DRUG DEVELOPMENT
GLOBAL education INDEPENDENT
INTERNATIONAL DEVELOPMENT objective surveys
improving the human condition
ENERGY multidisciplinary research
health policy NONPROFIT

Work That Matters

Annual Report 2012

RTI INTERNATIONAL


advance
research
informing policy
SCIENCE
GLOBAL
solving problems
improve lives
making a difference
CLIENT-FOCUSED
technology
WORK THAT MATTERS

Ask RTI researchers about their work and you learn quickly how much it means to them . . . and why.

We are driven by the challenge of solving complex problems, the potential to advance the state of science and technology, and the opportunity to improve lives around the world. What we do each and every day—whether we're working in an office, in a laboratory, or on location in the field—reveals who we are and what makes us different.

At the end of the day, we believe in our work. It matters to us, it matters to our clients, and we believe it matters to the world.

PROUD WORLD EVER-CHANGING

work that matters

creative FORWARD PEOPLE developing

President's Message

Earlier this year, I was fortunate to be selected as the fourth president and CEO of RTI International. I inherited an organization with a proud history of scientific achievement and people who are united in their dedication to make a difference in the world.

Throughout 2012, we focused on *work that matters* as we continued to inform U.S. federal policy on issues ranging from health care reform and education to the projected costs associated with obesity and cancer treatment in the United States. Our laboratory scientists and engineers made important strides in developing technologies to improve health, energy efficiency, and the environment. We are extremely proud of the work our international development experts are doing in many parts of the world to curb the transmission of neglected tropical diseases, improve governance, and teach children to read. We also continued our work supported by the pharmaceutical industry to determine the most effective and efficient use of medicines and medical devices.

Toward the end of the year, we acquired MPR Associates, a leading education policy research firm based in Berkeley, California, which significantly increased our capability to analyze and disseminate education research findings.

Additionally, we were pleased to welcome former Peace Corps Director Aaron Williams back to RTI as executive vice president of our International Development Group. Aaron's tremendous talents and experience will advance our efforts to provide innovative solutions to myriad challenges facing developing nations.

I look forward to the coming year with pride in what we have achieved and confidence in the creative entrepreneurial spirit that drives our organization to pursue *work that matters* in our ever-changing world.

E. Wayne Holden
President and Chief Executive Officer

EDUCATION

JUSTICE

epidemiology

ENVIRONMENT

public health

social policy

FOOD SAFETY

program evaluation

health care reform

ECONOMICS

consumer behavior

Work That Informs

Public Policy and Practice

Our social scientists are driven by their desire to understand the size and scope of the world's most complex challenges, what motivates people's behaviors, and whether interventions and programs are effective.

During FY2012, our researchers designed and conducted complex national surveys and economic, statistical, epidemiological, and social policy research for government agencies and commercial clients across the areas of health, environment, education, and justice. Our projects provided independent, objective insights that informed public policy and practice.

Program Evaluation Highlights Smart Options for Government and Business

In our current economy, with the federal government and corporations cutting budgets, our experts systematically collected data and evaluated programs to help decision makers make smart choices.

During FY2012, a study we conducted of 250,000 Medicare patients found that commercial disease management models did not reduce hospital admissions or emergency room visits or result in cost savings.

"While this would appear to be an innovative way to reduce Medicare expenditures, managing the care of older patients through telephone contact

Nancy McCall, ScD, health policy analyst *My primary research focuses on evaluating demonstration programs of alternative Medicare payment models designed with the hope of "bending the Medicare cost curve." With very talented RTI colleagues, we have conducted rigorous evaluations whose negative findings have stood up against intense industry and congressional scrutiny. Our findings have saved us, as taxpayers, billions of dollars.*

or an occasional visit does not achieve the cost savings Congress had hoped for when it mandated the Medicare Health Support Pilot Program," said Nancy McCall, ScD, RTI health policy analyst and the study's lead author.

Our researchers implemented and refined accountable care organization design to improve efficiency and quality in Medicare. We designed risk adjustment plans for state health insurance exchanges to improve affordability and access to health insurance for individuals in poor health, and we began evaluating the Community Transformation Grant initiative's effectiveness and the long-term health and economic costs and benefits of particular policies or environmental interventions.

