Gang Approves Ruddock House
Bid To Rotate Summer Residents
By Bob Morrison

Ruddock House President Mike Azz has submitted a petition to Bob Gang, director of housing, in an effort to reduce or eliminate assignments of non-Caltech people in Ruddock. The petition was the result of a concern for damages to Ruddock House over the summer. Last year's petition of complaint of damages to a room turns out to have been the Shriners' Hospital sponsored football team. During their stay, someone (not one of 300) extinguished and sprayed it around, a room, for which the Shriners paid full damages and cleanup costs. There have been no known damages, according to Gang, other than this incident.

Gang was not willing to eliminate the income derived from Ruddock, groups used were the summer, but agreed to accommodate the people in other houses, starting next year.

A rotation scheme is planned, although it is not perfectly clear yet how or where groups will be housed, if at all. Nothing can be done this summer, because the contracts with the conference groups have already been made.

There are three groups that concern Ruddock this summer, one of which is planned for one night only. The Shitoni's football team of approximately thirty members will also be at Ruddock for ten days in July, and finally a championship Frisbee throwing event is to be held in Ruddock. Ten members, will be in Ruddock for a two-week period. The income derived from their stay is expected to be from $6000 to $9000, which is added to the funds of Ruddock.

This income is the only source besides student room and board income that is used for this purpose. Consequently, Azz and Gang now agree that the funds are badly needed; thus there resulted the rotation compromise. Ruddock has traditionally had the football players and Frisbee throwers, primarily because it is closest to the housing offices, and it is Azz' favorite during the summer. Lloyd House, however, at the other end of campus, has a conference of cello players this summer. Blacker, Delaney, and part of Ricketts will be used to house Caltech students.

The nominating Committee, which nominates faculty members to these various posts, was incorrectly listed in the Tech two weeks ago. The real members of this committee are Drs. Robert Vaughan (chairman), Charles Babcock, Donald Burnett, Sunil Mathews, and Joyce Printz. The Members of the Membership and Bylaws Committee are Drs. David Goodstein, Jack Morgan, and William utens, Leverett Davis Jr., and Samuel Epstein.

A clever mechanical stack by Ruddock EE Tom Guthrie. Its simplicity was elegant: just put the correct key into the lock and the door would fall off. The proper key was hidden a mere three feet away. However, thinking that it was a typical EE stack, the Riddolds never managed to get in.

A neat twist by Page's John Morgan, currently Associate Dean of Students, has been elected Chairman of the Faculty. He will serve a two-year term. Dr. David Goodstein was elected Vice-Chairman. Dr. David Elliott was elected to another term as Faculty Secretary. Dr. Paul Revelle was elected to remain on the Board, and three new members were elected to the Academic Freedom and Tenure Committee: Drs. Tom Apostol, Charles Barnes, and David Keese. New members elected to the Academic Freedom and Tenure Committee are Drs. Norman Davidson, Leverett Davis Jr., and Samuel Epstein.

The nominating Committee, which nominates faculty members to these various posts, was incorrectly listed in the Tech two weeks ago. The real members of this committee are Drs. Robert Vaughan (chairman), Charles Babcock, Donald Burnett, Sunil Mathews, and Joyce Printz. The Members of the Membership and Bylaws Committee are Drs. David Goodstein, Jack Morgan, and William

A clever mechanical stack by Ruddock EE Tom Guthrie. Its simplicity was elegant: just put the correct key into the lock and the door would fall off. The proper key was hidden a mere three feet away. However, thinking that it was a typical EE stack, the Riddolls never managed to get in.

A neat twist by Page's John Morgan, currently Associate Dean of Students, has been elected Chairman of the Faculty. He will serve a two-year term. Dr. David Goodstein was elected Vice-Chairman. Dr. David Elliott was elected to another term as Faculty Secretary. Dr. Paul Revelle was elected to remain on the Board, and three new members were elected to the Academic Freedom and Tenure Committee: Drs. Tom Apostol, Charles Barnes, and David Keese. New members elected to the Academic Freedom and Tenure Committee are Drs. Norman Davidson, Leverett Davis Jr., and Samuel Epstein.

The nominating Committee, which nominates faculty members to these various posts, was incorrectly listed in the Tech two weeks ago. The real members of this committee are Drs. Robert Vaughan (chairman), Charles Babcock, Donald Burnett, Sunil Mathews, and Joyce Printz. The Members of the Membership and Bylaws Committee are Drs. David Goodstein, Jack Morgan, and William

A clever mechanical stack by Ruddock EE Tom Guthrie. Its simplicity was elegant: just put the correct key into the lock and the door would fall off. The proper key was hidden a mere three feet away. However, thinking that it was a typical EE stack, the Riddolls never managed to get in.

A neat twist by Page's John Morgan, currently Associate Dean of Students, has been elected Chairman of the Faculty. He will serve a two-year term. Dr. David Goodstein was elected Vice-Chairman. Dr. David Elliott was elected to another term as Faculty Secretary. Dr. Paul Revelle was elected to remain on the Board, and three new members were elected to the Academic Freedom and Tenure Committee: Drs. Tom Apostol, Charles Barnes, and David Keese. New members elected to the Academic Freedom and Tenure Committee are Drs. Norman Davidson, Leverett Davis Jr., and Samuel Epstein.

The nominating Committee, which nominates faculty members to these various posts, was incorrectly listed in the Tech two weeks ago. The real members of this committee are Drs. Robert Vaughan (chairman), Charles Babcock, Donald Burnett, Sunil Mathews, and Joyce Printz. The Members of the Membership and Bylaws Committee are Drs. David Goodstein, Jack Morgan, and William
Letters To The Tech

To the Editors:

As Mr. Kellner's first letter showed his ignorance, so his second shows his stupidity. He totally missed the point of our letter. We were not correcting the Tech in its supplementing it. To spell out the give and take that Osvalide missed:

It is true that decreased business hurts our profits, but rising costs hurts us much more. We can buy enough food to cover any amount of business in one night, but then we would have to raise prices to cover the spoilage. We believe the current infrequent shortages are preferable to higher prices. If you disagree, please state your case.

As a final word, remember: "A man is happy by his own means as well as his friends." This applies to institutions as well.

The Coffeehouse Management

Gary Lorden Chairman
Of Financial Aid

Coffeehouse

Tuesday’s Election

One of ASCIT's more multifaceted elections in recent memory will be held on Tuesday. Seniors are allowed to vote in this election (although they can’t vote for class officers of course). There will be four separate things on the ballot. They are:

1) Class elections

2) Five amendment changes. These changes will a) make the TQFR an official ASCIT publication, b) give the Excomm the power to submit Recommendations to the BOD, c) insure that all elections are held in secrecy, d) raise ASCIT dues $4 over the next four years, and e) institute a system of penalties against editors of publications not distributed on time and raise the salaries of the Tech editors by $300. Each amendment will be voted on separately and we recommend a Yes vote on all five of them.

3) A survey of Techners about the size of the undergraduate class. The survey will request opinions on possibilities ranging from abolishing the undergraduate program to enlarging the undergraduate class to 3000. The survey will also ask how you feel, from personal experience, the size of the student body affects the following areas: student life in general, student housing, class size, labs, athletics and P.E., Health Facilities, Social Life.

4) Finally, there will be a referendum on student housing. The questions on the referendum simply ask if you ever felt that you have been denied any sort of housing because you are a student. Although this doesn’t affect Caltech greatly, this referendum is being voted on in order to make sure that all elections are held in secrecy, d) raise ASCIT dues

Caltech Y Presents . . .

The End Of A Successful Year

By Alan Silverstein

A very short time remains before another term and another year are history and memory. But with finals hanging around a couple of weekends, the outlook may not be overly optimistic. Cheer up! For even if those horrid little dances this year, the Y still has a few programs you can anticipate eagerly to, wait.

The annual Lost and Found Auction, featuring our own Exec Dir! Ex Executives Walter “Motor Mouth” Meader, happens on the Quad at noon on Thursday, June 2. “We pre-empt our regularly scheduled lunch-hour emesis to bring you this special Y event, in living holographic color.” If any of the items you are searching for are already yours—then tune in early or you might have to bid for it. Proceeds will go to charity.

