## Innovation at Work
### South Dakota

### Total Direct and Indirect Economic Output of the Biopharmaceutical Sector

<table>
<thead>
<tr>
<th>Amount</th>
<th>371.2 million</th>
</tr>
</thead>
</table>

### Total Employment Supported by the Biopharmaceutical Sector

<table>
<thead>
<tr>
<th>Employment</th>
<th>2,103</th>
</tr>
</thead>
</table>

### Local Perspective:
**Sioux Falls, SD**

> Wendy Giebink, Executive Director of NAMI South Dakota, grandmother to Jackson, 16, living with depression and anxiety

> “Medical research is important to me because I want my grandson to have access to mental health medications that are safe and effective. He has been hospitalized six times in the last two years. I cannot lose him to suicide.”

### South Dakotans who Died from Heart Disease in 2014

<table>
<thead>
<tr>
<th>Number</th>
<th>1,704</th>
</tr>
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</table>

### Total NIH Award Funding (FY16)

<table>
<thead>
<tr>
<th>Amount</th>
<th>22 million</th>
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### Research in the Mount Rushmore State

#### University of South Dakota (USD), Vermillion, SD
National Institutes of Health (NIH)-funded USD researchers are exploring the potential therapeutic use of ubiquitin, a protein that destroys other proteins, to increase nerve cell recovery following a stroke.

#### Galera Therapeutics, Watertown, SD
Galera Therapeutics is conducting phase II clinical trials to test the safety and efficacy of a medication to prevent radiation-induced oral mucositis, a painful infection of the mouth. The medication would be administered prior to radiation therapy for patients suffering from head and neck cancers.

#### Sanford Research, Augustana College, Dana-Farber Cancer Institute, Brigham and Women’s Hospital, and University of Pennsylvania Perelman School of Medicine, Sioux Falls, SD
Led by Sanford Research, this NIH-funded collaboration is studying the relationship between ovarian cancer and the protein SUSD2. Researchers have found that higher levels of SUSD2 are associated with improved survival rates, an exciting development in efforts to combat this deadly form of cancer.

**Sources:**
- National Institutes of Health
- Pharmaceutical Research and Manufacturers of America (PhRMA)
- Centers for Disease Control and Prevention
- A Research!America Survey of U.S. Adults Conducted in Partnership with Zogby Analytics in June 2016, Sanford Research ClinicalTrials.gov