

American Beauty: ASCIT Movie Tonight (6/2)



0.34532 1 357 42 30 10101110 4732

Go inside the ASCIT Elections with the full numeric results.

Page 2

The California Tech

VOLUME CI, NUMBER 29

Pasadena, California

June 2, 2000

Help move a Child higher

BY VIKKI KOWALSKI

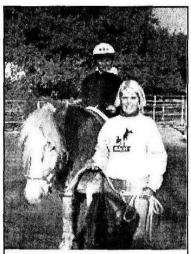
Many of us have reached the point of the term where we don't want to think about anything except our summer. (Some some of us, of course, reached that point a bit sooner than others.)

Since we're all thinking about it, and many of us will be around here for SURF's, TIDE's or summer jobs, I'd like to mention an interesting idea for summer volunteering (and which could also very well carry on into next year). "Move A Child Higher" (MACH) is a handicapped riding program at Flintridge Stables (conveniently located right next to JPL), and can always use volunteers for a variety of tasks.

This is a program that does make an important difference. Riding a horse exercises many of the same muscles as walking, and it provides children who are too crippled to walk a way to develop these muscles and prevent atrophy. Horse riding also has a calming effect on other sorts of kids and provides something for them to focus on. In countries such as Germany, "theraputic riding" is a regular part of traditional therapy programs for children and adults alike.

Personally, I find it just wonderful to take a break, "get out," and work with horses and little kids. Most of the volunteer work involves leading horses around while children are riding (although this usually assumes some prior experience with horses) or walking alongside to make sure the children stay in the saddle. The last time I went

PLEASE SEE MACH ON PAGE 3



Lend a helping hand with MACH

Kipfest to honor top physicist

BY ELISABETH ADAMS

Kip Thorne, the well-known Caltech astrophysicist and author of several famous books on physics, is turning 60. In recognition of this, Caltech has arranged a three day symposium to "honor his long and distinguished career in physics, and also to honor his commitment to and achievements in the communication and popularization of science." The festivities include a banquet Friday night at the Atheneum and culminate in a full day of lectures in Beckmen Auditorum on Saturday.

Kipfest, as the event is billed, will feature several renowned scientists, including Stephen Hawking, Thorne's long time colleague, friend, and betting partner; Igor Novikov, head of the Theoretical Astrophysics Center of the Nordic Institute for Theoretical Physics, in Copenhagen; and Kip Thorne himself. Filling out the rest of

the all day Saturday program will be two science writers: Timothy Ferris, author of best-selling books such as *The Whole Shebang* and *Coming of Age in*

Milky Way, and 1 a Lightman, a novelist and senior physics lecturer at MIT. The lecwill eventually form the nucleus for a book. There will also be an appearance by Lynda Williams, the "Physics Chanteuse." (For a sampling of her unique music,

visit http://www.entersci.com/pchant.html.)

Thorne, who is the Feynman Professor of Theoretical Astrophysics, received his B.S. degree from Caltech in 1962. He left for a few years to earn a Ph.D. at

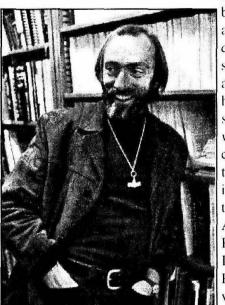
Princeton but returned as an Associate Professor in 1967 and has been here ever since. His work has focus on gravitation physics and astrophysics. Along with R. W. P. Drever and R. Weiss, he was the cofounder of the LIGO Project, which is de-

signed to detect gravitation waves.

Thorne's books are well known to several generations of physicists and physics students, some of whom credit them with first piquing their interest in physics (even though much of the advanced gravitation went over their heads). Gravitation, published in 1973 with John A. Wheeler and Charles W. Misner, is regarded as one of the classic scientific books on general relativity of all time. More recently, Thorne wrote the best-seller Black holes and time warps: Einstein's outrageous legacy, a fascinating history of the past century in relativity which received rave reviews from scientists and the general public alike.

Although the early-admission tickets for Caltech/JPL staff, faculty, and students, have all been claimed, admission without tickets on a space-available basis will begin Saturday at 9:30 a.m.

For more information visit http://www.events.caltech.edu/kipfest.html.



Thorne: Caltech alum, professor and world-renowned physicist

AMa gets computational

BY JUSTIN KAO

As everyone needing to register for AMa 95 next year undoubtedly noticed, Applied Mathematics has a middle name. The AMa department is now Applied and Computational Mathematics, reflecting the increasing use of numerical methods in math as applied to science and engineering. According to ACM executive officer Oscar Bruno, the name change is simply following the changes that have taken place in the department over the last several years. "Many more things can be done with a computer now than 30 years ago... [the name change] lets people know of this aspect." In a way, noted Bruno, the change to ACM is a result of changes across all of science and engineering, which are increasingly relying on computers to solve problems by simulation. The computation itself, however, is also a problem, one requiring the application of mathematically rigorous algorithms drawn from analytical techniques developed by mathematicians over the centuries. In other words, the computational methods require applied mathmatics.

Are there other changes in ACM along with the new name? Although the name change is largely following previous changes in the department, the graduate curriculum is being updated and revamped as well. Future ACM grad students will leave Caltech having taken two year-long numerical analysis classes, designed to provide a foundation for scientific computing. Although other components of the curriculum have also changed, Bruno emphasized that the requirements are still evolving and changes will be ongoing even after the fall catalog is published.

So what does this mean for undergrads? Like it or not, AMa 95 still exists, now by the name ACM 95. As far other options go, nothing has changed—ACM 95 will be exactly the same as AMa 95. Undergrad AMa majors will want to take note though: ACM 101 will not be the same as AMa 101. However, according to Bruno, the undergraduate requirements will probably be largely the same, as much as is possible given the reshuffling of classes involving grad students.

Simulant Incorporated

Undergraduate compnay sets sights high

BY MONA SHEIKH

Yet another Caltech start-up company is being readied to take the business world by storm. Simulant Inc. is a software company jointly founded by undergraduates Michael Hochberg (sophomore), Tom Baehr-Jones (junior), and Professor Axel Scherer, of Physics, Applied Physics and Electrical Engineering.

This year it was the recipient of the Caltech CNSE (Center for Neuromorphic Systems Engineering) Prize, which is awarded to winners of the annual Caltech 10K Business Plan competition.

