

UC SANTA BARBARA

# THE *Current*

January 6, 2014

Julie Cohen

## **Two Faculty Members Receive Prestigious Award**

David Weld, an assistant professor of physics at UC Santa Barbara, has been awarded a 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.

“The impressive achievements of these early-stage scientists and engineers are promising indicators of even greater successes ahead,” President Obama said of the recipients. “We are grateful for their commitment to generating the scientific and technical advancements that will ensure America’s global leadership for many years to come.”

Weld joins 101 other recipients, including Rouslan Krechetnikov, an adjunct assistant professor in the Department of Mechanical Engineering. The PECASE is intended to recognize some of the country’s most promising scientists and engineers, those who demonstrate exceptional potential for leadership at the frontiers of scientific knowledge during the 21<sup>st</sup> century.

“I am honored and pleased to congratulate professors Weld and Krechetnikov on this high-profile award,” said UCSB Chancellor Henry T. Yang. “The Presidential Early Career Award for Scientists and Engineers is highly competitive and recognizes not only the excellence and significance of our colleagues’ current research contributions but also their tremendous potential for future leadership and research

impact. UC Santa Barbara is proud of their achievement and committed to fostering a vibrant and supportive intellectual environment for our faculty to flourish and develop their careers.”

An experimental expert in ultracold atoms, Weld joined the UCSB faculty in 2011. He received his Ph.D. from Stanford in 2007 and his bachelor of arts in physics from Harvard in 1998. His research interests also include quantum simulation, optical lattices, trapping of alkali and alkaline earth atoms, novel quantum phases, nonequilibrium dynamics, new cooling techniques, analogies between condensed matter and atomic physics, quantum metrology and micron-scale force sensing.

“I am very grateful to the White House and the Army Research Office and really appreciate all the support I have received at UCSB from the Department of Physics, the Office of Research, the Division of Mathematical Life and Physical Science and the California NanoSystems Institute,” Weld said. “I look forward to the exciting experiments on nonequilibrium quantum systems that this award will enable.”

Krechetnikov, a specialist in fluid dynamics, earned his Ph.D. in applied mathematics at the Moscow Institute of Physics and Technology in 2004. His research interests include experimental and theoretical fluid mechanics at all scales — aerodynamics, geophysics, micro-hydrodynamics and physics of complex interfaces — as well as analytical mechanics and applied mathematics.

“This award recognizes the fact that David and Rouslan are emerging as two of the top scientists and engineers in the world,” said Michael Witherell, UCSB vice chancellor for research. “Although there were 102 winners this year, only about 60 of those were from universities. UCSB has won five PECASE awards in the past three years, which places us among the top few universities in the country.”

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, including the Department of Defense and the National Science Foundation, which nominated Weld and Krechetnikov respectively.

---

## **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.