

Tuition Increases Slow Down, But Still Exceed Rate Of Inflation

from NSNS

Officials of the College Board recently announced that tuition increases slowed at most institutions this year, but the rise in college costs still exceeded the national inflation rate.

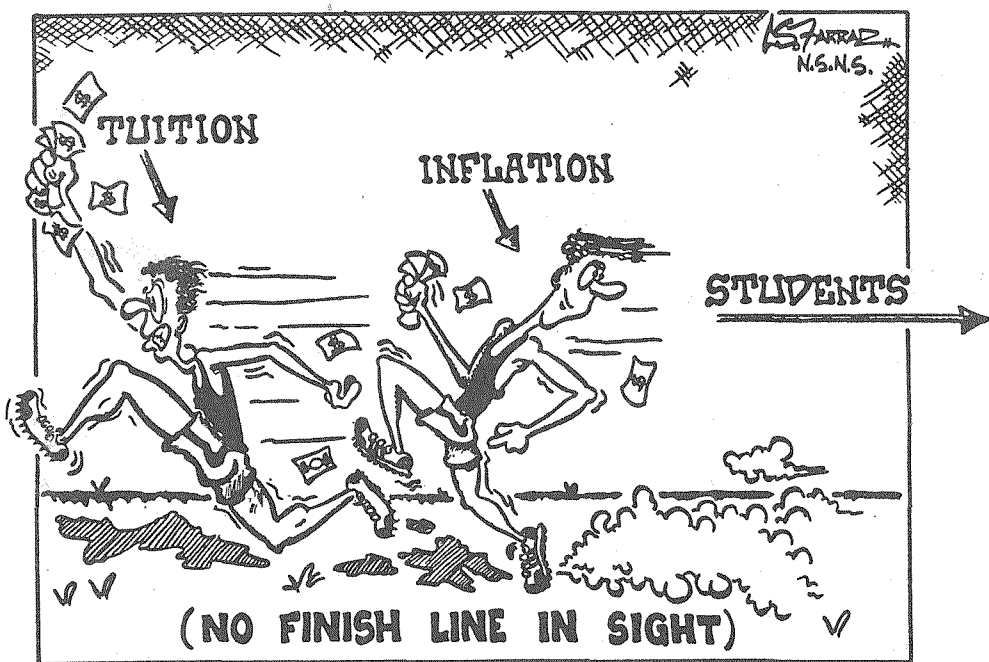
In its annual tuition survey, the College Board reported that undergraduates at public four-year colleges and universities are paying \$2,686 for tuition and fees on average, which is six-percent more than last year.

The annual cost of private four-year schools also

went up six-percent, to an average of \$11,709, according to the survey.

Meanwhile, the rate of inflation was 2.9-percent as measured by the Consumer Price Index for the 12 months ending in August.

"The good news is that the rate of increase has continued to lessen," said James Appleberry, president of the American Association of State Colleges and Universities. "The bad news is that any increase in tuition limits access, and the impact is differentially hurtful for the economically disadvantaged, minorities and recent immigrant groups."



National Student News Service, 1994

By Chris Farrar

Alumnus Ben Rosen, CEO of Compaq, visits Caltech

by Jessica Chang

The Entrepreneur Club is proud to welcome Mr. Rosen, who will give a lecture and offer advice to prospective entrepreneurs next Tuesday, 1/10. We invite you to join us at 4:30 p.m. in Baxter Lecture Hall to hear about Mr. Rosen's success and learn from his experiences. There will be opportunity for a question and answer session at the end of the talk. Refreshments will be served. Benjamin M. Rosen is the Chairman of the Board of Compaq Computer Corporation and also serves as the vice-chairman of the Board of Trustees of Caltech. A Caltech alumnus from Fleming House, Mr. Rosen was one of the speakers at the conference "Caltech and Entrepreneurship: Where Are We and Where Should We Be Headed?", which was held in conjunction with the groundbreaking ceremony for the Gordon and Betty Moore Laboratory of Engineering last year.

After graduating from Caltech in 1954 with a bachelor's degree in electrical engineering, Mr. Rosen went on and received his master's in EE from Stanford in 1955 and later an M.B.A. from the Columbia Business School in 1961. Since then, Mr. Rosen has contributed greatly to the computer industry and our society. He was a former founding director of Lotus Development Corp., vice-president and senior electronics analysts at Morgan Stanley & Co., and an electronics engineer at Raytheon and Sperry Gyroscope. In 1992, Mr. Rosen was chosen by *Computerworld* as one of 25 people in the computer industry "who changed the world." Also in that year,

Computer Reseller News selected him as the number one executive in the personal computer industry and one of the 10 "Legends of the PC Industry."

The list of achievements doesn't stop here. Currently, Mr. Rosen is the director of NoMax Energy Systems, and a member of the Board of Managers of Memorial Sloan-Kettering Cancer Center as well as a member of the Board of Overseers of Columbia Business School. He is also chairman and partner of Sevin Rosen Management Company, a venture capital firm managing a several-hundred-million-dollar portfolio. Sevin Rosen has invested in more than 60 computer, software, telecommunications, electronics, health care, energy, and other technology start-up companies. Among the Sevin Rosen companies that have achieved public status are Borland International, Compaq Computer, Convex Computer, Cypress Semiconductor, Cyrix, Electronic Arts, Landmark Graphics, Lotus Development, Proteon, Quarterdeck Office Systems, Retix, Silicon Graphics, and Video Telecom.

The Entrepreneur Club was started at the end of last year in an effort to promote entrepreneurship at Caltech. It is open to all undergrads, grads, faculty members, and any interested individuals. The club sponsors and organizes monthly events featuring speakers, workshops, and socials. Our next meeting is on Wednesday, 1/25 at 6 p.m. in Winnett Clubroom #1. Pizza will be served, so come and get involved! For more information contact samson @ugs or jessica@portia.

The Pentium Chip: What's Going On?

by Wei-Hwa Huang

Many of our readers have probably heard of a problem with the (relatively) new Pentium processor chip, Intel Corporation's (who supplies microprocessor chips for all IBM-PC compatible machines) most advanced chip commercially released to the general public. Here's the real story.

A professor Thomas Nicely posted an electronic message on a forum on Compuserve that reported "a bug in the floating point unit [FPU]...of many...Pentium processors." He noted that the expression $1/824,633,702,441$ was apparently accurate to only seven decimal places, which was significantly less precision than the Pentium FPU promised (single precision instead of double precision arithmetic). He had arrived at this conclusion by noticing that the results of a program he had written concerning a series in number theory, that of the summation of the reciprocals of the twin primes (pairs of prime numbers that differ by 2), which is known to converge. When comparing the results of his program with published results, he noticed a discrepancy which painstaking testing isolated to an error in the Pentium chip. (Astute mathematicians may have already noticed that $824,633,702,441$ is one of a pair of twin primes.)

