

# Innovation at Work Missouri



	<p>Total Direct and Indirect Economic Output of the Biopharmaceutical Sector</p> <p><b>\$19.3 billion</b></p>	<p>Total Employment Supported by the Biopharmaceutical Sector</p> <p><b>78,688</b></p>	<p><b>64%</b></p> <p>A majority of Americans agree that even if it brings no immediate benefits, basic scientific research that advances the frontiers of knowledge is necessary and should be supported by the federal government.</p>
<p><b>Local Perspective: Centralia, MO</b></p>	<p><i>"Members of Congress should support research because there is currently no cure or effective treatment for epidermolysis bullosa. Currently the only treatment option is wound care and pain management."</i></p> <p>Brandon and Nicole Esser, parents of Hayden, living with epidermolysis bullosa</p>	<p>Missourians with a rare disease</p> <p><b>1 in 10</b></p>	<p>Total NIH Award Funding (FY17)</p> <p><b>\$538 million</b></p>

## Research in the Show Me State

### *Washington University in St. Louis, St. Louis, MO*

The Agency for Healthcare Research and Quality (AHRQ) funded researchers at Washington University in St. Louis to study transmission and infection rates of community-associated-MRSA in children. Researchers are sampling commonly touched items, such as toys, pets and household objects to find key bacteria reservoirs and household transmission dynamics. The goal of this research is to prevent future CA-MRSA infections and save lives.

### *Pfizer and Children's Mercy Hospital, Kansas City, MO*

Pfizer is conducting phase III clinical trials at the Children's Mercy Hospital, testing the safety and efficacy of a 10 day course of hydrocortisone to treat bronchopulmonary dysplasia (BPD) in premature infants. BPD, a chronic lung disorder, affects 10,000 babies annually, most of them born prematurely.

### *Missouri University of Science and Technology, Rolla, MO*

Researchers at Missouri University of Science and Technology have developed a way to deliver breast cancer drugs more efficiently to tumor cells. They packaged the drug, doxorubicin, into "DNA packages". These DNA mechanisms entered breast cancer cells more efficiently and delivered higher concentrations of doxorubicin. This technology could eventually be used to treat difficult-to-manage breast cancer and eventually applied to other organ specific diseases.

SOURCES: NATIONAL INSTITUTES OF HEALTH (NIH), PHARMACEUTICAL RESEARCH AND MANUFACTURERS OF AMERICA (PHRMA), CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC), A RESEARCH/AMERICA SURVEY OF U.S. ADULTS CONDUCTED IN PARTNERSHIP WITH ZOGBY ANALYTICS IN JANUARY 2017, AGENCY FOR HEALTHCARE RESEARCH AND QUALITY (AHRQ), CLINICALTRIALS.GOV, MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY.