Biologist Ed Lewis Wins Nobel Prize in Medicine

by Jay Aller

PASADENA—The Royal Swedish Academy of Sciences announced Monday that Edward B. Lewis, Caltech’s Thomas Hunt Morgan Professor of Biology, Emeritus, will share the 1995 Nobel Prize in medicine with two other scientists for “the genetic control of early embryonic development.”

Lewis is the 23rd Nobel Prize won by a Caltech faculty member or a Caltech alumnus.

Lewis, 77, is renowned for his work on the genetics of Drosophila fruit flies. He has been at Caltech as a student and faculty member since 1939, and for the past five and a half decades he has been studying genetic mutations in fruit flies and how these affect an insect’s development.

As the citation accompanying the announcement explained, “his pioneering work on homeotic genes induced other scientists to examine families of analogous genes in higher organisms.”

“As you can imagine, I’m overwhelmed. It’s quite a shock,” said Lewis by phone from Ascona, Switzerland, where he is attending a scientific conference.

“I think that it’s wonderful for my colleagues, because they’re very deserving. It’s also wonderful that the academy recognized basic research. The benefits of research into the genetics of fruit flies have turned out to be very important for understanding human development and the mechanisms underlying some genetic diseases.”

“Ed’s contributions have been very profound,” said Thomas E. Everhart, president of Caltech. “His work has had, and will continue to have, an important impact on medicine and on our understanding of how organisms, including humans, develop.”

In the 1950s Lewis played a key role in discovering and explaining the role of homeotic systems, including humans, develop.

Ascona, Switzerland, where he is attending a scientific conference.

Edwards Nobel Prize Laureate

OLGA TODD, Professor of Mathematics, Dies

courtesy of the Caltech Mathematics Department

Olga Taussky-Todd, Professor Emeritus of Mathematics, died on October 7th, 1995. She is survived by her husband, John Todd, also Professor Emeritus of Mathematics.

Olga Taussky-Todd began her active mathematical career in 1930. She received much of her training in mathematics from Furtwangler and Emmy Noether, one of the founders of modern algebras, and she served as an assistant to Courant when she spent a year at Göttingen. She joined the Caltech faculty as a Research Associate in Mathematics in 1957. She was promoted to the rank of Professor of Mathematics in 1971 and to Professor Emeritus of Mathematics in 1977. She was the first woman to be appointed Professor in the Division of Physics, Mathematics and Astronomy.

Her specialties in mathematics were algebraic number theory and matrix theory, and in both fields she was recognized as one of the world’s leading experts. Among her many honors and awards, she received an Honorary Doctorate from the University of California and a Fellow of the American Association for the Advancement of Science. She was a Corresponding Member of the Bayerische Akademie der Wissenschaften, and she was awarded the Medal of Science by the Austrian Ministry of Science and Research. In addition, she was elected to the Council of the American Mathematical Society in 1970 and served on it until 1985, when she was elected Vice President of the Society in 1976. She was honored as one of the foremost living women in mathematicians at a symposium at Caltech. She will be sadly missed.

Firefighters Rescue Construction Worker Trapped in Pit

by Spay Ch.

PASADENA—In a freak construction accident, an unidentified man was trapped in a 24 foot hole. The Fire and Rescue division of the Pasadena Fire Department removed the man from the hole and rushed him to treatment at Huntington Memorial Hospital.

The man, who was working on the site of the new Fairchild Memorial library, was resting near the hole, where he was about to work. A construction crane traversing the site hit the man and knocked him off balance, causing his fall into the well.

The Fire Department responded to the first reports of the incident within an estimated 15 minutes. Firefighters were unable to simply throw the man a rope and help him up because of his injuries. The rescue was a difficult one, given the instability of the dirt walls around the man, and the fact that the hole had shown signs of further instability. After nearly half an hour in the pit, the man was removed from the hole in a neck brace, to the cheers of the crowd. Caltech officials at the scene looked the site over in an attempt to improve safety there.

Some students were concerned about the injured worker.

“I hope he’s all right. It must have hurt falling down there,” one remarked.

Others were caught up in the excitement.

Oh cool, like that one little baby that fell into the well,” said another Techer.
California Blvd a threat to students

Dear Editor,

In reference to the letter by Keil Maberry on the "de-emphasis" of California Blvd. I have lived on California Blvd. for more than 25 years.

I want the students to be aware that street intersections on California Blvd. have relatively high accident rates for pedestrians, bikes, and cars. I can single out the intersections at Los Robles, Wilson, and Hill Avenues, and the pedestrian courts, which has a delayed activation for good reason.

Left turns and running red signals are frequent culprits; speeding is also a problem, with the average speed on Cal. Blvd. probably around 40 mph. Uniting Del Mar Blvd. has the disadvantage of PCC traffic. One last word of advice I obtained from a City Engineer, as of ten years ago: "only a fool would ride a bicycle on California Blvd."

These days, motorists are more aggravated than what is perceived as forced traffic congestion due to the "de-emphasis", all of us should be even more careful on California Blvd. Above all.

Sincerely,

D. A. Papastamoulis

Students' opinions heard in graduation speaker choice

Dear Editor,

As chair of the Convocations Committee, I was a bit puzzled by some of the statements of candidates for Senior Class President on the Tech Oct 6.

