

NEW HUMANITIES AND SOCIAL SCIENCES DIVISION CHAIR



She has traveled alone in a war-torn area of Africa and listened to lions pad around her tent at night, but now Caltech professor of anthropology Jean Ensminger takes on a different challenge, as the new chair of the Division of the Humanities and Social Sciences.

In making the announcement, Caltech provost Steve Koonin commented, “Jean brings a distinguished record of teaching and research, fine judgment, and demonstrated management skills to an important position of academic leadership within the Institute. We are very fortunate that someone of her talents is willing to take on this important responsibility.”

Ensminger will be the first woman to serve as division chair at Caltech, and will take the helm on June 15, replacing John Ledyard, professor of economics and social sciences, who will be returning, he

says, to “the best position in the world: full professor at Caltech.” He will redirect his energies to his research in market and organization design, or focus on a new, unrelated area, or “go sailing, if my boat is still afloat.”

For her part, Ensminger is enthusiastic about the prospects for the division, and hopes to build on its successes over the last two decades. “The division has transformed the study of political science and political economy in ways now emulated and dominant in virtually every major university in America,” she says, “and is currently incubating several areas of expertise that have the same potential for transforming disciplines as we know them today.”

Specifically, she notes that the absence of disciplinary boundaries at Caltech is spawning research that will “reshape the philosophy of mind, behavioral economics, and the frontier between neuroscience, psychology, and economics, while the division’s uniquely seamless boundary between literature and history, together with proximity to the Huntington Library, affords us another opportunity to blossom in the humanities.”

Ensminger is an uncommon anthropologist: her line of research is in an area known as experimental economics, a field, she notes, that the division has played a

Institute for Useless Research; the “institute’s” president was Isaac Neutron and the secretary was J. J. Coupling.

From the ’60s on, Caltech tried to lure Pierce back to campus. Finally, Francis Clauser, chairman of the Division of Engineering and Applied Science, was shocked one day in 1971 to get a phone call from Pierce announcing, “You know, I think I’d like to come to California.” So, after more than 35 years at Bell Labs, Pierce embarked on his second career as professor of engineering at Caltech. He took emeritus status in 1980 but continued in the post of chief technologist at JPL until 1982.

In that year, at the age of 72, Pierce began a third career as visiting professor of music at Stanford’s Center for Computer Research in Music and Acoustics, a post he held for the next 12 years. Although he claimed not to be able to carry a tune, he had become interested in music while at Bell Labs. He composed some of the first computer-synthesized music, made two recordings, and wrote several books on music, sound, and speech and hearing, including *The Science of Musical Sound*.

Pierce was awarded the National Medal of Science in 1963 for his work on communication satellites, and the

prestigious Charles Stark Draper Prize in 1995. He received one of Caltech’s first Distinguished Alumni Awards (1966) and many other honors, including the Engineer of the Year award of the Institute for the Advancement of Engineering, the Medal of Honor of the Institute of Electrical and Electronics Engineers, the Marconi Award, and numerous honorary degrees. He was a fellow of the National Academies of Sciences and of Engineering, the American Academy of Arts and Sciences, and a member of the American Philosophical Society. He was the author of 20 books and held about 90 patents.

Pierce is survived by his wife, Brenda Woodard-Pierce, of Sunnyvale, a son, John J. Pierce of Bloomfield, New Jersey, and a daughter, Anne Pierce, of Summit, New Jersey. □—JD

The material quoted above comes from articles in Engineering & Science, October 1971 and November 1981.

pivotal role in shaping. She is interested in how people make economic decisions, and her work involves running experiments—described to the participants as games—that use real money in order to learn something about real behavior. Unlike most experimental economists, however, Ensminger takes the method out of the university laboratory and into small-scale communities in Africa and elsewhere.

The simplest game she uses plays for fairly high stakes, usually a day's wages, whether the game is played in Hamilton, Missouri, or Wayu, Kenya, two places where she has conducted her research. Ensminger will bring a group of people together to play in pairs. Player one is told he or she has, say, \$50 to divide with the other person; both will remain anonymous to one another, and player one can give player two any amount or nothing. How is the money divided? More fairly than one might guess, often as high as a 50-50 split.

Even more counterintuitive to conventional economic theorizing, says Ensminger, is that the more involved a society is in a market economy—that is, working for wages, or raising something (crops or cattle) and selling it in order to live—the fairer people tend to be. Across 16 small-scale societies studied around the world, the U.S. is the most fair-minded reported to date, while hunter-gatherers are the least.

For almost 25 years, Ensminger has traveled to Africa, living and studying with the Orma tribe, partially nomadic cattle herders in northeastern Kenya near the Somali border, where she will return this summer for five weeks. In the beginning, she would live in a tent on the grounds of a local school, in a place that was frequented by roaming

lions at night. Now she stays in the compound of the local chief, but there is a greater danger—banditry.

“My field site became very dangerous in the 1990s because of the collapse of the Somali state,” says Ensminger. “There is an ethnic conflict between the Orma and the Somali, who want to take over Orma territory. A phenomenal number of people I know have either been shot or killed by the bandits. It’s not a war; it’s like the Wild West with armed bandits on the loose.”

As a woman traveling alone, carrying cash, and in one of the few cars in the area, she is obviously a target for bandits. And while she feels safe in the Orma villages, she admits to being “unabashedly terrified whenever I go on the roads in and out of that area.” Still, that is where 20 years of her research is, and she is not willing to give it up.

It is that kind of perseverance she intends to bring to working with her colleagues as division chair. “I’m honored and delighted to have the opportunity to work with faculty of the extraordinary quality found here, and I look forward to the possibilities and challenges that lie ahead.” □ —MW

HONORS AND AWARDS

David Baltimore, president of Caltech, has been named an honorary member of Art Center College of Design’s Board of Trustees.

