

"To be great
is to be
misunderstood."

The California **TECH**

"Huh?"

Volume XCVI, Number 29

Pasadena, California

Friday, June 2, 1995

Biologist Ray Deshaies Named Searle Scholar

from Caltech Public Relations

PASADENA — Assistant Professor of Biology Ray Deshaies has been named a 1995 Searle Scholar in recognition for his outstanding research in the field of biochemistry and the genetics of cell division. He will use the three-year, \$180,000 grant to further his investigations into the mechanisms of cell division in the microorganism *Saccharomyces cerevisiae*, otherwise known as baker's yeast.

Work in many laboratories over the past five years has shown that a remarkable similarity exists between the simplest eukaryotic organisms, such as baker's yeast, and much more complex eukaryotic organisms, such as people. Yeast and humans use similar proteins to implement and control the processes of the cell cycle.

One critical regulator of the cell cycle is an assembly of two different proteins called cyclin and cyclin-dependent kinase (Cdk). Cyclin binds to Cdk and activates it, and Cdk then switches on other proteins in the

cell cycle process. When Cdk has completed its task, it is deactivated by the destruction of its partner protein, cyclin. Deshaies's lab hopes to exploit the genetic technologies available for working with yeast to identify proteins that help control Cdk activity. He and his colleagues want to understand how cyclin, Cdk, and other proteins work in the cell cycle to ensure that chromosomes are duplicated and segregated accurately during cell division.

The activity of cyclin, Cdk, and other proteins is crucial to human health. Mutations in proteins that control Cdk activity has been suspected in triggering certain types of cancer in humans. Because of the similarities in the cell cycles of yeast and humans, discoveries made by Deshaies's group will likely be applicable to people as well. Basic research such as this on the cell cycle may eventually assist in the development of innovative chemo-therapeutic treatments for cancer.

Deshaies graduated in 1983 from Cornell University with

honors and distinction in biochemistry, and earned his Ph.D., also in biochemistry, in 1988 at UC Berkeley. He held postdoctoral appointments at UC Berkeley and at UC San Francisco, and joined the Caltech faculty in January 1994. In addition to being a Searle Scholar, Deshaies is a Lucille P. Markey Charitable Trust Scholar.

The Searle Scholars Program was established at the Chicago Community Trust in 1980, and is funded by the estates of Mr. and Mrs. John G. Searle.

John Searle was the grandson of the founder of the worldwide pharmaceutical company G. D. Searle & Company. It was the Searle's wish that certain funds be used to support "research in medicine, chemistry, and biological science." To achieve this goal, grants are made to support the independent research of outstanding individuals who are in the first or second year of their first appointment at the assistant professor level.

Poll: Why Techers Chose Science

by Dave Relyea

Disclaimer: I claim that I wrote down most everything that people gave me as an answer to this poll, except for the email which I printed, and that I'll try not to personally bias the data in any way, shape, or form. Finally, I promised everyone that I wouldn't include any names in this survey. Therefore, the quotes that I use are genuine, but I unfortunately have too little time to find every single person who responded to this poll, so I'm going to enforce confidentiality.

People who responded: 51 undergraduates 6 graduates (all levels of graduate work) 1 professor 1 other (no profession given) I didn't include my opinions and experiences.

I was quite surprised that six graduate students (I expected about 0) sent me lengthy responses to this poll. I either talked to or received email from 51 undergraduates, about 6 percent of the undergraduate population. This number of people is not large enough to show trends in the motivations of undergraduates (fifty people is too few to justify global opinions, unless you're finding a movie at Blockbuster, in which case five are usually too many). However, I believe that the responses of these 59 people were interesting enough to merit a writeup. Nyah. I initially counted the number of responses in several



Gary Lorden presents Monwhea Jeng with the Sigma Xi Award.

Sigma Xi Inducts Members

by Jian Zhang

Sigma Xi, a research honor society, held its annual banquet on Friday, May 19, to reunite present members and new initiates and to also inform all the members about the outreach programs student associate members plan to carry out during the next few years.

During the initiation ceremony, presided by Gary Lorden, the President of the Caltech Chapter, all the new initiates had to recite the pledge of the society. The new members pledged themselves with the purpose and objectives of Sigma Xi, which includes "...to encourage original investigations in science, to foster companionship and cooperation among scientists, to maintain honor, integrity and honesty in all scientific activities, and to assume the other continuing responsibilities of membership." Undergraduate initiates included Christopher Hunter, Debbie Leung, Penny Muir, Nathan Scandella, Adele Shakal,

Katherine Sippel, and Lyndie Williamson.

The Annual Sigma Xi Award given to a graduating senior who has carried out an outstanding piece of original scientific research, was awarded to Monwhea Jeng. A surprise appreciation plaque was awarded to Dr. William Whitney for his dedication to research and for his guidance and support to the Sigma Xi members who attended the National Conference on Undergraduate Research.

All the members and guests at the banquet had the wonderful opportunity to hear the guest speaker Julia Kornfield, Assistant Professor in Chemical Engineering, give a short presentation about Long Molecules. Anandi Raman, a senior in biology and chemistry, also gave a short preview of the upcoming programs that the student members are currently planning. The outreach programs target elementary, junior high, and high school students in the nearby school districts.

Three Techers Receive Awards

by Suzette Cummings

The Green, Froehlich, and Haagen-Smit Awards were presented on May 25, 1995 at an awards luncheon in The Athenaeum. Jerry Shan, Senior in Engineering, received the George W. Green Prize for his creative research in digital particle image velocimetry (DPIV) with Professor Morteza Gharib's group. The Jack E. Froehlich Memorial Award is for outstanding juniors in the top 5% of the class. Nam Yu and Roman Muchnik were selected this year. Thank

Nga Tran won the Arie J. Haagen-Smit Memorial Award, which is given to a chemist or biologist who has shown academic promise and has made recognized contributions to Caltech.

The Dean of Students, Rod Kiewiet and Associate Dean, Barbara Green, hosted the lunch with special guests Mrs. George W. Green (Bernice), Mrs. Arie J. Haagen-Smit (Zus), Mrs. John D. Roberts (Edith), Professor Ray Owen, Assistant Professor Barbara Imperiali, and Charlene Chindlund from Donor Relations.

Campus Notices

ASCIT Election

ASCIT General Election Monday, June 5th for Senior Class President, Senior class Secretary-treasurer, Junior class President, and Junior class Secretary-treasurer.

Ballot boxes will be in the 7 houses from 10 a.m. to 10 p.m. on Monday. Please VOTE!

McKinney Prizes Awarded

The McKinney Committee of the Caltech Literature Faculty is pleased to announce the winners in the 1995 contest for excellence in writing. In the category of non-fiction essay, first prize has been won by Lucia Kuhns. In the category of prose fiction, first prize is awarded to Connie Chang. Shameel Arafin won first prize in poetry.

Honorable Mention is given to Alan McConchie, Ben Taskar, Serge Belongie, Donna Akutagawa, and Charles Boyce.

Chamber Singers presents a Variety of Music

Once again Caltech's own Chamber Singers is having a concert. This term, the program is eclectic. There will be madrigals, ballads, barbershop quartets, Gilbert and Sullivan songs, music from around the world, and a piece by the modern German composer, Distler. This free concert will be at 8:00 PM in Dabney Hall on June 8th, and a reception will follow. Come and enjoy!

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New Committee Officers

Academic Policies Kohl Gill Lin Jia Jian Zhang <i>Alternate:</i> Jason Lee <i>Alternate:</i> Adam Villani	Grievance Adam Villani Pauline Ng
Advising System Suzie Bruch Barbara Weir Johanna Yao <i>Alternate:</i> Kiran Shekar	Health Angie Bealko <i>Alternate:</i> Thanh Nga Tran
Athletics & Physical Education Chris Cary <i>Alternate:</i> Katie Stofer	Housing Adam Villani <i>Alternate:</i> Penny Muir
Curriculum Kohl Gill Adam Villani <i>Alternate:</i> Kiran Shekar <i>Alternate:</i> Thanh Nga Tran	Institute Programs Lin Jia Ellis Meng
Educational Outreach Lin Jia Jason Lee <i>Alternate:</i> Angie Bealko <i>Alternate:</i> Penny Muir	Library Abhijit Bhalla <i>Alternate:</i> Lin Jia
Freshman Admissions Amy Herr Adil Karim Dave Relyea Wes Salzillo <i>Alternate:</i> Suzie Bruch <i>Alternate:</i> Alison Slemph	Patents & Relations With Industry Venky Ganesan <i>Alternate:</i> Stephanie Haussman
Foreign Students Krishna Gidwani Kanna Shimizu <i>Alternate:</i> Venky Ganesan <i>Alternate:</i> Thanh Nga Tran	Scholarships & Financial Aid Lin Jia Michael Ru Ron Schaeffer <i>Alternate:</i> Leonard Sung <i>Alternate:</i> Jian Zhang
	Undergraduate Academic Standards and Honors Meg Crocker Eric Dickson Kim Komisarek <i>Alternate:</i> Emily Jennings <i>Alternate:</i> Srdjan Sobajic
	Food Chair Renny Talianchich.

