

THE *Current*

July 23, 2012

[Sonia Fernandez](#)

Assistant Professor of Physics Receives U.S. Presidential Science Award

Ania Bleszynski Jayich, an assistant professor in physics at UC Santa Barbara, has been awarded the prestigious Presidential Early Career Award for Scientists and Engineers (PECASE). The award is the highest honor the nation can bestow on a scientist or engineer at the beginning of his or her career.

"Discoveries in science and technology not only strengthen our economy, they inspire us as a people." President Obama said. "The impressive accomplishments of today's awardees so early in their careers promise even greater advances in the years ahead."

Jayich joins 96 others who were also named by President Obama as recipients of the award, which is intended to recognize some of the finest scientists and engineers who show exceptional potential for leadership at the frontiers of scientific knowledge during the 21st century.

"UC Santa Barbara takes great pride in President Obama's recognition of the research of Assistant Professor Jayich," said Chancellor Henry T. Yang. "We look forward with great anticipation to developments in her studies of quantum electrical transport in nanoscale systems. And we wish her a joyous celebration when she visits the White House to accept this prestigious honor."

Jayich, who joined the faculty in 2010, was recognized for her "exceptional research accomplishments in the application of scanning probe techniques to study quantum electrical transport in nanoscale systems, and for the development of ultra-high sensitivity magnetometry techniques to study quantum effects in mesoscopic systems."

Jayich received her Ph.D. in physics from Harvard and her B.S. in physics and mathematical and computational science from Stanford in 2000. Her efforts include experiments on a technique that could result in magnetic resonance imaging on a nanoscale, small enough to image the structure of proteins. Jayich conducted the research, which involved coupling nitrogen-vacancy centers in diamond to nanomechanical sensors, during a yearlong stint at Harvard prior to her professorship at UCSB. She continues the work at UCSB, as the head of the Jayich lab.

"This is an amazing honor," Jayich said. "I'd like to acknowledge all the support I have received here at UCSB, from my funding sources at the Air Force Office of Scientific Research, and from my graduate and postdoctoral advisors. This award will allow our lab to pursue the study of quantum effects at the nanoscale via novel imaging techniques. These are exciting research directions, as physics at the nanoscale offers many surprises and functionalities, which are being explored for applications in computing and biology."

"PECASE awards are given every year to the top scientists and engineers in the country across all fields early in their careers. This award recognizes the fact that Ania is emerging as one of the top experimental physicists in the country," said Michael Witherell, vice chancellor for research.

Started in 1996 by the Clinton administration, the PECASE awards foster innovative and far-reaching developments in science and technology, increase awareness of careers in science and engineering, give recognition to the scientific missions of participating agencies, enhance connections between fundamental research and national goals, and highlight the importance of science and technology for the nation's future. This year's PECASE recipients are employed or funded by 11 federal departments and agencies.

Related Links

[The Jayich Lab](#)

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.