Volume LVI

Pasadena, California, Thursday, February 3, 1955

Number 15

Charities Drive next week

New Tech humanities course to feature "flying professor"

The sophomore curriculum next term will include "Introduction to Human Relations," a course to be introduced on a trial basis by the Humanities Department. Dr. Hubert Coffey, University of California staff member, will fly to Pasadena each week to teach the classes, and then return to his Berkeley

The course will be of an experimental nature, and will cover recent advances which psychologists have made in the study of group behavior and individual adjustment. If the project proves successful with its "flying professor," a more permanent arrangement will be made in the future. Assisting Dr. Coffey in his teaching assignment will be Dr. Charles Ferguson, UCLA professor.

Understanding

The plan has come about as the result of discussions by John Weir, Hallett Smith, and James Davies. Their interest was attracted by the fact that on Dr. Weir's questionnaires sent to employers of Caltech alumni, the main reason indicated for lack of employee success was some form of "inability to understand people." After consultation with other colleges this course scheme was proposed.

Course elective

Sophomores may take the seven units of work as an elective instead of "Business Law" or "Industrial Organization." There will be only one class and enrollment will be limited.

Acts needed for Old Faces

"Old Faces," the projected ASCIT variety show, has now been definitely scheduled for Thursday evening, March 3. Jon Harford, ASCIT rally commissioner, asks that all Beavers who plan to participate give him their names soon. All manner of acts, including skits, musical numbers, recitations, or what have you, will be welcomed.

To answer the question of moral standards to be used in the script, Harford states that the show will be, at least in part, a date affair.

Lost and found in Caltech Y office

Lost your sliderule? Missing your keys, your jacket or your rubbers? The Caltech Y office in lower Dabney acts as clearinghouse for all articles lost on campus. Visiting the Y office is a good idea for anyone who has left something lying around, and for anyone who has found unclaimed property.

The Y's collection of found articles now includes several jackets, a few textbooks, a sliderule and countless other items. Since all articles except clothing are kept indefinitely, property lost long ago may still be identified and claimed. Clothing still unclaimed after one year is given to charity during the Y spring

Noninations next Thursday

The ASCIT nominations assembly will be held next Thursday at 11 a.m. at Culbertson. At that time candidates will be nominated for the student body elections, which will be held Thursday, February 24.

All candidates planning to be nominated at the assembly must inform ASCIT President Jim Adams of their names and who will nominate them before the assembly starts.

Nominations for all offices which are uncontested will be held open for one week.

Tech formal to later this month

Caltech will go to The Palms for this year's ASCIT Formal, which is to be held on Friday, February 18. The Palms, which is on the road to Scripps and Pomona, is about 12 miles from Pasadena on Highway 66-a 20 minute drive from the Caltech campus.

With the theme, "Young At Heart," the dance will start at 9:30 p.m.; Don Ricardo and his 14 piece orchestra will play until 12:30 p.m. Identification cards will be necessary to purchase the beverages which will be served from 9:00 p.m.

Couples will have plenty of room to dance and relax at The Palms. Enough tables for all the couples will be placed around the dance floor, which is about the size of Dabney Lounge.

Bob Kausen, ASCIT first rep, suggests that those going contact a date soon as the dance is two weeks away.

Dr. Oppenheimer subject of Murrow film interview

Dr. J. Robert Oppenheimer defends himself against "security risk" charges in a movie to be shown here next Thursday at 7:30 p.m. in 155 Arms. The movie is a filmed interview between Oppenheimer and commentator Edward R. Murrow, taken from a recent C.B.S. television program produced by Murrow and Fred W. Friendly.

Sponsored on campus by ASCIT and the Caltech Y, the film was made available to colleges by The Fund for the Republic, Ford Foundation branch concerned with American civil liberties.

ASCIT rally commissioner Jon Harford, in charge of next week's film showing, has announced that the film will be shown twice next Thursday if demand is great enough. The second showing will be at 9 p.m. in 155 Arms.

The Caltech Y will also show the Oppenheimer film Thursday, Feb. 21 in Culbertson. This showing will be primarily for the faculty and friends of Cal-

In line with the Oppenheimer film showing, the public affairs room in Dabney Hall is featuring an exhibit concerning science and security. The exhibit includes copies of recent articles by Dr. DuBridge and biology chairman George Beadle on the

Math club meeting to feature movie

Analog Computers will be featured next Monday at the meeting of Tech's newly formed Math Club, H. D. Wall, with International Business Machines, will speak on the work that IBM is doing in the field.

The meeting begins at 7:30 in 155 Arms. Following the talk, a movie which was prepared to present essentials of industrial application of the computers will be shown.

Dr. Sage speaks at Friday lecture

Dr. Bruce Sage from the Chemical Department will present a demonstration of "Critical Phenomena" at the public lecture tomorrow night in 201 Bridge. The lecture starts at 7:30, but overcapacity crowds have been the rule, so those who wish to sit are advised to come early.

The demonstration, well-known to frosh, shows the continuity of the liquid and gaseous phases of ethane at the critical point. Dr. Sage explains the imporpetroleum production, where high temperatures and pressures are often encountered.

Houses compete for waiters; be at The Palms money goes to four charities

The 1955 ASCIT Consolidated Charities Drive will be held next week, Monday through Friday. The drive, a combination of what used to be several different charity appeals, is the only off-campus charity program held during the year. The goal of this year's drive is \$3500, which will be distributed among

Dr. Mead to hold fireside this Sunday

Dr. Hunter Mead, professor of philosophy and psychology at Caltech, will be host to the Caltech Y Faculty Fireside this Sunday evening. The fireside, which will last from 7:30 to 9:30 p.m., will be held at Dr. Mead's residence at 626 North Chester Avenue. This will be the first of two planned firesides this term.

A highlight of this gathering at Dr. Mead's house is the organ that Dr. Mead has built into an entire room of his house. The organ, originally a second hand mechanical one, has been entirely made over by Dr. Mead himself into a modern electrical instrument. John Hamilton, harpsichordist and organist, will probably be present to offer his renditions of various melodies on the organ.

