



## Beckman Lab Dedication

[CNB] Sophisticated genetic engineering tools, new disease treatments, exotic plastics, and the ability to eavesdrop on body chemistry using magnetism are among the advances that will arise from research in the Arnold and Mabel Beckman Laboratory of Chemical Synthesis, to be dedicated today.

The dedication will include remarks by President Marvin L. Goldberger, chairman of the Division of Chemistry and Chemical Engineering Fred C. Anson, and Professor of Chemistry Peter Derivan. The ceremonies will include an unveiling of a plaque honoring the Beckmans, followed by tours of the facility.

Made possible by a \$6.5 million grant from the Arnold and Mabel Beckman Foundation, the laboratory will ultimately house six faculty in organic chemistry and their research groups, totalling

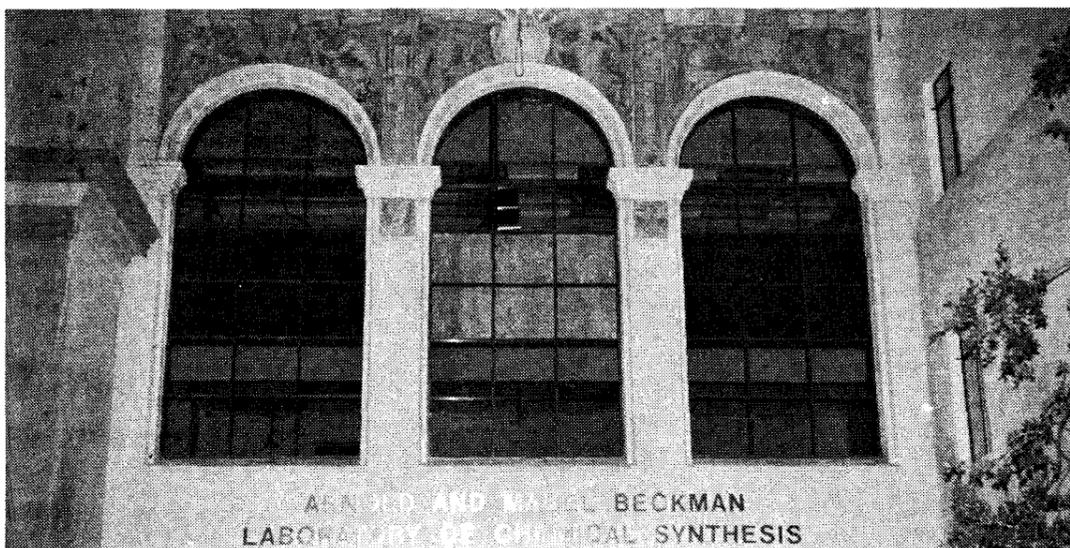
some 100 scientists. The first 16,000 square foot phase of the laboratory is now complete, and the entire facility, covering 46,100 square feet, will be finished within two years.

The Beckman Laboratory combines the shells of Crellin and Church chemical laboratories into one structure, with a redesigned interior tailored to research in synthetic organic chemistry. Besides research laboratories, the facility includes computer rooms, instrument rooms, and cold rooms.

The laboratory is distinguished architecturally by a set of bas-relief sculptures, known as the "Calder Arches", mounted on the facade depicting Greek figures representing Nature, Art, Imagination, Law, Energy, and Science. These sculptures were executed in a three-year period, 1908-1911, by sculptor Alexander Stirling Calder, father of Alexander Calder, creator

of the mobile. They were originally mounted on the late Throop Hall and were preserved when Throop was demolished due to damage from the 1971 earthquake.

Besides the Laboratory of Chemical Synthesis, the Beckmans have made possible two other major facilities at Caltech: Beckman Auditorium and the Mabel and Arnold Beckman Laboratories of Behavioral Biology. Dr. Beckman served as chairman of the Board of Trustees from 1964 to 1974, when he was elected chairman emeritus. In 1980, his friends endowed the Arnold O. Beckman Professorship of Chemistry at the Institute as "a continuing public tribute to his leadership." In 1985, Dr. Beckman received the Robert A. Millikan Medal for distinguished service to the Institute. He will also be delivering this year's commencement address.



The lovely Calder Arches, late of Throop Hall, now grace the new Beckman Laboratory of Chemical Synthesis.

## How to Succeed in Science? Learning How to Break the Rules

by Josh Kurutz

"Learning to Break the Rules: What Makes Engineers and Others Successful," was the title of the discussion held Tuesday night in 24 Beckman and led by Dr. Martin Krieger, Associate Professor of Planning at USC. This talk was second part of the leadership series of presentations sponsored by the Caltech Y.

Krieger focused on the commonalities of people who are considered successful in modern society. Some of the attributes he outlined as being the most useful included having talent, being able to cope with complex situations with no solutions, being capable of handling people as well as technique, being a white male, and "having a rich daddy." Lacking those qualities does not necessarily spell doom for those who don't have them, but they can help those who do, according to Krieger.

The speaker prescribed some recommendations to make one successful. He advised, "learn to break the rules... because no one will tell you how." "Take the right H&SS (humanities and social science) courses. Read good books and learn to write. Learn about politics. Choose a curriculum suited for ten years down the line. Find wise folks and rational inspiration. Go for deep and monumental (experiences and people) wherever they are."

"Universally," Krieger said, "The heroes are the people who go around the rules." He did not

elaborate on just what those rules were, but discussed examples of people who had broken them. He described them as "those who fall in between the niches," those who deviate from the normal. Their major characteristic is that they have all experienced major events that have changed their lives. There are ways to put oneself in situations that tend to foster these occurrences. Krieger explained that crisis moments could be set up in which the subject would be made to feel that he was going to die, even though he was not going to. Because of such personal disasters, their perception of the world and its events undergo radical changes.

People have to be forced out of their safe havens and encounter rich, new worlds in order to be successful, according to Krieger. "You should always be ahead of your capabilities or else you get bored." He emphasized that failure should not automatically be looked upon negatively. "You have to come out looking good," was the advice he gave to successfully recover from a failure.

Krieger made note of the fact that revisions need to be made in the current method of higher education practiced in the United States. He said that reports come out about every fifteen years recommending changes to solve the problems; most of the "improvements" involved the addition of various humanities requirements. He stressed that humanities requirements are not

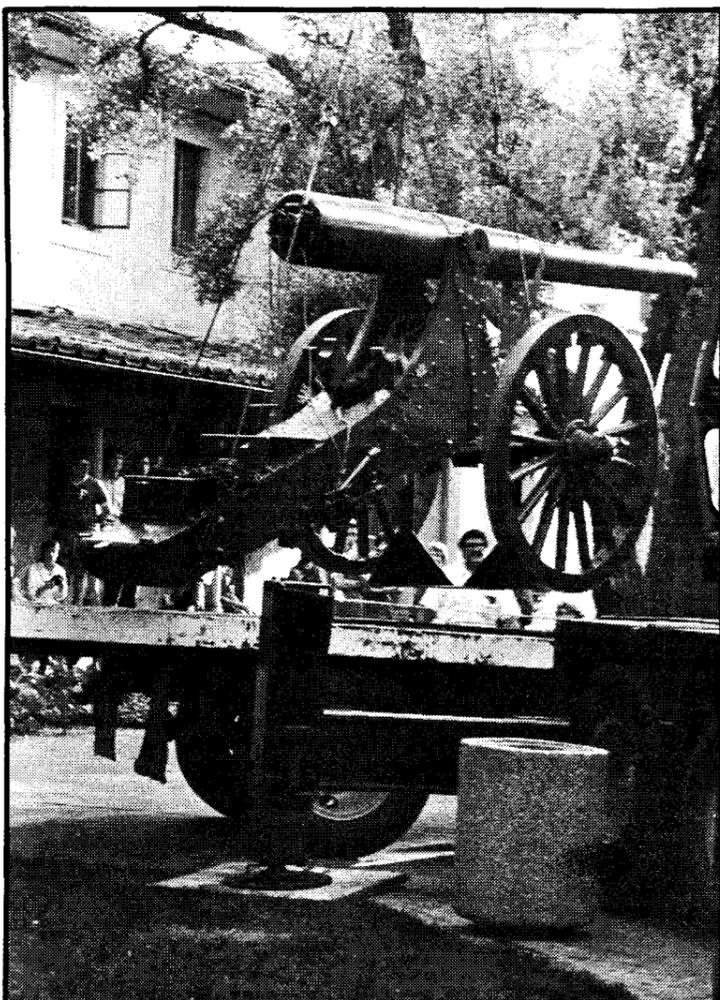
the answer to create successful people.

