

Research & Innovation: Montana

RESEARCH AMERICA

Montana Health Facts

- Alzheimer's disease affected 21,000 Montanans in 2010.¹
- Cancer was the leading cause of death between 2005 and 2009, killing more than 9,500 Montanans.²
- Heart disease was the second leading cause of death in Montana, causing more than 9,000 deaths from 2005 to 2009.²
- Health challenges include low immunization coverage and a high occupational death rate³

National Institutes of Health (NIH)-funded research at the McLaughlin Research Institute

- Important discoveries in neurodegenerative diseases like Alzheimer's disease, Prion disease and Parkinson's disease.⁴
- Research to improve recovery from hearing loss.⁴



McLaughlin Research Institute
for Biomedical Sciences

NIH-funded research at Montana State University (MSU)

- Discovery of a compound to eliminate biofilms on medical equipment⁵, which will aid in preventing infections in hospitals and other public settings.⁶
- MSU is developing therapies for lung damage from pneumonia⁷, which along with Influenza killed more than 900 Montanans between 2005 and 2009.²

Growth of the bioscience industry in Bozeman

- LigoCyte Pharmaceuticals works with MSU to create drugs that fight inflammation.⁸
- Microbion partners with MSU to develop its effective compound for biofilm removal, which is necessary to sterilize hospital equipment.⁹



National Institutes of Health

NIH grants lead to new discoveries at the University of Montana (UMT)

- Research to repair damaged blood vessels in collaboration with the International Heart Institute, another Montana research center.¹⁰
- UMT is exploring novel treatments for Alzheimer's disease.¹¹

Biotechnology companies formed

- Promiliad Biopharma, a startup company developed through UMT, develops antifungal and antibacterial products to alleviate the spread of contamination and infection.¹²
- Rocky Mountain Biologicals, a startup from UMT, develops technology for blood analysis and provides products for research use.¹³



National Institute of Allergy and
Infectious Diseases

The NIH's Rocky Mountain Labs

- The National Institute of Allergy and Infectious Diseases of the NIH has provided a research base in Montana, focusing on treatments and cures for infectious diseases.¹⁴
- Employs 400 Montanans.¹⁴

Billings is home to NIH-funded clinical research

- The Montana Cancer Consortium is a nonprofit, NIH funded institute that sponsors clinical trials for new cancer treatments.¹⁵
- The Montana Health Research Institute is a nonprofit institute that conducts clinical trials for drugs to treat diseases such as Type II Diabetes and high blood pressure.¹⁶

[1. Alzheimer's Association- Montana](#)
[2. Montana Health and Human Services](#)
[3. America's Health Rankings](#)
[4. MRI Annual Report 2009-10](#)
[5. Montana State – Biofilm](#)

[6. Medscape – Biofilms](#)
[7. Montana State – Pneumonia](#)
[8. MATR News – LigoCyte](#)
[9. MT.gov – MSU & Microbion](#)
[10. UMT – Intl Heart Institute](#)

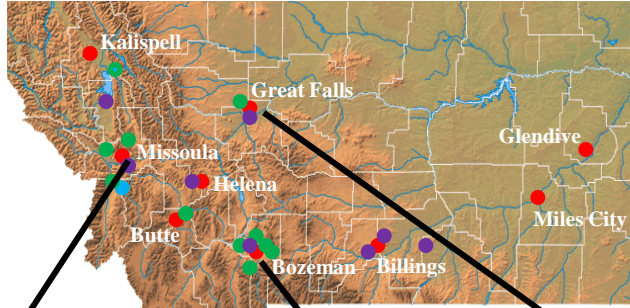
[11. NIH Reporter](#)
[12. OHIO- Promiliad](#)
[13. Rocky Mountain Biol.](#)
[14. Rocky Mountain Labs](#)

[15. Montana Cancer Consortium](#)
[16. Montana Health Research Inst](#)

Why is funding from the National Institutes of Health important?

- ✓ Supports university and independent research institute research
- ✓ Trains new scientists
- ✓ Creates cures, preventions and treatments
- ✓ Builds the biosciences industry
- ✓ Keeps Montana competitive

Bioscience Centers in Montana



University of Montana, Rocky Mountain Labs, Missoula and Hamilton

Montana State University, Bozeman

McLaughlin Research Institute, Great Falls

● Cities ● Bioscience company
● Universities, Colleges and Institutes

Source: Geology.com

Investing in Montana's Future

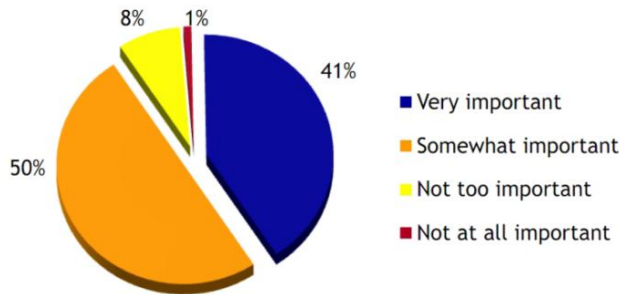
- Montana bioscience institutions directly employ more than 1,700 Montanans and support more than 5,100 jobs state-wide.*
- The average annual salary for a Montana biotech employee is \$49,500.* (The average annual state-wide salary is \$36,000.**)
- Bioscience employees account for 44% of Montana's manufacturing work-force.#
- \$54 million in NIH funding in 2010 supported approximately 1,000 in-state jobs.##
- Montana benefits from the NIH Institutional Development Awards (IDeA) programs, which provide opportunities for the state to greatly expand in bioscience.***
- Montana start-up bioscience companies have received millions in NIH Small Business Innovation Research funds to develop pharmaceuticals and health products for the market.****

Sources: * MT.gov, #Montana Bioscience Alliance, ##UMR Report, 2011, **Department of Labor, ***National Center for Research Resources, ****Grants.NIH.gov- SBIR/STTR data

"Our current times require that not just scientists speak up, but that all of us who see the long-term value of science voice a call to continue making our national investment in research a priority. Research is the key to Montana's future." – Dr. Richard Bridges, University of Montana, Billings Gazette, April 2011

Most Americans Think R&D is Important to State Economies

How important do you think research and development is to your state's economy?



Source: Your Congress-Your Health Poll, March 2011, Charlton Research Company for Research!America