profit corporation that provides undergraduate students with opportunities to actively participate in the scientific review and publication processes and in science journalism. These opportunities are provided through the operation of JYI's science journal for undergraduates, which is also called JYI, and these educational opportunities are enhanced through mentoring relationships with professionals in the scientific community.

The journal is split into a research articles section and a feature articles section. The research articles section comprises manuscripts on original research conducted by undergraduates and technical review articles. The feature articles section comprises a wide variety of journalistic and non-technical articles written primarily by science journalists on staff.

JYI is an entirely undergraduate-run enterprise. Currently, we are proud to

boast an excellent staff of over 50 undergraduate students from a wide variety of academic institutions.

If you are interested in being a part of JYI, there are currently two important positions we are trying to fill.

1) Managing Editor - must be an UNDERGRADUATE in university/college

Basically, the position requires someone with superior organizational, management, and people skills. The Managing Editor manages staff (hiring & firing, interacting with staff, keeping up staff morale, coordinating staff projects), plans and organizes the Annual Editorial Conference, is the "effective" secretary of the Board of Directors, and helps the Director of Recruitment and Public Relations with recruitment of staff and manuscripts.

2) Chief Financial Officer - must be an UNDERGRADUATE in university/college

The Chief Financial Officer (CFO) is responsible for researching and contacting potential funding sources and is the main financial contact for JYI. He/she, the DPR, and members of a selected committee from the editorial staff work to ensure financial security by promoting and advertising JYI to both private and public organizations.

to obtain support. Through acting as manager of the company bank account, the CFO also takes care of all reimbursements. In addition, the CFO is responsible for all legal matters affecting JYI.

3) Webmaster - open to high school students and undergraduates in university/college

This person is responsible for keeping up the JYI website. Uploading new articles, making the site user-friendly.

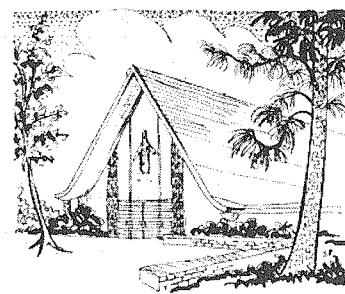
If you are interested in any of these positions, you need to submit a cover letter and resume. For the position of Managing Editor and CFO, I also would like 2 letters of recommendation and 1 letter of support from the Dean. Email your application to choi@jyi.org Please visit <http://www.jyi.org/aboutJYI/helpWanted.html> for details about the application content.

We are always looking for article submissions to be published in the Journal. So, if you have done some interesting research, and would like to get published, please feel free to contact me at any time. I would love to give you more information and help you get an article published in JYI.

-- Anita Choi
(UBC 99)
www.jyi.org

Midterms have you hitting the Malox?

Try Knox.



Knox Presbyterian Church offers a peaceful hour of worship and reflection. Immediately following the service we enjoy Fellowship (coffee, tea and thee!) on the patio. If you like to sing, our Choir welcomes all singers and has soloist spots available. We look forward to seeing you!

~~*~*~*~*~*~*~*~*~*~*~*~*~*~*

Worship 10:00 a.m.

Fellowship 11:00 a.m.

Choir Rehearsals 11:15 a.m.

(Every other week after worship.)

~~*~*~*~*~*~*~*~*~*~*~*~*~*~*

Knox Presbyterian Church

225 South Hill Ave.*

Pasadena, California 91106-3402

Phone 626.449.2144

E-Mail connect@knoxpasadena.org

www.knoxpasadena.org

Jane Newstead, Minister



*Northwest corner of Del Mar & Hill. We're within walking distance :-)



by Nathan Wozny

What's new at the Y?

- Noon concert today outside of the Red Door Café. The group Speechwriters LLC will be performing an acoustic mix.

- The Yankuititl Aztec Dance Group will perform next Friday at noon outside of the Red Door Café.

- Day Hike to Rubio Canyon on Saturday, November 10. All are invited to come on this 1.5 mile hike. Transportation will be provided on a space-available basis.

Contact Justin Kao (kaoj@caltech.edu) for more information.

- Reading to Kids, Saturday, November 10 at 8:00 am. Make a difference by reading to children at an inner city elementary school. Contact Anita Choi (anichoi@caltech.edu) for more information. Advance registration is required by the school.

- The Community Service Planning Committee meets every Thursday at noon in the Y Lounge. If you are interested, please stop by or contact Niki Zacharias (niki@caltech.edu)

Did you know?

The Y rents camping equipment at a reasonable cost. Equipment includes backpacks, tents, sleeping bags, sleeping mats, bear canisters, stoves, and water filters. Stop by the Y or call X6163 for prices and availability.

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

Minutes

A.S.C.I.T. Minutes

OCTOBER 29, 2001

Present: BoD. Guests: Zack Chadick and Matt Ashman, on behalf of the Dabney Halloween pumpkin drop; Kevin Bartz, from the Tech.

Meeting brought to order at 5:06 pm.

Guests:

Zack and Matt came to ask for Multihouse funding for the Annual Pumpkin drop, which has always drawn crowds from the seven houses and even the police. Last year's event was met with some complaints from neighbors of the Caltech community because speakers were playing music from the top of Millikan. This year's event should not disturb as many outsiders, and will be equally if not more entertaining. Dabney is approved for their Multihouse funding.

General Meeting:

IHC Chair vacancy. At the meeting, the BoD received notice that Dana was resigning. The BoD extends its gratitude to Dana for her work as IHC Chair-person and wishes her the best. Her resignation leaves a vacuum in the BoD, and according to the By-Laws we will need to open the floor for new IHC candidates, to serve until the

start of the new administration. The interim IHC Chair-person will not have a vote on the board and will be selected upon approval by the Executive Committee (ExComm). Todd offers to sign-up as a candidate, given his experience with IHC in the past, but in doing so, he will have to resign as UDAL. Since Todd's UDAL replacement won't have a vote, Ted adds that this is a rare opportunity for everyone to play musical BoD and swap roles until no one has a vote on ASCIT.

Parking. A new parking survey has been placed online on the donut website. We are in the process of gathering data about undergraduates needs for parking spaces, in light of the policy changes that will take into effect next academic year. ASCIT strongly urges undergrads to take a few minutes and complete the survey, as student opinion will be represented on a new committee formed by Vice President of Business and Finances Al Horvath to address the parking issue.