Krieger recommended that an approach of integrated professional education should be taken. This would entail that courses would not be taught by departments. This would theoretically free the students whose interests don't lie in some departments to not learn as much about subjects taught under them. Krieger expressed hope that colleges would say to themselves, "Maybe the students don't have to learn this much."

HaSS courses, "hassles of professional education" as Krieger called them, "may change a person significantly, but probably won't." He said of them, "They're not necessarily the answer... they're more of a problem." He felt that humanities professors in professional schools such as Caltech place priority on their own careers over the needs of their students. The popularity of a professor is not necessarily determined by his relation with the students, saying, "You're a star (on campus) because you're a star somewhere else."

Most of Krieger's presentation consisted of stories that exemplified the points he tried to make. He made use of people from the military, universities, science, industry, philosophy, and literature. He compared the road to success experienced by his other examples to that glorified by Horatio Alger, an American writer

continued on page 2



The Fleming cannon returns! Early Thursday, students from Harvey Mudd loaded a balloon-bedecked cannon and proceeded to return the cannon to its rightful place in the cosmos, in front of Fleming house. A band of Flemish hijacked the Mudd convoy, sending the Mudders scurrying back to their campus. MOSH Chris Brennen rectified the situation and arranged for the return that was witnessed yesterday.

Photo by Sandy Lee

## A New Kid in Town Master's Office Goes to Berkley

by Diana Foss

There is a new face in the Master's Office these days. Susan Berkley, late of Mechanical Engineering, has replaced Carmela Kempton as Assistant to the Master of Student Houses. She decided to try for the job because she has long felt that working with undergraduate students was the high point of her old job. "Undergraduates are really the heart of Caltech," she says, and she is excited at the prospect of getting to know students. She says that she wants to play an active role in students' lives, both personally, and by getting involved with ASCIT and the IHC. "The Master's Office

can really be very important in the the lives of Caltech undergraduates," she says. "I especially want to do more for the women undergraduates, to address the unique problems they face here."

She is also a firm supporter of the party policy set forth by her predecessor. Carmela's exotic parties, the stuff of legends, are a terrific way for students to let off steam, according to Susan. "Undergraduates need to get away from student life sometime."

Although some students might have met her at Tuesday's Master's Tea, those who haven't should drop by the office to get acquainted.



The lovely Susan Berkley, late of Mechanical Engineering, now graces the MOSH's office.

Photo by Sandy Lee

## LETTERS

## String Fixes

To the Editors:

I am sorry that not everyone who wanted to attend the Watson Lecture on Superstrings was able to get in: it seems that there were several hundred people outside the auditorium. Perhaps your correspondent Josh Kurutz was one of them.

The following is a revised copy of his article published in *The California Tech* on April 18, containing changes that would bring the article closer to describing the actual state of affairs.

Yours sincerely,

—Murray Gell-Mann

[Changes in italics]

First two paragraphs stand.

Part of the significance and versatility of the theory is that an infinite number of particles *would* be made using superstrings, though merely hundreds *would be accessible to experiment because of energy restrictions*. That property could calm those who get distress-

ed when new particles are discovered.

One of the great hopes for the theory is that it will provide a "single theory to describe all elementary particles and forces in a single elegant equation," according to Gell-Mann. *Apart from superstring theory*, the only forces to have been related to one another, *even conjecturally*, are the electromagnetic force, the weak force, and the strong force, leaving the gravitational force *out in the cold*.

Next paragraph is OK...

The theory of superstrings was first thought of about 15 years ago by John Schwarz, who came to Caltech in 1972 to research it. He and Joël Scherk, who visited Caltech in 1974, proposed that the theory could be applied universally to solve everything. Previously it had been thought of as *an alternative to quantum chromodynamics (QCD)*.

QCD describes the forces encountered between particles according to their "color." These forces are found between quarks, which have six "flavors;" up, down,

strange, charmed, truth, and beauty; and three "colors," "red," "blue," and "green." Quarks assemble in different combinations to form different *nuclear* particles, like protons and neutrons.

Next paragraph is OK...

The superstring theory also predicts a broken symmetry between fermions, which obey the Pauli exclusion principle, and bosons, which "love to be in the same state," according to Gell-Mann. This situation is called a "supersymmetry," hence the "super-" part of the strings.

In 1984, it was found that only two systems of *additional* symmetries could work within the framework of the theory. It turned out that each system had 496 (31x32/2) symmetries; this, according to Gell-Mann may be the reason that hundreds of low-mass elementary particles can exist, rather than just a few.

Next paragraph is OK...

Delete the final paragraph.

Mr. Kurutz replies: *I would like to affirm that the corrections submitted by Dr. Gell-Mann are rather trivial alterations to an otherwise correct article. Admittedly, the report on the lecture could have been more accurate, but that minor errors were made should by no means imply that I may as well have stayed outside the auditorium. Dr. Gell-Mann, I was warned, was a very difficult lecturer to understand; this turned out to be true. I brought to the lecture a tape recorder, a device which would have made Dr. Gell-Mann's letter unnecessary. This useful tool was confiscated at the door by one of the ushers, who said that it was against Beckman Auditorium policy to record Watson lectures. Nevertheless, I believe I captured the important parts of Superstring theory and related them to the readers of the Tech as presented.*

## Appalling Food

To the Editors:

The quality of the food service operation at Chandler is appalling. Many times I have had to search through the forks to find one that was clean. The trays are almost always wet, and, not infrequently, dirty.

The food is nothing to write home about. The pastries are not bad, but would be more appetizing if plates were provided; they lose some of their appeal when eaten from a napkin on a wet tray.

I would expect that problems of this nature could be solved without the necessity of letters to *the Tech*. I hope that Caltech finds a better food service contractor, as not all of us on Campus have the option of eating at the Athenaeum.

—Casey Charles  
Staff

## A Puzzling Question:

Remember those Collegiate Crosswords we had in the *Tech* earlier this school year? Those were free samples, but we have the option to run more. Does anyone want to see more? Let us know.

**Wanted:** Circulation manager for the *California Tech*. Duties include Friday morning pickup and on-campus distribution. Excellent pay and benefits.

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## The Caltech Y Fly-by

Friday... April 25

**Noon Concert with Belfires.** At noon on the Quad. Bring a friend and a lunch.

**L. A. Philharmonic.** Mozart's *Violin Concerto in A*, Beethoven's *Symphony No. 9*. Music Center, 8 PM. Sign ups close Monday, 4/21.

**Night, Mother**—play at the Mark Taper Forum, 8 PM. Rides leave Winnett at 7:15 pm.

**Signup For Cats Close at 5:00 pm.** Pay only \$17 for \$35 tickets. Going quickly....

Saturday... April 26

**Pasadena Philharmonic** 8:00 pm. Pasadena Auditorium. A program of Beethoven, Dvorak and Corigliani.

Tuesday... April 29

**Cats.** Rides leave Winnett at 7-ish. Ask at Y to be sure. Winners posted on Friday, April 25 at 5:30 pm.

Wednesday... April 30

**Cats.** Rides leave Winnett at 7-ish. Ask at Y to be sure.

Friday... May 2

**Noon Concert: Caltech Thursday Jazz Band.**

**Hawaii Drawing.** 5-7 pm on the Quad, as part of a benefit raffle for the Children's Center.

**Renaissance Faire!** The Y has 100 tickets at half price (\$6.50 each). Good any weekend until and including Memorial Day.

Any questions, comments, or ideas?  
Come see us in the Y office or call x6163

## Rules

from page 1

of the 1880's. In Alger's works, the characters, "got successful by pluck, luck, and talent - not by school."

Some ideological gems taken from Krieger's presentation included: "I'm not clear a third of the time, but that doesn't mean I'm a bad teacher." "Looking for the best solution is a waste of time. Looking for the better is more useful." "Professors aren't beyond money—you don't even have to give them a lot of money." "Having bad teachers prepares you for real life. That example is too good." "Don't show that you work."

Dr. Krieger earned his PhD. in experimental physics from Columbia and has taught at various professional schools "to give culture or ideas to the students."

The next Caltech-Y-sponsored lecture on leadership deals art and science working to foster creativity. The speaker will be Dr. Robert Bernstein and the event will be held on May 22.