Last summer, when Physics majors Hochberg and Baehr-

Jones wanted to perform simulations of photonic crystals, they realized that the finite difference time domain (FDTD) simulation they wanted to do would require a supercomputer to run it because of speed and memory considerations. Since purchasing one would prove extremely impractical, they instead designed and wrote a distributed implementation of FDTD, which would allow the simulations to run on a cluster of inexpensive computers.

Two clusters have since been built on campus to run Simulant's software. One has eight computers, while the other has thirty-two, each of

PLEASE SEE SIMULANT ON PAGE 4

| Inside t | he Tech |
|--------------------------|--------------------------|
| The Usual ASCIT Minutes | Media Guy4 Rivet Teaser4 |

ASCIT Election Results

Results of Student Elections of May 24, 2000

 ΛM

Class Officers

The race for senior class president was decided after a redistribution of the NO votes. Here and in the other officer races, AM = absolute majority = (1/2)*(number of non-abstaining ballots cast) + (1/2)*(error). ABS = abstain, W = write-in.

Ballots cast: 65

| COMMER | IVES | NEWASKAR | | NO | ABS | W |
|--------|-------------|----------|----|----|-----|----|
| 11 | 5 | 28 | 15 | 1 | 5 | 33 |
| 12 | 5 | 31 | | 12 | 5 | 27 |

So Puneet Newaskar wins.

The election for senior class vice-president, which had only one human candidate, was decided on the first count:

| DALY | NO | ABS | W | AM |
|------|----|-----|---|----|
| 41 | 15 | 1 | 8 | 33 |

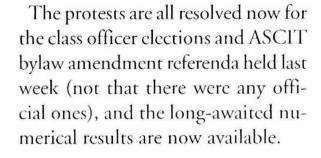
Unsurprisingly, Dan Daly won this one, making both of this year's junior class officers next year's senior class officers.

The election for junior class president went through three redistributions before a winner could be declared. There were no write-ins, and 87 ballots in all.

| BUSTOS | GUPTA | HEFFNER | STURGEON | NO | ABS | AM |
|---------------|--------------|---------|---------------|----|-----|----|
| 22 | 20 | 21 | 14 | 8 | 2 | 43 |
| 22 | 20 | 21 | 15 | | 9 | 40 |
| 24 | 29 | 22 | - | | 12 | 38 |
| 27 | 32 | | (manufacture) | | 28 | 30 |

The new junior class president is Dinkar Gupta. His vice-president, Sam Yeager, won on the first count:

| CROSBY | SHANNON | YEAGER | NO | ABS | W | AM |
|--------|---------|--------|----|-----|---|----|
| 9 | 10 | 44 | 18 | 5 | 1 | 42 |



Ballots cast per house:

| House | Fr/Sr | So | Jr | Total |
|----------|-------|----|----|-------|
| Blacker | 12 | 14 | 12 | 38 |
| Dabney | 5 | () | 3 | 8 |
| Fleming | 19 | 15 | 13 | 47 |
| Lloyd | 5 | 8 | 7 | 20 |
| Page 25 | 22 | 13 | 60 | |
| Ricketts | 10 | 8 | 10 | 28 |
| Ruddock | 18 | 20 | 7 | 45 |
| Total | 94 | 87 | 65 | 246 |
| | | | | |





VOLUME CI, NUMBER 29 June 2, 2000

EDITORS IN CHIEF Jonathan Foster John Oh Dana Sadaya

THE CALIFORNIA TECH

editorial desk: (626) 395–6153 advertising desk: (626) 395-6154 editorial email: editors@tech.caltech.edu advertising email: adv@tech.caltech.edu ISSN 0008-1582

> BUSINESS MANAGER Tasha Vanesian

ADVERTISING MANAGER Jennifer Lee

PHOTOGRAPHER

COMICS EDITOR

Advertising

Letters to

Unsolicit

| Kenneth Kuo | Erik Dill |
|-------------------|-----------------|
| | Dana Sadava |
| COPY EDITORS | |
| Elisabeth Adams | CONTRIBUTORS |
| | Jason Cardem |
| STAFF WRITERS | Vanessa Sili |
| Justin Kao | Erik Dill |
| Mohi Kumar | Kenneth Kuo |
| Merc Chasman | |
| Mona Sheikh | FEATURE WRITERS |
| | Justin Ho |
| MINTS | Stephen Shepard |
| John Oh | Jason Melizner |
| | Adam Villani |
| CIRCULATION STAFF | |
| Roger O'Brient | ADVISER |
| Rick Karnesky | Hall Daily |
| | |

| ements (Mints): | noon | Mond |
|--------------------------|--------|---------|
| o the Editor: | 6 p.m. | Tuesd |
| ted Articles | noon | Mond |
| addished weather account | during | vacatio |

and examination periods by the Associated Students of the California Institute of Technology, Inc. The opinions expressed herein are strictly those of the authors and advertisers.

DEADLINES

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

Advertising should be submitted as cameraready art, but the Tech can also do simple typesetting and arrangement. All advertising inquiries should be directed to the business manager. For email, please use business@ tech.caltech.edu. Do not send ad inquiries to the editors. For subscription information, please send mail

to "Subscriptions" or call (626) 395-6154. Printed by News Type Service, Glendale We live for the One. We die for the One. It's been far too long since this box has had a

Amendments

HOUSE

Blacker

Dabney

Fleming

Lloyd

Page 3

Ricketts

Ruddock

TOTAL

The amendments are easier to count, since there aren't any of these redistributions to do. This time, the absolute majority is two-thirds of the non-abstaining ballots plus twothirds of the error.

| Amendmer | nt 1. D | irector | s at Large. |
|------------------|---------|---------|-------------|
| HOUSE | YES | NO | ABS |
| Blacker | 26 | 7 | 5 |
| Dabney | 3 | 4 | 1 |
| Fleming | 31 | 5 | 11 |
| Lloyd | 16 | 2 | 2 |
| Page 17 | 27 | 16 | |
| Ricketts | 12 | 8 | 8 |
| Ruddock | 30 | 6 | 9 |
| TOTAL | 135 | 59 | 52 |
| $\Delta M = 132$ | so the | ameno | lment passe |

AM = 132, so the amendment passes.

| Amendmei | nt 2. M | ovies | Chair. |
|----------|---------|-------|-----------|
| HOUSE | YES | NO | ABS |
| Blacker | 22 | 10 | 6 |
| Dabney | 3 | 4 | 1 |
| Fleming | 35 | 2 | 10 |
| Lloyd | 18 | 0 | 2 |
| Page 18 | 26 | 16 | |
| Ricketts | 12 | 7 | 9 |
| Ruddock | 29 | 8 | 8 |
| TOTAL | 137 | 57 | 52 |
| AM = 132 | so the | amend | lment pas |

Amendment 4. Dismissal of a BoC rep judged by peers to be biased. HOUSE YES NO ABS 3 Blacker 23 12 0 Dabney 1 3 Fleming 21 Lloyd 17 Page 3 57 0 Ricketts 22 0 6

Amendment 3. Calling back past BoC reps.

11

2

13

9

99

AM = 158, so the amendment fails.

ABS

3 0

0

2

2

12

YES NO

33

16

55

13

34

135

3 28 14 Ruddock 9 101 136 TOTAL AM = 160, so the amendment fails.

ASCIT Minutes

MACH:

CONTINUED FROM PAGE 1

there (only the second time I've actually managed to), I was feeling contented by the time I was ready to go back. I thought it was actually more like therapy for me!

You can even get paid \$12-\$15 an hour by the Y if you have federal work/study. The Y is very eager to pay volunteers for their time, and is ready to pay for any volunteer work you may want to do for a non-profit organization. Currently, a great deal of the work it pays for is done at the hospital and the Huntington.

For more information, visit MACH1's webpage at http://www.moveachildhigher.org, or contact Joy Rittenhouse by e-mail at joymach1@yahoo.com or by phone at (626) 798-1222.



A chance to make a difference

A.S.C.I.T. Minutes

Minutes of the ASCIT BoD Meeting May 30, 2000

Present: BoD; Guests: Kacie Shelton, Gustavo Joseph, Rory Sayres, Aych Bandeh-Ahmadi, Iljie Kim, Nate Austin, Dave Guskin

Meeting called to order at 10:25 pm.

Guests

Kacie picks up the check for the Anime Club to buy Pokemon.

Jamroom - Sean writes Rory a check for the Jamroom. He comes to ask us to approve the new Jamroom head he wants to appoint: Peter Plavchan, a junior from Ruddock. The BoD is also currently working on a Jamroom resolution to outline the specifics of appointing a new head. Rory suggests offering some compensation, since being a Jamroom head involves a lot of work with little recognition (much like being an ASCIT officer).

Totem - Iljie and Ayeh request more money for publishing the Totem this year (\$200). They would like to put in more color pages and print more copies (450, up from 300 last year). Since they asked them nicely, the GSC and the Alumni Association are also giving them funding, which will make the Totem available to grad students and faculty. They are printing their publication through Graphic Arts. Iljie also requests the bonus she did not receive for finishing the Totem on time last

"The Totem is a publication that will actually get published!" - Iljie. Ow, low blow for Mr. Publications!

little t - Dave and Nate show off their nifty publishing contract for the 2000-2001 little t. They will be printing 1200 copies, enough for the current frosh (who desperately need one), next year's frosh, and all the undergrads, plus a few extras. Nate runs off to make us a copy of the contract on the ASCIT copier. The BoD unanimously approves it.

Dolphins - Nate's dolphins are still perpetually jumping over Millikan Bridge. Nate has talked to Chris Brennan about possibly hanging the dolphins in a more permanent location, such as in the Athletic Center, for future generations to enjoy. The BoD bugs Nate about adopting an ASCIT dolphin. He starts talking about how ASCIT didn't really give him very much money and about how he wants to keep the set together, so basically we are denied! To show that there are no hard feelings, Sean gives him his \$100 of ASCIT dolphin funding.

Formal - Gustavo, the official photographer for last weekend's ASCIT Formal, comes in to show us two binders full of pictures, one of color pictures and the other of black-and-white. He did an awesome job, taking a good number of both posed and candid shots. Melinda was very photogenic that evening. The binders will be on display at the Red Door Cafe, where people can browse through them and pick out the ones they would like to order (\$1 for the first picture and about \$1.50 for each additional one). Full details will be posted at the Red Door, Melinda will email the list of Formal attendees to let them know.

General Meeting

Martha-Helenc suggests letting the Athletic Department take over the athletic awards, including the ordering of the letters. This would decrease the Ath Man's job to practically nothing. Eric would still like ASCIT to be somewhat involved, especially since ASCIT would still be subsidizing part of the cost of the varsity jackets. The BoD unanimously approves to draft a resolution about this.

ARC - Emma placed the trophy orders for the ASCIT Teaching Awards. She'll pick them up tomorrow. The date of the banquet has also been finalized. Emma will be the MC of the event. She will also get the IHC to promote the frosh student advisor program.

Laura reports that the current CLUE editors would like to finish what they've started. The BoD is concerned about it not being finished on schedule. Eric says that if the emails (requesting submissions) are not sent by the week after classes end, Laura and Chris will take over.

Eric is writing a few letters to incoming frosh. One is for the frosh student advisor program and the other is the traditional introductory letter by the ASCIT President.

The BoD will be having lunch at the Athenacum on Thursday, June 1.

The Caltech Discordian Klub (CDK) is requesting their entire year's funding now because they need it to buy equipment. The BoD approves (6-0-1) with the stipulation that if the club disbands by the end of the fiscal year, ASCIT will receive their equipment (or a monetary equivalent).

The BoD approves to give the Totem the \$200 they asked for (6-1-1). Meghan points out that they should have told us much earlier so that we could have allocated the appropriate amount at the Budget Meeting. We also

give Iljic \$50 as a bonus for her work on the Totem last year.

On a side note, Gurt Heffner is good at schmoozing. He was able to pull in enough funding to balance the Formal's budget. He's our go-to guy (like Shaquille O'Neal is to the Lakers) for getting ASCIT Formal funding.

Martha-Helene will send an email to the new club list to remind them to send in their mandatory new club reports (one per term for the first year). She will also send a reminder email to all the clubs to request their funding for this term, if they haven't done so already.

