

Caltech 336

T F S S M T W T F S S M T W

The campus community biweekly
September 18, 2003, vol. 3, no. 13

A swarm at St. Luke's



A worker prepares to remove a beehive from the cross atop the former hospital, now owned by Caltech. The 17-foot cross was later taken down and is expected to be given to a local religious organization.

Dabney Hall gets an overhaul

Amid buildings dedicated to chemistry, math, and physics, Caltech's Dabney Hall has been a home for literature, history, and philosophy. This month, the elegant but aged building began undergoing a renovation that will last through August 2004.

Like the science buildings around it, Dabney Hall was designed by architect Bertram Goodhue with pueblo-style forms and Mayan-inspired decoration. Funded by a gift of \$250,000 from Joseph and Louise Dabney and completed in 1928, the hall served for 40 years as a hub for the humanities and for distinguished teachers such as Shakespeare scholar and *Norton Anthology* editor Hallett Smith and medieval historian John Benton. It was a place to gather, relax, play music, and read.

As the Institute's needs developed, however, the humanities library was relocated and offices began replacing the library reading room, multipurpose Treasure Room, and lecture rooms. With continuing expansion of the division, most faculty moved their offices to Baxter Hall of the Humanities and Social Sciences, built in the 1970s.

see Dabney, page 6

"Bubbloy" is latest Caltech invention

First there was liquid metal, that wondrous substance from Bill Johnson's materials science lab that is now used to make golf clubs and tennis rackets. Now a couple of Johnson's enterprising grad students have come up with a new invention—liquid metal foam.

According to Chris Veazey, who is working on his doctorate in materials science, the new stuff is a bulk metallic glass that has the stiffness of metal but the springiness of a trampoline. "You can squish it and the metal will spring back," says Veazey, who has given the stuff the tentative name "bubbloy," a combination of "bubble" and "alloy." The researchers' material was featured in an article and on the cover of *Applied Physics Letters* in January.

Greg Welsh, the coinventor and also a doctoral student in materials science, adds that bubbloy is made possible by a process that foams the alloy so that tiny bubbles form. Preliminary results show that if the bubbles nearly touch, the substance will be especially springy.

"We think it might be especially useful for the crumple zone of a car," says Veazey. "It should make a car safer than one where the structures in the crumple zone are made of conventional metals."

DuBridge lecture series features Jack Valenti

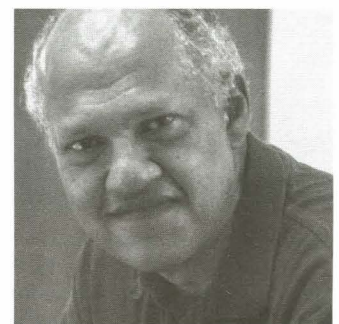
Lee A. DuBridge, a physicist and Caltech's president from 1946 to 1969, was considered an exemplary research-university president in an era of vast scientific, societal, and educational change. As a memorial to him, Caltech established the Lee A. DuBridge Distinguished Lecture Series to bring to campus prominent speakers of national and/or international importance.

Jack Valenti, head of the Motion Picture Association of America, will visit Caltech to deliver a DuBridge Distinguished Lecture on Thursday, October 2, at 8 p.m. in Beckman Auditorium. James Bates, entertainment reporter for the *Los Angeles Times*, will join Valenti onstage for an informal conversation.

In his role as CEO and president of the MPAA, Valenti has been highly effective in guiding the agency that watches over the U.S. motion picture and television industries. With Hollywood as a dominant force shaping and reflecting American culture, he is in a uniquely influential position.

Valenti's career has taken him close to centers of power; he was closely associated with Lyndon Johnson before and

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Professor to teach South Africa course

South African sociologist Wilmot James has been appointed Caltech's Moore Visiting Professor of History and Sociology. He will offer courses this fall and spring on his country's recent political history and on race and skin color.

James's fall-term course, "South African Politics and Culture before and during Its First Ten Years of Democracy," will study key personalities, including former president Nelson Mandela, and will explore the current climate of economics, education, racial reconciliation, and other factors affecting the country's post-apartheid transition to democracy.

In the spring, his "Racial Variation and the Evolution of Skin Color" course will focus on the treatment of "race" over time, by Linnaeus, Mendel, Darwin, the eugenics movement, and Nazism, through to molecular biology and the Human Genome Sequencing Project, and will consider the implications of the modern science of race, skin-color variation for the sociology of race, and racism itself.

A former dean of humanities and professor of sociology at the University of Cape Town, James is now an executive

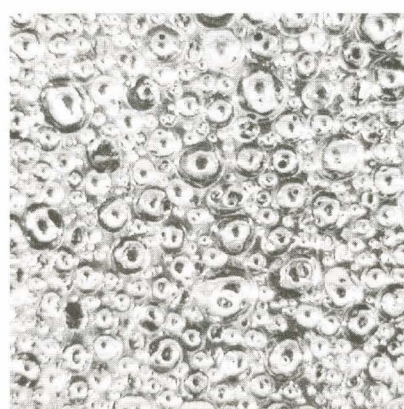
see James, page 6

Program cuts child-care costs

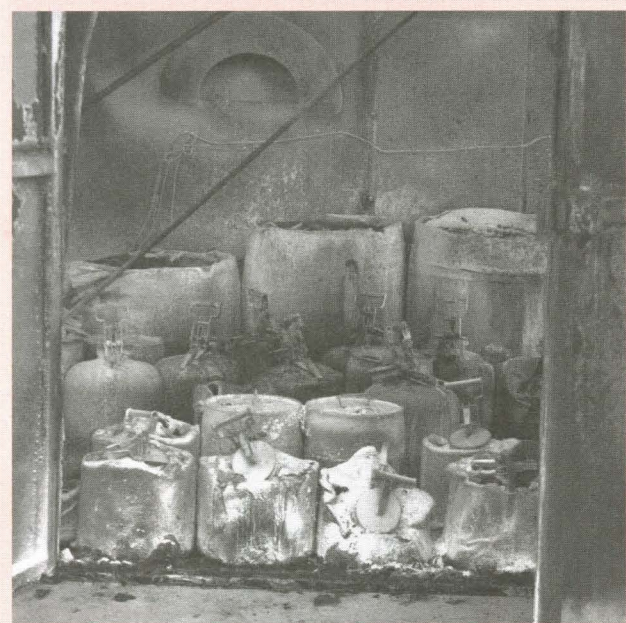
Many parents feel the heavy weight of their child-care bills every month, but that burden just got lighter for many members of the Caltech community. With the introduction of the Child Care Assistance Program, participants who meet financial criteria won't have to worry about paying a hefty chunk of next year's bills.