Joe Fassler received a response to the letter he sent to several administrators, and an undergraduate will be allowed to serve on this committee. Joe would like to serve as the representative, but he will be leaving for Cambridge for second term, and thus can not serve on the year-round committee. Accordingly, Joe proposes to

appoint Tim Crosby.

Parking Stats. Roughly 4300 vehicles have been registered, including 777 graduate students and 334 undergraduates. Of the undergraduate spaces, only 35 belong to freshmen, so if next year's incoming class car ownership pattern shows any resemblance to this year's, the new parking policy of prohibiting freshmen to park on campus will be saving less than 1% of the parking spaces on campus.

The Gift. ASCIT will be writing a thank-you letter to Dr. Moore and his wife for their generosity to this institution. Their largesse is greatly appreciated and ASCIT hopes that some of the funds can be directed to undergraduate-related affairs, such as the construction of the new student center and towards renovation of the houses. Martha-Helene adds that some of the facilities, the condensed matter physics Sloan-Annex building, especially, are very under-funded and deserve an upgrade.

How ASCIT can serve you. In light of donut complaints, ASCIT will be polling students soon on how they would like ASCIT to spend on students. We are in the process of developing a poll, that will be accessible through <http://donut.caltech.edu> where students can express their feelings on how ASCIT should apportion its funding across donuts, clubs, movies and DVDs, etc.

Publications update. We received the 'blue book' of the little T, which is the final version that the publishers are sending to the press. The proofs need to be verified before mass production, so the little T should be out by next week.

The Big T's from 2000 and 2001? Sketchy, but in-press.

DVD Library. The Web development team is not wholeheartedly in support of a safe, which may be unwieldy and would require locking and re-opening. There are, however, devices that can be built (or purchased) that automatically lock and open upon a card swipe.

Donuts. ASCIT realizes that Donut Man donuts are the best in the area, and so, it is doing the best it can to provide Donut Man donuts on Friday mornings. Winchell's donuts are a disappointment for early risers. The only reason why we considered them as a substitute is because they are significantly cheaper, which would allow us to provide more strawberry donuts, for example, at the ASCIT Midnight donuts which are better attended than Friday 8 am donuts.

However, getting Winchell's donuts is still a last resort. We have called Donut Man to inquire whether they can deliver the donuts to us, and are avidly seeking anyone in the Caltech community who passes Glendale on the way to campus and could possibly

pick them up for us. Another option appears to be the cheerleaders, who have proposed fundraising through Krispy Kremes in which ASCIT would pay full price for the donuts, while Krispy Kreme would provide them to the cheerleaders for half-price. However, if we were to recruit clubs as donut transporters, we would open the fundraising opportunity to all clubs also.

Donut Compromise. A new deal is on the table for Todd to trade his van-selling duty in lieu of providing Donut Man donuts on Friday mornings. Martha-Helene would assume responsibility of selling the van, and figuring out where it is at the moment also. Both parties request more time to consider the trade.

Physics lab and Club Room Ambiguities. Dr. Politzer requested a room in the SAC for physics lab help sessions and will be granted one of the club rooms for a few hours each week. It also came to the BoD's attention that many of the clubs have not been informed about reserving club rooms besides the Screening Room. Joe Jewell is given the responsibility to provide more details (likely through an e-mail directed to all of the registered clubs) on reserving club rooms for activities.

Meeting adjourned at 6:28 pm

Evidently,
Stressed.

ARC minutes 10/24/01

Attendance – Nick Knouf (Ch), Al Valdivia (Sec), Tim Crosby (Bl), Jonathan Lee (Da), Iram P. Bilal (Pa), Ves Sok (Ru), Clinton Conley (Li), Larry Stewart (Rep-At-Large), Justin Ho (Rep-At-Large)

in an article in last week's Tech for all undergrads to read. There is a consensus among the ARC that the reasons have helped to alleviate our concerns.

Programming Class - Nick and Chris Elion have been working on a proposal for a new programming course to supplement the existing

curriculum. They show us a rough draft of their progress and relay some of the feedback they have gotten from the faculty.

Ad-Hoc Library Committee – There is now an undergraduate member of the Ad-Hoc Library Committee which is looking to alter the existing library system.

This addition represents some progress. The committee is expected to deliver its report in the near future.

Student-Faculty Conference (SFC) – Nick informs us that the SFC will most likely take place this April in order to give the ARC and other committees a chance to properly prepare.

Meeting Time – The ARC meets every Wednesday between 3:30 and 4:30 in SAC 33. Anyone interested in addressing any academic and research concerns to the committee is welcome to attend.

Al Valdivia
ARC Secretary

Talk to PIMCO. It's all here.

Come see us on campus
3:30 - 5:00 p.m., Monday, November 5, 2001
Center for Student Services, 3rd Floor Conference Room

Find out more at www.pimco.com

P I M C O

News

Where's my Big T?

BY TED JOU

For the first time in over two years, the Caltech undergraduates received a yearbook. The 2001 Big T arrived this week in the House lounges, ending a long saga of missed deadlines, lost pages, sudden resignations, and a huge headache for ASCIT Publications.

It all began in March 1999, when Erik Dill was appointed editor of the 2000 Big T. Appointments for the editors and business managers of all ASCIT publications take place each spring, after the election of a new Board of Directors. Although appointed in spring, Big T editors do not begin their work until the fall of that year and a great majority of the work for the Big T is done the summer after the following school year.

If everything had gone according to plan, Erik Dill would have worked on the 2000 Big T through the 1999-2000 school year and finished it in the summer of 2000. Somewhere along the way, things went awry, and when the ASCIT BoD returned to Caltech in the fall of 2000, they began a weekly ritual of cursing Erik Dill and wondering if the Big T would ever come out. And so, as my fellow Juniors will note, just as we never received little t's to start our freshman year, we did not receive Big T's to chronicle that

year. (Incidentally, Erik Dill the business manager of that missing little t.)

Needless to say, on February 28, 2000, when Jacob West and Den Thap were appointed the editor and business manager, respectively, of the 2001 Big T, they inherited a publication that was not in the greatest shape. As Erik Dill did not have enough time to produce the 2000 Big T, he had even less time to train the 2001 editors in the fine art of yearbook manufacture. Thus, Jacob and Den did very little in the way of compiling content for their Big T during the 2000-2001 school year, and in the spring of 2001, they resigned their positions.