Last year, seniors were polled twice about their choices for graduation speakers; and each time, Pres. Everhart made every effort to get the students' first choice to come. We were led by the first speaker's office to believe that he would come, but he eventually had a schedule conflict. So students were polled again, and the President again tried very hard to recruit their first choice.

The person ultimately chosen to give the Commencement Address, Dr. Mark Wrighton, a Caltech Ph.D., a MacArthur Fellow, a former MIT Provost, and now President of Washington University, has an hour for a fascinating and interesting speech which was quite well received.

Last Spring, before graduation, nomination sheets were posted at all the undergraduate houses by Junior Class President Nestor Ocampo. They were tallied and a report given to Pres. Everhart. He is now again attempting to interested one of the students group of candidates (for no overwhelming first choice this time.)

I look forward to working with students to make this year's Commencement memorable. The Committee and the Administration have been open to students' opinions into account and will do so in the future. Any one with any suggestions for graduation activities or any method for getting a larger proportion of students to take part actively in planning for and organizing the event, please email me at Kousser@ats. Morgan Kousser,

Chair of History and Social Science.

Please send submissions for letters to the editor

The California Tech, Caltech 40-58, Pasadena, CA 91125, or by electronic mail to editors@tech.caltech.edu.

Deadline for submissions is Monday at 5pm on the week of publication. The editors reserve the right to edit or refuse to print any letter for any reason.

CSS Starts New Year

by Joseph Trella

The Caltech Space Society will have its first major meeting of the year this Saturday at 6:00 p.m. at Winnett Lounge. This marks the third year of the club's existence under the leadership of Christopher Brown, who has also been a member of the national board for Students for the Exploration and Development of Space (SEDS), an organization with over 100 chapters in high schools and colleges across the nation.

The purpose of the Caltech Space Society is to promote public education and awareness about space, science and the technological and scientific benefits accrued from it.

So far, members of the group have accomplished this through educational outreach at high schools (cool pictures and the like), and displays at science-oriented events (such as last year's premiere of "Star Trek: Generations" at the United Artists Theatre at Old Town Pasadena). In addition, members often go on field trips to events such as the IMAX showing of "Destiny In Space", space shuttle landings, and overnight star parties in the clear desert air east of Los Angeles.

However, the most important CSS event of the past year was the IMPACT '95 seminar. The group sent invitations to high schools across the Southland to come to the one-day event to learn about the nature of the universe, and the like. Many of the students who responded saw computer simulations of bodies in space, watched the creation of a WWW page on the event, which included pictures taken earlier in the day and the opportunity to make their own comets out of dry ice, water, ammonia and dirt and drop them off of Millikan Library to make craters in a wading pool full of flour-dirt "regolith". The event was highly enjoyed by both the attending students and the CSS members who made it possible (or at least those who weren't covered with dirt and flour at the end).

Therefore, the CSS plans to hold another seminar this year for high-school students; this year's theme will probably be on the problems of humans exploring and developing space. Lots of input is still necessary to finalize what's going to happen, however, and new CSS members are greatly wanted, so if you are interested in spreading the word about space and the exploration thereof, come to the meeting tomorrow at 6:00 p.m. There will be membership forms, free food.
Bargain Matinee

Ken brings up the huge Beijing Matinee electromagnet. Guppy rolls in and extends.

Grace tells us about the Melissa asks how she’s thing was over. (Freshmen that the Movies should not that the list of all the requirements that Dan Bridges gave thing was over, go find all the terms in these sports should be.

The BOD asks Grace to double check with the coaches to see if the new regulations are okay. Jon also tells Grace about ASCIT’s need to pay for the banner for the fencing team of n years ago that won a NOG.

Guppy rolls in and explains the financial situation of the ASCIT Movies. First, the ERG at the end of the THING IS OVER. (Freshmen, if you’d like to know what the Eric Hackman thing was, go to the CIT agency to another country, fencing, and golf minutes from last year pinned up on some house bulletin boards.

Second: In a typical semester, a few really good movies manage to draw profits, which the ASCIT Secretary member of the BOD then uses enough to account for the $300/item that ASCIT gives to the movies that put the UROH on the Web. The van is a happy.

Ken brings up the huge problem with continuity with the present system of putting out the Clue, juniors who run for Academic Director at large have to put out the Clue for the year AFTER they’ve graduated. We might someday have a problem chasing around a graduated ex-Director of Academic Affairs to get the Clue put out. Jon says the BOD should decide what to do about this before elections next term. Ken also hasn’t given out the Teaching Awards yet because he hasn’t gotten the artwork for the awards yet. Ken says he’ll personally give the artwork to the producers in a few weeks.

Dave will contact some- body to get the Bylaws in the correct form. Also, in order for the Tech to be able to save previous discussions, Dave promises to put all the action items (Directors Reports and ASCIT Agency updates) at the top of the minutes, reserving his inane drivel and chatter for the bottom of the container, causing the last person to drink iced tea to get that sugary sludge ten times as powerful as regular iced tea. Actually, there’s no similarity at all between the ASCIT Minutes and iced tea. Forgive me.