The posting of the error was later cross-posted to the Internet newsgroup comp.sys.intel, a newsgroup specializing in discussions of Intel's products. As could have been expected, comp.sys.intel was swamped with a deluge of posts concerning this event. It was soon shown that every Pentium chip tested shared the same error and therefore it was likely that the error was on every Pentium chip ever made. Other expressions that were also evaluated incorrectly were discovered, and Tim Coe, a design engineer from Vitesse Semiconductor Corporation, found a pattern. He released a report that claimed the worst case expression was $5,244,795/3,932,159$. If you have a Pentium, try to evaluate the expression $5,244,795-(5,244,795/3,932,159)*3,932,159$, which should come out to be zero (within specifications, 0.000000001) but, in fact comes out on the Pentium as 256, an error larger by a factor of 256 billion!

The outside press soon picked up the news. Both the Associated Press and The New York Times printed stories regarding the subject. The full cause of the error is now known. Without going into technical details, the error only occurs when a floating point division is called with a divisor whose mantissa's hexadecimal representation consists of the digit 1, 4, 7, A, or D, followed by a

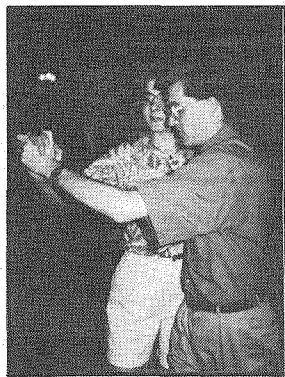
long series of Fs. For instance the number 3,145,727 is represented in hexadecimal as 4147FFFF80000000 (the first three digits are the exponent). Coe, Intel, and others have been working together on a software "patch" that will examine "risky" divisors and rescale both divisor and dividend before the actual division.

Another common source of discussion regards the frequency that the general user might actually encounter this bug. Estimates have been made from once per 30,000 years to once an hour. Both estimates are, in a sense, correct, since there is no standard for the "general user." Given a random divisor, the error has a 1 in 9 billion probability of occurring. The 30,000 year estimate is for, perhaps, a thousand divisions per day, while the once an hour estimate is for a chip doing nothing but random divisions all day.

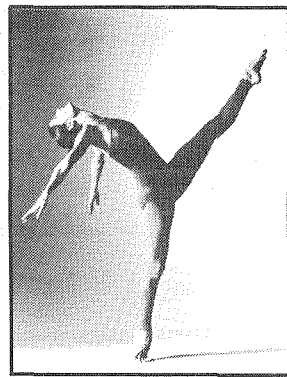
The event has also caused an avalanche of new Pentium jokes on the net. A sample joke is "Why wasn't the Pentium called the 586? Because when they added 100 to 486 they got 585.99942317703." Of course, many of these jokes represent the Pentium as more erroneous than it actually is. Finally, yes, that is Levar Burton (Lt. Commander Geordi La Forge on *Star Trek: The Next Generation*) doing the voice-over for the Pentium commercial.

In This Issue

Dancers on Page 4



Grad Student Ruth Ann Bertsch and ex-postdoc Melvyn Davies demonstrate Ballroom dancing.



Instructor Phyllis Eckler contemplates her upcoming Beginning Jazz Dance class.

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Campus News



GUITAR CLASSES AT CIT Hum 133 Topics in Film History: The Sixties

CIT Guitar Classes for the Winter Quarter will meet on Tuesdays starting January 10 in Room 1 of the Student Activities Center (SAC) as follows:

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

Classical and Flamenco repertoires are explored but techniques transfer to other styles of guitar. The Beginning Class includes a jazz/folk chord system. Classes are free to Caltech Students and other members of the Caltech community (space permitting). Undergraduates can receive 3 units of credit if they choose. Private instruction on any level can also be arranged. The instructor, Classical Guitarist Darryl Denning has an international background in performance, teaching and recording and can be reached at (213)465-0881.

This course will be looking at America in the 1960s through films made in the '60s. It will attempt to see how the social, cultural and political issues of the '60s appeared in movies made during the period, rather than a retrospective look back.

Topics will include the Cold War, student politics, the counter-culture, the anti-war movement and

ethnic minorities.

Class is offered Wed. afternoons from 1-3 PM with screenings on Mon. evenings at 7:30 in Baxter Lecture Hall. Films are open to the Caltech community and a short discussion will follow each film.

Contact Prof. Rosenstone at X4069 or his secretary, Sheryl Cobb, X4220.

Films to be shown in Hum 133 are as follows:

Jan. 9	<i>Dr. Strangelove</i>
Jan. 16	<i>Cool World</i>
Jan. 23	<i>Strawberry Statement</i>
Jan. 30	<i>Alice's Restaurant</i>
Feb. 6	<i>Easy Rider</i>
Feb. 13	<i>Putney Swope</i>
Feb. 20	<i>Medium Cool</i>
Feb. 27	<i>Little Big Man</i>

Editors' Corner

From your Friendly Tech Editors

Happy New Year! This year, we at the *Tech* resolve to print better articles and meet our publishing deadlines! Among those "better articles" in this fun-filled issue is the important ASCIT amendment on page 3.

The time is ripe to sign up for three units of credit by taking PA15! Yes, *you* can write for the *Tech*! It's a great way to take a break from homework and contribute to the community. Come to the Coffeehouse at noon today to sign up!

New to the *Tech* this year will be articles from the *National Student News Service*. NSNS is a wire service providing articles of interest to college students.

Our next issue will come together very early in the week due to inserts, so we'll be *strictly* enforcing article deadlines.

We welcome articles submitted on Macintosh (preferred) or IBM-PC 3.5 inch disks. If a disk is not an option for you, please email your article to editors@tech. We will take hard-copy, but we strongly prefer electronic media.

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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David R. Derkits

ASCIT NEWS

6 January 1995

✓ **CORE CURRICULUM**

- There is still time to turn in core curriculum surveys. Results are being compiled, and they will be posted next week.

- If you would like to assist in the evaluation of the survey, please contact David Derkits at dderkits@cco or Flora Ho at floho@cco before Monday of next week.

✓ **ELECTIONS**

- The first election of second term will be on Friday 13 January. This election is for Bylaw Amendments which need to be considered before officers are elected (see next item).