The program is open to Caltech faculty and staff members, postdoctoral scholars, and students who have dependent children up to five years old. These members of the Caltech community are urged to sign up for coverage of child-care expenses accrued in 2004.

see CCAP, page 6



NewsBriefs



Early Thursday, August 14, flames broke out in a storage shed near the central engineering machine shop. The Pasadena, Burbank, and Glendale fire departments responded with seven units, dousing the fire by 7:34 a.m. No one was hurt; damage to the shed was estimated at \$35,000.

Personals

Welcome to Caltech

June

Bernard Yurke joined Caltech effective June 1 as a Moore Distinguished Scholar in computation and neural systems.

July

Nathan Dunfield has joined Caltech as an associate professor of mathematics, effective July 1. A specialist in the field of three-dimensional manifolds, he is noted for his use of comprehensive computer experiments, combined with analytical techniques, in extending the range of problems that can be worked on. He received his BS from Oregon State University in 1994 and his PhD from the University of Chicago in 1999.

Sunil Golwala joined the Institute on July 19 as an assistant professor of physics. Recognized in both the particle-physics and cosmology communities as a first-rate experimenter, he is also expected to play a role in the development of advanced detection techniques. He received his BA from the University of Chicago in 1993 and his PhD from UC Berkeley in 2000.

Jennifer Lee has joined Caltech as a senior research fellow in chemistry, effective July 1.

Yves Leroy has been appointed Millikan Visiting Professor of Aeronautics, effective July 15. Director of research, Centre National de la Recherche Scientifique, he received his MSc from the University of Sherbrooke in 1984 and his PhD from Brown University in 1989.

Robert McQuinn came to Caltech in July as associate vice president for development. He was previously associate vice president for development at Williams College, where his accomplishments included planning and managing the development effort for Williams's next comprehensive campaign. Prior to joining Williams, McQuinn served as senior associate dean for development and public affairs at USC, where he received his bachelor's degree and where he also earned a master's degree in corporate finance.

August

Joon Kang joined Caltech as a research aide A, biology.

Manuel Vargas has been appointed a visiting assistant professor of philosophy, effective August 1. An assistant professor at the University of San Francisco, he received his AB from UC Davis in 1995 and his PhD from Stanford in 2001.

September

Jonathan Bird, research assistant, physics, mathematics and astronomy; **Ulyana Dyudina**, assistant scientist, geological and planetary sciences; **Marcy Fowler**, administrative assis-

tant, chemistry and chemical engineering; **Alejandro Hernandez**, security officer, Campus Security and Parking Services; **Joel Miranda**, unit chef manager, Dining Services; **Michael Rupp**, director of sports information, Student Affairs; **Dean Soares**, security officer, Campus Security and Parking Services; **Athena Trentin**, international-student advisor, Human Resources and Campus Services, have joined Caltech.

New positions

Jehoshua Bruck, Moore Professor of Computation and Neural Systems and Electrical Engineering, has been appointed director of information science and technology, effective July 1. He received his BSc from the Technion—Israel Institute of Technology in 1982 and his PhD from Stanford in 1989, then joined Caltech as an associate professor in 1994, becoming professor in 1998 and Moore Professor in 2001.

Emmanuel Candes, assistant professor of applied and computational mathematics, has been appointed associate professor of applied and computational mathematics, effective July 1. A member of the Caltech faculty since 2000, he received his diplôme from École Polytechnique in 1993 and his PhD from Stanford in 1998.

Donald Cohen became Charles Lee Powell Professor of Applied Mathematics, Emeritus, on July 1. He joined the Caltech faculty in 1965 as an assistant professor, becoming associate professor in 1967, professor in 1971, and Powell Professor in 1998, and he served terms as executive officer for applied mathematics and as chair of the engineering and applied science division. He received his ScB from Brown University in 1956, his MS from Cornell in 1959, and his PhD from New York University (Courant Institute) in 1962.

John Eiler, assistant professor of geochemistry, has been appointed associate professor of geochemistry, effective August 1. He received his BS from the University of Iowa in 1989 and his PhD from the University of Wisconsin—Madison, in 1994, joining Caltech that same year as a research fellow and becoming assistant professor in 1998.

Kenneth Farley, Keck Foundation Professor of Geochemistry, has been appointed director of the Tectonic Observatory, effective August 1. A member of Caltech's faculty since 1993 and appointed Keck Foundation Professor this year, he received his BS from Yale in 1986 and his PhD from UC San Diego in 1991.

Seyed-Ali Hajimiri, assistant professor of electrical engineering, has been appointed associate professor of electrical engineering, effective May 1. He received his BS from Sharif University of Technology in 1994 and his PhD from Stanford in 1998, and he joined the Caltech faculty that same year.

Gary Lorden, professor of mathematics, has been appointed executive officer for mathematics, effective August 1. A member of the Caltech faculty since 1968, he has served as dean of

students and as vice president for student affairs. He received his BS from Caltech in 1962 and his PhD from Cornell in 1966.

Oscar Mandel became professor of literature, emeritus, on July 1. He received his BA from New York University in 1947, his MA from Columbia in 1948, and his PhD from Ohio State in 1951, and first came to Caltech as a visiting professor in 1961. He joined the Institute's faculty as an associate professor of English in 1962, becoming professor in 1968 and professor of literature in 1980.

Anne McMenamin, associate director of gift and estate planning and manager of trusts and bequests, has been appointed director of gift and estate planning (GEP). Over the past six years she has managed a growing pool of life-income gifts—gifts that now total over \$130 million. As director, she will be leading the six-member GEP team.

Re'em Sari, who has held research and lecture positions at Caltech since 1998, has been appointed associate professor of astrophysics and planetary science, effective June 15. Known for his contributions to understanding gamma-ray bursts as well as to understanding the dynamics of planets in the early solar system, Sari received his BSc from Ben-Gurion University in 1992 and his PhD from Hebrew University in 1998.

Retirements

Timothy Abney retired on August 1 after 14 years at Caltech. An employee of Campus Facilities, he worked in the area of facilities systems.

Renella Dudek, a member of the support staff for the Administrative Technology Center, retired on June 1. She had worked at Caltech for 24 years.

Mary Gilmore will retire on October 1 after 12 years at Caltech. She was an administrative assistant in Human Resources.

Richard Gomez, a photo lab supervisor with Graphic Arts, retired on August 1. He had been at Caltech for 30 years.

Harry Hu retired on September 1. An assistant librarian, he had worked at Caltech for 22 years.

