

Return on Innovation

Global health R&D delivers for Tennessee



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

\$64.1 million
to Tennessee research institutions*

850+ new jobs
for Tennessee†

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

ORGANIZATION	FUNDING
Vanderbilt University	\$33.8 million
St. Jude Children's Research Hospital	\$15.0 million
The University of Tennessee Health Science Center	\$9.8 million
Meharry Medical College	\$5.5 million

Neglected diseases in Tennessee‡

HIV diagnoses	7,485
Tuberculosis cases	1,524
West Nile cases	138
Malaria cases	117
Zika cases	62

Tennessee industry in global health R&D

Immuno Technologies: Memphis
QuantuMDx: Chattanooga

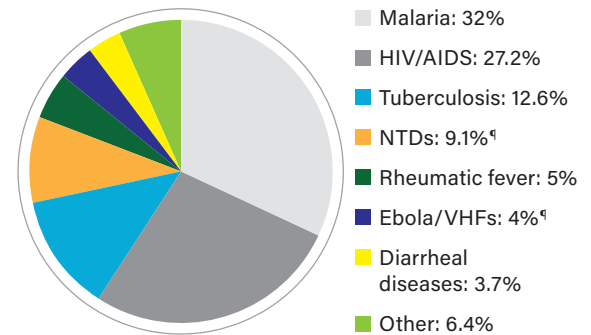
Global health R&D at work in the Volunteer State



Dean Calma / IAEA

Vanderbilt University researchers are working to stop mosquitoes from spreading disease. Their method uses *Wolbachia*, a bacterium found in more than 60 percent of the world's insects. In mosquitoes, it hijacks their reproduction so that mostly only offspring carrying *Wolbachia* survive. Remarkably, it also prevents mosquitoes from carrying viruses like dengue and Zika. The scientists identified the two genes responsible for *Wolbachia's* unique powers and found they can insert the genes directly into the insects' genetic material, increasing the rate at which it spreads. These discoveries hold great promise for controlling the spread of insect-borne diseases.

Tennessee's top areas of global health R&D 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.

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