What would finals week be without Finals Decompression Chamber? (Answer: a lot more dismal.) Drop in and relax between testing—i’ts better than diving out-Saturday and/or Sunday evenings, 8:30 to 1:30. It’s free, uncolored, usual, fun munchies, lots of blank posters, games to play, and with your help, boredom of people in a partying mood. Rumor has it that the Y also plans to offer up “Son of Glop”. Remember the epic 150-pound technicolor saga of first term a year ago? With a little help from Saga, there will be a sequel.

And while you’re working at your job all summer (or working at finding one), have a fun-filled camping weekend to look forward to. Sign up now in houses for Pre-College Camping Trips. Take your choice of King’s Canyon National Park in the Sierras or Joshua Tree National Monument east of San Bernardino. Each trip will last from early Friday morning, September 16, through late Monday night, the 19th. Cost will be an inflated $35 for the trip and transportation. These annual trips are really a great way to start the year, and to meet a lot of new students as well. Don’t shy away just because you haven’t been camping before, let this be a mild introduction.

For more information on the camping trips or anything else the Y can do for you, call ext. 2163 or visit 2nd floor, Winnett. Don’t let finals get you down. Remember that summer’s coming, and make it one to remember.

The Coffeehouse Management

Alan Boyar, Flora Boyer, Stan Coho, Alan Drum

Business Manager

VOTE ON TUESDAY

THE ASCIT FRIDAY NIGHT MOVIE

The Magic Christian

7:30 p.m. & 9:30 p.m. in Baxter Lecture Hall

ADMISSION: 50¢—ASCIT members

$1.00—anyone else

THE ASCIT FRIDAY NIGHT MOVIE

Stereophonic Sound

Exclusive Engagement

THE ASCIT FRIDAY NIGHT MOVIE

11:30 a.m., 1:30 p.m., 4:30 p.m., 7:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

Sunday, June 19

THE ASCIT FRIDAY NIGHT MOVIE

11:30 a.m., 1:30 p.m., 4:30 p.m., 7:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.

THE ASCIT FRIDAY NIGHT MOVIE

1:30, 3:30, 5:30, 7:30, 9:30 p.m.
DITCH DAY HIGHLIGHTED BY FEW EXCEPTIONAL STACKS

Continued from Page One
so guide the robot through the maze, making sure to go through five checkpoints on your way. The stack worked imperfectly and was broken into quickly.

Alan Silverstein's and others' long heralded stack (at least by Silverstein who claimed to this reporter that it would take the Sourve underclassmen "at least a week and a half" to get in) which yielded easily (too bad, Alan). This stack also worked with a microcomputer, but was not as sophisticated as Megdal's. Among the bribes left in the room was a bottle of vodka. The Darbs and the Moles seemed to be the most apathetic about the whole affair. Not a single Darb had a stack and the alley three refrigerator was overflowing with bribes from the lazy upperclassmen. Ed Bielecki removed and the floor was covered with sod. White lines were drawn on the sad, goals were put up at either end of his room, and a picture of a sheep field. All the furniture was removed and the floor was covered with sod. White lines were drawn on the sod, goals were put up at either end of his room, and a picture of a sheep was put in. As usual, this brute force stack was broken within half an hour. ("There's no way they could have it open by now," Russell is heard to object somewhat to the operative effort to RF Chris Russell's room. The stack was broken into quickly."

