Volume LXXXII

Pasadena, California; Friday, May 29, 1981

Number 30

## Fairchild Program: No Loss,

By Lee Sunderlin

Caltech is constantly being visited by persons of great talent or knowledge, people who we hope will impart some of their knowledge to the rest of us. Among the most important source of these visitors is the Sherman Fairchild Distinguished Scholars Program.

Sherman Fairchild was a captain of industry who set up foundation to support academics before he died in 1971. Caltech received funds for a program designed to provide opportunities for independent research free from restrictive goals to leaders in various fields. The only requirement is that they "must exchange ideas with our  $\frac{2}{6}$ people," according to assistant provost Lee Sterrett, who is in charge of the program.

The scholars are picked by process that involves being nominated by a faculty member, being approved by the department involved, and receiving a final okay by a committee with members from each department. They are invited here on a "no loss, no gain basis," although they are given many perquisites such as furnished house for their stay. Most scholars in this program stay for a year; the time varies to suit the institute and the visitor.

These are the current

Fairchild Scholars:

Obaid Siddigi: Professor Siddiqi founded and is head of the Molecular Biology Unit at the Tata Institute of Fundamental Research in India. He is one of the leaders of Indian science.

Aris is a chemical engineer who ban treaty. has contributed to the areas of design, stability, and control of chemical reactors. He belongs to the National Academy of



"I know what boys like..." A Dance Showcase and O. Mandel's The Fatal French Dentist show in Ramo tonight at 8 and tomorrow afternoon at 2:05.

Engineering.

George F. Carrier: He is a professor of applied mathematics at Harvard who has done widely varied research in solid and fluid mechanics. He is a member of both the National Academy of Sciences and the NAE.

John J. Lambe: John Lambe, who works for the Ford Motor Company, is involved in surface science, spectroscopy, electrical engineering, and computer science.

Vladimir I. Keilis-Borok: He is a professor of geophysics in the USSR, and probably the best one in that country. His includes varied work Rutherford Aris: Professor contributing to the nuclear test

Kenneth I. Kellermann:

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## THIENNU VU GETS Another Award

Last Friday, several students were given awards at a luncheon in the Athenaeum. Thienne Vu received the Green Award from Chris Wood. The check for \$750 was for the research she has been doing this past year with Tom Apostol. She and Dr. Apostol described the work involving Gauss Sums and how she became interested in pure research in Mathematics. Jim Morgan awarded the Froehlich Award of \$500.00 to Lance Dixon on the basis of his high academic achievement and his extracurricular activities, including soccer, athletics, Page House offices and tutoring. Ray Owen awarded Juanito Villanueva the Haagen-Smit Award. This was on the basis of his good academic achievement and his many extracurricular activities involving the Y and Lloyd House. Later, Ray Owen reminisced about Arie Haagen-Smit and George Green, both of whom he knew well. Mrs. Green was present at luncheon and enjoyed meeting the recipients. Jim Morgan talked about Jack Froehlich and the history of the Froehlich Award.

## THIENNU VU Gets An Award

Caltech Several undergraduates were honored recently at a Mathematics Awards Banquet.

Daniel Gordon, Peter Shor, and Thiennu Vu each received the E. T. Bell Undergraduate Mathematics Research Prize for outstanding original research in Mathematics.

Gordon, a senior majoring in Mathematics and Literature, wrote a paper describing minimal permutation sets for decoding binary Golay codes.

Shor, a senior Mathematics major, submitted a paper in which he improved the best known lower bound for the length of a partial transversal in a Latin square.

Miss Vu, a junior majoring in Biology and Mathematics, gave elementary proofs of various identities and reciprocity laws in number theory that had previously been derived advanced analytic by methods.

All three recipients began their work as part of the summer research program in Mathematics sponsored by the Richter Foundation.

A Morgan Ward Prize was also awarded to Freshman Alan Murray for a study of generalized Fibonacci sequences.

Each prize consists of a cash award and a certificate. The prizes are financed by funds won by Caltech undergraduates participating in the William Lowell Putnam Competition, a national mathematics contest. Professor Gary Lorden, the team's faculty advisor, presented letters of commendation to team members Peter Shor, John Stembridge, and Sekhar Chivukula for their outstanding performance in the 1980 competition.

The Mathematics Committee on Prizes judging this year's entries consisted of Professors Tom Apostol, DePrima, Alexander Kechris, W.A.J. Luxemburg, and David

## Tau Beta Pi Finds Its Raison d'Être

There were many people who argued that Tau Beta Pi could never be anything more than a "key-hanging" society at Caltech whose only purpose is somehow better a Caltecher's resume. Such people have been proven wrong. With the addition of thirty-one new members last January, we have undertaken several projects. The design of these projects has been oriented towards serving the Caltech community in some way that does not trespass upon the domain of other student organizations. Let me briefly relate to you what Tau Beta Pi has done this

At Sunney Chan's suggestion, we have taken over the tutoring of upper division courses (AMa 95, Ch 21, Ph be given by Sunny Chan on 106, Ma 108, etc.). This was in-Sunday, June 7. So, get those itiated this quarter as a pilot project and will hopefully be

continued next fall it our junior members show the interest. A list of tutors, courses, and addresses was published in last week's paper.

In order to somehow alleviate the deficit of federal funds for Caltech students, we have been trying to obtain cash prizes from industry. Presently, in conjunction with IBM, we are offering four one-hundred dollar cash prizes to underclassmen who have demonstrated outstanding motivation and creativity. Although the deadline is past, you can still get the forms in to Eric Chang (1-59), Bill Naylor (1-60), or me (127-72). But HURRY! In addition, the recipients of these prizes will be honored at our Tau Beta Pi dinner which will Sunday, June 7. So, get those forms in!

Also with IBM, we have

presented a discussion session on what it's like to be in a managerial position in a technologically oriented company. Many of you have probably seen the flyers about this talk around campus, and, in fact, many of you may even have attended the talk last evening. In the future, we hope to sponsor more of these talks in conjunction with IBM. We plan to bring in people who might be able to shed some light on some aspects and applications of science and technology that are not emphasized at Caltech. We already have an IBM Fellow lined up for next fall.