- A quick summary of the election cycle:

11 Jan - Nominations open for President and Vice President / BOC Chairman

13 Jan - Special ASCIT Bylaws Election

17 Jan - Nominations close

23 Jan - ASCIT Presidential Election

25 Jan - Nominations open for all other ASCIT elected offices

31 Jan - Nominations close

6 Feb - ASCIT Officers Election

✓ **AMENDMENTS**

- The Board of Directors has officially proposed an Amendment to the ASCIT Bylaws. This Amendment gives full ranking privileges

to write-in candidates (at present, write-ins may only be ranked first). This amendment will appear in the election of 13 January.

- Today, the Board of Directors will consider a second amendment. This amendment would separate the office of Vice Pres / BOC Chairman into two offices in order to make the workloads of the President and BOC Chairman more reasonable. The Board meeting will be at 11:00 AM in the ASCIT Office, SAC 64.

- A third amendment under consideration would give every undergraduate one vote for a BOC Rep. Specifically, members of more than one House would only be permitted to cast their vote in one House.

✓ **MISC ANNOUNCEMENTS**

- Concerns about the homework, test, or collab policies of a class may be directed to any Director.

- ASCIT WWW Home Page:
<http://www.cco.caltech.edu/~ascit/>

- Copies of ASCIT Board Minutes are available by mail or e-mail free of charge on request to students, faculty, and administrators. Requests should be sent to Secretary, ASCIT 64-58 or dderkits@cco. The Minutes are also available on caltech.ascit.announce and in House lounges.

Rationale for the Amendment**condensed from the ASCIT BOD**

Past experience has shown that the election system is unsatisfactory in handling write-in candidates (WIs). Although strong WIs may get enough First Rank votes to put them over other candidates, since voters cannot give lower ranks to a WI, the vote total for the WI stays constant as ballots are redistributed and the other candidates pick up votes. By allowing a WI to be ranked at any level, those voters whose first-choice is redistributed can still support a WI candidate.

This amendment brings procedures into closer agreement with the old (pre-1993) system, where a WI with strong first-round support could make it into the runoff, and all voters could vote for the WI in the runoff.

This proposal makes no change to the limit on WIs (i.e., one) to dissuade potential candidates from using the WI route. The standard practice of nomination is strongly en-

couraged (both for convenience of voters and the Election Committee); the WI option is primarily a backup for circumstances which may prevent a candidate from being nominated.

Past experience shows that a serious WI is present in less than half of all elections, and it would be unlikely that two or more WIs vie in the same election for the same office.

You are invited to attend the final round
of the second annual Doris S. Perpall
SURF Speaking Competition

to be held Wednesday, January 11, 1995
3:30 - 5:15 p.m.
Beckman Institute Auditorium

Finalists:

John Joseph Carrasco
Lin Jia
Roshan Kumar
Anandi Raman
Ken Walsh
Michael Wang

The ASCIT Friday Night Movie:

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Sat-Sun matinee 2:30 p.m.

ASCIT Bylaw Amendment: Grant full ranking privileges to write-in candidates

Key: Text Added Text Unchanged Text Removed
Description '...' = remainder of section unchanged

• In **ARTICLE VIII—ELECTIONS & PROCEDURES**, edit Section 5 to read as follows:

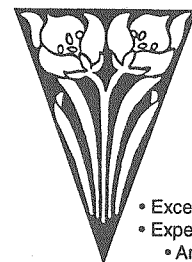
Section 5. Each voter shall rank the candidates for For each office, a voter shall rank the nominated candidates and up to one write-in candidate (who must be a registered undergraduate) in order of descending preference, with 1 (First Rank) representing the most preferred. For the First Rank, the voter may choose one of the following:

- (a) a nominated or write-in candidate,
(b) ~~any other legally qualified person;~~
(c) the word "NO," ~~"NO"~~ (see Section 6a), by writing it in,
(d)(c) abstaining.

For Second Rank (2) and subsequent Ranks, ~~only nominated candidates may be ranked; write-ins and "NO" are is not permitted.~~ No candidate may be ranked twice, ~~and~~ no candidates may be ranked equally, and not more than one write-in candidate may be ranked. A voter may abstain at any point in the ranking by leaving the remaining Ranks blank. A ballot conforming to these guidelines shall be considered correctly-cast.

Also, in Section 6, correct the definition of 'absolute majority' as follows:

Section 6. In order to win the election, a candidate must receive an absolute majority of votes. Absolute majority shall be defined as ~~one~~ plus more than the error plus half the number of correctly-cast non-abstaining votes...



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Ballroom Dancing is All About Fun

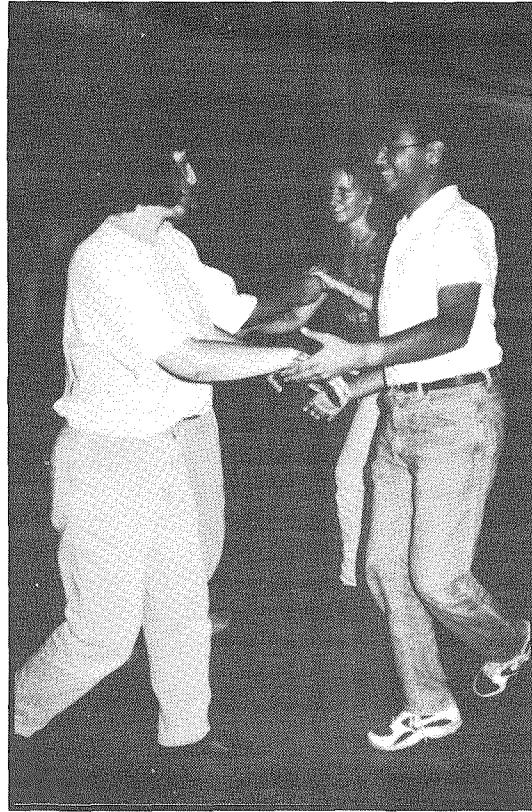
by Ruth Ann Bertsch

Ballroom dancing is a great way to relax, meet new people, and have fun. Come join the Caltech Ballroom Dancing Club to learn to dance, to have fun dancing, or both. Winter term the club will offer a beginning class and a beginning to intermediate class. The club also hosts dance breaks, times people can practice dancing and socialize. People without partners are welcome to all events, as are all members of the Caltech community.