If not for your sake, then for his.



That's right! We need writers, copy-editors, layout editors, people who can draw, people who can't draw, dancers, happy people, unhappy people, people to clean up the office, people to clean up after the people who clean up the office, assignment editors, and YOU!

WRITE FOR THE TECH

12:15 Coffeeshouse Fridays

Editors' Corner

From your Friendly Tech Editors

Wow! What a week! The rumors about third term frosh burnout are true! Oh well, only one more week (rivit rivit). A few of our readers have expressed concern over the use of animals (cats in particular) in recent *Tech* ads and articles. First, we would like to say that the editors do not condone cruelty to animals, nor do we think that actual cruelty to animals is funny. We have, however, played with irony in our advertisements, saying the opposite of what we would condone for the sake of humor. Our hopes were that readers would be surprised by the content, and that the shock might amuse them. Furthermore, Caltech students are generally very kind to their numerous pets (many of whom are cats), and would never think of hurting any of them.

In other news, our Ditch Day pull-out has been put off again because we have not received many submissions. *This is your last chance! Our last issue is next week and we want your Ditch Day abstracts!* Please see page 9 for more details.

See you next week!

Deadlines for Submission to The Tech

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

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12:15, Fridays, Coffeeshouse



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Songs in Russian



The Scotsman

Barbershop

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The California TECH

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IHC Minutes: 5/30/95

Present: Tom (chair), Laura (sec-
retary), Adil (Ru), Alison (Bl),
Bill (Da), Brian (Fl), Art (Ri),
David Derkitts (Pa), Micah
Barclay (Ll), Brian Winters, Pe-
ter Manca

- ☞ The dual absence of Nestor and Vogel is noted, if it weren't Maria's birthday we'd suspect something. Nestor's perfect attendance record is broken.
- ☞ Tom was asked about cable TV and wants to know if anyone has any info about it, Brian says he thinks most housing run property will get it, but is unsure. Since 150 is managed by property management and not housing it may not get cable.
- ☞ The Interhouse trophy is MIA, we make a motion, the vote passes to make it non-RFable in the future, providing it returns in some incarnation.
- ☞ Peter Manca tells us the BOD would like people from other houses besides Blacker doing ASCIT movies stuff.
- ☞ Please tell the game refs when you reschedule a game.
- ☞ We discuss frosh numbers, and Summer SURF students are fudged into spaces.

That's all folks!

Respectfully submitted,
Laura Brady, IHC Secretary

It Was Much Better Back When We Wrote the Title: A Social Commentary

by J. Random HercFrosh III and Lauren

Today's target: Social Commentary

OK. here's the deal... our contract has not been renewed for next term (by edict of the editors).
(*This is a unsubstantiated rumor. -eds.*)

So, this is our final article. For all time. For ever.
For always. You get the idea.

Anyway, we're outa here after this article, and we would just like to say, "<expletive deleted> off!"

So with no further ado:

This space for rent. Call (818) 395 - 6153 be-
tween 8 a.m. and 12 a.m. Ask for Wei-Hwa.

Your ad here.

If you lived here, you'd be home by now.

Baby on board.

How's my driving? Call:
1(800)EAT-<expletive deleted>.

got nilk?

ADAM VILLANI: MEDIA GUY

by Adam Villani

Assassins

TACIT's new production of Steven Sondheim's *Assassins* is not a Broadway show, but for an amateur production, it's pretty good. *Assassins* takes as its subject the myriad American presidential assassins and would-be assassins and tries to find out what makes them tick. Unfortunately, it doesn't get much more insightful than "they do it to get attention," which is something I could've told you. It's certainly more original an idea than most musicals, and one does get a certain thrill from seeing footnotes of history come to life. With TACIT's limited budget, though, the result is good performances, interesting staging (in Dabney Lounge), and a whirlwind tour through American history, guided by a bunch of people from John Wilkes Booth to John Hinckley who are, for the most part, insane.

Particularly charismatic is Craig Peterson as Charles Guiteau, the man who shot James Garfield because he wanted to be ambassador to France. The two women who tried to shoot Gerald Ford, played by Lara Hughes and Lynne Cooper, share a great scene, perhaps the comic high point, where they discover they both know Charles Manson. Ted Turócy does a fine job as Sam Byck, the man who tried to crash a 747 into Dick Nixon's White House, but he can't save his scenes from the fact that they seem to have been written in a calculated attempt to bring the tempo of the production to a grinding halt. As an extra note, the costuming was excellent at establishing the character and time period of each assassin; many were instantly recognizable. See *Assassins*; you'll like it. June 2 and 3 at 8 p.m., June 4 at 2 p.m. Tickets \$10, \$6 for students, call the ticket office at (818) 395-4652 or (800) 423-8849.

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Book by John Weidman

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ASCIT FRIDAY NIGHT MOVIE

KENNETH BRANAGH RICHARD BRIERS MICHAEL KEATON ROBERT SEAN LEONARD
KEANU REEVES EMMA THOMPSON DENZEL WASHINGTON



MUCH ADO ABOUT NOTHING

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1995 CLASS ELECTION STATEMENTS

Junior Class Offices

President

Gina Serraiocco

Hello, sophomore buddies! I'm running for Junior Class President because I know I would do a great job with Mudeo and finding a commencement speaker. I was ASCIT Frosh Director last year, and I really liked being involved with Caltech and representing my class. I hope you all give me a chance to do it again! Thanks!

Secretary/Treasurer

Dave Bacon

Graduation '97. After a last minute bout with the registrar over counting Ph 2c for advanced humanities credit, you've finally managed to scramble together enough units (of pain?) to graduate. You've gotten job offers from two non-fast-food companies and have been accepted to attend grad school at Po-dink U. You've purchased a spiffy graduation gown and one of those cool square graduation caps. Your whole family is in town to witness your triumphant graduation from Tech. Everything is real smooth. Imagine then your disbelief upon showing up at commencement ready for a perfect graduation, opening the commencement program, and discovering that the commencement speaker is to be none other than Edgar Iam Boring, author of "1001 ways clip your toenails", giving his commencement address on "Toenail Clipping Method Number 555: Use Scissors." The horror!

The Junior Class Secretary/Treasurer, along with the Junior Class President together have two main responsibilities: to organize a freshman-sophomore event (MUDEO) and to select the commencement speaker. If elected Junior Class Secretary/Treasurer, I would strive to both improve the freshman-

sophomore event and to obtain an interesting commencement speaker. As you can already see from the scenario I have presented above, I will not allow the commencement speaker to be some Joe-nothing who just happens to be available. Caltech is an extremely prestigious institute. We should therefore be able to attract world class commencement speakers.

Further, for too many years MUDEO has been a sparsely attended waste of time. If elected Junior Class Secretary/Treasurer, I would attempt to solve this problem. MUDEO has the potential to be an extremely exciting event. As Ruddock House Vice President I am currently responsible for organizing alley challenges. From this job, I have learned many things that make or break events such as MUDEO. Probably the most important step in organizing such an event is the input of the students. Students will not show up for events which they do not find interesting. If I can discern that no one wants to have MUDEO, then I feel that another event should be scheduled. Above all, I hope to make the freshman-sophomore event exciting and entertaining for all.

Finally, I feel that I am qualified to do an excellent job as Junior Class Secretary/Treasurer. I am currently the Vice President of Ruddock House, will be a freshman camp UCC, and am a member of the ARC. I have represented Ruddock at IHC meetings and love interacting with other houses at Interhouse events. (On a side note, my last name is a food item, which should count for something also.[grin]) Along with this experience, I also hope to bring my enthusiasm and dedication to this office.

Thank you for your time. I hope that you will give me your vote. Dave 'Baco' Bacon.

Senior Class Offices

President

Angie Marie Bealko

I like watching the sunrise over the Atlantic ocean on a crisp summer morning. I like playing golf in the rain when everyone else has gone home. I like the smell of the grass after I've spent hours mowing it. I like counting the syllables of sentences in my head. I like eating a warm soft pretzel covered with cheese. I like dancing around my room listening to country music. I like talking trash with my friends on the basketball court. I like shucking corn and picking tomatoes from my garden. I like to smile and laugh and sing.

That's me. Simple. What else is there to say after three years? If you don't know me; maybe you know a little more about me now. And for one last hurrah and chuckle, I won't resign...so vote for me.

Adil Karim

The senior class president has two main duties; setting the date of Ditch Day and "helping" to determine the form of the commencement exercises. I should not have any difficulty with the first issue. For me, every day is Ditch Day. The commencement ceremony is a subject of great importance to the senior class. It signifies that our work here is done. After the ceremony, we will have only our loans to remind us of the years we spent here. But I would also like the commencement ceremony itself to linger in our memories. We all feel that the students should have a greater say in determining the graduation speaker. The issue that remains is how to convincingly present our case to the convocation committee. I feel that I would be an excellent choice to represent the senior class in this matter. I have a great deal of experience in dealing with the administration. But I am not so much of a political animal

that I would neglect to be responsible and available to the senior class. I don't have an agenda of my own to push or any favors to return. I plan on reflecting student opinion to the best of my ability and presenting an articulate and rational argument to the committee on behalf of the individual that we want to speak at our commencement. Our current class officers have been gathering information for some time now and I am confident that we will be able to present an informed and unified opinion when the time comes. I feel very strongly that I would be an effective voice for the senior class. My years at Tech have been very special to me and I hope to continue working to make our experience something that we can all be proud of. I look forward to working with the entire senior class to make our final year unforgettable. Thank you.

Secretary/Treasurer

Suzie Bruch

I have a vision. All of my classmates are gathered together in the Court of Man, decked in graduation garb. The sun beats down on us as the mercury tops 100°F (or 37.8°C or 311K for the true scientists in the audience). Sweat pours down our bodies, as if we were not uncomfortable enough in our once-a-year dress duds. But we neither notice nor care. Why, you ask. How is this possible? We are so enamored by our graduation speaker, so enthralled by his or her words, excited that this message will stay with us and make this day truly memorable. Our friends at other schools will envy us. They will not deem it fair that our Commencement address was actually good, while theirs aided the process — of sleep. Aaahhh, my friends. This is my vision — to have graduation be exciting (or at least mildly entertaining). I will use my powers of persuasion to help others on the committee see my vision. If we believe we can get a good, energetic, entertaining

speaker, we can. No longer need we settle for trustees or friends of the esteemed Institute. (However, if some horrendous, insurmountable obstacle forces us to do just this, I would vote for Arnold Beckman. After all, it would be nice to see the man behind the name.) Furthermore, I will do my best to convince the chosen speaker why he or she should come to Caltech. (Unfortunately, we will not be able to throw on a sham such as Pre-frosh weekend, but I will try my best.) If you are a senior from any of the fine houses (and if you aren't, why are you reading this?) and you share my vision, I am open to any and all ideas you have about who you want to give us our last "lecture" at Caltech and what would make graduation more enjoyable. Finally, as Senior Class Secretary/Treasurer, I will help choose an appropriate date such that even the most scrupulous Ditch Day watchers will be unable to predict this gala event.

"Without a plan, there is no attack; without attack, no victory." I have a plan and I have an attack. Your vote for me will not symbolize a personal victory for me, but rather a victory for us as a class.

Alison Slemp

Who do you think should speak at commencement?



A. Thomas Everhart B. Batman



C. David Letterman

D. None of the above

Seriously, though. Wouldn't it be nice to have a choice?

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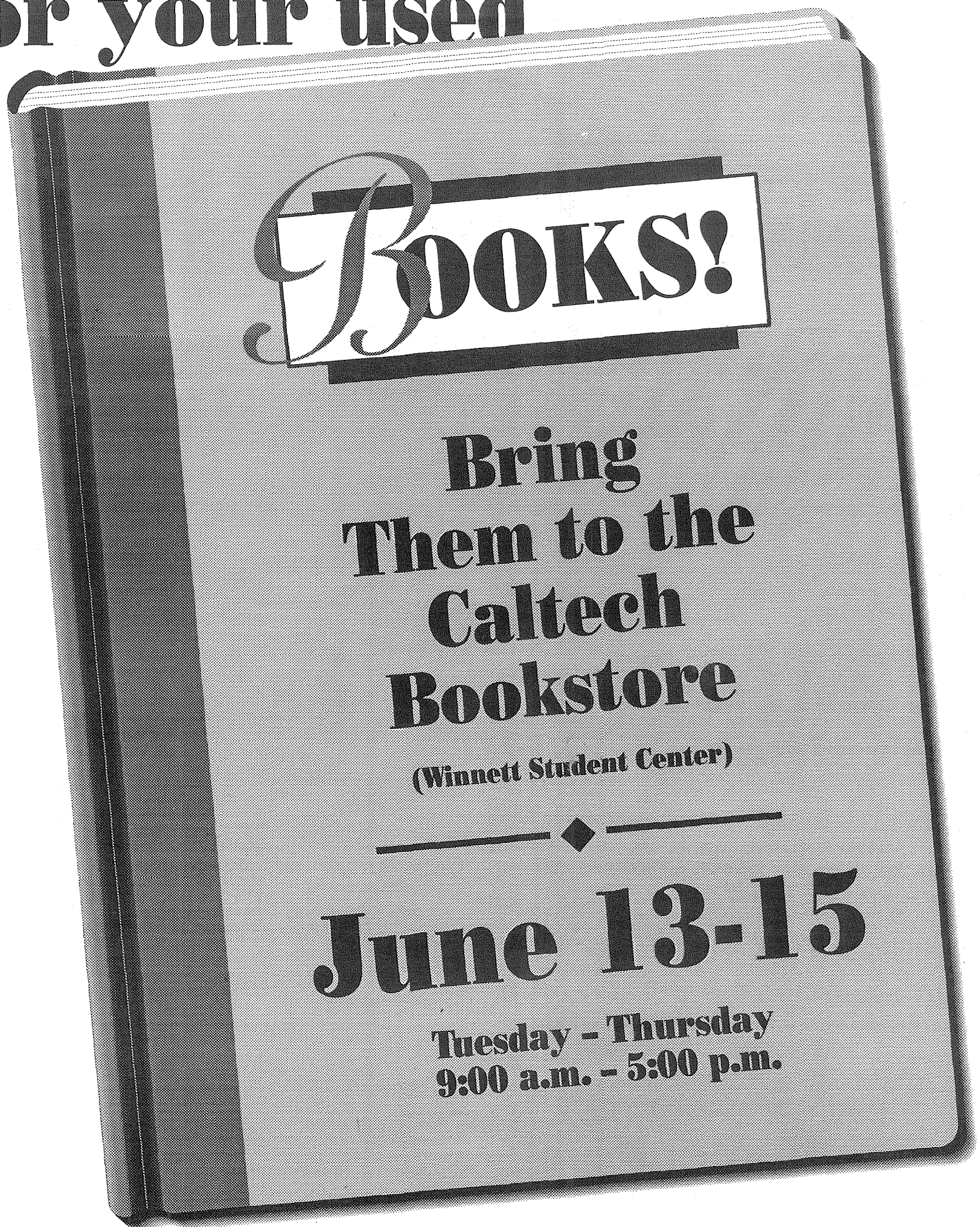
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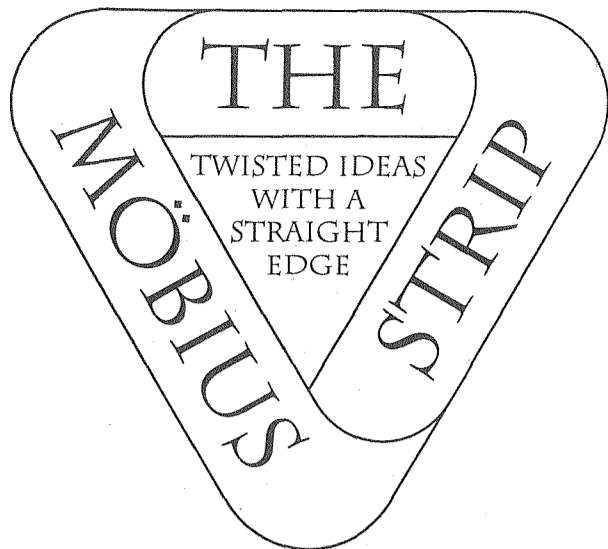
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by Rob Rossi

English, the Irrational Tongue — Let's face it, gang: English is a silly language. There aren't any rules...but English teachers make us learn a bunch of them anyway, which work less often than not. I particularly recall "i before e, except after c, or in words that sound like sleigh, or weigh, or in combination with a, or on Wednesday, and Thursday, and odd days in May, and (hey) you'll always be wrong, no matter what you say." It was a little confusing. Having struggled through learning several significantly

more "rational" languages, and having taught English as a second language, I can really identify with those trying to pick up our lingo, especially in regard to scientific terms. I don't have any good suggestions for you, though. Sorry. There's no secret logic...there is no logic! Parenthetically, my sincere thanks to Markus Weber, one of my roommates and a native of Germany, for inspiring the following diatribe. Some time ago Markus asked me "What is a Frosh?" After I explained, he replied "Ah, that is funny..." "frosh" means "frog" in

German." (I'm glad he asked before Tadpole Weekend.)

One thing that people using English as a second language almost always have trouble with is hyphenation. Hey, most natives have to look up the syllabication of some words—is there any rhyme or reason to it? I thought not, but Markus (a computer science guy) has studied the algorithms in the powerful typesetting system "T_EX," and he reports that the program actually empirically calculates the hyphenation of most words. The algorithm "looks like some kind of meta-physics," however. He tried to explain it, but I got lost. Suffice it to say that the method was developed at Stanford by Frank M. Liang in 1982, as part of his Ph.D. thesis in computer science. If you are interested, look at Appendix H in the T_EX manual—it's all there.