Jon brings up the Faculty Board Committee Meeting minutes from last year Oct. 9. Among other things, the Board will discuss the Steering Committee of the Campaign and Alumni Council (which gives suggestions about where the Core should be headed to the CCC). Apparently, the Steering Committee currently has no undergraduate members. Jon will attempt to put undergraduates on the Steering Committee. Jon will also talk with Student Affairs about centralizing budgets for Club Activities.

Respectfully submitted,
David Relyea
ASCIT Secretary

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World News Report

by Maria Huang and Myfanwy Callahan

Pasadena, CA.—The details of the 1993 Halloween murder case of three Pasadena teens unfolded for the first time Tuesday in the supreme court. Police believe the killing resulted from gang members in north Pasadena seeking revenge of an attorney of the three defendants is confident in proving his client innocent.

San Francisco, CA.—As engine companies are trying to exploit the Internet for its commercial possibilities, newly found weaknesses in the structure make a costly redesign necessary. Right now an eavesdropper or criminal can copy or alter a document in transit and send it on, without the receiver knowing of it.

PHOENIX, AZ.—Several cars of an Amtrak passenger train derailed early Monday southwest of Phoenix. A crewman was killed and dozens of people were injured. The evidence at the scene indicates sabotage, and the FBI has started its investigation.

MANZANILLO, MEXICO.—A luxury hotel in Mexico collapsed in an earthquake on Monday, killing 18 people. The building had been severely damaged in an earthquake in 1985, but was allowed to reopen after superficial repairs. The death toll for the entire area is 48.

PARIS, FRANCE.—More than half of the public-sector employees in France went on a one-day strike on Tuesday, wreaking havoc on the daily routine of millions. The strike was prompted by government proposals to freeze state parleys in an effort to lower the deficit, a necessary measure before a European currency can be established.

SARAJEVO, BOSNIA.—The Bosnian Serbs are undertaking a huge new “ethnic cleansing” campaign along the front line. Thousands of women and children were expelled from the town and mines taken away U.N. officials stated. The cease-fire is delayed once again as the Bosnian government says restoration of Sarajevo is inadequate.

NABLUS, ISRAEL—occupied West Bank. 500 Palestinian men were set free from detention in Israel on Tuesday. Two died while on a hunger strike. Israeli authorities are taking their first steps toward withdrawal from the West Bank.
Parkman explains gene therapy

by Ben Williamson

Last Thursday, Dr. Robert Parkman presented a seminar on gene therapy. It seemed to be targeted at those who have little previous knowledge of genetics, but was still interesting and enlightening in many respects. While he did discuss the technologies and methods of gene therapy, he seemed more focused on the ethical ramifications, using the scientific details only for background.

He began with a discussion of the various vectors used in gene therapy. A vector is a combination of a clone of the normal gene that is to functionally replace the abnormal gene to be corrected, a virus to infect the cell, and a promoter to regulate which cells are infected by the chosen virus. The most common virus used in the vector is a retrovirus taken from rat RNA, but other viruses such as adenoviruses are often used, each having its particular advantages and disadvantages.

Dr. Parkman went on to say give several examples of attempts at genetic therapy for such disorders and diseases as familial hypercholesterolemia, adenosine deaminase deficiency, cystic fibrosis, and cancer. Unfortunately, for most cases so far, genetic therapy is less effective, less efficient or considerably more costly than alternative treatments. Specifically, in the case of adenosine deaminase deficiency, the gene therapy cost $250,000. As he stated at the beginning of the seminar, current gene therapy is to a large degree more hype than reality. He did however stress that continued research could uncover better treatment methods that would be more viable alternatives to current methods.

After the background information on gene therapy, Dr. Parkman began discussing first the political restrictions on gene therapy, then the ethical ramifications. In 1976, the RAC, Recombinant DNA Committee was formed primarily to monitor modified microorganisms such as bacteria. Later, in 1987, as genetic modification of higher lifeforms became more common, a Human Gene Therapy Subcommittee was formed. In 1991, the RAC and HGT-SC merged.

The discussion on the ethics of gene therapy included the ethics of genetic enhancement and the ethics of in utero gene therapy, and the ethics of germline gene modification. The former and future stance of the RAC is basically that while genetic correction of disorders is well and good, modification of someone so that they can fire a bolt or leap tall buildings in a single bound is nonethical and thus forbidden. Another ethical question is that of changing the genetic structure of a fetus prior to it being born. In situations that are life-threatening to the fetus, this is not a problem. Other wise, their could be moral complications, as well as an associated ethical complication due to germline genetic modification, which is related to the genetic modification or therapy of the fetus. Basically, germline modification means the modification of the reproductive system of the recipient of the therapy such that any of their offspring would also have their genetics altered. Since most vectors are too nonspecific to just modify what portion of the body needs to be modified, this germline modification has ramifications not just for one person but for at least a portion of the future human population.