Dr. Mead is one of the leading influences among the group presenting the Chamber Music Concerts held every other week in Dabney Lounge. He has been at Caltech since 1947. Previous to this he acquired his B.A. at Pomona in 1930, his M.A. at Claremont in 1933, and his Ph.D. at S.C. in 1936.

Men who originally signed up for this fireside will be contacted. by the Y committee. As there are 47 signed up and only 20 can be accommodated, some people will have to be turned away. Anyone wishing more information about this fireside should see one of the committee mem-

The Y Fireside Committeemen tance of this phenomenon in are: John Stevens, Blacker (chairman); Bernie Lopez, Dabney; Herb Rauch, Fleming; and Jim Workman, Ricketts.

four charitable organizations: World University Service, The American Heart Association, The Pasadena Community Chest, and The American Cancer Society.

As in past years the four student houses and Throop Club will engage in competition to see who can solicit the greatest amount of money. The house winning this contest will be treated to a victory dinner featuring faculty waiters and entertainers. This dinner will be held Thursday, February 24. Dr. Ward Whaling, Fleming House RA, will be in charge of the faculty waiters, and Ed Hutchings, editor of Engineering and Science, will emcee the entertainment.

In order to be counted in the contest contributions must be turned in by noon Friday, February 11. Those in charge of the drive in each house are: Jim Workman, Ricketts; Everett Eiselen, Dabney; and John Andelin, Throop. Fleming and Blacker (Continued on Page 2)

Nolte is third **AUFS** man

Richard H. Nolte, of the American Universities Field Staff, is coming to Tech Monday, February 7, to give a report on current conditions in the Middle East.

Since his last visit to Caltech in 53, he has studied at Oxford and has traveled again in the Middle East to refamiliarize himself with the area, and bring himself up to date on conditions. Mr. Nolte will meet with various groups on the campus during his ten day stay, including a Y Lunch Forum.

His reports will mainly be concerned with the military situation in the Middle East, the new regime in Egypt, and the Palestine refugee problem.

Mr. Nolte, a graduate of Yale, nd a Rhodes Scholar is the third representative of the AUFS to speak at Tech this year.

Tech will take part in MIT conference; Eaton, two students going as delegates

Caltech will be among 90 universities participating in the M.I.T. National Intercollegiate Conference on Selectivity and Discrimination, which will be held at M.I.T. on March 25 to 27. Mr. Paul C. Eaton, Dean of Students, the new ASCIT president, and one other student, who will be selected by the ASCIT Board of Directors, will comprise the Caltech delegation to the conference.

The objective of the conference, as announced by M.I.T., is five fold: to bring together college students, professors and administrators from all sections of the country; to promote the exchange of conflicting viewpoints on vital issues involved; to consider the important problems of the Boston area; to study the success or failure of different colleges in coping with problems of selectivity and discrimination; to call national attention to the fact that the Boston area is of major concern to college students; and to attempt to develop a continuing intercollegiate effort toward the solution of the problem.

The conference will begin Friday afternoon, March 25, with a welcoming session and keynote

address. That evening the delegates will be free to sightsee in Boston. The delegates will be in plenary sessions and small discussion groups all day Saturday, and will continue their discussions after dinner that evening. There will be a nonsectarian religious service Sunday morning, and the conference will close with a final plenary session that afternoon.

Conference delegates will be quartered at Baker House on M.I.T. campus. Part of the transportation expenses of the delegates will be paid by M.I.T.

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The political situation

Don't let anyone say Caltech men aren't active in campus activities. The "joiners," the "organizers," the "politicians," and the anonymous hard-workers have created over fifty organization on campus, with everything from a detachment of the Air Force to a mythical dart club. A quick mental calculation reveals that this means less than twelve students per group. If each has four elective offices, that means three candidates per office not counting ambitious boys who major in extracurriculars, and assuming everyone wants to be a wheel of some sort.

Competition this year

This year, all indications are that campus elections will bear these figures out. Already, over three weeks before voting, there are enough publicly-avowed candidates to give competition for every office on the ASCIT board. Not for five years has every office been contested; usually several men win unopposed.

While some people, among them our weekly columnist, conclude that this reveals a lot of greedy egos, we would rather look on this activity as an indication of the success of Caltech student self-government. Not by courses in "human relations" (now to be given for the first time—see page one), but by practical experience does the Tech man develop leadership. This is one of the most valuable parts of Tech's small-college education.

Too much politics?

However, in this frenzy of activity, there always is the danger that elections may turn out to be merely "politics," popularity contests that ignore the quiet but deserving hardworker; election deals between groups; smear campaigns; costly campaigns; personal or house squabbles. These things prejudice the vote, leave bitter feelings and defeat the constructive purposes of extracurricular activities.

Maintaining a same level of competition is really the responsibility of each candidate. In running for office ,each man must assume this responsibility for a fair campaign, and must have a sincere interest in assuming the duties of the office. It behooves each candidate to consider this candidacy seriously. Also, to contribute to campus life, it behooves every person to take an interest; to run if he can do the work and to elect responsible people on election day.

A primer for politicians

A number of admonitions might be pointed out to men interested in leadership of campus activities:

- 1. Don't be afraid to run because of the competition. If you are willing to work, and have shown it, even "career politicians" can be outvoted.
- 2. Know what you are running for and why. Men who run for glory or for honor points are a threat to good government.
- 3. Prepare for public appearances; take them seriously and calmly. There is no reason why election rally stage fright should destroy the chances of a good man. The audience will support you unless you ham or show off.
- 4. Prepare especially for speeches. Think them through, be original, not trite, don't use the first person to the point of boredom. Here's the time to polish up public speaking!
- 5. Prepare campaign posters in plenty of time. Flimsy or inappropriate posters are unfair advertising. Avoid last hour rushes by starting to work now.
- 6. Lastly—to those not running—contribute your part to overworked candidates and to campus activity by helping out in your friends' campaigns.

