

## HONORS AND AWARDS

**Barry Barish**, Linde Professor of Physics, Emeritus, has been awarded a Laurea ad Honorem in Physics by the University of Bologna. A workshop, "Beyond the Standard Model," was held at the Bologna Academy of Sciences on October 2 in honor of Barish and his fellow recipient, Nobel Laureate Sheldon Glashow of Boston University.

**Jacqueline Barton**, Hanisch Memorial Professor and professor of chemistry, received the 2006 Willard Gibbs Award from the American Chemical Society's Chicago section on May 12; she is the second woman to have received the honor in its 95-year history, the first having been Marie Curie. She and **Peter Dervan**, Bren Professor of Chemistry, who won the award in 1993, are the first husband and wife to be so honored. Barton was cited for her "elegant, vitally important work" on "the molecular chemistry of DNA and its relevance to the development of a variety of diseases and inherited abnormalities."

**Warren Brown**, associate professor of history, **Nathan Dunfield**, associate professor of mathematics, **Ali Hajimiri**, associate professor of electrical engineering, **Niles Pierce**, assistant professor of applied and computational mathematics and bioengineering, and **Brian Stoltz**, associate professor of chemistry, have been named as faculty recipients of 2006 ASCIT (Associated Students of Caltech) Teaching Awards. The Teaching Award for research mentor has gone to **Preston McAfee**, Johnson Professor of Business

Economics and Management and executive officer for the social sciences, and awards for teaching assistant have been received by grad students **Bob Pelayo**, in mathematics, and **Christine Thomas** (PhD '06), in chemistry, and by **Po-Ru Loh**, undergraduate in mathematics, class of 2007.

**Charles Elachi** (PhD '71), Caltech vice president and professor of electrical engineering and planetary science, and director of the Jet Propulsion Laboratory, in May received the Order of the Cedars, officer grade, from Émile Lahoud, president of Lebanon. Elachi's return to his native country included, among numerous events, giving a lecture at the American University of Beirut on "The Challenges and Excitement of Space Exploration." He also won the 2006 Royal Society of London Massey Award, which "recognizes outstanding contributions to the development of space research," and was named one of "America's Best Leaders" by *U.S. News & World Report* and the Center for Public Leadership at Harvard University's Kennedy School of Government.

**Wolfgang Fink**, visiting associate in physics and senior member of the technical staff at JPL, has won first prize in the Congress of Evolutionary Computation 2006 Huygens Probe Competition, which was held at the World Congress on Computational Intelligence 2006, July 16–21, in Vancouver, British Columbia. The competition involved creating algorithms for evaluating fractal landscapes representing

the surfaces of moons.

**Peter Goldreich**, DuBridge Professor of Astrophysics and Planetary Physics, Emeritus, has been awarded the Grande Médaille of the Académie des Sciences of the Institut de France. Created in 1997, the award is given annually, rotating among the disciplines relevant to each division of the academy. Recipients have "contributed to the development of science in a decisive way, both through the originality of their personal research and by their international presence and stimulating influence."

**Judith Hall**, lecturer in creative writing, has received a 2006 Guggenheim Fellowship. Associated with Caltech since 1999, Hall is a widely published poet, the author of several books, and the poetry editor for the *Antioch Review*. Her fellowship will support the composition of a new book. Fellowships "are awarded on the basis of distinguished achievement in the past and exceptional promise for future accomplishment."

**Paul Jennings** (MS '60, PhD '63), provost and professor of civil engineering and applied mechanics, is the Earthquake Engineering Research Institute's George W. Housner Medalist for "extraordinary and lasting contributions to public earthquake safety." Housner (MS '43, PhD '41), often called the father of earthquake engineering, is the Braun Professor of Engineering, Emeritus.

**Jeff Kimble**, Valentine Professor and professor of physics, garnered the 2006 Berthold

Leibinger Zukunftspreis. He is the first recipient of the prize, which is to be awarded every two years for milestones in laser research, and was cited for "his groundbreaking experiments in the field of cavity quantum electrodynamics."

