

SEPA + INBRE/COBRE - the Pipeline to Workforce Diversity

Presented by Tony Beck, Ann Bertagnolli, PhD, Brian Bothner, PhD, Sarah Codd, PhD, Mohamed Elasri, PhD, Gary Rankin, PhD

Description: The NIGMS SEPA R25 program provides 5-year, \$1.35M awards for the development of educational activities for pre-kindergarten through grade 12 (P-12) students, teachers and parents. SEPA's goals are to encourage individuals underrepresented in the biomedical and behavioral sciences, to pursue further studies or careers in research. Part I: Overview of the SEPA program and how IDeA state SEPAs function as the early pipeline for INBRE. Part II: INBRE PIs will present case studies on what works and what does not work Part II: Interactive grant writing workshop with an insider view of the SEPA review process

Session theme or topic: SEPA and INBRE/COBRE partnerships

Session format (Lecture, facilitated discussion, panel discussion, Q&A): Other

3 anticipated participant learning outcomes:

Demystify the SEPA program

Snapshots" of SEPA/INBRE partnerships and outcomes

Keys to a competitive SEPA grant application

Intended audience: INBRE, COBRE, Students, Faculty, PI's

Name, title, Institution/bio for each facilitator/presenter:



Tony Beck

**Program Director , Science Education Partnership Award (SEPA)
Division for Research Capacity Building, NIGMS, NIH**

Tony Beck, Ph.D., is a program director in the Division for Research Capacity Building, where he manages the Science Education Partnership Award (SEPA) program that supports pre-K to grade 12 diversity pipeline projects and health-related exhibits at science centers and museums. Beck also manages the SBIR/STTR Serious STEM Interactive Digital Media program and the NIH Curriculum Supplement Series. Prior to joining NIGMS, Beck managed the SEPA program in the Office of Research Infrastructure Programs and in the former National Center for Research Resources, where he also managed Clinical and Translational Science Awards and human embryonic stem cell infrastructure programs. He started his NIH career in 2000 as a scientific review officer at NIAAA, and he worked for three Maryland area biotechnology companies before coming to NIH. Beck earned a B.A. and M.S. in biological sciences at the University of California, Riverside, and a Ph.D. in cell and molecular biology from the University of California, Irvine and Brookhaven National Laboratory. He conducted postdoctoral research in Denver at the University of Colorado Health Sciences Center and the Eleanor Roosevelt Institute for Cancer Research.



Ann Bertagnolli, PhD

**MT INBRE Principal Investigator
Montana State University**

For the past 17 years, Ann Bertagnolli has led the Montana INBRE Network program. Under her leadership, the Montana INBRE Network has become the backbone of a statewide biomedical research network that now involves 15 academic institutions, including seven tribal colleges. Bertagnolli has coordinated over 200 faculty research projects and helped facilitate over 2,000 student research projects across Montana, including eight Native American graduate fellowships.



Brian Bothner, PhD

**Professor of Chemistry and Biochemistry, MT INBRE Principal Investigator
Montana State University**

Brian Bothner is a professor in chemistry and biochemistry and the research in his lab is directed toward understanding biological function by investigating systems. He is currently the MT INBRE Principal Investigator. Montana INBRE is a collaborative network of Ph.D.-granting institutions, baccalaureate schools and tribal colleges that invests in Montana's biomedical research capacity and workforce pipeline.



Sarah Codd, PhD

**Professor of Mechanical Engineering MT INBRE Director of Student Programs
Montana State University**

Sarah Codd is co-director of the Magnetic Resonance Lab and a Professor in the Department of Mechanical and Industrial Engineering at Montana State University. Her research focuses on technique development, flow and diffusion studies in porous media, and investigation of fluid dynamics. She is the director of Student Programs for the Montana INBRE program which includes running a summer program that supports 50 undergraduates involvement in a 10 week research internship.



Mohamed Elasri, PhD

Mississippi INBRE Program Coordinator and co-PI
The University Southern Mississippi

Dr. Mohamed (Moe) Elasri is T. W. Bennett Distinguished Professor of Microbiology at the University of Southern Mississippi (USM). His research focuses on the elucidation of the regulatory mechanisms of the human pathogen *Staphylococcus aureus*. He uses both molecular genetics techniques as well as bioinformatics to study microbes that cause infections. Dr. Elasri has discovered a new operon in *S. aureus* that plays a critical role in infection and antibiotic resistance. This operon is a potential therapeutic target to combat antibiotic-resistant staph infections caused by MRSA or VRSA strains. Dr. Elasri has published over 40 peer-reviewed articles and trained a significant number of doctoral, masters and undergraduate research students (10 PhD, 3 MS, >60 undergrads). As an investigator, Dr. Elasri has also worked on several interdisciplinary projects (e.g. microbiology/material sciences) that have been productive and resulted in publications and funding. Before joining USM, Dr. Elasri received his PhD from Oklahoma State University and was a post-doctoral fellow at the National Institutes of Health (NIH) and at the University of Arkansas for Medical Sciences. Dr. Elasri's research has been funded by several agencies such as NIH, the American Heart Association, and the US Department of Agriculture. Since joining USM in 2002, Dr. Elasri has been awarded a total of \$64,634,972 in extramural funding as PI or co-PI. Dr. Elasri assumed several leadership roles in various societies such as the South-Central Branch of the American Society for Microbiology, the Mississippi Academy of Sciences, and the Mississippi BIO Association. Dr. Elasri has also assumed several administrative leadership positions that involved leading teams of faculty and staff with different backgrounds, developing strategic plans, and working with various constituencies at different institutions. In 2006, Dr. Elasri took on the administrative role of Program Coordinator and co-PI of the Mississippi INBRE program which is funded by NIH to augment biomedical research in the state



Gary Rankin, PhD

WV-INBRE Principal Investigator, Professor and Chair, Department of Pharmacology
Marshall University Joan C. Edwards School of Medicine

Dr. Rankin received his B.S. degree in Chemistry from the University of Arkansas at Little Rock in 1972, and his Ph.D. degree in Medicinal Chemistry from the University of Mississippi in 1976. He served as Postdoctoral Fellow in Pharmacology at the Medica