Two RF's take top honors for the ditch day festivities. First comes the Fleming House cooperative effort to RF Chris Russell's room. The stack was broken within half an hour. ("There's no way they could have it open by now," Russell is reported to have said over the phone to a friend) and the room was quickly turned into a soccer field. All the furnishings were removed and the floor was covered with sod. White lines were drawn on the sod, goals were put up at either end of his room, and a picture of a sheep (which acted too realistically for some) was put in. Two RF's take top honors for the ditch day festivities. First comes the Fleming House cooperative effort to RF Chris Russell's room. The stack was broken within half an hour. ("There's no way they could have it open by now," Russell is reported to have said over the phone to a friend) and the room was quickly turned into a soccer field. All the furnishings were removed and the floor was covered with sod. White lines were drawn on the sod, goals were put up at either end of his room, and a picture of a sheep (which acted too realistically for some) was put in. Two RF's take top honors for the ditch day festivities. First comes the Fleming House cooperative effort to RF Chris Russell's room. The stack was broken within half an hour. ("There's no way they could have it open by now," Russell is reported to have said over the phone to a friend) and the room was quickly turned into a soccer field. All the furnishings were removed and the floor was covered with sod. White lines were drawn on the sod, goals were put up at either end of his room, and a picture of a sheep (which acted too realistically for some) was put in. Two RF's take top honors for the ditch day festivities. First comes the Fleming House cooperative effort to RF Chris Russell's room. The stack was broken within half an hour. ("There's no way they could have it open by now," Russell is reported to have said over the phone to a friend) and the room was quickly turned into a soccer field. All the furnishings were removed and the floor was covered with sod. White lines were drawn on the sod, goals were put up at either end of his room, and a picture of a sheep (which acted too realistically for some) was put in.
By Kevin Drum

Reading through old piles of Tech's, I sometimes wonder if anyone would know that they were actually written decades ago, and that it wasn't for the date on the masthead and the yellowing pages. Open a copy of the Tech from the 1930's and you read about the same problems and complaints that you hear now. So, for your interest and edification, we present the following excerpts:

It seems that some students in early April of 1934 were complaining that the heavy workload at Caltech did not leave them enough time to develop any sort of social life (sound familiar?) It also seems that a certain Dr. William Munro told these students that he thought in a serious mood are, "What this students are really thinking about student problems and frequently the results of this thought are excellent.

This is not going far enough, however. Ideas as such are the world's most useless commodity: they must be acted upon to be worth the energy spent in evolving them. Not unreasonably, the up-and-coming student should "come half way" to success. Conservatively estimated (after a careful round table discussion), it has been calculated that a normal fun loving individual may easily loosely distribute his last half-hour on Sunday:

- 1 one-half hour
- 1 dancing class
- 1 half session
- 1 headache
- 1 aspirin

And now we understand how our benevolent faculty has made "coming half way" easy. Why, by diligent persuasion of the minute hand of a watch, we might even attend a movie, a play, and assimilate all of last week's news in that extra half-hour. At any rate, we have consciously and solemnly demonstrated that anyone has sufficient time to "come half way."

The recent flap about raising the GPA needed to graduate with honors has forced some people to ask what changes could be made in order to relieve some of the pressure of Caltech without lowering its standards. The article below has some ideas. It is from the May 17, 1934, issue of the Tech, back when the average GPA here was 2.36.

Recommending the abolition of the present grade and probationary systems, changes in the awarding of honors, and almost total reorganization of the Non-Resident Club, the sixteen page report of the Committee on Campus Life and Activities, was adopted by that group at a meeting held last Monday night.

The installation of improved physical education facilities, careful supervision by experienced teachers of classes now taught by inexperienced assistants, new methods of distributing rents in the individual living houses, revision of methods of selecting freshmen, and provisions for additional social opportunities for non-resident students are other matters considered in the report.

Of greatest interest to the students are the recommendations of the Subcommittee on Curriculum. This group felt that no changes need be made in the interhouse competitions; neither the Discobolus nor the Hercules is necessary. They recommend that the outside world be given to the student other than "passed" or "failed."

And an editorial from the same issue on the same subject:

Probably the most frequently used expression by undergraduates when in a serious mood are, "What this school needs is..." or, "That's the trouble with this school." This universal spirit of fault finding may be commended in many respects. It shows that the undergraduates are really thinking about student problems and frequently the results of this thought are excellent.

