

Learning Experience for Elementary School Girls

The under-representation of women in engineering, averaging 20% in college enrollment and 10% in professional practice has encouraged universities to reach out to students during the formative school years. California State University, Long Beach (CSULB), designated as a Hispanic-Serving Institutions campus, offers two women-in-engineering outreach programs through the College of Engineering, “Women Engineers @ the Beach” and “Engineering Girls @ the Beach”. Both programs serve the K-12 populations and are designed to introduce engineering to school girls via hands-on engineering-based workshops. The ability to recruit academically gifted students coupled with a steadfast commitment to serving minority students, are distinctive hallmarks of both programs. The older of the two programs, “Women Engineers @ the Beach” was awarded the Kimberly-Clark Outreach Award by the national Society of Women Engineers in 2009. In October 2009, CSULB was awarded a cooperative agreement to establish a NASA University Research Center, the Center for Human Factors in Advanced Aeronautics Technologies (CHAAT). Since the establishment of the center, CHAAT PIs have worked closely with the Women-in-Engineering Outreach Program to promote STEM research and education to underrepresented groups. The Kennedy Space Center learning experience will allow us to increase the number of students we can impact while complementing the objectives of our outreach efforts. This proposal seeks funding to serve 30 fifth- and sixth-grade girls, to be recruited from a select number of school sites that have existing relationships with CSULB’s Women-in-Engineering Outreach Program.