Meghan sent out an email recently to the publications people, asking them to submit their compensation schedules and to give their first report to ASCIT. She's still waiting for responses. Meghan's project over the summer will be to sell the ASCIT van.

Jason needs to update the bylaws on the ASCIT web page to reflect the results from last week's election. It will also have the new resolutions as soon as the BoD finishes writing them up.

The BoD is working on the following list of resolutions. (Eric goes through them quickly, amidst flying basketballs and running Frosh directors.)

Jamroom - The new Jamroom head will be appointed at the advice of the current head at the same time as the other elected offices and the term of office will begin third term. The head will be offered a compensation of \$100.

Duties of the Directors-at-Large - The Frosh Director-at-Large will be in charge of the Budget Meeting, UROH (which should come out in January. Martha-Helene will start working on it over the summer) and will be the Club Coordinator/Liaison. The Upperclass Director-at-Large will be in charge of the ASCIT

Copier and will be the Publications Director.

Movie Chair - The Movie Chair will have all the duties that were in the bylaws before the amendment, plus care of the DVD Library and Screening Room.

Donut Man - The Donut Man is and will always be the official supplier of ASCIT Donuts. Period.

Athletics - Control of the awards will go to the Athletic Director (currently Tim Downs).

The BoD comes up with a list of closing tasks for this year: - Take care of the ASCIT DVD Library/Screening Room - Clean up the ASCIT Office (especially the old food!) - Start the Web Project (Laura and Chris)

Sean will be in contact by email and snail mail over the summer, just in case any checks need to be written, He'll write them up and mail them to Laura for approval.

On a sad note, Melinda announces that she will be leaving for England next January to study abroad. We'll miss her and her awesome social directing.

The BoD will meet sometime before Rotation next year, but the date and time are still be decided. Stay tuned on the ASCIT web page (http://www.its.caltech.edu/~ascit).

As their final act this school year, the BoD unanimously approves Peter Plavchan as the new Jamroom head, effective immediately.

Final meeting of the year adjourns at 12:04 am. But the beat goes on...

Respectfully submitted,

Jason C. Cardema

News and Reviews



Adam Villani, Media Guy June 2, 2000

The Lower Depths

My co-worker Dave Barton's latest production (for his Rude Guerrilla Theater Company) is his own modern adaptation of acclaimed Russian playwright Maxim Gorky's *The Lower Depths*, a searing, take-no-prisoners look at a group of destitute flophouse residents struggling against their abusive religious hypocrite of a landlord. Gorky's characters are not without hope, but he avoids romanticizing them, preferring instead to expose audiences to the endless cycle of crime, alcoholism, and misfortune that traps the indigent in poverty. Barton worked from Anton Chekhov's notes on improving the dramatic structure, while also substantially modernizing and Americanizing the 1902 play, adding unmistakable Barton touches like a drag queen, copious amounts of foul language, and a more open representation of sex and violence.

There are 16 people in the ensemble cast, and it's remarkable that they're so distinct. David Cramer is perfectly cast as the uptight, cruel landlord, and Lee Jalube (another co-worker of mine) is his suitably dashing roguish foil who rises to the forefront of the uprising against him. Jalube's thief, meanwhile, is carrying on an affair with the landlord's sexy, bitchy wife (Raquel Riggs) who abuses her weak but kindhearted sister (Regan D'Lyn). Of particular note are David Beatty, who has really found the soul of his hard-luck junk man with a dying wife, and 14-year-old Erin Green, world-weary but still childlike as a runaway prostitute. Unfortunately, with so many characters in a fairly short play, many of them are well-defined but not necessarily as well-developed. Instead of the characters developing along an arc, some seem to instead just follow a straight downward path.

While it's true that Gorky's original structure was anticlimactic, with a rather preachy and unexciting final act, Barton's rewrite has gone a little too far in the other direction, with the climax (a murder) abruptly coming mere seconds before the final curtain. Furthermore, for such an ideological play, the turning point revolves not around a thematic issue, but around

the love triangle involving the thief and the landlord's family. The result is that the climactic murder seems more like a plot instrument than an exploration of Gorky's message. Barton's adaptation has, indeed, made the murder more purposeful than in the original, but dramatically it's still unsatisfying. It should be noted that his modernizations were well-considered, helping make the play more relevant for a current-day audience.

Structural issues aside, *The Lower Depths* is still worthwhile; the plight of the poor is as relevant in this country today as it was in Tsarist Russia. Complementing Dave Barton's masterful direction of his actors is the fabulous, evocative multilevel trash-strewn stage, Rude Guerrilla's best set design yet; and the intimate confines of the small Empire Theater, as always, heighten the intensity of the play. *The Lower Depths* runs through Friday, June 9, with performances Thursdays, Fridays, and Saturdays at 8:00 P.M. and Sundays at 2:30 P.M. at the Empire Theatre, 200 N. Broadway, Santa Ana. Tickets are \$12 general, or \$10 for students. Call (714)547-4688 for reservations

Kikujiro

Writer/director/editor/performer/painter Takeshi Kitano, the man who brought you the shockingly violent yet minimal Hana-Bi (Fireworks) now goes mellow with Kikujiro, a most unusual take on the middle-aged-man-with-a-kid buddy movie. Think of it perhaps as Kitano's Straight Story. It plays almost like a parody of Walter Salles's Central Station, only instead of having a crusty but benign old schoolteacher, there's an insane, goofy, aggressive loser of a con man (Kitano) taking a kid on a cross-country trip to find his mother. This movie should serve as a real test to weed out those who were only turned on to the violence in *Hana-Bi* from those who genuinely appreciate Kitano's severe yet whimsically original aesthetic. The relationship develops from being openly abusive to one of genuine care, but the evolution never seems schlocky. Kitano's character is an interesting study of a man who never really matured, but is able nevertheless to reach his own marginal peace with the world. There are several very funny scenes, and many more of striking beauty and creativity, all delivered in the deadpan "Beat" Takeshi style. I highly recommend this movie for those who want an extraordinary filmgoing experience.

Editor's Note: Be sure to watch Villani win Ben Stein's Money on Tuesday, June 20th, at 11:30 P.M. on Comedy Central.

SIMULANT:

CONTINUED FROM PAGE 1

them with dual-600 MHz processors and 1GB of RAM. Software that has been developed by Simulant until now includes programs for ray tracing, matrix multiplication and finite difference time domain simulation.

