# Faculty File







Ken Farley

fashion that it was not necessarily unreasonable to question their validity.

The principals were—in my view, appropriately—ultimately exonerated of fraud. But—also in my view—the longevity and intensity of conflict in this case derived in no small part from the revelation of the disorderly and seemingly capricious handling of the underlying research records.

Robert L. Sinsheimer Professor Emeritus Department of Molecular, Cellular and Developmental Biology, University of California, Santa Barbara

#### Dan Kevles replies:

Yes, Imanishi-Kari was something of a sloppy record keeper, but her habits in this regard had nothing to do with prolonging the case for the (unconscionably) long period of a decade. What had everything to do with it was the search for evidence of fraud by a congressional subcommittee and an investigative agency of government that began in 1989 and that through the next six years denied Imanishi-Kari elementary rights of due process, including the right to see the evidence against her and to confront and cross-examine the witnesses against her.

## Honors and Awards

Associate Professor of Political Science R. Michael Alvarez and Associate Professor of History William Deverell have been selected to receive 1999 Haynes Foundation Faculty Fellowships.

Harry Atwater, associate professor of applied physics, has been elected by the Materials Research Society to serve on its executive committee and council for three years—one year each as vice president (1999), president (2000), and past president (2001). His term commenced on January 1.

Professor of Chemistry Jesse Beauchamp (BS '64) has been selected as the 1999 recipient of the American Chemical Society's Peter Debye Award in Physical Chemistry, which is sponsored by DuPont.

John Bercaw, Centennial Professor of Chemistry, will be the recipient of the American Chemical Society's 1999 George A. Olah Award in Hydrocarbon or Petroleum Chemistry.

Seymour Benzer, Boswell Professor of Neuroscience,

Emeritus, and Crafoord laureate, has been named a 1998 Ellison Medical Foundation Senior Scholar as part of the Ellison Medical Foundation Senior Scholars in Aging Program. Benzer's current research centers around the "Methuselah" gene, which, when mutated in fruit flies, increases the fly's life span by one-third. It is not yet known whether humans carry an analogous gene.

John Brady, Chevron Professor of Chemical Engineering and executive officer for chemical engineering, has received the Professional Progress Award for Outstanding Progress in Chemical Engineering from the American Institute of Chemical Engineers. Given to a person under the age of 45 who has made a significant contribution to the science of chemical engineering, the award is sponsored by Air Products and Chemicals, Inc.

Peter Dervan, Bren Professor of Chemistry and chair of the Division of Chemistry and Chemical Engineering, will receive the American Chemical Society's 1999 Alfred Bader Award in Bioinorganic or Bioorganic Chemistry.

Associate Professor of Geochemistry Kenneth Farley has been selected to receive the

1998

James B. Macelwane Medal of the American Geophysical Union, "which is awarded for significant contributions to the geophysical sciences by a young scientist of outstanding ability."

Petr Horava, Sherman Fairchild Senior Research Fellow in Physics, has been awarded a Junior Prize of the Learned Society of the Czech Republic for outstanding research in theoretical physics.

Hans Hornung, Johnson Professor of Aeronautics and director of the Graduate Aeronautical Laboraories, will be awarded the 1999 Ludwig-Prandtl ring at the annual congress of the DGLR (the Geman Society for Aeronautics and Astronautics) in Berlin in September. The award is given to one person per vear in academia or industry for his or her contributions to aeronautics and astronautics. Previous Caltech recipients include Theodore von Kármán, who got the first one in 1957, and Hans Liepmann.

Norman Horowitz (PhD '39), professor of biology, emeritus, has received the 1998 Thomas Hunt Morgan Medal, which "recognizes a lifetime contribution to genetics," from the Genetics Society of America, which cited not only his impact on genetics and evolutionary

biology, but his contribution to the scientific education of the public. As a grad student, he assisted in experiments performed by Thomas Hunt Morgan, the medal's namesake and the first chairman of Caltech's Division of Biology, who won the Nobel Prize in 1933 for his work in genetics.

Matthew Jackson, professor of economics, has been elected a Fellow of the Econometric Society.

H. Jeff Kimble, Valentine Professor and professor of physics, has received the 1998 International Award on Quantum Communications from the Fourth International Conference on Quantum Communication, Measurement, and Computing "for his outstanding experimental advances in the areas of quantum measurements, cavity QCD, and quantum logic."

Nobel Laureate Rudy Marcus, Noyes Professor of Chemistry, was honored at the American Chemical Society's 216th National Meeting as one of the "Top 75 Distinguished Contributors to the Chemical Enterprise" by Chemical & Engineering News.

Gerry Neugebauer (PhD '60), Millikan Professor of Physics, Emeritus, has been awarded the 1998 Herschel Medal by the Council of the Royal Astronomical Society "for his inspiring leadership within the astronomical community."