That brings me to my personal crusade. Well, maybe it's just the chip on my shoulder, call it what you like. 1, 2, and 3. Yeah. Not 1, 2 and 3, mind you. 1, 2, and 3. Most people in science circles get it right, thankfully. But you can pick up several serious national monthly newsmagazines and find it all

wrong! Wrong? Conventional wisdom is that you can enumerate a list in written form as either 1, 2, and 3, or 1, 2 and 3. But only the first makes common sense. Why? Let me quote the eloquent explanation in *Technical Reporting*, 3rd Ed., by Joseph N. Ulman, Jr. and Jay R. Gould:

Unless you put a comma before the conjunction in every series, you will sometimes confuse your readers. Suppose you write:

Electric lenses were developed by Davisson and Calbrick, Knoll and Ruska and Bruche.

This is evidently meant to be a three-member series...but does Ruska belong with Knoll or with Bruche?

Two other examples are given by Ulman and Gould that make the point even more strongly. I'll omit their explanation as I think you can see the problems yourself:

1. If we have subdivisions of X, Y and Z, whose values are known...
2. A sampling device is made up of two cascaded components, a sampling switch and a cascaded holding device.

Are you confused yet? If you use the 1, 2, and 3 enumeration scheme, probably not. But the sentences above are vague at best if you can't trust that their writers consistently use that "extra" comma.

So from now on, please, make the world a better (or at least clearer) place and stick in an "extra" comma, if you aren't doing it already! It'll lower my blood pressure. Not that I won't die before 30 anyway...

Puzzler #2 — If there was any hard-core engineer left in me, I'd look up the solution to the last Puzzler. It has to be somewhere,

right? (Not ALL engineering is done by the book, of course...but a reference-based solution is pragmatically required in most engineering work, and that's what drove me out of the field into science. Hey, I'm only so pragmatic.)

Last time we puzzled you with triangle ABC, lying on rays A, B, and C, emanating from a camera. Well, the computers are still thinking about it. Of the many people who've fed this problem to a computer, each using a different algorithm, I don't know of anyone who got something meaningful out of it. No analytical solutions were sent in, so I'll do my best with my paper triangle and string answers. For any set of three points, there is the special case where the "solution" points are all equidistant from the camera, for which there is only one solution. In every other case I've tested, symmetry or no, there are two solutions. Whatever solution point is closest to the camera in one case is furthest from it in the other.

If it is not required that the rays be non-identical, more two-solution cases are generated; three identical rays put the one solution at an infinite distance, which is getting mathematically obtuse and so I'll stop there.

This issue's new puzzler is also science...and a question of ingenuity. You have gotten in a heated debate with the local science teacher on an isolated island. He has been telling his students that salt water is less dense than fresh water, and insists he is right. There's plenty of fresh

SEE MOBIUS PAGE 10

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YNEWS

by Donna Ebenstein

This Friday we have yet another noon concert, this time by a campus band. Dave Liney and the *Line Monsters* will be playing in front of Winnett, so bring your lunch out and enjoy the sun and the music.

Decompression is coming!!! Decompression will be on June 10th and 11th — free food and entertainment in front of Winnett. Sign-ups to volunteer will be in the student houses this week. Sign up, help out, and get a free t-shirt.

As always, the YExcomm meets every Monday from 12 p.m. to 1 p.m. in the Y Lounge (2nd floor of Winnett). If you're interested in finding out more about the Y feel free to drop in.

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ASCIT Minutes: 5/24/95

Present: Thomas MacCarone, David Relyea, Kanna Shimizu, Greg Steiert, Laura Munoz, Andrew Huntington, Flora Ho, Jon McDunn, Ken Walsh, James Honaker, Darth Vader, and Ernie.

Not Present: Everyone else, including but not limited to the immediate family of Tom, James' cat, and James Stewart (we think he's dead).

The Meeting starts at 4:05 p.m. Andrew Huntington acquires a third term Multihouse funding check from Kanna Shimizu for Ricketts House for BDR + some F (how much F, we don't know).

Jon McDunn achieved a point total of 579,000,000 while playing the video game "Jurassic Park."

Flora Ho and others have altered some Grievance Committee procedures, but the changes to the procedures have not been passed.

ASCIT Teaching Awards are up. Vote for your favorite teacher. Make Ken smile.

Jon requests the opinions of the members of the BOD toward acquiring an ASCIT logo by means of a community competition. Jon says that Tom Lechner might be able to do it. The logo would need to contain the word "ASCIT" and not appear to be a small map of Venezuela.

The quick brown fox jumped over the lazy yellow dog.

Tom mentions that the senior class president might be given the task of finding out if seniors want to destroy things for their stacks that aren't theirs. For example, the pyramid underneath Baxter was destroyed on Ditch Day, and several people have complained. Some people add that it might be difficult for the president to find out what stacks are destroying things, but the BOD likes the idea. What if seniors want to destroy the bust of justice, or the carpet in Lloyd? Oops. Too late.

Dinah Lee Schaller's office was flooded, and she needs an office for the summer. Jon tells the BOD that Student Affairs asked to use ASCIT's office - the BOD is generally against this. Sure. Steal our homes and workplaces. Beat our swords into plowshares! *We Will Endure!*

James failed to find the operating budget for the Tech. Whether an operating budget exists is uncertain at this point. James mentioned briefly to everyone that he'll seek out Gavin later.

James adds that the BOC is \$2100 in the red (and \$6 in the green). With the \$1500 from this year, the BOC will only be \$600 (or \$800, actually, due to a \$200 expenditure) in debt. As the BOC has no outside account, any money put into the BOC's account at this point will just go to paying off the debt. Thus, James requests a cash loan of \$500 from ASCIT for BOC operating expenses (and it is approved 5-0-2 = \$3)

The Dean has requested a blurb in the Student Handbook to the effect of: "If you have an account at another bank besides

the Caltech Credit Union, the Credit Union will charge you a service fee."

Sharon Slavin met with Dan Bridges to see if Student Affairs can help us with Ath Funding.

Lloyd House has no third term House List. Suck. Page House has a fax machine. Double suck. The Interhouse Trophy was stolen from Fleming and has since been seen in the steam tunnels, in Outer Mongolia, and possibly orbiting Callisto. Fleming has consulted SEDS about building a rocket, and the launch is scheduled for sometime in 1998.

Laura says the Van is happy and collects litter.. Obviously, she's lost her mind. Vans can't be happy, Laura. Dave adds that the copier has trouble printing double-sided copies. Everyone else Dave has talked to says that the copier prints double sided copies just fine. Dave is jinxed.

Greg told the Ath that 118 people will attend the Formal. Greg also wants to give out money every weekend for social events, like the Jim Pierce Scavenger Barbecue first term and Foodeo third term.

Ken wants people to talk to the registrar about the new rule stopping me and maybe other students but I'm not sure from taking Math 112 and Physics 106 at the same time because they OVERLAP BY 1/2 AN HOUR ON MONDAY. (They made a rule just to do this. They don't like me.) Ken also would like to know exactly who the registrar got to pass this rule.