Anonymity abrogated

In reply to writers of anoymous letters:

The editors of the Tech welcome, and in fact encourage, letters for publication. Good letters, often the source of excellent suggestions and comments, add interest to the paper and to school activities.

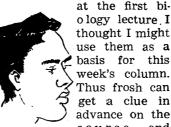
However, to insure sane, responsible correspondence, we must require that signatures be included. If circumstances dictate, we will withhold names from publication, but we do not print letters from anonymous writers.

The World

by Isaac Tangora

Eventually most Techmen start taking notes at lectures. Often this serves principally to keep the student awake. Ocasionally it serves as material for a column in the California Tech. It also makes cramming easier at the end of the term.

Bioolgy 1 is one of the courses in which note-taking is quite the fad. Since I took copious notes



use them as a basis for this week's column. Thus frosh can get a clue in advance on the course, and

sophomores may benefit from review.

Biology lectures are given by Dr. Galston in 119 Kerckhoff. Students are advised to enter and leave Kerckhoff by the door nearest the lecture hall, thus obviating the necessity of gas masks. The Orange Bible lists Biology 1 as a nine-unit course three lecture, three lab, and three study. Since a two-hour reading assignment is given for each lecture, everything works out fine if you ditch the lab and don't study for the etsts Dr Galston does recommend that you attend the lectures; the text is carefully chosen so that it does not contain all the material which he wants to cover.

The lecture begins with the assertion that biology is dynamic, exciting, and progressive. Great advances have been made in medicine, for example, since the day when one would die very young unless one was lucky and remained healthy. However, medicine will remain open as long as one-third of the population continues to live under substandard health conditions.

Dr. Galston goes on to aapologize for omission of part of the subject of biology from the tenweek course. Many interesting facets of biology have been omitted to allow time for others which are easier to lecture on.

Th cell is no longer the fundamental particle of anotomy, he says. Instead, certain smaller fundamental particles are now considered the fundamental particles. Some of these fundamental particles may be only one micron in length. To give you an idea of the scale involved, Dr. Galston reminds you that one micron is just 10,000 Angstroms.

Dr. Galston left out the most useful hint of all: the quietest, most restful part of the lecture hall is the back.

Tech jackets coming soon

Measurements are being taken this week for the Caltech school jacket. These jackets are available to lettermen and non-lettermen alike for \$12.00. The jacket is Oxford grey in color with orange and white trim.

The orders will be placed next Monday for the first shipment, and the jackets should be available in a few weeks. No deposit is necessary but collection will be made before delivery.

Measurements will be made in Blacker House lounge today at 12:30 and in Dabney House lounge tomorrow at the same time. If you can't attend these meetings see Phil Conley in Fleming 68 sometime before Monday for a fitting.

The Editors Reply

EDITORS NOTE: The following is a story which appeared in the Star-News, following last week's TECH:

"Attention Joe DiMaggio!

"The Caltech campus is apparently the only place in the United States where Marilyn Monroe is not wanted.

"According to a letter to the editor of the student paper, the California Tech, 'Any ideas she could bring to the campus are not new and are being adequately covered by the sex lectures.'

"The letter, written by the editors of the student literary magazine 'Pendulum,' was discussing a list of persons who the editors would like to see lecturing on campus . .

"Campus observers believe the editors may have their tongues in their collective cheeks."

OPEN LETTER TO THE STAR-NEWS

Really, gentlemen, has our favorite Pasadena gazette found itself in such dire straits for newsworthy material that it is forced to make a page one feature out of an obscure college reference to Marilyn?

We do not set ourselves up as authorities on journalism, but we do think that you had to stoop rather low to appeal to the animal instincts of your readers, who get a vicarious thrill out of the mere mention of her name.

After all, what is there behind the front of the famed Hollywood actress who is known chiefly for the shape of herclothes-and her waddle. College men are interested in the finer embellishments of life—the development of the mind and refinement of artistic tastes. We have no use for the common sensationalism which is so prevalent in our times.

Anyway, who would want Marilyn to lecture?

—THE EDITORS.

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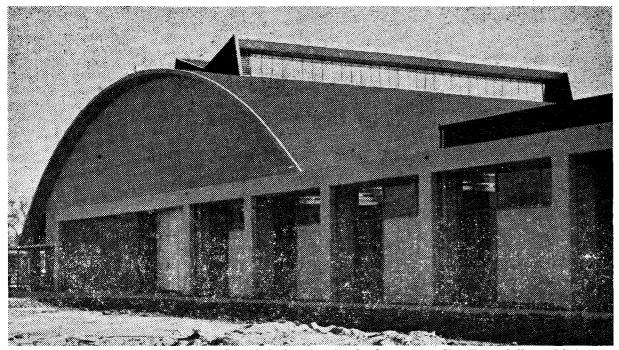
Servomechanisms Computers Systems Analysis Information Theory Automatic Controls Physical Analysis Microwave Tubes Pulse Circuitry Guided Missile Systems Ground Radar Systems Solid-State Physics Transistors Test Equipment Design Miniaturization Electromechanical Design Gyros Hydraulics Subminiaturization Mechanical Design Instrumentation

Telemeterino

Wave Guides

Antennas

The Tournament Park Story



SCOTT BROWN Gymnasium and Alumni Swimming Pool, the new half-million dollar addition to Tech athletic facilities, will serve as the site of home basketball, water polo, and swimming, and is to

Home games here? Bigwigs look into possible construction of football stands

nament Park expansion?

After thirty years of dreaming about a gymnasium, it may seem like pretty wishful thinking to imagine any more windfalls, but when money comes through, the Institute will be ready to spend it on football facilities.

Recently the athletic council has talked about moving football games back to Tournament Park, scene of Rose Tournaments of yesteryear. Perhaps in the next few years, at a time to be determined by some generous friend of the school, Caltech will have bleachers to play games on its own field instead of in the vast Rose Bowl, which was never intended for the kind of crowds at the Tech games.