The club has hired Enio Cordoba, owner and director of the Alhambra dance studio Let's Dance LA, to teach a beginning to intermediate class this winter term. West Coast swing and salsa will mainly be covered this term. Both Enio Cordoba and his teaching partner Terryl Jones are experienced professional dancers and teachers. Cordoba is a world renowned champion in the Latin dances and very experienced in other dances. For example, he won the U.S. ProAm Latin Championship in 1991. He has coached US and world swing champions. He has won two Feather Awards, the dancer's equivalent of the Oscars, for Top Teacher in 1992 and Hottest Mambo Dancer in 1993 and 1994. Jones is a Fred Astaire National Rising Star Ballroom Champion. Besides teaching Latin dances and swing, they teach modern dances such as waltz, fox-trot, tango, and Viennese waltz. Classes at Caltech will be from 7:00 p.m. to 9:00 p.m. approximately every other Friday starting January 20. The first class January 20 is in Winnett lounge; but most classes thereafter will be in Dabney lounge. Free practices will be held on the alternate Friday nights. The cost for five lessons is \$15 for students, staff, and JPL employees and \$30 for spouses, alumni, and other

people. To register, send a check payable to The Caltech Ballroom Dance Club to Bob Herman at MC 170-25. Registration will probably be available at the door; however, sign-ups are on a first-come-first-serve basis. If there are any questions, he is available at rherman@arms.gps or x6143.

The club will offer free beginning classes on Monday nights starting in January. These are perfect classes for people who have never danced before



Cha-cha-cha! Graduate students Leila BelKora and Ashish Bansal sport their fancy moves on the dance floor.

or for people who want help on some basic steps. People are welcome to start joining the classes anytime. Dancers in the ballroom dancing club teach different dances on different weeks. We cover swing, tango, merengue, rumba, cha-cha, waltz, polka, Viennese waltz, and fox-trot in about five months. Classes will be in Winnett lounge on Monday nights from 7:00 to 8:30 p.m. starting January 9. For more information, contact Jeanne Hardebeck at jlh@seismo.gps, x6971, or MC 252-21.

It is not necessary to have a partner for any of the classes. If you don't have a partner, come to the classes anyway and check them out. The teachers ask that people rotate partners so that people can learn the best leading and following techniques and not reinforce a couple's bad habits.

Ballroom dancing can earn undergraduates physical education credit, although none of the ballroom classes are currently P.E. classes. The "student-designed fitness program" allows a student to negotiate P.E. credit individually with either the Director of Physical Education, Dan Bridges, or the Assistant Director Wendell Jack. Undergraduates interested in having ballroom dancing earn such P.E. credit should talk to Bridges or Jack.

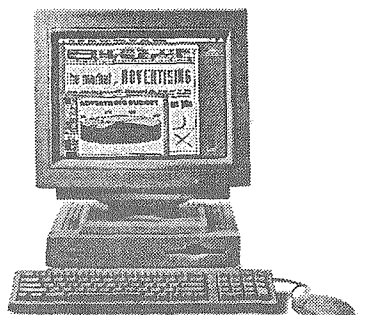
In January, the club will sponsoring dance breaks from 7:00 p.m. to about 9:30 p.m. in Winnett lounge on Friday nights. These are dancing practices open to beginners, intermediate and advanced dancers who want to practice dancing or socialize and watch others dance. For more information contact Ruth Ann Bertsch at MC 127-72, x6553, or RBERTSCH@cco. To get reminders and updated announcements via e-mail, contact Ching Liu at CHINGLIU@ugcs.

PE Dance

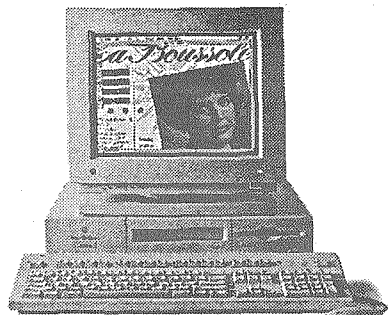
Caltech students, faculty, and staff will be dancing up a storm this coming term at the Braun Athletic Center. In response to an enthusiastic demand for dance classes, the Athletic Department will once again be offering Beginning Jazz Dance classes starting Tuesday, January 10th.

The three hours-per-week course will take place on Monday evenings from 8:00p.m.-9:30p.m. and Thursday evenings from 8:00p.m.-9:30p.m. (The first meeting on Tuesday, January 10th is due to a printing error in the schedule.) The emphasis of the instructor, Phyllis Eckler, will be on encouraging dance as a fun form of physical fitness. With upbeat music and the latest dance moves in her routines, Ms. Eckler says students are barely aware of how their bodies, posture, and attitudes toward getting shape are changed after ten weeks. "I want Beginners to enjoy moving," says Eckler, "while at the same time I try to give them feedback on injury prevention and proper alignment." Sign-ups for the course begin January 3rd at the Braun Athletic Center. Classes are open to all students, faculty, and staff as well as spouses who are members of the athletic facilities.

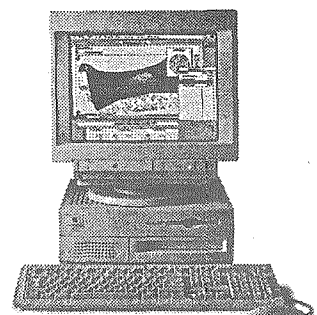
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ADAM VILLANI: MEDIA GUY

by Adam Villani

Editor's Note: Due to space restrictions, sections of Media Guy have been postponed to next week.
I saw a ton of movies over break, so here we go.