Finally, in an effort to Hispanic junior high school students from our local area the opportunity to get excited about science, we are initiating a program whereby these students may visit Caltech. Tau Beta Pi members shall show

## New Firm Seeks Entrepreneurs

by Mike Doty

A new technology development firm is actively seeking Caltech talent for developing new ideas. Teknekron, based in Berkeley, is a modern, highly decentralized, umbrella firm, in

which aspiring entrepreneurs are provided with a full range of support services during the crucial beginning years.

Typically, a researcher with

CONTINUED ON PAGE 8

Yearbook **Picture** For Lit 15 Will Be Taken Today 128 Baxter, 12:00

## **EDITORIAL**

Welcome to third term. The sun is shining outside and the day is right for long, contemplative walks designed to inspire the humanistic side of one's character. And what are you thinking of? Three weeks of back 95 assignments? Five weeks of Ph2 lectures that you missed? Ha, Ha, Ha! Hear the birds singing and look at the Flems playing frisbee on the Quad. You can't have that, though. You should be working right now—catching up. Remember last week? What were you thinking last week? "Gotta catch up." And the week before that? "Gotta catch up."

Ah, that sordid greyness of third term. The homework piles are glistening like heaps of rotted raw liver, and little maggot pencil leads make vain attempts to consume the carrion. But then you ask, where is this editorial leading. Nowhere. Why should it? Where the hell is third term leading? Nowhere. Oh, but this editorial should offer solutions—it has to say "something" relevant. Quit—give up. That's the ticket, just throw up your hands, which by now have odd little wrinkles on them, and say, "no more." Easy.

You know, there is a world out there, or would you? On weekends I eat at the Coffeehouse; when I need shampoo I go to the bookstore; and for entertainment, I attend ASCIT movies and parties. What if you give that up? You'll be on the outside: the bleak, black, void that seethes beyond the borders of Caltech. Scary, huh? The demons of reality await the unfaithful, and they promise to poke your warm buns with sharp little traffic signs if you flake out. Maybe giving up isn't as bright as it sounds.

"I want off this Movie!" a student was heard to scream. "But it's your movie," Atmanfester cheerily replied. The student was what they call "burned out." His motivation was gone. He still wanted to be a scientist, he knew he loved his discipline (at least he used to actually enjoy doing his homework sets

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#### AN OPEN LETTER TO WALT MEADER

Dear Walt,

In six weeks you'll be retiring as Director of the Caltech Y and moving on to other things. We'll miss you. The Caltech community you'll leave behind is greatly indebted to you and exceedingly grateful

for the work you've done here. In the nine years you've been with The Y and especially during the last seven as Director, you've changed and expanded The Y, helping it reach out in ways undreamt of ten years ago. My four years at Tech have been immeasurably enriched by my involvement in The Y. I've seen and heard

# LETTERS

To the Editors:

There is a huge controversy in the academic and scientific communities presently, which I think deserves a wider audience. It is the question of the scientific and logical adequacy of Darwin's theory of "evolution." There is a collateral controversy regarding creationism—evolutionism, but the arguments of the creationists are so trivial from the standpoint of an intellectual community that it needs not concern us.

First of all, contrary to the implied usage by many scholars and scientists, evolution theory is not synonymous with natural selection theory. Evolution refers to a class of theories which state in general that all things change to varying and nothing exists degrees forever. They may or may not refer to causes of the changes or to the mechanisms by which change occurs. The life cycle, seasons, physical cosmology, and even the sun rising and setting all refer to evolution. Darwin's theory of natural selection is one of a set of theories which attempt to explain the mechanism of evolutional change based on the premises of overpopulation

which find themselves in an environment of scarce resources. Only a few of these organisms survive to reproduce and when they reproduce they tend to produce offspring more like themselves than like those of the species that have already perished. While no one could criticize "evolution", the question as to whether "natural selection" is adequate can and has been severely criticized. It is the considered opinion of the writer that Darwin's theory is not only questionable but indeed it is ludicrous. Darwin never defined life,

organisms

"species"

among living

categorized into

nature, adaptation, the forces of nature that do and do not operate to change a species and/or the methods used. Indeed the theory is tautological, i.e., the fit of a species survive, why, because they are fit. What makes them fit? Because they survive. Darwin's theory has never been able to predict a single adaptation of a single species, even post hoc. many scientists feel that this does not detract from the "scientific" adequacy of Darwin. Darwin's theory, like that of the Bible, leads to a disquieting conclusion. If all life

Open Letter:

Turn out at Mudeo: 2 sophomores! So, to all of you howling at Fred and me about Mudeo—GO TO HELL.

speakers like William F.

Buckley, CIA chief Admiral Stansfield Turner, mountaineer

Jim Whittaker, and writers

Harlan Ellison and Larry

Niven, because of your efforts,

through The Y, to bring them

here. Every finals week has been more bearable because

you've cared enough to make

sure there were always bagels,

-Glen Swindle

Sirs

Please print F. Picabia's letter.

-A. Breton

Regards,

[No.-eds]

hot cocoa, and cartoons at Decompression. Under your leadership The Y organized the Student-Faculty Conference at JPL two years ago, opening channels of communication as

only The Y could do. During

my years with The Y I've seen

you help increase The Y's scope

CONTINUED ON PAGE 3

## NEWS SERVICE

—For members of Caltech community, subscribers to the Tech—

Send in personal messages-we will print them free of charge under the Classified Ads section. Deadline is Tuesday noon of week of publication. Leave in envelope on **Tech** door marked "Classied." Rate for non-subscribers is \$3.00 / column-inch, 40¢ / line.

## FRIDAY ASCIT MOVIE 7:30 10:00

TONIGHT:

## Coing in Style

50¢ ASCIT members \$1.00 All others

NEXT

WEEK

Baxter Lecture Hall

DIRTY MARY, CRAZY LARRY

came from lower forms of life, where did the first living thing come from? No doubt a rock jumped into the air (by random processes) and life began.