A new ASCIT BoD took office this past February, with all of these issues still unresolved. There was no Big T from the previous year, and there was no timetable for its publication. The people in charge of the next yearbook had resigned, and nobody had volunteered to take their place. In May of this year, Wren Montgomery, editor of the 1999 Big T, solved one of these problems. A 2000 graduate of the Institute, she returned to campus, seized the 2000 Big T from Erik Dill, and got it to the publisher over the summer. However, since it was almost a year removed from its original production schedule, the printing was delayed. Students

should receive their 2000 Big T's within the next few weeks.

The 2001 Big T was saved by Eric Tuttle, ASCIT President 2000-2001. A 2001 graduate, he volunteered to stay on campus the summer after his senior year to finish the yearbook. Responding to a plea by the current ASCIT BoD this past April, Eric Tuttle, Mona Sheikh, and Melanie Goodrich were appointed editor-in-chief, associate editor, and business manager, respectively. Eric enlisted the help of Laura Brogoch, as House editor, Jason Cardema as photography editor, and Kevin Tse as athletics editor to round out the rest of his staff.

The final product comes with a leather cover, and shows no trace of the saga that preceded it. The staff decided on a 1920's theme, and the work that they put into researching the early history of Caltech adds a nice touch to the book, providing several intriguing anecdotes. The full-page photos of architectural details of Caltech give the book a certain charm and contribute nicely to the theme. Make sure to read the humor section in the back, which has a few gems from the past as well as a few odd glimpses into the minds of the editors. The 2001 incarnation of the Big T was certainly a long time in the making, but in my humble opinion, it is well worth the wait.

\$10 million NSF grant to fund 'National Virtual Observatory'

The Internet brings its users the world online. Astronomers from 17 research institutions have announced that they're starting an ambitious new project to put the universe online.

The National Virtual Observatory (NVO), headed by astronomer Alex Szalay of The Johns Hopkins University and computer scientist Paul Messina of the California Institute of Technology, will unite astronomical databases of many earthbound and orbital observatories, taking advantage of the latest computer technology and data storage and analysis techniques. The goal is to maximize the potential for new scientific insights from the data by making them available in an accessible, seamlessly unified form to professional researchers, amateur astronomers and students.

The new project is funded by a five-year, \$10 million Information Technology Research grant from the National Science Foundation. Organizers characterize their goal as "building the framework" for the National Virtual Observatory.

Szalay, the Alumni Centennial Professor of Astronomy in Johns Hopkins' Krieger School of Arts and Sciences, views the NVO (<http://us-vo.org>) as a significant step forward in formalizing a third major approach to scientific research that's been growing in usefulness and popularity in recent years.

"First, you have science conducted through theoretical models," he explains. "Next, you have science tested through experiments. The new approach, scientific exploration through computational methods, is developing in response to the tremendous volumes of data we're starting to gather in many of the sciences."

According to Szalay, advances in technology and technique now annually double the total information astronomers gather each year from observatories.

"If we do not develop ways to distill information and insights from these floods of data, we will end up like shipwrecked sailors on a desert island, surrounded by an ocean of salt water and unable to slake our thirst," co-principal investigator Messina says.

Messina notes that the NVO was inspired by the Digital Sky Project (<http://www.npac.edu/envision/v15.3/digitalsky.html>), an NSF-funded project led by Caltech computer scientist Tom Prince that is working to make data from four different astronomy databases available through one seamless web portal.

The NVO will take some of its basic techniques from an earlier multi-disciplinary, multi-institutional NSF-funded project led by Szalay. That project, started two years ago, worked to de-

PLEASE SEE OBSERVATORY ON PAGE 9

The Ticket Stub

by Terry Yen

In the Whitechapel District, a teeming red-light ghetto where gaudy ladies of the night rub up against beefy boozers in alleyways, an anonymous madman in white gloves and a top hat is on the loose, luring his voluptuous victims with grapes, the ominous crack of his unfolding coach steps a hidden invitation to gory murder.

Such is the Hughes Brothers' new thriller, "From Hell" which came out to theaters on October 19th. Based on the graphic novel by Alan Moore and Eddie Campbell, the movie opens and ends with Jack the Ripper's infamous quote, "One day men will look back and say I gave birth to the 20th century." The repetition definitely backfired. It not only gave the movie a bland

and cheesy taste, it also nullified the quote's implication that the never-captured prostitute murderer of 1888 London ushered in an era of celebrity serial killers.

The meticulous carving of five prostitutes is gruesome indeed, but nowadays it's not necessarily front-page news. With all of the horrible unsolved crimes being committed and publicized in the traditional and tabloid media, does Jack the Ripper still hold a place in the public's imagination? "From Hell," with all of its artful touches, never makes the case that he should.

The movie puts an opium-smoking, sometimes-clairvoyant inspector Fred Abberline (Johnny Depp) on the killer's trail to ultimately present a solution that involves, in some way or another, everyone from the British royals to Freemasons to the knife-wielding lowlifes of London's dank alleys. Everything is cold and distant. The

audience never gets the chance to really know any of the characters too deeply. The prostitutes are walking bulls-eyes accessorized by one or two key traits - Susan Lynch is a fiery lesbian and Heather Graham the heart-of-gold Irish lass.

And while Depp retains his ability to convey depth in his standard bad-guy-hunting character, his demons never become ours.

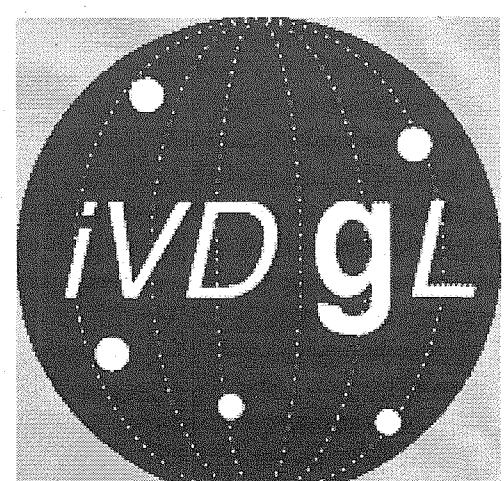
However, "From Hell" did expand horizons by incorporating more issues than the typical tracking-the-Ripper tale. It encompasses societal prejudice (the police chief wishes to throw suspicion from Englishmen onto minority groups, particularly Jews), John "The Elephant Man" Merrick, Prince Edward's syphilis, Freemason conspiracies, and substance abuse.

All in all, this contemporary "whodunit" did not achieve the goal of depicting an intense crusade of messianic evil. "From Hell" plunges into the late 19th century only to conjure up visions of grainy bad-dream slaughter that seem to slice the movie, if not that century, apart.

