EPSCoR/IDeA
Experimental Program to Stimulate Competitive Research
Institutional Development Award Program
www.epscorfoundation.org
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Basic Principles:
• Stimulate, not support
• Infrastructure development
• State-based effort
• State-federal partnership
• “Quality in context”

Agencies:
• National Science Foundation- $115 M
• National Institutes of Health- $220.5 M
• Department of Defense- $17 M
• Department of Energy- $15 M
• NASA- $15.5 M
• USDA- $19.2 M
Catalytic Impact of EPSCoR
EPSCoR/IDeA Impacts on the MUS

- The MUS has been continuously funded since 1980 by NSF EPSCoR.
- Current award through July 2010 is funded at $3 million per year for three years (no match required).
- Match/cost share funding has been a significant issue over the three decades of support (2001 through 2007 MBRCT funded match).
- NSF EPSCoR Research Infrastructure Improvement (RII) program has been a major factor in the growth of the MUS research programs.
- The NSF EPSCoR RII has enabled the MUS to recruit outstanding faculty as well as improve other components of research infrastructure.
- **16 MSU** and **7 UM** faculty recruited with NSF EPSCoR funds received NSF CAREER Awards.
Accomplishments of Current Award

• 19 new faculty recruited with assistance from NSF EPSCoR
• 35 Graduate student stipends funded
• 193 Undergraduate students supported
• 12 Multi-investigator awards funded
• 6 Tribal college research awards
• More than 7,500 K-12 students reached through the NSF EPSCoR outreach program
New NSF EPSCoR Proposal Submitted
October 2009

• The proposal is required to fit the focus of a state-wide Science and Technology Plan, MUS Science & Technology Advisory Committee (MUSSTAC) was created by OCHE in fall of 2008 to develop the plan

• MUSSTAC S&T Plan identified five core research focus areas

• Through a competitive process two of these focus areas were selected by MUSSTAC to be the themes for the new proposal; Energy Sciences & Engineering, Environmental & Ecosystem Science

• If approved, research in these areas will be funded at $4 million per year for five years (20% cost share required)
Goals of the new NSF RII Proposal

• Build interest and capacity of students in Montana in environmental and energy sciences and engineering with an emphasis on Native American participation
• Enhance research processes through improved cyberinfrastructure
• Build a sustainable collaborative research community in Montana that connects basic science in energy and environmental sciences & engineering with applied science and innovation in the state
• Enhance the level of interdisciplinary and multi-investigator environmental and energy science & engineering research programs
• Develop scientific and non-technical educational products for wide dissemination of research findings
Montana INBRE II
IDEA Network for Biomedical Research Excellence

$17.5 million grant (2009-20014) from the National Institutes of Health to enhance biomedical education and research capacity at Montana’s academic institutions, goals of MT INBRE are to:

• Increase number of infectious disease, environmental health, and health disparities investigators to sustain productive and competitive research at Montana’s academic institutions

• Develop and support community-based participatory research (CBPR) initiatives led by Montana tribal colleges to reduce health disparities in Native American communities
Montana INBRE II
Goals, continued...

• Strengthen the state’s biomedical and bioinformatics infrastructure

• Expand research opportunities for students and enhance biomedical curricula from K-12 through college and graduate education to strengthen the pipeline to careers in health research
Montana INBRE II: 
Research Projects Across Montana

- **Carroll College**: infectious disease (1 project)
- **Montana State University-Billings**: infectious disease (2 projects)
- **Montana Tech of the UM**: infectious disease (2 projects), education outreach (1 project)
- **Rocky Mountain College**: education outreach (1 project)
- **The University of Montana-Western**: infectious disease (2 projects)
- **Blackfeet Community College**: CBPR and health disparities (1 project)
- **Chief Dull Knife College**: infectious disease (1 project)
- **Fort Belknap College**: infectious disease (1 project)
- **Fort Peck Community College**: CBPR and health disparities (1 project)
- **Little Big Horn College**: infectious disease (1 project), CBPR and health disparities (1 project)
- **Salish Kootenai College**: education outreach (1 project), CBPR and health disparities (1 project)
- **Stone Child College**: CBPR and health disparities (1 project)
- **The University of Montana**: education outreach
- **MSU**: Developing health disparities research in Nursing, Social, and Behavioral Sciences
Montana INBRE:
Economic, Educational, and Research Impact

Across Montana, MT INBRE has increased educational choices, created jobs, produced additional revenues in communities and developed the biomedical industry:

• Over $20 million in research support has been distributed throughout Montana since 2004
• At least 57 new jobs were created by INBRE (2004-2008)
• $15 million in additional grants related to INBRE projects was received during the 2007-2008 academic year
• 220 undergraduate students and 119 graduate students received research awards (2004-2008)
Montana INBRE:
Economic, Educational, and Research Impact, continued...

- INBRE developed research culture and undergraduate research opportunities at Montana academic institutions where biomedical research did not previously exist
- More than 120 Tribal College Students have participated
- Faculty Networking Forums – 7 statewide meetings held at tribal colleges focused on cross-cultural education and developing research infrastructure (60 – 100 participants each)
Centers of Biomedical Research Excellence (COBRE)

• COBRE Objective: “to strengthen an institution's biomedical research infrastructure through the establishment of a thematic multi-disciplinary center and to enhance the ability of investigators to compete independently for complementary NIH individual research grants or other external peer-reviewed support”

• COBRE Awards are five-year awards each funded at $1.5 million direct costs per year. The MUS currently has four COBRE’s.

• Two COBRE Awards at UM in the areas of:
  – Neuroscience
  – Environmental Health

• Two COBRE Awards at MSU in the areas of:
  – Infectious disease
  – Systems Biology
Building Competitive Research in Montana State, Federal and Private partnerships

• Competitive Faculty
  – Compensation for recruitment and retention
  – “Start-up” package

• Competitive Graduate Students
  – Stipends
  – Resident tuition status

• Competitive Infrastructure
  – Modern facilities
  – Core instrumentation
  – Technical support
Enrollment in Graduate Programs Lags Behind Peers

Percent of Higher Education Enrollment in Graduate Programs
Unduplicated Headcount at Public & Private Institutions, Fall 2006

source: NCES, IPEDS Fall Enrollment Survey

Montana University System