

UC SANTA BARBARA

# *THE Current*

February 15, 2011

George Foulsham

## **Three UCSB Faculty Members Awarded Sloan Research Fellowships**

Three assistant professors at UC Santa Barbara are among this year's winners of Sloan Research Fellowships from the Alfred P. Sloan Foundation. The new Sloan Fellows from UCSB are among 118 winners announced today by the Sloan Foundation.

The UCSB winners are Katherine "Katie" Byl, assistant professor of electrical and computer engineering; and Benjamin Monreal, and Cenke Xu, both assistant professors of physics. The two-year fellowships are awarded to researchers in recognition of distinguished performance and a unique potential to make substantial contributions to their fields. UCSB faculty members have received 14 Sloan Fellowships in the past seven years.

Byl's research focuses on dynamic systems and control, with particular interest in modeling and control techniques used in bio-inspired robot locomotion and manipulation in real-world environments. Byl has worked on a wide range of research topics in the control of dynamic systems, including magnetic bearing control, flapping-wing microrobotics, and piezoelectric noise cancellation for aircraft.

Monreal is a member of the high-energy physics group and the particle astrophysics laboratory at UCSB. His research is devoted to experimental searches for dark matter and the neutrino mass.

Xu's research interests include strongly correlated electron systems; quantum phase transitions and quantum criticalities; geometrical (magnet) frustrations; exotic quantum ground states; topological insulators; and non-fermi liquid behaviors.

Sloan Fellows may use their two-year, \$50,000 grants to pursue whatever lines of inquiry are of most interest to them, and they are permitted to use fellowship funds in a variety of ways to further their research. Funds are awarded directly to the Fellow's institution. This year's winners are drawn from 54 colleges and universities in the U.S. and Canada.

Related Links

[Katherine Byl](#)

[Cenke Xu](#)

---

## **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.