To Live

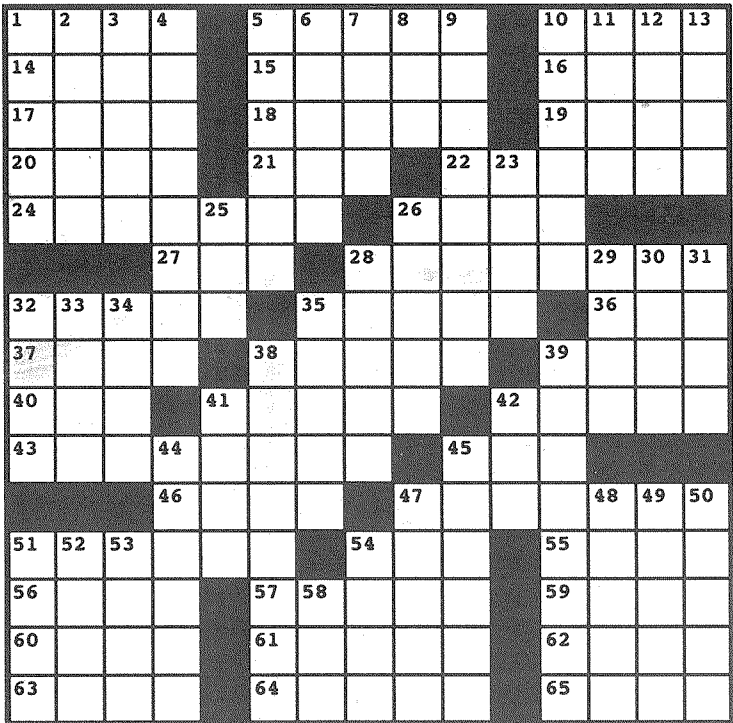
Zhang Yimou's new release *To Live* is the best of a number of fine epic films from mainland China in the recent past that chronicle 20th century Chinese history (*Farewell My Concubine*, *The Blue Kite*). Zhang's best previous films, *Ju Dou* and *Raise the Red Lantern*, have both been very tightly controlled psychological dramas confining a small cast of characters to a limited physical space, and his work here on a grand, "cast of thousands" scale is very satisfying indeed. *To Live* chronicles the life of the Xu family, beginning in the late 1940's with the father in the family (Ge You) as a wealthy landowner who loses everything he owns gambling, along with his wife, the exquisite Gong Li (from Zhang's previous films and *Farewell My Concubine*). The first of many great ironies in the film is that as the Maoist Communists take over China, the man who won the Xu property is shot as a counter-revolutionary, while Ge lives because he is now a working class puppeteer. As the first act ends, Ge breathlessly reassures himself that "it's good to be poor." As history unfolds through the eyes of Ge, Gong, and their children, we might almost be fooled into thinking *To Live* is a pro-Maoist film. But the constant ironies in the film reveal that Communism under Mao is full of lies and is a system that eats its own. Despite all of this, the film remains remarkably lighthearted; we care about the Xu family like we care about our friends. At the 1994 Cannes film festival, Ge You won Best Actor and the film itself won the Special Jury Prize. It's playing locally at the Rialto in South Pasadena.

Heavenly Creatures

Heavenly Creatures is a riveting new film from New Zealand that tells the true story of two teenage girls, Pauline Parker (Melanie Lynskey) and Juliet Hulme (Kate Winslet), whose friendship grows into an obsession that drives them to murder Pauline's mother. I found this movie so intriguing that I saw it twice, and the second viewing affirmed my initial hunch that this is one of the best films of the year. As we learn in voiceovers taken directly from Pauline's diaries, the girls imagined themselves to be "heavenly creatures" that could see and enter a medieval fantasy world they had created, complete with a saucy royal family for whom they had detailed 500 years of lineage. Director Peter Jackson (*Dead Alive*) pulls out all the stops and tells the story from a truly mad view-point. The "Fourth World," as they called it, is brought to life by using innovative special effects, and the camerawork and editing allow us to feel the pair's insane ecstasy with them as well as the pain of their eventual separation. Nevertheless, the girls' parents are not portrayed as monsters; they are instead well-meaning yet helpless to help their children. Pauline's mother's fate seems inevitable, yet is still horrifying. This outstanding movie never seems less than genuine and the performances never falter. Look for this to take a place high on my 1994 top ten list coming soon. Playing at the Sunset 5 in Hollywood and the Art in Long Beach.

SEE MEDIA GUY, PAGE 7

Crossword, Games & Puzzles



ACROSS

- 1. Do or die
- 5. Stiffness
- 10. Where imps and demons are found
- 14. Large bird
- 15. Bring to tears, perhaps
- 16. Willy, for instance
- 17. Mends
- 18. Democratic, for instance
- 19. He waited for Godot
- 20. Pals
- 21. Prefix for ire or ower
- 22. Scottish author
- 24. The El Hamad deserts
- 26. "Early in the ____"
- 27. Inverter gate
- 28. Faith
- 32. Eleftherios Gkioulekas, e.g.
- 35. Campus arenas
- 36. Do the pigeon
- 37. Jobs' job location
- 38. Benji and Boomer
- 39. Sensed
- 40. Japanese elder brother
- 41. Serves
- 42. Seasonal goddesses
- 43. Habitually
- 45. Do the twist
- 46. Bugle burst
- 47. Reading this clue, the participle was

DOWN

- 1. Little urns
- 2. foe
- 3. Alice, when she was with the ewe
- 4. Perambulator
- 5. Rnounce sin
- 6. Islamic senseis
- 7. Horse in Dickson's Dragon Knight series
- 8. Sports great Mel
- 9. Burt the wrap?
- 10. Giving out
- 11. You pray in Latin
- 12. An uncrossed bull?
- 13. Imbrium, for instance
- 23. Makes
- 25. It's all right
- 28. Poor-conditioned roads
- 29. The freezer, perhaps?
- 30. ____-la
- 31. Paper or pitch
- 32. Dwarf in *The Simarillion*
- 33. Kidney-related
- 34. Egress
- 35. It attracts bees?
- 38. Eskimo dog
- 39. I don't have the answer
- 41. Barrier
- 42. Solo
- 44. Cent. Afr. Rep., once
- 45. "I've killed Moby Dick," Tom ____
- 47. Some 24-acrosses
- 48. Milky
- 49. Baby bird
- 50. Pour water, not find it
- 51. Tail
- 52. Advantage
- 53. Gates, e.g.
- 54. Makers of the 9000
- 58. Surround
- 51. Settle down
- 54. Science Research Institute, for short
- 55. Gilbert Gottfried's cartoon character
- 56. Barbra on *I Dream of Jeannie*
- 57. Self-serve movers?
- 59. Color of pale skin
- 60. Gung-ho
- 61. Pull pigtails, for example
- 62. French St.'s
- 63. Lucy's son
- 64. Some rapists do this to victims
- 65. Lug

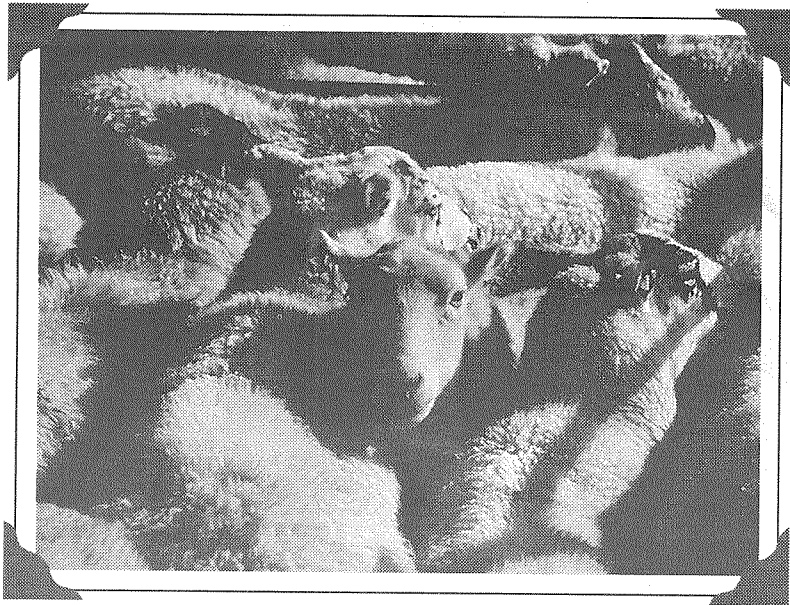
How's Your Grammar?

