

Mississippi NSF EPSCoR Announces Six Research Grants

The research universities in Mississippi have been awarded a large multi-year grant to build research infrastructure in the state in the area of Modeling and Simulation of Complex Systems. A seed grant program for funding promising new research projects is one component of the larger grant. Six recipients of the 2010 Seed Grants were chosen by the NSF EPSCoR Steering Committee after careful evaluation of the 25 proposals submitted. "The selection process was very difficult because we had so many outstanding proposals," stated Dr. Susan Bridges, Science Coordinator for Mississippi EPSCoR. "Our goal is to build expertise and collaboration at Mississippi universities in computational modeling of biological and biochemical systems." The recipients of the 2010 Seed Grants are:

Dr. Annette Wysocki of the Department of Surgery at the University of Mississippi Medical Center in Jackson, Mississippi is collaborating with Hybrid Plastics in Hattiesburg, MS to engineer and test biomaterials that can be used to replace cartilage in joints.

Dr. Xiu-feng (Henry) Wan of the College of Veterinary Medicine at Mississippi State University and Dr. Nan Wang of the School of Computing at the University of Southern Mississippi are combining computational and biological techniques to elucidate the structural factors that influence influenza infection.

Dr. Jason Ritchie of the Department of Chemistry and Biochemistry at the University of Mississippi and Dr. David Maggers of the Department of Chemistry and Biochemistry at Mississippi College are using both computational and experimental methods to investigate the properties of a new polymer that has many potential applications including fuel cells.

Dr. Ali Mohammed of the Technology Department of Jackson State University is developing improved methods for modeling the deposition of inhaled particles in the lung. This research has important potential applications in the impact of pollution on human health and in aerosol drug delivery.