The seminar was relatively interesting, although most of the scientific content could be picked up in considerably less time from a copy of Discover or some such publication. What made the seminar work for attendees were the ethical discussions and the post-seminar random question and answer session.
Dedication Ceremony Scheduled for Moore's Stone Volute

by Caltech Media Relations

PASADENA — A dedication ceremony has been scheduled at the site of Caltech’s newest public sculpture on campus, Moore’s Stone Volute, between Noyes Laboratory and Beckman Behavioral Biology Laboratories, at 5:00 p.m. on October 11, 1995. This lyrical work of mortared stone, 6 feet high and 55 feet in diameter, was created by artist Lloyd Hamrol, a long-time resident of the Los Angeles area. At 4:00 p.m. in the Beckman Institute auditorium prior to the dedication ceremony, Mr. Hamrol will present a slide lecture on the subject of this new sculpture and its relationship to his past work. Mr. Hamrol was chosen through competitive selection to design and install Moore’s Stone Volute. It rose along with the Moore Laboratory of Engineering, fulfilling a Pasadena ordinance that requires a work of public art to accompany academic and administrative buildings beyond a certain size, and its title honors the new lab’s benefactor.

About Moore’s Stone Volute, the artist says, “It is both architectural and biomorphic in its associations, suggesting a link between the disciplines and systems we construct and the mysterious source of our inspiration.” Mr. Hamrol, whose works grace public spaces from Alaska to Florida, is a three time recipient of visual arts fellowships from the NEA. His public projects in Southern California include: Upstream Rockers (Los Angeles); Twenty-one Stones (Los Angeles); Pipeline Ramp (Fountain Valley); City Terrace (Anaheim); Crown Lair (Calabasas); and Sea Look Out (Santa Barbara). Mr. Hamrol’s last professional appearance on the Caltech campus was in 1960, as one of the many artist-participants in EAT (Experiments in Art and Technology)’s Celebrates Apollo Moon Landing, an evening of temporary events.

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Theater
- Here’s an event you won’t find but once in a millennia: Director Michael Holmes has chosen this season’s script, a comedy of its gothic arch with stained glass windows, to back up his rendition of Phantom that is being held every Friday through Sunday through December 3rd. But this play doesn’t even bother with scene changes, though, as Holmes finds it best to make use of the church the way the play makes use of the castle by moving the cast, crew, and audience from venue to venue around the church so that the audience truly feels to be a secret observer into the tragedy that unfolds. With spectacular lighting and crew, and a truly fit cast, Holmes is able to create scenes that have been acclaimed as “breathtakingly eerie.” This show makes real what is hard to make interesting.

- Other ongoing events: Four Dogs and a Bone, a comedy by John Stanley, has a cast including Martin Short, Brendan Fraser, and Elizabeth Perkins (if you don’t recognize any of these names, you really ought to get out more), and will be showing at the Geffen Playhouse for only another seven weeks! Tickets are through “Telecharge.”

- For all those looking to relive a bit of their childhood, actor Peter Dennis will be giving two performances of his one-man show Bohler!, a genius acting of the tales of Winne the Pooh by A. Milne Winnie much closer to the original than Disney ever dreamed of being at 725 Beverly Boulevard on October 14th & 15th at 7:30 p.m. Dennis’s production of Bohler! have been widely acclaimed for over the past decade and promise both nostalgia and surprise to audiences of all ages.

- Also coming up: tickets are available now for Comic Relief V to be held on November 11th at the Universal Amphitheatre from $35 a piece. Benefiting homeless healthcare projects across the US, Comic Relief will be hosted this year by Billy Crystal, Whoopi, and Robin Williams; tickets can be purchased (who ‘da guessed?) through Ticketmaster.

Concerts
- Cooler than life: The College Fest Way More Weekend is to be held on October 21st and 22nd at the Olympic Velodrome with the bands No Doubt, Eleven, The Obvious, Extra Fancy, ordinaire. Includes: Exam, Filing, Way is Terrace on November 17th and 18th at the Wiltern Theatre (but tickets don’t really ought to get out more), and will be showing at the Geffen Playhouse for only another seven weeks! Tickets are through “Telecharge.”

- Another ongoings: with Bill Miller at the House of Blues on Friday, October 21st; The Thing on Saturday the 28th. Lawn tickets for R.E.M. with the Gin and of itself, but the bill may reflect this as well: meals begin at around $25 a piece, but you can be purchased (who ‘da guessed?) through Ticketmaster.

Restaurants
- I’m sort of a cult-follower to some restaurants in the Los Angeles basin, having frequented them multiple times over the last decade and a half. Another of these restaurants is a very interesting, extremely exotic place called The Marrakesh. It’s kinda a drive "Hatfield with Doe oli. It./LU/uVlu

Movies
- The Rocky Horror Picture Show is to celebrate their twentieth anniversary in style this October 23rd at the Pantages. The “gates” open at 8 p.m. for the party, followed by a special showing at midnight. To appear: the original actors of the parts Brad Brad, Riff Raff, as well as Magenta. Tickets will be sold at the Pantages as well as through Tickemaster locations. Or look it up on the web at http://www.rockyhorror.com/phta.

- There are a heck of a lot of interesting looking movies out right now, but only one I can personally vouch for. I’m hoping to see Valid with Reg. It rose along with the Moore Laboratory of Engineering, fulfilling a Pasadena ordinance that requires a work of public art to accompany academic and administrative buildings beyond a certain size, and its title honors the new lab’s benefactor.

