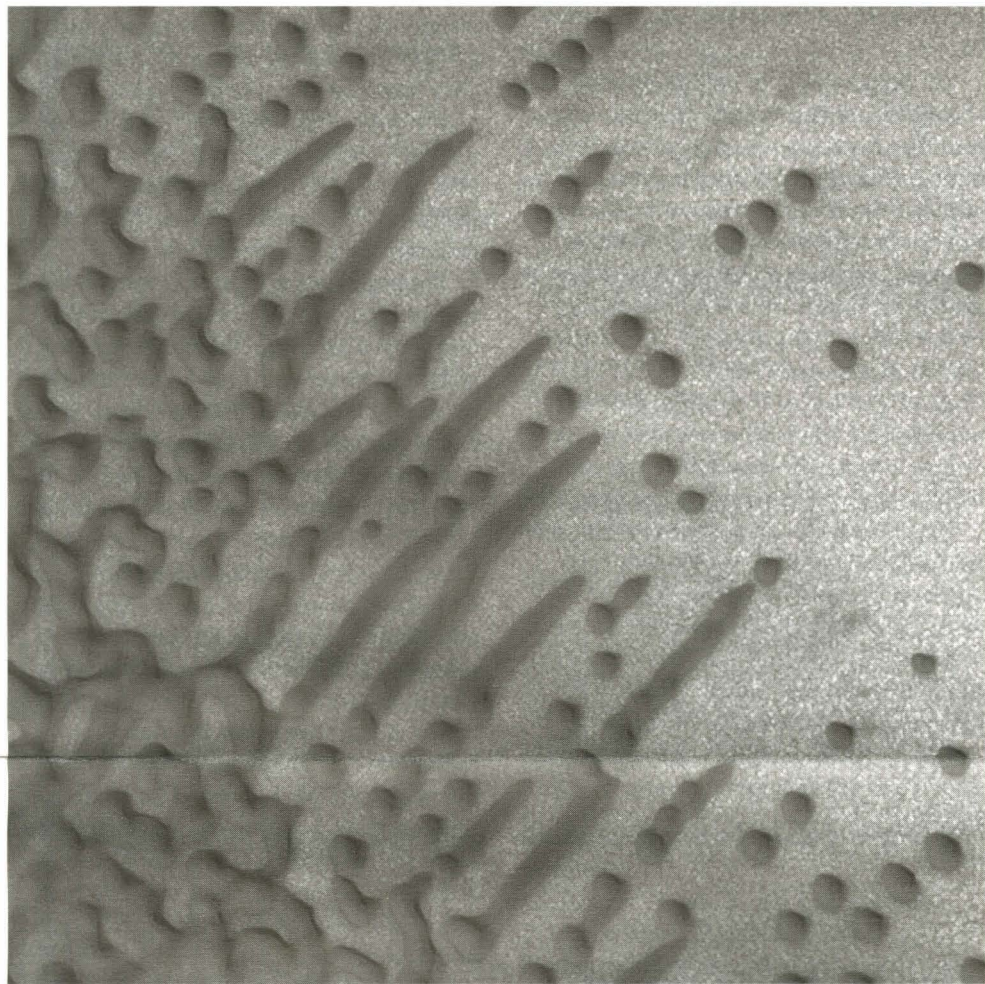


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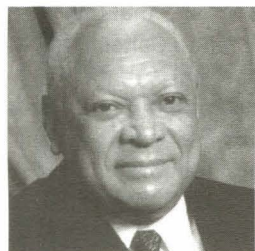
T E S S M T W T F S S M T W

The campus community biweekly
November 18, 2004, vol. 4, no. 17

Designer dunes



Looking like an abstract painting, an image released November 9 from the Mars Orbiter Camera of JPL's Mars Global Surveyor shows a pleasing pattern of dark sand dune shapes in the planet's north polar region. The picture covers an area about 1.9 miles wide. Caltech and Malin Space Science Systems built the camera with spare hardware from the Mars Observer mission.



Urban League president named trustee

John W. Mack, president of the Los Angeles Urban League and a respected advocate for equal opportunities in education and economics, will now lend his expertise to Caltech as a new member of the Board of Trustees.

In his 40 years with the Urban League, Mack—described as “a bridge builder across all racial, cultural, economic, gender, and religious lines”—has worked to build partnerships with businesses, government, and communities. Under his leadership, the Los Angeles branch serves more than 100,000 individuals yearly through innovative business and career development programs such as job training and placement, academic tutoring, computer technology, and youth achievement.

see Mack, page 6

Caltech high in world rankings

The Institute's star continues to soar as the school recently ranked high and highest in surveys on top universities worldwide and on the best academic employers in the United States.

The *Times Higher Education Supplement*, a British publication, ranked Caltech fourth out of 200 elite universities around the globe in its inaugural World University Ranking, published November 5. According to the *Yale Daily News*, seven of the top 10 were American schools, including the top three—Harvard, UC Berkeley, and MIT—which along with Caltech bested Britain's own Oxford and Cambridge universities (fifth and sixth, respectively). Based heavily on a poll of 1,300 international scholars asked to name the top universities in their fields, the rankings also considered the number of citations of an institution's research, the student-faculty ratio, and the proportion of international students and staff, said *Times Higher Education Supplement* editor John O'Leary. The rankings are posted at www.thes.co.uk/worldrankings (registration required).

Closer to home, happy Techers have proclaimed the Institute the number one

see Rankings, page 6

Caltech, city ready for emergencies

Caltech is working closely with the city of Pasadena's police, fire, and health departments, as well as the FBI, Huntington Memorial Hospital, and the Red Cross, to coordinate resources and integrate their various emergency plans. This coalition, known as the Pasadena Emergency Preparedness Partnership, aims to produce a comprehensive and uniform citywide emergency plan.

The Institute's internal emergency plan, the Emergency Preparedness and Response Plan, is specific to the needs of the campus and outlines the roles of Campus Security, the Safety Office, and key campus personnel. Caltech will maintain this plan while working closely with the partnership to draft the citywide plan. If implementation of either plan is necessary, each is designed to be integrated with, and mutually supportive of, the other.