Sylvia Jacoby retired on September 1 after 24 years at Caltech. She was a senior administrative secretary in chemistry.

Janet Jenks, an associate librarian, retired on September 1 after 29 years with the Institute.

Josefa Meraz, a custodian, retired on September 1 after 16 years at Caltech.

Gloria Morales, a member of the staff of the Provost's Office, retired on September 1. She had been at Caltech for 19 years.

William Wong retired on September 1 after 24 years at Caltech. He was a manager in Physical Plant.

Deaths

Carlos Baldoceda died August 5 at his home, near Chicago, of a brain tumor; he was 22. He would have been a Caltech senior in electrical engineering this year. He graduated cum laude in 1999 from Oak Park and River Forest High School, where he served on the student council and played football, basketball, and tennis. In 1998 he and fellow classmates placed fourth in the Rube Goldberg Award competition sponsored by Argonne National Laboratory. A dean's list student, he was also a Hispanic National Merit Scholar finalist and an Illinois State Scholar. He received a full Caltech scholarship and was a member of Fleming House. Passionate about music, he played a number of instruments. He is survived by his father, Carlos; his mother, Margarita; two sisters, Ursula and Blanca; and his grandparents, Gonzalo and Blanca Mejia.

Eric Tse, a PhD student in biology who came to the Institute in 1999, died in August. Enrolled in the MD/PhD program at Caltech in conjunction with the USC Medical School, he had earned two bachelor's degrees at USC. He will be awarded a posthumous master's degree in biology by Caltech in June 2004.

Honors and awards

Warren Brown, associate professor of history, **Ada Chan**, Harry Bateman Research Instructor in Mathematics, **John Eiler**, associate professor of geochemistry, **James Eisenstein**, professor of physics, and **Ritsuko Hirai Toner**, lecturer in Japanese, have received 2003 ASCIT (Associated Students of Caltech) Teaching Awards. Awards for teaching assistants went to grad students **Katalin Grubits**, physics, **Robert Forster**, physics, and **Brian Kwan**, chemistry.

Mark Wise, McCone Professor of High Energy Physics, has received the 2003 Graduate Student Council Teaching Award, and **Re'em Sari**, associate professor of astrophysics and planetary science, the Mentoring Award. Grad students **Kumar Manoj Bobba**, aeronautics, and **Justin Bois**, chemical engineering, have received the awards for teaching assistants.

Details about the awards plus individual citations can be found online in the minutes from the faculty meeting at which the awards were announced: <http://oof.caltech.edu/pdf/Faculty/Minutes/Faculty%20Meeting%20Minutes%2006-11-2003.pdf>.

Caltech shows the way

Caltech's home page has been used as an illustration of what the properly designed Web page should look like. With the lead-in "A typographically effective Web page," the caption for Figure 5.2—in *A Concise Guide to Technical Communication*, by Laura J. Gurak and John M. Lannon—reads, "This Web site uses typography effectively for the screen. The stretched sans-serif font is clear and readable; the design and color scheme is aesthetically pleasing to the eye and draws the reader's attention to the Caltech logo."

Frosh wins gold

Axline scholar and incoming freshman **Pavel Batrachenko** was awarded a gold medal at the 34th International Physics Olympiad, held in Taipei, Taiwan, August 2–11. National Taiwan Normal University, a leading university in training and programs for high-school teachers, coordinated the event, with support from Taiwan's Ministry of Education and National Science Council. Founded in Warsaw in 1967, the Olympiad has become an annual event for secondary-school students around the world—participants this year came from 68 countries.

Individual competition took place on two of the days, with contestants being tested on theoretical problems one day and experimental problems on the other. Batrachenko was awarded first place on the theoretical exam and tied for first on the experimental exam, thereby earning a gold medal and boosting the cumulative U.S. score sufficiently high to also win a gold. One of only 20 contestants to receive a gold, Batrachenko also received a certificate, a trophy, and prizes, including a digital camera and camcorder. "I was very surprised," Batrachenko said of his success.

Originally from Moscow, 16-year-old Batrachenko has had an eventful summer. In addition to his accomplishments at the Olympiad, he has received an Axline scholarship from Caltech, which brought with it the opportunity to participate in Caltech's Summer Undergraduate Research Fellowships (SURF) program. Working with astronomy professor S. George Djorgovski and senior postdoctoral scholar Ashish Mahabal, Batrachenko is helping to develop algorithms for the classification of galaxies.

Telephone Office moves

The Telephone Office has moved from Dabney Hall to room 111 in the Administrative Technology Center, 263 South Chester. The new mail code is 111-10; phone extensions remain the same.

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the academic week at Caltech

is a printed version of selected events from the online @Caltech calendar, <http://atcaltech.caltech.edu/calendar/>. To publish events online, register as an event planner on the @Caltech calendar. If unable to submit electronically, please call (626) 395-3630. For further information or a schedule of deadlines, call (626) 395-3630, fax (626) 449-2159, write 336 Calendar, 1-71, California Institute of Technology, Pasadena, CA 91125, or e-mail debbieb@caltech.edu.

September 22–October 5, 2003

M T W T F S S

Tuesday, September 23

General Biology Seminar
119 Kerckhoff, 4 p.m.—“Genetic Analysis of Systemic RNAi in *C. elegans*: Insights into Intercellular Trafficking of RNA,” Craig Hunter, associate professor of molecular and cellular biology, Harvard University.

Wednesday, September 24

Organic Chemistry Seminar
147 Noyes, Sturdivant Lecture Hall, 4 p.m.—“Application of o-Quinone Methides and p-Quinol Derivatives in Synthesis of Natural Products,” Professor Thomas R. R. Pettus, department of chemistry and biochemistry, UC Santa Barbara.

Friday, September 26

High Energy Theory Seminar
469 Lauritsen, 11 a.m.—Topic to be announced. Yoichi Kazama, professor of physics, University of Tokyo. Information: www.theory.caltech.edu/people/seminar/schedule.html.

Monday, September 29

Thesis Seminar
151 Crellin, 4 p.m.—“Development of New Asymmetric Organocatalytic Methods and Progress Toward the Total Synthesis of Guanacastepene A,” Wendy Jen, graduate student in chemistry, Caltech.

Tuesday, September 30

Carnegie Observatories Colloquium Series
William T. Golden Auditorium, 813 Santa Barbara Street, 4 p.m.—“Internal Dynamics, Structure, and Formation of Dwarf Elliptical Galaxies,” Marla Geha, Carnegie Observatories. Refreshments, 3:30 p.m.

