

The California Tech

Then you 90 to Caltech...

VOLUME LXXXIX NUMBER 19

PASADENA, CALIFORNIA

FRIDAY 4 MARCH 1988

Dr. Benton: Historian

by Carlos Ramirez

Caltech mourns the passing of John F. Benton, 56, the Doris and Henry Dreyfuss Professor of History at the California Institute of Technology, who died unexpectedly of unknown causes Thu. evening, Feb. 25, at his home in Pasadena. He had been professor of history at Caltech since 1970.

He was a world-renowned scholar of medieval history, and was especially recognized as an authority on the 12th century lovers, Heloise and Abelard Benton. He will especially be remembered by those who took his courses on "courtly love," where he provided insight into personal relationships that apply even today.

Dr. Benton was also known for using image-processing techniques developed at JPL to read ancient. medieval, and modern manuscripts in which the writing had been erased, damaged, or faded.

He was a member of the American Historical Association,

the Mediaeval Academy of America, and the Medieval Association of the Pacific, and he had served as president of the International Courtly literature Society

In 1985, he recieved the prestigious MacArthur Prize Fellowship, whose cash award allowed him to travel frequently to Europe to conduct his research. He had also held Guggenheim and Fulbright fellowships.

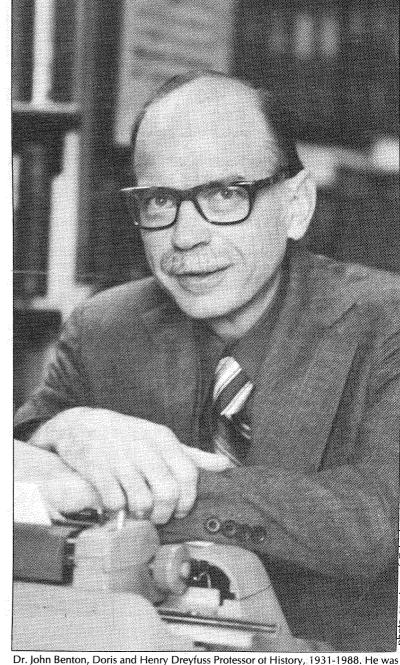
A non-scholar facet of Dr. Benton was his commitment to humanity and charity. He dedicated much of his life to the causes of racial desegregation and equal rights. In a letter written to his eldest daughter, Helen, on the night before his death, he spoke of the ideology that motivated him: "The ideology that means the most for me is one of justice...freed of the illusions of class, race, party, and nation."

He was involved in the 1963 "I Have a Dream" march with Dr. Martin Luther King Jr. and dedicated great amounts of time to the effort to desegregate America's schools. In his involvement in politics, he tried to demonstrate that individuals could make a difference in our system.

John Wheedlin, an activist in Pasadena, at a recent memorial service, recalled, "John was a very rare person who had passion, and a hatred for injustice, and wherever it showed itself, he was ready to fight it. He was frail in body but had tremendous inner strength."

Dr. Benton recieved his BA degree from Haverford College and his MA and PhD degrees from Princeton University. After holding faculty positions at Reed College and the University of Pennsylvania, he joined the Caltech faculty as Assistant Professor of History in 1965. He became Professor in 1970.

He is survived by his wife, Elspeth; daughters, Laura, Helen, Jo, and Anna; and a sister. A memorial service will be held Mar. 14, 4:30PM in Dabney Lounge.



a much honored medieval scholar who was considered an authority on Heloise and

Panel Debates Feminism

by Larry Cheng

More than forty people filled Winnett Lounge Mar. 2 to hear a panel discussion presented by the Organization of Women at Caltech entitled "Feminism, What's In It For Caltech?"

The panel consisted of Judy Cohen, Associate Professor of Astronomy; Mary Kennedy, Associate Professor Biology; Jean Westphal, chemistry staff scientist; Tricia Stoddard, aeronautics graduate student and former Caltech undergrad; and Gary Lorden, Dean of Students. Phyllis Pugh, an undergraduate in biology, was the moderator.

The panel began with a round of statements which reflected personal opinions of the speakers. Westphal began the round with a definition of feminism. She advocated a change to bring about equality between men and women, and the acceptance by women of their simply being women.

Westphal viewed Caltech as a microcosm of American society in general, and advocated the presence of a feminist movement in order to provide support and alliance within the Tech community in the same way feminist groups in general provide these things. She concluded by stating that the Institute needs more women in all areas students, faculty, and administration Stoddard described changes she perceived in the attitudes towards women during and since she was an undergraduate at Tech. She has experienced feelings ranging from being "judged on an equal basis" as an undergrad, to being treated as a threat in industry, to needing more support as a graduate student than as an undergrad. She offered a different definition of feminism, stating that what was necessary was the "recognition of the special traits and abilities of women," and an effort to maximize the benefit to society of theses features. She stressed that men and women are not the same, but have "definite differences," which should be taken advantage of. Stoddard also spoke of the dilemma in recruiting women to Caltech. She noted that there is a

fine line between promoting the school to women and having standards possibly lowered as a result of admissions of possibly less qualified students through such recruitment. Stoddard also addressed difficulties encountered by female faculty, such as professional advancement. Furthermore, she pointed out that few female role models exist in science related fields and professions, and that many more are needed.

Lorden, who spoke next, noted that although the Institute has come a long way in increasing sexual equality, there remained a "tremendous imbalance," and that much more could be done. He suggested preconceptions learned during one's childhood could lead to the imbalance of numbers of men and women in science related fields, including the classic preconception of males as more scientifically oriented and females as more creatively oriented.

Later in the program, Lorden suggested combating this at the high school level by showing students that both males and females can do science. On the subject of undergraduate admissions, Lorden suggested that heavy reliance on standardized tests may also be a contributing factor in the numerical imbalance, but was purposefully vague on the subject, saying only that accomplishments in high school needed to be looked at besides test scores. Mary Kennedy stressed the point that feminism was not a single doctrine, but a broad range of ideas which did not necessarily concur. She then described a number of current feminist movements and conferences and their ideas, which included the connection of civil rights to feminism, and the belief that women should be able to bear children while continuing to work in society. Kennedy also noted the perception of anti-feminist backlash in today's society, which she attributed to the reactions to the advancement of women in many fields. She recognized the presence of a ratio imbalance at Tech, but suggested that balancing out this ratio did not necessarily involve any lowering of

standards. She also noted the absence of any significant number of female role models, especially at the Institute.

Cohen, who spoke last, stated that feminism is useful in promoting self-awareness among women, but not in affecting any useful results regarding the issue of sexual equality. She stressed that science should be gender-blind, and that a "woman's point of view" please see FEMINISM, page 4

Abelard, the 12th century lovers. He was also a humanitarian who actively pursued social ideals.

Patents Protect

'itamins' Value Questioned

by Sayuri Desai

Members of the Southern California Skeptics Society and the Caltech community gathered in Baxter Lecture Hall last Sat. to hear Dr. Stephen Barret talk about "Doing the Vitamin Hustle." The free lecture was sponsored by the Skeptics Society and the Caltech Y.

Dr. Barret, a nationally renowned author, editor, and consumer advocate, asked victims of vitamin quackery to share their stories with the audience. When he then asked for a show of hands from people who take vitamin sup-plements, a majority did so. "I would be willing to bet that most

of you do not need to take nutritional supplements," he declared to those who had raised their hands.

Since the body needs vitamins in small quantities, it is unlikely that anyone in the United States who eats a reasonably balanced diet would suffer from a vitamin deficiency. For instance, there has never been a documented case of vitamin E deficiency in the United States. Moreover, the body stores vitamins, so not consuming vitamins for a few days has little affect.

Mineral requirements, such as those for calcium and iron, are a

Have you ever considered mar- but that doesn't mean he can keep keting an idea or invention but were unsure how to go about it? In his lecture sponsored by the Caltech Y Wed., Mar. 2, Jeffrey Sheldon, a specialist in patent law, informed listeners about the various protection schemes, patents, trademarks, copyrights, and how to obtain them.

by Quoc Pham

Sheldon stressed that one should apply for a patent as soon as possible upon the development of a possible marketable ideaor gadget. While a patent does not guarantee financial sucess, it gives one hundred percent of the product's market to one for a period of seventeen years. Within that time span, no one in the countries in which the patent is held may make, copy, or sell the product.