If natural selection is so adequate, and so omniscient as Darwin claims, why have species not ever evolved inedible varieties, or the unnecessity of eating for that matter, species that are disinterested in reproduction or species that are so fit that they never die? The answer is that in each of these cases there would be either no struggle for survival or no overpopulation—no need for natural selection.

Let me suggest another scenario, one that I feel represents something closer to the truth than Darwin. Once upon a time two monkeys were copulating in the forest when lightning struck them. The offspring was man. Natural selection? Hardly. Nothing but random processes. Nothing more. My particular "belief" is that everything simply is. A few billion years ago there was an explosion. Everything since then just happened. There is no reason. We are just here because we are here and if we weren't we would be somebody else somewhere else something else would be here.

I wrote a paper several years ago entitled "Natural Selection as a Special Case." The thesis was simply that if we assume that a favorable environment was necessary for life to originate, then natural selection could not have then existed because the struggle CONTINUED ON PAGE 3.

The California Tech

Friday, May 29, 1981
Volume LXXXII Number 30
Published weekly except during
examination and vacation
periods by the Associated Students of the California Institute
of Technology, Inc. The opinions
expressed in all articles are
strictly those of the authors
and do not necessarily reflect
those of the editors or of the

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The California Tech publication offices are located in Winnett Student Center on the Caltech campus. The address is: Winnett Center, Caltech 107-51, Pasadena, CA 91125. Telephones-Editor: 356-6153; Business Manager: 356-6154. Printed by News-Type Service, Glendale, California.

Subscriptions \$2.50 per term \$6.00 per year \$100.00 for life ISSN 0008-1582

## THE CALTECH Y..... Fly by

Today, Friday, May 29th-Le BoBo Productions presents Skylight, a group of exciting Jazz musicians, for your noon enjoyment at the NOON CONCERT on the Quad. This will be your last chance this year to have lunch while listening to the music so don't miss it!

Wednesday, June 3rd-This is the last day to retrieve any missing items from The Y Lost & Found. After 5:00 today, you will have to buy them back at the auction tomorrow.

Thursday, June 4th (Karren's Birthday)-Are you in the market for a "new" coat or sweater? Today you can buy one cheap at The Y Lost & Found Auction at noon on the Quad. We have everything from books and clothing to aneight-track stereo. Come and take a look, you might just walk away with that something that you've always wanted.

Saturday and Sunday, June 6th & 7th-Come and relax at this year's final Decompression in Winnett Lounge from 8:30pm to 1:30am. In addition to our usual fare of munchies, games, etc., we have a special treat for all of you Bugs Bunny, Road Runner, and Daffy Duck fans. We will be having about two hours of Warner Brothers cartoons for your viewing enjoyment. Take a break from your finals for a while and have some fun.

### Walt Meader

and breadth of programming so that there is rarely a week when there aren't at least three or four Y programs scheduled.

But your achievements while at Caltech can't simply be summarized in a list of programs you've inspired and run. Come August, Caltech will be without a special friend who's always been around to counsel, to laugh, to listen. When a student has a hard time coping with life at Caltech, you've been there to help him along. By sharing the perspective you've gained over nearly a decade of working intimately

FROM PAGE TWO

with Caltech students, you've helped hundreds of Techers find answers to their personal problems. As a minister, your work has included premarital counseling and officiation at dozens of Tech weddings. Whenever students have asked for your time and advice, you've given it freely. Because you've cared, your contributions to Caltech will not be forgotten.

To those of us who have been associated with The Y, you've been both a close friend and a teacher. When differential equations threatened to

engulf us, you helped provide a chance to get away and see de Bergerac" 'Cyrano "Evita". The ski trips, backpacking expeditions, and Colorado River raft trips that oversaw were fun reminders that there's more to life than physics. As a former member of the Student Ex-Comm of The Y, I owe you a special debt. You've given me an education which only you and The Y could provide. I've learned how a corporation like The Y runs, how to organize an agenda, how to introduce a speaker, and much more. Just how important these lessons are will be even clearer as the present Y ExComm helps your successor learn the unique job

THE CALIFORNIA TECH

you've filled so well.

The Y must now find a new Director for The Y. In their search they can only hope to find your successor, and certainly not your replacement. As I've heard a number of friends wonder, "How can you replace Walt?" You can't. We can only hope that the new Director, in his own way, can continue the work of The Y as effectively as you have.

As you move on to another position elsewhere, I wish you the best of luck, confident that your combination of skills will be put to good use. Thanks for nine special years.

Keep in touch,

-Michael R. Nelson

Darwin

FROM PAGE TWO

necessary for natural selection could not have then existed because the struggle necessary for natural selection did not exist. A less than optimal environment would have been required. Also there would have been too few organisms for an effective struggle in this 'enriched" environment. Evolution could have occurred. As the members of this original species moved to different areas of this environment they changed because the areas were slightly different from one place to another. Only if the environment radically changed or the original organisms eventually filled the good environment could natural selection have become prominent and this certainly would not be for many eons, perhaps half a billion years. Therefore, natural selection must be a limited, dependent natural law.

As a teacher and a scientist I resent quite intelligent other teachers, scientists, scholars and logicians trying to convince the public and themselves that a theory they believe in because they perceive religious arguments of creation standing outside of the walls of academia ready to pounce on us again if Darwin's picture is not continually and prominently displayed. It is about time to either admit that Darwin's theory is not science, not even logically defensible, and put it into the archives of discarded knowledge or to explain why it is science (falsifyability, predictability, logical adequacy. laboratory testing under controlled conditions) and answer criticisms such as those above.

As far as I am concerned,

both the creationists and the

Sincerely yours, -Robert A. Lee Associate Professor of Sociology El Camino College

evolutionists arguments should be taught in literature classes, under fiction. After all, they are both all-time best sellers, but not to be taken too seriously. Education and science are nothing unless they are credible and neither God nor Darwin is very credible today. Don't let Darwin make a monkey out of you!

