

UC SANTA BARBARA

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## **Sloan Fellowship Awarded to UCSB Assistant Professor**

Joan-Emma Shea, an assistant professor of chemistry and biochemistry at the University of California, Santa Barbara, has been awarded a prestigious Sloan Research Fellowship from the Alfred P. Sloan Foundation.

Shea is one of 116 outstanding young scientists and economists from 51 colleges and universities in the U.S. and Canada who have been selected to receive the Sloan Research Fellowship this year. The Fellows are engaged in research at the frontiers of physics, chemistry, computational and evolutionary molecular biology, computer science, economics, mathematics and neuroscience.

The new Sloan Research Fellows were selected from among hundreds of highly qualified scientists in the early stages of their careers on the basis of their exceptional promise to contribute to the advancement of knowledge. Twenty-eight former Sloan Fellows have received Nobel prizes.

The Sloan Research Fellowship Program is the oldest program of the Sloan Foundation and one of the oldest fellowship programs in the country. It began in 1955 as a means of encouraging research by young scholars at a critical time in their careers when other support is difficult to obtain. Grants of \$40,000 for a two-year period are administered by each Fellow's institution. Shea plans to use the funds to hire graduate student assistants.

Shea's research spans the fields of theoretical chemistry and biophysics. She is working on the forefront of the field in the study of protein folding and aggregation. Last fall she was one of only 16 scholars nationwide to be selected for a Packard Foundation Fellowship for Science and Engineering for 2003.

She explains that "Proteins are among the most important building blocks of life. They play an essential role in a wide variety of ways from antibodies fighting infection, to enzymes catalyzing biochemical reactions, to the structural collagen in our bones. Synthesized on the ribosome as chains of amino acids, proteins spontaneously assemble under physiological conditions into well-defined biologically active three-dimensional structures. How this 'protein folding' takes place is essential to understanding how they work. It is also one of the most important unsolved puzzles of biology."

With the current awards, the Sloan Foundation has spent over \$103 million for support of more than 3900 young researchers. Candidates for fellowships are nominated by department chairs and other senior scholars familiar with their talents.

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## **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.