Candidates for patents, continued Sheldon, must possess four qualities. First, an invention must pertain to a patentable subject matter. An example of non-patentable subject matter is exhibitions of nature, such as electricity or gravity.

everybody else from using it for seventeen years," quipped Sheldon.

"Sure, Newton discovered gravity,

Second, the invention must be useful. Patents are designed to encourage creative efforts whose fruits, through their usefulness, improve the quality of life in general. Anyone could put together trash from the city dump and apply for a patent if utility were not one of the criteria.

Third, the idea behind the invention must not be obvious. The seventeen years of exclusive rights is reserved for only the extraordinary, the revolutionary, the original--such as flexible plastic ice trays which pop out ice cubes upon twisting.

Fourth, the idea must be new. If this were not so, anyone could travel to Japan, copy a patented idea there, take it to Germany where the idea in question is not patented, and sell it for a big profit. As is, chances are that the plagiarist would not be able to get

please see PATENTS, page 4

bit different from vitamin requirements and are not quite as readily fulfilled. In particular, Barret recommends that women who feel that they do not get enough calcium in their diets may want to consult their physicians about taking mineral supplements.

The U.S. Recommended Daily Allowance for vitamins and minerals is determined by the Food and Drug Administration from extensive case studies, and it includes a "safety factor" of extra recommended dosages, which take into account the varying nutritional needs of different age and sex groups.

Barret repeatedly stressed that vitamins are so plentiful and are needed in such small quantities that anyone who eats food is likely to get enough vitamins. Only people who tend to eat almost nothing or very little, such as alcoholics and the elderly, may be in danger of becoming vitamin deficient.

please see VITAMINS, page 4

THE CALIFORNIA TECH

FRIDAY 4 MARCH 1988



What is Mudeo?

Hey Freshman! Hey Sophomores! What didn't happen first term that was supposed to? What was it? Think hard. What didn't happen first term last year? And the year before that? And.

I'll bet you don't know. Let's ask the Junior class president if he knows. Does he? We doubt it.

It's the law. The Junior class president is supposed to organize a Freshman-Sophomore event. We read our little t; did you? If you did, you'll notice on page 141, Resolution III, section 4:

"The officers for the Junior class shall be responsible for organizing a Freshman-Sophomore Event during the first term of each academic year."

So what was it? We don't remember any event. The governor of Arizona is presently undergoing an impeachment trial. Perhaps the officers of the Junior class should follow.

Well, it's too late this year. But for you sophomores out there, you know what you have to do...

Time Passages

by Eric Fung

We are mortal. Caltech has felt mortality so much closer these past weeks. It is confusing and saddening, death. The childhood question, "Where does one go when one dies?" we ask today, even if we are not children.

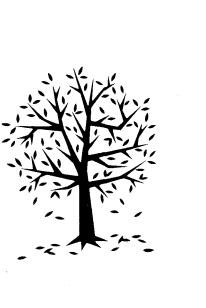
Many of us have a place on which we rest our hopes, our dreams, and perhaps even our fears. For the religious, the question is a bit easier to face, and maybe even answerable. For the non- (or un-) believers, the question does not yield an easy answer.

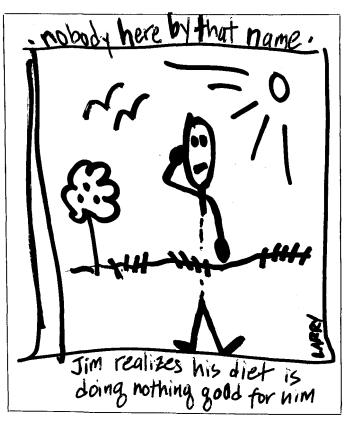
Our reactions to death vary as our attitudes towards life vary. Kurt Vonnegut, in Galapagos, perceived death as a long blue tunnel. Simon de Beauvoir, a French writer, wrote that "death preserves life...[since] death does away with time." Gandhi wrote in *Young India*, "Life and Death are but phases of the same thing...Death is an Eternal verity...'

Death has been personified too. Ingmar Bergman, in The Seventh Seal, portrayed death as a ruthless chess player. Emily Dickinson, on the other hand, perceived death to be a court-er whose gift was Immortality. Both John Milton and John Donne believed death was their adversary whom they could vanquish.

Our attitudes toward life are reflected in our attitudes toward death, and vice versa. For those of us who still have life, we should pause to think not about death, but about life. And forever in death, there is life. John Benton, just before his death, wrote to his daughter, "I feel optimistic about the human race and the next generation. I am not afraid of death...By and large I feel at peace with myself.'







Another Look

by Chandra Tucker

The other day, I hurried to class as usual, striving against the clock to get there on time. Yet along the way something stopped me. I stopped rushing and, for the first time in a long while, I opened my eyes. Though I must have taken this same route hundreds of times before, I saw things I have never seen before at Caltech: trees I did not know even existed, cracks on walls of buildings, birds fighting over food on the ground...

It is amazing how much there is to see if one just takes the time to look. It seems like these days everyone is just too busy doing something and hurrying someplace. Too busy to stop and enjoy little things like the patterns the wind makes in a pool of rainwater, or ants struggling to carry twice their weight in food. Too busy to get involved, to care, to look at the world as it is today and as it could be. Too busy to open themselves to new ideas and thoughts and points of view. Too busy to look around at where they are and where they are going-to stop and question life. To ponder, to daydream, to wonder. Is the universe flat or curved? What would this world be like without water? Do insects ever get sick? What happens when you die? Why do people act the way they do? Where do atoms come from? Why does life exist?

It is a sad state of society when people are too rushed to think and wonder and question all that exists around them. After all, how can one expect to find answers when one does not question?

THE CALIFORNIA TECH

Volume LXXXIX • Number 19 4 March 1988

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THE CALIFORNIA TECH 25-58 SAC California Institute of Technology Pasadena, California 91125

We do not know where Richard Feynman and John Ben-ton are now. Perhaps Richard Feynman is on a beach, collecting pebbles with Isaac Newton. And perhaps John Benton is discussing the state of the nation with Dr. Martin Luther King Jr. Wherever they are, let us only hope that whatever they sought in life, they found.

The "trees" and cracks in the wall are always there, though we, with our limited perspectives, may not see them.

ASCIT F	RIDAY N	IGHT MOVIE	PASADENA SCIENTIFIC & TECHNICAL BOOKS	Letters and announcements are welcome. All contributions should include the author's name and phone number and the intended date of pub- lication. The Editors reserve the right to abridge and edit letters for expe-
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Phone: (818) 356-6154 Published weekly except during

examination and vacation periods by

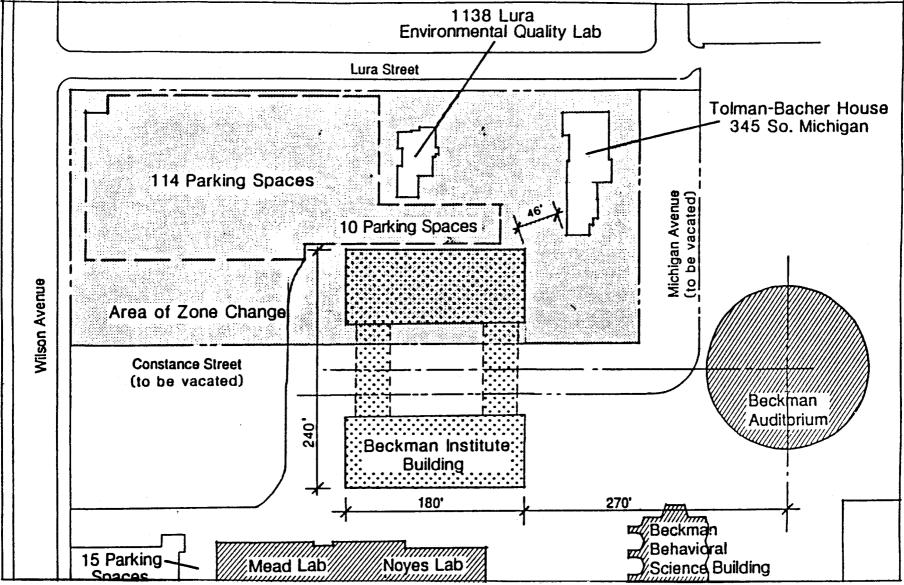
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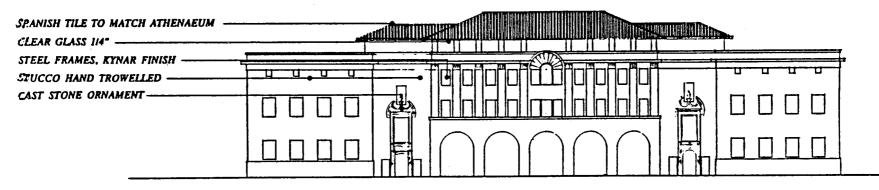
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FRIDAY 4 MARCH 1988