The \$10,000 that the company won in the CNSE prize will contribute to hiring programmers in the summer. They are now seeking \$3 million in equity financing in order to expand their venture further.

The company is currently working to develop two products: a distributed FDTD electromagnetics package and a generalized software development kit for distributing algorithms across heterogeneous networks, which will be applicable to a variety of important algorithms.

Though their business takes up a great deal of time, perhaps even requiring them to take the next academic year off, both Hochberg and Baehr-Jones still intend to move on to graduate school after earning their undergraduate degrees here at Caltech.

Work for the Tech

The Outside World

by Erik Dill

Bint Jbail, Lebanon - The Hezbollah guerrilla group has begun to provide water, medical care, and other public services in the border territory abandoned by Israel last week.

Rome, Italy - The municipal council withdrew official and some financial support for the World Gay Pride Festival planned for July. The action is probably related to the Catholic Church's ongoing jubilee celebration.

Egali, Eritrea - Ethiopia said that it would withdraw from Eritrean territory seized over the past three weeks. Peace talks between

the two nations opened (again) on Tuesday.

Miami, Florida - Twelve Cubans on their way to Florida in a homemade ship were turned back by the Coast Guard. Twenty-three illegal Cuban immigrants arrived in Key West on Wednesday. And Elian Gonzalez may finally be headed home, after the 11th Circuit Court of Appeals rejected the petition for political assylum filed on his behalf.

Washington, D.C. - A World Bank report stated that living conditions in sub-Saharan Africa have deteriorated since the 1960's, the only major region of the world where this has happened. The report blames some of the problem on inept foreign aid projects, including those funded by the World Bank itself.

Suva, Fiji - In response to the capture of parliment and several other government officials by armed rebels, military leader Bainimarama took control of the government. At first, Bainimarama said the military would relenquish power when the hostage situation was resolved, but now says they may remain in power for up to three years.

In the pristine tradition of such respected literary journals as...

Hot Throbbing Geographic
Techweek
Cosmopolitech
Los Angeles Tech
and The Rivet

The California Tech proudly presents the finest of the finest:

THE NATIONAL INQUISITION

See why we're the worst selling paper on campus!

Coming next week!

Movie reviews



BY JUSTIN HO

Mission: Impossible-2 (C)

By action movie standards, *M:I-2* was rather disappointing and given the lack of other genres in which this film could be placed it is lacking in any redeeming value. Even the first *Mission: Impossible* had a second level of film-noir sophistication which made it aesthetic in its dark way.

The setting was punctuated by bleak European buildings which added its suspenseful atmosphere by allowing us to conjure the many things which may have lurked in the background shadows. In contrast, *M:I-2* has lost its ability to surprise in its recycling of gimmicks.

The infiltration of secret buildings via rope suspension fro the ceiling and the over-use of realistic masks were novel in 1995, but in four years of maturing, one would expect a greater degrees of sophistication. The answer: near-instantaneous DNA sequencing, a colorful in vivo resolution of a deadly biological agent attacking a host's cells with better quality than an electron micrograph, and talking petri dishes which send out warning when conditions for their inmates are unfavorable.

Somehow, a movie which actually enlists a genuine Tom Cruise and not a stunt double in the rock-scaling scene should not resort to faux scientific instruments, though with a mediaconsuming public not as science-savvy as Caltech it's a cleverly-fabricated means to prevent the introduction of anything that would be genuinely scientific and prolonged.

It's hard to put a finger on why the DNA sequencing instrument would be a target of more criticism than, perhaps, the wildly unreal amorphous shape-shifting capabilities of the *Terminator II* villain though; just like it's so much bizarre that the co-existence of lemurs and dinosaurs in the Disney movie is more harangued than the fact that they sing and dance.

Scientific controversy aside, it's difficult to label *MI-2* as a good movie because of the inability to relate to the characters. Even the love triangle which develops and is a humanizing feature in the otherwise emotionless heroic personas does little more than to portray Nyah Hall(Thandie Newton) as a Smurfette.

There is little to substantiate

the transcendence of Ethan(Tom Cruise) and Nyah's relationship to the non-platonic state and although two good people hooking up just makes sense it is another contrivance. A lack of any cathartic moments prevents the audience for sympathizing with the characters, so that even when Nyah potentially risks her life, there's nothing truly self-sacrificing in the act even though she asserts that her nature is self-



Tom Cruise and Thandie Newton star in Paramount's "Mission: Impossible 2"

serving.

It's easier to elicit pathos in character-changing movies, the coming-of-age tale in *Star Wars*, for example. Movies which especially include human weaknesses and growing out of them, or obstacles as emotionally-taxing instead of simply physical barriers are much more successful unless there are truly ground-breaking antics or special effects.

Thus, while Saving Private Ryan was technically superb, the explicit yearning of Tom Hank's character to return to his wife and home will be equally endeared.

As an action demigod, Tom Cruise as Ethan Hunt is too invulnerable, too impersonal to draw sympathy for a truly emotional experience.

And, as in its James Bond film parallels, the superficial connection between Ethan and Nyah will likely be severed in the interim. In the aftermath of *The Matrix*, most films which claim to action will also be lacking.

In characteristic John Woo fashion, the camera pans the faces of the characters with stylistic elegance. Slurring some of the action sequences becomes a form of eye candy too, but it is used more effectively in the former than latter half of the movie and it also marks a disjunction in the tone of the movie. The beginning is imbued with a European chic-ness an almost decadent posh. Given the shal-Iowness of the plot line, it's a sophisticated detail. But in the latter half, there's a hastiness to the movements.

Indeed, the movie becomes a

cat and mouse chase, replete with overturning motorcycles and exploding SUVs but at this point when the movie has the potential to become most stimulating it also becomes most ordinary.

Shanghai Noon (B+)

Shanghai Noon had the misfortune of opening in the same weekend as M:1-2 and the added disadvantage of a sour trailer. Perhaps with these slightly lowered expectations the audience will be at least mildly impressed. The action hero personas Jackie Chan and his sidekick, Owen Wilson, assume are markedly different from those in M:I-2. Both envision themselves greater than their ineptitude prohibits, but it is a universal longing in anyone, which makes it more approachable. And despite the slap-sticky screenplay, it is actually a project which is furnished with much wit.