This football season, gate receipts at the Bowl did not even

What's the next step in Tour- pay game expenses. Only two sides-for the day when Tech games were played there, since other schools would rather play at home and make a little profit.

Football players think playing in the famous Bowl is glamorous at first, but the thrill wears thin when only several hundred spectators sprinkle the coldly quiet acres of seats. Coach La Brucherie has been heard to comment, "It's like playing in a tomb." Perhaps playing in our own field built for Tech-site crowds would give football spirit a boost.

What this means to Musselman's athletic department is that there would be bleachers for games in Tournament Park-if there were funds. Preliminary investigations by Building and Grounds put stands on the south side. They'll be high and deep to allow for expansion on the

teams triumph. The big problem in all these plans is the fact that even the most economical bleachers, the movable-wod type, run about \$10 a seat. With costs like this, plans overrun funds in no

Pool opens as athletic facilities are finished

The last bit of construction work on the Scott Brown Gymnasium and Alumni Swimming Pool will be done this month, and Caltech students can finally look back with a smile on the months and years of delay which have preceded the completion of the work. There is no longer any reason to be skeptical about the date of completion, for nothing remains now but landscaping and some patchwork on the pool.

The gymnasium was dedicated at half-time of the Caltech-Long Beach State basketball game of January 11. Dedication of the pool, however, will probably not be complete until the Alumni Seminar next April; plans for these ceremonies have not been detailed yet.

Recreational use

Some question still remains as to how much of the time the facilities will be available to students for recreation. Teams and PE classes have tied up the schedule pretty thoroughly to date. One avenue for future development was opened last Saturday, when the gym was free from 9:30 to 11:30 for unsupervised recreation. This practice will be continued if response is satisfactory; meantime other possibilities are under consideration, such as Sunday afternoons and perhaps weekday evenings.

Progress reports

Techmen should be amused to read "progress reports" of the gym and pool in back issues of the California Tech.

On January 29, 1953, the Tech

reports a gift from the alumni of \$150,000 to build a swimming pool, to be completed by the fall of 1953. On March 5 of that year the Scott Brown begrest of \$400,000 made possible the construction of a gymnasiu.a, and the newspaper reported that "The construction of the gym and pool will be finished . . . around June 1954.'

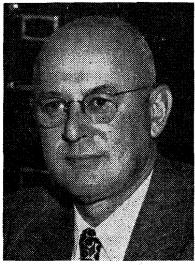
Ground was broken in April, 1953, but it was a year before progress was evident. An article in the issue of May 27, 1954, predicted completion "by next fall." By October, estimates were pushed back to "around December 1," with the confident statement that the first home basketball game would be with Redlands on December 10 - one month ahead of the actual date.

Only four weeks ago the final word came out, that the pool "will be ready within two weeks. Barring disaster the date of completion is upon us, and Techmen are ready to start enjoying the use of one of the newest athletic centers in

Four full-time coaches form nucleus of the athletic staff

The man who is in charge of the entire Tournament Park setup is Caltech Director of Athletics, H. Z. Musselman. His staff includes four full-time coaches, several part-time coaches, two secretaries, and the trainer, Dr. Floyd Hanes, not to mention the various people who in one way or another assist in carrying out the athletic program.

Hal Musselman came to Tech in September, 1921, as frosh football and basketball coach and



Harold Musselman

varsity baseball coach. He later assisted in varsity football and was the varsity basketball coach. He served as varsity baseball coach until 1947—a span of twenty-six seasons. From 1923-1941 Mr. Musselman was manager of athletico under the late athletic director, William J. (Fox) Stanton. In 1941 he was appointed acting director of athletics, letters, taking over in

Bert LaBrucherie, Tech's football and track coach, is a graduate of UCLA, where he was a halfback on the varsity football team for three years. He came to Caltech in September 1949 after a highly successful prep and collegiate coaching career. He coached at Los Angeles High School for 16 years, where his teams won 7 "A" grid titles and 3 "B" titles. From 1945 to 1948 $\,$ he was head coach at his alma mater, UCLA, and he was chosen College Coach of the Year in 1946 for leading the Bruins to a perfect season and the Rose Bowl bid.

Varsity baseball and frosh football and basketball coach Ed Preisler came to Caltech in 1947 from San Diego State College, where he compiled a very impressive record as an athlete. He received awards for three years in football, basketball, and

(Continued on Page 6)

time. Since present lighting is sufficient for practice only, lights will probably have to wait. Perhaps some Saturday afternoon a few years hence a joyous Caltech crowd will cheer a Caltech team-on a Caltech field.

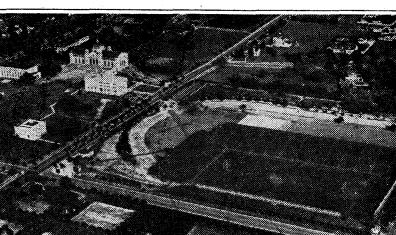
First Rose Tournament held on present Caltech athletic field site

The long and at times tempestuous career of twenty or so acres of what we now call Tournament Park symbolizes over fifty years of Pasadena activity. The development of this particular tract of land, from the time when it was no more than pasture outside the young city of Pasadena, to the time when it is the site of a half-million dollar athletic center, holds a colorful

Pasadena has gained national fame for its New Year's Day "Tournament of Roses," and our Tournament Park served as one step in the growth of this civic institution from the early "flower parade" to the present multimillion dollar Rose Bowl extravaganza.

In 1902, when the "Tournament of Roses" was only twelve years old, the tournament committee decided to expand the annual parade and flower pageant to include an afternoon of athletic games to follow the morning parade. They purchased land from the Patton family — the same family which was later to give the world General George Patton of World War II fame. The land was cleared and temporary bleachers were installed. Football was chosen as the best spectator sport, and on New Year's Day of 1902, the first Rose Bowl football game was played in TP when Michigan defeated Stanford 49-0.

