

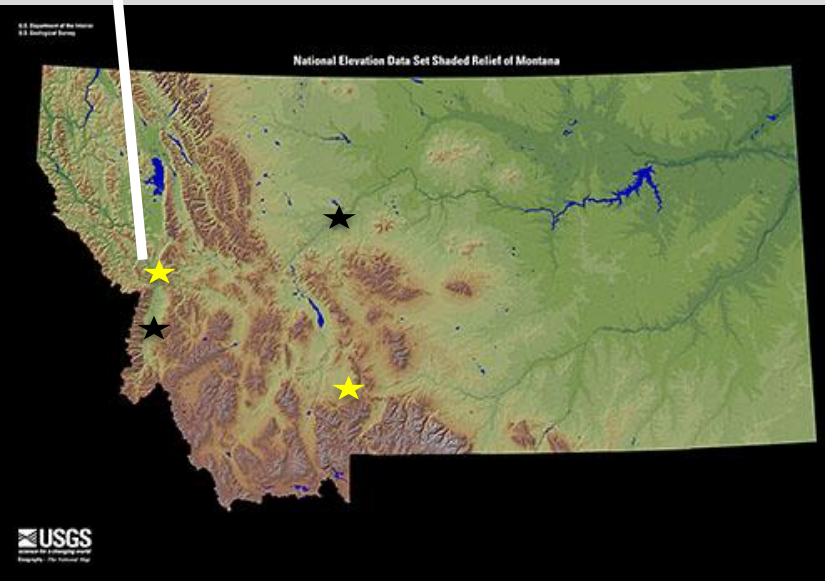
IDeA Program Institutions In Montana

University of Montana, Missoula

**COBRE Center for Structural
& Functional Neuroscience**
IDeA Funding 2000 - 2009

**COBRE Center for Environmental
Health Sciences**
IDeA Funding 2002 - Present

**COBRE Center for Biomolecular
Structure & Dynamics**
IDeA Funding 2011 - Present



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Montana State University, Bozeman

