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
- 3 of the top 50 national universities and
- 2 of the top 25 medical research universities in the U.S.


GLOBAL HEALTH R&D: A KEY BIOSCIENCE PLAYER

- Among all 50 U.S. 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.

Dr. BARBARA K. RIMER
DEAN
UNC Gillings School of Global Public Health

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/global-health

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.
Global Health R&D Fosters Partnerships

Dollar for dollar, global health R&D is one of North Carolina’s best investments. Biomedical and global health R&D produces synergistic partnerships between universities, medical centers and local companies. Global health collaboration keeps North Carolina’s economy growing and improves the health of people domestically and around the world.

- The Research Triangle Park (RTP), a biotechnology hub located in Durham, is home to more than 80 biotechnology and life science companies and three large research universities in the surrounding area. RTP was fourth in the 2010 International Ranking of Emerging Biotech Hubs by Business Facilities for its infrastructure and network of scientific working groups. RTP is a global leader in drug development, contract research and testing, and vaccine development.

- The Triangle Global Health Consortium (TGHC), a collaboration between 16 academic institutions, nonprofit organizations and businesses, is dedicated to fostering North Carolina-based global health activities. TGHC hosts the annual Global Health Expo and organizes working groups to showcase members’ global health projects. Additionally, TGHC places interns at member sites and hosts its annual Case Competition for students.

- IntraHealth International is a Chapel Hill-based non-governmental organization (NGO) that began at the UNC-Chapel Hill campus. Today, this NGO works in more than 30 countries to strengthen the local health system and workforce. IntraHealth creates partnerships to address family planning and reproductive health; HIV/AIDS and tuberculosis; maternal, newborn and child health; and malaria.

- Futures Group is a global health consulting firm that provides insight and data-driven expertise in Durham to governments and NGOs in more than 30 countries. The firm works with the UNC Carolina Population Center’s MEASURE Evaluation project to improve population health data collection practices and strengthen monitoring and evaluation systems to improve health and nutrition.

- North Carolina campuses host many health initiatives. An NC State program, the Global Health Initiative (NC GHI), develops international partnerships that provide students and faculty with global health opportunities related to education, training and engagement. At Duke University, the Duke Global Health Institute (DGHI) has more than 215 interdisciplinary and innovative research projects in more than 40 countries committed to addressing global cardiovascular disease and obesity, emerging infectious disease, cancer, environmental health, mental health, health systems strengthening, and maternal and child health. The UNC-Chapel Hill Institute for Global Health and Infectious Diseases promotes global health research, teaching, and service activities across campus, supporting organizations like Engineers Without Borders, Nourish International, and Proyecto Puentes de Salud.