COMPUTERS

CONTINUED FROM PAGE 1

The universities participating in the project are University of Florida, University of Chicago, California Institute of Technology, University of California at San Diego, Indiana University, Boston University, University of Wisconsin at Milwaukee, Pennsylvania State University, Johns Hopkins University, University of Wisconsin at Madison, Northwestern University, University of Southern California, University of Texas at Brownsville, Hamp-



ton University, Salish Kootenai College.

National Laboratories participating include Fermi National Accelerator Laboratory, Brookhaven National Laboratory, Argonne National Laboratory, and Stanford Linear Accelerator Laboratory.

News

OBSERVATORY

CONTINUED FROM PAGE 8

velop different and improved methods for accessing and analyzing large volumes of scientific data.

A key challenge for the NVO will be developing ways to simultaneously analyze data from several of the dozens of astronomical databases available today. "Each of those databases is organized differently, which makes it quite difficult to perform analyses of data from several collections simultaneously," Messina explains. "Those kinds of investigations promise to yield important scientific discoveries, though, so the NVO will work to streamline our ability to do such analyses."

Computationally, NVO will do this work through a set of approaches and techniques developed in the 1990s known as "grid" computing. Grid computing lets scientists in multiple institutions easily and rapidly share data and other problem-solving resources.

Szalay compares the effects of this technique for users to the electronic power grids set up for large regions of the United States. Power grids gather and use resources from a variety of sources, but without the user ever being aware such gathering processes are occurring.

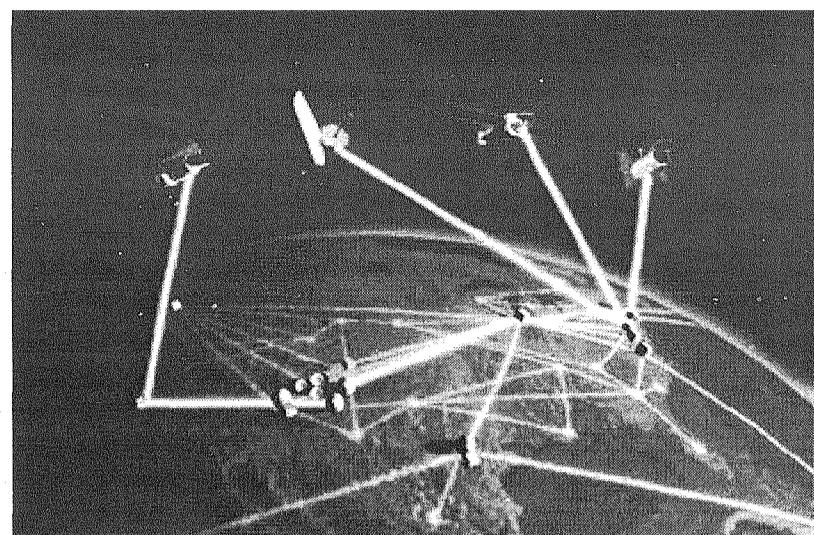
"We'll rely on the same kinds of techniques to transfer data and [run computer programs] in a transparent way," Szalay says. "You won't necessarily know where your computer program is running or be aware that data's being accessed in one database or another - just that the work is getting done."

Ethan Schreier, an astronomer at the Space Telescope Science Institute who is a member of the NVO project Executive Committee, says astronomy has been at the forefront of archiving and sharing data electronically for at least two decades.

"Astronomers first started adopting standards for data exchange in the late 1970s, were aggressive in developing standard data analysis systems that

other astronomers could share, and then built data archives for use by the broad scientific community," says Schreier, who is an adjunct professor at Hopkins. These archives, Schreier notes, have so much data in them that they can be used to produce new discoveries many years after the data were originally gathered.

Messina emphasizes that the focus for the NVO won't be to impose a particular set of database standards but to encourage their continued creation, with the expectation that competition among the standards will encourage further development of standards that large segments of the astronomical community agree on. He notes that they already have an encouraging indicator of the NVO's potential for expanding consensus: all the major archives of astronomy data in the United States are already signed up to participate in the NVO,



ARTIST'S CONCEPT BY G. BACON AND J. GITLIN (STSCI/AVL)

and links are being created to similar initiatives in Europe and Asia.

"This project will reach across the astronomical community," Szalay says. "The number of people interested has been growing exponentially, and I think this is likely to change astronomy as we know it."

Organizers are planning to keep the NVO "virtual" - not located in any one facility - and accessible enough for non-spe-

cialists like science teachers or students to use.

"A major goal for the NVO is to provide a window on the universe for students, teachers, backyard astronomers and the interested public," says Bob Hanisch, NVO project manager at the Space Telescope Science Institute. "The NVO will enable the public to explore directly the wealth of information from society's investment in our national research facilities."

Russell brings comedy to Caltech

Comedian Mark Russell is playing off the headlines, a perfect foil for his deadpan, tongue-in-cheek humor which has been tickling the funny bones of his audiences for more than 30 years.

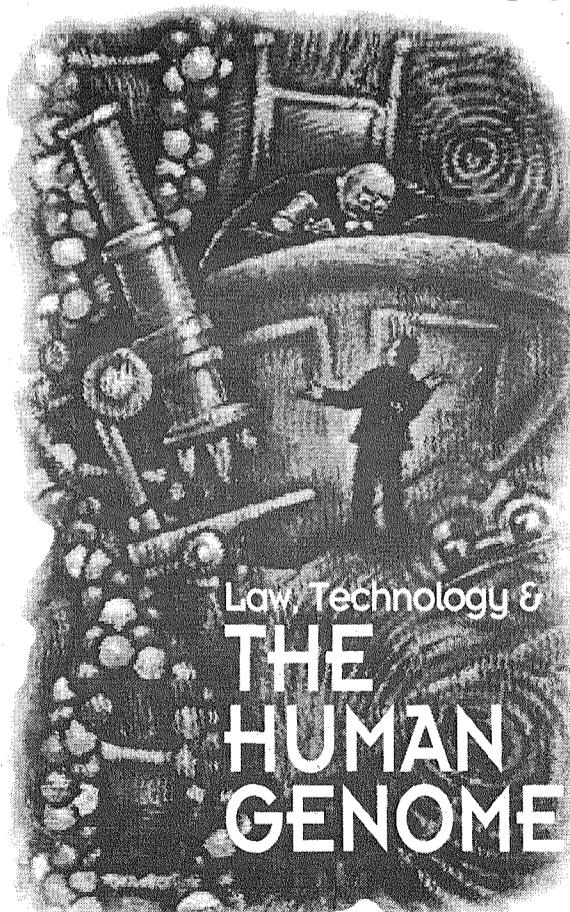
TV Guide has called Mark Russell "the funniest man on television" but he disagrees. "No, the funniest guys are on C-SPAN."