It behoves the students, therefore, to see that these plans are acted upon and put into use. True, the easiest course is to forget about any changes and consider the old rut, but the effort must be on the part of the students to assure the success of these reforms. The time for action is at hand.
After 40 Or 50 Years, We Still Have Many Of The Same Problems And Many Of The Same Complaints

For all of you who have wondered if trolling is all there is to life, you aren't the first. In 1923, issue of the Tech gives me a chance to complain with the excuse that it's all on historical grounds.

The trouble with the Tech is, and seems always to have been a lack of experienced, dependable writers. While there are a few very competent men on the staff, the paper if dependent for the mass of its copy on inexperienced writers: representatives of the various publications and social organizations, men who have enrolled in the journalism class for a term's credit in English. And they do not stay with us. They show an aptitude for learning, but a respectable publication cannot be put out when the majority of the copy is contributed by Frenchmen with two months' experience, whatever their potentialities.

From experience, it is impossible to maintain a deadline. This lack of well-written material, and the uncertainty about the appearance of whatever is available for publication, is especially true when each week's work culminates in a frantic writing of stories which failed to appear, or on the night before the paper goes to bed. Good make-up, which requires rather careful planning, is plainly impossible.

The paper is often criticized for being too dull and stuffy. Frankly, there is nothing at the Institute that meets any excitement. And if it is a question of not being funny enough, a good comatose dullness in infinitely preferable to what currently passes for humor on the campus.

I couldn't have said it better myself. Of course, the Tech isn't the only publication on campus, even if it is the best. Many of you may remember the talk about three years ago which preceded the distribution of each Big T, namely that this one might very well be the last Big T. This article from the May 2, 1930, issue of the Tech is dedicated to Stan Cohn.

Yearbooks in most colleges are upon a rather more secure basis than that of the Big T. The Tech student body wants its publication to continue; this was shown, by the 266-to-65 vote two years ago for a special assessment of $1.50 per student to liquidate the debts of past Big Ts. But the student body does not support its publication; annuals were sold to only 350 students last year, and sales of the 1935 Big T will not equal that figure when subscriptions close tomorrow night.

Can the Big T become a satisfactory publication for the entire student body? Can there be a satisfactory basis for budgeting the book? Can a yearbook be issued at a truly reasonable cost to each subscriber? There is one solution to these problems. A student body vote to make Big T subscriptions compulsory at a price of three dollars would provide for the publication of an excellent Big T—not one of the most extravagant of our campus, but one of the most modest. This would guarantee the Big T the place it deserves, the position held by other annuals in other colleges.

To end our journey, we go back to the beginning. Today, we seem to think nothing of trying to raise $130 million in our "At the Leading Edge..." program. Back in 1920, when Dr. James Scherer was President of Throop (he was also a president of Caltech), and William C. Baker, will immediately push forward plans that have been recently matured, so that the 1920 will be a red letter year for Throop, which undertakes to secure at least an additional million within a specified time.

Now we come to my favorite part. The following article was in the May 2, 1923, issue of the Tech.
Technical and statistical typing and photo transcription: resumes, reports, thesis, etc.; printing and binding services. Also available for administrative overload tasks. Call us about discount prices to students.

Phone: 256-2178
Ostriker: Question, Assumptions Of Big Bang Theory Of Universe

By Alan Silverstein

Get ready to switch your perspective for the biggest one there is: the universe as a sea of galaxies, colliding and cannibalizing, rotating to the strangest ways and evolving through lives we can barely imagine. That was the feeling that was conveyed in a rambling, freewheeling Watson lecture given by Dr. Jeremiah Ostriker, Caltech Fairfield Schol- se in theoretical astronomy, but Wednesday evening. His first comment of the hour-long talk, entitled "On the Origin and Evolution of Galaxies," was that the title was still valid but the synopsis might not be.

One of his major surprises in graduate school, Ostriker said, was that the consensus among astronomers that galaxies were the building blocks of the universe as that galaxies end in a cosmic whimper. Dr. Ostriker, said, was easy to understand—"there is obscuring matter—smog!" Following informally through the talk, he described the theory of the Big Bang: as the universe expanded, some galaxies filled all of space. It's odd, he noted, that "no one thought of seeing nothing wrong with that. "It's wryly that "Some people think of the presence of bars or spirals. We argued that if it were possible to see nothing wrong with that," he added, "and that the red shift phenomenon was discovered, "it is hard to explain nothing. This helps to support the only available explanation." This has been spent discussing and showing examples of how galaxies have been typed, say, by homogeneity vs. degree of presence of bars or spirals. Obviously, it is commented on the nature of genes, including placing on the evidence of the times, [I concluded that it was the only argument."