## Jelloh

Well, here it is, the last installment of Jelloh. For those of you who don't know, Jelloh is a column I started a year ago. In it I get to do whatever I feel like: fiction, commentary, Gift of Fire, A Grand Tragedy, whatever. So there! Nhahhhh! I hope you like the two short stories this week.

In the Morning by Alan Loh The young man thought he

detected evil when he looked at his own face in a mirror. Determined to remove its source, he picked up his razor. He placed the open blade against the mirror, over his throat's reflection. The glass squeaked in rhythm to his heart as he considered the possiblilities with razor and flesh. Outside, the morning air gradually warmed. It seemed a bit odd to the youth that thoughts of his own blood did not stir him. He wondered whether he should take this as a willingness to give up life. The logic worried him, so he put the question out of his mind-letting himself drift. Now, he could see the mailman tread the walkways across the yard. Now, he could smell the summer grass alongside the road. Nothing would change, he decided. Life isn't serious. If he bled to death it would not grow colder, it would not make any difference to anyone. His thoughts were interrupted by a knock on the door. He placed the razor back on its shelf. A voice from the door announced itself as his friend Gerald. No. he would not cut his throat with a razor. No, he thought, today I have learned something -something important. The young man walked briskly towards the door as he was quite excited by the prospect of seeing his old friend again. He remembered school his

days - days he often spent with Gerald discussing questions of great philosophic merit-to a schoolboy, he chuckled. As he reached for the doorknob he felt a sudden weakness in his limbs. He recalled how Gerald had died of sickness many years ago. The young man slid to the floor. He decided he would stop and rest awhile here. He felt very tired. His vision faded. Outside, warm sunlight painted little patches on the grass alongside the road-just as it always had.

The End The Graduate

by Alan Loh Hey, wow, this is really super and great, man, and makes you want to just be here forever and achieve karmatic greatness with earthworms. I mean like even the air smells good, today. Really good, v'know. It's like these intense personal heaviness waves in the air and I'm just soakin' on them and like I'm not savin' like there's flowers and stuff in the air but just that it smells so good or maybe more than just that. I mean you take a whiff on it and it makes you feel really, really...whoa! Spacey or far out or somethin'. Know

what I mean?

And like this light, man. Catch these lunar rays, man. I mean check it out. It's like cosmic to the max. Like fly me to the moon, man. I mean kick my ass and I'll croon like old blue eyes. Just leave me right where I'm standin'. Know what mean? Higher cosmicity, creamy karmal center, and big mutherfuckin' light rays. Like these little guys on the sun are sitting around with nothing to do or somethin' cause there ain't no chicks on the sun, y'know? So they start bettin' each other they can do these really great things. Are you followin' me, man? I mean this ain't highly technical or anything but see, it's just like people. I mean it's just like us sort of standing around when we're depressed, except right now I'm really diggin' it.

So the first sun guy says "Hey fuckers, watch this." And he takes this big leap and does this great double somersault with a half twist y'know, I mean really something to see and then he falls to earth, 'cept he's fallin' so fast now he's glowin, really burnin' up. And then the next guy he's really excited, man, just jumpin' up

"Goddam, that sure beats sittin' up here jerkin' off with you guys" so he jumps off too and soon all of these guys are just climbing over each other to get to the edge of the sun and jump off. And like they're all tryin' to outdo each other, y'know. Like one of them does a three and a half gainer so the next one does four into a

layout position.

Soon these guys are goin' berserko and like bouncin' off Mudeo (on May 27) with no the moon and landin' on the other side of the earth. I mean it's really somethin', all these bored horny guys flyin' around, I mean that's what sunlight's all about. I mean that's what makes the plants grow and all that stuff. Like it's really heroic I guess, all these guys just flingin' it to have some plant grow. And y'know when all these guys get their turn and there's no more of them around, that's it. That's the end of life as we know it on this planet and...Whoa, that's right. That last guy might be doin' his act at Dabney or depressing to the max. I think I of Millikan Library. better go inside.

The End

## The Board of Directors of e Y must now find a new Further Mudeo-Slinging

Dear Mr. Korevaar:

Where were all freshmen and sophomores who 'still want to participate in the Mudeo" on Wednesday? How many Mudeos must be held without either class fielding a team before you're convinced that hardly anyone but you gives a shit about this "ancient" Caltech tradition?

When Mr. Vachss faked the Mudeo first term (by rewriting last year's Tech Mudeo story, and running it with a staged picture of himself getting a mud bath), very few people noticed the deception, and fewer still cared. This term, when you finally realized that that was the only Mudeo he was planning to hold, you managed to excite enough knee-jerk traditionalists to make enough noise to convince even Mr. Vachss that some sort of "real" Mudeo was in order.

He chose to combine it with another tradition, Senior Ditch Day. This did not represent a conflict, since the seniors have no role in Mudeos except as spectators, and any senior has had ample opportunity to see them. They didn't miss much, as it turned out. There weren't evough contestants to form a contest. Again the die-hard traditionalists cried "foul." You can't expect people to come to Mudeo when they're busy breaking stacks, consuming bribes, etc.

While Fred rightfully felt that he had fulfilled his responsibilities as Junior Class President, his Secretary/Treasurer Glen Swindle wasn't taking any chances. He took it upon himself to organize another

CONTINUED ON PAGE 7

Help Keep Millikan Open!

Library attendants are needed Monday through Friday pm to midnight, and weekends 9 am to midnight, during the summer. Stimulating work and great working conditions. Students on Work Study preferred, but try us out. Meet the Liberry Ghost, the Elevator Monster that eats people, and the Photo-Kopy Kat that makes paper jam. There's a whole could happen at anytime. new world waiting just for you Jeezus, I forgot. Jeezus, the at Millikan. See Vitaly Kupisk right now. Goddam! That's McLaughlin on the first floor

down. And r. duke hymie The guide was an LSI-11 from the AI lab. So long, Armadillo! Goodbye, Sam Thope so! The Ohreally? I wasn't And you call that Houston Tech! Farewell forever! CS department paying much attengood? He couldn't even direct me to Unless, of course, they actually accept is doing some tion during that amazing work with artificial intellitour. I he guide was the bathroom! pretty bad. Doyou think they will? gence! 0000000000



Bobby was a good man

## In Pace Requiescat

When Bob Marley died a few days ago, I was not only surprised, but profoundly saddened. I can't really claim to have been heavily into Reggae: no dreadlocks, heavy ganja, or Jamaican accent; but what Marley meant, and what he said came driving through anyway. He seemed to me one of the very few 1980's singers with enough confidence and talent to mold and model a musical form to his will. More, he could express himself in the open, honest, and forceful way of all great artists.