## THE CALIFORNIA TECH

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## ENTERTAINMENT

## A Buncha New Records

by Peter Alfke  
**The Rolling Stones**  
*Dirty Work*  
 (Rolling Stones Records)  
**Laurie Anderson**  
*Home of the Brave*  
 (Warner Bros.)  
**The Violent Femmes**  
*The Blind Leading the Naked*  
 (Slash)

It was "Harlem Shuffle" emerging from my radio that induced me to buy *Dirty Work*. Cover though it is, "Harlem Shuffle" can stand up there with the Stones' best work: not that it is among their best, but it's not out of place in that company. The gang lock into a mighty R&B groove, play tightly, Mick puts in some nice touches to the singing...all adding up to the best Stones song since, oh, "Shattered" or so. But what of the rest of the album?

"One Hit to the Body", the first cut, starts promisingly enough, with some acoustic guitar straight out of *Beggar's Banquet*, leading into a good electric riff. Once it gets going, however, it loses some of that excitement, which might be said for the album as a whole.

It took me a few listenings to get to like "One Hit", but those listenings made the mediocrity of most of the other songs stand out

all the more. Oh, "Harlem Shuffle" is still fantastic, and "Had It With You" is another good minor Stones song along the lines of a bluesier "Little T&A", but nothing else happens on the album.

The playing is good, but the songwriting seems strictly by-the-book, and nothing seems to happen on the other seven songs. My brain didn't find them worth remembering, and my feet didn't even consider dancing to them. There's a nice bassline to "Winning Ugly", and producer Steve Lillywhite tosses in some 80's keyboards, but nothing happens. Midway through "Hold Back" a real Jimmy Page guitar solo rises out of the morass, but not very far ("Houses of the Holy" it ain't), and nothing further happens.

There are three more rockers on which nothing happens, and a reggae cover on which nothing happens, and finally a ballad on which nothing happens. Not a very happenin' album; get the single of "Harlem Shuffle" and save four bucks.

Nowadays, one expects the Stones to stay in a rut, but Laurie Anderson? Yes, her new album, *Home of the Brave*, is out, and it's alleged to be the soundtrack to a forthcoming film. Her music

demands more careful listening than I've yet been able to give it, but for large stretches of the album I get the impression that I've been there before.

Many of the guest musicians from *Mister Heartbreak* appear on the new album: Adrian Belew, Nile Rodgers, Dolette McDonald, even William S. Burroughs (if only as a vocal sample). When lots of them get together, as on "Talk Normal" or "Language is a Virus", one gets much the same effect as from *Mister Heartbreak*.

These aren't bad songs; they have some really nice touches (Morse-code-like synths on "Smoke Rings", Adrian Belew's great twisted guitar solo on "Talk Normal"), but some things just don't work. The gospel backing vocals, in particular, are way out of place. Overall the sound seems too cluttered and, in a Talking Heads, art-funk sort of way, trendy.

The minimalism of *Big Science* seems better suited to Laurie Anderson's intelligently absurd lyrics, and the new songs in that style ("Late Show", "Radar" and especially "White Lily") bear out this premise.

Speaking of lyrics, they are quite up to par. Try these, from "Talk Normal":

*I don't know about your dreams  
 But mine are sort of hackneyed.  
 Same thing, night after night.  
 Just...repetitive.*

*And the color is really bad—  
 And the themes are just  
 infantile.*

*And you always get what you  
 want—*

*And that's just not the way life  
 is.*

... or from "White Lily":

*What Fassbinder is it? The  
 one-armed*

*Man walks into a flower shop  
 and says:*

*What flower expresses*

*Days go by*

*And they just keep going by  
 endlessly*

*... Endlessly pulling you*

*Into the future.*

*And the florist says:*

*White Lily.*

I was a bit disappointed by this album, but I may be being too hard

on it. Laurie Anderson's roots are in art, so perhaps one expects more innovation than this album exhibits, but it's by no means bad, quite good in spots actually, and the lyrics are wonderful. Recommended, with reservations, to all Laurie Anderson fans.

The Violent Femmes burst out in 1983 with a debut album of punk energy, mostly acoustic instrumentation, and tongue-in-cheek teen-angst lyrics; a unique sound and fun as hell to play loud. The second album revealed Femmes singer Gordon Gano as a long-time Christian, but certainly no Amy Grant. Whereas on the first album he sang

*I know it's got something  
 to do with luck—*

*Why can't I get just one fuck?  
 on the new third album, *The Blind  
 Leading the Naked*, he proclaims:*

*Got my faith baby*

continued on page 6

## Hardly Legendary

by Nick Smith

*Legend*

Directed by Ridley Scott

How do you take a visually impressive movie that's about a classic confrontation between good and evil, and turn it into a so-so movie? Well, first off, you do a lousy job of casting the main characters. Then you forget to *direct* your main characters, leaving their limited acting skills to carry the show. Then you wait until the whole thing's filmed to decide what you wanted it to be in the first place, spending several extra months on re-editing and re-scoring the whole thing. Release it at an odd time of year to avoid competition from better movies and *voilà!* You have *Legend*.

Actually, *Legend* is not a terrible movie. It is, however, a very disappointing one. Tom Cruise is not a bad young actor, but he seems to need a director who will tell him what to do. Tim Curry is a very good actor, and his performance is the only really outstanding one in the film. The female lead (I've forgotten her name, and none of the ads seem to mention it—let's call her GP for Generic Princess) is not a great actress, and I would guess that she was picked for her ability to be a blank slate, visually, for the makeup and clothing she wears to be the dominating features in several key scenes.

Tangerine Dream did a reasonable job on the second score of the film (the first one is available on record at local shops—I have not listened to it, however).

The visual effects in *Legend* are very good, as is the makeup and

model work. There are a lot of non-human creatures, from goblins to unicorns (there's even a dancing dress—not a dress to dance in, but one that dances by itself), and they look good.

The basic plot is that Darkness (himself, the big D—you don't get any bigger and meaner) wants to rule Everything, and to do so, he must prevent there ever being a daytime again. Quite an ambitious plan, but, trust me, he has a way. Oh yes, he also wants to rule the universe with GP at his side. This leads to one of the better scenes, which might easily be subtitled "Dark Generic Princess" (X-Men fans take note.) Tim Curry plays Darkness, and if anyone wants to make a filmed version of any classic literature featuring Satan as a major character, Tim Curry would be a suitable choice. The man radiates *evil* and *meanness*, a difficult thing to do while spending the whole film in heavy makeup and elaborate appliances.

Opposing Darkness are Cruise as Jack the Forest Philid (kind of like Peter Pan without the ability to fly), and a sweet, pure princess. Oh, yes, there are a few elves and faery folk to face off against the goblins. Perhaps unfortunately, both goblins and faery folk are half-serious, half-comic relief. It's hard to laugh at beings that are in-to rotten meat, bad doggerel, and killing people. It's just as hard to cheer for heroic little people who do pratfalls. Maybe I was just in a bad mood by then, put there by the performances of Cruise and GP. Cruise is so far out of place that it's ludicrous, and that's too bad, because his other film work has been good. I had never knowingly seen the girl who played the Princess, and never care to again. As an actress, she gets my early nomination for the Tanya Roberts award for 1986. (For those of you who don't remember, Tanya Roberts was the woman who couldn't act well enough to stay on *Charlie's Angels*. She has since acted (badly) in a host of failures.)

Overall, I find it hard to recommend *Legend*, except for those of you who want to see *every* fantasy film that gets released, or for those really into the technical categories of the Oscars. *Legend* does have a lot of quality in the visual areas, from cinematography to makeup. For the rest of you, I suggest waiting a few weeks for the new Lucasfilms movie, *Labyrinth*. David Bowie will be the villain in that one, as well as having written some of the music, and the preview material that I've seen looks very good.

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# The Inside World

# Genetics!

**Blacker:** Well, the Southern California drought has hit Blacker early this year with 2 dry spells already this week. But luckily, there was a tropical shower prior to the dry spells. See Greg Harry for details. Well luckily, the weather was lush when the pre-frosh arrived. Yes, they came, they saw, and they took notes in Phys 1c. One notable exception in pre-froshes was this one large dude sporting a pair of custom made Vuarnet's and a plastering hairstyle. He was so popular that he made a guest appearance at Rich Letterman's then got escorted home. Even if you didn't meet any pre-frosh, you could still get what you needed at the espionage dance. Clues were well planned and the pie was good. But if you didn't go, a green bicycle and an extra hundred green ones wasn't bad either.

In international affairs, after a terrorist attack on our Swedish ambassador, Mad Dog Jason and his dyslexic diswashers cream-puff assassinated our beloved president. After a quick analysis of the situation, it was decided that Blacker would not tolerate such terrorism. This resulted in a pack of Moles crossing the line of death and hurling long-range foil-wrapped bombs.

