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

$32.8 million to Minnesota research institutions

400+ new jobs for Minnesota

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

University of Minnesota

Global health R&D at work in the North Star State

Researchers at the University of Minnesota Medical School are working to unlock why antiretroviral therapies are unable to completely shut down HIV production in cells in certain parts of the body. According to their research, nearly 99 percent of these HIV-infected cells are found in tissue in the lymph nodes, spleen, and gastrointestinal tract. This reservoir of latently infected cells can reactivate if therapy is interrupted, posing a major challenge to curing the disease. Their key finding was that the latent cells are associated with lower concentrations of drugs in these tissues. A next step is to understand why current treatments do not reach adequate levels in lymphoid tissue. This knowledge could lead to development of more effective treatments for HIV or even a cure for AIDS. Globally, more than 36 million people are living with HIV.

Neglected diseases in Minnesota†

<table>
<thead>
<tr>
<th>Disease</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV diagnoses</td>
<td>2,854</td>
</tr>
<tr>
<td>Tuberculosis cases</td>
<td>1,422</td>
</tr>
<tr>
<td>Malaria cases</td>
<td>358</td>
</tr>
<tr>
<td>West Nile cases</td>
<td>286</td>
</tr>
<tr>
<td>Dengue cases</td>
<td>104</td>
</tr>
</tbody>
</table>

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

3M: Saint Paul
Beckman Coulter: Chaska
GeneSegue: Minnetonka
Medisyn Technologies: Minnetonka
Medtronic: Minneapolis

Minnesota’s top areas of global health R&D by USG funding

- HIV/AIDS: 26.9%
- Malaria: 25.2%
- Salmonella infections: 24.7%
- Tuberculosis: 16%
- Diarrheal diseases: 3%
- Cryptococcal meningitis: 2%
- Other: 2.2%

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.