In concert his presence drenched the audience. He gave of himself without letting everything go. He knew just the right moment to tighten the reins on his own rising frenzy. Masters are always like this: holding in reserve a strength unknown to the audience, they seem to draw inspiration from a well of intimate depth.

No one who ever Marley perform could deny the power of his magic. Woman, No Cry" came straight from his soul and the audience knew it: from the mournful irony of the title to the wailing affirmation of its final note, that song beat with the rhythm of a strong but heavy heart—like Janis' "Ball and Chain" or Jimi's "Little

coming! After wrapping up

final details on the very suc-

cessful Candide, the musical production staff is getting

ready to select next year's

musical-but we need your

who is interested to express his

opinion on what musical

should be done. The choice for

next year's musical is between

South Pacific and Brigadoon.

If you wish to state your

of paper in the box outside the

Drama Office on the north side

We would like everyone

Wing." Marley, Joplin, Hendrix, Morrison, Redding, Lennon...a bad list.

"Jesus died for somebody's s...but not mine." sins...but not Somehow that line seems appropriate to this strange theme, though I can't seem to put my finger on exactly why these who died on the altar of Soul and were reborn in the schtick of the vinyl plastic fantastic should demand such a special place. It's even more peculiar in what Hunter Thompson calls our "crazily inflated culture economy that eats its heroes like hotdogs and honors them on about the same level."

It isn't easy knowing that their work, sweat, and very breath now buy cocaine and T-top trans-ams for the grinning groovies in double wide lapels who control the "music industry." The key word, of course, is industry, not music, because the primary function of the Record Companies is to make money-not propagate and support art. The back side of the music industry is a strange place which I have only glimpsed; but even from here on the border it's easy to see musicallythe jaded/money-first attitude starts. Every year thousands of new albums are released, and ninety-five percent of them

If you have any strong feel-

Since this is a Caltech show

ings about any other show, feel

we are interested in having peo-

ple here at Tech become more

involved with the production

of the show. If you are in-

terested in helping and/or lear-

ning about any area of produc-

tion, lighting, set design,

costuming, music....Please contact the theater arts pro-

gram and talk to us-we

Caltech's musical.

free to put that down also.

Joplin, would be better off if restamped into disposable plastic ice buckets/Shriner's hats for midwest conventioneers. So when anyone gets a new sound or a fresh idea the noise from the industry PR departments is like th esound of 50 lecherous old men trying to gang-bang Brooke Shields. And so it goes. They tried to push Reggae, but it doggedly refused to go commercial. Then came Punk. Overnight, album covers sprouted an odd assortment of leather jackets, chains, torn-Tshirts, etc. By the time the media machine had finished with it most decent bands had been so cosmetically (and musically) twisted in an effort to catch the "New Wave" that the whole movement was disowned by those who founded it.

With rare (and early) exceptions like the Pistol's "Anarch in the U.K." and Television's "Marquee Moon," the industry execs were so ideologically distant from the musicians that albums tended more toward bad self-parody (apparently unwitting) than toward any social or musical

Washington.

I see I've gotten pretty far off the track again, and I did want this to be about Bob Marley, not another frantic tirade against musicrape. And that takes me around again to what was so special about him. He had enough strength, vision, and talent to meet the industry on his own terms. Like the Brown Buffalo he spoke for his people; and he made his own music in his own fine style.

In Bustin' Loose, Richard

Pryor plays an ex-con who is

blackmailed by his parole of-

ficer into taking a dilapidated

school bus full of disturbed

children and a social worker (played by Cecily Tyson) from

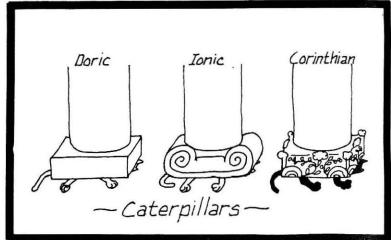
Philadelphia to a farm in

-Bruce Sams

Pryor gets a lot of mileage out of various sight gags involving the bus, the kids, and anything else that comes his way, including the Ku Klux Klan. And no one is funnier than Richard Pryor trying to talk his way out of the predicaments he gets into, but unfortunately no one is worse about extending scenes until the very last little snicker has been milked from the audience. Still, the movie has a lot of good laughs.

Things get a little corny toward the end of the film. Would you believe that the mortgage on the farm is going to be foreclosed and the poor orphan children who no longer are disturbed will be forced back to mean old Philly? Of course not! Naturally, justice, the American way, Mom, and apple pie (or maybe in this movie, sweet potato pie) prevail and there's a fulsome (no, I don't mean wholesome) happy ending for the whole family.

-Lisa Grenier



**Pryor Notice** 

## Billie und

"I don't want a pickle, I want to ride my bicycle." -J. Random Anonymous

Well folks, it is that time of year again. The seniors are learning to count backwards, you are finally making up last term's work, and the women's clothings are getting looser. You know, the only thing more distracting to a cyclist than a dog hanging of your ankle is a female cyclist with a loose halter top.

Now that I have managed to get your attention, I thought I would give a few tips on biking during the summer.

One of the main concerns r somebody who bought their bike in Pasadena is how to take it back home. The big problem for many may be the fact that most buses will not allow you to take bikes with you. I think it is because some jerk in the past sued a bus company because his bike was scratched or something. In any case, better find a friend to drive you to the airport or ride your bike home.

