University of San Diego Academic Grant Awards – Spring 2013

Diane (Dee) Aker, PhD, Interim Director, Joan B. Kroc Institute for Peace & Justice, has received from the United States Institute of Peace (USIP) and the Institute of International Education (IIE), through the Public Education for Peacebuilding Support initiative, a \$2,000 award for her project "Fostering Conflict Prevention and Peacebuilding in U.S. Foreign Policy." The funds were used to support the March 14, 2013 public lecture featuring Ambassador Rick Barton of Maine who is the Assistant Secretary of State for Conflict and Stabilization Operations and the Coordinator for Reconstruction and Stabilization.

Rae Anderson, PhD, Physics, was just awarded the third NSF-CAREER award this fiscal year. This 5-year (contingent on the availability of federal funds) \$500,000 project is titled "Elucidating the material properties of complex tunable biopolymer networks using single molecule nano stress-strain transducers and sensors." The goal is to develop a highly interdisciplinary research program to elucidate the complex material properties of a wide range of biopolymer networks by using novel experimental techniques to probe dynamics and interactions occurring at the single-molecule level. The PI's education plans focus on training the next generation of interdisciplinary researchers and teachers by developing and implementing a highly interdisciplinary undergraduate Biophysics Major, as well as a community service-learning program, while continuing to mentor undergraduate and high school research students from multiple STEM disciplines. A post-doctoral student and an undergraduate student will be an integral part of meeting the goal of this project.

Sara Azaransky, PhD, Theology and Religious Studies, has been funded for her project to begin June 1, 2013, "They Wore Traveling Shoes: Religious Black Internationalism and the Roots of Civil Rights, 1936-1956." This \$39,196 award from The Louisville Presbyterian Theological Seminary d/b/a The Louisville Institute, will fund a project that shows how internationalism sparked novel theological accounts of human beings, race, Jesus, God, and the church and how these accounts, in turn, shaped the course of Civil Rights Movement and the development of black theology.

Lauren Benz, PhD, Chemistry and Biochemistry, has received a 5-year, \$451,605 National Science Foundation Faculty Early Career Development Program Award (CAREER). Dr. Benz' project title is "Fundamental Investigation of Supported Materials: ZIFs and Nanoclusters." A postdoctoral student will join Dr. Benz during the first two years. This project is expected to establish connections between material composition and fundamental bonding and reactivity, allowing the prediction of structural changes in supported materials which will lead to enhanced reactivity and selectivity in gas binding. This work offers undergraduates a chance to participate in solid-state materials research, an area which is traditionally less explored at the undergraduate level, yet of growing importance in current challenge areas in chemistry.

Ami Carpenter, PhD, Joan B. Kroc School of Peace Studies, has received funding from the US Department of Justice, Office of Justice Programs for \$398,824. The central contribution of this project, "Sex Trafficking and Gangs in the San Diego/Tijuana Border Region Area," is to measure the scope of human trafficking by the creation of a single, integrated database that lays the foundation for drawing on all possible sources of evidence of human trafficking in the region. Specifically, the focus is on one of the most understudied aspects of human trafficking, the relationship between gangs and human trafficking.

Drs. Susan Bonnell and Linda Urden, in collaboration with Drs. Michael Terry and Karen Macauley, School of Nursing, have received \$144,000 California Song Brown Grant to prepare MEPN students to care for California's post-military veterans with physical and mental health care needs in general acute care, long-term, and community facilities. The faculty will work in Nursing's S&SPN Lab to develop a series of standardized patient case scenarios to assure that MEPN students develop competencies to care for veterans. In addition, psychiatric nurses will be mentored in the S&SPN Lab into the role of psychiatric clinical instructor in order to address the critical shortage of psychiatric nurse faculty.

Geoffrey Morse, PhD, Biology, is the recipient of a National Science Foundation grant "Collaborative Research: RUI: Extreme Polyphagy, Extreme Diversity or Both? Armored Scale Insects of Tropical

Rainforests on Four Continents." Benjamin B. Normark, PhD, University of Massachusetts has the collaborating proposal; the project will begin July 1, 2013. Dr. Morse will supervise all aspects of the USD component of the project, including supervising and mentoring undergraduate student researchers, and will coordinate field work in Panama, Australia, and Malaysia, and will take a leading role in current and historical population size estimation.

David A. Shirk, PhD, Director, Trans-Border Institute, Joan B. Kroc School of Peace Studies has received a \$15,750 award from the Woodrow Wilson International Center for Scholars (WWICS) to support his "Contract for Civic Engagement/Public Security Project." He is collaborating with WWICS on a project to examine the ways in which civic participation and community engagement can help strengthen the rule of law in Mexico and improve public security in the face of violent organized crime.

Adam Siepielski, PhD, Biology, has received a National Science Foundation grant for \$400,000 for his project "Latitudinal Variation in the Determinants of Community Structure." The focus of the project is to better understand what mechanisms govern species diversity. Undergraduate students will engage in this project; outcomes of the activity will foster research-based undergraduate course development and science curriculum for local pre-K-5th grade schools. The activities will engage and encourage young scientists to interact with the general public on the importance of biodiversity research.

Marie Simovich, PhD, Biology, has received a \$30,036 subcontract from the SDSU Research Foundation to continue her work with the San Diego Fairy Shrimp. The work will allow Simovich and researchers at SDSU to landscape genetics in the San Diego fairy shrimp and study the hybridization of the federally endangered species. The research project will provide recommendations for management, conservation and mitigation, in terms of impact of the genetic integrity and recovery of the fairy shrimp.

Avi Spiegel, PhD, Political Science and International Relations, has received funding from the Smith Richardson Foundation, Strategy and Policy Fellows Program to support his research project "Islamist vs. Islamist: How Competition is Changing Political Islam in the Arab World." The \$60,000 grant will run from May 2013 to August 2014 and will allow Spiegel to work on his book which will take readers inside the emergence of a new and still unexplored era of Arab politics: the era of Islamist vs. Islamist. The book aims to fuse research from many fields, including, the sociology of religion, comparative politics, Middle East studies and religious studies.