Inorganic-Electrochemistry Seminar
147 Noyes, Sturdivant Lecture Hall, 4 p.m.—“Nanoparticle Optics for Surface-Enhanced Sensing and Spectroscopy,” Richard Van Duyne, Morrison Professor of Chemistry, Northwestern University.

Wednesday, October 1

Environmental Science and Engineering Seminar
142 Keck, 4 p.m.—“Indirect Effects of Aerosols on Climate,” Professor Brian Toon, director, Program in Atmospheric and Oceanic Science, University of Colorado, Boulder. Refreshments, Keck lobby, 3:45 p.m.

Thursday, October 2

Chemical Engineering Seminar
106 Spalding Lab, Hartley Memorial Seminar Room, 2 p.m.—“Molecular Engineering of Gene and Stem Cell Therapies for the Nervous System,” Professor David Schaffer, department of chemical engineering, UC Berkeley. Refreshments, 113 Spalding Lab, 3 p.m.

Biophysics Lecture
153 Noyes, Sturdivant Lecture Hall, 4 p.m.—Topic to be announced. Professor Steven Chu, department of physics, Stanford University.

Physics Research Conference
201 E. Bridge, 4 p.m.—“Neutrino Astronomy,” David Saltzberg, associate professor of physics and astronomy, UCLA. Refreshments, 114 E. Bridge, 3:45 p.m. Information: www.pma.caltech.edu/~physcoll/PhysColl.html.

Social and Information Sciences Laboratory Seminar Series
25 Baxter, 4 p.m.—Topic to be announced. Vineer Bhansali, executive vice president and portfolio manager, Pacific Investment Management Company.

Friday, October 3

High Energy Theory Seminar
469 Lauritsen, 11 a.m.—“Black Hole Singularity in AdS/CFT,” Veronika Hubeny, Stanford. Information: www.theory.caltech.edu/people/seminar/schedule.html.

Fluid Mechanics Seminar
101 Guggenheim Lab, Lees-Kubota Lecture Hall, 3 p.m.—Topic to be announced. Professor Michael Brenner, Division of Engineering and Applied Sciences, Harvard University. Information: www.galcit.caltech.edu/Seminars/Fluids/CurrentFluids/index.html.

Stephen Hawking Lecture
Beckman Auditorium, 8 p.m.—“Gödel and the End of Physics,” Stephen Hawking, Lucasian Professor of Mathematics, University of Cambridge. The lecture is free. Guaranteed-admission tickets will be distributed at the auditorium beginning at 9 a.m. Tickets will be void at 7:45 p.m. and seats given to those waiting without tickets. The talk will be broadcast (audio only) outside the auditorium. Information: 395-4652, 1 (888) 2CALTECH, or events@caltech.edu. Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD).

Award-winning biographer to lecture

Brenda Maddox, author of *Rosalind Franklin: The Dark Lady of DNA*, will discuss the pioneering biologist whose work was essential to, but largely overshadowed by, Watson and Crick’s discovery of the structure of DNA. The free public lecture will begin at 8 p.m. on Tuesday, October 7, in the Beckman Institute auditorium.

On April 25, 1953, James Watson and Francis Crick published their groundbreaking discovery of the double-helix structure of DNA, the molecule essential for passing on human genetic information. Their breakthrough, however, depended on previous work by Rosalind Franklin. In her book, Maddox resurrects the reputation of a scientist of great achievement, portraying an intelligent and highly principled young woman who helped change the course of genetic knowledge before her death at age 37.

Maddox’s work has been translated into 10 languages. Her book *Nora: A Biography of Nora Joyce* won the Los Angeles Times Biography Award, the Silver PEN Award, and the French Prix du Meilleur Livre Etranger. *The Married Man: A Life of D. H. Lawrence*, won the Whitbread Biography Award in 1994, and her work *Yeats’s Ghosts*, on the married life of W. B. Yeats, was short-listed for the Samuel Johnson Prize in 1998. A past chair of the Association of British Science Writers, she is a member of the Royal Society’s science and society committee.

The event is cosponsored by the Women’s Center, President’s Office, Office of the Faculty, Division of Biology, History and Philosophy of Science Program, and Caltech Bookstore.

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CampusEvents

Monday, September 22

Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 12:30 p.m.—Loans of kitchen and household necessities and baby furniture are made to members of the Caltech community. Information: 584-9773.

Tuesday, September 23

Preschool Playgroup

Tournament Park, 10 a.m. to noon—Song and storytime, crafts and free play for toddlers and preschoolers (from walking to age 4). Information: 792-7808 or julia@astro.caltech.edu.

Caltech Shorinji Kempo Club

Brown Gymnasium, 7 p.m.—Learn effective self-defense and martial arts. Sessions are free. No experience required. Wear comfortable clothing.

Caltech Tai Chi Club

Winnett lounge, 7 p.m.—Meets Tuesdays and Fridays weekly. Sessions are free. Information: www.its.caltech.edu/~taichi.

Volleyball

vs. Claremont-Mudd-Scripps, 7:30 p.m.

Wednesday, September 24

Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 12:30 p.m.—Loans of kitchen and household necessities and baby furniture are made to members of the Caltech community. Information: 584-9773.

Wednesdays in the Park

Tournament Park, 10 a.m. to noon—Every Wednesday there's conversation and coffee for parents and caregivers and playtime and snacks for children. Information: 403-7163 or ktclark@caltech.edu.

Asbestos Awareness Training

118 Keith Spalding Building, 3 p.m.—This course is designed to enhance employee awareness of asbestos and its potential health hazards, as well as to provide guidelines for safely working around asbestos-containing materials. The Institute procedures for identifying and managing asbestos-containing building materials will also be discussed. Registration: 395-6727 or safety.training@caltech.edu.

Men's Soccer

at Occidental College, 4 p.m.

Free Summer Salsa Lessons

Winnett lounge, 7 to 10 p.m.—Learn fundamentals of Cuban-style salsa dancing and incorporate them into a Rueda de Casino ("casino wheel": rueda is a circular style of salsa dancing involving frequent partner exchanges and coordinated group movements). The beginners' session starts at 7 p.m. The intermediate/advanced lesson starts at 8:30 p.m.

Thursday, September 25

Video Compression for Presentations, Web, and CD/DVD

NewMedia Classroom, 363 S. Hill Avenue, 10 a.m. to noon—Learn why and how video is compressed for playback on a computer. There will be hands-on exercises with Cleaner 5 software, and demonstrations of other compression software such as Premiere and Sorenson Squeeze. Fee: \$50. Reservations: wenyee@caltech.edu. Information: http://muri.caltech.edu/nmc/index.htm.