**Jerrold Marsden**, Braun Professor of Engineering and Control and Dynamical Systems, has been named a Fellow of the Royal Society, which cites "his fundamental contributions to a very wide range of topics," including plasma physics, general relativity, and solar-system mission design. Established in England in 1660, the Royal Society is the world's oldest scientific academy in continuous existence and has counted Isaac Newton, Charles Darwin, and Albert Einstein among its members.

**Marsden** has also received the 2006 Graduate Student Council Mentoring Award. **Robert Sherman**, professor of economics and statistics, received the GSC Teaching Award, and **Ryan Turner** (MS '06), graduate student in chemical engineering, the award for teaching assistant.

**Barry Simon**, IBM Professor of Mathematics and Theoretical Physics, has been invited to give the 2006–07 van Winter Memorial Lecture in Mathematical Physics at the University of Kentucky, on March 20 of next year.

The **Two-Micron All Sky Survey (2MASS) Team** has been named to receive the Astronomical Society of the Pacific's 2006 Maria and Eric Muhlmann Award, which recognizes "the development



Lange (far left) and Meyerowitz (left).

**Andrew Lange**, Goldberger Professor of Physics, has been selected to be a corecipient of the 2006 Balzan Prize for Observational Astronomy and Astrophysics, with BOOMERANG colleague Paolo de Bernardis. The BOOMERANG experiment, utilizing a microwave telescope suspended from a balloon over the Antarctic, has provided important new images of the early universe. A second Balzan Prize, for Plant Molecular Genetics, went jointly to **Elliot Meyerowitz**, Beadle Professor of Biology and chair of the biology division, and Christopher Somerville of Stanford

University, for “their joint efforts in establishing *Arabidopsis* as a model organism for plant molecular genetics.”

The prizes will be personally presented by the president of the Italian Republic, Giorgio Napolitano, on November 24 in the Palazzo Corsini in Rome. Each prize is worth one million Swiss francs (about \$810,000), which is shared equally among the winners, who in turn must allocate half of their award to research projects to be carried out by young scholars in their respective fields.

The Balzan Prize is almost as lucrative as the better-

known Nobel, and is one of the highest world honors for science, culture, and humanitarianism. Established by Angela Lina Balzan, heiress of Italian newspaper magnate Eugenio Balzan, who had invested his assets in Switzerland and then left Italy to protest the rise of fascism, the International Balzan Foundation gives two prizes annually in various fields of science and two in the humanities. It also awards a two-million-franc Prize for Humanity, Peace, and Brotherhood among Peoples at longer intervals. □

**NELSON LEONARD  
1916 – 2006**

Faculty Associate in Chemistry Nelson J. Leonard died of cancer at his home in Pasadena on Monday, October 9, barely a month after his 90th birthday. Although Leonard did not join Caltech until 1992, at the ripe old age of 76, “he played a very important role in the life of the division,” says David Tirrell, the McCollum–Corcoran Professor and professor of chemistry and chemical engineering, and division chair. “He mentored many younger faculty members, participated in all our divisional decisions, and was an active member of the Freshman Admissions Committee for many years.”

Leonard was born on September 1, 1916, in Newark, New Jersey, and earned a BS from Lehigh University in 1937, a BSc as a Rhodes scholar at Oxford University in 1940, and a PhD from Columbia University in 1942. He moved to the University of Illinois at Urbana-Champaign as a postdoc and remained there until he retired in 1986.

A synthetic organic chemist with an interest in biochemistry and plant physiology, Leonard helped develop a method for mass-producing the antimalarial drug chloroquine in time for it to be used in the Pacific Theater during World War II.

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of innovative research instruments and techniques.” Based at the University of Massachusetts Amherst, the project includes team members from Caltech’s Infrared Processing and Analysis Center (IPAC) and from JPL. The Muhlmann Award is given annually “for recent significant observational results made possible by innovative advances in

astronomical instrumentation, software, or observational infrastructure.”

**Ahmed Zewail**, Nobel laureate, Pauling Professor of Chemical Physics and professor of physics, has been selected to receive the “Albert Einstein” World Award of Science 2006 for his development of the new field of femtoscience and his “valuable

contributions to the revolutionary discipline of physical biology.” The honor is awarded by the World Cultural Council, which was founded in Mexico in 1982. □