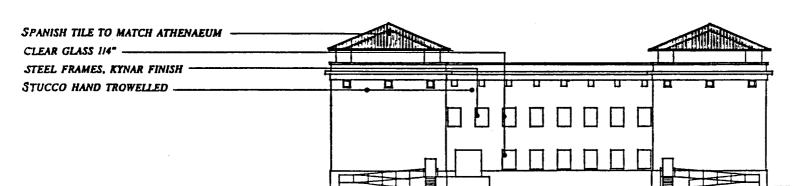
The New Beckman Institute



SOURCE: A.C. Martin, Inc., 11/8/87



East-West Elevation



by Stephen Lew

The Beckman Institute came one step closer to reality last week when Caltech presented its proposal to the Pasadena Planning Commission during a Public Hearing. The proposal consisted of three parts: an Environmental Impact Report (EIR), a Zoning change, and a proposal for Street removals.

The Environmental Impact Report noted that the Tolman-Bacher and Bateman Houses were "potentially eligible for National Register or Landmark Status." These houses will, however, be retained in their present locations.

North-South Elevation

George R.R. Martin author of Nightflyers, Fevre Dream, Sand Kings, Tuf Voyaging & Wild Cards will sign his work at Planet 10 79 N. Raymond Ave. Pasadena [818] 577-9309 on Saturday March 5 from 1-3

Albert C. Martin and Associates Planning/Architecture/Engineering



The Beckman Institute was conceived to be a place where interdisciplinary research could be conducted. According to the proposal, the building where the Institute will be housed is a 4 story building enclosing 140,000 sq ft with provisions for 124 parking spots. The basic architecture will be similar to that of the Atheneaum: stucco walls with a red-tiled roof.

The Institute is only a small part of Caltech's Master Development Plan. This Plan is a document submitted to the city planners informing them how Caltech intends to develop the campus in the coming years. In its draft form, the Plan illustrates how Caltech plans the development of the surrounding area with three-to-six story academic facilities in order to accommodate its growth needs in the next 30 to 40 years.

Patents, cont'd

from page 1

a patent for the idea in Germany or anywhere else, because the idea is not new.

Certain other factors also affect the probability of successfully obtaining a patent for some invention. An example is marketability. If a product sells well while the author applies for a patent, then its chance of getting patented is greatly enhanced. Professional approval is also a positive factor. Sheldon was certain that getting a Nobel Prize for a discovery should guarentee a patent.

In the United States, patent applications can be filed up to one year after the first public announcement concerning the invention. Most other countries, however, have rules that nullify any chance for a patent if the public announcement comes before the petition for patent was filed. In addition, filing in another country within a year of one's first filing date gives one the benefit of that date. That is, if a U.S. petition is filed in January, but the German petition is filed in May, officially, the German petition carries the January date.

Also in the United States, if two inventors apply for a patent on the same object, the one who can prove that he invented it first wins the patent. In other countries, it is usually the filing date, and not the date of invention, that decides who gets the patent.

 key to successful marketing of any product, even those protected with patents, is the product name. It is vital, stressed Sheldon, that the inventor select and register a trademark for his invention with the state. He will also need to determine if the selected name is already in use.

Vitamins, cont'd

from page 1

"You aren't playing nutritional roulette every time you prepare a meal!" assures Dr. Barret, although vitamin distributors would have the public believe otherwise. Vitamin suppliers prey on people's insecurities by saying, "Take our vitamin supplements just to make sure that you get enough." Because daily supplements are so inexpensive and harmless (if taken in reasonable quantities), these companies can get away with their billion dollar industry without public cries of outrage.

Selling vitamin supplements to those who don't need them is quackery, claims Barret, who has devised a basic rule of thumb: anybody who sells vitamins should not be asked for nutritional advice. Although vitamin hustlers may be sincere in their misguided beliefs in vitamins' potential, there is simply no evidence to support their

If the invention is to be sold in more than one state or in other countries, the author must register his trademark with the federal government. It costs around two hundred dollars, and the owner must re-register after the first eight years, and every twenty years after that.

Sheldon emphasized that successfully obtaining a patent is tricky, and one should enlist the aid of a professional patent lawyer to maximize the probability of sucess. The cost of obtaining a patent with professional help is between two and three thousand dollars. Also, it costs close to one thousand dollars to maintain a patent for the full seventeen years, with payments of three hundred dollars due at three and a half years, seven years, and twelve years.

For those not wishing to spend so much money, the easiest way to protect an original work is with a copyright. Copyrights require no effort to obtain and simply forbid any unauthorized duplication of the work in question. The author of any original work on a tangible medium needs only to put the copyright symbol, the circumscribed "c", and the year of the first publication. However, to sue plagiarizers it is necessary to register the copyright. Forms created for this purpose are available from the library of Congress, and the entire process costs only ten dollars.

Sheldon has practiced law for thirteen years. In addition to his law degree, he also holds a B.S. in chemical engineering and a M.S. in biomedical engineering.

For more information, contact Sheldon at 201 S. Lake Avenue. Suite 800, Pasadena CÁ 91101-(818) 796-4000.

Barret exposed numerous instances of relatively harmless and more serious forms of health and nutritional quackery throughout his lecture. Long after his prepared talk was delivered, audience members remained to have their questions and concerns answered during the discussion period.

Stephen Barret, M.D., practices psychiatry in Allentown, PA. He has written more than 21 books, including Vitamins and "Health" Foods--The Great American Hustle. In 1984 he received the FDA Commissioner's Special Citation Award for Public Service in combating nutritional quackery. In 1986 he was awarded honorary membership in the American Dietetic Association.

> ACADEMY **BARBER SHOP** 27 No. Catalina, Pasadena

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Student Gov't: ASCIT IHC ASCIT minutes 10PM 1 Mar 1988 IHC Minutes 8PM 1 Mar 1988.

1. Mike S. reads letter from Stu., ex-Techer who wants to pay ASCIT back with interest. Amt: \$40.

2. Sam W. reads letter from Nancy Matthews, who says she will credit ASCIT around \$3000 from cpies sold until now. Will start billing students weekly. She also makes a funding request for college bowl - \$250 - to build a buzzer system. This is less than the \$600 it costs to buy it from College Bowl. Nancy gets the money.

3. Sam W. says the budget polls have come out and should be returned.

4. ASCIT event Fri.: Street Talk will appear Fri. afternoon as part of the Y's Fri. noon concerts. ASCIT will provide beverages. Perhaps dinner outside in the future?

5. Tom T. has the literary magazine. The Totem, ready for publishing. Cost: \$1500. ASCIT has to fund - it's in the by-laws. AS-CIT will look up budgeting, and Tom will look for cheaper publishers.

Feminism, cont'd from page 1

specifically, pointing out that applicants who did not completely fulfill standards were not in the least guaranteed to fail, and thus the idea of admitting what some might consider 'unqualified' applicants, including women, to balance the ratio did not scare him.