The Safety Office administers Caltech's internal emergency plan, which addresses any contingency that may arise, including fire, earthquake, and hazardous material spill, says Caz Scislowicz, director of the Safety Office.

“Our response as an organization, the Emergency Preparedness and Response Plan, not only describes who, how, and with what resources each group responds in an emergency, but also how they fit together,” Scislowicz says. “A rapid and efficient survey of the campus with preassigned priorities lets us get a picture of the scope of damage and allows for a focused recovery action for the Institute to quickly return to normal operations.”

see Preparedness, page 6

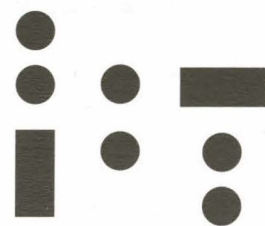
More time off, benefits for Techers

Recent policy and program updates by Human Resources (HR) include the good news of more vacation time for staff paid biweekly, and increased benefits for post-docs.

New vacation schedule

As of January 1, benefit-based staff on the biweekly payroll will accrue vacation at a new rate. Employees with less than five years of service will earn 15 days of vacation each year, up from the current 12 days. Those with five or more years of service, but fewer than 10, will earn 18 days, up from 15 days; staff with 10 or more years, but fewer than 15, will accrue 21 days, up from the current 18 days. The accrual schedule for employees with 15 or more years of service and for key-staff employees will remain unchanged, as will the 320-hour maximum accrual limit.

see HR update, page 6



A new view of information

Information is everywhere—whether facts gleaned from a teacher, the media, or the Internet; the instructions encoded in the human genome; or stock market data that motivates people to buy and sell. Information constantly streams to scientists around the world, and from other “worlds” as well, thanks to sensors in the sea or out in space.

What's needed is a way for scientists and engineers to harness and understand all of this data so they can continue unraveling the secrets of nature and of human institutions. In an unprecedented effort, Caltech has launched Information Science and Technology (IST), a university-wide initiative to uncover the nature of information itself and to redefine the way we approach and use science and engineering. IST will cut across disciplines, eventually involving over 25 percent of faculty and nearly 35 percent of students, likely altering the Institute's intellectual and organizational landscape.

Caltech has committed to raising \$100 million for IST as part of the Institute's five-year, \$1.4 billion capital campaign. Nearly \$50 million has been raised in the form of grants of \$25 million from the Annenberg Foundation and \$22.2 million from the Gordon and Betty Moore Foundation. The Annenberg gift will fund construction of the Walter and Leonore Annenberg Center for Information Science and Technology, which along with the Watson and Moore laboratories will form a core of IST research buildings. The Moore grant will establish four interdisciplinary research centers—focusing on biological circuit design, social and information sciences, the physics of information, and the mathematics of information—that will join two existing centers

see IST, page 6

Help flower JPL's Rose Parade float

Caltech employees, along with their family members and friends 13 years and older, are invited to help decorate JPL's 2005 Rose Parade Float. Dry decoration will take place from 9 a.m. to 5 p.m. on December 5, 6, 11, and 18; two shifts for floral decoration will be available each day from December 26 through 30. To sign up, please contact JPL's Public Services Office at (818) 354-0112.

NewsBriefs



Approximately 80 Techers learned fascinating facts about both Albert Einstein and physics at Saturday's Caltech-JPL Day at the Skirball Cultural Center. Presented in collaboration with Caltech, USC, and the Getty Center, *Einstein* is described as "the most comprehensive presentation ever mounted" on the scientist's life and theories. The exhibit runs through May 29.

Personals

Welcome to Caltech

September

Hiroko Shinnaga, staff scientist, Caltech Submillimeter Observatory, Hawaii.

October

Kathryn David, cook, and **Miles Garcia**, dining-room cashier, both in Dining Services; **Eun-Jung Hwang**, postdoctoral scholar in biology; **HyunHee Kim**, research assistant, biology; **Lilian Porter**, administrative assistant, bioengineering; **Marco Tarallo**, visitor in physics; **Kerry Thompson**, administrative aide, Development and Alumni Relations; **Kevin Wrong**, grant manager, computer science/engineering and applied sciences; **Yael Yavin**, research technician, planetary sciences.

November

Gloria Adams, administrative assistant / department coordinator, Development and Alumni Relations; **Susan Alemdar**, administrative assistant, Seismology Lab; **Simona Bordoni**, visitor in atmospheric sciences; **Ranga-Ram Chary**, staff scientist, physics, mathematics and astronomy; **Jorn Mosler**, postdoctoral scholar in aeronautics; **Karine Orudzhyan**, administrative assistant, Office of Technology Transfer; **Simon Radford**, project engineer, submillimeter astronomy; **Andrew Rawlinson**, image-processing scientist, biology; **Estevan Sifuentes**, server, Dining Services; **Kartik Sheth**, staff scientist, Spitzer Science Center; **John Tan**, postdoctoral scholar in bioengineering; **Richard Vaughan**, Caltech postdoctoral scholar in JPL's terrestrial sciences element; **Carolyn Woodroffe**, postdoctoral scholar in chemistry; **Woo Sug Yoon**, visitor in environmental science and engineering.

Retirements

Helen Hasenfeld, Caltech's ombudsperson since 1992, is retiring on December 9. She joined the Institute in 1991 as head of the Staff and Faculty Consultation Center, a position she has continued to hold even after taking on the task of ombudsperson. According to the e-mail from Vice Provost David Goodstein announcing Hasenfeld's retirement, she has "helped many community members resolve sticky problems and conflicts" and significantly contributed to institutionalizing principles and values that have made the campus a more healthy and productive environment. She is noted for the key role she played in establishing confidentiality as a legal privilege for ombuds offices nationwide.

Deaths

Mina Brown, who retired in 1997 after 31 years at Caltech, died on November 1; she was 74. She worked 17 years for the General Counsel, and 13 years in the Office of the President. A longtime member of the First AME Church in Pasadena, she had served on the altar guild and was a member of the Richard Allen Usher Board. Active in the community, she was most recently a member of the Altadena Guild of the Huntington Hospital. She enjoyed bowling, playing tennis, and golf. Predeceased by her son, Jeffrey, she is survived by her husband, Donald; a daughter,

Karla Marie Brown Alton; a grandson, Damian Jeffrey Brown; two sisters, Jacqueline Jackson and Lila Saunders; and a brother, Gerald.