Exploding tempting kernels of truth is Russell's stock-in-trade. He has said there's a very thin line between the satire and the original. Sometimes, Russell says, there's no line, as when Reagan was asked if he was aware that CIA director William Casey was carrying on covert activities. "Reagan answered: 'Not to my knowledge.' Now that's a direct quote," the comedian marvels.

He's now in his twenty-third season on PBS. He works live, fresh and topical, performing stand-up comedy while accompanying himself on the piano. The Mark Russell Comedy Specials have consistently been among the top-rated shows on that network.

Reserved seating tickets are \$35, \$31, and \$27.

3RD ANNUAL AT THE CROSSROADS CONFERENCE



Friday

Nov. 9

2:30pm -

5:30pm

Mock Trial

Patenting the
Human Genome

Saturday

Nov. 10

9:00am -

5:00pm

Conference

& Discussion

Genetic Property,
Genetic Privacy &
Genetic Progress

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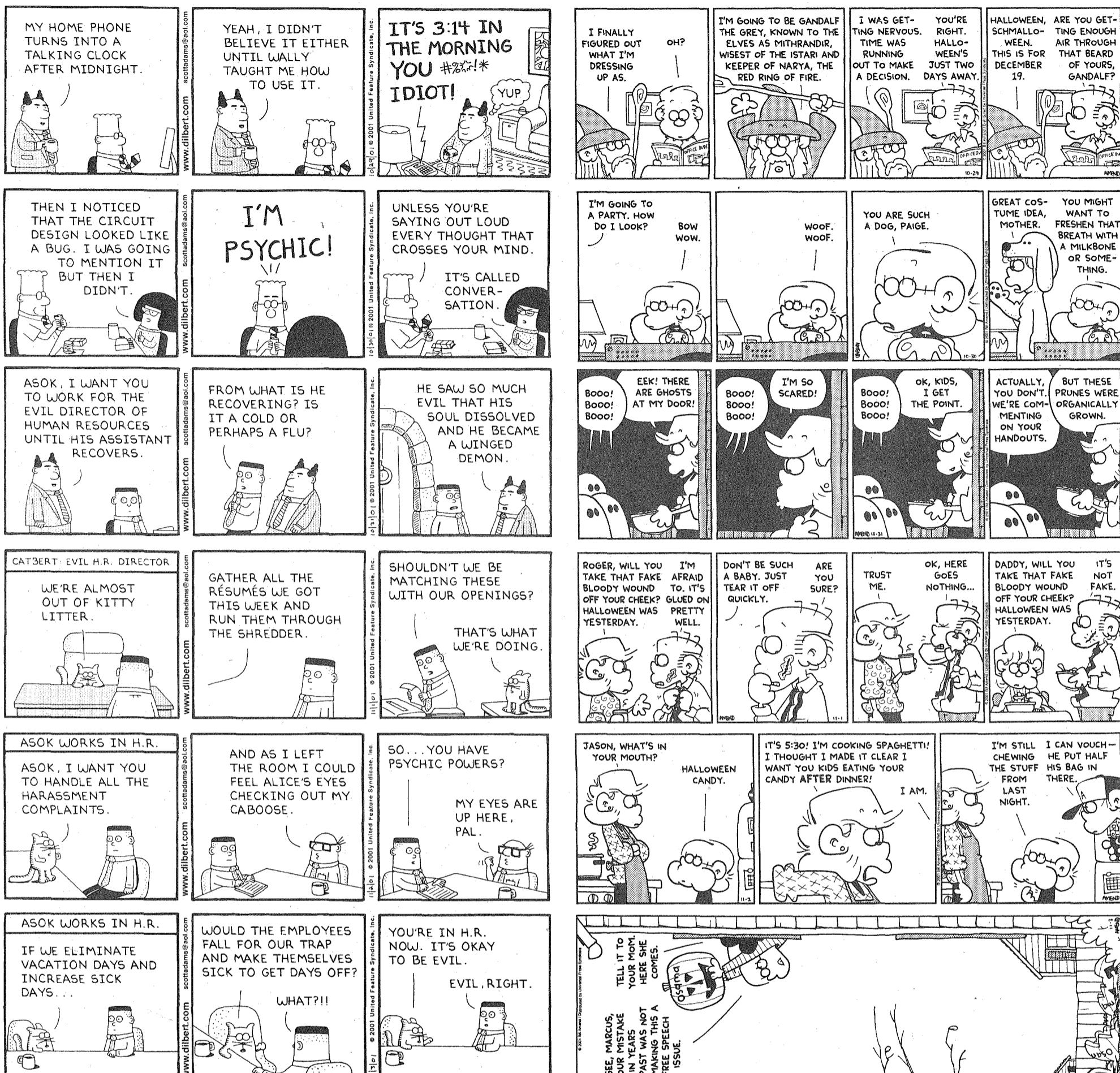
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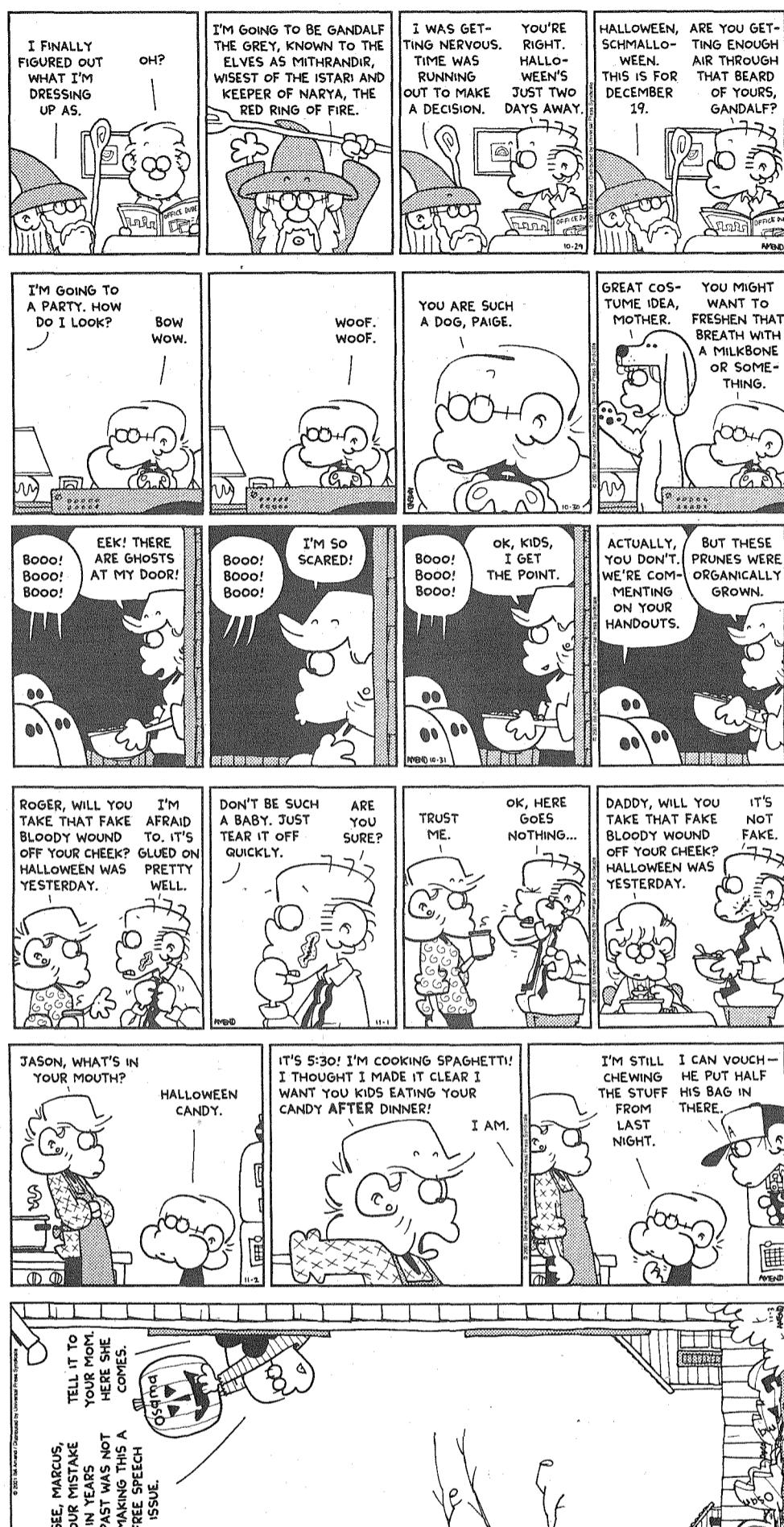
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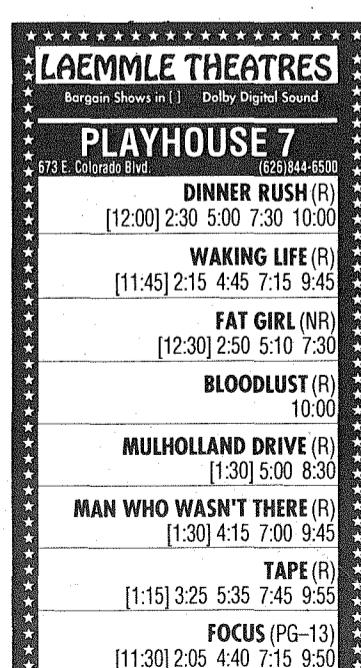
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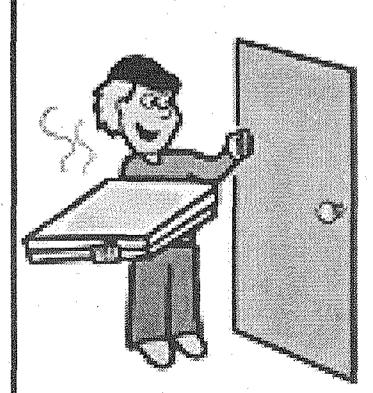
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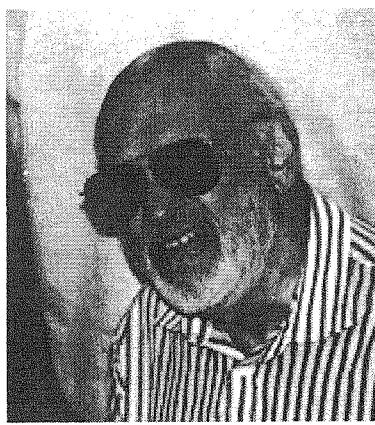


