



Let's Explore Applied Physical Science (LEAPS)

LEAPS engages UCSB graduate and undergraduate Fellows as instructors and mentors for inquiry-based physical science in Grade 8 classrooms, and after-school science clubs that serve grades 3-12. LEAPS Fellows collaborate with science teachers in interdisciplinary teams, where their expertise across a wide range of science and engineering topics provides valuable content resources. Fellows enrich students' learning through small-group engagement in scientific inquiry, through individualized science project mentorship, and on development of improved classroom science activities.

LEAPS is supported by an award from the National Science Foundation

Insights on Science and Technology for Society (INSCITES)

INSCITES is a collaborative project between the CNSI and the CNS that will integrate real-life science and engineering principles within a societal context. The course, designed for undergraduates, is developed and taught by multi-disciplinary teams of graduate student Teaching Scholars. The class encourages hands-on involvement through illustrative labs and also studies the broader implications of science and technology in the transformation of the way we live. The ultimate goal is to create a series of courses that can be the basis of a "liberal arts of science and engineering."

INSCITES is supported by an award from the National Science Foundation

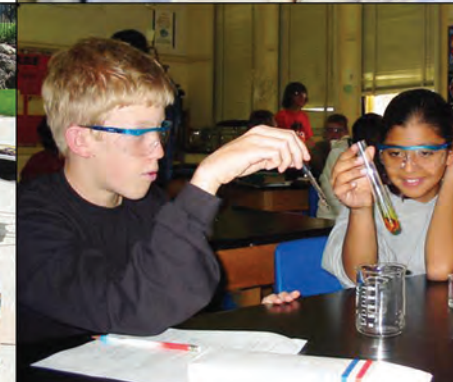
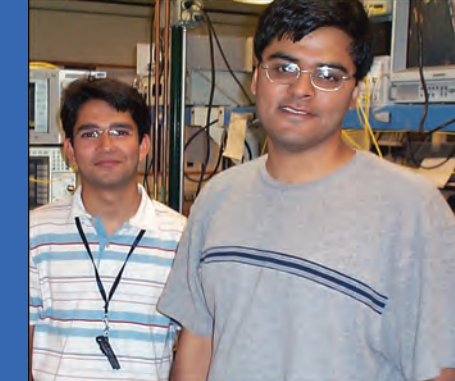
"You learn as you do and in great detail, without even knowing it."

High School Student,
Apprentice Researchers



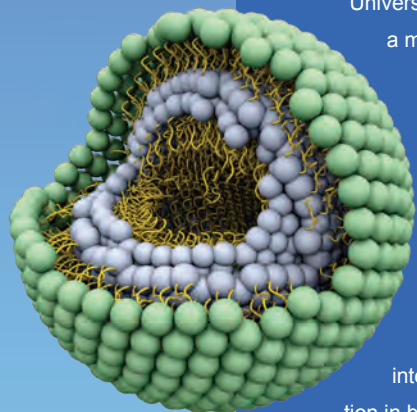
Evelyn Hu, Scientific Director
David Awschalom, Associate Scientific Director
Fiona Goodchild, Education Director
Liu-Yen Kramer, EPSEM and INSET
Ofelia Aguirre, ESPEM and SIMS
Samantha Freeman, INSET and LEAPS
Wendy Ibsen, Apprentice Researchers and LEAPS
Meredith Murr, INSCITES

California NanoSystems Institute
University of California, Santa Barbara
Santa Barbara, CA 93106-6105
(805) 893-7510
<http://www.cnsi.ucsb.edu/>



"The internship was amazing and assured me that research is a positive career goal for my future."

Community College Student, INSET program



California NanoSystems Institute

The California NanoSystems Institute (CNSI) at the University of California, Santa Barbara (UCSB) is a multidisciplinary research center established by the State of California, focused on the promise of science and engineering at the nanoscale, and the profound applications that could transform our world for the better.

CNSI's mission is to create the collaborative, closely integrated and strongly interactive environment that will foster innovation in both the research and education related to nanosystems. We seek to create new interdisciplinary learning opportunities for students, teachers and the general community. Because the CNSI community is diverse, we are able to develop a wide range of creative, dynamic education activities, supported by sustained partnerships on campus and in the community.

CNSI partners with the Center for Nanotechnology in Society (CNS) at UCSB to explore the impacts and interactions of nanoscience and nanotechnology within society. Linking scientists and engineers with researchers in the social sciences and humanities, the CNS not only serves as a national resource on nanotechnology's impacts, but also provides distinctive education programs for undergraduate and graduate fellows in the social sciences and STEM disciplines.



Internships in Nanosystems Science, Engineering and Technology (INSET)

The INSET program brings science and engineering community college undergraduates to CNSI laboratories for a summer research experience. Interns gain first-hand experience in scientific investigation in a dynamic, collaborative research environment. They are matched individually with UCSB faculty and graduate student lab mentors who provide training and Internships in Nanosystems Science, Engineering and Technology (INSET) support. Interns attend weekly meetings, special seminars, and have the opportunity to develop their presentation skills throughout the summer.

INSET is supported by an award from the National Science Foundation



Expanding Pathways to Science, Engineering and Mathematics (EPSEM)

The EPSEM program brings science, engineering, and mathematics community college students to the UCSB campus for activities which promote academic and career success. Students participate in a summer institute at UCSB, school-year visits for career exploration days, nanosystem lab tours, and social events. EPSEM partners with UCSB student-serving organizations and with faculty at local community colleges. UCSB researchers participate in a variety of roles as instructors and mentors.

EPSEM is supported by an award from the National Science Foundation



"The most exciting part of EPSEM was working in the lab and getting to be part of real research. It was also neat to get to know the UCSB campus a little more."

Community College Student, EPSEM program

Apprentice Researchers (AR)

The Apprentice Researchers program brings high school students and teachers together with CNSI researchers in their scientific investigations during the summer. Apprentices not only practice the doing of science, but also focus on the ability to effectively communicate scientific ideas to a variety of audiences. Additionally, Apprentices explore career opportunities through tours of industrial laboratories and other UCSB research labs.

Apprentice Researchers is supported partially by an award from the National Science Foundation

Summer Institute in Mathematics and Science (SIMS)

SIMS is a rigorous introduction to university science and engineering. This two-week program provides intensive academic preparation in mathematics, chemistry, writing, and lab skills. Graduating high school seniors who will be majoring in science, engineering or mathematics, at UCSB may participate.

SIMS is supported by an award from the National Science Foundation