Joseph Koepfli, senior research associate in chemistry, emeritus, and a member of the Caltech Associates, died on October 30; he was 100. After receiving his PhD from Oxford and working as an instructor of pharmacology at the Johns Hopkins School of Medicine, he came to Caltech in 1932 as a research associate. He remained at the Institute for 40 years, with leaves to serve as the science officer at the American embassy in London (1948), as the first science advisor to the U.S. State Department (1951–53), and as chair of the NATO Task Force on Science and Technology (1957). He became emeritus in 1972 and senior associate emeritus in 1974. He was a member of the boards of the L.A. County Museum of Art, of which he was a founding benefactor, and the Southern California Symphony Association, of which he served as president 1964–66. Predeceased by his son, David, he is survived by his wife, Ann; his daughter from a previous marriage, Daphne Moore; and two granddaughters and three great-grandchildren.

Honors and awards

Michael Alvarez, professor of political science, has been named by *Scientific American* magazine as a Policy Leader within the 2004 Scientific American 50, the magazine's "prestigious annual list recognizing outstanding acts of leadership in science and technology from the past year." He, along with Ted Selker of MIT, was recognized in the Computing Category "for recommending sweeping changes to overhaul U.S. voting systems." Alvarez received his BA from Carleton College in 1986 and his PhD from Duke University in 1992. He joined Caltech that same year as an assistant professor, and was appointed full professor in 2002. The entire list of the 2004 SA 50 will appear in the magazine's December issue, available at newsstands on November 23.

Ken Libbrecht, professor of and executive officer for physics, has received a 2004 National Outdoor Book Award for *The Snowflake: Winter's Secret Beauty*. The awards, which honor books across nine individual categories, "represent some of the finest outdoor writing and artwork being published today," and Libbrecht's book was honored in the Nature and Environment Category. A collaboration with photographer Patricia Rasmussen, *The Snowflake* explores the science and hidden beauty of snow. Libbrecht is a graduate of Caltech (class of 1980), and in 1984 he both received his PhD from Princeton and joined Caltech as an assistant professor, becoming full professor in 1995 and executive officer in 1997. Voyageur Press has now published *The Little Book of Snowflakes*, just in time for Christmas.

Jason Douglas Surratt, a graduate student in chemistry, has received a Science to Achieve Results (STAR) research fellowship from the U.S. Environmental Protection Agency (EPA). The title of his research is "Chemical Speciation of Organic Compounds Found in Atmospheric Aerosols." According to the EPA, "the STAR graduate fellowship program supports some of the nation's most promising masters and doctoral candidates in environmental studies."

Media minute

Caltech's **Richard Andersen**, Boswell Professor of Neuroscience, was featured along with Professor of Mechanical Engineering and Bioengineering **Joel Burdick** and President and Professor of Biology **David Baltimore** in a November 3 *Los Angeles Times* article. "Teamwork, Not Rivalry, Marks New Era in Research" describes how interdisciplinary research, once uncommon at leading universities, has mushroomed in recent years as scientists attempt to solve problems in an increasingly complex world. Andersen, who brought in robotics specialist Burdick, electrical engineers, a physicist, and a neurosurgeon in his quest to develop artificial limbs that can be controlled by thought, says, "I really can't see how it would happen any other way." According to Baltimore, the human genome project has contributed to this trend in the biological sciences. Biologists had to investigate millions of gene interactions, yet they were "simply not trained in how to deal with questions on that scale of complexity," and now they're realizing they need to work with mathematicians, engineers, and physical scientists to help solve such problems.

Seeking excellent Caltech instructors

Provost Paul Jennings has issued a call for nominations for Caltech's annual Richard P. Feynman Prize for Excellence in Teaching.

Honoring the late professor's legacy of outstanding classroom instruction, the prize is awarded yearly to a professor "who demonstrates, in the broadest sense, unusual ability, creativity, and innovation in undergraduate and graduate classroom or laboratory teaching."

An endowment by lone and Robert E. Paradise and contributions from Mr. and Mrs. William H. Hurt make possible the prize: a cash award of \$3,500 and an equivalent salary raise. The awardee will receive the prize at a faculty meeting in the second term, as well as be honored at a celebratory event with colleagues, administration members, and the prize donors.

All professorial faculty are eligible for the award, and any Caltech community member may suggest a candidate by submitting a letter of nomination and detailed supporting material (including, but not limited to, a curriculum vitae, a course syllabus or description, and additional letters of recommendation) to the Office of the Provost, Mail Code 206-31, Pasadena, California, 91125. (The Provost's Office will compile teaching evaluations for all nominees for courses taught during the prior academic year.) Nominations are due by December 30.

Established in 1993, the Feynman Prize has been awarded to Professors Tom Tombrello, Erik Antonsson, Yaser Abu-Mostafa, R. David Middlebrook, Barbara Imperiali, Emlyn Hughes, Donald Cohen, David Stevenson, Joseph Kirschvink, Niles Pierce, and George Rossman.

For more information, contact Stacey Scoville at staceys@caltech.edu or (626) 395-6320.

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Thanksgiving in another language

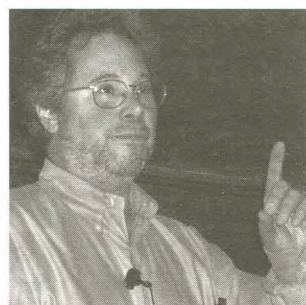
Thanksgiving Day, a time when family members across the country come together to make a collective gesture of gratitude, is arguably the most American of holidays. As such, many people from outside North America know little about it beyond tales of frozen turkeys and the iconic Pilgrim outfit.

But Thanksgiving is also a time when Americans like to share the bounty, and, as in past years, local families have opened up their homes to international students who are unable to join their own families for the weekend. This way the students can take part in an American tradition that is much more than an elaborate meal.

"The Pasadena Rotary Club teams up with schools in the area that have international students, like Fuller Seminary and the Art Center, and their members invite the students to their homes for Thanksgiving," says Athena Trentin, an advisor in International Student Programs who is coordinating the activity. "When Rotary member families sign up, they indicate the number of people they would like to invite," she adds, so a student's immediate family members are also welcome.