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Dean's

Dean's Corner



The Boats

by Jean-Paul Revel

Along with Dean Barbara Green, and Jason Hickey '85, Professor of Computer Science, I just had lunch with a great bunch of students, the winners of the ME contest at Orientation Camp in Idlewild this year. I am sure that all of you remember your own boat building experience, or at least watching the race, you seniors while still at Catalina, the juniors at Pine Summit and the sophomores and freshman at Astrocamp. The origin of the contest is lost in the darkness of times past, (well, may be not really lost, but I don't remember, if I ever knew).

For the last few years the contest has been run by alum Jason Trevor '97, who by now has done it so often that he has become, one could say, a "professional". Groups of students are given a grab bag of tongue depressors, plastic bottles, rubber bands, plastic spoons, drinking straws, rubber balloons, clothes pins and other junk from which they are asked to build a boat. The vessel must be capable of transporting a handful of plastic toy soldiers, safely and faster than in anyone else's boat, from one side of the test basin to the other.

On Catalina Island, the sea was too choppy for the flimsy structures that can be constructed with the materials available. So Jason actually assembled a "portable" pool of plywood lined with plastic. It used to be that the canoes were ported from one lake or stream to the next, but we are forever originals here at Caltech and so prefer to move the waters instead. Recent venues for camp have all had swimming pools, which avoids the porting of artificial puddles. Once the pumps have been turned off for a short time to give currents a chance to die down, the pools serve admirably as sites for the great boat race.

It is interesting that the winning boats have an uncanny resemblance to each other. The consensus winning design is a catamaran with symmetrical hulls (catamarans with an outrigger seem difficult to steer straight). Another feature of the best boats is propulsion by a paddle wheel made of plastic spoons. Of course there are lots of other designs,

which, one can hypothesize, reveal something about the personalities in the contesting groups. Some of the boats are plain and straightforward in construction, presumably conceived by plain, straightforward-would-be-engineers. There are what I'll call the Rococo boats, with odd flourishes, pleasing and surprising touches that are not necessarily particularly functional. Some have plush quarters for their toy cargo, some have nearly non-functional but truly amazing propulsion systems, ranging from "jet propulsion" to elaborate screws made of niftily folded playing cards.