Anatol Roshko (MS '47, PhD '52), von Kármán Professor of Aeronautics, Emeritus, has been selected to receive the University of Alberta's Distinguished Alumni Award for "his outstanding career and important contributions in the fields of gas dynamics, fluid mechanics, and aerospace engineering." He received his BSc from Alberta in 1945.

Anneila Sargent (MS '67, PhD '77), professor of astronomy and director of the

Owens Valley Radio Observatory, has been presented with the NASA Public Service Medal, "in recognition of [her] leadership, dedication, and commitment to NASA as a member of the NASA Advisory Council and as Chair of the Space Science Advisory Committee."

Wallace Sargent, Bowen Professor of Astronomy and director of the Palomar Observatory, has been elected an associate of the Council of the Royal Astronomical Society in recognition of "his inspiring leadership within the astronomical community and outstanding work in observational astrophysics."

Thomas Wolff, professor of mathematics, has been selected as a corecipient of the 1999 Bocher Prize, which honors research in the mathematical field of analysis, "for his contributions to the theory of harmonic analysis."

Professor of Physics Nai-Chang Yeh has been selected by the Overseas Chinese Physics Association as the winner of the 1998 Outstanding Young Researcher Award "for her outstanding achievements in physics."

Ahmed Zewail, Pauling Professor of Chemical Physics and professor of physics, has received two medals from the American Chemical Society for his work in femtochemistry. The 1998 William H. Nichols Medal was awarded by the New York Section and the Nichols Medal Jury, while the 1997 Linus Pauling Medal was awarded by the Oregon, Portland, and Puget Sound Sections.

Three Caltech faculty members have been elected to the National Academy of Engineering: Chevron Professor of Chemical Engineering John Brady, Professor of Applied Mechanics Wilfred Iwan (BS '57, MS '58, PhD '61), and William Johnson (PhD '75), Mettler Profesor of Engineering and Applied Science.

# BECKMAN WINS PUBLIC WELFARE MEDAL

The National Academy of Sciences (NAS) has selected Arnold O. Beckman (PhD '28), life trustee and chair emeritus of the board of trustees, to receive the Academy's most prestigious award, the Public Welfare Medal. Beckman was chosen for his leadership in developing analytical instrumentation and for his deep and abiding concern for the vitality of the nation's scientific enterprise. Established in 1914, the Public Welfare Medal is presented annually to honor extraordinary use of science for the public good. Previous recipients include Vannevar Bush, C. Everett Koop, and Carl Sagan. The NAS Public Welfare Medal, consisting of a bronze medal and an illuminated scroll, will be presented to Beckman during the NAS annual meeting in April 1999. The National Academy of Sciences is a private, non-profit institution that provides science advice under a congressional charter.

### ANDERSON WINS NATIONAL MEDAL OF SCIENCE

Don L. Anderson (MS '58, PhD '62), McMillan Professor of Geophysics and a Crafoord laureate, has been named a 1998 recipient of the National Medal of Science—one of nine Americans to be awarded the country's highest scientific honor. The announcement was made on December 8, 1998 at the White House by President Clinton, who cited the nine for "their lifetime of passion, perseverance, and persistence to bring about new knowledge that extends the limits of their fields and drives our nation forward into a new century." Anderson was cited for his contributions in understanding the processes of Earth and Earth-like planets, as well as his promotion of the earth sciences.

The National Medal of Science was established by Congress in 1959 to be bestowed annually by the President of the United States. The first Medal of Science was awarded by John F. Kennedy in 1962 to Caltech's Theodore von Kármán, a pioneer of aerospace engineering. To date, 362 American scientists have been awarded the Medal of Science. Of these, 44 have been Caltech professors and alumni.

# LIGO HONORED

LIGO (Laser Interferometer Gravitational-Wave Observatory; see *E&S*, No. 2, 1998) won the Distinguished Engineering and Science Project Achievement of the Year Award for 1999, from the Engineering Council (a group of large engineering organizations). LIGO was nominated by the Parsons Infrastructure & Technology Group Inc., which acted as architect/engineer on the project. The award was presented to LIGO Deputy Director Gary Sanders in a ceremony on February 27. Meanwhile, work on LIGO continues toward its turn-on date in 2001.



At the Hanford, Washington, site (the women behind the mask is Helena Armandula) one of the exquisitely sensitive fused-silica mirrors was recently hung in its mounting. Waiting to pick up a gravity-wave signal, laser beams will bounce back and forth between mirrors such as this one, hung kilometers apart. The purple surface on the mirror is a multilayer stack of alternating dielectric materials that is highly reflective to the laser's infrared light.

And (right) at the LIGO site in Livingston Parish, Louisiana, Allen Sibley works on the vacuum equipment, housed at the meeting point of LIGO's two four-kilometerlong beam tubes, through which the laser beam passes.