The ISP office sent out invitations last week and several students have accepted, but space is limited. Last Thanksgiving, about 20 Caltech students enjoyed the generosity of these families. Inquiries may be directed to athena2@caltech.edu.

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Kiowa Bower

Alum Richard Scheller speaks at the club's recent event.

Club boosts interest in biotech

Heidi Privett

Founded just under a year and a half ago, the Caltech Biotech Club (<http://biotech.caltech.edu>) has already exceeded 300 members. While the majority of members are from the Caltech community, almost 20 percent are in industry and 10 percent from other academic institutions. This membership diversity is key to the club's goal of serving as a link between its members in academia and in industrial research in biotechnology—a sector that develops products using biological information and techniques.

Through events such as a speaker series, company tours, career workshops, and case studies, the club exposes interested members to a wide variety of career opportunities in biotech and related fields. Our signature speaker series has attracted leaders and visionaries from different walks of the biotech industry: Caltech president David Baltimore; Ansbet Gadick, founding general partner of the MPM Group, which invests in the life sciences; and Amgen's Roger Perlmutter, chief of research, and Dennis Fenton, executive vice president for operations.

On November 8, the Biotech Club hosted its first speaker series seminar of the academic year. Richard Scheller, a Caltech alum and the executive vice president for research at Genentech, spoke about the future direction of biotechnology in the context of his company's past and present research.

In his introduction, Scheller told the audience he had not given many seminars since joining Genentech, and mused about why he had come to give this talk at Caltech. He said it was simply "because the students asked me," and that the strong connection he felt to Caltech, having once been a student here, made it an obvious choice. This simple remark shows how powerful students can be when they organize for a common interest.

Other events have included a trip in August to San Diego's biotech hub for tours of the Genomics Institute of the Novartis Research Foundation and of Biogen Idec. Examples of career series events have been a talk on biotech and pharmaceutical consulting by Olivier Leclerc, a management consultant with McKinsey & Company, and a hosted lunch with Alexander Suh from California Technology Ventures, a firm that invests in life sciences and information technology. Venture capitalism and management consulting may not be considered a direct part of biotechnology, but these related fields have proven to be of great interest to club members and others in the Caltech community.

The club has close ties to biotech firms and is currently sponsored by Amgen and Nestlé. Campus sponsors are the Alumni Association, Graduate Student Council, and Office of Technology Transfer. Pasadena Entrectec, a local nonprofit organization based at Caltech, is also a sponsor.

Heidi Privett, a graduate student in chemistry, is director of communications for the Caltech Biotech Club.

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November 22–December 5, 2004

N O V E M B E R D E C E M B E R

Monday, November 22

Geological and Planetary Sciences Seminar

155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Chemical Weathering, Physical Erosion, and Climate: A Cosmogenic Perspective,” Professor James Kirchner, department of earth and planetary science, UC Berkeley.

High Energy Physics Seminar

469 Lauritsen, 4 p.m.—“Spin Physics at STAR: First Results and Future Measurements,” Renee Fatemi, Indiana University. Information: www.theory.caltech.edu/people/carol/seminar.html.

Applied Mathematics Colloquium

101 Guggenheim Lab, Lees-Kubota Lecture Hall, 4:15 p.m.—“Multifractal Analysis of Signals,” Professor Stephane Jaffard, Center for Mathematics, University of Paris XII.

Tuesday, November 23

Computer Science Faculty Research Lecture Series

74 Jorgensen, noon—Topic to be announced. Alain Martin, professor of computer science, Caltech. Refreshments.

Carnegie Observatories Colloquium Series

William T. Golden Auditorium, 813 Santa Barbara Street, 3:30 to 5 p.m.—“Gamma-Ray Bursts: The Revolution is Here,” Edo Berger, Observatories of the Carnegie Institution of Washington. Refreshments, 3:30 p.m.

Chemical Physics Seminar

147 Noyes, Sturdivant Lecture Hall, 4 p.m.—“Continuum Solvent Models: Development and Application to Environmental Chemistry Problems,” Christopher J. Cramer, Distinguished McKnight University Professor of Chemistry, department of chemistry and the Supercomputer Institute, University of Minnesota, Twin Cities.

General Biology Seminar

119 Kerckhoff, 4 p.m.—Topic to be announced. Tony Movshon, Center for Neural Science, New York University.

Wednesday, November 24

Organic Chemistry Seminar

153 Noyes, Sturdivant Lecture Hall, 2 p.m.—“Stable Carbenes and Singlet Diradicals,” Professor Guy Bertrand, department of chemistry, UC Riverside.

Thursday, November 25

Thanksgiving Holiday

Through November 26.

Monday, November 29

High Energy Theory Seminar

469 Lauritsen, 11 a.m.—Topic to be announced. Nathan Berkovits, Institute of Theoretical Physics (IFT), São Paulo University. Information: www.theory.caltech.edu/people/seminar/schedule.html.

Geological and Planetary Sciences Seminar

155 Arms, Robert Sharp Lecture Hall, 2 p.m.—“Early Mantle Differentiation: Evidence from New High-Precision 142Nd Data in Terrestrial Rocks,” Guillaume Caro, Laboratoire Géochimie-Cosmochimie, Institut de Physique du Globe de Paris.

High Energy Physics Seminar

469 Lauritsen, 4 p.m.—Topic to be announced. Michael Dine, professor of physics, UC Santa Cruz. Information: www.theory.caltech.edu/people/carol/seminar.html.

Inorganic-Organometallics Seminar

151 Crellin, 4 p.m.—“The Mechanism of Olefin Oxidation by Pd(II) Chloride Confirming the Mechanistic Chloride Dependence in the Wacker Process,” John Keith, graduate student in chemistry, Caltech.

Tuesday, November 30

Computer Science Faculty Research Lecture Series

74 Jorgensen, noon—“Tolerating Cross-Point Defects in Nanowire PLAs,” Helia Naeimi, graduate student in computer science, Caltech. Refreshments.