Remember what your mother told you about drugs? Well, she was right. Why do I bring this up? Because I had the sad position of watching Alex succumb to the pressures of taking erythromycin. You can now find him hallucinating and searching for Linda P. who supposedly can be found at BC. Well, pray for sun and surf and don't be like Alex—get a clue...

D...D...D...Don't do it,  
B...B...Baby  
—Aaahoo! (Bless you!)

**Dabney:** The heat of a thousand suns was quite evident as Top Scientists continued with their efforts to bring an end to Dabney House, but once again met with dismal failure. Military and space agency officials have not revealed the nature of the payload involved in the fireball that ripped through Dabney Courtyard and took the lives of at least four bricks, but high concentrations of aluminum have been found throughout the Courtyard.

In other news, the Manned Bicycle Program was dealt another series of major blows as equipment failures and crew mutinies resulted in truncations or postponements of the past three missions. Foremost among the problems was the recent discovery that certain structural elements of the Helmet Illumination Units (HIU's) are underrated for the high-temperature halogen Primary Photoconverter (PPC).

Although project engineers suspected from the start that the halogen-equipped HIU's would fail under actual flight conditions, group managers have for weeks brushed aside questions about the safety of the missions. Earlier this week, however, the fears were proven founded when a tragic melt-through occurred. Engineers have spent a frenzied week correcting the problem with retrofits to the obsolete but stable tungsten-based PPC's, for which, say project specialists, the HIU's were designed in the first place. The HIU disaster, along with other difficulties, has effectively increased the turn-around time to a full three days, bringing back charges that the bicycle is not competitive with conventional forms of transportation.

—“J”

**Fleming:** 1986—the year that Caltech was reassured that there is indeed good reason to ignore Harvey Mudd. Hopefully the cannon is back before this reaches print and we can just chalk another one up to experience. The next time Mudd wants to play, they had better check with their mothers first.

Well, there's no more suspense about Discobolus: Fleming has it for the third year in a row. So why not play Lloyd in Kickball? Let's see “60 red shirts lining the field” this Sunday.

It looks like Interhouse Basketball is ours also, especially if we can continue to play like we did against Lloyd. Tennis is coming up soon, so get out there and practice up. And watch out for Animal Meal 1986.

This Saturday it's softball with the Alums, followed by casino night in the Lounge, with the Savage Toad tending bar for old time's sake. Until then, let's hope that we're not all drafted to go ride camels

and shoot morons in Libya.

—Al Fansome

**Lloyd:** R. Francis' Law of Conservation of Superfluous Items: Items of a demonstrably superfluous nature tend to spontaneously degenerate, at a frequency directly related to the degree of disorscurity and temptation.

Why does Jean think Min has to jump off the window? Don't forget to ask her about her secret recipe for cheesecake with vinegar.

Riddle: Who can pick up a girl at midnight in the wilderness of Mt. Wilson before one can say, “Is that fuzball all there is to it? I want my money back!” Answer next week.

Seniors sucked up the whole Millikan, and juniors played horse on the Oaktree, but where were all the sophomores? Well, they are only SOPHOMORES. The beach trip is supposed to be this Saturday again. Don't count on it, however. Ditch Day is tomorrow, as you are very well informed. Are seniors wimps? I don't think so, man. And a special hello to the girl in the silver convertible.

—Max

**Ricketts:** Big things underfoot this week. Sam's giant man-eating boa constrictor was last seen traveling north on Elm. The snake was overpowered and rendered harmless by Marlon Perkins and his trusty assistant Jim. Speaking of snakes, Greg's “water weenie” is wreaking havoc in Snatch. Johnson's shoes got the best of him when they wandered into Millikan Pond.

Contrary to plan, no orgy this week. However, Tylis does wish to welcome his new housemates [who forgot to turn in an Inside World this week—Eds.J. The orgy will be rescheduled. At Capra, people discovered the many benefits of niacin. Peter-Pete claims it made his nose, ears and butt bright red. TWBM is back to Sunday with delicious pitzo.

Be nice to your frosh by contributing to the Help the Frosh Fund. Send your tax deductible check or money order c/o Ricketts Hovse sophomores.

Some interesting phrases: Tub-o-lard, piece-o-pitzo, yuck-o-matic, once was band, best in land, everybody said, my they're grand, how they laughed, tuba went by, oom-pa-pa, great big sigh.

Britta is dead!!!

—Saxy

**Ruddock:** Greetings from the Budd, where the men are frosh, the women are in chemlab and the seniors are wimps. For those who missed it, lost it, or have forgotten all about it, the Drinkoff was Saturday. The final (very suspicious) figures were 124 oz. seniors, 115 oz. everyone else. Next year, though, all the restrooms get the “La Plastique” treatment.

Late Night CS with Rich Letterman was definitely the class to be at Monday night. Prof. Letterman's special guests included Bob's Big Boy (courtesy of the Blacker frosh) and Craig & Derek the nerds (nice socks, Deke!). Way to go NLF and Co.! Congrats also to the Anti-Glom squad and the preferred method of dealing with pre-frosh.

Alley challenges are coming down to the last stretch with Alley 3 wasting on Alley 1 in Cookie Bake-Off; Alley 5 overcoming dizziness and lack of balance to beat Alley 2 in hopscotch twirling; and Alley 4 powering to the “We will challenge everyone in just about everything.” Alley standings are on the Board of Ex-Communication.

The Ruddock Basketball Team fell to Page in a close match on Tuesday, but will be back to standard winning mode by Friday in time to play the Flems. Be there or Joe Mama will make another Dinner Announcement. The Ping Pong tournament is still in full swing, so be sure to play off your games as soon as possible. Don't forget to tell Ed or Amadeus if you want to play tennis for the Budd.

The Social Team, after dazzling us with miniature golfing last week (“Great!” said Ahmed; “Erotic,” said Pi; “It sucked,” said the Goof (He didn't go)) is following up with a beach trip this Saturday to a mystery beach... (keep in mind that the C.T.C. Tanning Invitational is only a month away.) Life's a Beach & then you Burn!

—Butch

continued on page 6

# Bloom County by Berke Breathed

Sponsored by the Caltech Y

MR. DALLAS... YOUR FRIENDS ARE HERE TO SEE YOU.

MY FRIENDS! OH GOD, YES, MY FRIENDS! NOTHING BETTER TO LIFT THE SPIRITS OF A MAN IN PHYSICAL CRISIS THAN A SHOW OF LOYALTY BY HIS COMPADRES!

THEY'RE WATCHING PRO WRESTLING. YOU'RE IT?

GAD, EVERY PORE OF MY BODY IS IN PAIN... EVERYTHING MUST BE BROKEN... ONLY YOUR SPINE.

WHO ATTACKED ME? A MOB OF DRUG-CRAZED BIKERS? SEAN PENN.

JEEZ... HE MUST'VE BLASTED ME WITH A 12-GAUGE. HE POUNDED ON YOUR BACK.

WITH WHAT? A VOLKSWAGEN? HIS FOREHEAD.

OH DR. LEGRUNT... MR. DALLAS WOULD LIKE TO KNOW WHAT, IN RESTRICTED-TIONS A PERSON WITH A BROKEN BACK IS UNDER.

JOGGING IS OUT. MOTORCYCLING IS OUT. DANCING IS OUT. SWIM--

WHAT ABOUT... ER... YOU KNOW...

WHAT?

YOU KNOW...

THE BIG ONE IS OUT!

HOSPITAL RULES: NO SMOKING, NO DRINKING, NO BLEEPING, NO BANGING, NO BUMPING, NO BANGING, NO BUMPING, NO BANGING, NO BUMPING.

OH WE'RE JUST PILGRIMS, VISITING A GOOFUS... BRINGING A BIT OF CHEER, TO THE GOOFUS DOOFUS!!

IF YOU MEAN STEVE, HE'S ABOUT TO HAVE DELICATE SURGERY AND THERE'S A PRIEST IN WITH HIM.

WE'RE HERE TO SEE THE DOOFUS.

I THINK STEVE DESERVES MORE RESPECT THAN THAT, DON'T YOU?

PRIEST? THE DOOFUS IS AN ATHEIST.

LORD, DON'T LET THIS DOOFUS ATHEIST CROAK... RIGHT! RIGHT!

GOOD MORNING, MR. DALLAS. I'M DR. LEGRUNT, YOUR ORTHOPEDIC SURGEON. SO... A BROKEN SPINE, EH?