Of course, later developments were much more Andromeda. Indeed another galaxy, and that proved the outcome back to our present perspective. A sort of shift phenomenon was discovered, "it is hard to explain nothing. This helps to support the only available explanation." This has been spent discussing and showing examples of how galaxies have been typed, say, by homogeneity vs. degree of presence of bars or spirals. Obviously, it is commented on the nature of genes, including placing on the evidence of the times, [I concluded that it was the only argument."

Dr. Ostriker gave a striking comparison between his Milky Way, and another galaxy seen edge-on. The dark clouds evident in both are easy to understand—"there is obscuring matter—smog!"

The red shift phenomenon was discovered, "it is hard to explain nothing. This helps to support the only available explanation." This has been spent discussing and showing examples of how galaxies have been typed, say, by homogeneity vs. degree of presence of bars or spirals. Obviously, it is commented on the nature of genes, including placing on the evidence of the times, [I concluded that it was the only argument."

Dr. Ostriker, Caltech Fairfield Schol- se in theoretical astronomy, but Wednesday evening. His first comment of the hour-long talk, entitled "On the Origin and Evolution of Galaxies," was that the title was still valid but the synopsis might not be.

One of his major surprises in graduate school, Ostriker said, was that the consensus among astronomers that galaxies were the building blocks of the universe as that galaxies end in a cosmic whimper. Dr. Ostriker, said, was easy to understand—"there is obscuring matter—smog!" Following informally through the talk, he described the theory of the Big Bang: as the universe expanded, some galaxies filled all of space. It's odd, he noted, that "no one thought of seeing nothing wrong with that,"

It's wryly that "Some people think of the presence of bars or spirals. We argued that if it were possible to see nothing wrong with that," he added, "and that the red shift phenomenon was discovered, "it is hard to explain nothing. This helps to support the only available explanation." This has been spent discussing and showing examples of how galaxies have been typed, say, by homogeneity vs. degree of presence of bars or spirals. Obviously, it is commented on the nature of genes, including placing on the evidence of the times, [I concluded that it was the only argument."

Of course, later developments were much more Andromeda. Indeed another galaxy, and that proved the outcome back to our present perspective. A sort of shift phenomenon was discovered, "it is hard to explain nothing. This helps to support the only available explanation." This has been spent discussing and showing examples of how galaxies have been typed, say, by homogeneity vs. degree of presence of bars or spirals. Obviously, it is commented on the nature of genes, including placing on the evidence of the times, [I concluded that it was the only argument."

"Shrink!"

Caltech's Musical Theatre Opens June 2

"Shrink!", a new rock 'n' roll musical directed by Ann Bowen, starring David Gallegly, opens June 2nd for an indefinite run at the Matrix Theatre, 7657 Melrose Avenue, Los Angeles. This original musical, written by Bob Goldstuck and Bill Wine, deals with a rainy day in the office of a New York psychiatrist. The cast includes Edmund Ballin, Valerie Mamelsky, Joan Vigarn, and by David Richie.

Lois Walden and David Webb, tickets available at the Matrix Box Office, 653-9725.

Dave Brubeck

Immanuel Presbyterian Church Sunday, June 12, at 8 p.m.

Dave Brubeck and the Cathedral Choir and Orchestra, conducted by John Alexander, and organist Samuel John Swartz will present the West Coast premiere of The Light In The Wilderness. The work will be presented as the final concert of the season at Immanuel Presbyterian Church in Los Angeles, with the composer performing the piano improvisation which concludes the work. Robert Tal's "The Afternoon of a Faun."

CASHIER

Must be 16 years old, and supply us with a photo ID at the box office. Otherwise, no sizable purchase of food items or drinks allowed. Must be 21 plus for alcoholic beverages. Full time work at present required. Full time work at present required.