Overall, the discussion raised a number of points related to feminism at Caltech. Due to the short amount of time allotted for the discussion, the audience was not treated to much actual discussion among the panel members, but this did not take away from the presentation, for many of the items brought to light will surely be discussed over and over, both personally and as matters of Institute policy, in the future.

regarding the field was irrelevant. Cohen proceeded to give a sampling of the disadvantages faced by women at Caltech. She stated that the Institute was hostile towards women, that the rules, traditions and organizations do not adequately recognize women. As an example, she pointed out that until two years ago, the health center had no program regarding pregnancies or abortions.

Cohen said also that the social burdens of being a female member of the faculty were imposing.

1. Jimbob Speaks..

a. A proposal is made to have official rules for minor sports (i.e. wrestling, broomball, etc). Jimbob will look in to it.

b. Cable for campus. It seems that many other schools have cable available to the students, but numerous attempts to get the cable company to agree have failed. Maybe the satellite signal can be fed to the houses...

2. Dave Lipin says that Blacker, Lloyd and Ruddock owe Ricketts \$50 each for the cost of a security guard during last week's party

3. What a mess! It seems that Blacker, Fleming and Ricketts all used the kitchen last weekend, and there was a big mess Monday morning left for Gary. Dave L. claims that Ricketts cleaned up and Blacker and Fleming didn't. Blacker claims that it cleared out the furniture eventually, but not soon enough. Fleming is looking into the problem. Dave says that it looks as if we might lose kitchen privileges and that it is unfair. He suggests

These included not having time for children, and the "added burden of not having wives" to take care of social and domestic problems. Cohen suggested that more women needed to get into positions of power, both in faculty and administration. She also suggested that the admissions committee needed to work harder in hunting out and recruiting qualified women to admit to Tech.

A short question-and-answer period yielded a number of points, some concerning feminism in general, and some concerning Caltech in particular. To the question of what kind of affirmative action to utilize, the panel seemed to agree that more intensive recruiting of women was needed. Lorden once again brought up the question of 'qualifications' and 'standards,'

Gary should be reimbursed and Fleming and Blacker should write and apology. In the future there should be punishment.

4. The ICE MACHINE CAPER. Just one short week after the ice ruling, Lloyd's ice machine has been cleaned out again! Apparently the culprits were two Flems who were not on official duty. After much debate, the IHC votes to fine Fleming house a total of \$20 and let Fleming decide if it should fine the persons involved.

5. Bob's Corner

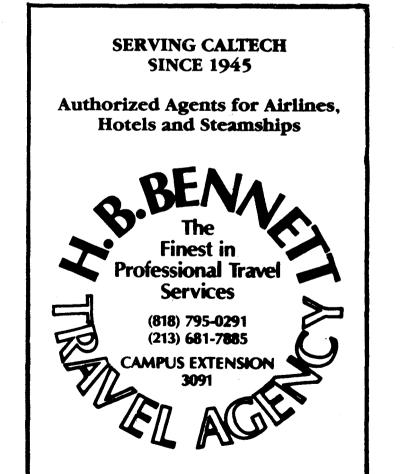
a. Daihatsu caper. Late one night a Daihatsu was commissioned to go on a Ralph's run. Unfortunately, their vehicle was pulled over by police at Colorado and Wilson. When questioned about the origin of their vehicle, one of the people said to the officer, "Uh, I kinda stole it." They were arrested, but later released. Bob says they broke the rule [the rule being not to take Daihatsu's off campus] and they should be fined. Dwight says we should do nothing until everyone has been contacted.

b. Bob asks two questions: 1) Why are the food reps board being subsidized? 2) Why is Nancy cochairing the Food Committee Meetings? It is decided nobody there really knows the answer and the food reps should be invited to the next meeting.

c. Smoke detectors removed from Ruddock. Someone at P-plant wants to know why. Bets says that we play with soccer-balls in the alleys, it was probably removed by ..." She'll look into it and get back to everyone.

d. Having the presidents invite people to Tuesday night dinners doesn't seem to be working. Several suggestions are made: 1) Tell everyone sooner. 2) Put out a schedule. 3) Move the date around. 4) Move the sign-up to the MOSH's office.

6. Ken asks Bob if anything was done about the Damage Tours. All the students have paid their \$10 and there hasn't been anything done. Bob says he's written Nancy a "threatening" memo three days ago. Dave J. says he went over there and Nancy said there was no way that she could inform students about the tours beforehand.



claims, says Dr. Barret.

Selling unnecessary vitamins to the public is relatively harmless, but more serious forms of quackery abound in the health industry. Certain companies such as Immune America claim to cure sufferers of AIDS and other immunodeficiencies by promoting special nutritional products and diets. Barret fears that those who are taken in by such claims may shun the proper medical care that they need. sometimes even with fatal consequences.

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THE CALIFORNIA TECH



FRIDAY 4 MARCH 1988

The Inside World

This week's Inside World was brought to you by: Blacker: Rorke Haining and Rob Padula Fleming: Pierce Wetter Ricketts: Steve Sobelman and Tom Tromey

Blacker: Four score and seven days ago, the sun rose over Seattle. (It was raining at Caltech, if that matters to you. But anyway, the sun rose.) This pleased Erik "Fourth?" Hille, Seattle native. It also inspired Erik to put Harry's bike in the shower. This did not please Harry. All of Hell was amused. So began the legend of the Flying Bicycle.

Faster than a running frosh, more aggravating than Ph106, able to hover silently over hapless diners. Look, up in the air, it's a bird; it's a plane; (it's a Valkyrie) ... it's Harry's Bike. Harry: On a four year mission to find new TV shows to flick with, seek out strange, new aircraft, to boldly learn what no frosh has known before. And so the legend goes...

Alan Wong, if you are reading this, someone has been calling for you. They didn't say all too much, but did leave a message: "Frrrossh!" Also, they said for you to call them at 356-HAND, when you get the chance. Also, if you don't talk to Cliff soon, he will put your room up for grabs.

"We've paid enough to get who we want and what we want" -Anna Maria Yeakly -Horke Rainin' and Spinolio

Fleming: Another week, another Insnide World...ah, whom to mock this time? Wine and Candlelight was a smashing success. No table-chasing demolition derby this year, but we finally got Daniels to realize his true sexual preference (with a little help from Slovik). By the way, did Daniels take Slovik or did Slovik take Daniels? But, as always, the waiters seem to have outshone all others in the way of massive inebriation. We ALMOST managed to get rid of Barry this time, but some moron dragged him out of the middle of Califor-

nia BEFORE he got hit by a car. Oh, well. There's always next year... The unparalleled and unparallelable Fleming Interhouse Volleyball team is still crushing all who dare face it, although it's kind of hard to tell by the, shall we say, less-than-spirited dinner announcements we've been getting lately. And would somebody please show Swanson how to ring the bell? I've discovered how to tell if someone is a good volleyball player or not. All good volleyball players wear a pair of really ugly shorts. It's true. Maybe it's the knee pads, but there's something about watching Linda play volleyball that just well...never mind.

It seems that Alley One's Midget Parade Challenge has proven too lame to even think of accepting. I guess Alley Five is still the unquestioned and unquestionable Alley of the True Gods.

This quarter's Mellow Mail catalogs are in. Humphreys was seen reading one in the lounge with a grin from ear to ear. Not getting any, eh Humphreys? That's ok, neither am I. I haven't heard any noises coming out of Kent's room lately so he probably isn't either. Or she isn't a squealer. Not like Jennifer (famed one-time Alley Two Rabbit), or Melinda (or is that Frank?) anyway.

