

# Global Health R&D

→ A smart investment for **NEW JERSEY**



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

## Job Creation

- ∴ New Jersey is the third largest health related research and development employer in the U.S., with more than 211,000 jobs supported by health R&D, many of which are in global health.\*
- ∴ New Jersey's health related R&D industry had more than a \$60 billion economic impact on the state in 2009.\*\*
- ∴ Tax-payer dollars support high salaried jobs in both the public (\$57,000) and private research and development sector.\*\*\*
- ∴ Public and private investments in global health R&D have produced tens of thousands of jobs in medicine, research, public health and education in New Jersey.

Source: \*The Biopharmaceutical Sector's Impact on the Economy of New Jersey, Archstone Consulting, 2009.

\*\*The Biopharmaceutical Sector's Impact on the Economy of New Jersey, Archstone Consulting, 2009. ; Research!America 2011.

\*\*\*In Your Own Backyard: How NIH Funding Helps Your State's Economy, Families USA's Global Health Initiative, June 2008.

## Why Invest?

- ∴ In 2009, the U.S. exported over half a trillion dollars worth of goods to developing countries; more than 90% of those revenues went to small and medium-sized U.S. companies—our country's job growth engines.\*
- ∴ In FY 2009, New Jersey received \$258 million in federal funding from the National Institutes of Health and \$145 million from the Centers for Disease Control and Prevention—important economic drivers for global health R&D and the state.\*\*
- ∴ Every \$1 million that the NIH invests, including those for global health R&D projects, generates more than \$2 million in new state business activity.\*\*\*
- ∴ 73% of New Jersey residents believe it is important for the state to offer incentives for companies to invest in research to improve health globally.\*\*\*\*

Source: \*Remarks by Administrator of USAID Rajiv Shah at the Center for Global Development, January 2011.

\*\*NIH, Office of Extramural Research, Award Trends, Dollars Awarded by State, 2004 and 2009, CDC, Office of the Associate Director for Communication, CDC State Funding Map, Illinois, FY2009.

Note: NIH funding numbers exclude funding from ARRA.

\*\*\*In Your Own Backyard: How NIH Funding Helps Your State's Economy, Families USA's Global Health Initiative, June 2008.

\*\*\*\*New Jersey Global Health Web Survey, January 2011, Charlton Research Company for Research!America.

## HEALTH IMPACT

- ▶ **New Jersey company Temptime's partnership with PATH and the U.S. Agency for International Development allowed them to become the world's leader in monitoring of heat sensitive vaccines, enabling the delivery of an additional 140 million doses of vaccine, and helping save 140,000 lives worldwide.\***
- ▶ **New Jersey research led to the development of the human papillomavirus (HPV) vaccine (Gardasil in the US). This helps protect women and girls here and around the world against cervical cancer, which leads to over 270,000 deaths each year.\*\***

Source: \*Temptime Corporation, Morris Plains, NJ. \*\*Cervical Cancer Vaccine Project, PATH, May 2010.



## NEW JERSEY PROFILES: PRODUCT DEVELOPMENT PARTNERSHIPS



**DAVID ALLAND, MD**  
PROFESSOR  
New Jersey Medical School,  
UMDNJ

**David Alland**, a longtime TB researcher at the University of Medicine and Dentistry of New Jersey (UMDNJ), led the development of a test that tells, in under two hours, whether a person has TB and whether the bacteria is resistant to drugs. The test for TB takes the place of the microscope—which labs have used to test for TB for the last 125 years. This is a powerful example of product development partnership Foundation for Innovative New Diagnostics' (FIND) collaboration with UMDNJ, the NIH and Cepheid, a medical diagnostics company. Approved by the WHO in December 2010, the new test is increasingly used by diagnostic laboratories and tuberculosis control programs around the world.

**The Global Alliance for TB Drug Development (TB Alliance)**, a global not-for-profit product development partnership brings together resources and expertise from the public, private, philanthropic and academic sectors to speed the development of new TB drugs. The TB Alliance collaborates with several New Jersey institutions including: Rutgers University (Piscataway), XenoBiotic Laboratories (Plainsboro), Huntingdon Life Sciences (Somerset), Aptuit (Allendale) and Johnson & Johnson (New Brunswick). These partnerships generate millions in revenue and connect New Jersey-based researchers with colleagues worldwide.