Jackie Chan has become the quintessential self-mocking super-hero. Lacking in absolute English proficiency, he has been successful at poking fun at his misinterpretations. Such a target of levity as in the movie would have been a grave disability in the actual historical context of the film, but it also introduces those increasingly-noticed hybrids of east-west languages and culture.

The plot of the movie is simple: to rescue an abducted Chinese princess (a resplendent Lucy Liu) betrothed to an impish emperor from cowboy-dominated 1800's America. Chon Wang (Jackie Chan) is a member of the Royal Guard, but sent overseas foremost as a porter because of less than exemplary martial arts. Fate separates him from the rest of the rescue party at which point he associates

speed but his proficiency is still very evident. In contrast to previous films, his instruments of warfare/self-defense assume a more traditional Chinese character, that is, rope darts, swords, and spears as opposed to ladders or sofa chairs.

Still, none of his opponents come close to his fighting ability, an upper-hand which gives him the ability to take a less-than serious demeanor and exhibit



Jackie Chan shows heroics in "Shanghai Noon"

himself with an aspiring train robber/notorious gunslinger and saves Indians, starts bar brawls, and drinks himself into silly stupors.

History lends itself easily to an amalgamation of cultural mixing, misgivings, and displays of kung-fu. In his middle-age Jackie Chan may be limited in

little facial contortions. It reinforces Jackie Chan as a master of physical comedy, to which Roy O'Bannon (Owen Wilson) plays the perfect foil by cutting corners in his endeavor to become a man of great notoriety. The synergy is an unexpected hybrid Western/action/comedy gem of a movie.



If the stuffiness of the corporate world doesn't appeal to you, then you'll love working at Continuous Computing (CCPU). CCPU is the leading provider of Voice-over-packet platform solutions for telecom equipment manufacturers.

Located in San Diego approximately 7mi from the beach, CCPU provides a casual working environment where shorts are considered office attire and the focus is on the individual. As part of a small company, you will see the results of your effort on a day-to-day basis, and you will work on products that meet the needs of our customers.

We currently have entry level and summer internships available for Electrical Engineering and Computer Science. Check out all of our job openings at www.ccpu.com or contact us at (858) 547 8804.

Helpful qualifications:

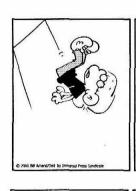
- Detail-oriented personality
- Familiarity with PCB layout and digital/ analog circuit design
- Proficiency with SPARC/Solaris
- Familiarity with PC/computer components (memory, CPU, I/O cards, etc.)
- Excellent communication skills
- Willing to work in a team-oriented environment

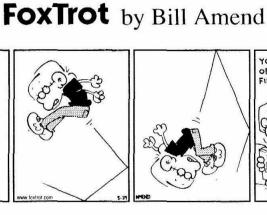
Comics

$footnote{DILBERT}^{\circledR}$ by Scott Adams

I CAN WEAR THESE MY SOCKS USE AN BABIES FOR DAYS ANTIMICROBIAL POLYMER TO BOND BEFORE THEY START CHLORINE ATOMS TO STINK. TO COTTON.



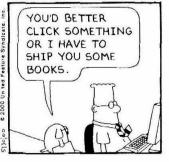






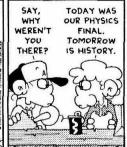


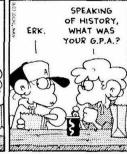








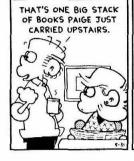




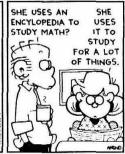








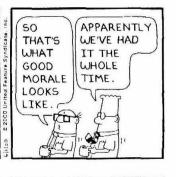














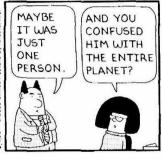


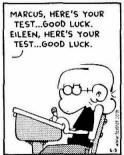








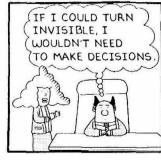














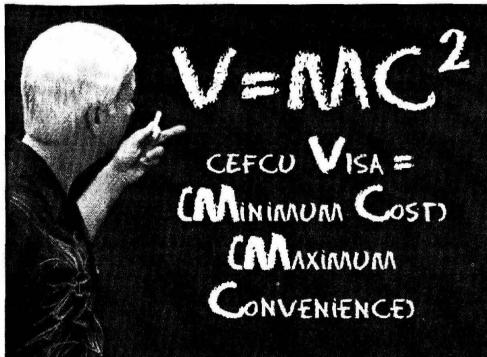












THE FORMULA FOR Low-Cost Credit!

We figure, if you're smart enough to be a full-time student at the best school in the country, you're smart enough to carry our low-cost Visa card.

It's a brilliant solution for an infinite number of purposes. And, it's yours for the asking if you're a CEFCU member... 18 or older...carry a minimum of 12 units... and have no credit problems. Enjoy credit limits of:

- \$500 for freshmen
- \$600 for sophomores
- \$700 for juniors
- \$800 for seniors
- And, relatively speaking, this is one of the most affordable credit cards in the nation!

and \$1,000 for graduate students.

Consider these factors: Vo annual

fee · A low fixed rate

of just 11.95% APR A 25-day grace period

No cash advance fee.

Multiply these advantages by a square deal from your Credit Union (our low rate isn't just a temporary introductory offer) and you've got a card you can count on for light years.

Visit us online at www.cefcu.org or in person. Or, call (626) 395-6300 for an application and put our theory of financial convenience in your pocket!



1200 E. California Blvd. (Lower floor of the Keith Spalding Building) • CIT 15-6 • 395-6300

NOT YET A MEMBER? Visit our on-campus branch, join and apply for your low-cost VISA at the same time. CEFCU is an equal opportunity lender.

The best four years of your life

Seven days, seven days,

and who is counting? Lots

of you seniors I suppose,

impatient to get on with the

rest of your lives. But

please believe me, if you

can, the last 4 years will

turn out to have been some

of the best years of your

life. That does not mean

that things are going to be

pretty crummy from now

on, only that it will take a

bit of distance for you to

realize that what you have

just lived through was in-

deed a high. Whether you

realize this or not, the great

day is approaching (tic...

toc...), and with it new be-

ginnings, or as we say in

French, "Commencement".