Brain Daniels didn't win Road Ralleye. Hahahahahah. And the frosh managed to miss it by two hours. (Have some Kudos, Pottenger?). Kent's band learned a new song. Quite a few songs, in fact. WellIfive, anyway. This time only two of them are "Louie, Louie" though. Welstand does NOT look like me, damnit. He has more hair. (I wouldn't

think that was possible, Pierce. Unless you mean hair on his head -Y.F.) I've become a waiting kinda guy. Your worst nightmares come true

Wednesday was Drop Day. Drop Early, Drop Often, but Don't Drop Me. Moonlighting Sucks. Dick Dale is the One and Only True King of the Surf Guitar. Kent has decided to become a music major at PCC. His hobbies are nihilism and hot oil wrestling. Kent Nordstrom, future Rose Parade Queen. (I'd like to go to UCLA and study to become a veterinarian, because I love people -Y.F.) (Are you sure that wasn't sheep? - N.F.) (That was irony, & *head -YF

Yesterday was Ditch Day frosh, you missed it. Now get your shovels and fill in all the holes. Rumor has it that Laura Hernandez is insatiable, but that's just a rumor. Or was that Soo?

Safari party this weekend at 328 S. Hol. Bring your own animal passions. Well, we've ragged on enough people so bye till next week.. -NeanderFlem & Young Fansome

Ricketts: Sentences Arranged According to the Laws of Chance Damn I hate iT when there's still tinfoil sealed around the lip of a Tylenol bottle and I have to peel it off.

space

catty (n) - An Asian unit of weight commonly equal to 1 and 1/3 pounds avoirdupois.

Damn I hate running my fingernails over the hood of a dirty car but I always do, time and time again.

space

a list of the evils of censorship:

He had heard or read somewhere that Virgos were violent but of course

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he did not believe in astrology

space

The quick brown fox jumped over the lazy dogs.

And new in this box, a secret decoder ring!!!

If none of this makes sense to you, don't worry. This was written in the middle of the night in the following method:

1:"say something'

2:"put random letters in boldface"

1:"ok" 1111

I once read a book about cryptography, but that was a long time ago and I've forgotten much of it.

Kill commas, kill dead. Kill you!

-J.A. and Skip

[wander lost over yonder just to go!-Eds.]

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sports

Bright Fencing Future

by Sabre T. Tiger

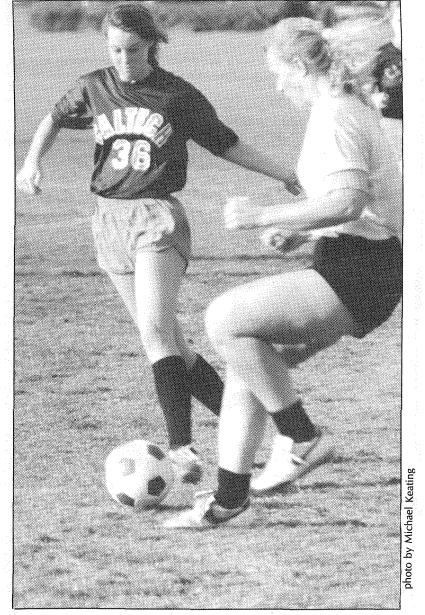
With the fencing season over, Caltech is left with more than just a few memories and many, many hopes for the future. The team's hopes for post-season competition were virtually eliminated at the second meet of the season. The fencers continued to compete until the very end. Though the official stats only reflect the second half of the season due to first half disqualifications, when taken as a whole, the season record is quite impressive in what will undoubtedly be referred to as a rebuilding year.

The women's team came the farthest and shows some real promise for the next several years. All four freshman ladies are ready to return and compete at some time in the next season. Miriam Myjak was the most dedicated of the team, competing at all the dates, fighting solo at the first meet and joined by Kitt Hodsden at the second. Later in the season they were joined by Celina Mikolajczak, the most successful member of the team, and Anna Yeakley, a young lady who had not touched a foil until the evening before her first competition. If these four women are able to compete again next year, the women's team's future is very bright indeed.

Even brighter, however, are the prospects for the men's teams, with only one graduating senior in the ranks. Jeff Greason, that lone senior, was a four year member of the fencing team, spending the last three on an epee squad and the last one as the squad's captain. Even though he is graduating, there are three returning epee members for the future, and they are sophomore Joe Dadek, freshman Ben Holland, and freshman Allen Price. With off-season work, they should be able to chalk up many more team victories than the two that highlighted the past season for these four gentlemen.

The men's foil team will not lose any fencers. With more experience for freshman Steve





McLaughlin, sophomore Robert Coker, and captain Paul Rubinov, a junior, the trio will shine in the next year. Additionally, they will be able to build a strong foundation for future years, working with the large crop of beginners that the introductory fencing class gathers.

The sabre team, however, has the possibility for the best future. Ray Sidney, the left-handed freshman fencing sensation, is maturing nicely. He will make a strong contribution next year, as will Sean Johnston, another fine talent who already has two years of experience. Bob Fox, a fencer from Oxy, is also transferring to Tech next year. The sabre team will benefit from his last year of eligibility, as well as his experience during practice.

The only big question mark is captain Matt Himmelstein, who, though a senior, has one more year of eligibility and no real plans for a June graduation. If he does indeed compete next year, great things are expected of him.

-what goes on

from page 8

E.T. Bell Research Prize

The E.T. Bell Undergraduate Mathematics Research Prize is a cash prize of \$500 awarded for the best original mathematics paper written by a Caltech junior or senior. Contestants for the Bell prize must be

nominated by a faculty member familiar with their work. Students who wish to be considered for this prize should contact a member of the Mathematics faculty prior to the end of the second term to discuss the nature of the research. If the entry is sufficiently worthy, the faculty member will nominate the contestant and act as sponsor. Each studnet is entitled to only one entry. All contestants nominated must submit their papers in final form to their faculty sponsors by the end of the fourth week of third term. A faculty committee will then judge the papers and announce its decision before the end of third term. The committee may award duplicate prizes in case of more than one outstanding entry. The name of the winner (or winners) will appear in the commencement program.

Honeywell Futurist Competition

Honeywell's sixth annual Futurist Awards Competition, an essay contest open to full-time college students, asks students to predict technology advancements they foresee by the year 2013. This year's contest will offer 10 winners \$3,000 each. In addition, all entrants will receive a Futurist Award Competition poster designed by French artist Jean Michel Folon.

The 1988 contest is open to all full-time undergraduate or graduate students at any accredited U.S. college or university. Students are asked to devote the first half of the 2,000-word essay to one of the following areas: aerospace applications, aircraft capabilities, control systems for commercial buildings, control systems for homes, industrial automation and control, and microelectronic devices. The second part of the essay should reflect the societal impact of the predicted changes.

Completed essays must be postmarked no later than March 18, 1988. Essays will be judged on the bases of creativity, technical understanding, feasibility and clarity of expression. Winners will be notified by April 22 and will be flown to Minneapolis later that month for the awards ceremonies. To obtain registration information write:

Honeywell Futurist Awards Competition, Box 524, Minneapolis, MN 55440, or call toll free, 1(800) 328-5111, x1581.

presents

Oscar Mandel's

The Morgan Ward Competition

Any Caltech freshman or sophomore may enter this contest. An entry may be individual (submitted by one student) or joint (submitted by a group of two or more students). Each student is entitled to at most three entries, of which at most two may be individual.

An entry is to consist of a mathematical problem, together with a solution or significant contribution toward a solution. The problem may have any source, but this source should be stated in the entry. The entries will be judged on the basis of the nature of the problem and the originality and elegance of the solution. Any outside references used should be indicated.

Entries from each contestant or group must be placed in an envelope and delivered to the Mathematics Office, 253 Sloan, during the fourth week of third term. The names of the contestant, or the names of all participants in the case of a joint entry, must be written on the envelope only, not on the entry. The Judging Committee will consist of three volunteers, approved by a vote of the Caltech Mathematics Club. Each jugde must be a junior or senior and a member of the Mathematics Club. The judges will select a group of finalists and submit their entries to the Mathematics Department faculty who will make awards to the winners. Prizes will ordinarily be awarded for the 2 or 4 best entries, the value of each prize being \$75. Prizes for individual entries will be limited to at most one to a contestant, and no group may receive more than one prize.