**COBRE Center for Zoonotic &
Emerging Infectious Diseases**

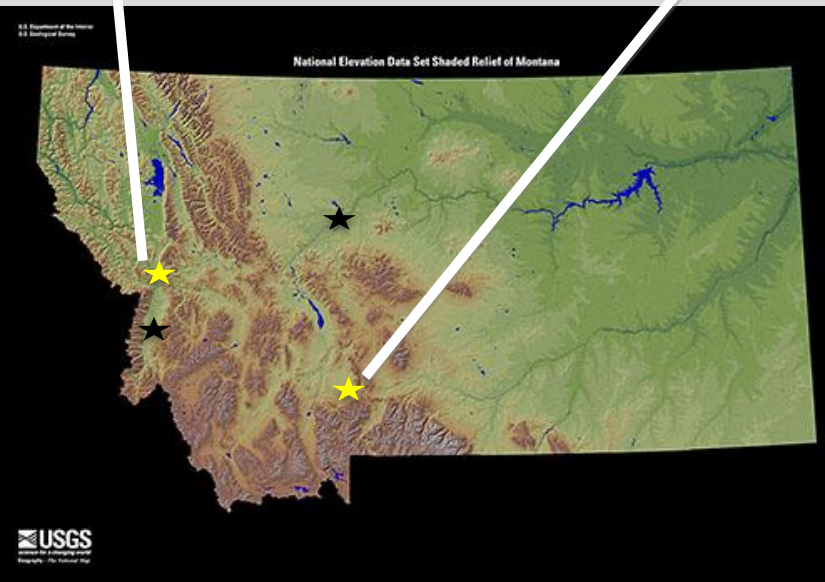
IDeA Funding 2004 - Present

**COBRE Center for the Analysis of
Cellular Mechanisms & Systems Biology**

IDeA Funding 2009 - Present

Montana INBRE

IDeA Funding 2002 - Present



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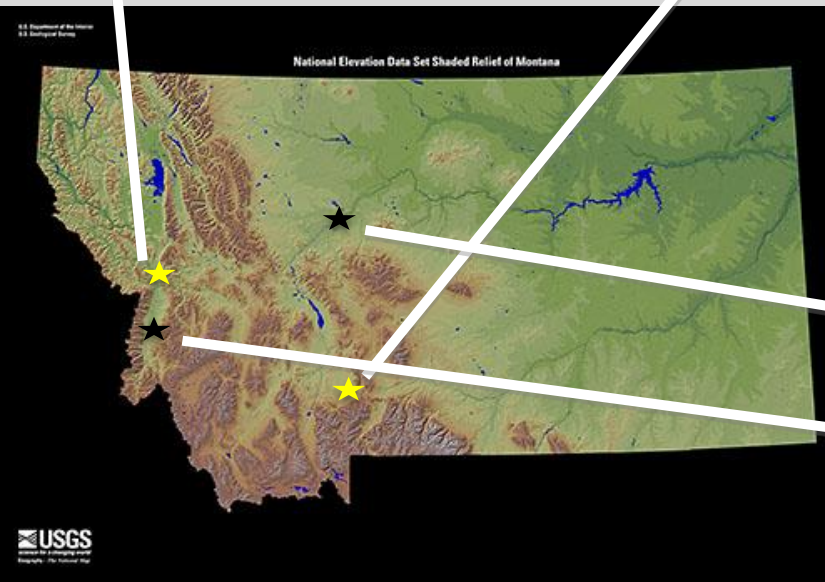
Montana INBRE

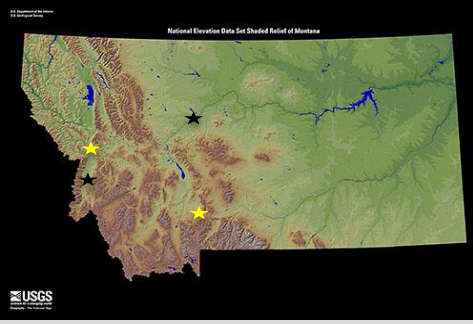
IDeA Funding 2002 - Present

Collaborative Research Institutions

McLaughlin Research Inst., Great Falls

NIAID Rocky Mountain Labs., Hamilton





COBRE Program Goals In Montana

Primary Goal & Expectation:

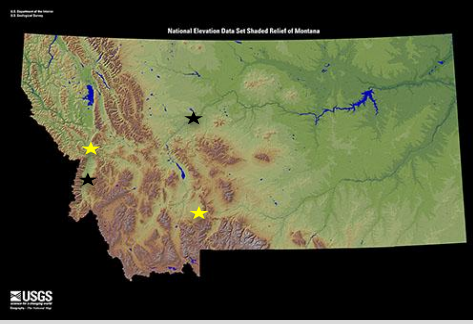
To Increase the **Quantity** and **Quality** of Biomedical Research

Anticipated Benefits:

- Increase #'s of Research Competitive Faculty & Lab Groups
- Increase Grant Funding
- Increase Publications

Most Significant Impact:

Increase Critical Mass & Infrastructure



COBRE Program Goals In Montana

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To Increase the **Quantity** and **Quality** of Biomedical Research

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Most Significant Impact:

