

THE *Current*

September 15, 2022

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Rewarding Geophysical Research

In recognition of their meritorious work and service toward the advancement and promotion of discovery and solution science, three faculty from UC Santa Barbara have been selected for section awards from the American Geophysical Union (AGU).

Debra Perrone, Samantha Stevenson and Anna Trugman are being recognized for their early career achievements by AGU, a nonprofit organization that supports 130,000 experts and enthusiasts worldwide in Earth and space sciences. The union annually recognizes a number of individuals as part of its Honors and Recognition program.

[Debra Perrone](#) was chosen for a Hydrologic Sciences Early Career Award, which “recognizes outstanding contributions to hydrology through research, education, or societal impacts.”

“I am grateful for the support of my colleagues who nominated me for this award, as well as the hydrologic sciences community, more broadly, for their support of research that integrates multiple disciplines and has a focus on societal impacts,” said Perrone, an assistant professor in the Environmental Studies Program.

Perrone focuses on identifying and solving society’s water-scarcity challenges, particularly issues concerning groundwater. She takes a broad approach to the task, combining research methods from engineering, physical science and law to inform water sustainability and policy.

AGU conferred an Ocean Sciences Early Career Award to [Samantha Stevenson](#), an assistant professor in the Bren School of Environmental Science & Management. The award lauds “significant contributions to the ocean sciences from honorees within 10 years of receiving their Ph.D.”

As a physical oceanographer, Stevenson studies the physical mechanisms that affect movement of water in the ocean. She’s particularly interested in understanding how interactions between the ocean and atmosphere alter the behavior of El Niño and La Niña events.

Stevenson uses numerical ocean and climate models to investigate how those processes respond to climate change. Some of her work focuses on projections of future 21st century climate change. She’s also considering how to use reconstructions of climatic conditions over the past several hundred years to improve both our knowledge of the past and our estimates of what we may expect in the future.

“It has been my dream for a long time to contribute to humanity's knowledge of the oceans in order to help us prepare for the ongoing threat of climate change,” Stevenson said. “I am tremendously excited that my work has been recognized by the AGU Ocean Sciences section.

“I plan to continue doing my best to solve important ocean and climate problems,” she added, “and also hope this award will help me be a good role model for the younger generation of women in physical oceanography.”

[Anna Trugman](#) received a Global Environmental Change Early Career Award. The honor cites researchers who’ve made “outstanding contributions in research, educational, or societal impacts in the area of global environmental change [...] within 10 years of receiving their Ph.D. or highest terminal degree.”

“I’m extremely excited to be among Debra and Sam as early career female environmental scientists winning these awards,” said Trugman, an assistant professor in the Department of Geography.

Trugman is a plant ecologist interested in the terrestrial carbon cycle. Her lab focuses on how climate change impacts forest resilience as well as carbon, water and energy fluxes from the land surface to the broader Earth system.

Some of her current projects include the ecological, carbon-cycle and economic consequences of wildfire in California. She also aims to understand how the physiology of plants under stress shapes ecosystem resilience and biogeographic patterns in water-limited systems.

AGU will formally recognize this year's recipients during the [AGU22 Fall Meeting](#), which convenes Dec. 12–16 in Chicago, and online. This celebration is a chance for the union's community to recognize the outstanding work of their colleagues and be inspired by their accomplishments and stories.

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.