April 20, 2016 | By Mario Aguilera and Inga Kiderra and American Academy of Arts and Sciences

American Academy of Arts and Sciences Elects Three UC San Diego Professors

New members include oceanographer Farooq Azam, cognitive scientist Jeff Elman, and geophysicist Lisa Tauxe

Three faculty members of the University of California San Diego have been elected to the American Academy of Arts and Sciences, one of the country's most esteemed honorary societies and independent policy research centers.

Founded in 1780, the academy convenes leaders from the academic, business and government sectors to respond to challenges facing the nation and the world. Previous members have included George Washington, Benjamin Franklin, Daniel Webster, Ralph Waldo Emerson, Margaret Mead, and Martin Luther King Jr.
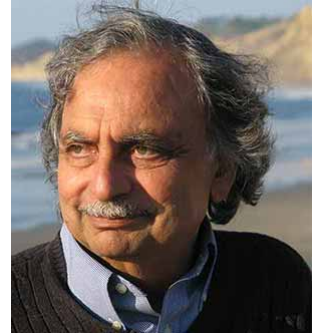
"Having three UC San Diego faculty members elected to the American Academy of Arts and Sciences speaks to the innovative and visionary nature of this university and our faculty," said UC San Diego Chancellor Pradeep K. Khosla. "I am proud that these professors and their career accomplishments are being recognized on such a prestigious national platform."

Members of the 2016 class include winners of the Pulitzer Prize and the Wolf Prize; MacArthur and Guggenheim fellowships; the Fields Medal; and the Grammy Award and National Book Award.
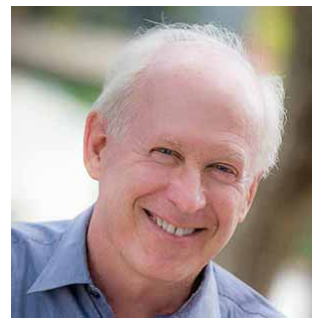
The new UC San Diego members, who will be inducted at a ceremony on Oct. 8, 2016, in Cambridge, Mass., are:

- **Farooq Azam**, a distinguished professor of microbial oceanography at Scripps Institution of Oceanography, has made fundamental contributions to the study of the ecology of marine microbes. He and his students helped discover that the ocean's microbiome plays a major role in the functioning of marine ecosystems and in the ocean's importance in the global carbon cycle. Azam is a leader in the emerging field of microscale ecology and biogeochemistry of marine microbes. He is currently working to develop a unifying

mechanistic framework for the role of microbes in ecosystem function and resilience in order to better predict the response of the diverse ocean ecosystems, including the pelagic ocean and coral reefs, to climate change. His awards include the Hutchinson Medal from the American Society for Limnology and Oceanography, Tiedje Award from the International Society of Microbial Ecology, D.C. White Research and Mentoring Award from the American Society for Microbiology and Doctor of Philosophy *honoris causa* from Linnaeus University, Sweden. In 2004 he was elected a Fellow of the American Academy of Microbiology.

- **Jeff Elman**, distinguished professor of cognitive science and former dean of the Division of Social Sciences, is a pioneer in artificial neural networks and an internationally recognized scholar in the field of language processing and learning. He studies language through computational models and through psycholinguistic and neuroimaging studies. A member of the UC San Diego faculty since 1977, he was a founding member of the Department of Cognitive Science, the first of its kind in the world, as well as founding director of the Center for Research in Language and founding co-director of the university's Kavli Institute for Brain and Mind. Among his honors is the prestigious David E. Rumelhart Prize, which he received in 2007 in recognition of his groundbreaking contributions to the theoretical foundations of cognitive science. Most recently, he was named inaugural director of the Office for Online and Technology Enhanced Education at UC San Diego. He also holds the cognitive science Chancellor's Associates Chair.

- **Lisa Tauxe,** a distinguished professor of geophysics in the Geosciences Research Division at Scripps Institution of Oceanography, studies paleomagnetism, the study of remanent magnetism in ancient rocks and archaeological materials. She is working on a number of projects to improve the understanding of Earth's magnetic field through time and applications of magnetic methods to solve geological problems. Current projects include refining the understanding of ancient field strength variations in the Jurassic and Cretaceous periods, improving the global database concerning the directional and intensity behavior of Earth's magnetic field for the last 10 million years, and more detailed studies using archaeological materials from the Middle East, China, and the southwestern U.S. A former department chair/deputy director for education at Scripps

Oceanography, Tauxe was elected to the National Academy of Sciences in 2015. Other awards and honors include the George P. Woollard Award of the Geological Society of America, Outstanding Academic Title in Earth Science from the American Library Association for *Essentials of Paleomagnetism,* the Antarctic Service Medal, the Benjamin Franklin Medal, and the Arthur L. Day Medal.

See the full list of academy members here and the UC San Diego list here.

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