

NASA EPSCoR Program

NASA's Experimental Program to Stimulate Competitive Research (NASA EPSCoR), authorized by Congress in 1993, establishes partnerships between government, higher education and industry to improve states' research infrastructure, research and development capacity, and national research and development competitiveness in fields of importance to NASA and to related aerospace and earth systems industries.

NASA EPSCoR awards support development of research and technology, faculty and graduate students. Idaho receives \$125,000 core funding annually to engage faculty and graduate students in aerospace-related research activities with NASA scientists and engineers. Dr. Joseph D. Law, associate professor of electrical and computer engineering, is Idaho's NASA EPSCoR director.

Idaho NASA EPSCoR programs promote research and economic development in Idaho, including workforce development in technical fields, and provide educational opportunities for minority students and students in rural areas. All Idaho research projects are designed to increase and enhance the state's workforce in science and technology fields.



In addition, the programs encourage the development of research expertise and infrastructure allowing Idaho-based researchers to compete nationally in areas of strategic importance to the NASA mission.

Accomplishments

Idaho has received funding from the National NASA EPSCoR major research competition, which supports three-year, interdisciplinary, multi-institutional research projects. Idaho holds five major research awards, ranking first among NASA EPSCoR jurisdictions.

Idaho NASA EPSCoR researchers are

- Developing technologies to treat biological contaminants on the surfaces of Mars-bound spacecraft, with the NASA Jet Propulsion Laboratory.
- Developing miniaturized propulsion systems for the growing market of nano-satellites, with the Jet Propulsion Laboratory.
- Working to understand the molecular details of cellular sensory reception and bone homeostasis and building Idaho's education capacity in the area of bone loss, with NASA's Ames Research Center and Johnson Space Center.
- Improving estimates of snow-water equivalency from microwave remote sensing, with the Jet Propulsion Laboratory and NASA's Goddard Space Flight Center.

- Investigating the potential for microorganisms residing on Mars-based spacecraft to inhabit Mars and pose planetary protection challenges, with the Jet Propulsion Laboratory

Other program benefits include patents, publications, presentations and advanced degrees. Collaborative studies with industry contribute to Idaho economic development. Workforce development through the education of diverse students in STEM fields is a primary goal. In the past three years, funding has been provided for 34 research projects and 10 graduate fellowships, of which three supported Hispanic graduate students who earned advanced degrees.

Consequences of Reduced Funding

The relatively small investment in the NASA EPSCoR program provides a level of funding for researchers and students in Idaho that translates into more research dollars in the future. Cuts in the funding of the national NASA EPSCoR Program usually result in increased competition among more researchers in more states, and for less money.

A reduction in funding will mean less aerospace-related projects in the state, less leveraging of outside funding, and fewer publications, patents and advanced degrees awarded.

For more information, please contact:

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