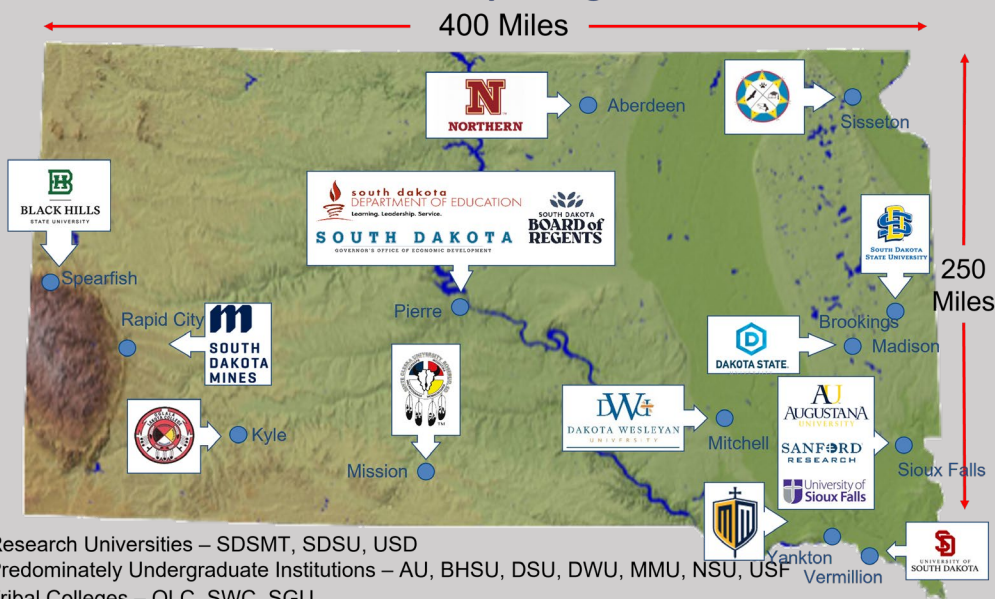


## EPSCoR Participating Institutions



## Established Program to Stimulate Competitive Research (EPSCoR)

Six federal agencies for EPSCoR and NIH INBRE (IDeA Network of Biomedical Research Excellence) administer programs supporting the development of research infrastructure, STEM education and knowledge-based economic development.



## EPSCoR Impact on South Dakota

### National Science Foundation (NSF)

Mel Ustad, Project Director  
[Mel.Ustad@sdbor.edu](mailto:Mel.Ustad@sdbor.edu)

#### NSF Track-1

Statewide research infrastructure, STEM education and economic development projects  
 Current 2019-23 award — \$20M  
 1989-2023 — 10 awards — \$90M

#### NSF Track-2

Collaborative research projects  
 5 awards — \$17M  
 3 Active awards — \$14M

#### NSF Track-4

Early career research fellowships  
 10 awards — \$1.7M  
 2022-2023 awards — \$600,227

#### Co-Funding

EPSCoR co-funds awards with other NSF directors  
 2021 — \$6M

### National Institutes of Health (NIH)

Victor Huber  
[Victor.Huber@usd.edu](mailto:Victor.Huber@usd.edu)

#### IDeA Network of Biomedical Research Excellence (INBRE)

Statewide core research infrastructure and summer research support  
 2001-22 — \$63.4M  
 2022 — \$3.7M

#### COBRE (Centers of Biomedical Research Excellence)

2000-2021 — \$91M  
**3 Centers** — 2021 — \$5.5M  
 • Center for Cancer Biology  
 • Center for Pediatric Research  
 • Transdisciplinary Approaches to American Indian and Rural Population Health Research

### National Aeronautics & Space Administration (NASA)

Ed Duke  
[Edward.Duke@sdsmt.edu](mailto:Edward.Duke@sdsmt.edu)

#### NASA Research Infrastructure Development (RID) awards

Supporting NASA EPSCoR core activities in South Dakota  
 2007-2022 — \$2.7M  
 2021 — \$150,000

#### Major Research Awards

\$750,000 3-year research awards  
 2007-2021 — 13 awards — \$9.75M

#### NASA Space Grant

Supports STEM Education  
 2005-2022 — \$12.9M  
 2022 — \$800,000

## Research Impact

NSF EPSCoR Track-1 supports new faculty hires.

- Grant Crawford, hired in 2011, is currently leading a five-year, \$11.2 million Department of Defense research project.
- Alevtina (Alla) Smirnova, hired in 2011, is leading a \$4.5 million, NSF-funded Industry University Collaborative Research Center (IUCRC) and a \$3.9 million Governor's Research Center.

EPSCoR Researcher team innovations were the basis for three South Dakota Governor's Giant Vision Competition Business Plan winners and successful startup companies.

South Dakota Governor's

# GIANT VISION

Competition

## STEM Education Impact

NIH INBRE supports 55 undergraduate students doing summer research annually, with a total of 1,100 students supported from 2001-2021.

NASA EPSCoR has supported 274 graduate students and 239 undergraduate students doing research — 2007-2021

225 teachers (including 6 pre-service teachers) from 170 schools participated in the 2021 summer teacher workshops, training them to implement new STEM education modules in their classroom.

*(Photo on right):* Darin Newton is a Belle Fourche middle school science teacher who piloted one of the new STEM education curriculum units.



## Economic Development Impact

Dakota Seeds Co-Funding Internships — 2008-2021

- 277 Companies participated, hiring 30 percent of interns on a full-time basis.
- 1,596 Internships supported

NSF EPSCoR Co-Funding Small Business Innovation Research (SBIR) Awards: 17 South Dakota companies won 35 NSF SBIR awards totaling \$9.5 million

*(Photo on right):* Fomeno, (a platform to connect thrift shoppers with online stores for specific items), was the 2021 student entry of Brigit Blote and Payton Ryz of the University of South Dakota in the South Dakota Governor's Giant Vision Student Plan Competition. Fomeno went on to win a \$100,000 international Hult Prize for entrepreneurship.

