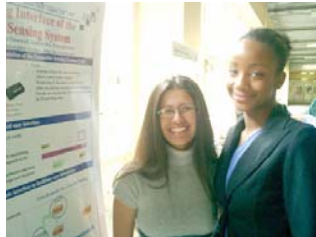
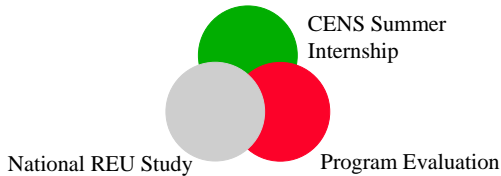


Diversity @ CENS

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Women@CENS: Increasing Diversity in Engineering and Computer Science

Women@CENS: a research system



The **Women@CENS** program was designed to enhance our REU program with scaffolding that supports students with different skill sets and course backgrounds, and to provide professional development seminars that support female and underrepresented students. Our intent is to develop a set of promising REU diversity practices that can be shared broadly, especially those that increase women participants' sense of belonging, interest, and long-term commitment to engineering and computer science.

Studying How REU Programs Support Women's Interest and Long-Term Commitment to Science and Engineering

Program Evaluation

Program

Year 1 -- 13 students

Research experiences, program supported by UCLA-CARE

Year 2 -- 42 students

Women@CENS funding, gender/diversity seminars, mixed group mentoring

Year 3 -- 24 students

Tech Camp, Weekly Progress Meetings, One-on-one meetings

Year 4 -- 23 students

Integrated approach to diversity workshops, development of teams all connected to theme

Tracking Student Success: An online survey of the 79 alumni from the CENS summer programs from 2003-2005

Evaluation

Obtain funding for more students

Need to enhance sense of community

Organically integrate diversity vs. training intervention

National REU Study

The **Women@CENS** research project is studying undergraduate research internship programs in science, technology, engineering, and mathematics (STEM). We are especially interested in learning about aspects of these programs that increase women participants' interest and long-term commitment to STEM fields, engineering and computer science in particular.

Phase I

An online survey was administered to 713 NSF funded undergraduate research internships (REU's) in STEM.

Phase II

A comparative case study focusing on the practices, evaluation and outcomes of programs especially successful at getting women participants into Ph.D. programs.

Collaborations & Partnerships

STC Joint Recruitment

Through this effort, we established a partnership across all STCs, which also led to collaboration in other joint efforts. With respect to undergraduate recruitment, one of our intended outcomes was to increase efficiency across STCs while increasing our effectiveness with respect to diversity recruitment. These activities included development and distribution of marketing materials, creation of nsfstc.org website and online application system, attendance at national conferences (SACNAS, SHPE, SWE) and the California Diversity Forum, contact of over 6000 students and faculty in science and engineering programs nationally, coordination of application materials and distribution to all STC's.

Local and National Partnerships

•**Partner Institutions:** UC-AGEP (Alliance for Graduate Education and the Professoriate), UCLA-CEED (Center for Excellence in Engineering and Diversity), UCLA-Summer Programs for Undergraduate Research, USC-Center for Engineering Diversity, UC-Riverside Copernicus Project, UC LS-AMP Programs, and other centers within the school of engineering.

•**Local minority serving institutions and community colleges:** Cal State LA, Loyola Marymount University, Pierce College, Santa Monica College, and West Los Angeles College.

•**Local chapters of national professional organizations:** (AISES, NSBE, SHPE, and SWE)

•**National organizations:** QEM Network

Hands-on Future Tech Conference

In September 2005, we hosted the 1st Hands-on Future Tech Conference with three other STCs (CBST, MDITR, and NBTC). With targeted recruitment, each Center hosted underrepresented undergraduates, master's students, and faculty from minority serving institutions nationally (including several HBCU's) at this conference designed to inform participants about research and opportunities at our STCs.



Society for Advancement of Chicanos and Native Americans in Science (SACNAS)



CENS participated in a joint-presentation with two other Science & Technology Centers (NCED & SAHRA) at the 2006 Annual SACNAS meetings in Denver, Colorado.

CSULA CEA-CREST REU

We have developed a partnership with CSULA CEA-CREST, which focuses on environmental sciences, to teach their undergraduate interns how to create basic sensor networks to incorporate our technology into their projects. CENS will host CEA-CREST students as well as provide technical support in their research endeavors.