Caltech Raquetball Club

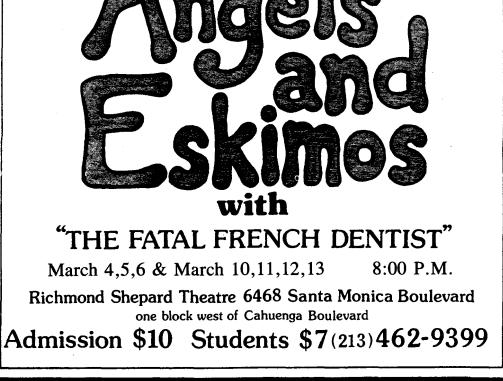
Passes for the use of the Pasadena YMCA's racquetball facilities are now available at the Caltech Y for the price of 1 dollar. They can be purchased during normal office hours and are available to any student. The passes allow full use of YMCA facilities for one day.

The YMCA is located at 235 E. Holly Ave., 1 block north of the Pasadena Plaza, next to City Hall. There will be a list of available partners posted at the Caltech Y, so if you are interested, please sign up.

If you have any helpful suggestions for the club, contact Jason Stewart at 1-59 or 356-9414.



Caltech's Teri Engelhard (36) skillfully maneuvers the ball away from the opponent in a Feb. 21 game in which Caltech lost to Defeet.



FRIDAY 4 MARCH 1988

sports



Beaver Cup: Part II

by Ice Man The Caltech Ice Hockey Club stormed into MIT for the second annual Beaver Cup last weekend. The road trip included exciting parties, barroom brawls, entertainment and interaction with MIT President Paul Gray, and of course the Beaver Cup.

As was expected the line of Martin Brouillette, Paul Svitek, Dave Braun, Dwight Berg, and Sandy Krasner did the majority of the scoring and got most of the penalty minutes. The game seemed like a marathon to Caltech, because of an additional seven minutes on each period. The combination of the oversized ice surface, the time change, and the deluxe accommodations gave MIT the slight advantage they needed to pull ahead of Caltech 13-0.

The game's casualties included Jim Bower's sprained knee, Mar-

tin Brouillette with a bruised knee United Airlines was kind enough to and no outside right skate edge, and Sandy Krasner who suffered from a broken ankle halfway through the second period. Another injury went to Brooke Anderson who was stabbed but was reincarnated as Peter Dowde.

The road trip included more than just exciting and close hockey games. The Caltech team was privileged enough to stay at the MIT Hilton, which turned out to be a racquetball court. Aside from the fine accommodations, the MIT hospitality was outstanding. The Caltech players were taken to such fine events as dinner with MIT's president, dinner with Caltech alumni, the Blender Blitz, Party 'Til the Sun Comes Up, and the Bahama Blast.

The return flight from MIT also yielded an unexpected bonus as

donate eighty motion sickness containers to Caltech for use in case of large instances of non- foodrelated gastro-intestinal viruses.

Although not fully recovered from the post game celebrations, the pucksters took on Cal Lutheran Wednesday night. The game at the Pasadena Ice Center in front of just over twenty fans, was protested by Lutheran who lost 6-2.

Scoring for Caltech were Martin Brouillette with two brilliant goals and one assist, Pavel Svitek with two goals and two assists, Dwight Berg with one goal and two assists, and Dave Braun with a goal and an assist. All fans are reminded that free beverages will be served at the last regularly scheduled home game of the season on Wednesday, March 30, against U.S.C. at 9:45PM.

WEEKLY SPORTS CALENDAR

Day	Date	Time	Sport
Fri.	3-4	3:00 pm	Baseball
Fri.	3-4	3:00 pm	Tennis (M)
Fri.	3-4	All Day	Golf
Sat.	3-5	All Day	Golf
Sat.	3-5	11:00 am	Baseball (2)
Sat.	3-5	11:00 am	Track
Sat.	3-5	1:30 pm	Tennis (M)
Sat.	3-5	1:30 pm	Tennis (W)
Sat.	3-5	TBA	Fencing
Sun.	3-6	TBA	Fencing
Sun.	3-6	11:00 am	Soccer Club (W)
Mon.	3-7	1:00 pm	Golf
Tue.	3-8	3:00 pm	Tennis (M)
Fri.	3-11	1:00 pm	Golf
Sun.	3-13	9:00 am	Soccer Club (W)

Opponent Claremont-Mudd

Ft. Lewis College So. Cal. Intercollegiate Tourney So. Cal. Intercollegiate Tourney Claremont-Mudd Redlands Pomona-Pitzer Whittier Men's West. Regionals Men's West. Regionals Mavricks La Verne Redlands Redlands Shakers

Location Caltech Caltech **Torrey Pines Torrey Pines** Claremont Claremont Pomona-Pitzer Whittier Long Beach Long Beach Caltech Pomona-Pitzer Caltech Whittier Caltech





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Or

Women's Tennis Victorious

by Martin Navartalova

The Caltech women's tennis team pulled out another 6-3 victory over Christ College Irvine last Wednesday, though it wasn't quite as satisfying as their first triumph over the Eagles this season. Back on January 30, only five Tech

LAEMMLE THEATRES

ESQUIRE | COLORADO

players made the long trek out to Irvine, yet they clobbered C.C.I. 6-3, losing two of the three matches by forfeit.

Last Wednesday, only five Eagle players out of a full complement of six came to Caltech to face the confident Beavers. Though the final score was the same, Caltech's top seeds did not play nearly so well.

The brightest spots of the day for Tech were third and fifth seeds Laura Hernandez and Jennifer Low. Laura put on a veritable tennis clinic, neatly disposing of Denise Manning 6-1, 6-0. Always

record to 4-3, one of the best individual records on the team. Carol Mullenax and Junko Munakata got a break from singles play, and responded with a 6-0, 6-0 massacre of Casillas and Luedtke at second doubles. Junko has been battling a variety of physical ailments and a barrage of Tuesday night/Wednesday morning homework sets all season, so her relatively restful match last Wednesday was welldeserved.



against C.C.I.'s annoying blonde

bubbleheads Corrie Stelmachowicz

and Anne Kringle. Unfortunately,

three potential comedies turned in-

to tragedies as Carol and Jane lost

their doubles match and their

Tech's top two seeds. Neither came

into the match feeling too well, and

bad starts against opponents they

had beaten before fueled their

It was simply a bad day for

respective singles encounters.

tke 6-2, 6-1. This ups Linda's frustrations, which continued throughout the day. The highlights of their matches occurred in the first set of doubles which they won handily 6-1, before losing the next two sets.

> The highlight for Caltech fans attending the match occurred in that first doubles set when Jane Seto purely unintentionally sent Irvine's Stelmachowicz to the ground with a vicious overhead smash that grazed Corrie's head. Fortunately, she was unhurt, but her tumble sent somewhat unsportsmanlike waves of satisfaction through some

	2670 E. Colorado Blvd. (818) 793-6149 "Best Picture' -L.A. Film Critics HOPE AND GLORY Mon-Fri 7:00 pm, 9:10 pm	(818 Peta AN CREATI Mon-Fri	7:30, S	4 s D OMAN 2:30 pm	feelin the fi four comp M tinue with Casil nifer nis o coupl	ng sorry for rst set as sl times to giv letely out-c leanwhile, J d her streak a 6-0, 6-0 las. Relative had been pla f anyone on e of matche	ennifer Low con- of excellent play win over Larisa ely speaking, Jen- aying the best ten- the team the last es.			All through the of All through the of been witnessing the pair perform such as laughing and ju occasionally when to shots went out. Rem John Gass, "Those they're straight off For all I know, the The Facts of Li Stelmachowicz an	match, they had Christ College classless antics imping around their opponents' narked spectator two look like f some sitcom. ey could be on <i>fe.</i> " However, d Kringle did
L	Sat-Sun 2:20,4:40,7:00,9:10 pm	Sat-Sun 1:30,	3:30,5:30,7:	30,9:30 pm			eter also played th seed Liz Lued-	and the first de	vo singles matches oubles match were counters as this day	play well in attaining victories on the date	
ſ		新	18	卛	M	家		pitted the noble	e, dark, and stormy Choy and Jane Seto	Another day, a the Caltech women.	nother win for This makes the

for the Caltech women. This makes the team record 4-5 going into Saturday's 2:00PM match at Whittier. They then face Redlands at home on Monday at 3:00pm in their last match until next term. Both matches should be very competitive. In upcoming issues of the Tech. look for individual profiles on the Caltech players and an exclusive interview with Coach Giny Marum. That's all from the world of tennis.