Carnegie Observatories Colloquium Series

William T. Golden Auditorium, 813 Santa Barbara Street, 3:30 to 5 p.m.—“Catching Them Young: Formation, Accretion, and Disks in the Brown Dwarf Domain,” Subhanjoy Mohanty, Harvard-Smithsonian Center for Astrophysics. Refreshments, 3:30 p.m.

General Biology Seminar

119 Kerckhoff, 4 p.m.—Topic to be announced. Richard Youle, National Institute of Neurology Disorders and Stroke, National Institutes of Health.

High Energy Physics Seminar

248 Lauritsen, 4 p.m.—“Recent Results from KLOE at DAFNE,” Matteo Palutan, research scientist, physics, National Institute of Nuclear Physics (INFN), Italy.

Wednesday, December 1

Control and Dynamical Systems Seminar

102 Steele, 11 a.m.—“Multiplayer Games and Adaptive Convergence to Nash Equilibria,” Professor Jeff Shamma, mechanical and aerospace engineering department, UCLA.

Carnegie Observatories Colloquium Series

William T. Golden Auditorium, 813 Santa Barbara Street, 1:30 to 3 p.m.—“The MESSENGER Mission to Mercury: Seeking Clues to the Formation and Evolution of the Inner Solar System,” Sean Solomon, department of terrestrial magnetism, Carnegie Institution. Refreshments, 1:30 p.m.

Environmental Science and Engineering Seminar

142 Keck, 3:40 to 5 p.m.—Topic to be announced. Pamela Martin, assistant professor, department of the geophysical sciences, University of Chicago. Information: www.esse.caltech.edu/seminars/index.html.

Astronomy Colloquium

155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Cosmology with the Milky Way,” Professor Matthias Steinmetz, scientific chairman and director, Astrophysical Institute, Potsdam. Information: www.astro.caltech.edu/~gma/colloquia.html.

Information Science and Technology Seminar

080 Moore, 4 p.m.—“Advanced Reasoning in Graphical Models,” Professor Rina Dechter, Donald Bren School of Information and Computer Science, UC Irvine.

Thursday, December 2

Bioengineering Seminar Series

142 Keck, 4 p.m.—“Bioengineering for Context: From Single Molecules to Intact Animals,” Michael Levene, biomedical engineering department, Yale University. Information: www.be.caltech.edu/seminars.html.

Physics Research Conference

201 E. Bridge, 4 p.m.—“Atoms Made Entirely of Antimatter: Two Methods Produced Slow Antihydrogen,” Gerald Gabrielse, Leverett Professor of Physics, Harvard University, and spokesperson for the ATRAP Collaboration. Refreshments, 114 E. Bridge, 3:45 p.m.

Thesis Seminar

151 Crellin, 4 p.m.—“Computational Optimization of Chemical Vapor Detector Arrays,” Brian Sisk, graduate student in chemistry, Caltech.

Friday, December 3

High Energy Theory Seminar

469 Lauritsen, 11 a.m.—Topic to be announced. Matthew Strassler, associate professor, theoretical high energy physics, University of Washington. Information: www.theory.caltech.edu/people/seminar/schedule.html.

Information Science and Technology Seminar

080 Moore, 11 a.m.—“Optimal Error Control Strategies in Networks with Priced Resources,” Dr. Lavy Libman, National ICT, Australia. Information: www.ist.caltech.edu/events/seminars.html.

High Energy Theory Seminar

469 Lauritsen, 1 p.m.—“Supersizing Worldvolume Supersymmetry for Solitons in SQCD,” Professor Arkady Vainshtein, School of Physics and Astronomy, University of Minnesota, Twin Cities. Information: www.theory.caltech.edu/people/seminar/schedule.html.

Inorganic-Organometallics Seminar

151 Crellin, 4 p.m.—“Can We Predict Catalytic Efficiencies of Metallo- β -Lactamases from Molecular Dynamics Simulations?,” Peter Oelschlaeger, postdoctoral scholar in chemistry, USC.

Kellogg Seminar

Lauritsen Library, 4 p.m.—“Evidence for the Pentaquark: A New Type of Quark-Matter,” Professor Kenneth Hicks, department of physics and astronomy, Ohio University.

RF and Microwave Seminar

080 Moore, 4 p.m.—Topic to be announced. David Haub, Texas Instruments Inc.

German Language Film Series

Baxter Lecture Hall, 7:30 to 10 p.m.—*The Legend of Paul and Paula* (1973), East Germany; with English subtitles.

the academic week at Caltech

is a printed version of selected events from the online master calendar, <http://today.caltech.edu/calendar/>. To publish events online, register as an event planner on the Caltech Today 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.

December 6–12, 2004

M T W T F S S

Monday, December 6

Biophysics Lecture Series

153 Noyes, Sturdivant Lecture Hall, 4 p.m.—“Conformational Diseases,” Professor David Eisenberg, Center for Genomics and Proteomics, department of chemistry and biochemistry, UCLA.

Geological and Planetary Sciences Seminar

155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Cassini Ultraviolet Imaging Spectroscopy Shows an Active Saturn System,” Professor Larry Esposito, Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder.

High Energy Physics Seminar

469 Lauritsen, 4 p.m.—“Hadronic Effects in the Muon Anomalous Magnetic Moment,” Arkady Vainshtein, School of Physics and Astronomy, University of Minnesota, Twin Cities. Information: www.theory.caltech.edu/people/carol/seminar.html.

Tuesday, December 7

Beckman Institute Seminar Series

Beckman Institute auditorium, 10:30 a.m. to noon—“The Molecular Observatory,” Doug Rees, Dickinson Professor of Chemistry and faculty advisor, X-ray Crystallography Facility, Beckman Institute, Caltech. Refreshments, 10 a.m. Information: www.its.caltech.edu/~bi/seminars.html.

Chemical Physics Seminar

147 Noyes, Sturdivant Lecture Hall, 2 p.m.—Topic to be announced. Professor Veronica Vaida, department of chemistry and biochemistry, University of Colorado, Boulder.

Carnegie Observatories Colloquium Series

William T. Golden Auditorium, 813 Santa Barbara Street, 3:30 to 5 p.m.—“The Dusty Universe at Redshift Two,” Lin Yan, Spitzer Science Center, Caltech. Refreshments at 3:30 p.m.