We could also say "De-

buts", but that brings to

mind a rather more social

affair. I don't think that

calling you graduates

débutantes and débutants

would convey the right

tional educational opportu-

nities that you have had at

Caltech, there are things

that we did not teach you,

things that are essential for

success and maybe even for

survival in the outside

world. So it is high time that

I try to remedy this failing.

recognize that in the outside

world (yes there is one),

time has a different value

than in the golden confines

between Wilson and Hill

and Del Mar and California.

Yes, Caltech is bigger than

It is crucial for you to

Sit up already and listen.

In spite of the excep-

message.

Dean's Corner Tic, Tech

by Jean-Paul Revel

we have outlying fiefdoms beyond these boundaries, but these few blocks are where the time anomaly is most developed. In spite of what has been your custom for the past 4 years, it is imperative that you now relearn that most professional activities take place between 9am and 5pm, Monday through Friday.

Caltech is lenient to a fault in allowing you latitude in choosing, let's call it, your personal longitude. When it is midnight here many of you behave as if you were living 120 degrees East of here. But in the world into which we are about to release you, this schedule mostly won't do. It could be reason enough to be fired. There are few jobs where working hours so disconnected from the norm would be tolcrated. So, if you are terminally time shifted, find yourself an appropriate position (Night watchman, Policeman, Emergency vehicle driver, Attendant at an all night gas station), or reform. I suppose you could also move to Europe and tic toc as if you were at Tech ..

Come to think of it, there is another solution. That is to work for the right technology company. I understand that many companies all but ask their employees to live at their work. At Tellme, apparently one of the brightest start ups in Silicon Valley, I understand that some executives have bunk beds built over their desks shades of the Hovse you

n o w live in. I also hear that they are vigorsearching for don't know what a bimmer is either], presumably one with a clock.

But working hours are next term.

No more Deans who arrange for you to be forgiven almost anything, at least once. No more professionally planned meals, no more

Car problems? Complete foreign and domestic auto repair -- In service for over 29 years. (Engine repairs, tune-ups, old change, brakes, batteries, etc.)

Hrant Auto Service 1477 E. Washington Blvd. Pasadena CA 91104 Call for Appointment (626) 798-4064 (626) 791-1993



that, ously copacetic staff. Of course they do have competition from the likes of Trilogy in Texas, which, I read, is looking for top tech students, offering them \$200,000 and a bimmer [Editor's note: we

> not the only thing that you are going to have to worry about in your fancy new job. You are also going to have to deal with withdrawal from all those services that Caltech used to provide but which will not be available to you once you step off that podium in the Court of Man. No more obliging TAs with office hours in the middle of the night. No more understanding Professors, who, discovering that you are under duress, extend their deadlines for a few hours and sometime well into the

undietetic dinners with Tom

615 S. Mentor Ave., Pasadena

Value, Style, Location

Offered at \$475,000

Delightful 4 bdrm, 3 bath Spanish style home in Cal Tech/So. Lake area w/over 2600 sq.ft. Features include large rooms, lots of light, fpl & newer kit. Truly the best price in the area.

Contact Lowell Hamburg (626) 396.3966 (626)229.0909

Mannion, no more Coffee House with the best shakes in the West and the most accommodating hours.

Gone too will be the safety nets, the ever approachable RAs to whom to pour your heart out. Gone will be these people down the hall with whom to talk, play games, do homework with and who knows what else. Gone the camaraderic of the Glee clubs, and the comradeship of waiters, gone the company of fellow Interhouse athletes. Gone, all gone. You'll have to start building all of these things from scratch and/or be satisfied reminiscing with your fellow alumni.

Of course you'll argue that from here on you'll be free to play something else beside the Charge of the Walkyries [Editor's note: or, perhaps the Ride of the Valkyries] at top volume. No one will interfere with your parties, at least you think, however raucous they'll get. Kid yourself not. The tenant below will bang on his ceiling with a broom handle (although not a warlock, he) and the police, the real thing, not the slow-toarouse security, will shut you down, bet on it.

Gone the Daihatsus of

old, beasts of burden for your every move. Gone the imperatives of the Honor Code: there will be no BoC in your future. Even so let the Code under which you lived at Tech keep guiding your conduct even when you are away from here. Gone... but you'll discover soon enough all the things that you will be missing.

Having given you a few of the reasons for you to miss Caltech, I must also tell you that we will miss you too. It is a truly bittersweet occasion to see you go. On the one hand we all are proud that you made it, about half of you with Honors, in the school with one of the most demanding curricula in the country. We are happy to have a new crop of ambassadors. Yet we are sad to see you leave, now that we have gotten so used to your faces, and smiles, and quirks, and, well, you know. We like you, warts and all, and wish you the very very best.

Au revoir!

Jean Paul Cevel

damage response in yeaast, in new/fun lab at UCSF. Involves genetics and biochem. Perfect for graduating senior wanting to go to grad/med school in two years. email toczyksi@cc.ucsf.edu

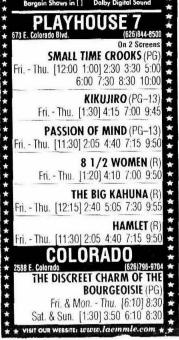
IMMEDIATE OPENINGS!

Lab tech job in San Francisco. Looking for a tech study DNA

Students earn \$375/\$575 weekly processing/assembling medical I.D. cards from your home. Experience unnecessary...we train you! Call MediCard 1-541-386-5290, ext. 300.