- About Moore’s Stone Volute, the artist says, “It is both architectural and biomorphic in its associations, suggesting a link between the disciplines and systems we construct and the mysterious source of our inspiration.” Mr. Hamrol, whose works grace public spaces from Alaska to Florida, is a three time recipient of visual arts fellowships from the NEA. His public projects in Southern California include: Upstream Rockers (Los Angeles); Twenty-one Stones (Los Angeles); Pipeline Ramp (Fountain Valley); City Terrace (Anaheim); Crown Lair (Calabasas); and Sea Look Out (Santa Barbara). Mr. Hamrol’s last professional appearance on the Caltech campus was in 1960, as one of the many artist-participants in EAT (Experiments in Art and Technology)’s Celebrates Apollo Moon Landing, an evening of temporary events.

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The easiest way to...
Ph11 - First Hurdle (1996)

Consider a plane surface that is composed of a rectangular array of atoms onto which a single layer of foreign atoms can be absorbed. (Each absorbed atom sits on top of a surface atom.) The nature of these absorbed atoms is such that one cannot have more than two in a continuous line (horizontally, vertically, or diagonally).

1) What is the maximum coverage of absorbed atoms that can occur?
2) How does the answer change if the surface is finite in extent, i.e., has a well defined square boundary?
3) Are there preferred patterns of the absorbed atoms?

Rules: Clearly state all assumptions made. You may use any reference you like, but you cannot collaborate. The use of computers, etc. is OK. The hurdles are due by Monday, October 25 - by 3 p.m. in 201 Sloan Annex.

(Note: You must be a freshman in order to try for a place in Physics 11 but you do not have to be in enrolled in Ph 10, as stated in the Caltech Catalog, in order to try out.)

Physics 11 to explore the “good stuff” in physics
by Dave Bacon

Revolution of thought is the essence of science. From Newton’s revolution that the moon was falling to Einstein’s idealistic view that physics should be the same in all inertial frames, science has been built upon creative insights which revolutionized the way in which we view the world. Unfortunately, the kind of creativity and insight which is such a fundamental part of science is not something one learns in the “standard” courses offered to freshman at Caltech. “Just great”, you say, “I come to the greatest scientific institute in the world and not only am I a lovely frog, but I’m not even going to learn one of the most important skills necessary for a successful research career: creativity.” Don’t despair frog! There is hope!

Hope comes in the form of a very “radical” and unique class called Physics 11. Physics 11 was created with the express purpose of teaching a few selected freshmen the forgotten skills necessary to have a creative and successful career in research. In short, Physics 11 seeks to give freshmen a glimpse at the “good stuff” in physics—the thrill of doing independent research in physics.

Starting second term, each Physics 11 class is first presented with small problems which test the students’ resourcefulness and creativity. During weekly informal lectures the students in Physics 11 spend time exploring these small problems among themselves and with the Physics 11 guru, Professor Tombrello. After the students have mastered these small problems, they are finally given a full fledged independent research problem. Then, during the course of the summer, the students receive a stipend to try and hammer out the answer to their research projects.

One of the best things about Physics 11 is that the research projects assigned to the students are not boring, rote work which some professor is too lazy to do, but are instead actual problems that physicists at the forefront of research are pursuing. Past Physics 11’ers have worked a variety of different problems taken from almost every branch of physics. From examining the effect of holes in superconductors to trying to understand the self-organizing motion of sand dunes across the desert, past Physics 11 classes have had the chance to tackle problems that most PhD holding physicists would be happy to solve. And above all, Physics 11 keeps reminding the student that physics is supposed to be exciting and interesting, so that one never becomes bored with what one is doing because the projects are just too exciting.

So how do you get into this amazing class? Well, you will have to compete in a time honored Physics 11 tradition—the hurdle. The Physics 11 hurdle is a small “unusual” problem from physics which is designed to test creative ability. It is not a typical homework problem and solutions to the problem (if they exist!) often require days of thought. See this week’s Tech for a copy of the first hurdle with complete instructions on how to submit your hurdle. Physics 11 is open only to freshmen, but it is not necessary that you be a physics major in order to compete for a space in the class. Once you have completed the first hurdle, a second hurdle will be issued in the same manner as the first. You do not have to do the first hurdle to do the second hurdle, though it is strongly encouraged that you do both hurdles. Finally, based on the results of the hurdles, five to eight freshmen will be allowed to enroll in Physics 11.

If you have any questions about Physics 11, feel free to contact Professor Tombrello (x4581) or the TA of the class Dave Bacon (x1691, Ruddock 240).
Comedian Mark Russell to Entertain at Tech Today
by Caltech Public Events

Comedian Mark Russell presents "The Laughter and Song of Politics" on Friday, October 13, at 8 p.m. in Caltech's Beckman Auditorium.
Russell finds humor in the latest-breaking news, especially the incongruities in official Washington. With his star-studded grand piano, he pokes fun at conservatives and liberals alike.

Born in Buffalo, New York, Russell served in the Marines and had a stint as a piano player in the Carroll Arms Hotel Bar on Capitol Hill. There he made up songs about his customers, many of whom were politicians.

He went on to become the resident comedian at Washington's Shoreham Hotel from 1959 to 1979. Currently, he can be seen on PBS in "The Mark Russell Comedy Specials."