Caltech/JPL Association for Gravitational-Wave Research Seminar Series

114 E. Bridge, 4 p.m.—Topic to be announced. Rana Adhikari, postdoctoral scholar, LIGO, Caltech.

General Biology Seminar

119 Kerckhoff, 4 p.m.—Topic to be announced. Yishi Jin, associate professor of molecular cell and developmental biology, UC Santa Cruz, and assistant investigator, Howard Hughes Medical Institute.

Wednesday, December 8

Astronomy Colloquium

155 Arms, Robert Sharp Lecture Hall, 4 p.m.—“Imaging Debris Disks with the Spitzer Space Telescope,” Karl Stapelfeldt, JPL. Information: www.astro.caltech.edu/~gma/colloquia.html.

Thursday, December 9

Caltech Library System Presents: EndNote for Absolute Beginners

Sherman Fairchild Library, multimedia conference room, 2 to 3:30 p.m.—Learn what EndNote is and the basics of how it can work for you to create bibliographies within a word-processing document and as a search interface to online databases and catalogs, allowing you to directly export records to your computer. Not intended for Mac users. Class size is limited to eight participants. Registration: <http://oliphaunt.library.caltech.edu/forms/cls-classes>. Walk-ins will be accepted only if space permits.

Chemical Engineering Seminar

106 Spalding Lab, Hartley Memorial Seminar Room, 4 p.m.—“Protein Unfolding at Interfaces: Slow Dynamics of alpha-Helix to beta-Sheet Transition and Possible Relevance to Van Gogh’s Glair (Egg White Varnish),” Professor Georges Belfort, department of chemical and biological engineering, Rensselaer Polytechnic Institute. Refreshments, 113 Spalding Lab, 3:30 p.m. Information: www.che.caltech.edu/calendar/seminars.html.

Von Karman Lecture Series

JPL, von Karman Auditorium, 7 p.m.—“Peering into the Universe: Discoveries with the Keck Interferometer,” Dr. Rachel Akeson, research scientist, JPL, and Michelson Science Center, Caltech. Admission is free. Information: www.jpl.nasa.gov/lecture.

Friday, December 10

High Energy Theory Seminar

469 Lauritsen, 11 a.m.—Topic to be announced. Konstantin Zarembo, department of theoretical physics, Uppsala University. Information: www.theory.caltech.edu/people/seminar/schedule.html.

Bristol-Myers Squibb Symposium

153 Noyes, Sturdivant Lecture Hall, 1 p.m.—“Asymmetric Catalysis: The Monodentate Chiral Ligand Approach,” Professor Benjamin Feringa, department of organic and molecular inorganic chemistry, University of Groningen.

Bristol-Myers Squibb Symposium

153 Noyes, Sturdivant Lecture Hall, 2 p.m.—“Identification of Kinase Inhibitors: Progress and Challenges,” Dr. Joel Barrish, Bristol-Myers Squibb.

Bristol-Myers Squibb Symposium

153 Noyes, Sturdivant Lecture Hall, 3:30 p.m.—“C-H Oxidation Reactions as Enabling Methodologies for Organic Synthesis,” Professor Justin Du Bois, department of chemistry, Stanford University.

Kellogg Seminar

Lauritsen Library, 4 p.m.—“Helium: Probing the Exotic and Searching for the Strange,” Professor Zheng-Tian Lu, Fermi Institute and department of physics, University of Chicago and Argonne National Laboratory.

William Bennett Munro Memorial Seminar

Treasure Room, Dabney Hall, 4 p.m.—“Pain and Pleasure in Political Economy,” Catherine Gallagher, Eggers Professor of English Literature, UC Berkeley.

Bristol-Myers Squibb Symposium

153 Noyes, Sturdivant Lecture Hall, 4:30 p.m.—“Synthetic Studies on Heterocyclic Natural Products,” Professor Tohru Fukuyama, University of Tokyo.

Von Karman Lecture Series

Pasadena City College, 1570 E. Colorado, the Vosloh Forum (south of Colorado on Bonnie), 7 p.m.—“Peering into the Universe: Discoveries with the Keck Interferometer,” Dr. Rachel Akeson, research scientist, JPL, and Michelson Science Center, Caltech. Admission is free. Information: www.jpl.nasa.gov/lecture.

CampusEvents

Tuesday, November 23

Office Ergonomics Training

118 Keith Spalding Building, 8:30 a.m.—This course discusses ergonomic design of office environments, specifically computer use. Low-budget techniques are emphasized in assisting computer users to alter their workstation to a “user-friendly” environment. If you would like to sign up for this class, please contact the Safety Office at 395-6727 to reserve your place.

Wednesday, November 24

Salsa Dance Classes

Winnett lounge, 7 p.m.—Learn the fundamentals of salsa dancing starting at 8:30 p.m. If you already know the basics, come to the intermediate class at 7 p.m. and learn Cuban rueda. Everyone is welcome to stick around for the free practice session at 10 p.m. Classes started on October 6. Cost: \$7 for a single class, five classes for \$25.

Thursday, November 25

Thanksgiving Holiday

Through November 26.

Credit Union Closure

All branches of the Caltech Employees Federal Credit Union will be closed November 25 and November 26 in observance of the Thanksgiving holiday.

Friday, November 26

Women’s Basketball

Caltech Thanksgiving Classic, Simpson College vs. Southwestern, 6 p.m.; Caltech vs. Emerson College, 8 p.m.

Sunday, November 28

Beginning International-Style Ballroom Dance Class

Winnett lounge, 4:30 p.m.—This is the final class in an eight-week series. No partner or previous experience is required.

Tuesday, November 30

Ballroom Team Practice

Braun Gym, multipurpose room, 9 p.m.—Sessions feature the assistance of a professional coach so that team members can get advice and tips to improve their dancing. Team membership is required, and there is a \$5 fee to enter the gym if you do not have Caltech/JPL-issued ID.

Thursday, December 2

Interviewing: Picking the Right People the First Time

Brown Gym classroom, 8:30 a.m. to 12:30 p.m.—One of the most crucial jobs of management is the selection of new employees. This hands-on workshop, designed for supervisors and nonsupervisors, will provide an opportunity to practice preparing interview questions. Registration: 395-8055 or diane.williams@caltech.edu.