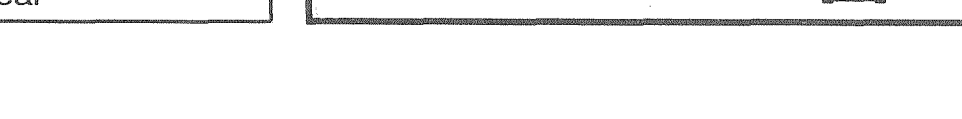
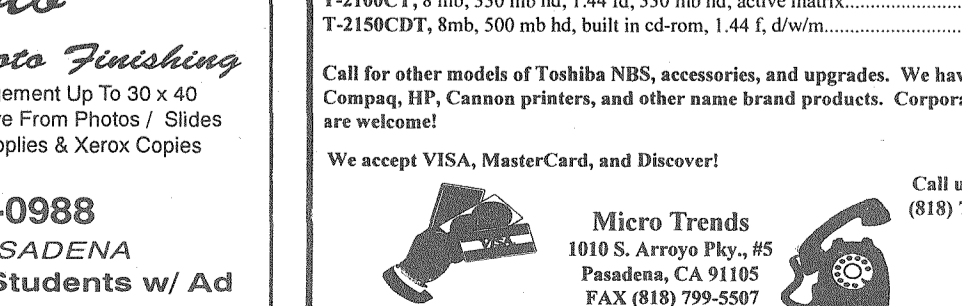
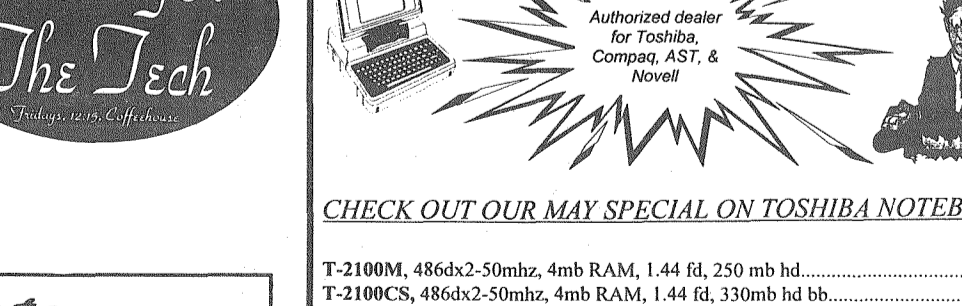
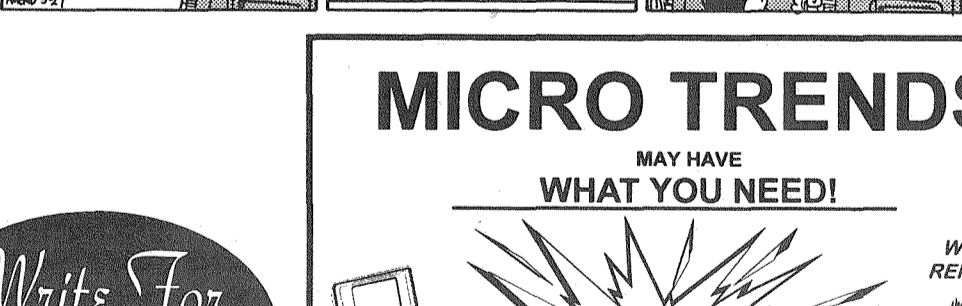
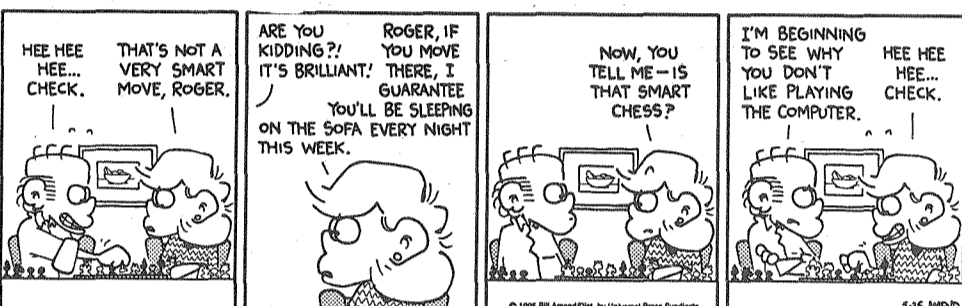
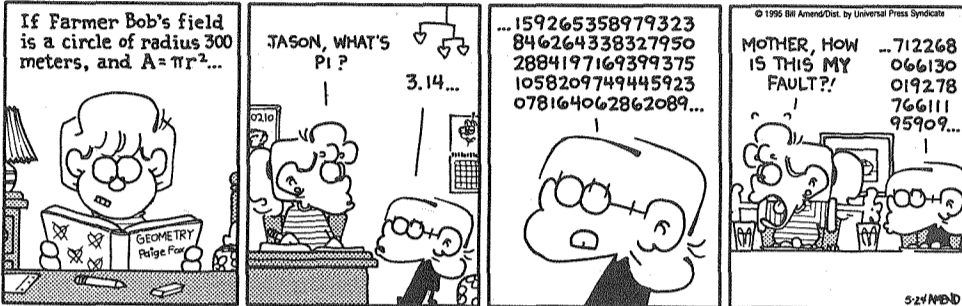
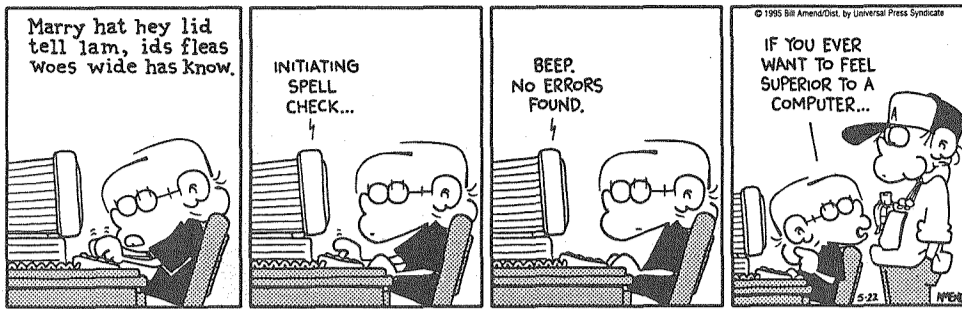
Tom adds that the IHC is working on the railroad, and on summer housing problems. We need 52 spaces for non-Caltech students. The IHC will also stop people from getting screwed over in picking rank in other houses if their house is being renovated.

Kanna says that a lot of clubs haven't picked up their checks, and if they don't by drop day, they lose. Drop Day was Wednesday. Contact Kanna if you want to beg and plead with her to give you the money that you were late in collecting. Kanna adds that the Totem needs more money, because Thanh-Nga Tran (who has since disappeared and has been seen off-campus and in the steam tunnels) said the Totem would be getting bigger this year.

Dave says that elections for class officers will be held on Monday after Memorial Day. Candidates should put their statements and a list of their favorite people in the Tech by Wednesday.

This is as anal as I get. David Relyea
ASCIT Secretary

FOXTROT by Bill Amend



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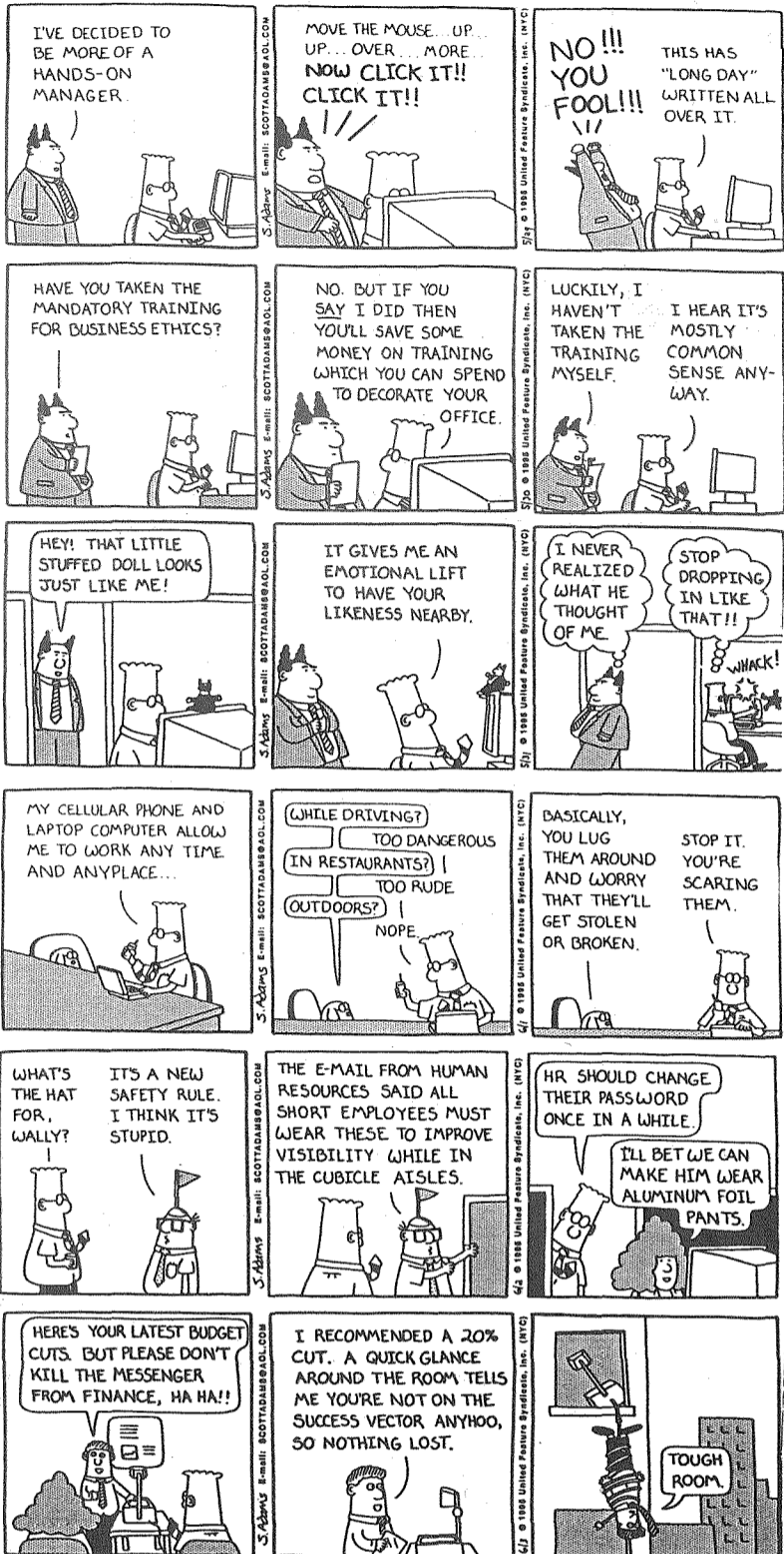
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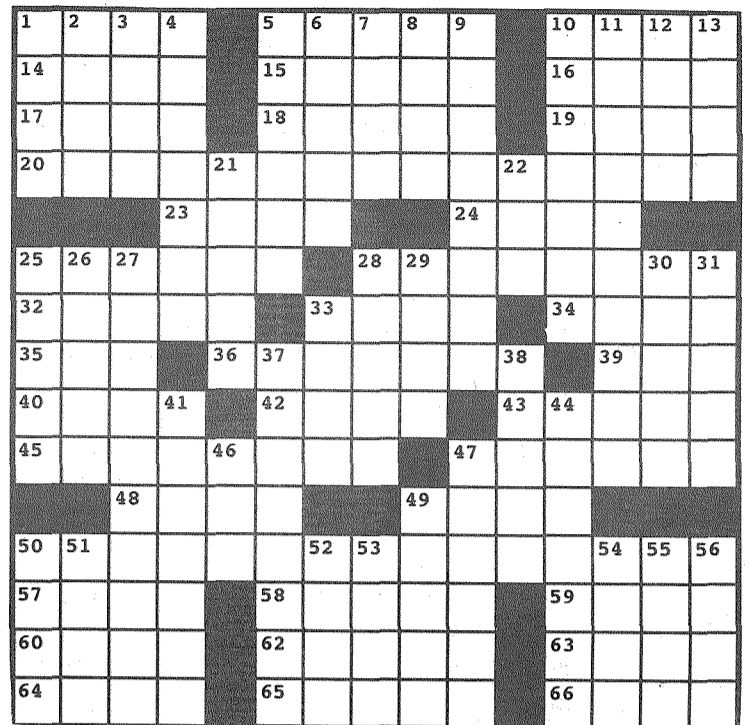
Bye, Seniors!

