

**Outside Witness Testimony submission by Jamie Bay Nishi, Director, Global Health
Technologies Coalition**
**Prepared for the Subcommittee on Labor, Health and Human Services, Education and
Related Agencies, United States Senate**
Addressing NIH, CDC, and BARDA

On behalf of the Global Health Technologies Coalition (GHTC), a group of more than 30 nonprofit organizations, academic institutions, and aligned businesses advancing policies to accelerate the creation of new drugs, vaccines, diagnostics, and other tools that bring healthy lives within reach for all people, I am providing testimony on fiscal year (FY) 2020 appropriations for the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC), and the Biological Advanced Research and Development Authority (BARDA). We appreciate your leadership in promoting the value of global health, particularly continued research and development (R&D) to advance new drugs, vaccines, diagnostics, and other tools for longstanding and emerging health challenges.

To achieve this goal, we respectfully request maintaining robust funding for NIH, particularly the National Institute for Allergy and Infectious Diseases and the Fogarty International Center, providing funding to match CDC's increased responsibilities in global health and global health security—at minimum, funding of \$513.62 million for the CDC Center for Global Health (CGH) and \$644.62 million for the CDC National Center for Emerging Zoonotic and Infectious Diseases (NCEZID), in line with the House bill—and supporting funding for BARDA's critical work in emerging infectious diseases.

We also strongly urge the Subcommittee to continue its established support for global health R&D by urging leaders at the NIH, CDC, the Food and Drug Administration, and other entities within the US Department of Health and Human Services, like the Office of Global Affairs, BARDA, and the NIH Fogarty International Center, to join leaders of other US agencies to develop a cross-government global health R&D strategy to ensure that US investments in global health research are efficient, coordinated, and streamlined.

GHTC members strongly believe that sustainable investment in R&D for a broad range of neglected diseases and health conditions is critical to tackling both longstanding and emerging global health challenges that impact people around the world and in the United States. My testimony reflects the needs expressed by our members, which work with a wide variety of partners in nearly one hundred countries to develop new and improved technologies for the world's most pressing health issues.

Critical need for new global health tools: While we have made tremendous gains in global health over the past fifteen years, millions of people around the world are still threatened by HIV/AIDS, tuberculosis (TB), malaria, and other neglected diseases and conditions. In 2107, TB killed 1.3 million people, surpassing deaths from HIV/AIDS. 1.8 million people were newly diagnosed with HIV. Nearly half of the global population remains at risk for malaria and drug resistant strains are growing. Maternal mortality is 19 times greater in under-resourced regions than developed countries. One out of every 13 children in Sub-Saharan Africa dies before the age of 5, often from vaccine-preventable and other communicable diseases. These figures highlight

the tremendous global health challenges that remain and the need for sustained investment in global health R&D to deliver new tools to combat endemic and emerging threats.

New tools and technologies are critical, both to address unmet global health needs and address challenges of drug resistance, outdated and toxic treatments, and difficulty administering current health technologies in poor, remote, and unstable settings. As seen with recent outbreaks of Ebola and Zika, we simply do not have all the tools needed to prevent, diagnose, and treat many neglected diseases – yet the emerging evidence of the impact of an experimental Ebola vaccine candidate currently being deployed in the epidemic in the Democratic Republic of the Congo, developed in part with funding from the US government, demonstrates the power of having the right tool at the right time to respond to a health emergency. It is critical to invest in the development of next generation tools to fight existing and emerging disease threats and have tools ready to go when we need them.

Research and US global health efforts

The United States is at the forefront of innovation in global health, with NIH, CDC, and BARDA leading much of our global health research.

NIH: The groundbreaking science conducted at the NIH has long upheld US leadership in medical research. Within the NIH, the National Institute of Allergy and Infectious Diseases, the Office of AIDS Research, and the Fogarty International Center all play critical roles in developing new health technologies that save lives at home and around the world. Recent activities have led to the creation of new tools to combat neglected diseases, including vaccines for dengue and trachoma, new drugs to treat malaria and TB, and multiple projects to develop diagnostics, vaccines, and treatments for Ebola—including supporting clinical trials for the rVSV-ZEBOV investigational Ebola vaccine currently being deployed to counter the Ebola epidemic in the Democratic Republic of the Congo. Leadership at NIH has long recognized the vital role the agency plays in global health R&D and has named global health as one of the agency's top five priorities.