WELL! LET'S JUST DIG IN THERE... CLAMP THINGS BACK TOGETHER... SHORE UP THE FRAMEWORK AND LAY SOME STEEL!!

OKAY CREW... LET'S BREAK GROUND!!

WHY DOES THE BLUE-COLLAR ASPECT OF BONE SURGERY BOTHER ME?

NURSE... FETCH ME A 'BUD'.

MEN... WE'LL START EXCAVATING AT THE SIXTH VERTEBRAL... LET'S COUNT 'EM OFF...

DOC?

ONE... TWO... THREE...

DOC! I'M STILL AWAKE!!

WHO SAID THAT?

ME!! MY GOD... I CAN STILL FEEL EVERYTHING!

NURSE... FETCH THE PATIENT A 'BUD'.

## ENTERTAINMENT

## Shaw at Pasadena Playhouse

by Diana Foss

Ever since I have been at Caltech, and I daresay for quite a bit longer than that, the boards that closed off a small complex of buildings of El Molino, just south of Colorado, proclaimed the imminent arrival of a musical *Dames at Sea* to the Pasadena Playhouse, the complex in question. At first I really thought that such a production would take place, but after the better part of a year went by with no change, I gave up the hope of having live theatre in Pasadena.

But wait! This January, the *Tech* began receiving press material indicating that, indeed, the Pasadena Playhouse was really going to return to the land of the living. And the story of the Playhouse is richer than I ever would have guessed.

In 1925, Gilmor Brown founded the Playhouse, and for over thirty years, it was one of the foremost regional theatres in America. In 1937, the State Legislature declared it the official State Theatre of California, a title which it still holds. The Playhouse was the first American theatre to present all of Shakespeare's plays, the first to stage theatre-in-the-round, the first theatrical complex with a school, and put on *Nicholas Nickleby* years before the Royal Shakespeare Company. The sheer number of its students who went on to become well known in Hollywood is impressive for example: Harry Dean Stanton, William Holden, Raymond Burr, Joanne Worley, and Gene Hackman.

Yet, when Gilmor Brown died, the Playhouse couldn't carry on; he had trained no one to succeed him. It sank deeper and deeper until, in 1969, a bank foreclosed on a loan

and, in 1970, all of the contents of the Playhouse were sold at auction. It sat for five years until the City of Pasadena decided to buy it, but the City could find no one with enough money to restore it as a center for the performing arts. In 1978, the City received an Economic Development Administration grant which insured the basis for restoring the Playhouse, if matching funds could be found. In 1979, David Houk, a developer, matched the EDA grant and provided additional money to preserve the structures into the future.

Thus, last Saturday, the Pasadena Playhouse threw open its doors with the gala beginning of its new season. George Bernard Shaw's *Arms and the Man* is the first production, to be followed by Ketti Frings' *Look Homeward Angel*, based on the novel by Thomas Wolfe, and Stuart Parker's *Spokesong*.

Which brings us to the play itself. *Arms and the Man* is a very funny play, and the Playhouse production does it absolute justice. Shaw is attacking the upper class' romantic idealization of war and the everyday pettiness that comes with it. As the lovely Raina, Lisa Eichhorn shines, sighing breathlessly to her heroic fiance Sergius, but confessing to her mother how much he really bores her. Her mother, played by Carole Shelley, seems to want Raina to marry Sergius only because she herself cannot, and her own marriage to the loony Major Petroff, played by Rex Robbins, is held together by her facile lying and the fact that he has no idea what is ever going on.

When John Rubinstein's Sergius is funny, he is very funny indeed. However, *Arms and the Man* occasionally turns to the deep resentments harbored by the servant Louka, played by Jean Hackett, and the hopeless love she bears for Sergius. The transitions to this less sarcastic, more direct attack of Shaw's is too abrupt; it is hard to connect these two parts of the play together. Hackett's Louka is smoldering and sullen; it's easy to believe that Sergius is seduced by her charms, but when they are alone, or when Louka is railing against Nicola, the born servant played by Dylan Baker, it is a distinct shock when any of the other characters intrude.

The greatest and most pleasant surprise of the evening is Richard Thomas' Bluntschli, the Swiss chocolate-cream soldier. Bad memories of John Boy and *Battle Beyond the Stars* fade away as Bluntschli wins Raina's heart, without her real knowledge, and the hearts of those in the audience, with their enthusiastic assent.

The sets, as well as the newly revived theatre itself, are breathtaking; the only drawback are the two intermissions required to change scenes. *Arms and the Man* at the new Pasadena Playhouse is a joyful experience, a fine return of live theatre to Pasadena. The play is staged every day but Monday at 8:00PM. Ticket prices are \$17.00 and \$20.00 Tuesday, Wednesday, Thursday and Sunday, with a \$2.00 student discount on these days, and \$21.00 and \$25.00 Friday and Saturday. There are, unfortunately, no student rush tickets, but perhaps the Y could sponsor a trip... *Arms and the Man* runs until 11 May 1986.

## FEATURES

## 'It's the Law'

With Mike Roberts

On the Hill of Death...

I looked up the road. It went up, and up, and up. The full-body environment suit was quite intolerable, as was the relatively heavy bicycle Xi had forced me to ride. And yet, I felt a strange, hypnotic need to go on riding. The frighteningly strange scientist and his wacky dancing lab assistant were still chasing me up the Hill, music for the making of sludge playing in the background.

I continued up the Hill, every inch more painful than the last. I slowly lost feeling in my legs and arms; my vision started clouding over. I started to fade into reverie. Before I realized what was happening, I was deep inside a dream of sorts.

Soon I became aware that I was having a religious experience, and I saw the solutions to all the world's problems.

"Hello! I'm Pat Wayne, known worldwide as Mr. Millions! In the next four hours, I'm going to show you all how you can become fabulously rich with no money down, no experience with the complicated real-estate or stock markets, and, best, of all, no intelligence to speak of!

"Before we go on, I'd just like to announce that this is the first time anyone has ever appeared simultaneously on all four broadcast networks as well as HBO, Showtime, and Cinemax, plus most independent stations nationwide--during prime-time!"

*There seemed to be a tendency on my part to use exclamation points to excess, but that didn't faze me; it was a religious experience, after all.*

"Is everyone ready? Great! I've made millions of people rich, and I can make you rich, too. 'How?' you ask? It's easy! Just come to my seminars! I'll show you the secret. But first, listen to these people who have made millions by following my patented plan!"

*A series of testimonials was presented. In each clip, a couple extolled the wondrous cash and prizes they had made and how easy it was, while a famous television letter-turner showed stacks of actual cash and prizes (with prices provided in convenient on-screen captions). In each case, the people involved were obviously chosen to prove anyone could make money with this simple and patented method.*

"In a moment, I'll tell you all about my money-massing plan. But first, let's take a commercial break."

*There was a long advertisement, about three minutes long, for the seminars which were the subject of this program. It was a novel*

*idea, I thought, to advertise during your advertising. It must really throw off the viewer, resulting in vast untapped tracts of cash.*

"For those of you not familiar with my millionaire-making method, let me describe it. Most of you are tired of those phony real-estate plans which can only work for a lucky few. My method, though, is entirely different. You don't just buy property; you buy the wonder-property of the future! You buy

## Mini-Malls!

Yes, Mini-Malls will make you a millionaire, just as surely as talking about how mini-malls will make you a millionaire has made me a millionaire!"

*The picture became fuzzy. Suddenly, my lecture about my seminars about my plan was replaced with a President/actor-singer from decades ago.*

"Good evening. As all of you are painfully aware, the mini-mall problem has grown to terrifying proportions. City Councils and State Legislatures alike are powerless to stem the growing plague of small neighborhood malls. Thousands of mini-malls are now on the rampage, running the streets wild in packs, harassing children and the elderly, frightening women, threatening our way of life.

"Mini-malls are infesting our inner cities, displacing low-income housing projects on which good federal money could be spent. In our rural areas, the very breadbasket of our great nation, mini-malls are eating away at valuable farmland.

"For years, the federal government has chosen not to take action. But the time has come when we can no longer sit back and let mini-malls reign all-powerful over our country. For this reason, I have taken the one course of action which was available to us. Earlier this evening, I ordered Air Force F-111 bombers to strike six targets. All of these targets were deep in mini-mall-infested territory and were chosen to minimize civilian casualties.

"At the current time, all but one plane has been accounted for. We do not know if this plane succumbed to anti-aircraft fire from the mini-malls, which was reportedly quite heavy.

