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Prepared for—



The Triangle Global Health Consortium

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RTI Project Number 0215836

May 2017

The Global Health Sector's Contributions to the Economy of North Carolina

Final Report

Supported by—



Duke











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Executive Summary

GLOBAL HEALTH WORK ADVANCES NORTH CAROLINA'S ECONOMY

North Carolina's global health sector produces significant humanitarian and economic benefits both globally and locally. As a national leader in global health, North Carolina houses more than 220 organizations and institutions that work in more than 185 countries to save lives and improve health. Major universities; nonprofit organizations; faith-based groups; government agencies (including the National Institute of Environmental Health Sciences and offices of the Environmental Protection Agency); and biotechnology, pharmaceutical, and medical technology companies all come together in the state to improve the health of people around the world. Global health transcends boundaries and requires collective solutions that emphasize improving health, reducing disparities, and protecting against global threats. From mitigating emerging disease outbreaks like Zika and Ebola to developing early HIV/AIDS treatments and increasing access to safe drinking water and sanitation around the world, North Carolina institutions are at the forefront of

saving lives. By developing new medicines, vaccines, technologies, and services, local researchers, businesses, and advocates are improving the health of communities around the world, including those in North Carolina, while also benefiting the state's economy.

The Triangle Global Health Consortium, in partnership with RTI International, found that in 2015¹, global health work contributed about \$3.7 billion in state gross domestic product (GDP), a common measure of the size of the economic production of North Carolina. This statewide value is roughly \$370 per person and is comparable to other important North Carolina sectors such as arts/entertainment/recreation and farming.² To create this economic impact, more than \$1.2 billion in health research funding comes to North Carolina from sources other than the state government, including federal agencies, much of which is spent locally on wages, goods, and services.

Global health work supports over 26,000 jobs in North Carolina across multiple sectors (Table 1). These jobs paid over \$1.6 billion in annual wages, salaries, and

TOP THEMATIC AREAS OF NC GLOBAL HEALTH ORGANIZATIONS



Drug Discovery and Development



General Clinical Research



Food and Nutrition



Clinical Trials



Community Engagement



Infectious and Tropical Diseases



Medical Technology



Knowledge Dissemination



Noncommunicable Diseases

¹ This is the most recent year for which data is available.

² The U.S. Bureau of Economic Analysis provides the official GDP by state statistics for North Carolina at https://www.bea.gov/regional/index.htm.

Table 1. Summary of Economic Impact of Global Health Activities on the North Carolina Economy: 2015

CATEGORY	STATE GROSS DOMESTIC PRODUCT (GDP) (\$MILLION)	LABOR INCOME (\$MILLION)	JOBS
	GDP is a measure of the overall size of the economy	Labor income is the value of wage, salaries, and benefits earned	Number of jobs
For Profit	\$3,336	\$1,360	21,233
Nonprofit	\$318	\$225	4,252
Academic	\$64	\$43	966
Total	\$3,718	\$1,628	26,451

Source: RTI analysis based on a single region IMPLAN PRO Input-Output Model (2013) results

Table 2. Estimated Fiscal Impact for Governments: 2015 (\$Million)

GOVERNMENT -	CATEGORY			70744
	FOR PROFIT	NONPROFIT	ACADEMIC	TOTAL
Federal	\$379	\$45	\$9	\$433
State/Local	\$158	\$19	\$5	\$182
Total	\$537	\$64	\$14	\$615

Source: RTI analysis based on a single region IMPLAN PRO Input-Output Model (2013) results

benefits, an average of about \$62,000 per job. The top three sectors directly engaged in or supporting global health are

- scientific research and development services: 3,998 jobs;
- pharmaceutical preparation manufacturing: 1,190 jobs; and
- colleges and universities: 732 jobs.

The fiscal impact of the global health sector is important too. The additional economic activity created state tax revenue (\$182 million) and federal tax revenue (\$433 million) that totaled \$615 million (Table 2).

North Carolina has a long history of a wide variety of organizations working collaboratively to achieve global health advances, spur innovation, and improve health. The Triangle Global Health Consortium was founded in

2009 as a hub for this collaboration. The Consortium's mission is to establish North Carolina as an international center for research, training, education, advocacy, and business dedicated to improving the health of the world's communities. The Consortium brings together diverse organizations across the state to build community, share best practices, prepare the next generation of global health leadership, and advance North Carolina as a center of global health. By working together, North Carolina organizations can build healthier communities and expand human progress, while also increasing stability, expanding democracy, creating new trade partners, and generating good will for both the state and the country. This work produces significant benefits both globally and here in North Carolina.

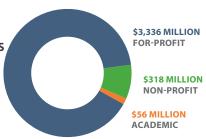
NORTH CAROLINA'S GLOBAL HEALTH SECTOR

North Carolina has a uniquely diverse and thriving global health sector. Over 220 organizations work in 185 countries to save lives, improve health, and protect against global threats.

The purpose of this study is to measure how global health work advances North Carolina's economy.

INCREASES THE SIZE OF NORTH CAROLINA'S ECONOMY BY

\$3.7 BILLION



This statewide value is roughly \$370 per person and is comparable to other important North Carolina sectors such as arts/entertainment/recreation and farming.

NC GLOBAL HEALTH CORE STRENGTHS















Medical Technology





Noncommunicable Diseases

CONTRIBUTIONS TO NORTH CAROLINA

RETAINS OVER

220

ORGANIZATIONS AND INSTITUTIONS

1.2 BILLION

IN ANNUAL RESEARCH FUNDING ADDS \$182 MILLION IN STATE AND LOCAL

TAX REVENUES

JOBS

DIRECT 9,776

INDIRECT 16,675

TOTAL 26,451

Global Health Sector Wages, Salaries, and Benefits

\$769 \$859 1,628
MILLION MILLION MILLION

Average Global Health Sector Wages, Salaries, and Benefits

\$79,000 \$52,000 \$62,000
PER JOB PER JOB PER JOB

¹ Indirect effects include two economy responses to the direct global health sector spending. The first response is the new business spending among local businesses as they buy more goods and services to meet growth. The second response is the spending of wages, salaries, and benefits associated with job creation.















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