COOK TRAINEE

We will train qualified applicants in all phases of cooking service. Opportunities vary depending on shift and work. Excellent Summer Employment opportunities which will continue as part of the employment program for the future.

HAMBURGER HAMLET

14683 Melrose Ave., Los Angeles, CA

A Royal General Employer, Employer

Friday, May 27, 1977 THE CALIFORNIA TECH Page Seven

Y PRESENTS RECOMBINANT DNA

Continued from Page One

Concerned about the unknown effects of combining random genes in a bacterium, Dr. Robert Sinshimmer, Caltech biology division chairman, which argues that scientists simply do not know enough to infect the human gut, was less than one in 10.

On the one side, Davidson argued for not doing basic research, aimed at understanding, measuring, and evolving through lives and evolving through lives and evolving through lives and evolving through lives and evolving through lives. On the other side, he said that there are possible benefits from such research being done at Caltech, and the safety precautions taken. Five groups here are working with recombinant DNA techniques, he said. All of them are doing basic research, aimed at understanding, measuring, and evolving through lives and evolving through lives and evolving through lives and evolving through lives and evolving through lives, and that's the punchline of this talk; that's the punchline of this talk; that's the punchline of this talk; that's the punchline of this talk; that's the punchline of this talk.

Dave Brubeck

Immanuel Presbyterian Church Sunday, June 12, at 8 p.m.

Dave Brubeck and the Cathedral Choir and Orchestra, conducted by John Alexander, and organist Samuel John Swartz will present the West Coast premiere of The Light In The Wilderness. The work will be presented as the final concert of the season at Immanuel Presbyterian Church in Los Angeles, with the composer performing the piano improvisation which concludes the work. Robert Tal's "The Afternoon of a Faun."
RECOMB DNA
Continued from Page Seven
method by which some are expressed, or "turned on" while others stay inactive.
Manatis went on to describe the categories of safety specified by the NIH guidelines. There are two types of safety precautions—physical containment and biological containment. Physical containment ranges from P-1 (standard laboratory to the high security P-4 which includes autoclaves, showers for workers, gloveboxes, etc. Biological containment varies from simply the use of a crippled strain of Escherichia coli, called X1776, which is not able to survive outside of laboratory conditions.
As Manatis explained, there are numerous P-1 labs on campus. In addition, there are now P-2 labs, in which only "good, microbiological, aseptic techniques" are allowed. Finally, there is one P-3 lab, which includes an airlock, recirculating biosafety hood, and a pass-through autoclave. Work done in the P-3 lab, he said, will use the standard laboratory strain of E. coli while all work in the P-3 lab will use the crippled strain X1776.
Three grad students, Welcome Benitez, Jon Fuhrman, and Dave Goldberg, and one post-doc, Amy Lee, next participated in a panel discussion and question period.
Fuhrman began by making the strongest case of the night against recombinant DNA. He said that the biggest danger in such research, as opposed to conventional research with known pathogens, is that a dangerous new bacterium might not be immediately recognized as dangerous. We "don't know what to look for and it may not become apparent for a while," he said. Another fear he had, he said, was that "an air of nonchalance will develop in the lab while all is well, and nonchalance will develop in the lab while all is well, and precautions are not taken." This fear was not entirely unfounded, since some of the panels had grown somewhat critical of the NIH guidelines for recombinant DNA.
Most of the questions from the floor dealt with ideas that the voice of the people would not be heard as the "technocrats" pushed for recombinant DNA. Dr. Davidson answered him, saying, "The recombinant DNA has been the most open, most debated scientific problem ever, and whoever is responsible for training and testing anyone planning to use recombinant DNA must have more opportunity to give voice in this issue than ever before.

Swords And Starships

By Nick Smith
A very short column this week, just to bring you up to date on a couple of things to keep you busy during the summer.
First, in case you haven't noticed, Star Nuts has been released, and is currently in Westwood and Hollywood. For those of you who haven't been reading about it, this is the first genuine high-budget SF movie since 2001, and is quite worth seeing. Space opera of the finest kind, with Alec Guinness giving the acting quality a boost. Even more important, for those of you who can't get out of the area, a very local theatre (walk north to Colorado and turn west, a block past Roma's) has it tentatively scheduled for the summer.