Tickets to Mark Russell are priced at $55.00, $32.00, and $29.00. Caltech students (with I.D.) can purchase half-price tickets in advance and $8.00 for Rush Tickets beginning on Friday, October 13 (subject to availability). Tickets can be purchased at the Caltech Ticket Office, located just north of the Beckman Auditorium parking lot. Call campus extension 4652 for information.

Individuals with a disability should call Deborah White on extension 4688 (Voice) or extension 3700 (TDD) to arrange accommodations.

October 13, 1995
was taken from the Villa apartment complex. Victim chained and locked bike at approximately 12:00 p.m. Upon returning at 1:00 p.m., discovered the bike missing.

Theft
Blue Mountain Bike, valued at $5.00 (that's right) was stolen from the bike racks near Ricketts house. Suspect Loser.

This free concert will be at 8:00 p.m. in Dabney Hall on June 8th, and a reception will follow. Come and enjoy!

Once again, Caltech's own Chamber Singers is having a concert. This program is eclectic, so there's something for everyone.

There will be madrigals, ballads, barbershop quartets, Gilbert and Sullivan songs, music from around the world, and a piece by the modern German composer, Distler.

This free concert will be at 8:00 p.m. in Dabney Hall on June 8th, and a reception will follow. Come and enjoy!

Mark Russell

Crime And Incident Beat

Crime and Incident BEAT

September 30, 1995
Missing Property
Security responded to a report concerning a package found in the front yard of the Catalina complex. The package had been damaged and opened. Security took the package to the address indicated. The owner stated that items were missing from the package.

October 1, 1995
Noise Complaint
At approximately 1:40 a.m., security responded to a complaint of loud music in the area of Olive Walk. The noise was from a party. The party was breaking up and the noise had subsided.

October 2, 1995
Smell of Smoke
At approximately 9:40 p.m., security responded to a report of a burning odor in the Kerchoff lab room 12. Upon arrival, security discovered smoke emitting from the rear of a machine plug into an outlet. The machine was unplugged by the service department and warning signs were posted on the machine.

October 3, 1995
Theft
Red Murray bike, valued at $50 was stolen from the bike racks near Ricketts house. Suspect Loser.

Chamber SIngers Concert

Chamber Singers presents Variety

Once again, Caltech's own Chamber Singers is having a concert. This term the program is eclectic, so there should be something for everyone.

There will be madrigals, ballads, barbershop quartets, Gilbert and Sullivan songs, music from around the world, and a piece by the modern German composer, Distler.

This free concert will be at 8:00 p.m. in Dabney Hall on June 8th, and a reception will follow. Come and enjoy!
Small tech firms say you have to give up cushy benefits to work on the hot stuff. It’s not until you hire on with no extras, that you find your cup of employment isn’t brewing up any big projects on the front burner . . . or the back. At Oracle, you not only get an opportunity to work with the universe’s largest supplier of software for information management, you also get to choose from a stellar array of benefits. We offer you six medical, two dental and two vision plans. There’s premier life, auto & homeowner’s insurance and legal services. Plus tax, investment, savings & stock plans that complement our excellent work/family balance options. And that’s no Java.

BS/MS CS/EE. You can become a Software Developer • Technical Analyst • Consultant • Product Manager
Will be interviewing on campus November 6 & 7. Sign up at Career Center TONIGHT!
Oracle Corporation, 500 Oracle Parkway, Redwood Shores, CA 94065. E-mail: jobs@us.oracle.com / FAX: 415-506-1070 / PHONE: 415-506-6991
For additional information, visit our web site at: http://www.oracle.com/vehicle/techrecruiting.html. Equal talent will always get equal opportunity.

Enabling the Information Age
Y NEWS
by Donna Ebenstein

Next week is Diversity Week, and there are special events every day!

Monday
Danza Oceoleli — Dance Group at 12 noon in Winnnet Quad

Tuesday
Environmental Racism Panel in Dabney Hall from 7-9 p.m. (see flyers for more details)

Wednesday
Mae Jemison, first African American female astronaut, is speaking at 8 p.m. at Ramo Auditorium

Thursday
Family Night (see Caltech Y Activities Calendar for more information)

Friday
Annie Rapids — noon concert in Winnnet Quad

In addition, on Saturday, October 21 is a Union Station Volunteer trip — sign up at the Y. And on Fridays at 2 p.m. are Mountain Biking Trips.

We hope to see you at the Diversity Week events. Thanks for your support!

For more information on these or other Y events, call x6163 and ask for Chris.

It’s Mae in October!
by Sharyn Slavin

The Multicultural Task Force of the California Institute of Technology is honored to present Dr. Mae C. Jemison as the distinguished speaker to kick-off the Kaleidoscope ‘95 programs. She will discuss issues of diversity and career opportunities for women and minorities in science.

Dr. Jemison’s talk will be held at 8 p.m. in Ramo Auditorium to accommodate students entering immediately following in Dabney Lounge. This event is open to the entire community at no charge.

Dr. Jemison’s talk is part of a series of events on diversity co-sponsored by the Multicultural Task Force, The Women’s Center, Caltech Precollege Science Initiative, the Society of Women Engineers, and the Los Angeles Urban League.