*“Finding new treatments and cures for the world’s most dreaded diseases while keeping and growing these jobs in America—and New Jersey—is of critical importance to the world’s health and our state’s economic well-being.”*

**Kim Guadagno**  
LT. GOVERNOR, NEW JERSEY

## ECONOMIC IMPACT

### Where Does New Jersey Rank?

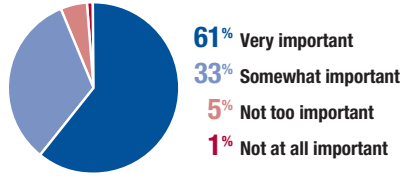
SOURCE OF R&D FUNDING	INVESTMENT	STATE RANK
Federal Government	\$1,769,000,000	18
Industry	\$17,407,000,000	2
Universities	\$237,000,000	15
Non-profit	\$79,000,000	13
Other*	\$58,000,000	20
<b>Total</b>	<b>\$19,552,000,000</b>	<b>3</b>

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.

### What New Jerseyans are saying

**94% of residents believe it is important for New Jersey to be a leader in health R&D.**

*How important is it for New Jersey to be a leader in health research and development?*



Source: New Jersey Global Health Survey, January 2011  
Charlton Research Company for Research!America.

- ▶ New Jersey ranks 11th in the nation in population size (8.6 million people\*) and 3rd in the country in R&D investment. Investment in R&D in New Jersey is critical to the growth of the state’s economy.
- ▶ Less than one penny of every U.S. health dollar goes toward global health R&D.

Source: U.S. Investment in Global Health Research, Research!America.

## Global Health is America’s Health.

New Jersey has long been home to world leaders in health and global health R&D including 17 of the world’s 20 largest pharmaceuticals, medical technology and diagnostic companies. Becton Dickinson, Johnson & Johnson, Merck, Novartis and sanofi-aventis have their U.S. headquarters in New Jersey. These industry leaders have shown a commitment to providing solutions for some of the world’s deadliest infectious diseases such as:

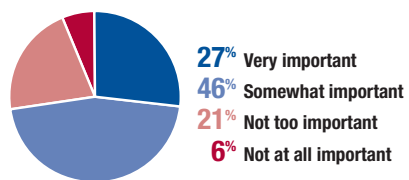
- ▶ The first dengue vaccine to ever reach the final stage of clinical development
- ▶ Supply developing nations with affordable, disposable Uniject syringes that greatly reduce transmission of infectious disease
- ▶ More effective insecticide-treated nets to prevent malaria, reducing the chance of infection by 50%

**In 2009, these companies contributed over \$29.2 billion dollars to New Jersey’s economy and accounted for more than 130,000 New Jersey-based jobs, helping not only the state but also the country to remain a leader in scientific innovation.\***

\*Source: Economic Report, HealthCare Institute of New Jersey, 2010.

### Global health research spending is important to the economy of New Jersey.

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



Source: New Jersey Global Health Survey, January 2011  
Charlton Research Company for Research!America.



## New Jersey Global Ties

- ▶ Every 10% increase in exports results in a 7% decrease in the unemployment rate here at home.\*
- ▶ Many of the 14,000 passengers arriving at New Jersey airports daily from cities all over the world are international tourists and business people who spend millions of dollars a year in New Jersey, generating wages and jobs that contribute significantly to the state’s economy.\*\*

Source: \* Remarks by Administrator of USAID Rajiv Shah at the Center for Global Development, January 2011.  
\*\* Why Does Global Health Matter to New Jersey? Families USA’s Global Health Initiative, 2008.



1101 King Street, Suite 520  
Alexandria, Virginia 22314  
703.739.2577  
Fax 703.739.2372  
www.researchamerica.org  
info@researchamerica.org

Cape May photo courtesy of http://www.gamazingimages.com/