We recognize and are grateful for Congress' work to bolster funding for NIH, including through the *21st Century Cures Act*. It remains critical that support for NIH considers all pressing areas of research—including research in neglected diseases. To deliver on the remarkable progress being made across the institutes, it is vital that we renew our commitment to health research and maintain steady support for the NIH.

CDC: The CDC also makes significant contributions to global health research, particularly through CGH and NCEZID. CDC's ability to respond to disease outbreaks, like recent episodes of Zika and Ebola, is essential to protecting the health of citizens both at home and abroad, and the work of its scientists is vital to advancing the development of tools, technologies, and techniques to detect, prevent, and respond to urgent public health threats. Important work at NCEZID includes the development of innovative technologies to provide a rapid diagnostic test for the Ebola virus, a new vaccine to improve rabies control, and a new and more accurate diagnostic test for dengue virus. The center also plays a leading role in the National Strategy for

Combating Antibiotic-Resistant Bacteria, to prevent, detect, and control outbreaks of antibiotic resistant pathogens, such as drug-resistant TB.

Programs at CDC's CGH—including the Global HIV/AIDS, Global Immunization, Parasitic Diseases and Malaria, Global Disease Detection and Emergency Response, and Global Public Health Capacity Development programs—have also yielded tremendous results in the development and refinement of vaccines, drugs, microbicides, and other tools to combat HIV/AIDS, TB, malaria, and neglected tropical diseases like leishmaniasis and dengue fever. In addition, the CGH plays a critical role in disease detection and response, working to monitor and respond to outbreaks, develop new tools to help detection efforts, train epidemiologists in high-burden regions, and build capacity of health systems.

As global disease outbreaks have grown in frequency and intensity, CDC's work in novel technology development and global health security has only become more important. This includes the agency's efforts in the Democratic Republic of Congo to quash that country's tenth outbreak of Ebola, now the second largest Ebola outbreak in history, as well as CDC's engagement with the international community on a coordinated Global Health Security Agenda (GHSA). Unfortunately, most of CDC's global health security activities have been supported by one-time supplemental funding that expires in 2019, not by annual appropriations. As these funds expire at the end of this fiscal year—jeopardizing the agency's efforts to develop new tools, train epidemiologists, buy equipment, upgrade labs, and stockpile drugs—GHTC urges the Subcommittee to continue to support an increase to annual appropriations for the Division of Global Health Protection (DGHP) within the Center for Global Health to ensure these activities continue. We also urge increased funding for the National Center for Emerging and Zoonotic Infectious Diseases (NCEZID), which complements DGHP's efforts globally with domestic preparedness efforts to ensure Americans are protected at home and abroad. We urge the Senate to match the increased support for these critical activities included in the House FY2020 LHHS bill: at a minimum, funding of \$513.62 million for CGH and \$644.62 million for NCEZID.

BARDA: BARDA plays an unmatched role in global health R&D by providing an integrated, systematic approach to the development and purchase of critical medical technologies for public health emergencies. By leveraging unique contracting authorities and targeted incentive mechanisms, BARDA partners with diverse stakeholders from industry, academia, and nonprofits to bridge the “valley of death” between basic research and advanced-stage product development for medical countermeasures—an area where more traditional US government research enterprises do not operate.

With these unique assets, BARDA has played a vital role in the development of urgently needed countermeasures for emerging infectious diseases (EIDs) like Ebola and Zika, developing at least three Ebola vaccine candidates, at least six diagnostics for Zika, and at least five Zika vaccine candidates in under two years. To date, BARDA's work in advancing tools to protect against the threat of EIDs has largely been funded through emergency funding. To ensure the continuation of this critical work and forward-looking investments, GHTC supports the creation of a separate line item dedicated funding for EIDs within BARDA.

Innovation as a smart economic choice: In addition to bringing lifesaving tools to those who need them most, investment in global health R&D is also a smart economic investment in the United States. **\$0.89 cents of every US dollar invested in global health R&D goes directly to US-based researchers. US government investment in global health R&D between 2007 and 2015 generated an estimated 200,000 new jobs and \$33 billion in economic growth.**

Furthermore, investments in global health R&D today can help achieve significant cost-savings in the future. New therapies to treat drug-resistant TB, for example, have the potential to reduce the price of TB treatment by 90 percent and cut health system costs significantly.

Now more than ever, Congress must make smart budget decisions. Global health research that improves the lives of people around the world—while at the same time supporting US interests, creating jobs, and spurring economic growth at home—is a win-win. On behalf of the members of the GHTC, I would like to extend my gratitude to the Subcommittee for the opportunity to submit written testimony for the record.