Football did not attract the crowds that the sponsors hoped for, so in the next years a miscellaneous assortment of competitive sports was offered. Perhaps the most famous of these contests was the chariot racing,



TOURNAMENT PARK and Caltech in 1922, the last year Rose Bowl games played here. Note Throop Hall in upper left.

with true replicas of Roman style chariots competing in the tradition of the Coliseum games. But chariot racing was not the answer either, so bicycle and motorcycle racing were given a try. The strangest of all events held to attract crowds to the New Year's show was ostrich racing, which was held for several years.

In 1916, football was again tried, and this time was a success—and so it has been football which has accounted for the modern fame of the Rose Tournament. By 1922 the capacity of the wooden bleachers in Tournament Park had been pushed to fifty thousand and was still inadequate. It was then that the Rose Bowl games left their first home and moved to the natural bowl which has today evolved into the concrete oval that America knows as the Rose Bowl. Most of the bleachers were torn down to provide lumber

for the new facilities. But the stands on one side of the fieldremained until they were condemned in 1939.

After the new stadium was ·built, tournament officials gave the park to the City of Pasadena to be used as a public recreation ground. The area was used for everything from church picnics to sandlot baseball. Gradually an informal arrangement grew up whereby Caltech was able to use the field part of the time.

The present baseball diamond and bleachers were built by the city in 1940 in the hopes of attracting a second major league ball club here for spring practice. Difficulties arose when the Chicago White Sox, who were training at Brookside Park, objected to the entry of another club, and when nearby citizens protested to the idea of "loud and unruly mobs" in the vicinity. Thus the baseball facilities were

(Continued on Page 6)

Visiting physicist attempts Physics Club to illuminate genetic secrets tours Kellogg

by Russ Hunter

Tech was host last week to George Gamow, scientist and author of popular science writing. He is known to Techmen primarily for his books, Mr. Tompkins in Wonderland and One, Two, Three . . . Infinity.

Gamow started his scientific business in Russia, moved to Germany (where he started spelling his name with a "w" and pronouncing it Ga - mof) and eventually here. His first interest

was nuclear physics, then he turned to astro-physics and now he is trying to apply the same techniques to laying a theroetical foundation to protein biology. He likes to feel he is an intellectual pioneer driven from field to field by too many newcomers.

He says that he is not interested in physics anymore. It was was fun when "I was sort of a pioneer." But pioneer or not, his book Birth and Death of the Sun is going into its second newstand reprint after several hard-cover editions. It is profitable despite inaucracies, which he admits but says "I told the publishers I had written a new book. But they said, 'It makes money.' So?" (And what do you do, you pure scientists?)

He was here between semesters at Washington University to chat with old friends on his way to a secret USAF meeting in Sonta Monica (Rand Corporation???). Also he was here because of his new passion, protein biology.

While here, he talked with Jim Watson in Biology who has proposed the latest structure for DNA (desoxyribonucleic acid). This is most exciting stuff since it is either the genetic material or is so close to it that it is worth studying. As Gamow said in his seminar which took an hour to tell of the experiment that failed: "We're a good bit like the drunk who was looking for his wallet under the street lamp when we study DNA. The drunk knew he had dropped it up a

dark alley, but the light was

lousy up there." The genetic material is so neat because it is the secret juice which governs specificity in reproduction. This is why junior should have blue eyes if Mommy-O and Daddy-O do and the iceman doesn't.

Gamow thought maybe the methods of a physicist with probability statistics could show a connection between DNA's structure and an insulin molecule it might have been instrumental in building. He didn't succeed, but it was a fresh idea for attacking the problem.

Openings for summer jobs

The U.S. Government is offering summer jobs to engineering, mathematics, and physical science students. These positions will offer students experience in Federal research, developmental, survey, or mapping activities through the summer

As Student Trainees, freshmen will be paid \$225.00 a month, sophomores, \$245.00, and juniors, \$265,000. Application cards and complete information may be obtained from the placement office, room No. 120 Throop Hall. These applications will be accepted until February 14 and should be sent to the U.S. Civil Service Commission, 630 Sansome Street, San Francisco.

Wednesday

The Caltech Physics Club will hold its first regular meeting next Wednesday night at 7:45 p.m. in 101 Kellogg. There will be a talk on "What Goes on in Kellogg" followed by a tour of the laboratory. Dr. Ward Whaling will give the talk with Dr. Tom Lauritsen conducting the

Program planned

The club held an organizational meeting last Thursday night at the home of Dr. Lauritsen. At this meeting temporary officers were elected, the purpose and activities of the club were discussed, and a set of programs were planned.

Trapnell prexy

Fritz Trapnell was elected president and Lyman Fretwell secretary-treasurer. A three man program committee was also picked: Dick Hundley, Ken Laws, and Jim Snyder. These men will continue in office until permanent officers are chosen sometime in the near future.

Meetings Thursdays

As it is planned now, the club will hold meetings every other Thursday night. Next week's meeting was shifted to Wednesday so as not to conflict with the Oppenheimer film.

The club is open to all those who are interested in physics. The club officers will be glad to give more information to anyone who is interested.

PASADENA BOWLING LANES 970 East Colorado

Headquarters of Caltech Bowlers Open 11 a.m. to 1 a.m. SY. 3-1341 Special Student Rate before 6 P.M. except Sendays and Holldays 25c per line

Blacker, Fleming, Ricketts men to enjoy weekend snow party

The student houses will endeavor to undertake another weekend of feverish social activity, highlighted by a three-house snow party. Also on the social agenda will be an exchange with a high school and a college.

Friday evening the men of Ricketts, Fleming and Blacker,

Caltech regatta held this weekend at Los Angeles

The long-awaited CIT-LAYC Intercollegiate Invitational Regatta will be sailed this coming weekend at the Los Angeles Yacht Club. Six other colleges have been invited to participate: Pomona, Orange Coast, Oxy, San Diego State, the University of California (Santa Barbara) and the University of California (Berkeley).

According to team captain Jan Arps, the fleet will likely be split into two divisions to sail Dick Lewis will sail first for the Beavers, while Ron Wann and Chuck Helsley will sail in the second division.

