Global Health R&D
A smart investment for NORTH CAROLINA

Economic Impact

- The U.S. government continues to lead the world in global health R&D. In 2011, $1.36 billion of federal investments went towards R&D for globally neglected diseases.
- U.S. leadership and new drugs produced from federally funded research have helped North Carolina build partnerships with donor governments, global researchers and the biopharmaceutical industry throughout the world.
- Global health research is conducted at the University of North Carolina at Chapel Hill (UNC-CH), Duke University and North Carolina State University (NC State). These three academic centers account for roughly 90% of academic global health activity in North Carolina.

Source: G-Finder, Duke Global Health Institute

A Thriving Bioscience Community

- North Carolina is ranked in the top 10 of bioscience employer states.
- Since 2001, North Carolina has had the fastest bioscience job growth rate of any state at 23.5%.
- North Carolina employs the fourth largest number of people in the drug and pharmaceutical industry compared to other states. This booming sector is critical to the development of innovative bench-to-bedside global health products.
- The Tar Heel State is home to
  - More than 500 bioscience companies
  - 4 of the top 50 research universities and
  - 2 of the top 25 medical research universities in the U.S.

Sources: NC Biotechnology Center; Global Health Technologies Coalition; Battelle/BIO

GLOBAL HEALTH R&D: A KEY BIOSCIENCE PLAYER

- Among all 50 US states, North Carolina received the sixth highest amount of funding from the National Institutes of Health in 2013.
- In 2011, Science awarded Breakthrough of the Year to the HIV Prevention Trials Network, led by UNC-CH scientist Myron Cohen, for their study which proved that antiretroviral drugs used to treat HIV infections also prevented the transmission of HIV infections.
- North Carolina is one of seven participating states in the Centers for Disease Control Tuberculosis Trials Consortium (TBTC), a collaboration between the CDC, international and domestic public health departments, academia, and selected VA centers. With an annual budget of $11 million, TBTC conducts programs to diagnose, clinically manage and prevent TB locally and globally.

Sources: NIH RePORTER; NIH, CDC.

NORTH CAROLINA: PROFILES AND PARTNERSHIPS

The UNC Gillings School of Global Public Health works across North Carolina, the United States, and in more than 55 countries spanning 5 continents on topics including clean drinking water and sanitation; air quality and toxicity; infectious diseases including HIV/AIDS, malaria and tuberculosis; chronic disease prevention including cancers, obesity, diabetes, heart disease and stroke; nutrition and physical activity; minority health and health disparities; health systems and services; injury and violence prevention; and public health practice and leadership. Global health research generates products that treat and prevent conditions that benefit North Carolinians as well as people in developing countries. www.sph.unc.edu/globalhealth

Two examples include the $21.4 million grant NIH awarded to epidemiologist Ralph S. Baric, PhD and geneticist Mark T. Heise, PhD, and the $2.6 million grant NIH awarded to health behavior researcher Suzanne Maman, PhD. Drs. Baric and Heise are studying deadly viruses of the lung and brain, including SARS and West Nile. Information gained on the genetic susceptibility of contracting these could result in more effective treatments for these, and other life-threatening infections. --In Dar es Salaam, Tanzania, Dr. Maman is working to reduce HIV risk and partner violence among young men. 2,800 men are receiving microfinance loans and leadership training to create their own small businesses, learn about healthy behaviors, and reduce sexually transmitted disease and violence against their partners, thereby beginning to imagine a different kind of future for themselves and their loved ones.

Source: UNC Gillings School of Global Public Health; UNC Carolina Population Center.

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