To transport a bike by plane requires you to either get a bike bag or a box. Although a bike box can be obtained from a bike dealer for nothing, transporting the bike in the box or the two separately is extremely awkward. Also, from looking back on my own ex-

periences, it seems that boxed bikes are handled with less care. The bags for bikes are available at the check-in gate and cost about \$4. Although they can be used over and over, one that will last a lot longer can be purchased from bike stores for \$8+. It is also important to remember that special handling fees will be charged by most airlines. Check with your airline; I think Delta was the only airline that will ship bikes free.

Once you get your bike home, you may find long distance riding to be a lot easier. There are many reasons for this. First of all, you are probably more familiar with the area and people's attitudes. other words, you are psychologically more relaxed and your mileage will show

The physical environment is

also important in biking ease. Unless you have carefully trained in a particular environment, your body may not function well in that environment. Riding in Pasadena is more or less the same as riding in the desert, which it once was. This means that if you are used to biking in Maine, you may worry about overheating and dehydration. These problems are caused mainly by the intense sunshine which is impeded only by the pollution. In comparison, in the more temperate parts of the country, the trees may provide shelter

Well folks, start planning for the summer and make it a good one. Also girls, please don't wear loose halter tops while biking. I want to live to see myself graduate from this place.

Nominate Yourself!

Nominations for class officers are now up on Theresa's door. This is your chance to make sure Ditch Day and the Mudeo are run properly (or, in the Mudeo's case, run at all).

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preference, please leave a slip people to get more involved in

\*\*\*\*\*\*\*\*\*\*

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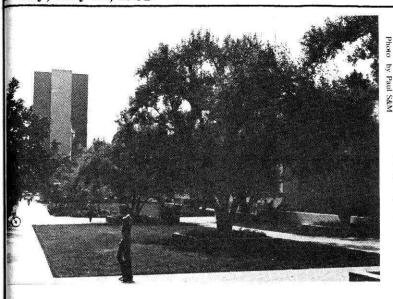
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ust in case you haven't noticed yet, third term is here. Enjoy.

# Up From the Well

At Caltech, there are udents from all over the ountry; actually, from all over ne world. Being a native alifornian, I'm a little tired of earing what California lacks. In especially tired of hearing bout my state's shortcomings from students from the East loast. By far, the great matrity of those who deplore the ack of culture, despair about the state of public transportation, complain about the earth of good Italian food, to, have no idea what

alifornia has to offer. Can you name another state nich has deserts, redwood rests, miles of coastline and ountains? Did you know that utside of Alaska, the highest oint in the United States is in alifornia? (Mt. Whitney at ,495 ft.) Or that the lowest oint in the U.S. is only 85 iles away? (Death Valley is 2 ft. below sea level.) And here do you think the oldest, **llest** and largest known living tings currently reside? (The ristlecone pine, the coastal dwoods and the giant seuoias are all native Califor-

I don't think California is errific because of all these ighest-lowest-biggest-bestullshit; I think California is terrific because of the amazing variety of stunning natural scenery. So please, before you point out again how bad the smog is in certain parts of California, go see the beautiful desolate desert scenery at Death Valley, walk among the waterfalls and giant sequoias in Yosemite, drive along Highway I through the Big Sur area at sunset, and visit the lovely, moist redwood forests near Crescent City. Then, maybe I'll listen to your plaints.

-Susan Hunts

## T-BIRDS STILL FABULOUS

I went to Perkins Palace a few weeks back, on the same night as Bruce "the Man" Sams, and the Fabulous Thunderbirds were every bit as good as his review portrayed them. The Fab T's play the blues with enough soul (well, for bofay...) to bring back the days when B.B. was King and Barry Manilow was writing Dr. Pepper commercials. However, the true blues got lost in the shuffle somewhere on the way

Sale Of The Year

The greatest deal of 1981 is here. The Caltech Y Lost and Found Auction starts Thursday June 4, 1981. Our auctioneer extraordinaire, Walt Meader, will be on the Quad from 12:00 to 1:00 selling various items at prices so low, it must be illegal.

Some of this year's hot sellers are a multi-quart coffeemaker, an eight-track stereo, a sleeping bag, and, of course, our 1981 spring line of intimate apparel (yes, all of it was found on this campus). So, if you think some of these sound good, come and see the really valuable items too good for print.

One final note, if you are missing your rubber ducky or less valuable items, please stop by The Y office before 5:00 Wednesday June 3, 1981 and claim them. If you don't, you may find your dirty laundry for sale.

to their new Chrysalis album, Butt Rockin'.

Not to say that the album isn't good-it is. Very good, in fact; it certainly lives up to its name in rocking the listener. The addition of a horn section smooths out a transition from basic blues guitar to r&b rock, and the Thunderbirds still crank out the great solos and hot licks that got them where they are. And since there are exactly two bass lines and two drum parts that cover 95% of the blues ever written, Keith Ferguson and Mike Buck provide a **SOLID**, if not inventive, rhythm section for the solo abilities of Kim Wilson on harmonica and Jimmy Vaughan on guitar. But on the latest album, the soloists get repetitive too, and you end up with three or four songs that cross the line from "stylistic continuity" "Boston syndrome." "Tip on In"is indistinguishable from "Scratch My Back," from their first album, even down to the inflection of the spoken lyrics. "Jumpin' Bad" is reborn, with a slightly slower tempo, as "Tell Me Why" and the similarity between "I Believe I'm In Love" and "You Ain't Nothin But Fine" from the first LP is more than mere coincidence.

The rest of the songs are just fine, fine, fine, although the songwriting Thunderbirds seem to have eliminated all but one of the problems that give you the blues. (Hint: "Frailty, thy name is \_ record is inundated They're All Bitches blues, which are fun to listen to, if not very constructive (with a title like "One's Too Many Hundred Ain't (And a Enough), how can you go wrong?). Vaughan gives you all the guitar you expect, plus some, in his solos, and Wilson's voice is belting out those blues as strong as ever. In direct contrast to the above, Buck really takes the initiative on the first side, with some drumming that shows how much room for originality there really is in these new songs.

