

## **2016-2017 Tier One Program Grant Recipients**

### **Global Media Analysis Research Clusters (GMARC) Project**

**PI:** Alan Kluver

**Co-PI:** Stephen Balfour, F. Gregory Gause, Wendi Kaspar

The Global Media Analysis Research Clusters (GMARC) Project is a joint effort between the Departments of Communication and International Studies in the College of Liberal Arts, the Department of International Affairs in the Bush School of Government and Public Service, and the Policy Science and Economics Library in the Libraries. The GMARC Project will engage multidisciplinary teams of undergraduates, graduate students, and faculty directly in transformational learning about foreign language media analysis in four critical languages: Arabic, Chinese, Farsi, and Russian. Student teams will be given real world projects related to global media analysis, media framing, and narrative analysis either for academic publication or by agencies that the Bush School and the Department of Communication already work with such as the Joint Chief's Staff, the intelligence community, and non-profits. Supervised GMARC student teams will use the Multi-Media Monitoring System (M3S) which is a tool that transcribes and translates non-US news sources in the critical languages. Faculty supervision and the M3S together with real world projects will give students (1) global perspectives on current events they would not otherwise have access to, (2) multiple critical perspectives on events happening right now, (3) analysis skills and exposure to agencies which need those skills, and (4) writing and communication skills in real work contexts.

### **Math Virtual Learning Center**

**PI:** Michael Pilant

**Co-PI:** Jennifer Whitfield, Richard Furuta, X. Ben Wu

The accelerated development of digital technology that has occurred in the last two decades has created a dramatic paradigm shift in the educational landscape and in the way that information is acquired and assimilated. Many students are as comfortable in the virtual world as in the physical world. The main goal of this proposal is to take full advantage of this new paradigm and create an engaging and interactive virtual math learning environment where students will find a rich set of tools, instructional material and content. This learning environment will host a community of learners where students can connect, interact and collaborate with their peers. There will be mechanisms and authoring tools in place to facilitate and encourage mathematics faculty to author additional online materials.

### **Collaborative Learning Initiatives in Maternal, Perinatal, and Infant Health Research**

**PI:** Jayanth Ramadoss

**Co-PI:** Fuller Bazer, Katrin Hinrichs, Larry Suva, James Herman

We propose to develop a program that will offer a diverse and robust platform to introduce Texas A&M University undergraduate students to the world of scientific research as it relates to maternal, perinatal, and infant health. This is a research area that has significant societal impact, and is of interest to students from a broad variety of backgrounds. Drawing on the expertise of research laboratories and mentors from seven colleges across the campus, including CVM, Science, ENG, CEHD, Liberal Arts, COALS, and HSC, this program will provide undergraduate students with a state-of-the-art, hands-on research experience. Building on successful research-education models already in place at Texas A&M University, we will bring together faculty with active research programs with outstanding undergraduate students from diverse backgrounds. This research experience will be designed to build students' critical thinking skills, with the goal of stimulating students to synthesize ideas with originality, and to work in imaginative and innovative ways. Presentation of the results of their projects will enhance student communication skills, and the program will yield both formative and summative evaluations of student outcomes. Each year, for three years, the program will offer research experiences to 100 undergraduate students in their junior year, in one of the participating research laboratories. We hypothesize that in addition to providing a unique undergraduate research experience, the successful coordination of the participating laboratories over the three years of this program will form the basis for competitive federal training grants in the area of maternal/perinatal/infant health research.

## **Famine to Feast: Engaging Texas Food Banks**

**PI:** Malini Natarajarathinam

**Co-PI:** Robert Jones, Mary Campbell

A learning community devised of at least 500 (over three years) undergraduate students within the disciplines of Industrial Distribution, Engineering, Sociology, and Technology Management will work together to enhance the ability of local, regional, and statewide Texas food banks to understand and meet client's needs, improve efficiencies, and better achieve their overall missions to help the citizens of Texas. Faculty members with experience achieving the high impact practice of service-learning andragogy (and training in the last cohort of University Service-Learning Fellows) along with other faculty will create a new way of combining two high-impact practices – a learning community and service-learning. The students in their classes will work in multidisciplinary teams on research projects from Texas food banks to reduce costs, enhance efficiency and productivity and optimize their resources. The uniqueness of this service learning opportunity comes from two aspects: 1. Projects are solicited from the members of Feeding Texas (the pilot agency partner) and 2. Student groups work on research-rich problems that address a need in the society and develop a multidisciplinary solution, developing students' personal and professional aptitudes and attitudes. Unifying students' projects on one focused area (Hunger-free Texas, in this case) increases the impact of the results of the project on students, faculty, university and the agencies. This effort will also provide an opportunity to assess the challenges that are associated with managing large, multidisciplinary service-learning classes and develop a framework and model to scale service learning initiatives in the near future at Texas A&M University.