And then each year there are also boats which try to "cut corners". A favorite trick is to equip the boats with a long boom. At first the boom is more or less straight up, like a mast (but for lack of an appropriate keel this makes the boat prone to rolling over). The idea is that eventually the boom falls (or is made to fall) forward, touching the opposite shore far ahead of the hull, and so artificially increasing the "speed" of the crossing. An ingenious ploy, but I have never seen it actually work well enough to bring victory. There is a lesson there I think, about the self-defeating impact of cutting corners.

There are other lessons to be learned of course. In a superficial way, it can be argued that the contest serves as a good introduction to one of the special things at Caltech, and this is cooperation between students. Ability to work with others is as important for success at Tech as it is in the boat yard. Especially demanding at Tech is the amount and difficulty of the homework the students are expected to do. Actually the only way to make it a workable load is to collaborate with classmates, a good preparation it is said for real life and real jobs, where many will be asked to contribute to a team effort rather than going solo.

Of course this presents problems. For a student to collaborate with others in this way and yet hand in work which represents his or her own effort, rather than a copy of the consensus results arrived at by the group, requires one to be alert. Being used to collaboration can make life even more diffi-

cult very own, lest we take advantage of our classmates.

On this last day of midterm week I hope you all did well, and that you, frosh, are beginning to get the hang of things. I also hope that as you read this Halloween will have been for you the treat that I am sure you wished for, rather than the dirty tricks terrorists, or more likely your housemates, might have tried to inflict.

For treats of course it would be hard to match Betty and Gordon Moore, Ph.D.'74, the former Chairman of Intel and of the Board of Trustee, Commencement

Speaker Emeritus, insightful propounder of "natural" laws, as well as Patrons of the Volute, you know the stone poem between Noyes and Beckman Behavioral. What a munificent treat for the Institute! \$6*10⁸! Only one word will do: Wow!!!

A bientot

Jean Paul Revel

Jean-Paul Revel
Dean of Students

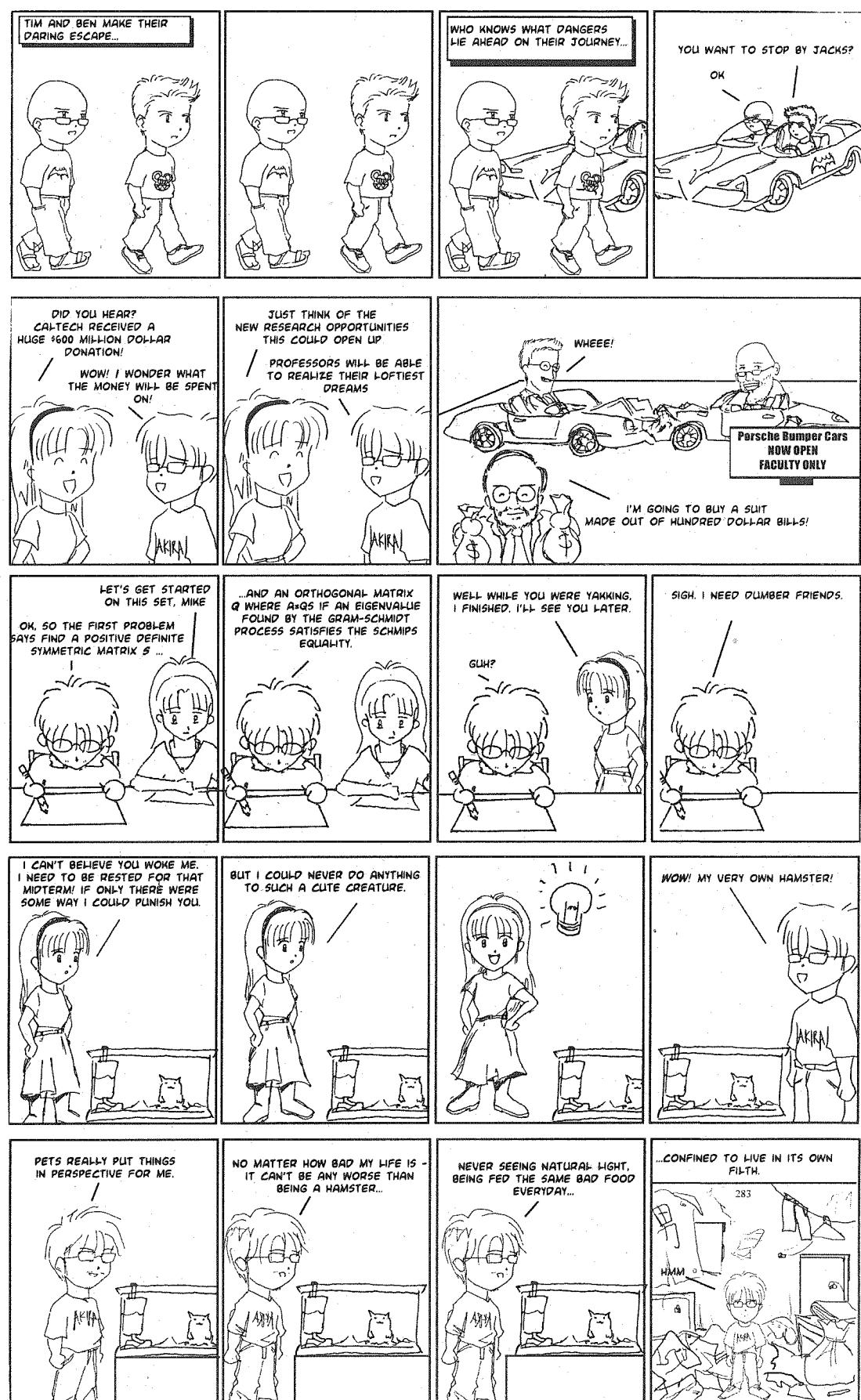
Crippling Depression

Term One

www.CripplingDepression.com

By Tim Wan, Mike Yeh and Ben Lee

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



Mints

Announcements

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

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

Flu Shots will be available free of charge to Caltech students and staff who present a current, valid Caltech ID. Vaccinations will be given at Winnette Lounge on Wednesday, November 14, 2001 from 10 am to 5 pm. - ONE DAY ONLY. Dependents are not eligible for this program.