As a whole, Butt Rockin', is jolly good fun, and if you've never heard the first two, you won't even notice what I've been bitching about for the last ten minutes. Go buy it if you've got six bucks you aren't using. And go see them next time they're in town-find seven bucks you aren't using. The Fabulous Thunderbirds are going to be an enawmus, in-keredible, stoopendus, HIT in a few years, as long as they keep turning out the creative blues jams that filled their first 23/4 albums. But the road to KiiS is paved with good inflections - done the same way one time too many. Caveat, guys.

-Dave Younge



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You laughed at Kahoutek
You laughed at Chrysler

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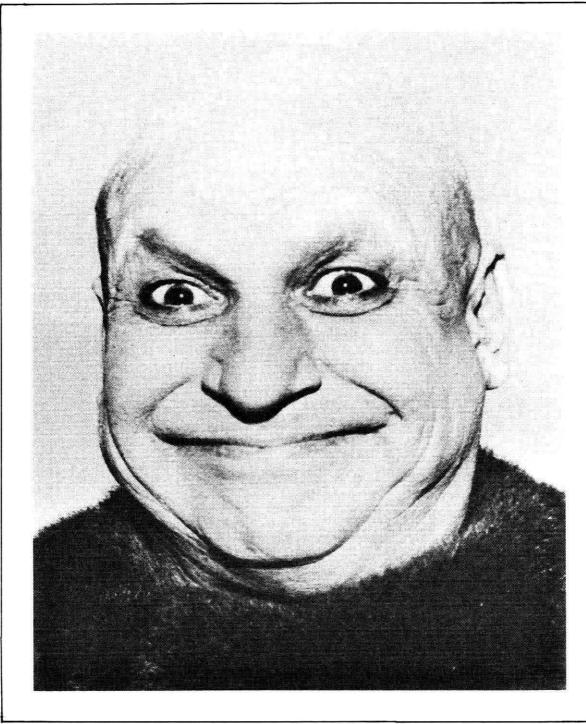
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You really ought to attend the following workshops, because your soul(assuming you still have one) is in great need of salvation.

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June 5: Have we got a deal for you!

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FROM PAGE THREE nmicks. Again, hardly yone showed up. People m to like the concept of holding tradition a lot more n sloshing around in the

Caltech has many tradions, and they are an impornt part of the special atosphere here. But these tradions should reflect the inrests of the community, not ctate them. When a tradition longer interesting, it ould be allowed a dignified ath, and be remembered ndly by those who enjoyed rticipating in it. It should

not be propped up until it rots, to detract from surviving traditions; new ones are created every year.

Is it possible that you are defending the Mudeo because it is the only responsibility of the Junior Class President (an office you held last year), and its elimination would essentialremember you as the lone voice in defense of the gameroom. By coincidence, you are also the Gameroom Chairman (a job I once held).

The Mudeo is dead; please don't interfere with its burial any further.

-Eric H. Eichorn

### **EDITORIAL**

FROM PAGE TWO

nd thinking about the unexplored avenues of the subject matter). Now he was tired. All he wanted vas a vacation for a while – unfortunately it was hird term, the third to the last week of third term. ertainly a familiar story to Atmanfester. He smiled tight Mandarin smile and the wrinkles on his orehead became ever so slightly pronounced. He oughed to clear his throat with the subtley of a cat omiting. "You're your own person, you're a star. Oon't let some arbitrary authority tell you what you ave to do. Be your own producer." The student felt little better. Sure, he thought to himself, I have a hole life beyond finals week. The student sighed. You know, man, you've got a lot to say to me." He ure did. Atmanfester could create a world in six ours and spend the seventh dismantling it again, nd he always had a new way of twisting a phrase to spose some hidden truth in an otherwise mundane xpression.

"Where we need to begin is with your constant ense of being trapped. You only trap yourself." Atanfester continued on for several minutes as the udent's mouth fell agape. Atmanfester was only a ttle disappointed that this case would not be as allenging as the others, but beggars can't be osers, he thought. He wasn't up to a challenge at esent, anyway, and his parlor tricks were getting st a bit too stale. "Why don't we go back to my asement hovel and begin to explore the beauties of is, our world." At that he stretched out his arms nd took a deep breath, but it would have been clear the more experienced eye that his grand shows of y and love were taking their physical toll. The stunt readily followed him as they began their so-

At least the end is in sight for most of us.

-Stuart Goodnick

## THE Body Shop

Now that summer seems to ly abolish that office? I also be here, everyone is heading for the beach and competing for the best and darkest tan. As I walked down the Olive Walk last week, many of you were sunning on the lawn, soaking up those long awaited Unfortunately, warm rays. many people think they look healthier and more attractive with a tan, myself included. Maybe it's related to being in California, I mean doesn't everyone here ride surfboards, wear bikinis, and have a wonderful golden tan?

> As you try to get your California tan before going home for the summer, remember a few helpful tips concerning sunburns and skin

> Sunburns are due to overexposure of ultraviolet radiation. Allergic reactions can also occur due to this overexposure. Sunburns can be mild and desired or severe and feared! The degree of reaction depends upon several factors, including length and intensity of exposure, the individual's complexion and previous condition of the skin. Varying degrees of redness develop within 2 to 12 hours after exposure and reach maximum intensity within 24 hours. Sunburns are usually classified as either first or second degree. First degree is overexposure causing signs of redness or discoloration, mild swelling and pain, with rapid healing. Second degree burns have a red or mottled appearance of the skin, development of blisters, swelling and possibly a wet appearance of

> Treatment of sunburns consists of cold water applications, NO butter, salve, vaseline or other home ancient remedies. Blot the skin dry and cover when exposed to sun. If blisters are present, do not break them open. Take 2 aspirin every four hours for pain (Tylenol if you

are allergic or sensitive to aspirin). If your arms or legs are affected, elevate them when possible. If blisters break open, cover them with a sterile dry dressing. Very deep burns with many large blisters should have medical treatment. Prevention is the best course of action! Limit your exposure at the beginning of warm weather to 15 minutes, then increase 5 to 10 minutes each time. Beware of cloudy days-you can still burn! There are many commercial suntan lotions, oils, etc., available. Choose a lotion with a large percentage of PABA sun blocking agent to use at first (around 15%). Avoid greasy or oily preparations as they may cause acne-like eruptions. Test a small area of your skin first with the preparation to see if you are allergic to it before smearing it on your entire body. Be sure and apply lotion, such as Vaseline Intensive Care after sunbathing to help keep your skin from drying out and prevent peeling.