Barry Barish, Linde Professor of Physics and director of the Laser Interferometer Gravitational-Wave Observatory Laboratory, is the 2002 recipient of the American Association of Physics Teachers (AAPT) Klopsteg Award.

Andrew Benson, Caltech Prize Fellow in Astronomy, has been awarded the 2001 Michael Penston Prize, which is presented annually by the Royal Astronomical Society to honor the best astronomy PhD thesis in the United Kingdom.

David Chan, assistant professor of biology and Bren Scholar, has been selected to receive a 2002 Beckman Young Investigators award, intended to “help provide research support to the most promising young faculty members in the early stages of their academic careers in the chemical and life sciences.” A graduate of Harvard Medical School, Chan joined Caltech in January 2000.

Thomas Caughey, Hayman Professor of Mechanical Engineering, Emeritus, has been selected by the Engineering Mechanics Division of the American Society of Civil Engineers to receive the 2002 Theodore von Kármán

Medal in recognition of “his pioneering developments and sustained leadership in developing tools for dealing with challenging problems in engineering science”.

John Eiler, assistant professor of geochemistry, has been awarded the 2002 James B. Macelwane Medal by the American Geophysical Union (AGU) in recognition of his scientific accomplishments.

Thomas Everhart, president emeritus, has been named the 2002 recipient of the Founders Medal by the Institute of Electrical and Electronics Engineers (IEEE).

Robert Grubbs, Atkins Professor of Chemistry, has been selected by the American Chemical Society to receive the 2002 Arthur C. Cope Award.

Sossina Haile, associate professor of materials science, and Denise Nelson Nash, director of public events, have been selected as 27th Congressional District Women of the Year. Along with seven others, they were honored by Congressman Adam Schiff for having “played a critical role in improving the quality of life” in the 27th District and having “made a difference in our community in a significant manner.”

Wilfred Iwan, professor of applied mechanics and director of the Earthquake Engineering Research Laboratory, was awarded the 2002 Alquist Medal by the



Joe Kirschvink, winner of the Feynman Prize for Excellence in Teaching.

California Earthquake Safety Foundation in honor of “his lifetime of service to the profession of structural engineering and its application to the safety of the people of California and the world.”

Joseph Kirschvink, professor of geobiology, has been awarded the 2002 Richard P. Feynman Prize for Excellence in Teaching. Kirschvink was specifically selected for “his innovative teaching style and outstanding mentorship, which have inspired a generation of Caltech students.”

Steve Koonin, provost and professor of theoretical physics, has been elected a member of the Council on Foreign Relations. Dedicated to increasing America’s understanding of the world and contributing ideas to U.S. foreign policy, the council “aims to enhance the quality of study and debate on world issues, develop new generations of thinkers and leaders, and help meet international challenges by generating concrete and workable ideas.”

Shrinivas Kulkarni, MacArthur Professor of Astronomy and Planetary Science, will deliver the 2003 Salpeter Lecture at Cornell University.

Andrew Lange, Goldberger Professor of Physics, has been chosen by the Manne Siegbahn Institute in Stockholm, Sweden, to deliver its annual Manne Siegbahn Memorial Lecture.

David MacMillan, associate professor of chemistry, was selected by AstraZeneca Pharmaceuticals as a recipient of the 2001 AstraZeneca Excellence in Chemistry Award. In addition, he was chosen by the Pfizer Global Research and Development Academic and Industrial Relations Committee as a recipient of the 2001 Pfizer Award for Creativity in Organic Chemistry.

Carver Mead, Moore Professor of Engineering and Applied Science, Emeritus, was awarded Carnegie Mellon University’s Dickson Prize in Science.

Ned Munger, professor of geography, emeritus, has received the Gandhi-King-Ikeda Award from the Martin Luther King, Jr. International Chapel and the Gandhi Institute for Reconciliation, Morehouse College, Atlanta. The award reads: “In the tradition of Mohandas K. ‘Mahatma’ Gandhi, Dr. Martin Luther King, Jr. and Dr. Daisaku Ikeda, you have served your community and the world through your dedication to peace and unity, your commitment to non-violence, and your persistent efforts to establish justice for all humankind.”

Michael Roukes, professor of physics, was selected to give one of the 2002 Lillian M. Gilbreth Lectures from Frontiers in Engineering at the National Academy of

Engineering’s national meeting in February.

Anneila Sargent, professor of astronomy and director of both the Owens Valley Radio Observatory and the Interferometry Science Center, has been invited to deliver the Graham Lecture at University College, Toronto.

Re’em Sari, Sherman Fairchild Senior Research Fellow in Astrophysics and lecturer in planetary science, has been awarded Case Western Reserve University’s 2002 Michelson Postdoctoral Prize Lectureship.

Barry Simon, IBM Professor of Mathematics and Theoretical Physics and executive officer for mathematics, has been invited to be a Distinguished Visitor at UC Irvine.

P. P. Vaidyanathan, professor of electrical engineering, was selected by the Institute of Electrical and Electronics Engineers Signal Processing Society to receive the 2001 Technical Achievement Award.

Erik Winfree, assistant professor of computer science and computation and neural systems, is a recipient of the Presidential Early Career Award for Scientists and Engineers.

Ahmed Zewail, Pauling Professor of Chemical Physics and professor of physics, has been selected to join the Welch Foundation’s scientific advisory board. He has also received a Distinguished Alumni Award from the University of Pennsylvania and the G. M. Kosolapoff Award in chemistry from the University of Auburn. □