by Wei-Hwa Huang

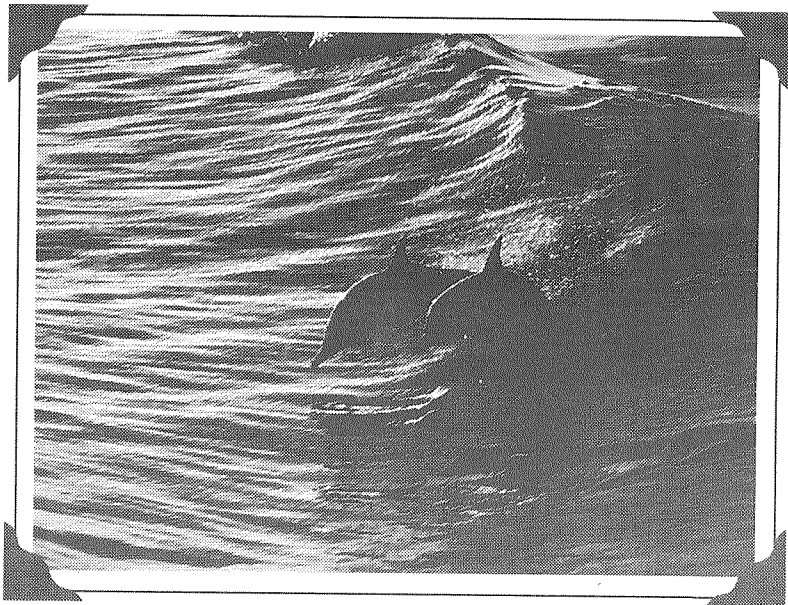
Let's cut the chat. Ten statements, find any grammatical errors, correct them. E-mail answers to gp@tech by Wednesday, 8:00 p.m. Winner gets \$10. Remember to give me your mailing code.

- 1. There is nothing between him and me.
- 2. This one is different than that one.
- 3. None of us is ready to go.
- 4. He wants to always be the life of the party.
- 5. Of the two she is the least capable.
- 6. That hat looks good on you.
- 7. We learned that a mile was 5,280 feet long.
- 8. If I was you I'd go immediately.
- 9. That kind of a deal is not for me.
- 10. Who do you think you are?

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FoxTrot

by Bill Amend

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MEDIA GUY

FROM PAGE 5
Mrs. Parker and the Vicious Circle

Dorothy Parker, one of the founders of the New Yorker, is well known for her criticism and acerbic wit, and as one of the key figures at the Algonquin Round Table, a group of literati in the 20's who would meet for lunch every day at the Algonquin Hotel in New York City. She was also habitually self-destructive, drinking too much and continually falling in love with abusive or neglectful men. Director Alan Rudolph, a protégé of Robert Altman, does an excellent job of portraying the Algonquin Round Table as a very exciting, hip, and witty place to be, capturing the spirit

of the times perfectly. Unfortunately, about halfway through the film I realized that it had no structure; it seemed very much like just a series of events that ended when they ran out of film. It's probably not a coincidence that the best things about this movie are the biting jabs the Round Tablers throw at each other, since these weren't written by the filmmakers. Even Jennifer Jason Leigh's much-acclaimed performance as Parker perhaps crosses the line into merely being excellent mimicry rather than excellent acting.

By comparison, Campbell Scott as her editor and good friend Robert Benchley seemed much more like a real, sympathetic, and sharp person. Mrs. Parker is not a bad film by any measure, but with its performances and the material it had to work with, it could have been a much better piece of cinema. Playing locally at the Esquire on East Colorado Blvd.

Faster, Pussycat! Kill! Kill!

Russ Meyer's "classic" 1966 exploitation flick *Faster, Pussycat! Kill!*

Kill! has a great-looking new 35mm print playing weekends at midnight at the Sunset 5 in Hollywood. The premise of the film is that three wild, hot rod-driving vamps drag-race, fight in the desert, kill a guy, kidnap a Gidget-like waif (played by a former Playboy playmate), and try to get a creepy old crippled miser's secret money stash while also trying to get in bed with his sons. But let's be honest, the real reason this B-movie was made seems to be to advertise push-up bras. The dialogue and acting are so terrible they're hi-

larious ("Are you girls nudists or are you just a little short on clothes?") As much as I hate to admit it, though, the cinematography, editing, etc. are actually pretty good. If you're in the mood for a campy midnight movie, this one just might do the trick. Note: as this was made in 1966, there is no actual nudity.

Well, that's all the space I have for now; watch this space next week for "What I did on my Christmas vacation, part 2."

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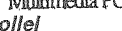
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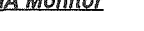
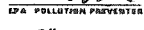


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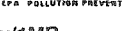
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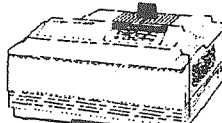


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Notices

° The AIDS Service Center presents "Just Say Know," a free eight week educational support group that will explore different topics related to HIV and AIDS. "Just Say Know" will meet every Tuesday from 6:30 to 8:30 p.m. from January 31st through March 21st at the AIDS Service Center, 126 West Del Mar Boulevard, Pasadena. To participate, call Tom Drake at (818) 398-4553.

° The Arroyo Singers, a women's chorus that is in its thirty-fourth season of performing in the San Gabriel Valley, is seeking new members. Rehearsals will be held each Tuesday from 7:15 to 9:30 on the Caltech campus beginning January 10th. No voice training is required. During the spring, the chorus, under the direction of James Reitzell, will present a concert on June 11th on the Caltech campus, as well as being featured in other community events. Repertoire is broad, including classical, folk and contemporary. The spring concert will feature Broadway favorites from George Gershwin to Andrew Lloyd Webber. Those interested in joining may call Cathie DeJoseph at (213) 256-5332.