Your lips also need protection from the sun. I found Nose-Coat to be effective for my lips also. Zinc oxide is a very effective and inexpensive preparation. If drying and cracking occur, apply A and D

ointment 3 or 4 times a day.

Don't forget the eyes as well as the skin need protection from overexposure to the glare of the sun, sand and water. Wear sunglasses or a hat to shade your eyes.

If you're around this summer and acquire a sunburn, come on over to the Health Center. We do have prescription medicines that may help you; early application is necessary.

This is the last column for this year, so have a great summer, stay healthy and thanks for all your support and encouragement with the Body

-Lynnette K. Wilmoth, N.P. Health Center 1-8



Tute Your Bi

The list of Biology tutorials (Bi 23) to be offered next term is now available outside the Biology Office, 156 Church, and outside Rm. 12, Beckman Labs. The tutorials are staffed by Biology faculty, postdocs and grad students. They provide an opportunity for learning through personal contact in a small group situation and cover a broad range of subjects. Bi 23 may be taken for up to 6 units; grading is pass/fail. For details, see Ron Konopka, Rm. 12, Beckman



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Faculty, Grad Students, Attend! Mondays and Tuesdays are Beer Days. Buy 1 pitcher, get the second one free!

On Lake Avenue 1/2 Block North of California Remember Ditch Day

The Master's office has started a program to collect information on ditch day stacks. These will be kept as a file to inform the curious about "typical" stacks. According to Carmela Kempton at the Master's Office, it will be good to have a permanent record of the many interesting stacks that appear each year.

Any senior who believes that his stack is worthy of memory is invited to write down how it worked and give it to the Master's Office. This will provide a consistent history of a tradition long lost in the quirks of oral recordkeeping. At last, we will stop hearing forever about the car that was put in a room as a counterstack and the sheep that country-minded more underclassmen used for the same purpose. We will have to put up with stories about the swimming pool and chemical bomb.

The Feeling Cycle

A road map of your feelings, how feelings work, how to come to terms with your feelings, how to use them to point the way to selffulfillment, are elements to be presented by Dr. David Viscott Beckman Caltech's Auditorium on Friday, June 5. 8pm lecture is cosponsored by the Pasadena Mental Health Association and the CIT Faculty Committee on Programs.

According to Viscott, a psychiatrist and author of The Language of Feelings, How to Live With Another Person, The Making of Psychiatrist, our feelings are our sixth sense, the sense that interprets, arranges, directs, and summarizes the other five. Feelings are our reaction to what we perceive, and in turn they color and define our perception of the world; they make up ma language all their own. Viscott also says in The Language of Feelings, feelings can be managed defensively or creatively, the one a turning inward, the other an expressive flowing outward." When feelings are not resolved, he points out, they form symptoms either physical or emotional.

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Please return all library books before you leave for the summer.

Are You Graduating?

Please remember to return your questionnaires concerning your plans after graduation to the Placement Office as soon as possible...especially before you leave campus. The office is in Room 8, Dabney Hall. If you don't have one, drop in and give them the information directly or phone x6362. Thank you.

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**LOST:** A set of about 10 keys three weeks ago. If found, please call Mike % 578-9368.

**OPPORTUNITIES** 

DESIGNER-Junior or senior with drafting experience, studying civil/structural engineering. Design & draw plans for foundation for second-story addition. \$7.00/hour. 660-7392 after 6pm. A LECTURE on the botany of Psilocybin mushrooms, especially identification methods, given at the Delacour Auditorium of the L.A. county Natural History Museum, 900 Exposition Blvd. (across from USC), on May 30 (next Saturday) at 7:30pm. The lecturer will be Paul Stamets, author of Psilocybe Mushrooms and their Allies. The lecture is free, and no reservations are necessary

HELP WANTED—Researcher's overflow, short project assignments, background in commercial art helpful; 213/358-1230.

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### Teknekron

FROM PAGE ONE

a useful idea is provided with capital to develop it into a marketable product or service. He has access to accounting, financial, and consulting services from Teknekron's central organization. As he goes to market and capital accumulates, he assumes an increasing amount of control and responsibility. As a result, the frequent failures, long breakeven times, and high initial personal investment of standard venture enterprises are avoided. The entrepreneurs are usually around twenty-five years of age with little or no full-time experience in industry management.

The difference in performance from conventional capitalization means phenomenal. Break-even time from initial organization is around one year, compared to the usual five to seven years. The businessman-scientist retains control of his company rather than seeing his share dwindle to less than five percent. Teknekron's future affiliation with the Caltech community will present an excellent alternative to the currently limited variety of engineering and research jobs.

### Fairchild

FROM PAGE ONE

Kellermann is a young but highly regarded astronomer at the National Radio Astronomy Observatory. He is a member of the NAS.

Robert P. Kraft: Professor Kraft, of the University of California at Santa Cruz, is an astronomer who has worked in the fields of stellar rotation and close binary systems. He too is a member of the NAS.

Christopher McKee: Professor McKee of UC Berkeley is a theoretical astrophysicist whose main areas of interest are quasars and the interstellar medium. He has also worked with the laser fusion program at Livermore Laboratory.

Barry Simon: Barry Simon is a Professor of Mathematics and Physics at Princeton. He has made important contributions to quantum mechanics and quantum field theory.

Gerard 't Hooft: He is a Dutch theoretical physicist. He studies some of the most advanced fields in physics, including quark theory and aspects of quantum mechanics. He discovered "instantons," which I don't understand, so I won't tell you about them.

There have been over one hundred Fairchild Scholars. Many who are here now will be leaving soon. However, there will be nine new persons here next fall. These outstanding guests will continue to enrich every department at Caltech (at least as long as the money holds out).

## (4)

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