UC SANTA BARBARA

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UC Santa Barbara Receives $2 Million for Science Outreach

The California Nanosystems Institute (CNSI) at UC, Santa Barbara has been awarded a $2 million educational outreach grant from the National Science Foundation (NSF).

CNSI (a partnership between UCSB and the University of California, Los Angeles) facilitates a multi-disciplinary approach to develop the information, biomedical and manufacturing technologies that will dominate science and the economy in the 21st century.

As part of NSF's program for Science, Technology, Engineering and Mathematics Talent Expansion (STEM), the UCSB part of CNSI received this grant for a new program called Expanding Pathways to Science, Engineering and Mathematics (EPSEM).

EPSEM aims to increase the number of high school and community college students who complete undergraduate degrees in science, technology, engineering and mathematics (the STEM disciplines). CNSI will thus address the broad issues of education, mentorship and retention for students in the science and engineering disciplines that critically underpin work in nanosystems.

EPSEM represents an extensive partnership within the UCSB campus, and between UCSB and local community colleges and high schools. EPSEM will work in close collaboration with Allan Hancock College, Oxnard College, Santa Barbara City

College and Ventura College, as well as eight of their feeder high schools. These linkages will help in recruitment of students with a strong interest in science, engineering and mathematics, and who have a high potential for admission or transfer to the University of California. EPSEM recruitment will have a particular emphasis on identifying disadvantaged and underserved students, and students from groups traditionally under-represented in STEM disciplines.

Mentorship will be a central focus of this initiative. It will address three areas of student needs: social interaction, career exploration and academic skills development.

Sponsorship from the UCSB College of Engineering will help to coordinate campus activities and student opportunities. EPSEM-sponsored summer institutes and school year-mentorship activities will bring high school, community college and UCSB students into the CNSI community. In that way, students will connect with research scientists, academic departments, campus outreach initiatives and student-centered programs such as Early Academic Outreach.

UCSB faculty in education, science and engineering will be involved in the program in a variety of roles as instructors, mentors and researchers. They will also serve on an internal committee that will monitor EPSEM activities and help identify the supports and requirements for student success, especially in the case of students who transfer to UCSB from community colleges. An external advisory board will guide the EPSEM program design and dissemination.

Ofelia Aguirre is the new Project Coordinator for EPSEM. Aguirre brings impressive credentials and experience to this position. She completed her undergraduate degree at Scripps College and her Master's degree in chemistry at the University of California, Santa Cruz. At UCSB she has been the coordinator for both CAMP (California Alliance for Minority Participation in Science) and Community College Special Programs in Admissions and Outreach Services. She will collaborate with Fiona Goodchild, the education director of CNSI; CNSI education personnel Wendy Ibsen and Liu-yen Kramer; and Evelyn Hu, director of CNSI at UCSB.

Related Links

EPSEM

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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.