Goodwill Industries of Southern California is seeking male and female volunteers to model authentic antique fashions that date as far back as the 1860's. The style shows are held at major hotels, country clubs, and churches to benefit the non-profit Goodwill, which provides rehabilitation and job training and placement for people with physical and mental disabilities and/or social disadvantages. Shows are held weekdays as well as weekends. Goodwill is seeking models between the ages of 18 to 70 years, so please contact Beryl Panza or Cathy Hoyt at (213) 223-1211 Ext 229 or 230 for more information.

The Caltech Muslim Student Association will hold Muslim Friday Prayers weekly in the Y-lounge at 12:40 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

° Dr. Merritt Roe Smith, Director of the Program in Science, Technology, and Society at MIT, will be holding a seminar entitled "Military Roots of Mass Production" on Thursday, January 19th at 4:00 p.m. This lecture is part of the Science, Ethics, and Public Policy Seminar Series, and is free to the public.

° On Wednesday, January 11th at 8 p.m., Dr. Roy Williams, senior staff scientist at Caltech, will give a lecture entitled "Infinite Information on the Internet" at the Beckman Auditorium. Dr. Williams will discuss what the Internet is now and what it will be in the future in this Earnest C. Watson Caltech Lecture. Admission is free.

° Frank Klicar will personally narrate the coming Armchair Adventures travel film entitled "China - The Dragon Awakens!" on Friday, January 13th at 8 p.m. Held at the Beckman auditorium, admission will range from \$6.50 to \$8.00.

° The Boland-Dowdall Duo will present a concert including a mixture of pieces ranging from 19th

century American parlor music to Hungarian and Irish tunes on Sunday, January 15th at 3:30 p.m. at the Dabney Lounge.

° William Bing will be hosting guest drummer Greg Bissonette in a Caltech Jazz Bands Concert on Saturday, January 21st, at 8 p.m. in the Beckman Auditorium. Admission is free.

° On Sunday, January 22nd at 3:30 p.m., The Chamber Music Society of Lincoln Center will perform Mozart's Quartet in F major for Oboe & Strings, K. 370; Brahms' Trio for Horn, Violin & Piano, Op. 40; Hindemith's Sonata for Oboe & Piano; and Fauré's Quartet No. 1 for Piano & Strings in C Minor, Op. 15 at the Beckman Auditorium. Admission ranges from \$12.00 to \$22.50 (a \$4 discount is available for Caltech students).

° Professor of Chemistry Rudolph Marcus will give a seminar "Managing Your Way to a Nobel Prize" on Tuesday, January 17th at 6:00 p.m. in the Athenaeum. A Nobel laureate in Chemistry, Dr. Marcus' speech is hosted by the Caltech Management Association; admission will be \$28.00 for members of the Athenaeum and \$38.00 for non-members. All wishing to attend are kindly asked to RSVP with Ron Oliver by January 10th at Caltech mail-stop code 202-6.

Club Announcements

° On Tuesday, January 10th at noon, Dr. Fay Ajzenberg-Selove, professor of physics at the University of Pennsylvania and author of the book "A Matter of Choices: Memoirs of a Female Physicist," will speak about her new book at the Women's Center.

On Wednesday, January 11th at 7:00 p.m. in the Beckman Auditorium, Paulina Borsook will present "Love in Cyberspace: One Woman's Opinion." Paulina Borsook will discuss in this Women's Center Speaker Series her writings on developing relationships using the internet technology communication and will provide her analysis of the strengths and weakness of using the internet to develop relationships, reading from one of her publications entitled "Virtual Romance".

° The Women's Center will also be hosting a series of dinner lectures, on the 13th and the 19th of January. Held at the Athenaeum at 7:30 p.m., these lectures will host perceptively Dr. Funk and Dr. Bult. Dr. Funk, the Program Leader of the Flora of the Guyanas program at the Smithsonian, has been profiled as one of the participants in the heated debate regarding appropriate methods for doing phylogenetic analysis and is known as an intrepid field biologist. Dr. Bult, head of the Molecular Evolution Laboratory at The Institute for Genome Research (TIGR), is currently working on the project focusing on patenting cDNA sequences from the human genome project.

° The Caltech Swedish Club will meet at 3 p.m. on Sunday, 15 January, at 955 Fallen Leaf Rd., Arcadia for a "julgransplundring" (post-Christmas celebration). Anyone interested in Scandinavian culture or in speaking Swedish is welcome. For more information, please call Welma Muhleman at 355-8265 or Rustan or India Leino at 584-7162 (or email rustan@cs).

° CIT Guitar Classes for the Winter Quarter will meet on Tuesdays starting January 10 in Room 1 of the Student Activities Center (SAC) as follows: Beginning Guitar Class between 4:30 and 5:30 p.m., Intermediate between 3:00 and 4:00 p.m., and advanced classes from 5:30 to 6:30 p.m. Classes are free to Caltech Students and other members of the community (space permitting). Undergraduates can receive 3 units of credit if they choose. The instructor, Classical Guitarist Darryl Denning has an international background in performance, teaching, and recording, and can be reached at (213) 465-0881.

Events and Notices

° denotes a new announcement.

° Women's Glee Club begins all new music this term: Purcell's "Come Ye Sons of Art", Stravinsky's "Symphony of Psalms", and the Mozart "Requiem". Rehearsal will be held in SAC 1 on Mondays from 7:30 to 9:30 p.m. and with the Men's Glee Club in Beckman on Wednesdays from 5:00 to 6:00 p.m. This is the last time this year that the Glee Club can accept new singers. For more information contact Laura Brady, President (356-7427, laura@wgc) or Monica Hubbard, Director (X6260, mhubbard@cco).

The Caltech Ballroom Dancing Club meets every Thursday at 7 p.m. in Dabney Lounge for a 90-minute ballroom dance lesson. No previous dance experience is required for this free class. Experienced dancers meet every Sunday at 1:30 p.m. in Winnett Lounge for a two-hour intermediate ballroom dance lesson. For further information, please send e-mail to rherman@arms.gps.caltech.edu.

Internships and Competitions

° The National Research Council announces the 1995 Resident, Cooperative, and Postdoctoral Research Associateship Programs to be conducted on behalf of federal agencies or research institutions whose 120 participating research laboratories are located throughout the United States. The Programs provide opportunities for Ph.D. scientists and engineers of unusual promise and ability to perform research on problems largely of their own choosing yet compatible with the interests of the sponsoring laboratory. Approximately four hundred new full-time Associateships will be awarded on a competitive basis in 1995 for research in: chemistry; earth and atmospheric sciences; engineering, applied sciences and computer science; life, medical, and behavioral sciences; mathematics; space and planetary sciences; and physics. Awards are made for one or two years, renewable for a maximum of three years; senior applicants who have held the doctorate at least five years may request shorter periods. Applications will be accepted on a continuous basis throughout the year to the National Research Council Associateship Programs (TJ 2094/D1), 2101 Constitution Avenue, N.W., Washington, D.C. 20418, or at the fax number (202) 334-2759.