Across

1. Popeye's favorite tuber?
5. Mountain in the Bible
10. Little bits
14. Let out
15. Babylonian abode of the dead
16. "Dies"
17. Genius in the field
18. Actor Novarro
19. Insect
20. The seniors who are leaving
23. Was Latin
24. There's a lot of it regarding nothing
25. Brit's grits?
28. Problems with getting 10-Down?
33. cohere
34. Prefix for centric or stile
35. Where you might hear a 57-Down
36. "peanut butter sandwiches!"
37. Bad feelings
40. Why telnet sessions take so long
41. Owner of the best WWW page at Caltech
43. Attachment
44. Armadillo
46. What a senior at Caltech is likely to be
48. They roll
49. "culpa"
50. Din
51. When most of the seniors leave
59. French mine
60. Giver
61. Island of color
62. Softest mineral on earth
63. Act well
64. Miniature slide?
65. What the WWW page in 41-Across deals with
66. British levels
67. Woman's retort

Crossword

edited by Wei-Hwa Huang



Down

1. Thugg?
2. River in Siberia
3. Cetus sun
4. What the seniors will soon cease to be
5. Annoy, like the X-Men Chief editor?
6. What the valedictorian does
7. Branches
8. College in NC
9. Screwed-up place?
10. What all the seniors try to get
11. Integral
12. Dances in Bologna
13. It's said there are seven of them
21. Those for whose benefit a suit is brought
22. B fore?
25. Flood
26. :
27. Prefix for e or utang
28. German engraver
29. Press
30. Italian bazaar
31. "On"
32. Bjorn's stuff
34. Strange sounding lake?
38. Herb
39. Looked in an ASCIT meeting
42. Deal
45. Redcaps
47. French born
48. Measures
50. God did it again
51. Carrie "
52. Sharif or Khayya'm
53. A senior has a 1/8 chance of being this
54. Valentine's affliction
55. Descendant of Adam
56. I'm glad I use it
57. Part of 35-Across
58. "Owwww!"

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May 9

Theft Car Radio
Victim parked his 1992 Toyota Camry in the Wilson lot on May 8, at 5:00 p.m. Upon returning



to his vehicle on May 9, at 8:45 p.m., he discover his radio missing. No evidence of forced entry was observed on the vehicle. Pasadena Police Department notified.

May 12

Damage
Victim parked his 1993 Toyota Tercel in space #229 Wilson Structure at about 8:00 p.m. on May 10. Upon returning to his vehicle on May 12 at 8:00 p.m., he discovered a dent in his vehicle on the right side.

May 14

Vandalism
Security responded to Ricketts House at 2:10 a.m., where it was reported that graffiti had been written in room T2 (restroom), room #56, and the stairwell wall near room #56.

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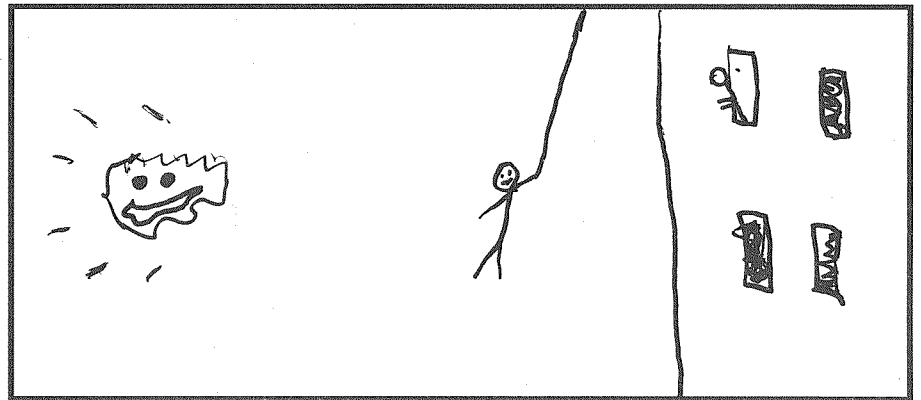
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Submit Ditch Day Abstracts!

We've received fewer than 10 stack abstracts! Please, if you want your stack to be included in our Ditch Day layout (which has been delayed two weeks already), send us an abstract (*editors@tech*). Here's a sample of what we're looking for...

Bob's Stack

Underclassman went to the ends of the earth to solve Bob's Stack. While hanging off of Millikan library to read a clue printed on the seventh floor, something flew out of Beckman Institute and latched onto Bill's neck and wouldn't let go. And, in the end, everyone had to laugh because, what was that thing?



Bill, swinging from Millikan library, is attacked by a "thing."

Kreative Korner

Kreative Korner Policy

Guidelines for Submissions.

Submissions are generally creative works, such as narrative, fiction, drama, poetry, artwork, or photographs. Essayists are encouraged to submit to *The California Tech*. Most cartoons should probably belong in the Inside World.

1. All submissions must be in by the Tuesday preceding the issue in which the submission is to appear.
2. Submissions may not contain libelous material without consent of those being libeled. It is the responsibility of the author(s) to check on this fact. Suspicious submissions will not be printed.
3. Submissions may not contain vulgarities. The editor has judgement on what constitutes a vulgarity.
4. Submissions must be turned in by e-mail, Macintosh disk, or 3.5" high-density IBM compatible disk.
5. All submissions will be submitted to the *Totem* after publication unless explicit instruction is given by the author(s) to the editors to the contrary.
6. The author must be part of the Caltech/JPL community. Certain waivers for alumni, friends of the community, etc. may be made at the editor's discretion.
7. The editor reserves the right to edit, shorten, disallow any submission, or take exceptions to these rules.

grasping id weaves
ichor stained webs
around fallen sattva

twisted soul smiles
anguished grimace
for perfume stench

thanatos embraces
chill solace from
pain of enlightenment

shadowy dreams entice
nostalgic seductions
by wraiths of memory

broken heart rages
what once was
will never be

by Ben Williamson



Lost Property

Victim left two cardboard boxes containing personal property in the hall-way of the Fleming house near room #21 2:00 a.m. Victim notice the boxes missing at 10:00 a.m.

May 15

Vandalism

Victim reported an attempted break-in to his car the night of May 14. Victim parked his 1991 Volvo 240 in the 1100 block of Blanche at 8:00 p.m. Upon returning to his vehicle on May 15, at 7:15 a.m. he discovered the lock on the driver's side of the vehicle damaged. No other lost was reported.

May 18

Theft

Victim placed a back pack in the

Ruddock Library at 10:00 a.m. Victim notice the back pack missing at 4:00 p.m.

May 19

Grand Theft Auto

Blue Chevy Pick-Up Truck, valued at \$9,000, was taken from Arden Street just south of the Health Center. Victim parked his vehicle at 12:30 p.m. Upon returning at 3:00 p.m., discovered the vehicle missing. Pasadena Police Department notified.

Damage

Victim parked her 1994 Gray Volvo on the south side of Tournament Park Lot at 3:15 p.m. Upon returning at 5:05 p.m. noticed the antenna up and broken. No other damage reported.

Vandalism

Security responded to an attempted auto break-in, east of Brown Gym in the Tournament Park lot. Witness reported seeing a male kneeling next to a brown Porsche 944. The vehicle's passenger side window was broken out. All units dispatched, suspect was no longer in the area. Witness reported seeing suspect leave in a gold and brown, Ford Maverick. Pasadena Police Department notified.

May 21

Suspicious Odor

Security responded to a report of a smell of natural gas in the Noyes Laboratory. Upon arrival, the building was evacuated and the Pasadena Gas company were notified.

May 22

Unauthorized Access

Security responded to a report of kids riding bikes in the Moore construction area. Subjects were

instructed that they were on private property and would have to leave immediately. Subjects complied. Subjects were not Caltech affiliated.

May 23

Suspicious Odor


Security responded to a report of a smell of gasoline in the Physical Plant Building. Upon further

investigation a gas can was discovered in room #15. Gas can was removed from the area.

