Scientists at University of Arkansas for Medical Sciences (UAMS) have been awarded federal funding from the National Institutes of Health to support research on infectious diseases. This funding has enabled UAMS to establish the Center for Microbial Pathogenesis and Host Inflammatory Responses, which focuses on pathogens—bacteria, viruses, and microorganisms—and the disease responses they cause in humans. The center has advanced research on malaria, pneumonic plague, leishmaniasis—a parasitic disease that causes disfiguring skin lesions—and other deadly diseases. By trying to understand how pathogens cause disease in humans, the scientists hope to develop new treatments and technologies. One other new idea being developed at UAMS is a non-invasive malaria detection laser for spotting parasite-infected cells traveling through blood vessels.

**Global Health R&D at work in the Natural State**

**Arkansas's top global health R&D institution by USG funding**

University of Arkansas

**Arkansas industry in global health R&D**

AC Diagnostics: Fayetteville

**Arkansas's top areas of global health R&D by USG funding**

- Malaria: 76.7%
- Tuberculosis: 15.4%
- NTDs: 7.9%

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**Return on Innovation**

**Global health R&D delivers for Arkansas**

US government (USG) investment in global health R&D has delivered $2.4 million to Arkansas research institutions.

**Neglected diseases in Arkansas**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV diagnoses</td>
<td>2,412</td>
</tr>
<tr>
<td>Tuberculosis cases</td>
<td>744</td>
</tr>
<tr>
<td>West Nile cases</td>
<td>143</td>
</tr>
<tr>
<td>Malaria cases</td>
<td>29</td>
</tr>
<tr>
<td>Zika cases</td>
<td>15</td>
</tr>
</tbody>
</table>

**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.

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*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.


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

www.ghtcoalition.org