The University of Texas at Houston has created a Summer Research Program for students interested in pursuing a graduate degree in the biomedical sciences. Students will gain hands-on experience in the areas of biomedical research under the supervision of faculty sponsors of their choices. Specialized training is available in laboratory and radiation safety, research technology, and biomedical ethics. Students will write research abstracts which will be published in the annual UTH Summer Research Abstracts book. All student must be enrolled in any accredited U.S. college or university during 1995. Students are responsible for travel and living expenses, but will receive a \$2,000 abstract. All applications are due by February 24, 1995. For more information or an application, please call extension x1545.

Sao Summer Internship Program 1995 Applications are invited from undergraduates to participate in the Smithsonian Astrophysical Observatory Summer Intern Program at the Harvard-Smithsonian Center for Astrophysics in Cambridge, Massachusetts. We anticipate that twelve positions will be offered during the summer of 1995. Research opportunities exist in all areas of astrophysics from planetary science to cosmology including theory, observation, data analysis, instrumentation and laboratory astrophysics. The program will provide students with the opportunity to use telescopes at the Oak Ridge Observatory and to present a paper at a scientific meeting. The Intern Program begins June 12th and ends August 18th, 1995. The stipend will be \$250 per week, and housing/travel will be subsidized. Applicants must be US citizens (or hold a valid green card) currently enrolled in a program leading to a bachelor's degree. Graduat-

ing seniors are not eligible. For more information email to: IN%kdow@corwin.harvard.edu

The 1995 Elie Wiesel Prize in Ethics Essay Contest, with awards totaling \$10,000, is now open to junior and senior undergraduates who are enrolled full-time at an accredited college or university in the United States. The deadline for submitting an original 3,000-4,000 word essay is January 13, 1995. The theme for this year is: "Creating an Ethical Society: Personal Responsibility and the Common Good." For entry forms and guidelines contact: The Elie Wiesel Foundation for Humanity, 1177 Avenue of the Americas, 36th Floor, New York, New York 10036. Phone: (212) 221-1100.

Fellowships and Scholarships

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

The American Concrete Institute (ACI) is offering several awards. The Peter D. Courtois Concrete Construction Scholarships are two \$1000 awards for undergraduate study in concrete construction for the 1995-96 academic year. Eligible students must be enrolled at least half-time and must be seniors in 1995-96. The application, available at the Financial Aid Office, with all required supporting documents is due January 10, 1995.

° The Intel Foundation is offering a renewable Women in Science and Engineering (WiSE) Scholarship at Caltech. Funding for the first award will begin in the 1995-96 academic year and includes: an award amount of \$20,000 to be applied toward tuition, fees, and living expenses; a paid summer internship at Intel Corporation offered through Intel's College Recruiting Office; and an Intel Mentor. The application deadline is January 20, 1995. Nominated candidates will be interviewed in late January or early February. Final selection will be made by March 31, 1995. Basic eligibility criteria include: Second year woman majoring in electrical engineering, computer engineering, or computer science (also eligible for consideration: materials science, applied mathematics, chemical engineering, operations research, physics, and chemistry); full-time student; U.S. Citizen or permanent resident; 3.0 GPA or above. Please see application materials for additional information. Applications are available at the Minority Student Recruitment and Retention Office located at 287 S. Hill (second floor).

° The Intel Foundation is offering a renewable Minority Engineering (MESP) Scholarship at Caltech. Funding for the first award will begin in the 1995-96 academic year and includes: an award amount of \$20,000 to be applied toward tuition, fees, and living expenses; a paid summer internship at Intel Corporation offered through Intel's College Recruiting Office; and an Intel Mentor. The application deadline is January 20, 1995. Nominated candidates will be interviewed in late January or early February. Final selection will be made by March 31, 1995. Basic eligibility criteria include: Second year underrepresented minority (African American, Native American, or Hispanic) majoring in electrical engineering, computer engineering, or computer science; full-time student; U.S. Citizen or perma-

nent resident; 3.0 GPA or above; active in appropriate minority programs; demonstrated financial need. Please see application materials for additional information. Applications are available at the Minority Student Recruitment and Retention Office located at 287 S. Hill (second floor).

° The American Society of Naval Engineers is sponsoring a scholarship program with awards of \$2,000 each for the 1995-96 academic year. Eligible students must be U.S. Citizens, graduate or undergraduate students (undergraduates must be in their final year of study), majoring in engineering, and who demonstrate a genuine interest in a career in naval engineering. Demonstrated financial need is not a requirement but may be taken into consideration. Applications are available from the Financial Aid Office, and are due February 15, 1995.

° The American Meteorological Society announces the 1995-1996 AMS/Industry Undergraduate Scholarship competition. Full-time students who will be juniors in 1995-96 and who are: Pursuing a course of study leading to a B.A. in the atmospheric or related oceanic or hydrologic sciences; or enrolled in a program leading to a B.A. in science or engineering who have demonstrated a clear intent to pursue a career in the atmospheric or related oceanic or hydrologic science following the completion of appropriate specialized graduate level education are eligible to apply. Applicants must also have a minimum 3.0 GPA, and must be U.S. Citizens or permanent residents. The awards are \$2,000 for 1995-96, and are renewable for the following year (the senior year). To request an application, mail a self-addressed, stamped envelope to: American Meteorological Society, Attn: AMS/Industry Undergraduate Scholarship Program, 45 Beacon Street, Boston, MA 02108-3693. Applications are due February 17, 1995.

° The Marin Education Fund is offering grants to Marin County Residents who are undergraduates enrolled at least half time. Specific criteria for grants and scholarships vary. Applications are available from the Marin Education Fund, 1010 B Street, Suite 300, San Rafael, CA 94901, (415) 459-4240. Applications must be postmarked by March 2, 1995.

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

° The Coalition of Higher Education Assistance Organizations announces three \$1,000 scholarships, and six \$100 scholarships available to Caltech students. To receive an application, you must come to the Financial Aid Office to pick up a COHEAO postcard, and send it in to request the application by April 1, 1995. The completed application is due to COHEAO on June 1, 1995.

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



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