



# Montana University System EPSCoR Montana

*Building Research and Science Education Infrastructure for the State and the Nation*

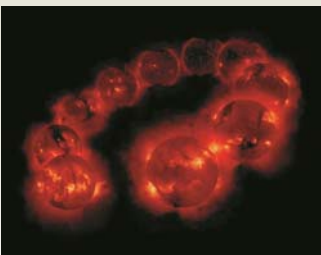
## EPSCoR Experimental Program to Stimulate Competitive Research



Montana's university scientists develop biofuels from algae



Students and faculty at Montana's Tribal Colleges lead water resource research



Images of the sun using Montana developed tools for the solar telescopes

**EPSCoR Montana** is a federal and state partnership program targeted at increasing academic research and development. The program focuses on building research infrastructure and producing quality research programs within the context of Montana's needs, unique expertise, and resources.

### Areas of Focus:

#### ❖ **Science and Engineering**

EPSCoR funded research is discovering new enzymes for use in bioenergy production, and researchers are advancing bioenergy production from algae and microorganisms found in high temperature environments. Additionally, EPSCoR funded research has developed a new class of nanoparticles for use as catalysts for sunlight driven hydrogen production. Researchers are also developing other nanoparticles for protection against flu, SARS and other respiratory viral infections.

#### ❖ **Water Resources**

EPSCoR researchers are developing a comprehensive understanding of water resource dynamics in Montana's 'Crown of the Continent' for America's three major river systems.

#### ❖ **Workforce Development**

Montana EPSCoR helps grow Montana's future science, math, and engineering workforce. In addition to providing opportunities for our own Montana University System students, EPSCoR connects Montana's rural K-12 schools to university science to encourage youth interest. Our EPSCoR program also works with Montana's seven Tribal Colleges to engage Native American students in research projects that have local relevance on the respective reservations.

#### ❖ **Space**

EPSCoR researchers are developing tools used in Solar telescopes to better understand the physics behind the activity on the sun's corona, which drives space weather.

#### ❖ **Incubator for Science and Engineering Start-up Companies**

EPSCoR has funded over 100 Phase 0 and Phase 1.5 Small Business Innovation Research (SBIR) grants to companies in Montana for early-stage research and development on projects with commercial applications. Many of those grants have led to new small businesses in Montana and the designation of Montana as one of America's top 'Entrepreneurial States' for small business development.