

GREENSTEIN LECTURESHIP BEGINS

and fell in a black shower, mixed with the sand which its rapid motion had forced along; at the same time, the roaring and whistling produced by the impetuosity of the air escaping from its confinement, seemed to increase the horrible disorder of the trees which everywhere encountered each other, being blown up, cracking and splitting, and falling by thousands at a time. In the meantime, the surface was sinking, and a black liquid was rising up to the belly of my horse, who stood motionless, struck with terror."

Even though the book offers up more frightening tales of humanity's relative powerlessness against the forces of nature, in the end its purpose is not to terrify, but to educate. For besides bringing the reader up to speed on what geologists know about the earth's evolutionary processes, the authors also discuss some steps humans can take to survive in such a hostile environment.

After all, when you live on such a volatile, shifting surface as we do, putting the pieces of the geologic puzzle together is the first step toward a safer future. □

Ryan Poquette



Jesse Greenstein

A lectureship has been established in honor of Jesse Greenstein, DuBridge Professor of Astrophysics, Emeritus. The first annual Greenstein Lecture was given on October 28, nine days after Greenstein's 89th birthday. The speaker was Princeton University's James Gunn (PhD '66), who built the "4-shooter" CCD camera for the Hale Telescope and revolutionized ground-based optical astronomy. In his lecture, "The Sloan Digital Sky Survey: First Light and Commissioning," he affectionately referred to Greenstein as his astronomical "father." □

HONORS AND AWARDS

Giuseppe Attardi, the Steele Professor of Molecular Biology, has received a Gairdner Foundation International Award for Achievement in Medical Science for his "pioneering contribution to our understanding of the structure of the human mitochondrial genome and its role in human disease."

Lance Davis, the Harkness Professor of Social Science, has been awarded the Alice Hanson Jones Prize in Economic History. He and coauthors Robert Gallman and Karin Gleiter were honored for their book, *In Search of the Leviathan: Technology, Labor, Productivity and Profits in American Whaling, 1816-1906*.

Professor of Aeronautics Morteza Gharib (PhD '83) has been elected a fellow of the American Physical Society.

William Johnson, the Mettler Professor of Engineering and Applied Science, will receive the MRS Medal at the December meeting of the Materials Research Society. He is credited with "the development and fundamental understanding of bulk metallic glass-forming alloys," leading to a new class of structural materials for advanced engineering applications.

Thomas McGill (MS '65, PhD '69), Jones Professor of Applied Physics, has received the Defense Advanced Research Projects Agency's Best Technical Development of the Year Award for the work described in "Double Manhattan" in this issue's "Random Walk" section.

Associate Professor of Computer Science Peter Schröder is one of 24 "promising young scientific researchers" to be awarded a five-year fellowship from the David and Lucile Packard Foundation. Schröder's research involves "modeling, simulation, and visualization of large problem sizes on workstation-class computers."

John Seinfeld, Nohl Professor and professor of chemical engineering, and chair of the Division of Engineering and Applied Science, received the Fuchs Award at the International Aerosol Conference in Edinburgh, Scotland, in September.

Paul Wennberg, associate professor of atmospheric chemistry and environmental engineering science, has been selected by the National Science and Technology Council to receive the Presidential Early Career Award for Scientists and Engineers. A new award, it

HONORS AND AWARDS (CONTINUED)

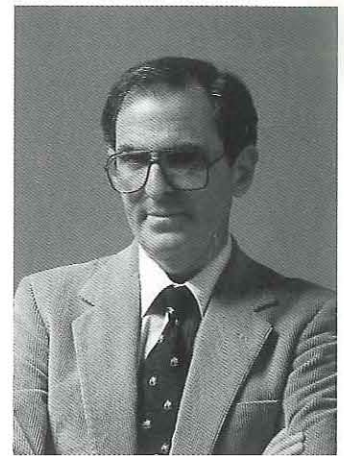
recognizes up-and-coming scientists and engineers "who show exceptional potential for leadership at the frontiers of scientific knowledge."

The 1997-98 teaching awards of the Associated Students of Caltech (ASCIT) have gone to Professor of Biology Marianne Bronner-Fraser, Professor of Applied Mathematics Donald Cohen, Professor of Physics Andrew Lange, Professor of Biology Ellen Rothenberg, and Mellon Visiting Professor of Humanities John Miles. Recipients of honorable mentions are Professor of Biology James Bower, Associate Professor of Physics Emlyn Hughes, Professor of Planetary Science and Geology Bruce Murray, Lecturer in Computer Science and Electrical Engineering Glen George, and Visiting Professor of History Timothy Breen. Named for teaching-assistant awards are Travis Williams, a senior in chemistry this year, and Alexa Harter, a graduate student in physics, and, for honorable mentions, Michael Siu, a graduate student in chemistry, and Ben Miller, who received his bachelor's degree in mathematics this past June.

Recipients of the 1997-98 Graduate Student Council Teaching and Mentoring Awards are, for classroom teaching, Professor of Aeronautics and Applied Mechanics Ares Rosakis and, for mentoring, Scott Fraser, Rosen Professor of Biology. Teaching-assistant awards have gone to Zvonimir Bandic, a graduate student in applied physics, and Ayhan Irfanoglu, a graduate student in civil engineering. □

GOODSTEIN GETS OERSTED MEDAL

David Goodstein, professor of physics and applied physics, Gilloon Distinguished Teaching and Service Professor, and vice provost, has been selected the 1998 Oersted Medalist by the American Association of Physics Teachers. The Oersted Medal, established in 1936, recognizes a teacher for notable contributions to the teaching of physics. This puts Goodstein in excellent company—past medalists include Carl Sagan, Exploratorium founder Frank Oppenheimer, and Nobel Laureates Hans Bethe and I. I. Rabi. Only two other Caltech faculty have ever been so honored: Robert Millikan (in 1940) and Richard Feynman (in 1972). □



David Goodstein



Steven Koonin



Ahmed Zewail

CALTECH TAKES TWO OF SIX LAWRENCE AWARDS

The U.S. Department of Energy has named Steven Koonin (BS '72), vice president and provost and professor of theoretical physics, and Ahmed Zewail, the Pauling Professor of Chemical Physics and professor of physics, the recipients of this year's E. O. Lawrence Award, given for exceptional contributions to the development, use, or control of nuclear energy. The award has been given since 1959 in memory of Ernest Orlando Lawrence, the Nobel Prize-winning nuclear physicist who invented the cyclotron. Koonin and Zewail will join four other Americans at the January 15, 1999, awards ceremony in Washington, D.C.

Secretary of Energy Bill Richardson commended Caltech for Koonin's and Zewail's advancements in nuclear science, saying, "This is only the second time in the award's 38 years that one

university has produced two winners."

Koonin developed a technique for modeling atomic nuclei on parallel computers that is widely used in nuclear physics and astrophysics. And his theory of quantum interference effects between emitted pions is one of the most important techniques for studying hot nuclear matter, including simulations of densities and temperatures similar to those soon after the Big Bang.

Zewail pioneered the burgeoning field of femtochemistry, in which molecular reactions are viewed in extremely short pulses of laser light. This creates stop-motion photographs, as it were, of chemical bonds in the act of breaking and forming—the so-called "transition state," which had long been hypothesized to exist but had never before been seen directly. □