



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

**\$73.6 million**  
to Missouri research institutions\*

**850+** new jobs  
for Missouri†

### Missouri's top global health R&D institutions by USG funding\*

ORGANIZATION	FUNDING
Washington University	<b>\$60.8 million</b>
Saint Louis University	<b>\$7.4 million</b>
University of Missouri-Kansas City	<b>\$3.6 million</b>
University of Missouri-Columbia	<b>\$1.8 million</b>
University of Missouri-St. Louis	<b>\$81 thousand</b>

### Global health R&D at work in the Show Me State



Researchers from Washington University School of Medicine have discovered that the Zika virus uses the process of autophagy, or cellular waste disposal—a key feature of the placental barrier—to infect the fetus. Their research also showed that an existing malaria drug, hydroxychloroquine, can protect the fetus by blocking this process. The drug is already approved for short-term use in pregnant women. Further studies are needed before it can be used for the duration of pregnancy. Counterintuitively, hydroxychloroquine blocks Zika by lowering the body's ability to clear out invaders.

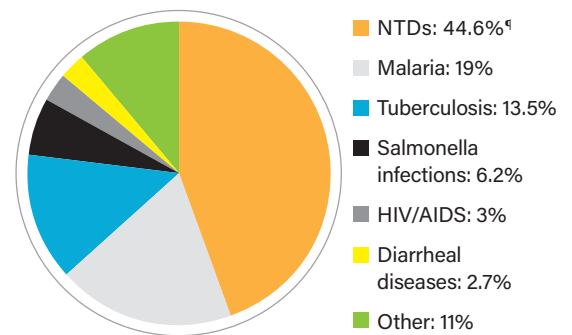
### Neglected diseases in Missouri†

HIV diagnoses	<b>4,599</b>
Tuberculosis cases	<b>855</b>
West Nile cases	<b>135</b>
Malaria cases	<b>118</b>
Zika cases	<b>38</b>

### Missouri industry in global health R&D

**Bayer:** Kansas City  
**Charles River Laboratories:** O'Fallon  
**Mediomics:** St. Louis  
**Pfizer:** St. Louis  
**Sanofi:** St. Louis

### Missouri's top areas of global health R&D by USG funding\*



### GLOBAL HEALTH R&D IS A SMART INVESTMENT FOR THE UNITED STATES<sup>§</sup>

**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](http://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](http://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.

¶ NTD: neglected tropical disease. NTDs include Buruli ulcer, Dengue, Helminths, Kinetoplastids, Leprosy, Trachoma, and Leptospirosis.