UC SANTA BARBARA

THE Current

April 29, 2022
Shelly Leachman

Academy Honors

Three faculty members of UC Santa Barbara have been elected to the American Academy of Arts and Sciences. Chemist Joan-Emma Shea, economist Shelly Lundberg and chemical engineer Michael Doherty are among 261 new fellows and international members of the prestigious organization. Their selections bring to 45 the number of UC Santa Barbara faculty members who have been named fellows of the academy.

“On behalf of our UC Santa Barbara community, I am honored and delighted to congratulate Professors Michael Doherty, Shelly Lundberg, and Joan-Emma Shea on their election to the American Academy of Arts and Sciences, one of the oldest learned societies in the country,” said Chancellor Henry T. Yang. “This prestigious achievement is a deeply meaningful affirmation from their peers of their inspirational leadership in research, teaching, and service to our society.”

• **Michael Doherty** holds the Mellichamp Chair in Process Systems Engineering, in the Department of Chemical Engineering. His research focuses on process systems engineering, with particular interest in conceptual design of chemical process systems, crystal engineering for product and process design, and separation with chemical reaction.

• **Shelly Lundberg** is the Leonard Broom Professor of Demography, associate director of the Broom Center for Demography and a distinguished professor of economics. With expertise focused in labor economics and the economics of the family, her current research examines the sources of educational inequality and of

gender gaps in education, as well as the status of women in the economics profession.

• **Joan-Emma Shea** is associate dean of science and a professor of chemistry and biochemistry. Her many areas of specialization include physical chemistry, biomedical sciences, and biology-inspired chemistry and physics. Research in the Shea Group focuses on developing and applying the techniques of statistical and computational chemistry and physics to the study of biological problems.

Founded in 1780, the American Academy of Arts and Sciences honors excellence and convenes leaders to examine new ideas, address issues of importance to the nation and the world, and advance the public good. The academy for more than 240 years has been electing and engaging exceptional individuals. This year's election of 261 new members continues a tradition of recognizing accomplishments and leadership in academia, the arts, industry, public policy and research.

"We are celebrating a depth of achievements in a breadth of areas," said David Oxtoby, president of the American Academy. "These individuals excel in ways that excite us and inspire us at a time when recognizing excellence, commending expertise, and working toward the common good is absolutely essential to realizing a better future."

The artists, scholars, scientists, and leaders in the public, non-profit, and private sectors elected this year also include computer scientist Chieko Akasawa, writer Sandra Cisneros, musician Rhiannon Giddens, evolutionary biologist Harmit Singh Malik, historian Heather Cox Richardson and mathematician Claire Voisin.

The new members join a distinguished group of individuals previously elected, including Benjamin Franklin and Alexander Hamilton in the eighteenth century; Ralph Waldo Emerson, Maria Mitchell, and Charles Darwin in the nineteenth; Albert Einstein, Robert Frost, Margaret Mead, Martin Luther King, Jr. and Condoleezza Rice in the twentieth; and more recently Jennifer Doudna, Bryan Stevenson, M. Temple Grandin, Viet Thanh Nguyen and Sanjay Gupta.

"The academy was founded on the belief that the new republic should honor truly accomplished individuals and engage them in meaningful work," said Nancy C. Andrews, chair of the Academy Board of Directors. "The academy's dual mission continues to this day. Membership is an honor, and also an opportunity to shape ideas and influence policy in areas as diverse as the arts, democracy, education,

global affairs, and science.”

Shea’s current work involves the investigation of cellular processes such as in-vivo protein folding and protein aggregation. She is editor-in-chief of the Journal of Physical Chemistry, the first female editor-in-chief in the journal’s 125-year history. She received her B.Sc. in Chemistry from McGill University, Canada, in 1992 and her Ph.D. in physical chemistry from MIT in 1997. She pursued her postdoctoral studies at the Scripps Research Institute. After a year as an assistant professor of chemistry at the University of Chicago, Shea joined the faculty at UCSB in 2001.

Lundberg also is a research fellow at IZA, a fellow and past president of the Society of Labor Economists, and past president of the European Society for Population Economics. In 2020, she was elected a distinguished fellow of the American Economic Association. She has served on the Board of Directors of the Population Association of America and as chair of the AEA’s Committee on the Status of Women in the Economics Profession. Lundberg’s research has been funded by the National Institutes of Health, the National Science Foundation, the Russell Sage Foundation, and the MacArthur Foundation.

Doherty joined the faculty at UCSB in 2000 and served as department chair from 2008 to 2013. A member of the National Academy of Engineering, he was named by American Institute of Chemical Engineers (AIChE) one of “One Hundred Chemical Engineers of the Modern Era,” and has received AIChE’s Alpha Chi Sigma Award for Chemical Engineering Research. He holds six patents, published more than 200 technical papers and given more than 250 invited lectures.

The academy is an independent research center that convenes leaders from across disciplines, professions and perspectives to address significant challenges. Founded by John Adams, John Hancock and others who believed the new republic should honor exceptionally accomplished individuals and engage them in advancing the public good, the academy named luminaries such as George Washington and Benjamin Franklin among its first fellows. Since then, more than 13,000 individuals have been elected to academy membership.

Tags
Awards

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.