[ª] NL X. ネバ Ŧ SUN TUNG LOK RESTAURANT **DINNERS 20% OFF** with coupons **3 MASTER CHEF SPECIALTIES Cattech ID** DIM SUM, SZECHUAUN, CANTONESE, SEAFOOD Dim Sun available daily at lunch **OPEN 7 DAYS** 400 S. ARROYO PARKWAY, PASADENA 11 AM to 11 PM **BEER & WINE** Near Velvet Turtle 584-6719 584-6720 FREE PARKING IN PASADENA INN

Announcements for What Goes On

should be submitted on an announcement

form available in the SAC copy/mail room

(Room 37) or on a plain piece of paper. Please indicate the date(s) you want the

announcement to run. Send announce-

ments to 25-58, or put them under the

Announcements must be received by the

The Surf Club is proud to announce a

more than ample collection of surfboards

and wetsuits to keep you stoked. If you want

to check them out for a day or longer, con-

tact Bill Foster, 795-4049 (nights) or Chris Edgington, 577-9694.

Applications for SURF-'88 (Summer

Undergraduate Research Fellowships) are

currently available in Room 3, Dabney Hall.

We have a notebook with a few projects for

'88 listed for undergrads to review. Application deadline is 5 PM Monday, March 7.

Caltech will host four leaders of the com-

puter industry this spring at a lecture series called "Future Trends in Microcomputing."

The series, which will be free and open to

the public, will feature Benjamin Rosen,

Steven P. Jobs, Gordon E. Moore, and

of these talks on March 15 at 8:00 pm in

Beckman Auditorium. He is co-founder of

the Sevin Rosen Management Company, a

venture capital firm with major investments

in the microcomputer industry. He is chair-

man of the Compaq Computer Corporation

and a director of Borland International, Bes-

tinfo, and Ouarterdeck Office Systems. He

is the former founding director of the Lo-

tus Development Corporation. A Caltech

alumnus (BS 1954, EE), Rosen also earned

degrees from Stanford (MS, 1955) and Columbia (MBA, 1961). For ten years, be-

ginning in 1973, Rosen wrote the Rosen

Electronics Letter, which analyzed trends in

personal computers and semiconductors. In-

stitutional Investor named him Top Elec-

tronics Analyst for six consecutive years in

the 1960s and 1970s. Rosen has been a

member of the Caltech Board of Trustees

quired. To obtain free tickets, contact the

Caltech Ticket Office: in person, at 332 S.

Michigan Ave.; by mail, Ticket Office, Caltech (332-92), Pasadena, CA 91125;

Admission is free, but tickets are re-

Benjamin M. Rosen will give the first

Microcomputing Talks

door of Room 40A of the SAC.

Tuesday prior to publication.

Surf Club's Up!

SURF's Up!!

Philippe Kahn.

what goes on

Horseback Riding Sign up at The Y for horseback riding tomorrow, March 5. Leaving at 7:15 am

sharp, because those horses get up awful

No, it's not a new rock group, it's the

subject of a talk in the Judy Library on Fri-

day, March 11 at noon. John Heilbron of

U.C. Berkeley, Professor of History and

Director of the Office for History of Science

and Technology, will give a lunchtime talk

entitled "Dilemmas of an Upright Man: Max

Planck, the Nazis and German Physics.'

There's a meeting Monday at 4:30 in the

chalk room by the gym for all you wild and

crazy women who'd like to play, or even

learn to play water polo, so come on down!

If you can't make, stop by the pool some-

Haus Ohne Huter (1975) will be shown

on March 7th in Baxter Lecture Hall at 7:30

pm as part of the German Film Series. Based on the novel by Heinrich Boll, the film takes

place in a catholic town in the Rhineland in

the nineteen fifties. The fatherless children

of two very different families become

friends and make their first life experiences under contrasting auspices, both moral and

material. Producer: Rainer Wolffhardt. Star-

ring: Johannes Wolffhardt, Werner Lier,

Renate Schroeter, Gunther Malzacher and

Everybody involved in helping the or-phanage, "El Rancho Milagro" during spring

break, please attend the meeting on Satur-

day, March 5 at 1:00 pm in Clubroom A

(Rm. 13, S.A.C.). We will be discussing

the plans for the entire trip! Questions? Con-tact Geoff Pilling, 1-59, 578-9346.

Renaissance Dance Workshop

ciety will be having a dance workshop in

Winnett Lounge on Sunday, March 6 from

1-4 pm. Many basic dances will be covered,

and one or two more complicated ones. The

workshop will be followed by a CMRS

meeting and potluck meal-bring food if you

The next Caltech-MIT Enterprise Forum

will be held on Tuesday, March 15th.

American Rocket Company of Camarillo

will present its business plan to a panel of

financial, marketing and technical experts.

1985, designs and is testing a four-stage ex-

pendable booster, of industrial quality, that will deliver up to 3000 pounds of low-cost

satellites to low Earth-orbit. They hope to

operate the delivery service as well as

produce the boosters. American Rocket

builds its own hybrid engines from scratch

and buys the electronics. President George

A. Koopman will ask the Forum's advice

about financing to keep the company alive during the time it takes for the market to

clarify and the vehicle to be ready for oper-

The Forum is at 7:00 pm in Baxter Hall.

American Rocket Company, founded in

Commercial Rockets

The Caltech Medieval/Renaissance So-

Karion Baal. All are invited.

The Orphanage Project

Bring your lunch and listen.

Women's Water Polo

time and talk to Clint Dodd.

German Film

Max Planck and the Nazis

early.

Second All-Mozart Concert

Music for piano, winds, mixed and men's chorus and orchestra will highlight an all-Mozart concert to be presented at 8 pm on Saturday, March 12 in Dabney Hall Lounge

Similar in format to last year's SRO performance, the program will include the Caltech Chamber Singers and Men's Glee Club, student vocal soloists Dean Elzinga, John Daly and Doug Roberts, a wind octet, and Canadian concert pianist Wendy Caldwell.

Works to be presented include Regina Coeli and Ave Verum Corpus for mixed chorus and orchestra, Laute verkünde uns're Freude for men's chorus tenor solo and orchestra, Serenade in E flat, K. 375 for wind octet, two arias from Don Giovanni, and the concert will conclude with piano concerto

#21 in C, k. 467. Of special interest is Laut verkünde uns're Freude, Mozart's seldom performed penultimate work, written three weeks before his death, for the dedication of a new Masonic Temple. With text by Schikaneder it is much in the vein of *The Magic Flute* and with its spirit of praise and jubilation gives no hint of the Requiem which was to occupy his final days.

The concert will be conducted by Dr. Donald Caldwell and will be presented without charge. After last year's overflow attendance, early seating is recommended. Second Term Film Series

In conjunction with H-131: History Through Film, Professor Robert Rosenstone will be screening a series of excellent feature-length films at 7:30 pm on Wednesday evenings in Baxter Lecture Hall. These screenings are open to members of the Caltech community. There is no admission charge. The film for March 9 will be San Soleil (France-USA-1983), directed byChris Marker.

Backpack In Zion Park

The Caltech Y is sponsoring a spring backpack into the canyons of the Southwest. This year, we'll be exploring the backcounty of Zion National Park. (We're reserving spots for Grand Canyon for spring break of 1989.) The hike is scheduled to leave EAR-LY morning on Friday, Mar. 18 and return LATE on Wednesday, Mar. 24. Your cost of \$40 includes transportation, food, and equipment from the Y (if you NEED it). This should be a GREAT new tradition, so sign up SOON at the Y-spaces are limited. Deadline for signups is Friday, March 11 at 5:00 pm. See y'all on the trail!

