

**NORMAN HOROWITZ
1915 — 2005**



Professor of Biology, Emeritus Norman Horowitz, a geneticist who made key contributions to the understanding of how genes code for proteins and how evolution works at the molecular level, and who designed an instrument for the two Viking missions to Mars to search for signs of life, died on June 1 at his home in Pasadena. He was 90.

A native of Pittsburgh, Horowitz earned his bachelor's degree at the University of Pittsburgh in 1936 and his doctorate at Caltech in 1939. After a postdoctoral appointment at Stanford with George Beadle, Horowitz returned to Caltech when Beadle moved to the Institute in 1946, and was on the faculty of the biology division for the remainder of his career. He was division chair from 1977 to 1980, and became professor emeritus in 1982.

A memorial service has been scheduled for September 12 at 2:00 p.m. in Dabney Lounge and Gardens, and will be covered in a subsequent issue of *E&S*. □

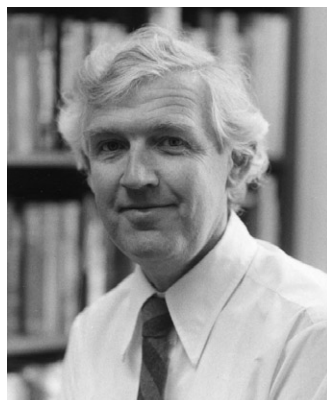
**RONALD F. SCOTT
1929 — 2005**

Ronald Fraser Scott, the Hayman Professor of Engineering, Emeritus, died August 16 at his home in Altadena after a long battle with cancer. He was 76.

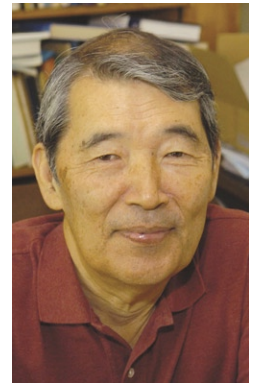
Scott was an international leader in the field of soil mechanics, particularly in relation to landslides and other soil failures. Born in London and raised in Scotland, he earned his bachelor's degree from the University of Glasgow and his master's and doctorate degrees from MIT. He joined the Caltech faculty in 1958 as an assistant professor, and rose through the ranks to become the Hayman Professor. He retired from active faculty duties in 1998.

Scott worked on various NASA missions, including the Surveyor unmanned and Apollo manned missions to the moon and the Viking spacecraft that landed on Mars in 1976. He designed the soil scoop that fed Norman Horowitz's instrument.

As a memorial service is being planned, *E&S* will carry a full obituary at a later date. □



KONISHI WINS NEUROSCIENCE PRIZE



Bing Professor of Behavioral Biology Masakazu "Mark" Konishi and his former postdoctoral researcher Eric Knudsen, now chair of the neurobiology department at Stanford University, have been awarded this year's Peter Gruber Foundation Neuroscience Prize for their work on the brain mechanisms of sound localization in barn owls. They will receive a gold medal and a \$200,000 unrestricted cash award at the annual meeting of the Society for Neuroscience in November.

Konishi has worked extensively on the auditory systems of barn owls and songbirds for two decades. In a remarkable collaboration, Konishi and Knudsen established that

owls—who can home in on mice on the ground in total darkness—have "space-specific" neurons that respond to sounds coming from particular directions and form a topographic map of auditory space in the midbrain. They also worked out how this auditory map is calibrated with the neighboring visual map.

The citation praises their research as a "paradigm for the precise organization of a sensory system and its ability to adapt to environmental experiences," and adds that their "mentorship and care of their disciples have made them models for scientists all over the world." □



PICTURE CREDITS:

43 – Elizabeth Horowitz, Lee Salem/California Science Center;
44 – Peter Mendenhall, Mark Konishi, Bob Paz

Kip Thorne (center), the Feynman Professor of Theoretical Physics, has been named California Scientist of the Year by the California Science Center in Los Angeles. He was honored for “being one of the world’s leading experts on the astrophysical implications of Einstein’s general theory of relativity, and for having trained a generation of scientists.” The award was presented at the Center’s Discovery Ball by former California governor George Deukmejian, left. Jeffrey Rudolph, President of the Science Center, is on the right.

NEW DIVISION CHAIR FOR E&AS



David Rutledge, a leading researcher in the wireless telecommunication revolution, became chair of the Division of Engineering and Applied Science on September 1. He replaces Richard Murray, Rutledge is currently the Kiyoo and Eiko Tomiyasu Professor of Electrical Engineering.

He earned his bachelor’s degree at Williams College, his master of arts degree from the University of Cambridge, and his doctorate from UC Berkeley. Rutledge joined the Caltech faculty as an assistant professor in 1980, and rose through the faculty ranks to become the holder of the

Tomiyasu chair in 2001. He also served as executive officer for electrical engineering from 1999 to 2002.

Rutledge’s research group is currently involved in building circuits and antennas for numerous electronic applications. His work on microwave circuits has been important for various advances in wireless communications and useful for applications such as radar, remote sensing, and satellite broadcasting.

He is also director of the Lee Center for Advanced Networking, which aims at creating a reliable and robust global communication system. □—RT

OTHER HONORS AND AWARDS

Emmanuel Candes, associate professor of applied and computational mathematics, received the James H. Wilkinson Prize in Numerical Analysis and Scientific Computing at the Society for Industrial and Applied Mathematics annual meeting held in New Orleans. The honor recognizes Candes’s “outstanding theoretical and practical contributions to computational harmonic analysis and image processing.”

Shri Kulkarni, MacArthur Professor of Astronomy and Planetary Science, has been chosen as the Biermann Lecturer for 2005. The Biermann Lectureship is considered the highest visiting position of the Max Planck Institute for Astronomy in Garching near Munich, Germany. **Jerrold Marsden**, Braun Professor of Engineering and Control and Dynamical Systems, gave this year’s John von Neumann Lecture at the Society for Industrial and Applied Mathematics annual meeting. Marsden was chosen for his fundamental contributions to geometric mechanics based on symmetry. **George Rossman**, professor of mineralogy and divisional academic officer for geological and planetary sciences has been awarded the 2005 Friedrich Becke Medal of the Austrian Mineralogical Society for his “outstanding contributions in the fields of mineralogy, petrology, and geochemistry.” □