Dr. Jemison blasted into orbit aboard the space shuttle Endeavour, September 12, 1992, the first woman of color to go into space. This historic event was only another in a series of accomplishments for this dynamic African-American woman. She was Science Mission Specialist (a NASA first) on the STS-47 Endeavour, September 12, 1992, and she conducted experiments in life sciences, material sciences, and was co-investigator for the Multicultural Task Force experiment. Dr. Jemison re-signed from NASA in March 1993.

Chemical engineer, scientist, physician, teacher and astronaut, she has a wide range of experience in technology, engineering, and medical research. In addi-

tion to her extensive background in science, Dr. Jemison is well-versed in African and Afro-American studies and is trained in dance and choreography.

At sixteen, Dr. Jemison entered Stanford University on scholarship where she graduated with a Bachelor of Science degree in Chemical Engineering, fulfilling the requirements for an A.B. in African and Afro-American studies. She attended Cornell Medical College where she earned her Doctorate in Medicine in 1981.

In medical school, her interest and knowledge of Third World countries evolved into a commitment to effectively contribute. She traveled to Cuba, rural Kenya, and spent a medical clerkship in Thailand at a Cambodian Refugee Camp. She completed her internship at the Los Angeles County/USC Medical Center in 1982.

Co-sponsored by The Multicultural Task Force, The Caltech Women’s Center, The Caltech. Y, The Vice President for Student Affairs Office, and the Society of Women Engineers. Partial funding for the Jemison visit is provided by the James Irvine Foundation. The Multicultural Task Force wishes to thank the following groups for their support: Caltech Precollege Science Initiative, The JPL Advisory Council for Women, The JPL Educational Affairs Office and The Los Angeles Urban League. For more information call the Caltech Y and ask for Athena Castro or Diana Monot (x6195).
The Central Division Indians swept the Eastern Division Boston Red Sox in three games. MVP candidate Mo Vaughn and Jose Canseco both were held hitless, paralyzing the Bosox. Though the Indians were the best offensive team in the majors this year, even they did not hit well during the series. The Red Sox pitching, led by Roger Clemens and Tim Wakefield, did well but the offense choked. The Indians are, by far, the best team in baseball. They won one hundred games and only lost 44 games, producing one of the best winning percentages in "modern" (post 1900) major league history. Their offense is led by MVP candidate Albert ("Don't call me Joey.") Belle, who hit 50 home runs this year, sophomore Manny Ramirez, and Carlos Baerga, Kenny Lofton, Jim Thome, and future Hall-of-Famer Eddie Murray, member of the 3000 hit club. Future Hall-of-Famer Dave Winfield, another member of the 3000 hit club, was on the Indians this year as well but contributed very little, only driving in four runs this year. It’s time for him to retire.

The Western Division Mariners played the Wild Card Yan­kees of the AL East, defeating them in five games in on of the most exciting postseason series in many years. The Yankees won the first two games, despite Ken Griffey Jr.’s 3 home runs during that span. The Mariners then became the fourth team in major league history to come back from a two game playoff deficit to win the series. MVP candidate Edgar Martinez, who entered the series as perhaps the best "un­heralded" star of the postseason, drove in a playoff record 7 runs in game four. The Yankees had gotten a quick 5 run lead, but Martinez and the Mariners over­came it. In game five, the Yan­kees led 2 nothing and 4 to 2. The Mariners tied it, and the game went into the extra innings. The Yankees scored a run in the top of the tenth inning, and many Mariner fans thought their season was about to end. How­ever, Seattle scored two runs in the bottom of the tenth to win the game and the series. That game saw Manager Buck Showalter of the Yankees leave David Cone on the mound too long, giving the Angels two runs to closer John Wetteland and set­ting up Steve Howe by bypass­ing them in favor of Jack McDowell when he replaced Cone, and Seattle pitcher and probable Cy Young Award win­ner Randy (“Big Unit”) Johnson pitching a couple of innings in relief. Largely because of Johnson’s appearance, the Angels defeated the Mar­iiners 3 consecutive games. The Mar­iiners had been expected to beat the Angels in three games. The Angels had better pitching, but were defeated by the better hitting of the Yankees.

The league posted a record $200 million in revenue last year, up from $180 million in 1994.

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edly be corrected before
regional courses, and was not enough to
adversely affect the determined
relieved Caltech runners on this day. The
course was a very nice, fast,
course, mostly run on shaded
sand trails with some grass and
asphalt at the beginning and
the end. However, the men's course
had some brutal uphills to
give it an overall uphill grade.
The women's team was led
again by CaHin Henderson, one of the favorites to win
the Sullivan Award this year. CaHin
finished in second place with a
time of 19:34 for the 5000m
course. A few minutes later, the
first mile was blazingly
finished in fifth place, needing
26:50 to complete the
checkered starting line. Yet
the men overcome this disgrace and
ran some outstanding times.
The first mile was blazingly fast,
and the rest of the course con­
tained the aforementioned bru­
tal hills. Dan Kryman persevered through
the difficulties and
finished in fifth place, needing
only 26:50 to complete the
course. A few minutes later, the
dependable Caltech main pack
crossed the finish line one by
one. There was Brian Barris at
28:46, Conrad "Goose" Zesler at
29:01, Tom Meyer with 29:03,
and Brad "Brad" Nakatani with 29:35.
An amazing six Beaver runners
came in under thirty minutes.
Further back was Harmesh Lad,
and Tom Drsken had to
drop out due to illness. The
men placed fifth out of six, but again,
one of the top teams Division I.
The performances of all
the runners at both meets keeps up
the optimism that has sur­
tround the team all year. The
only remaining meets are crucial
in the teams' attempts to place well in SCIAC and send runners to
Nationals. Next week is the
SCIAC Multi-Dual Meet at La
Mirada Park, the first meet that
will help determine conference
placement. Two weeks after that is the
Conference Championships at Prado Park in Chino, and
two weeks after that is the Regional
Meet in San Diego, the culmina­
tion of months of training and
hard work. Those three meets
are your only chances left to see
these amazing athletes in action.