Japan Internship Orientation Meeting. Are you a freshman, sophomore, or junior who wants a meaningful, research-based summer internship? Are you interested in the Japanese culture? There will be a presentation Friday, November 9, 2001 from noon to 1 pm at the Center for Student Services, 3rd floor Conference Room (414 S. Holliston Avenue). Former interns will share their experiences. Space is limited to the first 30 people. Light lunch will be provided. The Japan Internship Program is sponsored by the Career Development Center.

Exchange Programs. Sophomores & Juniors: Come to an information meeting on the Cambridge Exchange Program and learn how to spend a term in England. Wednesday, November 7th at noon in the Winnett Club Room. Lunch will be served - RSVP no later than Monday, November 5th by e-mail: ssstone@caltech.edu. (You must have a 3.2 GPA to apply.) Also, there is the opportunity for Sophomore and Juniors to spend a term in Denmark! Come to an information meeting on the Copenhagen Exchange Program and meet the Danish students who are here at Tech now. Wednesday, November 14th at noon in the Winnett Club Room. Lunch will be served - RSVP no later than Monday, November 12 by e-mail: ssstone@caltech.edu. (You must have a 3.0 GPA to apply.)

The Environment, Health, and Safety Office in conjunction with the Pasadena Fire Department will be offering Pasadena Emergency Response Training (PERT) on Friday, November 16, 2001 from 9 am to noon. The disaster training is taught by the Pasadena Fire Department. The session will cover what to do before, during and after an emergency. It will also cover disaster psychology, what to expect following an event. The training is open to anyone interested in becoming better prepared for an emergency. If you are interested in attending the PERT please contact the Environment, Health, and Safety Office at extension 6727 to reserve your place. Class size is limited so reserve your seat today.

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

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

Feeling stressed??? Sign up for the Stress Management Workshop offered by the Student Counseling Center. This workshop will include a mixture of informal lecture and experiential exercises focusing primarily on basic relaxation techniques and stress management skills. The three-session workshop will meet on consecutive Mondays (November 5th, 12th, and 19th) from 12-1 pm in the Health Center Lounge. Space is limited, so please call x8331 to reserve your place in the group.

Community Service Opportunities Abound!

The Caltech Y offers students and staff a variety of ways to participate in community service. Opportunities include working with Habitat for Humanity, Union Station Homeless Shelter, math tutoring (on or off campus), reading tutoring, and working at local hospitals. One-time community service events are planned each term and opportunities for service on a regular basis exist.

Undergraduates with federal work-study can receive \$15/hr for their community service work. To be added to the community service interest email list, or for more information about the Community Service Program, please contact Kristin Abbott at kabbott@caltech.edu or call (626) 395-3180. Or, stop by the Caltech Y in the Center for Student Services (formerly Keck House) for a complete listing of opportunities.

Les-Bi-Gay-Trans Discussion Group

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

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

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

The **Caltech Ballroom Dance Club** is offering two five-week class series this month: Samba and Waltz. AMERICAN SAMBA, taught by professional instructor Andre Fortin, takes place on Mondays (Dates: Nov. 5, 12, 19, 26, Dec. 3). Classes are \$6/lesson or \$25 for all five weeks for all Caltech students; \$8 (lesson) / \$35 (series) for others. AMERICAN WALTZ (Wed. Nov. 7, 14, 21, 28, Dec. 5) is amateur taught and costs \$1/lesson (free for freshmen or PE credit). All classes are held in Winnett Lounge from 7:30-9 pm, followed by a half-hour practice session. Refreshments provided; no partner or experience is required. Additionally, on Mondays from 9-11 pm we offer a mini-ballroom dance party (first half-hour is coincident with practice session) - request or bring your own music!

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

Scholarships

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

Upcoming Events

Sponsors for Educational Opportunity (SEO) Information Session. Wednesday, Nov 7, 5 pm in CDC 3rd floor Conference Room. SEO Career Program provides talented minority undergraduate students the opportunity to explore exciting, challenging and rewarding careers in some of the most competitive areas of economy. Come and learn about it! Also visit: <http://www.seo-ny.org>.

Come join the **Ballroom Dance Club** for a free latin, swing, and ballroom dance party! Beginners are especially welcome. Beginner's waltz class starts at 7:30 (no partner required), general dancing begins at 8:15. Plenty of refreshments! Sat. Nov. 3, Winnett Lounge.

Acclaimed clarinetist Charles Neidich will make his debut with **The Pasadena Symphony** in an all-Mozart program on Saturday, November 10, 8 pm, at the Pasadena Civic Auditorium. Conducted by Music Director Jorge Mester, Neidich will perform Mozart's Clarinet Concerto, the composer's only contribution to the genre. Also on the bill will be the ever-popular Symphony No. 40 and the somber and plaintive Masonic Funeral Music. This is the first of three all-Mozart concerts the orchestra will present during its 2001-2002 season. Single tickets are \$10, \$22, \$24, \$40, \$42, \$52 and \$64 for adults; \$5 for children ages 5 to 17. Student and senior rush seats are \$10 and are available with I.D. the week prior to the concert. Season subscriptions are also available. The Pasadena Civic Auditorium is located at 300 E. Green Street in Pasadena. For tickets and information, please call (626) 584-8833 or visit www.pasadenasymphony.org.

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

Self-Defense Class for Women Sponsored by the Caltech Women's Center. Free and open to students, staff, and faculty. Saturday, November 10th, 10 am- 6 pm. Steele House, Carriage House Conference Center. This eight-hour training offers participants the opportunity to learn and rehearse self-defense techniques. Participants will practice these new skills with a full padded assailant in a variety of simulated attack scenarios. The workshop will also include: assessing dangerous situations responding to being followed diplomatic limit-setting and communication skills. This class will introduce you to skills that can help you avoid, deter, and resist physical and verbal assault. For more information or to register please call ext. 3221. Space is limited.

Please note that Men's Self-Defense Classes will be held in the spring

Caltech Library System Presents. The following sessions are approximately one hour of formal instruction followed by an optional hands-on practice. All classes begin at noon and meet in the Sherman Fairchild Library Multimedia Conference Room (Room 328). Walk-ins are welcome, but pre-registration is preferred.

Tuesday, November 6: "Life Sciences Information Resources" POSTPONED, NEW DATE TBA

Tuesday, November 13: "Introduction to Endnote 4.0"

View details and register for these and other upcoming classes at: <http://library.caltech.edu/learning/default.htm>. For further information, please contact Kathleen McGregor at x6713 or kathleen@library.caltech.edu.

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