May 24

Lost Property

Victim lost a set of keys on a blue plastic key ring. Victim notice keys missing at 6:30 p.m. Victim believed that they were lost near the Beckman Institute.



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MÖBIUS

FROM PAGE 6

and salty water around, but no books on the topic, or balances or measuring devices accurate enough to convince him he's wrong. However, he does have a lump of clay that floats easily in water. Using this clay and a small pebble from the beach, there's an easy way to demonstrate this small density difference. What is it?

Shameless Shareholders — Two weeks ago I attended a really good William Bennett Munro Memorial Philosophy Seminar presented by professor Christopher Kutz of UC-Berkeley. Although in this limited space I can't do justice to the philosophical argument he was advancing, his talk got me thinking about the stock market. I'm already a target of the Stock-Market Anti-Defamation Lawyers Lawn-Bowling Club, so I figure I may as well go public with my gripes.

Stocks and the stock markets were originally developed as a means for individual entrepreneurs to raise the capital needed to turn their good ideas into realities. Such entrepreneurs would sell stock to people who believed in them and their product idea; nobody was fool enough to buy them based on anything else. Rarely did shareholders view the stock market as an investment engine, and most people held their stocks until they retired or died. The stock markets and government regulation were introduced mainly to reduce the costs associated with investment contracts and keeping track of investors. Corporations usually started small and companies didn't "go public" — they started that way.

The world of stocks and business capital has changed incredibly since then. These days most shareholders in any given company have at best only a glimmer of knowledge about it. Many corporations are wholly-owned subsidiaries of other corporations, and companies choose incorporation primarily for the legal and financial protection it grants the people who's money is invested in them. Rarely do companies start out public nowadays — entrepreneurs have to put up their own money and get personal bank loans. The stock market doesn't do its original job anymore. True, it still raises capital and divides risk — but that

has become a secondary function. The NYSE reminds me of a Las Vegas roulette table these days; that is, people approach it and play it the same way.

Mutual funds and profit-minded investors encourage companies to maximize this year's profits, because they want to see their money turn around fast — faster than any R&D project can possibly crank out a new product. To them, there's no money in research work, or in hiring good staff, or preserving a company's reputation with quality products. They will soon sell their shares, in order to reap their profits, anyway. But what company is going to be stupid enough to stop developing new products and/or otherwise shoot itself in the foot? That's the path to bankruptcy!

It's easy to forget that a corporation's stockholders own the company, and ultimately, albeit indirectly, *make all the decisions*. Both as a scientist and an American, it's frightening to see how over the last two decades, starting with the auto industry, companies cut back on research and product quality, in the interest of reducing costs and maximizing the present year's bottom line. Corporate "downsizing" did cut a lot of real fat off many corporations—but the future of many of America's oldest and biggest companies has also been downsized, in the form of research and development cutbacks. The research labs at IBM, AT&T, GE, and many others are shadows of their former selves. The implications for the economic future of the United States are frightening. CEO's with foresight, who look to making their company profitable for many years to come, become the targets of quick-buck investment groups and find themselves out of work, replaced by a cost-slashing big-bottom-line buccaneer. "When will X make a profit for us?!? Three years? Too long, kill it!" These cowboys (almost always males) move on to another high-power position before the consequences of such actions hit home.

I'm not usually labeled a reactionary, but with regard to the stock market that's probably a fair moniker. I'd like to see a return to a majority of responsible and interested shareholders — people who's stock reflects an interest, concern, and trust in the company they own. (These days companies find the only way to get such shareholders is to buy

up their own stock and sell it to their employees!) Mr. Kutz suggested a path toward that goal in his seminar, one that also addresses the "corporate cavalier" problem: which is, in Christopher's words, that "Limited liability encourages undercapitalized and under-insured companies to engage in risky activities."

How to kill two birds with one stone? "As participants in a shared venture, shareholders should be civilly and morally accountable for the unintended consequences of that venture, in proportion to their degree of ownership." You own one fifth of CheapCrude Incorporated? One of their single-hulled tankers split open off the Canadian coast...and they filed for bankruptcy because of the suit against them. But now YOU are on the hook for one fifth of whatever settlement is made against them in court. WHAT? This is where my share-holding friends call me a madman. "How am I supposed to know what CheapCrude is doing???" I just noticed they had a big cost-to-earnings ratio and bought some shares! That's today's market. THAT'S the problem!

To my mind, if somebody is in the market to make a buck, they should suffer consequences beyond the loss of their initial investment when their efforts contribute to risky, irresponsible activity that harms other people. Anything else is a rigged crap table, where the risk for market players is shifted to those who suffer the effects of their madness, be it chemical plant workers in Bhopal or fishermen in Alaska.

Making investors responsible sounds ludicrous only at the surface. Insurance companies would create policies to cover such risk, and people would get into the business of watching corporations to be sure they aren't doing some of the irresponsible things they do today. People will have to trust the corporations they invest in; and they won't trust corporations underserving of such trust. Investors will begin to think about what their money is taking part in, and a corporation's owners will finally have a real incentive to keep the corporation acting responsibly.

Not that it is likely to happen anytime soon. So in the meantime, give some thought to what the money you invest in that mutual fund is doing — besides growing. At what cost to the world and its inhabitants are you getting that 15% return?

"Love your neighbor — but don't pull down your hedge."
—Ben Franklin

POLL

FROM PAGE 1

categories, wrote them down, and spilled soda on them:

Science is "fun": 11. No longer going into science as a career: 5-9 (see below). There's nothing else I want to do: 8. "Good at science": 5. No choice (locked into science, parents made me, etc.): 5. Money: 4. Gives a fundamental understanding of the universe: 4. You can create things: 4. I can get a job in science: ONLY 2. I want to help society: 2. I like problem solving: 1. Science is the fundamental cool thing: 1.

First, I counted all math, science, and engineering fields as "science." Second, many people gave short answers, so I'll assume that almost all of the people polled (and not just five) are "good at science." The most common response I received was that "science is fun." The only professor I got a response from added that "most practicing scientists would give a similar [response]." Hopefully, this response implies that most people here going into science feel that science is fun. The small percentage (roughly 20%) of this response might be attributable to

the assumption that I wasn't looking for such a simple response. About 1 out of 7.5 people didn't want to do anything other than science. Several people told me that they could have done anything for a career, but science was their first choice. I assumed that everyone here was in a similar situation. Apparently, a small number of people at Caltech have no outside career interests (good news for Caltech if this is a global trend). Five people (1 in 12) specifically admitted that they had no other choice of a career, i.e. they're being forced into a career by parents, college choice, etc.

Although this percentage might appear large, people are often forced into circumstances by parents and the "system" (college applications, financial situation, etc.) and find themselves with only one option. Only four people admitted that they were going into science because it promised the best salary of anything they could do. An equal number of people, though, said that money was not an object, and that they would have gone into other fields if money had been their greatest motivation. (Yea. We're not greedy.) However, I myself appreciate the salary that a degree will bring me, and I'm pretty sure that a significant number of people are here to improve their financial situation from "minimum wage" to at least that of middle class or better. The philosophical implications of science (understanding of our surroundings) merited only four responses. Indeed, many more people (about 10) admitted that they had originally believed that science held "truth" or "understanding" and now see things in an entirely dif-

ferent light. Likewise, only four people mentioned that science allowed them to create things which had not previously existed. People might find a sense of wonder, thrill, and power in creation, but career choice probably isn't based upon these feelings ("problem solving" was only mentioned by one person). Finally, only two people (both undergraduates) mentioned concerns about getting jobs; both believed that they could only get jobs in scientific fields and nowhere else.

Several people gave very interesting responses to this poll; several of the best are below:

"You're not going to get a job if you don't have a technical degree." One student was only admitted to technical schools; thus science was chosen for him. "Learning prepares you for anything." Three people came to Caltech not knowing about the focus on science. They simply knew it was a good school in math and science, their most likely careers. "Math is pretty." (my favorite response) One person's best high school teachers were math and science teachers. "It's neat to be able to do something that a majority of the population can't do." "It's real and not stupid." One person was the first person in their family to do science. Program brings "immediate gratification," and it "always works if done correctly." "I respect and appreciate the intelligence of scientific prowess." "The quest for knowledge isn't practical."

The last response came from somebody who has decided against science as a career. Indeed, out of 59 people, 9 had chosen not to go into science. Out of these 9, one person has chosen economics, and one person has decided to go into architecture. Although some people would argue that both of these fields are part of "science", they fell outside my predetermined definitions of "science." I still have the utmost respect for architecture and economics; neither are trivial by any stretch of the imagination. Two other people have decided that they want to teach science, preferably at the college level. Hopefully a lot of children will benefit from people who might just be able to answer all of their questions (sometimes, it gets really annoying to have teachers unable to explain interesting things). Finally (I'm almost done) (thank God), five people have decided against going into science after learning what it entailed. Some of these people wondered how total understanding could ever be related to a differential equation, and others believed that the workload in science would not let them do anything else.

I've given the results of the poll and my analysis. Hopefully, you'll take a look at why you devote your life to science (in one form or another) and you won't think the results of this poll are worthless. Thanks for reading this.