Intermediate International-Style Ballroom Dance Class

Winnett lounge, 8 p.m.—This is the final class in an eight-week series.

Friday, December 3

Aloha Friday

Olive Walk, near Page House, 4 p.m.—Aloha Friday is a traditional Hawaiian Club event to which all members of the Caltech community are invited.

Glee Clubs Holiday Concert

Dabney Lounge, 8 p.m.—Tonight’s concert will feature Handel’s *Messiah*. A free reception for all will follow the concert.

Saturday, December 4

Belly-Dancing Classes

Braun Gym, multipurpose room, 12:45 p.m.—Learn to belly dance with Leela, a popular performer and instructor. Fee for trial class: \$5 for Caltech students, \$8 for others. Fee for full 8-week series: \$20 for Caltech students, \$50 for other Caltech community members.

Caltech Glee Clubs Holiday Concert

Dabney Lounge, 8 p.m.—Tonight’s concert will feature Handel’s *Messiah*. A free reception for all will follow the concert.

The Persuasions: The Godfathers of A Cappella

Beckman Auditorium, 8 p.m.—The Persuasions are one of the longest-lasting, most prolific a cappella groups around. While generally referred to as a “doo-wop” group, they’re just as comfortable singing contemporary, gospel, Christmas, and even kids’ music. (See Public Events contact information on this page.)

Sunday, December 5

Skeptics Society Lecture

Baxter Lecture Hall, 2 p.m.—“Beautiful Evidence: The Art of Science and the Science of Art,” Dr. Edward Tufte, theorist of analytical design and professor emeritus at Yale University. Donation is \$8 for nonmembers and non-Caltech students. Free to the Caltech/JPL community. Tickets and information: 794-3119 or skepticmag@aol.com. A book signing will follow the lecture.

Lagerstrom Chamber Music Concert

Dabney Lounge, 3:30 p.m.—Harpisichordist Elaine Thornburgh will perform a program entitled “Musical Images From Nature,” which will include pieces by Peerson, Byrd, Sweetlinck, Couperin, and Rameau.

Tuesday, December 7

Creative Problem Solving for Supervisors and Nonsupervisors

Brown Gym classroom, 8:30 a.m. to noon—This interactive workshop will help you with issues related to problem solving and decision making. Realistic problems are used, and participants are taught how to apply problem-solving techniques to actual Caltech concerns. Registration: 395-8055 or diane.williams@caltech.edu.

Productive Conflict Management for Supervisors

Brown Gym classroom, 1 to 4:30 p.m.—Participants will engage in role-playing and “real scenario” simulations in which they will have an opportunity to apply information and techniques for managing conflicts. Registration: 395-8055 or diane.williams@caltech.edu.

Wednesday, December 8

Asbestos Awareness Training

118 Keith Spalding Building, noon—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.

Thursday, December 9

How to Write Letters, Memos, and Reports

Brown Gym classroom, 8:30 a.m. to 4 p.m.—This workshop is designed to give you a firm grasp of the principles of effective business writing. Emphasis will be placed on helping you to develop model documents you can use in your job-related writing assignments. For supervisors and nonsupervisors. Registration: 395-8055 or diane.williams@caltech.edu.

James A. Westphal Memorial

Dabney Lounge, 4 to 6 p.m.—Jim Westphal, who came to Caltech in 1961, was professor of planetary science, emeritus. A fund in his name has been established for the support of students involved in observational planetary astronomy.

Saturday, December 11

Weird Nature: Marvelous Motion

Beckman Auditorium, 2 p.m.—Using innovative camera techniques, *Weird Nature* sets stunning animal action against dramatized human backdrops to reveal the extraordinary ways that animals move. Suitable for ages 6 and older. A discussion by Alex Bäcker, of Caltech’s Biology Division, will follow the screening. (See Public Events contact information on this page.)

Sunday, December 12

Skeptics Society Lecture

Baxter Lecture Hall, 2 p.m.—“The Church, the State, the Pledge, and the Law: Adventures in Skeptical Activism,” Dr. Mike Newdow, board-certified emergency physician, and University of Michigan Law School graduate. Donation is \$8 for nonmembers and non-Caltech students. Free to the Caltech/JPL community. Tickets and information: 794-3119 or skepticmag@aol.com.

Ongoing Events

Tuesdays

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: 584-0970 or kimdeman@yahoo.com.

CIT Knitters Group Meeting

256 Mudd Laboratory, South, noon—All levels of knitters and related handcrafters are welcome. We make items for others and ourselves. Information: 395-6905.

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.

Wednesdays

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. Stop by and make new friends from around the world. Information: 793-2535 or nancyhewett@earthlink.net.

Thursdays

Caltech Baby Furniture and Household Equipment Pool

234 S. Catalina, 10 a.m. to 1 p.m.—Loans of kitchen and household necessities and baby furniture are made to members of the Caltech and JPL communities. No appointment is necessary. Information: 584-9773 or furnpool@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.

Fridays

Caltech Tai Chi Club

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

Caltech Chess Club

Page House dining room, 8 p.m.—Be you master or novice, you will enjoy the chess club’s weekly meetings. Information: http://www.its.caltech.edu/~citchess.

Sundays

Caltech Shorinji Kempo

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

Public Events information and tickets

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.

Preparedness, from page 1

Local action plans determine individual emergency responses for the diverse divisions and departments on campus, which have equally diverse needs, Scislowicz says. Each campus building has volunteer emergency coordinators who have been trained and given instructions on what to do when an emergency strikes.

“My message to the campus is that each individual has a role in preparing and responding to an emergency,” Scislowicz says. “To be best prepared at work, each employee must put their proverbial house in order.” He suggests that all members of the Caltech community take advantage of the comprehensive safety-training program available through the Safety Office. The Institute’s emergency response plan is available on the Safety Office’s website.

While the Safety Office has prepared Caltech’s emergency response, Gregg Henderson, chief of campus security, deals with outside emergency agencies. As a member of the city partnership, Caltech receives daily updates from the Department of Homeland Security and keeps in close contact with all of the other members.