Caltech Architectural Tours

Athenaeum, 11 a.m. to 12:30 p.m.—Meet in the entry hall of the Athenaeum. Led by members of the Caltech Architectural Tour Service. Reservations: Susan Lee, 395-6327 or suze@caltech.edu.

Caltech Shorinji Kempo Club

Brown Gymnasium, 7 p.m.—Learn effective self-defense and martial arts. Sessions are free. No experience required. Wear comfortable clothing.

Amnesty International Monthly Meeting

Caltech Y lounge, 7:30 p.m.—Caltech/Pasadena AI Group 22 holds its monthly meeting to discuss current activities and plans. All are welcome. Refreshments. Information: (818) 354-4461 or lkamp@lively.jpl.nasa.gov.

Friday, September 26

Women's Club Welcoming Coffee

Red Door Café, 9 to 10:30 a.m.—An opportunity to meet new friends, welcome newcomers, and learn more about the Caltech Women's Club. Information: Carol Andersen, (818) 790-8175 or carol@vis.caltech.edu.

Caltech Tai Chi Club

Winnett lounge, 7 p.m.—Meets Tuesdays and Fridays weekly. Sessions are free. Information: www.its.caltech.edu/~taichi.

Volleyball

vs. Cal Lutheran, 7:30 p.m.

Saturday, September 27

Cross Country

at Cal Lutheran, 9 a.m.

Men's Soccer

vs. Claremont-Mudd-Scripps, 11 a.m.

Sunday, September 28

Men's Water Polo

vs. alumni, 11 a.m.

Auditions for Concert Band, Jazz Bands, and Chamber Music

Student Activities Center, 2 to 5 p.m.—Band auditions will take place in room 15, chamber-music auditions in room 12. Sign-up sheets will be posted on the doors. Pianists interested in chamber music should sign up for a time between 3 and 5 p.m. Auditions are friendly and informal. A very short prepared piece is preferred, but not required. Questions or to borrow an instrument: William Bing (bands), at wbing@its.caltech.edu; Delores Bing (chamber music), at dbing@its.caltech.edu.

Sign-Ups for Men's Glee Club and the Chamber Singers

Student Activities Center, 2 to 5 p.m.—The Men's Glee Club is open to all Caltech and JPL community members. The Chamber Singers are open to Caltech students only, both men and women. Sign-ups and auditions will be held in practice room 3, and will continue on September 29 from 1 to 4:30 p.m. Information: Don Caldwell, dgc@its.caltech.edu or 395-6197.

Women's Glee Club Sign-Ups and Placement Auditions

Student Activities Center, 3 to 5 p.m.—The Women's Glee Club is open to all Caltech and JPL community members. Sign-ups and auditions will be held in rehearsal room 1. Information: Desiree LaVertu, dlavertu@caltech.edu or 395-6260.

Caltech Shorinji Kempo Club

Braun Gym, multipurpose room, 3:30 p.m.—Learn effective self-defense and martial arts. Sessions are free. No experience required. Wear comfortable clothing.

Auditions for Concert Band, Jazz Bands, and Chamber Music

Student Activities Center, 7 to 10 p.m.—Band auditions will take place in room 15, chamber-music auditions in room 12. Sign-up sheets will be posted on the doors. Auditions are friendly and informal. A very short prepared piece is preferred, but not required. Questions or to borrow an instrument: William Bing (bands), at wbing@its.caltech.edu; Delores Bing (chamber music), at dbing@its.caltech.edu.

Monday, September 29

Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 12:30 p.m.—Loans of kitchen and household necessities and baby furniture are made to members of the Caltech community. Information: 584-9773.

Sign-Ups for Men's Glee Club and the Chamber Singers

Student Activities Center, 1 to 4:30 p.m.—The Men's Glee Club is open to all Caltech and JPL community members. The Chamber Singers are open to Caltech students only, both men and women. Sign-ups and auditions will be held in practice room 3. Information: Don Caldwell, dgc@its.caltech.edu or 395-6197.

Women's Glee Club Sign-Ups, Auditions, and First Rehearsal

Student Activities Center, 3 to 6 p.m.—The Women's Glee Club is open to all Caltech and JPL community members. Sign-ups and auditions will be held in rehearsal room 1. The first rehearsal will take place from 5 to 6 p.m. Information: Desiree LaVertu, dlavertu@caltech.edu or 395-6260.

Auditions for Concert Band, Jazz Bands, and Chamber Music

Student Activities Center, 4 to 6 p.m.—Band auditions will take place in room 15, chamber-music auditions in room 12. Sign-up sheets will be posted on the doors. Auditions are friendly and informal. A very short prepared piece is preferred, but not required. Questions or to borrow an instrument: William Bing (bands), at wbing@its.caltech.edu; Delores Bing (chamber music), at dbing@its.caltech.edu.

Auditions for Concert Band, Jazz Bands, and Chamber Music

Student Activities Center, 8 to 10 p.m.—Band auditions will take place in room 15, chamber-music auditions in room 12. Sign-up sheets will be posted on the doors. Auditions are friendly and informal. A very short prepared piece is preferred, but not required. Questions or to borrow an instrument: William Bing (bands), at wbing@its.caltech.edu; Delores Bing (chamber music), at dbing@its.caltech.edu.

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234 S. Catalina, 10 a.m. to 12:30 p.m.—Loans of kitchen and household necessities and baby furniture are made to members of the Caltech community. Information: 584-9773.

Wednesdays in the Park

Tournament Park, 10 a.m. to noon—Every Wednesday there's conversation and coffee for parents and caregivers and playtime and snacks for children. Information: 403-7163 or ktclark@caltech.edu.

Men's Soccer

vs. Redlands, 4 p.m.

Thursday, October 2

Caltech Shorinji Kempo Club

Brown Gymnasium, 7 p.m.—Learn effective self-defense and martial arts. Sessions are free. No experience required. Wear comfortable clothing.

Lee A. DuBridge Distinguished Lecture

Beckman Auditorium, 8 p.m.—Jack Valenti, head of the Motion Picture Association of America (MPAA), author, and special adviser to President Lyndon Johnson, joins *Los Angeles Times* entertainment reporter James Bates in an open-ended conversation. Admission is free. Information: 395-4652, 1 (888) 2CALTECH, or events@caltech.edu. Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at www.events.caltech.edu.

Friday, October 3

Caltech Tai Chi Club

Winnett lounge, 7 p.m.—Meets Tuesdays and Fridays weekly. Sessions are free. Information: www.its.caltech.edu/~taichi.