An equal number of people, though, said that money was not an object, and that they would have gone into other fields if money had been their greatest motivation.

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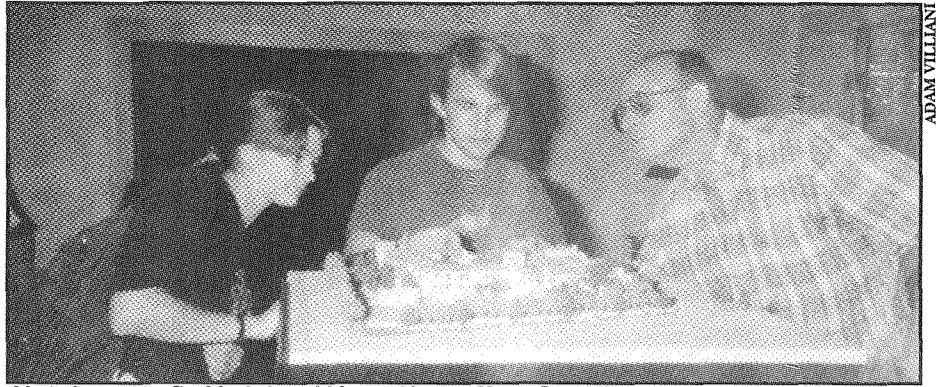
An Open House with Avery Center Architects

by Adam Villani

Last Friday the MOSH hosted an open house discussion session with the architects of the new Avery House building, currently under construction at the southwest corner of Holliston and Del Mar. Architects Mark Denton and Linda Brettler gave those who stopped by a guided tour of the future complex for undergraduate, graduate, and faculty housing, scheduled to open in the fall of 1996, through the use of intricate laser-cut models and detailed plans. Vice President for Student Affairs Gary Lorden and the MOSH himself, David Wales, were also on hand to answer questions about Avery House's functionality and purpose.

Avery House will have space for 140 students in 49 singles, 41 doubles, and 3 triples. The singles and doubles will be interspersed nicely throughout the building, and the different sections of the building will surround several courtyards of varying size and character. A 3:1 undergrad:graduate ratio is planned, and there will also be five faculty apartments. In addition to the residences in the complex, Avery House will contain a limited number of parking spaces and a cafeteria/ small student center. The cafeteria will have a smaller café section which will remain open late into the night, similar to the Coffeehouse, and will have a fireplace and big-screen TV. Fireplaces will also be in each lounge, and one

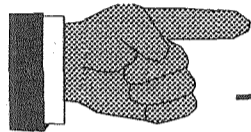
lounge will even have access to a tower and panoramic balcony. As usual, the building will physically have a Mediterranean flavor to it, following the example of most campus architecture. Avery House looks to be an exciting place in which to live, where undergrads, grads, and faculty can intermingle well.



Maria Satterwhite, Jim Murdock, and Master of Student Houses David Wales examine a model of Avery House.

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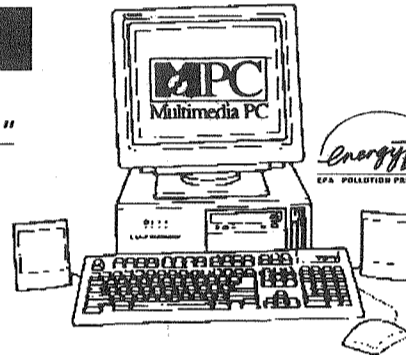
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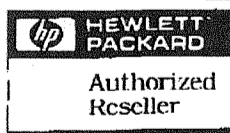
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From the Big T: Please turn in your mailing address by June 2nd to which we can send your year-books to you in the fall. Please remember that if you do not have your address turned in by then, a \$5 mailing fee will be charged when you later request your year-books to be mailed. Also, if you wish to have your senior pictures back, please send us a self-addressed sealed envelope. Any questions can be directed to *bigt@cco* or x1223. Send everything to SAC 27-58.

Announcements

Auditions For The Fall Of Theater: TACIT will be producing two small plays this fall. "Revenge of the Space Pandas," a comedy by David Mamet, promises to be enormously fun: it will hopefully be produced around Halloween (with a possible midnight performance). "Under Milk Wood," a play by Dylan Thomas, is basically a long poem for many parts. We will stage readings both on campus and at the E-bar in November. Remember that as these are "small plays" they will require relatively small commitments; thus, if you've been scared away by the size of past productions, this is your chance! Auditions for both will be held in Winnett Clubroom I on Saturday, June 3rd, between 4 and 6 p.m., Thursday, June 8th, between 6 and 9 p.m., and Saturday, June 10th, between 2 and 4 p.m. Please contact Maneesh Sahani at x8337

Announcements

✧✧✧ denotes a new announcement.

or at 793-2879 for more information.

✧✧✧ The Caltech Y currently has balcony tickets to Walt Disney's *Beauty and the Beast* for \$35 a piece for the performance at 1:00 p.m. on July 23rd at the Schubert Theater. Tickets may be purchased from the Y on the second floor of Winnett; only two tickets per person, please.

Caltech has publicly announced its right to create lots and lots of "noise, dust, vibration and utility interruptions as a result of construction of the Avery House at 293 S. Holliston Avenue, from now through August, 1996 from 6:30 a.m. to 5:00 p.m. daily." For further information or specific details, please call extension 4724.

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

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

From the Counseling Center

The Gay, Lesbian and Bisexual Support Group meets the first and third Tuesdays of each month at 7:30 p.m. in the Health Center Lounge. This confidential meeting is open to all Caltech community members looking for a supportive context in which to address questions and concerns about sexual orientation - including coming out, being out, self-

discovery, coping with families.... We begin with a focus topic but move to whatever is feeling most relevant to the group that night. Refreshments are served. For information, please call 395-8331.

Coming Events

The Theater Arts of Caltech present their performance of *Assassins*, based on the book by John Weidman, on June 2nd and 3rd at 8 p.m. and June 4th at 2 p.m. in the Dabney Lounge on the Caltech Campus. Tickets are available ahead of time through the Caltech Ticket Office (x4652, *tickets@caltech.edu*); admission will be \$6 for students with ID, \$10 for general admission. Group rates are available.

Club Announcements

The Caltech Ballroom Dance Club **Friday beginning and intermediate SALSA classes** will be held this Friday, June 2nd, in Winnett Lounge. Intermediate class is from 7 to 8:20 p.m., and beginning class is from 8:30 to 9:45 p.m. Taught by professional instructor Enio Cordoba, no experience needed for beginning class though six months prior dance experience is recommended for the intermediate class. No partner is required. There will be 2 more classes - June 9. Registration is \$12 for Caltech students, employees, or JPLers, and \$24 otherwise (couples will be charged \$24 if one of the two is from Caltech or JPL). Come to the first class, even if you haven't yet registered! For more information, contact Bob Herman at *rherman@arms.gps.caltech.edu*, or at 393-4720.

The Caltech Ballroom Dance Club offers free beginning classes to all. Classes are Wednesdays at

7:00 p.m. in Winnett Lounge. People are welcome to join the classes any time; no experience is required. Come with or without a partner. This week the club will hopefully be learning the cha-cha, and will do other dances in the future. For more information, contact Bob Herman at *rherman@arms.gps.caltech.edu* or at 393-4720.

Internships and Competitions

✧✧✧ Be a part of the search for Pasadena's New Year's Day ambassadors! **The Rose Queen and Royal Court of the 107th Tournament of Roses Auditions** will be held on Saturday, September 16th between 9:00 a.m. and noon, then 1:00 p.m. to 4:00 p.m., or Monday, September 18th, between 3:00 and 5:00 p.m. Each participant will receive a ticket for two to the Royal Ball, a semi-formal dance presented by Nordstrom and hosted by the Pasadena Tournament of Roses. This year the Royal Ball will be held on Friday, September 22nd, at the Pasadena Hilton Hotel. The Tournament of Roses Royal Court selection process is open to all unmarried women. Participants must be legal residences of the Trustee Areas of the Pasadena Area Community College District. Each participant must be enrolled either as a senior in high school or a full-time college student. Participants must demonstrate that they have earned at least a 2.0 grade point average in current course work and last year's course work. Participants must be at least 17 years of age by December 31st, 1995, and not more than 21 years before January 2nd, 1996. Each participant must complete an official application and participate in one of the interview sessions. For additional information call the Tournament of Roses at 449-4100

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

253 Sloan.

Fellowships and Scholarships

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

Jewish Family and Children's Services announces the continued availability of financial support for Jewish individuals and their families. There are loans, grants and scholarships available, and students may qualify for up to \$5,000 in aid. The Financial Aid Office has a flyer and questionnaire that you can use to apply, or you can call (415) 561-1226. **There are no deadlines** and students may apply throughout the year.

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

✧✧✧ The California Tech has released details on its **1st annual Journalism Scholarship**: the top five competitors to turn in a front-page type article based on either the question "What truly annoys you about Wei-Hwa?" or an article based on top choices for the award of "Flake-Boy of the Year" will be given each a scholarship of \$1,000.00 (yes, one whole dollar!) towards their education. No satires, please.

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