

The Institutional Development Award Program (IDeA) and the Experimental Program to Stimulate Competitive Research (EPSCoR) make important contributions in promoting basic, clinical and translational research, training the next generation of investigators and promoting economic development in regions that traditionally have not received the lion's share of federal funding. These programs have paid real dividends in New Mexico by encouraging young people to pursue careers in healthcare and biomedical research.

For additional information on IDeA and EPSCoR programs in New Mexico, please contact **Richard S. Larson, MD, PhD**. Dr. Larson is the Executive Vice Chancellor and Vice Chancellor for Research at the University of New Mexico Health Sciences Center. He can be reached at rlarson@salud.unm.edu or **505-272-6950**.

The National Institutes of Health IDeA Program in New Mexico

Growing research and innovation, supporting education and fostering public health

New Mexico IDeA Networks of Biomedical Research Excellence (NM-INBRE)

Principal Investigator: Shelley L. Lusetti, PhD

**Associate Professor, Department of Chemistry and Biochemistry
New Mexico State University**

NM-INBRE supports biomedical and behavioral research statewide, advances understanding of disease and treatments, delivers cohesive undergraduate and graduate training programs and grows and sustains a competitive, biomedical research base in New Mexico. It also provides access to research-related resources for faculty and students, such as biomedical instrumentation, sequencing, bioinformatics, and other technical services, promotes community engagement research, addressing health disparities in medically underserved areas, such as native communities. NM-INBRE collaborates with INBRE programs in other states to build a nationwide, NIH-funded multi-disciplinary research network. Over the past 17 years, NM-INBRE has funded 74 faculty investigators across the state, mentored and supported faculty (resulting in 47 successful tenure or promotion applications), published 553 scientific research publications and offered 1,762 research presentations by faculty and students at national and international meetings. Through the NM-INBRE Summer Experience (NISE), 55 New Mexico students have received intensive summer research training since 2015. NM-INBRE has introduced more than 293 American Indian college students to biomedical research.

Multimodal Imaging of Neuropsychiatric Disorders (MIND) Research Network (CoBRE P20 Phase 2)

Principal Investigator: Vince Calhoun, PhD

**Distinguished Professor, Departments of Electrical and Computer Engineering
Mind Research Network / University of New Mexico**

The Mind Research Network (MRN) is an independent non-profit organization focused on imaging technology and its emergence as an integral element of neuroscience investigation. In the MIND phase 2 COBRE, multimodal imaging techniques are used to study the neuromechanisms of psychosis and mood disorders, including bipolar disorder, schizophrenia and depression including several brain stimulation studies. MRN houses outstanding imaging resources: a 306 channel Elekta Neuromag MEG system, a state-of-the-art high-density EEG lab, an in-house 3T Siemens Trio scanner, and a mobile research 1.5T Siemens scanner as well as an advanced neuroinformatics suite called COINS (<http://coins.mrn.org>). The MIND COBRE offers cores in multimodal data acquisition, algorithm and data analysis, statistics and neuroinformatics, and clinical assessment and mentoring.

Autophagy, Inflammation and Metabolism (AIM) in Disease Center (CoBRE P20 Phase 1)

Principal Investigator: Vojo Deretic, PhD

**Chair, Department of Molecular Genetics and Microbiology
University of New Mexico School of Medicine**

The Autophagy, Inflammation, and Metabolism (AIM) Center is centered on the study of autophagy, a biological process that potentially holds the key to treating a spectrum of diseases, especially where it intersects with inflammation and metabolism. The center supports both junior and senior investigators and promises to grow into an internationally-known center through its scientific advances. The AIM will host national and international activities, promoting collaborations and providing career opportunities.

Integrative Program in CNS Pathophysiology Research (CoBRE P30 Phase 3)

Principal Investigator: Jim Liu, PhD

**Professor, Department of Pharmaceutical Sciences
University of New Mexico College of Pharmacy**

The Biomedical Research and Integrative Neuroimaging Center is a multimodal integrative neuroimaging facility for CNS pathophysiology research at the UNM Health Sciences Center. Established in 2001 with the support from a NIH COBRE Phase 1 grant, UNM's BRaIN Center houses a globally unique assemblage of imaging technologies for in-vivo and in-vitro studies – magnetic resonance imaging, electron paramagnetic resonance spectroscopy and imaging and confocal laser scanning microscopy. The facilities are open to all researchers, including those who aren't studying neurological related diseases.

Center for Evolutionary and Theoretical Immunology (CoBRE P20 Phase 3)

Principal Investigator: Eric Samuel Loker, PhD

**Distinguished Professor, Department of Biology
University of New Mexico**

CETI supports core facilities in molecular biology (with Illumina and other sequencing technologies), cell biology (imaging and cell sorting capabilities) and controlled environments (for specialized maintenance of research organisms). CETI investigators have played integral roles in developing and interpreting genome projects for nontraditional organisms and, among many other activities, are actively pursuing deeper understanding of mechanisms of intracellular survival of *Toxoplasma* parasites, transmission of human schistosomiasis in Africa, and evolution and diversification of immune system function in non-traditional models like snails, lungfish, monotremes and marsupials.

Center for Brain Recovery and Repair (CoBRE P20 Phase 1)

Principal Investigator: C. William Shuttleworth, PhD

**Regents' Professor, Department of Neurosciences
University of New Mexico School of Medicine**

Brain injury survivors often endure life-long disabilities that span a spectrum of deficits and which are associated with enormous individual and societal costs. There is an urgent need to develop effective interventions that can improve cognitive and motor function, as well as methods that can track individual recovery paths to begin to personalize intervention for the range of symptoms that follow brain injury. The Center for Brain Recovery and Repair will bring provide investigators with centralized facilities and resources to collaborate on interventions that promote cellular repair of damaged brain and recovery of function.

**Mountain West Clinical Translational Research – Infrastructure Network
(NIH/National Institute of General Medical Sciences IDeA CTR Award)**

Principal Investigator: Parvesh Kumar, MD

**Senior Associate Dean for Clinical Research, School of Medicine
University of Nevada, Las Vegas**

Support Center:

**UNM Clinical & Translational Science Center
Richard S. Larson, MD, PhD, Principal Investigator
Executive Vice Chancellor
University of New Mexico Health Sciences Center**

The Mountain West Research Consortium brings together scientists from Alaska, Hawaii, Idaho, Montana, Nevada, New Mexico and Wyoming to facilitate cross-institutional collaborations between basic and clinical researchers, develop data-sharing tools, enhance support for junior faculty to pursue clinical and translational research projects, and create a summer research program, the Undergraduate Pipeline Network. The member institutions were funded by NIH's IDeA program in 2013 to build a Clinical and Translational Research – Infrastructure Network (CTR-IN) led and coordinated by the University of Nevada, Las Vegas. The CTR-IN enhances Mountain West Research Consortium initiatives through mentoring to help investigators pursue clinical and translational research. It also coordinates funding for pilot grants and provides educational support for study design, data management, epidemiology, biostatistics and informatics.