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$3.3M NSF Award Creates UCSB and UTEP Partnership for Materials Research

New partnership will boost under-represented student participation in renewable energy technology research and attaining advanced degrees

NEWS RELEASE

Student working in the Materials Research Laboratory at UCSB

(Santa Barbara, Calif.) ? The National Science Foundation (NSF) has awarded $3.3 million for the es tablishment of a collaborative research and education program between The University of Texas at El Paso and University of California, Santa Barbara. As part of the national Partnerships for Research and Education in Materials (PREM) grant program, this award establishes a long-term partnership between UTEP and the Materials Research Laboratory at UCSB: an NSF Materials Research Science and Engineering Center (MRSEC).

The UTEP-UCSB PREM program broadens the participation and advanced degree attainment of under-represented minorities, primarily Hispanic students, in materials science and engineering. The program opens doors for UTEP and UCSB students to participate in research internships at the partner university, and for faculty at UCSB and UTEP to jointly teach advanced educational courses remotely to students at both campuses, among other benefits.

?The NSF PREM program is a chance to make a broader impact, and to excite and inspire the next generation of scientists and engineers at UCSB and UTEP,? said Craig Hawker, Director of the Materials Research Laboratory at UCSB. ?Together we will pursue research at the cutting-edge of photovoltaic materials research, de veloping new materials essential for efficient photovoltaics to be formulated.?

Materials are increasingly important for U.S. economic development, with looming world issues ? such as en ergy, the environment, and human health ? being dependent on research in this critically important area. UCSB ma terials research is renowned for developments in next-generation electronics, energy-efficient materials, and engineering applications driven by bio-inspired structures.

Another core advantage of this PREM partnership is that it opens up a wealth of global research internship programs available for students at UTEP and UCSB alike. The Materials Research Laboratory at UCSB co-sponsors the Cooperative International Science and Engineering Internships program in which undergraduates participate in extended research stays with international partner institutions in Europe and Asia, leading to a much richer educational experience for US students.

?We are preparing students for the future of research, and that future is in collaboration ? across disciplines, and across the world,? said Ram Seshadri, associate director of the Materials Research Laboratory at UCSB. ?This prog ram opens the eyes of students to international research environments and opportunities.?

"The PREM program provides a wonderful opportunity for UTEP scientists to interact closely with their

counterparts at UCSB in exciting research and educational projects," said Luis Echegoyen, the Robert A. Welch Chair in Chemistry at UTEP and principal investigator for the award. ?We anticipate true synergistic ou tcomes to emerge from this collaborative partnership at the frontier of materials research for photovoltaic applications."

The program will allow UTEP to significantly accelerate its emergence as a focal center for materials research with both universities emerging as strong partners and national leaders in diversity programs. This grant is also an important component of UTEP's progress toward Tier One status by expanding research capabilities on campus. In February 2012, UTEP unveiled its new $69.2 million state-of-the-art Chemistry and Computer Science Building, a major step toward its goal to become the first National Research University serving a 21st century student demographic.

"Collaboration with partner institutions is one of the cornerstones of our research approach at UCSB," said Rod C. Alferness, dean of the College of Engineering. "We are delighted that this PREM program with The University of Texas at El Paso will broaden and enhance the impact of novel research in photovoltaics and renewable energy technology for both of our institutions.?

Selection for a PREM award honors UCSB?s substantial efforts to provide science and engineering outreach to K-12 students, teachers, and college students through education, research, and internship programs. The new partnership builds upon the success of UCSB?s previous PREM program in collaboration with Jackson State University in Mississippi, which also received $3 million in renewed funding from the NSF.

"Our campus is honored and delighted that Director Craig Hawker and the Materials Research Lab team have been awarded NSF funding to continue our model PREM partnership with Jackson State University as well as funding to develop a new partnership with The University of Texas at El Paso,? commented UCSB Chancellor He nry Yang. ?UC Santa Barbara is proud to be a leader in building an outstanding and diverse student population, an d we are excited about the benefits that the PREM partnerships will bring to supporting underrepresented minority students in pursuing advanced degree studies and innovative research."

UCSB Materials education and research are consistently top-ranked programs. UCSB?s materials graduate pr ogram was recently ranked #1 among public universities by U.S. News and World Report . The materials research-doctorate program was ranked #1 in the world among public universities by the National Research Council . In terms of citation impact, UCSB materials research was ranked 2nd in the world by Thomson Reuters in 2011.

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