The perpetual trophy will be presented to the winning school Sunday afternoon after the last race, and take-home trophies for the two high-point skippers will also be awarded. Caltech will supply the lunch.

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and their dates, will be off to Running Springs, in the San Bernardino Mountains, for their combined overnight snow party. The majority of the couples are expected to arrive Saturday morning and afternoon to enjoy the skiing at Snow Valley, which is about five miles away.

Saturday will be a day of snowballing, tobogganing and skiing, followed by dancing, at the lodge in the evening. More of the same is in store for Sunday before the party breaks up that evening. Needless to say, trustworthy chaperones will be among those

Dabney house will entertain the oft-invited ladies of Mayfield and Immaculate Heart, at an exchange Friday night.

CHARITIES DRIVE

(Continued from Page 1) have not as yet picked their chairman. Vince Marinkovich is general chairman.

Literature has been distributed to all students in order that they may become familiar with the functions of the four organizations. During the drive each student will be visited by a solicitor. Donation may be by cash or check, or can be put on the students' third term bill.

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Tech courtmen win one, lose one

Coach Carl Shy's Caltech baseketball team took time out from conference play last week as they split a pair of encounters with Pasadena Nazarene and Los Angeles State. Tuesday afternoon the Beavers entertained the Nazarenes and lost a thrilling 69-67 decision in the final minute of play, but they came back Friday night with a 70-60 victory over the Diablos of L.A. State to avenge an earlier defeat at the Diablos' hands.

In the Nazarene game Caltech started out real hot and by half-time had a 36-26 lead. In the second half, however, the Cru-

saders started moving up and urged on by a lot of noise from their rooting section, they pulled to within one point at 64-63. Then with about one minute left in the game Perry put them ahead, 65-64. Jim Tyler regained the lead for Tech with a beautiful lay-up shot, but Perry again sank two points for Naz to make the score 67-66. Tech's George Madsen was fouled at that point and he sank one of his two shots to tie the game up. It looked like the game would go into overtime, but it was Perry once more as he drove in for the basket and scored the final twopointer just as the gun went off to give the Nazarenes a 69-67 victory.

Tech center Phil Conley was high scorer with 21 points and Tyler netted 17. For Paz Naz four men had ten points or more. Perry had 16, Pyle 13, Kerns 12, and Bounds 10.

Different strategy

In Friday night's game with L.A. State Tech used a different strategy as the score was close during the entire first half with the visitors from L.A. holding a 31-28 lead at the intermission. But in the second half it was Tech who did the catching up. The Diablos tried to contain Tech with a full-court press, but they committed 18 fouls in their panic and the Beavers made good on 22 out of 33 tries from the free throw line in the second half. George Madsen had 15 of those attempts and he made 9 while Bill Chambers sank 8 out of 9.

Chambers was the game's high point man with 21, Phil Conley tanked 19 points and Madsen ended up with 17. For the visitors Sherman had 17 and Gilmer 15.

Big margin

The ten point margin of victory was Tech's largest since the first game of the season when they defeated Cal Poly, 78-39. The win was Tech's fourth of the season against nine defeats. In non-conference play Tech has lost five games, but the Beavers get a chance to even the score with two of these opponents, Chapman and Pasadena Nazarene, later on in the season.

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Caltech five meets Dogs

The Caltech casaba team returns to conference action Saturday night when they travel to Redlands to meet the Bulldogs in the first game of the second round of SCIAC play. The Beavers will be out to avenge an earlier defeat suffered at the hands of these same Dogs before the Christmas holidays.

Big guns for the Bulldogs are Bob Edmondson and Al Endeman and the Dogs also have a bunch of little men who run and run all night.

Next Tuesday afternoon Tech entertains Chapman College in Scott Brown Gymnasium. The Beavers lost a hard-fought 64-62 decision to Chapman in Chapman's little bandbox of a gym in Orange a few weeks ago, but playing on their own bigger floor before the home crowd, the Beavers will have a definite advantage.

Phil Conley will lead the team into action. He has the highest scoring average on the team—19.9 in all games and 15.7 in league. Phil scored 24 points against both Redlands and Chapman in the previous games.

Tech frosh stomp Chapman after loss to Nazarene frosh

Tech's frosh bounced back from a 99-42 Tuesday afternoon battering at the hands of Pasadena Nazarene to take their second win from Chapman College 64-28 Friday.

An unstoppable Jim Bond scored 47 points for Nazarene as the cross-town team barely missed the century mark. Height and wonderful spring kept him in complete control under the backboards. Held to a 34-29 advantage at halftime, the Nazarenes broke into a scoring spree in the second half and kept Tech off balance for the remainder of the game. Bond scored a big 29 in that second half.

Late shift

The Chapman game was a result of a late shift in scheduling when it was found that Los Angeles State does not have a junior varsity. Under these circumstances only two men from the Chapman first team could make the game. Seven men comprised their squad.

Ron Marson's 17 points gave

him high scoring honors as the Beaverbabes substituted freely. Sonny Nelson had twelve, Glenn Converse ten, Dick Van Kirk nine, and Frank Rosbach eight. Larry Berry, Lance Hayes, Kay Sugahara, and Don Wiberg each contributed two points.

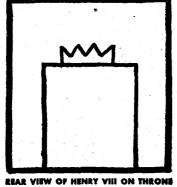
Redlands next

Practice is heavy this week in anticipation of the game at Redlands. The teams met earlier this year on the small court our frosh used before the new gym was completed. Tech won a close contest then with the home court advantage, but may be without the services of Dick Van Kirk this week. His Army reserve group seems to feel that he ought to attend a meeting occasionally.

A win would even Tech's record at 4-4. We have won one and lost three in conference play.

Baseball

Frosh baseball practice starts officially in a few weeks. Meanwhile workouts are being conducted by Dave Wilson.