Increase Critical Mass & Infrastructure

Increase in numbers hastened the embrace of a research culture

COBRE Themes facilitated the development of depth in areas of strength

Increased collaborative opportunities, networks and grants statewide

Prioritized Core development, usage, and sharing

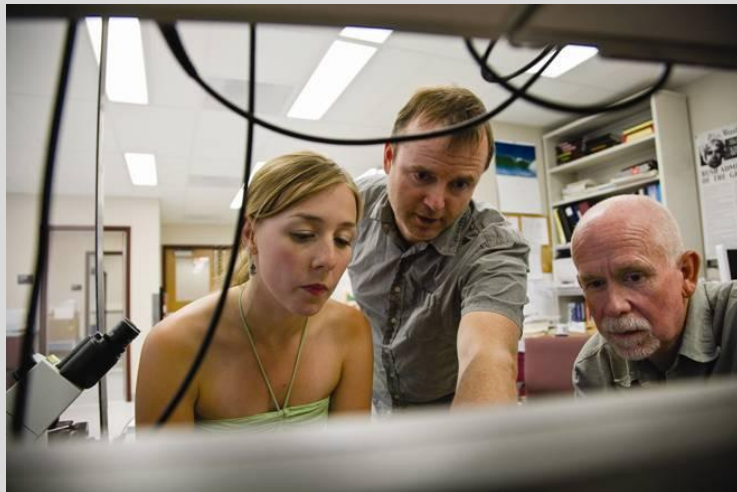
COBRE Program Impact In Montana

Increased Critical Mass

Anticipated Benefits:

- Increase #'s of Research Competitive Faculty & Lab Groups
- Increase Grant Funding
- Increase Publications

University of Montana COBRE Center for Structural & Functional Neuroscience



FY 1-10: **Hired 7 new faculty**

FY 5-10: COBRE Funding: \approx \$10,760,000

Leveraged non-COBRE Funding: \approx \$40,547,000

FY 1-5: 59 publications

FY 6-10: **148 publication**

COBRE Program Impact In Montana

Increased Critical Mass

Anticipated Benefits:

- Increase #'s of Research Competitive Faculty & Lab Groups
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- Increase Publications

University of Montana COBRE Center for Environmental Health Sciences

FY 1-10: Hired 6 new faculty

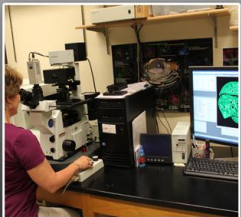
FY 5-10: COBRE Funding: \approx \$10,769,313

Leveraged non-COBRE Funding: \approx \$24,131,997*

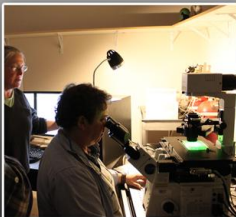
**Does not include non-CEHS leveraged funding*

FY 1-5: 102 publications

FY 6-10: 176 publication



Fluorescence
Cytometry Core



Molecular Histology and
Fluorescence Imaging Core



Inhalation and
Pulmonary Physiology Core

COBRE Program Impact In Montana

Increased Critical Mass

Anticipated Benefits:

- Increase #'s of Research Competitive Faculty & Lab Groups
- Increase Grant Funding
- Increase Publications

Montana State University COBRE Center for Zoonotic & Emerging Infectious Diseases



FY 1-10: **Hired 7 new faculty**

FY 4-9: COBRE Funding: \approx \$10,354,000

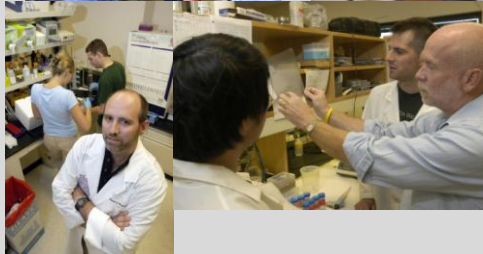
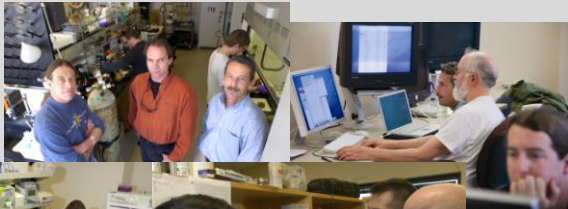
Leveraged non-COBRE Funding: \approx \$52,085,000

FY 1-2: 45 publications

FY 7-8: **75 publication**

“Value Added” Impact of COBRE Centers

**Serves as a Hub for
Additional Growth**



COBRE Program Impact In Montana

- **Additional recruitments beyond “COBRE” hires**

CSFN has grown from about 8 investigators to more than 40 statewide

- **Development of New Space**

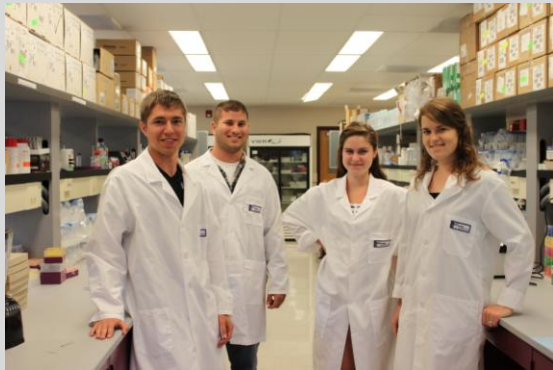
Presence of CSFN and CEHS drove the construction of a new research building