**SPORTS**

Harriers Rock Courses
by Brian Barris

Divide and Conquer' was the
philosophy of the Caltech Men's
and Women's Cross Country Teams this past weekend. The
bulk of the team traveled to San Diego for a preview of the Re­

gional course, while a few run­
ers remained unable to make this
trip and raced at La Mirada Park.
Among the men who com­
peted in the Biola Invitational at
La Mirada, Chris Cary shined the
brightest, finishing in 31:00. The
others who ran the 8K course
took on "Pepe" Collier, who made an incredible leap to
35:15, probably enabling him to
finish safely ahead of the crazy
old guy in future meets, Ben
Siron, and Richi Gilmore. James
Dosley decided to run a 1K
course instead, and his time of
40:01 was undoubtedly the fast­
est of anyone who ran that dis­
tance. The women's contingent
at Biola was made up entirely of
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these amazing athletes in action.
The Monterey Area Apartment Association will be hosting its sixth annual Fall Festival on October 21st at the Monterey Civic Center, 2nd Floor, between 4 pm and 6 pm. Light refreshments will be served. Admission is free.

The Caltech Swedish Club will have its formal meeting on Saturday, October 22nd at 5:00 pm in Ohrstrom Library, 11 pm. The meeting will be held on Tuesday at 6:30 pm in 191 Fliiberg Hall. The year-end meeting will be held on Tuesday at 6:00 pm in Professor Martin Sjörgen's office. The meeting will be held on Thursday at 7:00 pm in Professor John Swan's office. The year-end meeting will be held on Wednesday at 5:00 pm in Professor Erich Ebel's office. The meeting will be held on Thursday at 7:30 pm by Professor Ingrid Johnsson, a visiting professor from Umeå University in Sweden.

The Thomas, Caltech's literary magazine, can now be found on the W3C at http://www.caltech.edu/Thomas. Check out the eclectic range of the great and goofy poetry of the Caltech community and drop in to see what you think. There are still other copies of last year’s Thomas left in Caltech Post 27 if you’d like one.

The ascension of the community and accept any creative work, from visual art to proses and music. We will be holding a reading on October 3rd in the basement of the club to showcase a range of voices from across the community. Specifics about this reading will be announced soon.

The Caltech Folk Music Society is seeking new members. The society’s purpose is to promote the study of folk music through the participation in folk ensembles, sing-songs, concerts, and public performances. Any student interested in folk music is encouraged to join the society.

The Open House will be open on Saturday, October 28th, from 2:00 pm to 5:00 pm. Come and enjoy refreshments and a chance to meet and greet faculty, staff, and students. The event will be held in the basement of the club. Specifics about the event will be announced soon.

The Santa Clara University Foundation is now accepting submissions for their annual photo contest. The contest is open to all students, faculty, and staff of Santa Clara University. The deadline for submission is December 15th, 1995. For more information, please call (408) 924-1833 or write to Santa Clara University, Office of Communications, Building 141, Room 235, Santa Clara, CA 95050.

The Central European Film Festival is offering several awards. The Peter D. Kramer Film Award is open to all students, faculty, and staff of Santa Clara University. The deadline for submission is December 15th, 1995. For more information, please call (408) 924-1833 or write to Santa Clara University, Office of Communications, Building 141, Room 235, Santa Clara, CA 95050.

The Caltech VBallRugby club will be holding its annual Fall Festival on October 21st at the Caltech VBallRugby Clubhouse, 239 E. 3rd St., Pasadena. The meeting will be held on Thursday at 7:00 pm in Professor John Swan's office. The year-end meeting will be held on Tuesday at 6:30 pm in Professor Martin Sjörgen's office. The meeting will be held on Thursday at 7:30 pm by Professor Ingrid Johnsson, a visiting professor from Umeå University in Sweden.

The American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) will host its annual meeting in Chicago, Illinois, September 29 to October 3, 1996. The meeting will feature sessions on a wide range of technical topics, as well as social events and tours of local attractions.

The California Tech Foundation has established the Harry S. Truman Scholarship Foundation, which awards scholarships to students who have outstanding leadership potential and intend to pursue careers in public service. If you're interested, please stop by the Ohrstrom Library, 11 pm, for more information. The deadline for receipt of nominations for this scholarship is December 1st, 1995.

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