SCIC Standings

The Whittier Poets had a firm

grasp on the top position of the

SCIAC basketball race with a

four win, four loss record, but

Occidental remained in conten-

tion with a 4-1 mark after last

games. These two teams meet

on February 19 in a game which

could well decide the outcome of

the casaba race. Redlands, Po-

mona, and Caltech meanwhile

trailed well behind the two lead-

Whittier 4

Occidental 4

Redlands 2

Pomona 1

CALTECH 0 • 4 218

Won Lost PF PA

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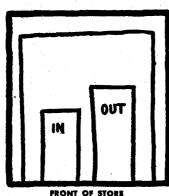
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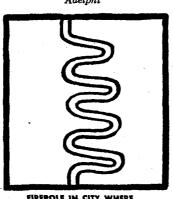
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338

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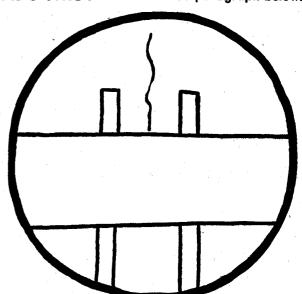


ARRIVAL OF IDEA
BEFORE THOMAS EDISON
Carol Hannum
Washington State

ALL NEW! LUCKY DROODLES!

WHAT'S THIS? For solution see paragraph below.

A STUDENT'S BEST FRIEND is Lucky Strike. At any rate, the greatest, up-to-datest college survey shows that college smokers prefer Luckies to all other brands—and by a wide margin. Once again, the No. 1 reason: Luckies taste better. They taste better, first of all, because Lucky Strike means fine tobacco. Then, that tobacco is toasted to taste better. "It's Toasted"—the famous Lucky Strike process—tones up Luckies' light, good-tasting tobacco to make it taste even better. Luckies taste better anywhere, any time, as illustrated in the Droodle

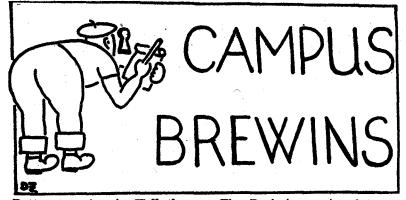


above, titled: Skier enjoying Lucky while whooshing under bridge. Next time you make tracks to a cigarette counter, Be Happy—Go Lucky. Enjoy the bettertasting cigarette...Lucky Strike.



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Better to reign in Hell than serve the Meaven.

-Milton.

That pocket-sized guide to pocket culture books. (Glasel, who else?) got a full-sized ski rammed up his pocket-sized leg on his first venture out of his ivory tower. In the finest Hemingway (or Cervantes) tradition, he nobly refrained from commenting on the mishap until he nobly fainted in his own noble blood. Revived after 8 stitches, he is reported to have asked immediately for his pocket edition of Marcus Aurelius.

Beauty isn't everything

The Beak's sympathy goes out this week to poor pill Purves. The unfortunate fellow was forced into spending an evening recently with a high school football queen. He reports that he had a miserable time. Her brains didn't measure up to her bust measurement, and naturally Purves never gets romantic until an intellectual rapport has been established. It could only happen in Dabney.

Ricketts Louse

It breaks our hearts to have to report that Cantor's girl's mother didn"t get to read the purity test after all. To all those who rejoiced at the thought, our condolences. To the one soul saddened by this happy thought (i. e. Cantor) our vongratulations on a terrific feat of oneupmanship.

Caltech prof speaks at meet

The second Conference of West Coast Spectroscopists, with support from the U.S. Office of Naval Research, is being held at Caltech today and tomorrow. The main address will be given tonight by Dr. Fritz Zwicky of Caltech, who will speak on "Spectroscopic Puzzles in Cosmology." Dr. Stanford Penner is chairman of the program committee for the conference.

Papers being delivered at the conference include: "Absolute Infrared Intensities," David F. Deggers, Jr., University of Washington; G. M. Barrow, Northwestern University. "Instrumental Limits of Detectability," H Cary, Applied Physics Corporation, Pasadena; J. W. Kemp, Applied Research Laboratories, Glendale; C. E. Berry, Consolidated Engineering Corporation, Pasadena. "Spectroscopy and Structure of Large Molecules," R. M. Badger, Caltech; G. B. B. M. Sutherland, University of Michigan; Linus Pauling and R. B. Corey, Caltech. "Astrophysical Spectroscopy," R. B. King, Caltech; J. Kaplan, University of California at Los Angeles; J. L. Greenstein, Caltech.

Pool to open soon; cracks are not bad

The Alumni Swimming Pool wlil probably open sometime next week. Swimming classes will begin at that time also.

The cracks in the bottom of the pool have been found to be of minor nature. They are surface cracks which looked worse because of the presence of dirt.

The Beak is overjoyed to report that Fleming's undernourished Frosh and would-be Casanova, Swiney Toads, (alias Larry Rhodes) received a dual shaft at the Fleming exchange last Saturday night. Early in the evening Swiney requested the honor of escorting a beauteous young South Pas damsel home. Overwhelmed (and obviously not in her right mind) she acquiesced. Soon thereafter she evidently regained her senses and beat a hasty retreat unbeknowns to Mr. Rhodes. Hours later he was seen wandering around searching in dark corners; and was heard to mutter something about "la belle dame sans merci" or its illiterate counterpart. Finally abandoning his vain search he entered the parking lot only to find that his car had evidently sprouted wings and flown away. Luckily for Swiney the wings must have been very weak for the car only got as far as the Athenaeum parking lot. Moral: the Rhodes of life are often

"Lost Horizon" Y feature film

"Lost Horizon" will be the leading feature of the Y Film Series presentation this Sunday at 7:30 p. m. in Culbertson. This is the epic film production of James Hilton's story of the fictional "Shangri-La," a Utopian community disconnected from the world by the high Himalayas. The film's pcincipals are well well known to audiences; Ronald Coleman and Jane Wyatt acting, with direction by Frank Capra, who, by the way, flunked out of Tech in the 30's.