- **Strengthened Translational and Clinical Research Efforts with Regional Hospitals**

Enhanced physician recruitment & Health Disparity research

“Value Added” Impact of COBRE Centers

Enhanced Training Opportunities

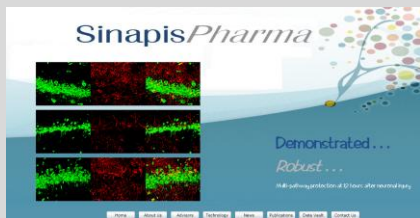


COBRE Program Impact In Montana

- **New Graduate Programs**
Toxicology
Neuroscience
- **Summer Research Experiential Training programs**
CEHS (R25-funded) & CSFN
Undergraduate Summer Research Program
- **Additional Mentors for UM Diversity Programs**
More opportunities for Native American students
- **New Undergraduate Programs**
Developing new minors in neuroscience and toxicology

“Value Added” Impact of COBRE Centers

Economic Development, Job and Business Creation



UM Tech Transfer –Brain Imaging Company, Rio Pharmaceuticals Launched

Wednesday, 01 December 2010 06:42



MISSOULA – Two new patents for brain imaging agents discovered at The University of Montana have produced a company called Rio Pharmaceuticals, which offers specifically designed molecules to image select biomarker proteins in the brain.

The new technology may help understand, diagnose and follow new therapies for neurodegenerative disorders such as Alzheimer's and Parkinson's diseases and neuropsychiatric conditions such as depression.



COBRE Program Impact In Montana

- **Increase in Critical Mass has led to new “high-tech” job creation**
- **New State Support**
CSFN matching grant for economic development from the Montana Department of Commerce
- **Greater Private Sector Collaborations**
SBIR Grants, Shared use of Cores, on-campus incubator lab
- **Spin-off Companies**
5 New companies started out of CSFN and CEHS over past 5 years

“Value Added” Impact of COBRE Centers

**Increased Outreach, Pipeline
Training and Scientific Literacy
for Biomedical Research**



COBRE Program Impact In Montana

- **K-12 Outreach**

CSFN R25-funded NINDS STEM

“Big Sky Brain Project”

CEHS SEPA NIEHS Project

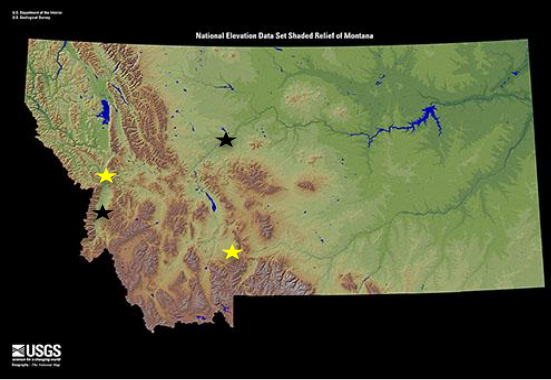
“Clean Air, Healthy Homes”

- **Community Based Research**

*Rural populations, Native American
populations, Unique environments*

- **Public Lectures & Community
Presentations to Increase Scientific
Literacy**

- **Patient Education with Hospital
Institutes**



COBRE Program Impact In Montana

Demonstrated Benefits

**Increased #'s of Research
Competitive Faculty & Lab Groups**

Increased Grant Funding

Increased Publications

“Value Added” Impact of COBRE Centers

**Serves as a Hub for
Additional Growth**

**Enhances Training
Opportunities**

**Economic Development, Job
and Business Creation**

**Increases Outreach, Pipeline
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