Second, for those of you who plan to be around here in August, there is something worth staying for. The weekend of August 12-14 brings an event called "Fantasy Faire," a small convention of SF fanzines, reprints, and other SF ephemera. Several major people are going to be there, including Fritz Leiber, A.E. Van Vogt, C.L. Moore, Randall Garrett, Marion Zimmer Bradley, and others.

Send for information at the following address: Fantasy Fair, 1855 West Main Street, Alhambra, CA 91801. The prices for this convention are cheap, and the hotel is about a mile from the campus. Films, panels, and all sorts of activities are planned for the three days. Try to go if you can.

ROMA GARDENS
BEER & WINE
ITALIAN CUISINE
PIZZA
SPAGHETTI
RAVILI

OPEN 5-11 p.m. Sun-Thurs
5-12 p.m. Fri-Sat
10% off to all CIT students in dining room 7 days/week
Use new back entrance for picking up orders
1076 E. Colorado 449-1948
Now Open for Lunch 11-2
Pizzas, Sandwiches, Dinners

THRU SUN
COUNTRY PORK
TRASHY TEDDY
MARDRE
THE MASKED MARAUDER
& BOOY PEOPLE
MAY 31-JUNE 5

THOUSANDS West's World Famous
COCKTAILS DINNER HOURS 4 NO LATE
9081 SANTA MONICA RVD. L.A. 276-6168

Sweat网吧r

THE CALIFORNIA TECH
Friday, May 27, 1977

BIGN END EVOLUTION THEORY QUESTIONED
Continued from Page Seven
"The first was the discov­
ery of quasars." These weird, atypical galaxies may be extreme cases of galactic evolution, but they’re not extremely rare.
A second, more subtle mon­
ument, was that "an air of
nonchalance will develop in
the lab while all is well, and
nonchalance will develop in
the lab while all is well, and
precautions are not taken."
This fear was not entirely
unfounded, since some of the
panels had grown somewhat
critical of the NIH guidelines for
recombinant DNA.

Continued from Page Seven
lm, the proper techniques be
able to be learned well before anyone
could ever enter a recombinant
DNA lab.

how some measurements of the
velocity of portions of galaxies
(preumably by red-shift) have
not decrease with distance, as
might be expected from looking
at the solar system. Perhaps, he
conjectured, this is due to huge
quantities of invisible mass out­
side the galaxies we perceive optically.

Major Trends In Frosh Option Choices 1967-77

Continued from Page One
brought to you by the Dean's Office. And, you know, since the
pizzas were late in arriving, people actually stood and talked for
half an hour, as instead of
prehaving half a pie and running
back to their cubbyholes to troll.

Etc., etc., at 179. Now that you're familiar
with this year's total will be, I
must regretfully say that it is so
tentative as to be almost mean­
less—but it's 215 as of Wed­
nesday last.

Sometimes people who actually
got those hollowed Caltech
ears have become members of
the Alumni Association (you
really should, you know). Ms.
Phyllis Jelnick of that worthy
organization says that thus far,
seven graduating seniors have
become Life Members and 50
people have joined as new
Annual Members.

ATTENTION GRADUATE STUDENTS: if you are working in any group that has just published an important paper, in any field
then we would be interested in
having you write a short popular­
ized version, discussing the work.
Please contact: B-J Syndicate, P.O. Box 9055, Daytona Beach, Fl., 32020

SERVICES
ACCURATE AND UP-TO-DATE TYPING by executive secretary.
We prepare, typewritten, manuscripts, papers for students and faculty.
IBM selects. Fast service, re­
sourceful. Write or phone ext. 2154.
Buying or selling something?
You, too, can take out an ad in the Caltech Fax for $1.50 per inch, plus $.25 per extra line for Classifieds. Send ad copy to the Tech office or phone ext. 2154.