

# Global Health R&D

→ *A smart investment for* **GEORGIA**



**Global Health Research and Development:**  
*working to improve lives at home and abroad.*

## Job Creation

- ⌘ In 2010, Georgia received \$433 million in National Institutes of Health (NIH) grants and contracts, creating more than 10,000 jobs in the state.\*
- ⌘ Georgia's biosciences industry employed 62,033 workers and reached \$16 billion in sales in 2007.\*\*
- ⌘ The average annual salary in Georgia R&D companies is well above the average Georgia salary of \$42,178, paying \$70,185 annually.\*\*
- ⌘ Public and private investment in global health R&D has produced tens of thousands of jobs in medicine, research, public health and education in Georgia.
- ⌘ The Centers for Disease Control and Prevention (CDC) employs 15,488 people nationwide; 72% are in Atlanta.\*\*\*

Source: \*Source: United for Medical Research, 2011

\*\*Shaping Infinity, The Georgia Life Sciences Industry Analysis 2009

\*\*\*State of CDC, Budget and Workforce, 2009

## Why Invest?

- ⌘ Bioscience is one of Georgia's fastest-growing industries. The number of life sciences firms grew almost twice as fast as the number of firms in all industries (6.3% v. 3.4% for all industries) between 2001 and 2005.\*
- ⌘ Over a third of Georgia's higher education degrees are for science and engineering.\*\* Global health R&D jobs keep Georgia-trained talent in state.
- ⌘ The joint Georgia Tech & Emory University Biomedical Engineering program is ranked #2 in the country and has received \$25 million in NIH funding — more than any other top 10 BME program.\*\*\*

Source: \*Research Portfolio Online Reporting Tools, 2010

\*\*National Science Foundation, Science and Engineering Indicators, 2010

\*\*\*2011 The Wallace H. Coulter Department of Biomedical Engineering at Georgia Institute of Technology & Emory University School of Medicine

## HEALTH IMPACT

- ▶ **The health research and implementation efforts of Atlanta's Carter Center have reduced Guinea worm disease from an estimated 3.5 million cases in 1986 to fewer than 1,800 today, making it likely to be the first disease since smallpox to be eradicated.** Source: The Carter Center
- ▶ **The Task Force for Global Health in Decatur received a \$6.8 million grant in 2010 from The Bill and Melinda Gates Foundation for continued coordination of the Polio Antivirals Initiative, a public-private effort. PAI — with CDC, NIH, the Food and Drug Administration, Rotary International, and the World Health Organization — works in partnership with collaborating pharmaceutical companies to develop drugs to prevent and control poliovirus.** Source: Task Force for Global Health
- ▶ **Emory University is the fourth largest contributor in the U.S. to the discovery of new drugs and vaccines by public-sector research institutions.** Source: *New England Journal of Medicine*, 2011



## GEORGIA: PROFILES AND PARTNERSHIPS



**HARRIET L. ROBINSON, PH.D.**  
CHIEF SCIENTIFIC OFFICER  
GeoVax Labs, Inc.

**Georgia Research Alliance (GRA)**, a public-private partnership, leverages university research into economic growth for Georgia. This translated into \$2.6 billion of additional federal and private investment over two decades, or nearly five new dollars in the Georgia economy for every one dollar in state investment. Between 2002 and 2010, GRA supported the formation of some 200 companies that employ 640 Georgians.

The **Emory Vaccine Center** was created with GRA support and has brought more than \$260 million in outside funding to Georgia. Technology developed by the Vaccine Center has produced companies such as **GeoVax Inc.** GeoVax, with the assistance of the GRA, NIH and Emory University funding, has led the discovery of one of the world's most promising HIV/AIDS vaccines. The Vaccine Center also addresses germs that put deployed troops at risk and works to keep the general public free from cancer and safe from bioterrorism.

## ECONOMIC IMPACT

### Where Does Georgia Rank?

SOURCE OF R&D FUNDING	INVESTMENT	STATE RANK
Federal Government	\$1,157,000,000	21
Industry	\$2,702,000,000	21
Universities	\$412,000,000	5
Non-profit	\$83,000,000	11
Other*	\$70,000,000	17
<b>Total</b>	<b>\$4,425,000,000</b>	<b>22</b>

Source: National patterns of R&D Resources, National Science Foundation, 2008  
\*Other represents funding from state and local governments and funding for Federally Funded Research and Development Centers from non-federal sources.

- ▶ Georgia ranks 9th in the nation in population yet 22nd among states in total R&D investment. Investment in R&D in Georgia is crucial to the growth of the state economy.
- ▶ Less than one penny of every U.S. health dollar goes toward global health R&D.

Sources: U.S. Census Bureau; U.S. Investment in Global Health Research, Research!America

## Global Health is America's Health.

Research and development for global health is essential to our ability to address rapidly progressing outbreaks and our ability to work across borders to improve health and prevent and stem outbreaks. Atlanta's Centers for Disease Control and Prevention is positioned to do just that. Specifically, CDC:

- ▶ Receives \$10 billion in federal funding each year. Source: State of CDC, Budget and Workforce 2009
- ▶ Was the first to identify the deadly H1N1 flu virus in its Atlanta labs and worked closely and rapidly with international partners in the early days of the pandemic to prevent its spread. Source: *MMWR Weekly*, May 2009
- ▶ Partners with the U.S. Departments of Defense and State and international organizations on global health diplomacy and biosecurity to keep Georgia's 100,000 military personnel as well as civilians safe. Source: CDC Global Health Security



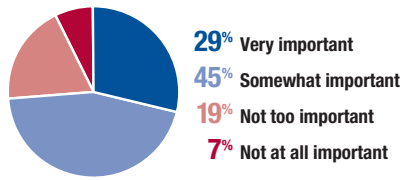
## Georgia Global Ties

- ▶ Ready air and sea access make Georgia open to the world. Preparedness for infectious diseases that may enter the U.S. through Georgia's air and sea ports is critical.
- ▶ Over half (52%) of Georgia's recent population growth is attributed to legal immigration – 67% from other U.S. states and 33% from other countries. Ensuring the health of populations around the world keeps Georgia protected from infectious diseases. Source: Georgia's Workforce: An Annual Report, Georgia Department of Labor, 2009
- ▶ Georgia State University's Viral Immunology Center, one of the few university-based top-level Biosafety Level 4 labs in the U.S. receives samples from around the world for researching Herpes B virus, which has an 80% fatality rate in humans. Sources: Georgia State University; Georgia Department of Economic Development

## What Georgians are saying

### Georgians Think Global Health Research is Important to Georgia's Economy

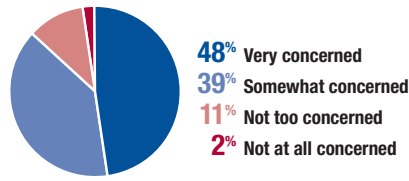
*In terms of jobs and incomes, how important do you think spending money on research to improve health globally is to the economy of Georgia?*



Source: Georgia Global Health Survey, May 2011  
Charlton Research Company for Research!America

### Georgians Concerned About Disease Exposure for Overseas Troops

*How concerned are you that our troops overseas are exposed to diseases that disproportionately affect poorer countries?*



Source: Georgia Global Health Survey, May 2011  
Charlton Research Company for Research!America



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