S.P.E.C.T.R.E. of Blake's 7

S.P.E.C.T.R.E., the Caltech Science Fiction Club, will meet next Wednesday, March 9, 1988, at 7:30 pm in Clubroom B (Rm. 15, S.A.C.). The movie will be the 3rd and 4th episodes of the British TV series, Blake's 7. For more information, bother Mark Looper at 304-0006.

Noontime Briefing

The Caltech Management Association presents a Noontime Briefing by JPL Management. Peter T. Lyman, Deputy Director of JPL, will discuss "Visions for the Future-A Participative Discussion" at noon on Wednesday, March 9, at the 167 Conference Room at JPL. The Noontime Briefings are an informal series of talks bringing together JPL management and staff to share information and communicate the history and culture of JPL. All employees are welcome.

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Seniors!! Take your senior photos soon. The final deadline for turning in the photos is April 4. Please include your name, hometown and option.

Internships in New York

The Student Internship Service of Kings Park, New York, offers listings of summer internships in various majors in New York City and on Long Island. Many offer salaries or stipends. Write for information: Student Internship Service, P.O. Box 1053, Kings Park, New York 11754.

Money For Montebellans

The Montebello Town Center has a scholarship program to assist students seeking higher education. Scholarship monies will be awarded to undergraduate and graduate students living within an eight-mile radius of the center. The student must submit a completed application form to the Iontebello Town Center management office by March 31, 1988. For further information regarding the scholarship and the eligible cities, please contact the Financial Aid Office, 515 S. Wilson.

SSSSP Tutors Needed

We will be needing tutors for our Summer Secondary School Science Program that begins June 27th through August 11th, 1988, from 9:00 am to 3:30 pm Monday through Thursday. We will need 4 tutors each for: Molecular Biology, Chemistry, Physics/Trig, and Physics/Calculus. Our first preference is to have seniors, then juniors, and last sophomores. Applicants may call x6207 or 6208, or come by Lee Browne's office at 515 S. Wilson Ave.

We are also looking for counselors for the dormitories; applicants may sign up for the counselor positions at the Master of Student Housing Office or with Lee Browne.

Summer Research At MIT

MIT's Materials Processing Center is offering a summer research opportunity. State-of-the-art research in: electronic materials; advanced ceramics; high T. superconductors; polymers; metals; metal, polymer, and ceramic matrix composites; space-based processing; rapid solidification; electroprocessing; welding and joining; environmental degradation of materials; mathematical modeling; economic systems analysis. Application deadline: March 7, 1988. Announcement of awards: March 16.

For information and application materials, contact: Mrs. Frances Page, Room 12-007, MIT, Cambridge, MA 02139. (617)

Big Money!

The General Motors Corporation is offering one scholarship to a sophomore in Electrical Engineering. The GM Scholarship includes full tuition, a book allowance and a paid summer internship. The award is renewable for the senior year. Financial need is not a consideration in the selection process

Applications and additional information are available in the Financial Aid Office, 515 S. Wilson Ave. Deadline is March 21, 1988. Apply now.

Political Internship

The Beckman Internship will be available for the summer of 1988. The internship, \$1,000 to graduate students and undergraduate seniors majoring in economics. The deadline for entries is March 14, 1988. For supported by friends of Dr. Arnold O. Beckfurther information please contact the Finan-cial Aid Office, 515 S. Wilson. man, will pay a stipend of \$2,500. It allows a selected Intern to spend the summer working in the office of a politician and to see from the inside the process of government. Marinaid? Marin Educational Foundation is offer-The Intern is expected to make arrangements ing grants to Marin County residents who with the appropriate political persons. It is will be pursuing an undergraduate degree open to any Techer who intends to be a on at least a half-time basis as of Septem-Caltech undergraduate next year. If interestber, 1988. The deadline to apply is April ed, submit a brief proposal describing where 1 1988 For further informat use the stipend tact the Financial Aid Office, 515 S. Wilson. Deans' Office, 102 Parsons-Gates, by Monday, April 11th. THE CALIFORNIA TECH Caltech 25-58 SAC Pasadena, California 91125

Writing Contest

The Caddo National Writer's Center announces its 7th annual Spring Literary Competition in Poetry, Short Fiction and Non-Fiction.

For beginning and experienced writers, this contest has cash prizes in each category, and all entrants will receive a critique of their material, as well as a choice of one of the available contest directories that lists other writing contests (directories available are for Poetry, Fiction & Drama, and Non-Fiction).

The deadline for entries is March 31, 1988. The rules are: Poetry-anything except haiku or senryu, any verse form, entry fee of \$20 for four poems; Short fiction, up to 4500 words per piece, entry fee of \$20 for two entries; Non-fiction, any subject, 3000 word maximum, entry fee of \$20 for two entries. 24 cash prizes in each category, ranging from \$100 to \$2000. To have your work returned and critiqued, include a selfaddressed, stamped envelope with the words "For Return of Manuscript" on the envelope.

All entries should be typed or printed clearly. Carbon copies, photostats and computer print-outs are acceptable (if legible). Your name may be included on the manuscript or you may use a cover sheet or card.

Mail entries to: Caddo National Writer's Center (CNWC), Contest Committee, P.O. Box 37679, Shreveport, LA 71133-7679.

Studenski Travel Award

Applications are now being received for the 1988 Paul Studenski Memorial Travel Award. The Studenski Award of \$2000 is given each spring to an undergraduate at Caltech who will use the money to travel, to reflect on the future course of his or her life.

The objective is to provide the student time and opportunity to weigh academic and career options. The roaming and ruminating ought to involve a concern to combine one's scientific strengths with humanity's needs

The Caltech Y's Board of Directors chooses the winner on the basis of an essay and interview. The application essay, limited to two typewritten pages, should explain briefly how the student would use the travel money and how that travel would help the student make a better determination regarding future plans. The interview is used to elaborate the ideas which the selection committee deems most appropriate.

The only other requirement is that the student's grades be in reasonably good ord-er. Deadline for applications is Thursday, March 31 at 5 pm. Questions will be answered by Julie Bolster in the Y Office.

Interviews will take place the second week of April and the winner will be notified by April 15.

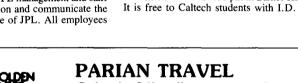
Macintosh Programming Jobs!!

This summer, Apple Computer will be providing several internships for Caltech students to work on science simulation software for elementary school students. Student interns will receive \$2000/month plus benefits, while working on campus as part of Project SEED, a Caltech/Pasadena Unified School District program for innovative science education. Call Susan at x6820 for more information.

Money For Economists

The National Society of the Colonial Dames of America is offering an award of

please see WHAT GOES ON, page 6



by phone, (818) 356–4652 or 1–(800) 423–8849. Note that tickets are valid only until 7:45 pm on the evening of the lecture. **CLASSIFIED ADS**

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MALE STUDENTS WANTED!

University students as sperm donors by California's largest sperm bank. Earn \$70-105/week. 213-553-3270 California Cryobank, Inc., 2080 Century Park East #306, Los Angeles.

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1983 SPORTSVAN, beige, well-used, reliable. Has over 50,000 miles. Tommy's chi-

li stains removable. Price \$2000 but is negotiable. Call 818-356-9208. Ask for Marty or leave message

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INSURANCE WAR! We'll beat anyone's prices or don't want your business. Sports cars, multiple tickets, good-driver discounts. Request "Caltech Plan." (818) 992-6966 or (213) 873-3303.

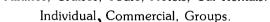
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Typing at low rates: Term Papers, Resumes, Manuscripts, Dissertations, Typesetting. Term paper \$1/Pg (dbl sp) if 10 pages or more. NLQ Printing. Call (818) 247-0183.

LOST AND FOUND-

GOLD CHARM, Chinese character - fu (luck/fortune). At Chinese New Year Partv at Winnett 2-21. Call Dave Jemison x6180 Lloyd 134. RATES \$2.50 for first 25 words;

... 10¢ for each additional word. Send written ad with payment to 25-58. No charge for on-campus lost & found.



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