On the same program will be shown "Bop Scotch," an abstract short. In this film, paving textures and patterns are brought into motion by the painter, Jordan Belson, and participate rhythmically with lively background music. "The Emperor's New Clothes," a UPA cartoon on the old fairy tale, will also be shown.

The price of admission is 35

Last sex lecture held next Monday

The last of the three sex lectures, "Marriage: Wedlock or Deadlock?" will be given by Dr. Fairchild, Assistant Professor of Psychology at Occidental College, on February 7 at 7:30 p.m. in 201 Bridge.

Dr. William Hawley, Dean of Students at the University of Chicago and acting dean of Chicago Divinity School will be on campus Tuesday and Wednesday, February 15 and 16. He will give two talks to luncheon clubs and one evening talk.

Other programs sponsored by the Y to be given in the near future are: "Astronomy and the 200 inch Telescope," by Dr. Jesse Greenstein on February 7 for the Frosh Lunch Club; "Egypt vs. Britain," by Richard N. Nolte for the Undergraduate Luncheon Forum on February 8; and "U. S. Foreign Policy," by Dr. Rodman Paul for the Frosh Lunch Club on February 10.

Interview Schedule

Thurs., 3—BS, MS, PhD/Ae, ME, CE, EE, Applied Ph, DOUGLAS AIRCRAFT CO., INC., Douglas is offering Summer employment for Jrs. up in the Engineering fields listed.

listed.

Fri., 4—BSup/ME, EE, Ae; Jrs. up/ME, EE, Ae for Summer AIR FORCE FLIGHT TEST CENTER, Edwards Air Force Base.
Fri., 4—BSup/EE, Ph, ROME AIR FORCE DEPOT, Griffs Air Force Base, Rome New York. The Rome Air Development Center is offering summer employment for students in the above fields who will complete their sophomore years in June.

Fri., 4—GROUP MEETING—101 Dabney, 4:15 p.m. WESTINGHOUSE ELECTRIC CORPORATION.

Mon. 7: Tues., 8—B5, MS, PhD/ChE, ME, EE, CE, THE PROCTOR & GAMBLE MANUFACTURING CO., For Production Management at Long Beach, Sacramento, or East. For Engineering Division, Chemical Development, Process Development and Pilot Plant work in Cincinnati.

Mon., 7; Tues., 8-BS, MS, PhD/EE, ME, Ph, WESTINGHOUSE ELECTRIC COR-

PORATION.
Mon., 7; Tues., 8; Wed., 9; Thurs., 10—
PhD/Bi, Ch, (non-nuclear), ChE, ME, E. I.
DU PONT, Wilmington, Del.
Wed., 9—BSup/Ma, EE, Ae, ME, Ph,
RYAN AERONAUTICAL COMPANY, San
Diego

Diego
Wed., 9; Thurs., 10—BS/ME, CE, BETHLEHEM PACIFIC COAST STEEL. Interviews
for Seniors interested in the Loop Course.
PhD/FE for Seniors interested in the Loop Course. Wed., 9; Thurs., 10—BS, MS, PhD/EE, Ph, Ma, Ch, BELL TELEPHONE LABORATORIES.

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The Tournament Park Story

FOUR FULL TIME COACHES (Continued from Page 3)

baseball and was named the outstanding all-around athlete at the college for two years. He was all-conference for three years in baseball and one year in football and he also played oo the San Diego State basketball team which won the NAIB title in Kansas City in 1941.

Jim Nerrie, the director of the physical education and interhouse athletic programs, has been at Caltech since October, 1946. He came to Tech after a four year hitch in the U.S. Navy where he held the rank of lieutenant and served as physical training officer. Prior to his Navy service he held the position of physical director in several high schools in New York.

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FIRST ROSE TOURNAMENT

(Continued from page 3) built and virtually never used.

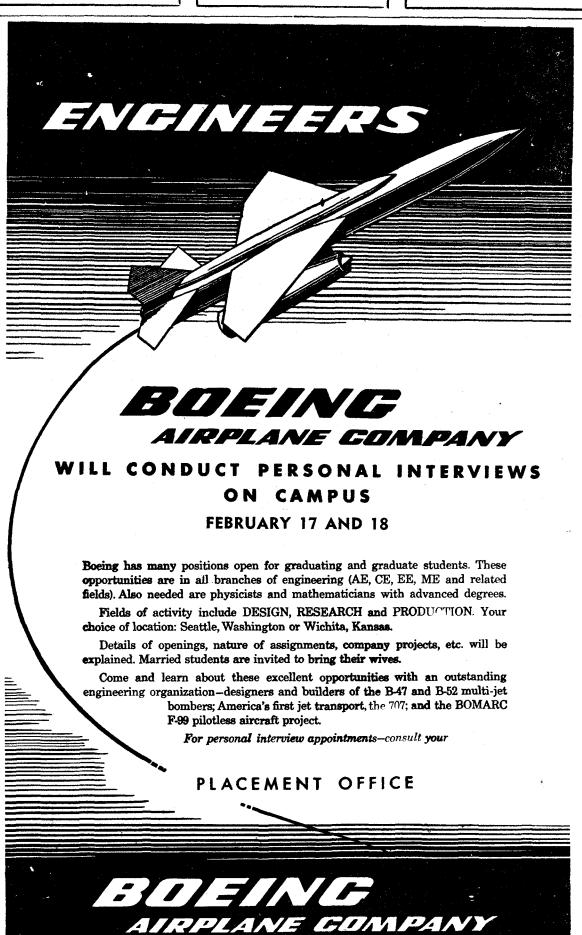
In 1947, Tech attempted to buy the park for its own use, and the resulting civic squabble involved a public vote and pacification of various groups who wanted the city to keep possession. A "Citizens Park Protective Association" was formed which vigorously fought the Tech expansion, but the public election was almost ten to one in favor of sale. So nearly a year later Tech paid \$280,000 for the land and facilities and began considering proposals for development. What we can see there today, the Scott Brown Gymnasium and Alumni Swimming Pool, mark the culmination of those plans.

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