Looking for a place to live? www.housing101.net... Your move off campus! Search for apartments. Free roommate sublet listings

LAEMMLE THEATRES





Tel: 449-8018 2475 E. Colorado • Pasadena etween Sierra Madre Blyd & Altadena Dr

OPEN 7 DAYS

Free Parking In Rear



Mints

ANNOUNCEMENTS

Additional HSS Course Announcement for Fall Term 2000-01: Lit 129 Austen, Bronte, Woolf An introduction to four of the most important English writers of the nineteenth and early-twentieth centuries. Understanding these novelists as a tradition, we will pay particular attention to formal developments in the Novel from the marriage plot through modernism. Jane Austen, Charlotte and Emily Bronte, and Virginia Woolf's major works-including but not limited to Emma, Persuasion, Jane Eyre, Wuthering Heights, Mrs. Dalloway, To the Lighthouse. Instructor: King; TTH 1-2:30

The McKinney Committee of the Caltech Literature Faculty is please to announce the winners in the 2000 contest for excellence in writing. In the category of prose fiction, first prize has been won by David Hockaday. In the category of non-fiction essay, first prize is awarded to Jit Kee Chin. The poetry prize was won by Stephen Shepherd. The Hallett Smith Competition (for the finest essay devoted Shakespeare) was won jointly by Jim Wong and Robert Swin-

RELOCATION: Effective Monday, May 8, 2000, The Bursar's Office will relocate from the first floor of Keith Spalding Building (Business Services), Room 116, to 363 South Hill Street and occupy the first floor of the main Hill House. The new Mail Code for the Bursar's Office will be 3-7. The telephone and fax numbers for The Bursar's Office will remain the same. Please note that the Disbursement Audit Office has been moved to the garage structure in the back of the Hill House. Additionally, a new Satellite Cashier's Office will be perational for Personal Accounts only in the garage structure of 363 So. Hill Street. The Satellite Cashier's Mail Code will be 4-7 and the telephone number will be (626) 395-2482. Only a minimal disruption in services on the morning of Friday, May 5, 2000 is anticipated.

The final Beginning Night Club Two Step class originally scheduled for Mon 29 May has been rescheduled for 7:30 - 9:00pm Mon 5 Jun'00 in Winnett Lounge. For further information see www.its.caltech.edu/~ballroom or call Don at 626/791-3103.

Halsey Rodman's art installation entitled "One and Many Suns," which includes sculpture and photographs, will be on view at Caltech's Outdoor Art Space until July 9. The art site is located behind the Campus Recycling Center on Holliston Avenue

Local indie rock label looking for interns for sales, marketing, internet and promotions. Looking for motivated self starter who is resourceful and responsible. Computer skills a plus! Serious inquires only please. Email: vrichter@netcom.com URL: http://www.vanrichter.net. Telephone number: 583-4717

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

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

Ride your bicycle to Caltech? Register with C a l t e c h 's CYCLOCOMMUTERS.http://www.its.caltech.edu/~cyclocom or email: cyclocom@caltech.edu. Monthly random drawing for a \$30.00 gift certificate to a local bike store and free tune up and extras at the Commuter Fair Day, on May 19th! If you are a distance rider, log in your miles for an extra chance to win additional prizes every 6 months.

EVENTS

Caltech's KipFest Science Symposium to Feature Physicists Kip Thorné and Stephen

Hawking. Advance Tickets Available Now, Caltech is hosting KipFest, a symposium on the occasion of theoretical astrophysicist Kip Thorne's 60th Birthday, June 1 to 3, 2000, to honor his career in physics, and his commitment to the communication and popularization of science and science education. Early admission tickets for the Saturday Science Talks are available now at the Caltech Ticket Office for students, faculty, staff and JPL employees, with a limit of two (2) per I.D. These early admission tickets provide guaranteed seating if presented by 9:30 a.m. There are a limited number of tickets, available on a first-come, firstserved basis. For more information on tickets, please contact the Caltech Ticket Office at ext.

45th Annual Service Awards Ceremony, Tues., June 6, Ramo
Auditorium, 10 to 11 a.m.—A reception will follow in Dabney Gardens.

Physics Research Conference, Thu., June 8, 201 E. Bridge, 4 to 5 p.m.—"The Cosmic Microwave Background: Past, Present, and Future," Andrew Lange, professor of physics, Caltech. Refreshments, 110 E. Bridge, 3:45 p.m.

106th Annual Commencement, Fri., June 9, Beckman Mall, 10 a.m. to noon—The speaker will be author Ray Bradbury.

Skeptics Society Lecutre. Sun., June 11, Baxter Lecture Hall, 2 to 4p.m.—"Denying History: Who Says the Holocaust Never Happened and Why Do They Say It?", Dr. Michael Shermer, author, publisher, and Skeptics Society founder. Donation is \$8 for nonmembers and \$5 for members and non Caltech students. The lecture is free to the Caltech/JPL community. Information: 794-3119.

Caltech/MIT Enterprise Forum, Sat., June 17, Baxter Lecture Hall, continental breakfast and registration, 7:45 a.m.; program, 8:30 a.m. to 12:30 p.m.— "Wireless Internet: The Next Gold Rush." A panel of experts will discuss the Wireless Internet and review the plans

and progress of successful and emerging Wireless Internet content and software ventures. Admission is \$40 (\$10 for non Caltech students; free to Caltech students and faculty), and preregistration is required. Information: 395-3916.

The 12th annual NASA Planetary Science Summer School offers student scientists and engineers the unique opportunity to design a space exploration mission in one week. "Discovery Micromissions: Focused Low Cost Science" is scheduled for August 7-11, 2000, in Pasadena, California. The program is directed toward PhD candidates and recent PhD graduates. For more information on the program and an application form, please visit http:// www.jpl.nasa.gov/pscischool/. The deadline for applications is June 11, 2000. Questions on science content may be directed to Ms. Anita Sohus at JPL, (818) 354-6613,

anita.m.sohus@jpl.nasa.gov.

SCHOLARSHIP

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

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

The John Gyles Education **Fund** is offering scholarship awards up to \$3,000 for the 2000-01 academic year. Applicants must be Canadian or U.S. citizens, have a 2.7 GPA or above, and demonstrate financial need. Criteria other than strictly academic ability and financial need are considered in the selection process. To request an application, send self-addressed, stamped envelope to: The John Gyles Education Fund, Attn: The Secretery, P.O. Box 4808, 712 Riverside Dr. Frederiction, News Brunswick, Canada E3B 5G4. Filing dates for mailing documents in 2000 are April 1, June 1, and November 15.

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

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

To submit an event for the Mints, contact mints@ugcs.caltech.edu or mail your announcement to Caltech 40-58 Attn: Mints. Submissions should be brief and concise. Email is preferred. The editors reserve the right to edit and abridge all material Deadline is noon Wednesday. Unless specified, all mints will run for two weeks.

THE CALIFORNIA TECH

Caltech 40-58 Pasadena, CA 91126