According to Henderson, the security response to emergencies has three levels. Level 1 is normal operations handling routine emergencies. Level 2 covers incidents that affect only members of the campus community and are isolated to a specific area of the campus. Level 3 addresses any emergency that affects a greater part of the campus and that includes the surrounding community as well. Level 3 emergencies are the ones that will be handled in concert with the other members of the partnership.

Henderson says that, in the case of a Level 3 emergency, Caltech’s priorities are to first secure all undergraduate and graduate student housing, followed by sensitive research facilities, and then the rest of the campus buildings. Chandler Dining Hall and the Athenaeum—sources of food supplies—would be secured as well if the nature of the emergency proved to be severe and enduring.

“The present primary evacuation site for the campus is the South Athletic Field,” Henderson says. “This is only temporary until construction of the North Athletic Field is completed.”

He adds that campus measures would be integrated with measures taken by other members of the partnership. One example is the possible use of the Caltech gyms. Caltech is not a designated Red Cross shelter site at this time, but in a citywide emergency the partnership might request permission to use Caltech’s gymnasiums as shelter sites. In this event, the gyms would be used to shelter community residents as well as

Caltech students and staff. In this way, Caltech would be an integral part of the emergency response network utilized by all of Pasadena.

Rankings, from page 1

U.S. research employer in *The Scientist’s* 2004 Best Places to Work in Academia survey. “Many respondents from these campuses noted support for interdisciplinary research as one of their institution’s strengths,” the publication says in its November 8 issue. “Top-ranked California Institute of Technology in Pasadena, with only 500 postdocs and 280 faculty members, promotes such collaboration.”

Institute researcher William Tivol, manager of the cryo-electron microscopy facility, is quoted as saying, “Caltech’s small size and cooperative and supportive atmosphere make interactions with colleagues easy and profitable. Many places talk about interdisciplinary research, but Caltech makes it a reality. The extraordinarily high quality of the faculty and students leads to a vibrant exchange of ideas and very creative research projects.” Among the top 10 institutions listed, Caltech also had the highest average number of citations per paper (36.98). Visit www.the-scientist.com for more info.

Mack, from page 1

“It is an honor to accept this important role as a trustee to the board of the California Institute of Technology,” Mack says. “As one of the preeminent research institutes in the world, Caltech is involved in some of the most vital scientific discoveries that will determine our future. Caltech understands the importance of an inclusive, diverse academic community for all. I eagerly look forward to this opportunity to contribute to the attainment of this crucial goal.”

Mack began his career with the Urban League in Flint, Michigan, in 1964 and was named executive director in 1965. He also served on the League’s national staff for six months in Washington, D.C., before being appointed Los Angeles chapter president in 1969.

Mack holds a master’s degree from Clark Atlanta University. The recipient of numerous distinguished honors and awards, he serves on various boards, including the United Way of Greater Los Angeles, Wells Fargo Bank, and Cedars-Sinai Medical Center.

HR update, from page 1

Makeup time

This feature, effective with the payroll beginning January 10, 2005, will allow nonexempt employees to request time off for specified personal activities during a work week, and to make up those hours in the same week without having to use vacation or sick leave. Over the next month, managers, supervisors, and payroll monitors will be encouraged to attend makeup-time training sessions.

New postdoc benefits

Effective immediately, postdoctoral scholars are eligible for a minimum of six weeks of paid childbearing leave with full benefits. Those eligible may also take up to 12 weeks yearly of unpaid family-care leave for the birth or adoption of a child or placement of a foster child. Those postdocs wanting more information should contact Eloisa Imel at ext. 2098.

Also, as of January 1, 2005, postdocs who are paid by Caltech, regardless of the original source of funding, will be eligible for all health and welfare benefits and voluntary benefit programs. In addition to health and dental insurance, the new benefits will include life insurance equal to annual pay (to a maximum of \$50,000), and basic long-term disability insurance. Those who wish may also enroll in voluntary supplemental life and long-term disability insurance. By the end of November, Caltech will mail enrollment information to each postdoc who will become eligible for these new benefits. That material will contain more details about the programs, as well as contact information.

On July 1, 2005, postdocs with three or more years of Caltech service who receive qualifying compensation will also become participants in the TIAA-CREF staff retirement program. The Institute will mail information about this new benefit in the spring of 2005 to those who are eligible.

IST, from page 1

to anchor Caltech’s effort to lead the way in IST.

Over the last 50 years, IST has evolved into a major intellectual theme that spans disciplines in engineering and the sciences. While other universities have schools of computer and information science, these are generally limited to computer science and software. At Caltech, IST serves as a new framework on which to build information-based research and instructional programs across the academic spectrum.

“To maintain preeminence in science, the U.S. needs new and unified ways of looking at, approaching, and exploiting information in and across the physical, biological, and social sciences, and engineering,” says Jehoshua (Shuki) Bruck, the Moore Professor of Computation and Neural Systems and Electrical Engineering and the first IST director. “Caltech is taking a leadership role by creating an Institute-wide initiative in the science and engineering of information. IST will transform the research and educational environment at Caltech and other universities around the world.”

Computation and communication advances in the 20th century have set the stage for the Age of Information. Yet those technological changes are quickly outpacing current institutions such as schools, media, industry, and government. “So we need a new intellectual framework to harness these new advances,” says Bruck, “in order to provide for a stable and well-educated society that’s prepared to meet the challenges of tomorrow.”

Notes Caltech president David Baltimore, a biologist: “Some say biology is the science of the 21st century, but information science will provide the unity to all of the sciences. Information science, the understanding of what constitutes information, how it is transmitted, encoded, and retrieved, is in the throes of a revolution whose societal repercussions will be enormous.”

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YOU ARE INVITED

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MOORE LABORATORY 07

Michael McMillen, Dr. Crump's Assistant, will be in attendance...

5:00 - 7:00 PM • Friday, 19 November

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AERO PACIFIC RESEARCH

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Caltech336

T U S S E T W T U S S E T W

The campus community biweekly
November 18, 2004, vol. 4, no. 17

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Published by the Office of Public Relations

California Institute of Technology
Pasadena, California 91125

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