Volleyball

vs. Pomona-Pitzer, 7:30 p.m.

Saturday, October 4

Men's Water Polo

Men's Water Polo Classic, 8 a.m.

Cross Country

at Biola, 11 a.m.

Men's Soccer

at Whittier, 11 a.m.

Volleyball

at Whittier, 7:30 p.m.

Caltech-Occidental Chamber Orchestra

Ramo Auditorium, 8 p.m.—The Caltech-Occidental Chamber Orchestra, under the direction of Allen Robert Gross, will present works by Vaughan Williams, Telemann, Bartok, and Beethoven. Information: 395-4652, 1 (888) 2CALTECH, or events@caltech.edu. Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD). Visit Public Events at www.events.caltech.edu.

Sunday, October 5

Men's Water Polo

vs. Cal Maritime, 11 a.m.

Caltech Shorinji Kempo Club

Braun Gym, multipurpose room, 3:30 p.m.—Learn effective self-defense and martial arts. Sessions are free. No experience required. Wear comfortable clothing.

Celebrate the Moon Festival

The Caltech C, the Institute's association of Chinese students and scholars, invites the campus community to a Chinese Moon Festival celebration on Saturday, October 4.

Also known as the Mid-Autumn Festival, the Moon Festival is one of the most important Chinese holidays, taking place on the 15th day of the eighth lunar month each year. Rich in history, folklore, and color, it is a time to celebrate the harvest and reunite with family and friends.

Starting at 6 p.m. in Winnett lounge, Caltech's Moon Festival party will feature a variety of Chinese dishes, including the traditional moon cakes—round pastries filled with lotus seed paste and sweet red beans, almonds, or pine nuts, and often elaborate in design. The evening will also include performances by Caltech C members and other local Chinese American artists, as well as movies, karaoke, and games.

For more information, contact Changlin Pang at changlin@caltech.edu or visit www.its.caltech.edu/~chinese. Cosponsored by Student Affairs, the Graduate Student Council, the Caltech Y, and International Student Programs.

A 40th birthday for "the Cake"

Caltech Public Events' 2003-04 season marks a milestone anniversary for one of campus's best-known landmarks.

Dedicated in February 1964, Beckman Auditorium was the gift of alum Arnold Beckman, PhD '28, and his wife, Mabel. Architect Edward Durrell Stone's distinctive circular white structure—dubbed the Wedding Cake by many a Techer—has been the Institute's premier venue for four decades. Upon its stage have trod musicians and longtime Caltech employees, Nobelists and actors, a prince and a U.S. president, in innumerable performances, lectures, films, and programs.

Some of the eminent academics appearing over the years have been anthropologist Louis Leakey, who filled the house twice in one day in March 1966; inventor, engineer, and cosmologist Buckminster Fuller (1973); astronomer Carl Sagan and NASA administrator Dan Goldin (1992); regular visitor Stephen Hawking (most recently in 2002); and biologist James Watson with President David Baltimore (2003).

From the arts world have come actors and performers, including a range of musicians: composers Igor Stravinsky and Robert Craft, who conducted Caltech's 75th Anniversary Chamber Orchestra in 1966; Peter Schickele, aka P.D.Q. Bach, in his first university performance in the western United States (1967); folk singer and activist Pete Seeger (1975); and "Weird Al" Yankovic and radio personality Dr. Demento (1997).

Also appearing have been actors Lillian Gish (1969) and Bette Davis (1978); Patrick Stewart, performing *A Christmas Carol* annually from 1990 through 1993; Vincent Price, as Oscar Wilde in *Diversions and Delights* (1983); John Houseman, who visited in conjunction with the release of his memoirs in 1983, 1984, and 1985; and mime extraordinaire Marcel Marceau (1971). In addition, Beckman hosted the 1980 West Coast premiere of *The Empire Strikes Back* and the 1995 premiere of HBO's *Tuskegee Airmen*, about African American fighter pilots who broke color barriers during World War II.

Other notable events have included the Viking I Mars landing live videocast, which was the first public interplanetary live video feed at Beckman (1976); visits by Governor Jerry Brown (1979), Prince Philip, Duke of Edinburgh (1982), and President Bill Clinton (2000); the Michelin Distinguished Visitor's Lectures, which since 1992 have brought artist David Hockney, playwright Tom Stoppard, architect Frank Gehry, and director Oliver Stone, among others; and the DuBridge Lectures, inaugurated in 1996 with journalists Walter Cronkite and Jess Marlowe and continuing next month with Jack Valenti, head of the Motion Picture Association of America (see page 1).

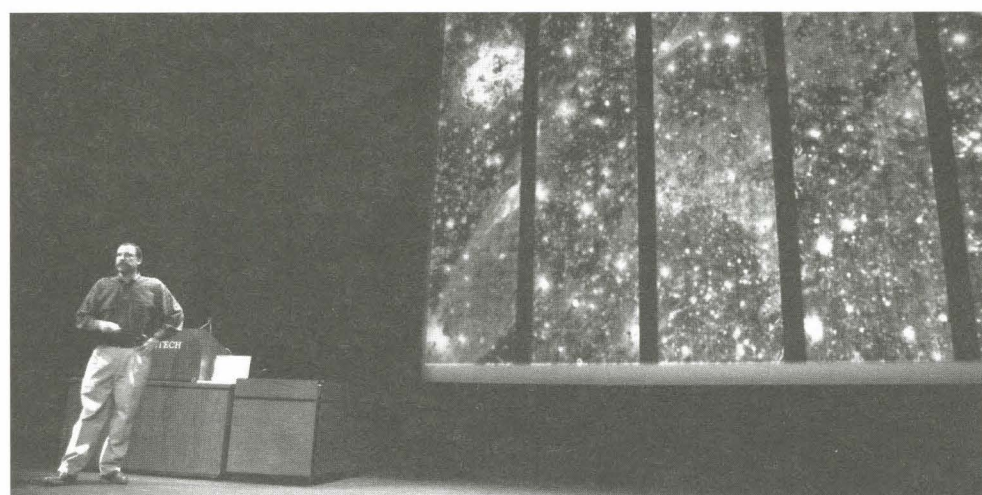
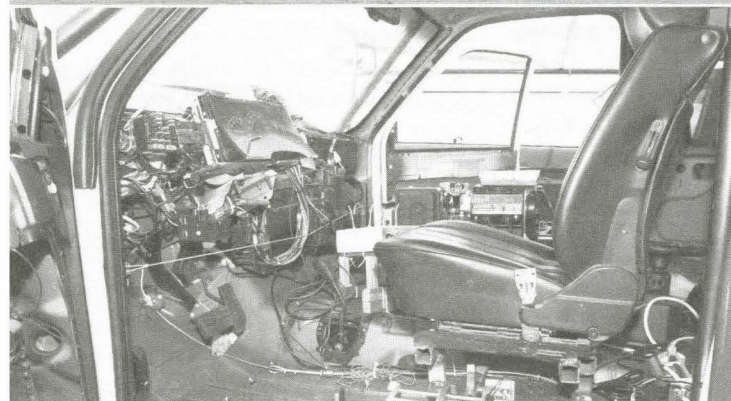
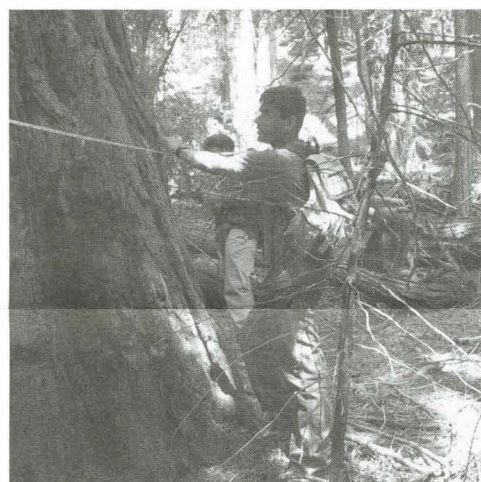
This year's Caltech Presents lineup will continue Beckman Auditorium's star-studded tradition. Humorist Garrison Keillor, author of *Lake Wobegon Days* and host of public radio's *A Prairie Home Companion*, will read from his new novel, *Love Me*, Monday, October 6, at 8 p.m. The free public event is presented in collaboration with Vroman's Bookstore and Caltech's Words Matter program.