"It gives me no pleasure to take this action. Yet, if necessary, we will do it again. So long as mini-malls make this country unfit for habitation by decent people, this administration will not fail to act."

*I felt my reverie begin to fade, and the Hill of Death was back. But could I make it out of this mess? That remains to be seen...*

FREE DELIVERY



PIZZA

Happy Hour

Monday and Tuesday

Beer on draft and wine

1/2 price

Free refills on softdrinks

CALL 792-5984

524 S. LAKE AVE. PASADENA

Just north of California

ALL YOU CAN EAT SPAGHETTI AND GARLIC BREAD \$2.99

15% DISCOUNT WITH STUDENT ID

NOT VALID ON DELIVERY OR ANY COUPON OFFER.

\$2.00

OFF

Any 16"

Pizza or \$1.00

off any 12"

ONE COUPON PER PIZZA

COUPON EXPIRES 4-18-86

FREE  
6-Pack SodaWith minimum  
\$8.00 order

NOT VALID WITH ANY

OTHER COUPON OFFER.

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COUPON EXPIRES 4-18-86

\$3.00

OFF

Any 16"

Pizza

Minimum of 3 Toppings

ONE COUPON PER PIZZA

COUPON EXPIRES 4-18-86

## TEACH IN JAPAN

Persons with a degree and job-experience in such fields as advertising, publishing, engineering, business administration, pharmacology, linguistics and languages wishing to teach English to Japanese adults for one or two years in Tokyo and other parts of Japan should write to:

Personnel Director  
International Education Services  
Shin Taisho Bldg.  
10-7, Dogenzaka 2-chome, Shibuya-ku  
Tokyo, Japan 150

We are tentatively scheduling interviews in Seattle, San Francisco, Chicago and Boston in May, June and July 1986.

Further information on the position, qualifications, salary, benefits, transportation and housing can be obtained by airmailing a detailed resume with a recent photograph to I.E.S.

## Lots o' New Records, Continued

from page 3

in the Lord Lord Lord  
and I know  
He'll make everything alright  
but also:  
Old Mother Reagan and her  
crew

took away from me and you  
I hope she goes far away  
she better go far away  
All of this makes the Femmes,  
along with U2, the only Christian  
bands that I have any respect for.  
Gano is comfortable enough with  
his faith that he can integrate it with  
being a normal human being, and  
he's clearly not taken in with the  
media fundamentalists' message.

What of the sound? The thrash  
of the first album is here mixed  
with elements from gospel, R&B,  
and even country music (real coun-

try, not any Alabama shit). No two  
songs have precisely the same feel;  
"Old Mother Reagan", all 29  
seconds, is hardcore thrash  
transplanted to acoustic instru-  
ments. "Faith" stomps along in  
good gospel style, and includes a  
great sax solo. "Heartache" and  
"Special" continue the first album's  
sound, while "Breakin' Hearts"  
two-beats into country territory.

The Femmes import a number  
of guest musicians to help out,  
most noticeably Talking Heads'  
Jerry Harrison (who also produc-  
ed). Eclectic though it is, the album  
holds together well and has a  
coherent feel to it. The Violent  
Femmes pick up on real American  
music far better than any Bruce  
clone; pick up the album and see  
how. (Or at least check out the truly  
strange back-cover photo...)

## DNA Tools

from page 4

of DNA left after cleavage, the  
chemists can discover which seg-  
ment of the DNA survived the at-  
tack by MPE and was, thus, the  
region of attachment.

In another technique, called "af-  
finity cleaving," the chemists attach  
the EDTA.Fe(II) "wrecking ball"  
directly to a natural substance, turn-  
ing it into a sequence-specific  
DNA cleaving molecule. For ex-  
ample, by attaching EDTA.Fe(II)  
to the antibiotic distamycin, the  
scientists were able to study where  
the distamycin attached to DNA by  
how the distamycin-EDTA combi-  
nation cleaved DNA around the  
attachment site.

The Caltech chemists' goal is to  
engineer artificial, improved ver-  
sions of a key genetic engineering  
tool—restriction endonucleases.

These enzymes bind and snip  
double-stranded DNA at specific  
sequences, and are widely used to  
cleave long DNA strands into  
manageable segments whose se-  
quences can be easily determined.

A major problem with restric-  
tion endonucleases is that they  
typically recognize DNA se-  
quences of only about four to six  
bases. Such sequences would be  
very common in very large DNA  
such as human chromosomes. This  
also means that the natural  
sequence-specific endonucleases  
are not adequate as the basis of  
sequence-specific reagents for  
diagnosis or therapy of disease in  
man. However, the development of  
artificial endonucleases that  
recognize sequences of 15 bases or  
more would give researchers the  
specificity needed to seek out un-  
ique sequences along the DNA  
chromosome.

## Bailey NAS

[CNB]—Dr. James E. Bailey,  
professor of chemical engineering  
at Caltech, has been elected a  
member of the National Academy  
of Engineering, in recognition of  
his "distinguished contributions and  
significant accomplishments" in  
chemical and biochemical  
engineering. Election to the  
Academy is the highest profes-  
sional distinction that can be fer-  
ferred upon an engineer.

Dr. Bailey's research group is  
investigating how proteins and cells  
used in industry to manufacture  
drugs and chemicals respond to dif-  
ferent process conditions and  
genetic manipulations.

Dr. Bailey received his B.A. in  
1966 and his Ph.D. in 1969, both  
from Rice University, and joined  
the Caltech faculty in 1980.

Paid Advertisement

### COLEMAN CHAMBER CONCERTS ON THE HORIZON

This weekend brings the 40th  
annual Coleman Chamber  
Ensemble Competition to Ramo  
Auditorium. The competition, which  
begins at 10 P.M. on Saturday, April  
26, is open to the public, free of  
charge. The Winners Concert will be  
held on Sunday, April 27 at  
3:30 P.M. in Ramo Auditorium.

Participants from across the  
country compete for prizes totaling  
over \$9,000. Past winners have  
included such notable groups as the  
Colorado Quartet and the Tokyo  
String Quartet. Student tickets to  
Sunday's Winners Concert are \$3.00.

Next weekend the distinguished  
Michala Petri Trio concludes the  
Coleman Chamber Concert series,  
Sunday, May 4 at 3:30 P.M. in  
Beckman Auditorium. Making its  
only Southern California appearance  
this season, this award-winning trio  
will play recorder, harpsichord and  
cello works by Handel, Telemann  
and Vivaldi, as well as contemporary  
Danish composers.

Coleman Chamber Music  
Concerts offers Caltech the extra-  
ordinary discount of one free ticket  
and one ticket at \$5.00 per student to  
the Michala Petri Trio. (Limit one  
free ticket and one at \$5.00 per  
student). These tickets go on sale at  
the Caltech Ticket Office Tuesday,  
April 29, but hurry - there are only  
50 free tickets and 50 tickets at \$5.00  
each available!

This offer is limited to Caltech  
students with I.D. The Caltech Ticket  
Office is located just north of the  
Beckman Auditorium parking lot.  
Call campus extension 4652 for  
further information.

## CHEAP HORIZONS



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# "LITE'S TASTE IS THE BIGGEST THING I'VE RUN INTO SINCE BOB'S SHOES."

Dave Cowens  
Basketball Great

Bob Lanier  
Basketball Great

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**THERE'S ONLY ONE LITE BEER.  
MILLER LITE.**

Friends don't let friends drive drunk.

**SPORTS**

# Track Team Rocks

by Steven E. Lodge

The Caltech track teams competed against Westmont and UCSD last Saturday, April 19. A winning season was assured for the men's team when they defeated Westmont by 92 to 61 and squeezed by UCSD 75 to 70. The coach's tactic of spreading the players out thin, along with a strong team effort, led to the victory.

The day saw one personal record after another being broken. In the triple jump all four of the Caltech entrants set new personal records. Nathan Inada won the triple jump with 39'9.25" and was followed by John Haba in third, Christopher Schofield in fourth, and Robbie Dow in fifth place. With a second place time of 1:01.8, Eric Smith broke his personal record on the 400 meter intermediate hurdles by 4 seconds. In the 200 meter race, David Gates finished second in 22.3 seconds and was joined by Alex Athanopoulos in fourth place with a time of 22.8 seconds. Both Gates and Athanopoulos established new personal bests in the event.

