

Return on Innovation



Global health R&D delivers for Nevada



US government (USG) investment in global health R&D has delivered

\$1.3 million to Nevada research institutions*

Nevada's top global health R&D institutions by USG funding*

ORGANIZATION	FUNDING
University of Nevada, Las Vegas	\$883 thousand
University of Nevada, Reno	\$396 thousand

Neglected diseases in Nevada†

HIV diagnoses	3,764
Tuberculosis cases	808
West Nile cases	92
Malaria cases	44
Zika cases	23

Nevada industry in global health R&D

Charles River Laboratories: Reno

DX Discovery: Reno

Sanofi: Reno

Global health R&D at work in the Silver State



BATH/Patrick McKern

A team of scientists from three universities, including the University of Nevada, conducted research that uncovered how the bacteria *Shigella* causes shigellosis, a diarrheal disease that kills more than 1 million people each year. When *Shigella* bacteria invade a human host, environmental conditions stimulate a process within the bacteria that allows them to thrive. Central to this transformation are two proteins that work together to increase the bacteria's harmfulness. The team found that production of one of the proteins can be controlled separately from the other, a discovery that could lead to new treatments. For large numbers of people living in low-income countries, targeted and improved antibiotics could mean the difference between life and death. No vaccine currently exists for *Shigella*.

Nevada's top area of global health research by USG funding*



GLOBAL HEALTH R&D IS A SMART INVESTMENT FOR THE UNITED STATES‡

89¢ of every dollar the USG invests in global health R&D stays within the United States, **supporting the domestic economy.**

USG investment in global health R&D between 2007 and 2015 **generated an estimated:**

200K new US jobs

\$33 BILLION in US economic growth.

*Authors' analysis of USG investment data from the G-FINDER survey, including funding for R&D for neglected diseases from 2007–2015 and for Ebola and select viral hemorrhagic fevers from 2014–2015. Reflects USG funding received by entities in state including academic and research institutions, product development partnerships, other nonprofits, select corporations, and government research institutions, as well as self-funding or other federal agency transfers received by federal agencies located in state; but excludes pharmaceutical industry data which is aggregated and anonymized in the survey for confidentiality purposes. See www.ghtcoalition.org for full methodology.

†Based on previous analysis of the economic impact of National Institutes of Health R&D funding and author's analysis described above. See www.ghtcoalition.org for additional details.

‡Centers for Disease Control and Prevention: HIV diagnoses 2008–2016, Tuberculosis cases 2008–2016, West Nile virus disease cases 2008–2016, Malaria cases 2008–2014, Zika virus disease cases 2015–2017.

§ Source: Policy Cures Research, Global Health Technologies Coalition. Return on innovation: Why global health R&D is a smart investment for the United States. 2017.