The following weekend will bring two nights of dancing under the stars on the auditorium's front lawn. On Friday, October 10, Michael Andrew and Swingerhead will bring swing, cha-cha, mambo, and more to Beckman Mall. You can't dance, you say? With the Pasadena Ballroom Dance Association providing a lesson,

you'll need another excuse not to enjoy the evening. Then on Saturday, October 11, guests can salsa away to the jazzy Afro-Cuban sounds of percussionist Bobby Matos and his band. Both events, cosponsored by KKJZ-FM, will begin at 8 p.m. Tickets are available at 1 (888) 2CALTECH, (626) 395-4652, or events@caltech.edu. Individuals with a disability: 395-4688 (voice) or 395-3700 (TDD).

October continues to dish up a smorgasbord of Beckman events with the annual Biology Forum on the 14th. Panelists Scott Fraser, Caltech's Rosen Professor of Biology; John Mazziotta, UCLA professor; and Jeffrey Cummings, director of UCLA's Alzheimer's Center will discuss Alzheimer's disease. The next evening, President David Baltimore opens the fall Watson Lecture series with a timely talk on viruses. On October 18, the child-friendly Saturdays at 2 series will feature the Tweaksters, who dance, juggle, and tumble in seeming defiance of the laws of physics. And the following week, political pundit Al Franken (October 22) and 1940s-style radio show hosts the Flying Leap Players (October 25) will appear onstage.

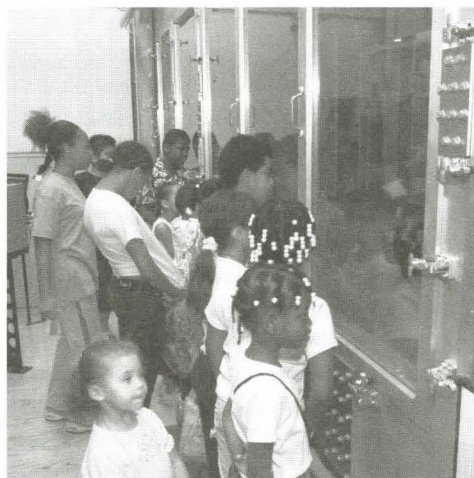
For more information or to see all public events currently scheduled, visit www.events.caltech.edu.



Summer scenes on campus



The American Astronomical Society's second Women in Astronomy conference brought dozens to campus in June to assess the progress women have made in the field in the past 10 years.

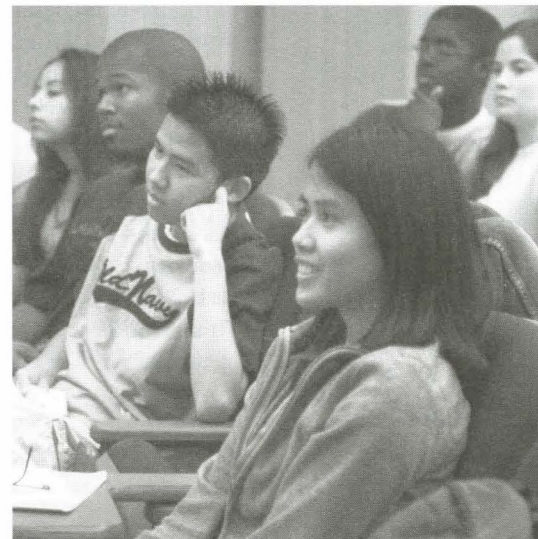


About 150 children from the Pasadena LEARNs (Leading Educational Achievement-Revitalizing Neighborhoods) summer program toured Caltech's wind tunnel, water tunnels, and other facilities in July.



Bruce Brunswick (center), with grad students Libby Mayo and Brian Leigh, was "officially" welcomed as director of the Beckman Institute's Molecular Materials Research Center when his office was set afloat in the Gene Pool in July.

Graduate student Sundee Mukherjee measures a giant sequoia in the Sierra National Forest, hoping to identify it as part of the Caltech Centennial Grove. The Caltech Y, International Student Programs, the Gnome Club, and the Alumni Association sponsored the June trip, in which 48 students, staff, and alumni participated.



Talented high-school juniors and seniors came to campus for several weeks in July for the Young Engineering and Science Scholars (YESS) Program, a kind of boot camp that provides an intense experience in scientific research and analytical skills.

"Bob" (left), a 1996 Chevrolet Tahoe, will be Caltech's weapon of choice in a race for autonomous off-road vehicles, which is being sponsored by the Department of Defense. A team of students is equipping Bob with software used in JPL planetary rovers in the hope that the vehicle will successfully steer itself from Los Angeles to Las Vegas and win the \$1 million prize.

Arizona State University planetary geologist Phil Christensen discusses recent images and results from the THEMIS (thermal emission imaging system) camera, part of the Mars Odyssey mission launched in 2001. His presentation was part of the Sixth International Conference on Mars, held on campus in July.



Pianist in residence James Boyk (left) and Mike Vanier from computer science play one last time in Dabney Lounge as workers ready the space for construction.

Rehab will limit Dabney access

Access to Dabney Hall and its lower garden will be restricted during construction, according to Reza Ohadi, associate director of campus operations. Fencing on the west and south will allow access only around the building's southwest corner. In the gardens, a fence will block off the lower portion; the upper garden may still be entered through the east and west wall gates. Walkways to the east and north of the building will remain open but will close periodically for construction. Please refer any questions resulting from restricted access to the Facilities Management service center at ext. 4717 or to Bradley Smith at ext. 6092.

Bubbloy, from page 1

Bubbloy was one of several advances that were showcased at the September 15 conference at Caltech titled "Materials at the Fore." It was the third annual meeting of the Center for the Science and Engineering of Materials at Caltech.

Julia Kornfield, professor of chemical engineering at Caltech and director of the center, presented the opening remarks and an overview of the conference. Presentations included "Nano-scale Mechanical Properties," by Subra Suresh of MIT; "Synthesis and Assembly of Biological Macromolecules: DNA and Beyond," by Steve Quake of Caltech; "Thermoelectric Devices," by Sossina Haile of Caltech; and others.

Dabney, from page 1

The rehabilitation will both restore Dabney Hall to its early grandeur and recentralize the humanities in their original home. Among the faculty who will reside there are recently hired professors John Brewer, a British historian, and Mordechai Feingold, who studies 17th- and 18th-century science. Since 1929, the division has grown to include history of science; U.S. cultural history; U.S., European, and Chinese demographic history; 18th- through 20th-century literature; philosophy of science and of cognitive science; and neuroscience. Humanities research at Caltech includes interdisciplinary work within the Institute, as well as collaborations with outside organizations such as the Huntington Library.

Both the humanities library and Treasure Room will return to Dabney, and the Hixon Writing Center and classrooms will be expanded. Dabney Lounge will also benefit from a facelift, with enhanced lighting, refinished floors and fixtures, and new rest rooms. The restoration will "not only help reclaim the beauty of an extraordinary building" but will also "invigorate the humanities for students through space enlivened by study, research, lectures, and performance," says Caltech president David Baltimore.

The \$12 million rehabilitation—including an upgrade of Millikan Library, where Development staff members have relocated from Dabney—is funded in part by the Ahmanson Foundation, a longtime Caltech ally that has supported capital projects, student financial aid, academic research, and a humanities fellowship. Others donors to date include alumnus Martin Gray (BS '71), staff member Evelyn Cederbaum, and Dabney family members Tom and Diane Kettering.

Valenti, from page 1

after Johnson's inauguration as president of the United States in 1963. Valenti served as the president's special assistant until he left to join the MPAA in 1966. In that role, he established the movie rating system, which is still used in essentially its original form. Valenti has written extensively for newspapers and magazines, and he has authored four books.

Prior DuBridge lecturers in the series have been veteran journalist Walter Cronkite, financier Warren Buffett, and Nobel Peace Prize winner John Hume. This event is rated G, is free, and is open to the public. Tickets and reservations are not required.

CCAP, from page 1

The filing deadline for 2004 funding falls on Tuesday, September 30. Details, including CCAP policies, care-provider criteria, and an online application, are available on the Web at http://cit.hr.caltech.edu/ccap_program.htm. Members who do not have online access may use the computer kiosks in the Human Resources office.

The program was established by the Institute to provide relief to parents. According to Robert Carter, interim director of employee relations, monthly child-care bills of \$1,800 per child are not unheard of.

"Child-care costs are extraordinary for working parents. I think the range is quite wide," he said, adding that CCAP is unique in that it is open to the entire Caltech campus community.

"The Child Care Assistance Program is the only financial assistance program for child care that offers assistance to students," he said. Similar programs at other academic institutions restrict their coverage to faculty and staff.

Based on the parents' income, the number of eligible children, and their age, CCAP may provide a total of up to \$3,500 per year to families who qualify.

"We acknowledge that child care is necessary for children age 12 and under, but the funding for this CCAP program is fixed, so we made it available to that population who had the most need," Carter said.

Participants who receive funding must sign up for Caltech's Dependent Care Spending Account. Once a family is awarded money, the assistance is made available via reimbursement. Most participants will be receiving these funds through their DCSA, Carter said.

"Tom Schmitt, the associate vice president for human resources at Caltech, oversaw development of this program," he said. "This initiative was conceived by an ad hoc committee of the Faculty Board to meet the child-care needs of the Caltech community."

The current application period runs through to the September 30 deadline. A period for new applicants is scheduled for May 2004. Eligible participants must reapply every year, whether or not they have received CCAP assistance in a previous year.

James, from page 1

director for social cohesion and integration research at the Human Sciences Research Council, which conducts studies and programs that support development in Africa. The council recently cosponsored the African Human Genome Initiative, an international conference on the genome project's significance for the continent.

James has authored or served as editor of numerous books. Most recently, he coedited and contributed to *Nelson Mandela: From Freedom to the Future*, a collection of Mandela's most famous speeches and tributes from friends, including his wife, Graça Machel; South African Archbishop Desmond Tutu; United Nations Secretary-General Kofi Annan; Bill Cosby; and Bill Clinton.

During South Africa's first democratic elections in 1994, James served as head of electoral information for the Western Cape. He chaired the government's Green Paper Task Team on International Migration and was project leader of the Ministry of Education's Values in Education Initiative. The former executive director of the Institute for Democracy of South Africa, James is a trustee of the Ford Foundation and serves on a number of other boards. He holds a PhD in sociology and African history from the University of Wisconsin-Madison and has held visiting positions at Yale University, Indiana University, and the American Bar Foundation.

Be a mentor or gain one

Now accepting applications, the Women Mentoring Women program matches postdoctoral scholars with graduate students in a formal, one-to-one mentoring experience. The goal is to support female graduate students in their academic, professional, and personal development. Each pair will meet monthly or biweekly over a one-year period, and may attend workshops, discussions, and networking socials with other mentoring pairs; coffee stipends, books, and other resources will also be available. Matching and orientation will take place in early October. For more information, contact Candace Rypisi at candacer@caltech.edu. The program is supervised by the Women's Center; the Caltech Postdoc Association; the Graduate Student Council; Women in Engineering, Science and Technology; the Ombuds Office; the Staff and Faculty Consultation Center; and the Student Counseling Center.

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