John Gehring finished third in both the 5000 meter and the 1500 meter events with times of 16:41.8 and 4:13.1, respectively. The other 5000 meter participants from Caltech were Chuck Lee, Gary Bloomberg, Jeff Willis, Sean Hillyard, Todd Kaplan, and Matthew Penn. Personal records were set by Hillyard, Lee, and Bloomberg in the 1500 meters. The discus was won by Dow who threw

for a new personal best of 112'9".

Edward Mao finished in sixth place in the discus. The men's 1600 meter relay team finished in third place, but only 5 seconds off the record. Penn ran both the 1500 meters and the 800 meters, setting a personal record of 2:05.0 in the latter event. Willis, Hillyard, and Ray Hu also competed in the 800 meters, with Willis placing third and Hillyard setting a personal best. The exciting race was the 400 meters where Gates missed winning by 6/100ths of a second. However, Gates did set a new personal record of 52.1 seconds.

The two other 400 meter runners from Caltech were James Davila, who set a personal best, and Nathan Inada. Taking third through sixth place in the 100 meter event were Thomas Tetzlaff, Schofield, Smith, and Nadeem Ghani. All four runners also set personal records. Haba won the high jump with 6'0" and Dow set a personal record of 5'8" with no misses. Dow placed second in the javelin with a throw of 140'1" to beat his old record. Mao won the shot put and raised his record to 36'4". The long jump was won by Gates with a jump of 19'7.25" while Inada and Schofield came in third and sixth, respectively. Dave Gallup earned second place in the pole vault by upping his record to 13'6". Smith also established a new personal record in the pole vault.

The 3000 meter steeplechase saw personal bests by Willis and Hu, who placed second and third. In the 110 hurdles Ghani and Haba

took fourth and fifth, with Ghani breaking his old time. Finally, the 400 meter relay team finished second in 45.8 seconds, beating the old season record by 3 seconds.

The women's track team may not have won, but they did put on a good performance. Clea Bures established a new school record of 11:57.3 in the 3000 meter event, placing third. Trina Juzang broke the old school record in the long jump with 13'2.5" and placed second in the event. Juzang also finished second in the triple jump by setting a new personal record of 29'6.5". Bures won the high jump with 4'0". This was the first time that Bures had competed in the event and she tied her personal record. In addition, Bures placed second in the 400 meter intermediate hurdles, second in the 100 meter hurdles, fourth in the 800 meter event, and fifth in the 400 meter event.

Dee Morrison placed fourth in the javelin competition. Morrison, though, went on to break the school record and secure second place in the shot put with a mark of 27'8". A second school record toppled before Morrison as she threw for 91'7" in the discus competition and a fourth place finish.

Special credit goes to Gates, Athanopoulos, Dow, Haba, Gehring, and Bures for participation in multiple events, one after another, and coming through. There will be the Caltech Invitational this Saturday beginning at 11:00 am.



Here's Caltech's incredibly cool track team (note the Hawaiian shirts)

Photo by Rod Van Meter

## Tennis > LaVerne

by Molly Volley

The Caltech women's tennis team defeated LaVerne by a commanding 8-1 score on Wednesday. This was the second meeting of the two teams, the first resulting in a 5-4 Caltech victory.

The entire team performed well with all matches won in straight sets. Joy Watanabe took the closest match 7-5, 7-6 with a steady performance that infuriated her opponent. She then partnered with Carol Mullenax, a 6-1, 6-2 singles victor, to take the doubles 6-0, 6-3. Lisa Cummings and Margaret Carter

won the third doubles by a convincing 6-3, 6-2 while Junko Munakata had an easy 6-2, 6-1 win. Pam Feldman trounced her opponent 6-1, 6-3, at the sixth singles spot while Tammy Choy outstayed the LaVerne first singles 6-2, 6-2 before joining sister Carol to take the doubles 6-0, 7-5.

This was the fourth win for the team, which is at the end of its best season ever. It will be meeting Biola on Saturday followed by Redlands on Wednesday before the conference championships on May 2 and 3 at Pomona.

## Kickball Previewed

by John Haba

**Game:** Discobolus Kickball  
**Matchup:** Lloyd vs. Fleming  
**Time:** Sunday 4/27

**What to look for:** A big crowd will be on hand for this highly antiquated and likely hotly contested confrontation. Defending trophy holder Fleming is seldom fazed by interhouse competition, but is kickball too casual for them? Fleming's soccer strength could be a key factor. Lloyd, on the other hand, has to show that it can muster something of a ruthless will to win to supplement traditional "just for the fun of it" enthusiasm of par-

icipation. Lloyd's prescient and farsighted recognition and support of kickball as the fast-rising sport of the mid- to late-80's and beyond ought to grant Mellow Yellow the benefit of the doubt.

**Significa:** Lloyd's Tachikara SP 13R, generally regarded as the optimal kickball for grass surfaces, has been repaired with a tire patch and is projected to see action Sunday. Pictured in pre-game "batting" practice (ask Earl Taylor about this) prior to the Lloyd-Ricketts game, the SP 13R ironically has yet to see interhouse action.



Caltech's golf team redefines macho. (Note Rob Fätland's bulging biceps)

photo by Min Su Yun

## MONK'S PIZZA

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&  
**FREE DELIVERY**

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**Rick Dees**  
KJIS FM Says  
One of the Top Ten  
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Limited Delivery Area

MENU	12 INCH	16 INCH
Cheese	4.99	7.12
1 Item	5.89	8.45
2 Items	6.79	9.78
3 Items	7.69	11.08
4 Items	8.59	12.38
5 Items	9.49	13.68
Monk's Special	8.59	12.38

(Pepperoni, Mushrooms, Green Peppers, Onions, & Sausage)

**Slices served in store only \$1.00**  
Pepperoni, Sausage, Mushrooms, Onions, Green Peppers, Ham, Pineapple,  
Beef, Olives, Jalapeños, Anchovies, Extra Cheese, Thick Crust.

All Pizzas Made to Order with Only the Freshest Ingredients;  
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## WHAT GOES ON

## Well, Me For One . . .

*Who's Afraid of Virginia Woolf*, the classic study of faculty life at a small town university by Edward Albee, is playing this weekend, each evening at 7:30 pm, in Winnett Lounge. Tickets are on sale at the Ticket Office, \$6 general, \$4 students.

## SSSSP Needs You

The Summer Secondary School Science Project will be needing tutors and counselors this summer, running from Monday, June 23 through Thursday, August 7, 1986. Those interested must wish to teach and work with motivated high school youth and/or supervise them in the north undergraduate houses for the seven weeks of the program (especially during the evenings). As of this writing, 3 tutors each are needed for Biology, Chemistry, Physics/Trig, and Physics/Calculus programs, as well as 12 to 15 counselors. Contact Lee F. Browne for further details.

## Guitar Classes

The Beginning Guitar Class (no experience necessary) has been reformulated to include not only classical repertoire but a new jazz and folk chord system as well. This will give the student a strong classical technique and enable him to branch into other forms of guitar if he desires. For further studies in classical and flamenco, Intermediate and Advanced classes are also offered. Classes are free to Caltech students (and other members of the Caltech community, space permitting). Undergraduates can receive 2 units of credit if they choose. Classes are on Tuesdays in Winnett Basement as follows:

Beginning guitar, 4:30-5:30 pm  
Intermediate, 3:30-4:30 pm  
Advanced, 5:30-6:30 pm  
Private instruction can also be arranged on any level with instructor Darryl Denning. For further information, call Mr. Denning at (213) 465-0881.

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## Renaissance Faire

It's time again for the Renaissance Pleasure Faire in Agoura! Come one and all for great food, entertainment, costumes, and wonderful crafts! The Y is selling tickets for \$6.50 (they normally cost \$12.50 at the gate). Tickets are good for any weekend through May 26! Transportation may be available.

## Renaissance Meeting

The Caltech Medieval and Renaissance Society wants you . . . to attend our next meeting: Sunday 27 April from 6PM until 10PM in the Y Lounge, Winnett Student Centre.

We will have pot-luck munchies (please bring if you plan to eat!), a dance practice, and a last-minute planning session to prepare for our Tourny and Revel next weekend.

On that note, remember that the selfsame Big Event is Saturday, May 3. The tourny is in Tournament Park (behind the Gym and playing fields south of California Blvd.) from 10AM to 5PM; the Revel is in Winnett (not Dabney House) from 6PM to midnight. Please attend!

## Caltech Kelpers Meeting

The Caltech Kelpers, a SCUBA dive club, meets on the first Thursday of the month at 7:45PM in the Benioff Conference Room, 258 S. Mudd. For the May 1st meeting, the speaker is Gary Davis of the Channel Islands National Park Service, whose presentation is entitled, "Monitoring the Kelp forests of the Channel Islands National Park".

## Class Officer Nominations

Nominations for Junior and Senior Class President and Secretary-Treasurer are now open and will remain open until Friday, May 2nd. Elections will be held the following Monday, May 5th. Signups are on the MOSH's door. Feel free to submit a statement to the Tech. [Yeah, what she said!—Eds.]

The Senior class officers are responsible for setting the date of Senior Ditch Day and for determining the form of each year's commencement exercises.

The Junior class officers are responsible for Sports Day and for obtaining a speaker for their class's commencement exercises.

## Campus MacUsers

I need your ideas for Macintosh software and hardware development on campus. Call Kent Noble at 792-4493.

## Plant &amp; Bake Sale

To all Caltech students: The Service League is here to help, so please be there to support our fundraising Plant & Bake Sale today, April 25, Winnett Patio, 8:00 am to 1:00 pm. Thank you.

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## The Morality of Freedom

Come join a discussion on "The Morality of Freedom: A Passover Query," led by Rabbi Michael Perelmutter on Tuesday, April 29 from 4:30-6:00 pm in the Y Lounge. Refreshments will be served.

## MEOW!

Cats tickets at half price! Sign up in the Y by 5:00 pm today (Friday, April 25). Winners will be posted at 5:30 pm today. This purring-good deal is brought to you by the Caltech Y and the MOSH. Be sure to indicate whether you want to go on Tuesday (4/29) or Wednesday (4/30).

## Scottish Concert &amp; Dance

Members of the Royal Scottish Country Dance Society are sponsoring a concert of Scottish traditional fiddle music to be followed by a dance on Saturday, April 26 at 7:30 pm in Dabney Hall Lounge. Combining the best of two traditions, Alasdair Fraser, dynamic fiddler from Scotland, and pianist Paul Machlis will present a concert of traditional fiddle tunes, then provide music for audience dancing. The dances will be taught by Royal Scottish Dance Society instructor, Jeanne Weston.

The unique concert/dance format invites the audience to participate in the entire music experience, joining in the fun with more than just foot-tapping.

Donation \$5.00 at the door, \$3.00 for Caltech students. Reservations suggested. For reservations or more information call (213) 306-0046, or (213) 661-9871. This event is sponsored by the Caltech Folk Music Society.

## Sports Day Fun

Homecoming Sports Day is to be held on Saturday, May 10. All Alumni, Faculty, Students and Staff are invited to participate in the sports or be a spectator—all are welcome! Special free buffet lunch at noon with events and entertainment. Details in the May 2 issue of this very newspaper.

## Merit Awards

Each year the Scholarships and Financial Aid Committee awards a number of Merit Awards to the most academically talented of the Institute's freshmen, sophomores and juniors. These awards are based on academic and research performance alone and not on financial need. Last year the Committee awarded 36 Merit Awards at \$3,000 and \$4,000 each. This year, Awards will range from \$8,000 to \$10,000.

Applications are available in the Office of the Vice President for Student Affairs, Parsons-Gates Building, Room 104. Applications Deadline is April 30.

## Summer Jobs

The Alumni Association, in conjunction with the Career Development Center, has generated some summer job possibilities. These positions are currently available, so if you are interested in summer employment, you should come by the CDC as soon as possible. We expect to have more jobs available so please check with the CDC (Room 8, Parsons-Gates) on a regular basis.

## Grad Student Housing

Graduate student housing information packets and applications for 1986-87 are now available in the Housing Office. If you are interested in obtaining information for next year, stop by the housing office and pick up a packet or call x6178 and a packet will be sent to you.

## Attention Writers!

The Literature Faculty is proud to announce the 40th annual McKinney Competition. The Mary A. Earl McKinney prize is awarded each year for excellence in writing. Only full-time students officially registered at Caltech as sophomores, juniors, or seniors are eligible to enter. This year three prizes will be given in three categories: poetry, prose fiction, and non-fiction essays. All submissions must be typewritten and double-spaced. In the poetry category, entrants may submit up to three poems. Submissions of prose fiction should not exceed 12,000 words. Essays may be ones prepared for a humanities class or any good piece of original writing on a topic relevant to the humanities. The prize in each category will be \$300.

Each student is entitled to only one entry in each category. All contestants must submit their work to Professor Jenijoy La Belle, Division of H&SS (Dabney 211) by no later than May 1, 1986. No entries will be returned. Each category will be judged by a three person committee from the Literature faculty. Essays will be judged on the quality of the thought and the effectiveness of the writing. Winners will be announced the last week of May. The names of the winners will appear in the commencement program. There will be an awards banquet on May 29. The Committee may divide the award in each category in case of more than one outstanding entry.

If you have any questions, contact Dr. La Belle, x3606, or Betty Hyland, x3609.

## Summer Housing

Summer housing information and contracts are now available in the Master's Office and Housing Office. Deadline for returning contracts to the Master's Office is May 16.

## Thai Traditions Festival

A Thai Traditions Festival celebrating the start of the Thai New Year with art, dance, music and ritual will inaugurate the City of Los Angeles Folk Arts Program as its first major public event on Saturday, April 26, from noon to 5 pm in Barnsdall Art Park, 4800 Hollywood Boulevard (just west of Vermont—a direct bus ride from San Pasqual and Lake on the 181, for those without cars).

The afternoon program is free and will also include demonstrations of Thai classical painting, vegetable carving, dancing, sword fighting to music, and kick boxing. Ten fodo booths with traditional Thai delicacies not available in restaurants will be prepared on-site and sold at very reasonable prices.

Opening ceremonies begin at noon with dignitaries to honor community arts teachers.

The event is sponsored by the City of Los Angeles Cultural Affairs Department Folk Arts Program and Councilman Michael Woo, with support from the California Arts Council and the National Endowment for the Arts. For information, please call (213) 485-2433.

## Study High Desert Birds

An opportunity for students to spend time in the spectacular Oregon High Desert area while studying birds and their habitats is now available through Portland State University's 1986 Summer Session. The focus of the one-week field program (July 28-August 2) is the observation and identification of birds of the Oregon High Desert and study of their habitats and activities. The course is limited to 15 participants, so you are encouraged to apply early. Final payment of fees is due July 1, 1986 (\$200 total of tuition and fees, graduate or undergraduate credits available).

For additional information, contact PSU Summer Session Office at 1-800-547-8887.

## Look, Up In The Sky . . .

Preliminary findings from spacecraft and ground-based studies of Halley's Comet will be discussed by JPL comet expert Marcia Neugebauer in the next Watson Lecture, "The Exploration of Halley's Comet." The lecture will be on May 7 at 8:00 pm in Beckman Auditorium. In her talk, Neugebauer will emphasize which theories about comets were confirmed and what surprises Halley's Comet presented. Neugebauer is a senior research scientist at JPL and an investigator on Giotto, the European spacecraft to Halley's Comet.

## Two-Thirds Plus Three

The change in the by-laws passed by the narrow margin of 93-45. A majority of 3/5 was needed for the amendment to pass.

## Chamber Singers Concert

Tonight, the Caltech Chamber Singers present an evening of love and folly, as they perform Brahms' Liebeslieder Wälzer, myriad Gilbert and Sullivan pieces, some real opera, and two strikingly modern pieces. Come and enjoy, starting at 8:00 pm in Dabney Lounge.

## Too Busy For Real World?

If you find yourself too busy to follow the news, there's an alternative. Read *The Outside World*, a weekly, 2-page summary of world news published by STRIVE. Copies are mailed to subscribers and distributed to Millikan (front desk), Baxter (Public Affairs Room) and the Y. To subscribe (free of charge), sign up in front of the Y office in Winnett or contact the editors: Hasok Chang, 1-59, and Paresch Murthy, 1-59. Also, if you're interested in helping with writing, research and production, please contact the editors of the newspaper.

## Tightly Packed Grads

The Graduate Student Council of the California Institute of Technology (commonly called the GSC) will hold its annual meeting at 12 noon on May 1 at the Red Door Cafe. All graduate students are welcome to attend [and stand very close together—it's a small room].

## Spring Formal Dance

Get out those dancing shoes, it's time once again for the Spring Formal. It will be held May 16 at the Altadena Town and Country Club. Tickets are \$30 per couple and should be paid to house Social Teams. Couples will be dancing and dining into the late hours of the night. Last chance to sign up is May 9, so ask that special someone soon!

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