We are also evaluating Medicaid incentives for prevention of chronic diseases and assisting the U.S. Department of Health and Human Services with developing a design for evaluating the impact of Medicaid eligibility expansions.

We studied **250,000** Medicare patients and found that commercial disease management models did not reduce hospital admissions or emergency room visits.

Additionally, during FY2012, we completed research on ways to improve dental care among rural populations in Alaska. We found that relying on a traditional itinerant dental care approach leaves people with limited access to emergency and preventive treatment, allows disease and associated pain to worsen, and fosters expectations that dental care should be sought only when a person is in pain. However, enabling dental health aide therapists to provide greater services improved access to dental care, and patients were satisfied with the care they received.

We also evaluated the No Child Left Behind Act and found that the law has bolstered language test scores for students in rural Alabama schools but done little to improve their math and reading scores.

"The results suggest that the Act failed in its major objective, which was to enhance students' proficiency in math and reading," said Yuqing Zheng, PhD, one of the study's co-authors.

80%+
patients surveyed
reported satisfaction with care from dental health aide therapists



Yuqing Zheng, PhD, economist *Policy evaluation is a critical stage in the policy process. By conducting policy evaluations using advanced economics tools, I hope to inform the decision-making and policy-making community and ultimately contribute to sounder policies to improve the world.*

Low-income smokers in NY spend

25%

of their income

on cigarettes

Identifying the True Cost of Disease and Treatment Programs

During FY2012, our expert economic analyses shed light on some lesser-known facts.

One study highlighted an inconvenient truth, that although cigarette taxes are effective at reducing smoking, they disproportionately burden low-income smokers. In fact, in New York, which has the nation's highest state cigarette tax at $4.35 per pack, low-income smokers spent nearly a quarter of their household income on cigarettes.

The study highlights the fact that states, especially New York, generate significant revenue from cigarette taxes, but only a small percentage of that money is used for tobacco control programs.

Our economic analyses found that cigarette taxes disproportionately burden low-income smokers. States, especially New York, generate significant revenue from cigarette taxes, but only a small percentage of that money is used for tobacco control programs.

In another study, we found that it pays to help inmates. Our research showed that government investment in prison-based drug treatment programs can help reduce overall costs across the criminal justice system, because prisoners who receive treatment are less likely to commit future crimes than those who don't receive treatment.

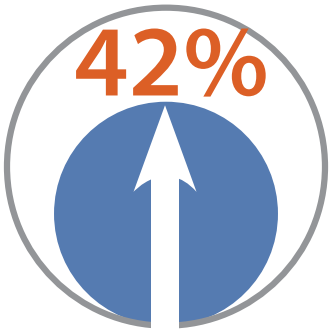
Nearly half of all state prisoners are drug abusers or drug dependent, but currently only 10 percent receive medically based drug treatment during incarceration.

During FY2012, our economists also illustrated the staggering impact obesity and diabetes rates have on our health care system. We reported that preventing obesity rates from increasing could save nearly $550 billion in medical expenditures over the next 20 years. Our research predicts that obesity rates will rise to 42 percent by 2030, which, combined with population increases, suggests that the U.S. health care system will be burdened with 32 million more obese people within two decades.

At the same time, high obesity rates have led to an increase in diabetes. During FY2012, we found that a community-based lifestyle intervention program could prevent nearly 885,000 cases of type 2 diabetes and save $5.7 billion nationally over the next 25 years.

We also found that additional significant costs are on the horizon for treating cancer. Our research showed that the rates of cancer are expected to rise in all states in the next eight years. State-level expenditures for cancer-related medical costs by 2020 (in 2010 dollars) will range from $347 million in Washington, DC, to $28.3 billion in California.

By 2030
obesity rates will
rise by



Preventing obesity rates from increasing could save nearly **$550 billion** in medical expenditures over the next two decades.

The PhenX Toolkit, which promotes data sharing, has had more than **80,000** visitors from **149** countries and has more than **900** registered users.

Research and Training That Improve Public Health and Individual Lives

From government agencies to the research community to the individual household, our work affects everyday lives and practices.

During FY2012, RTI researchers worked on several projects to help set scientific standards and share information across the research community. We developed an online database and communication platform, the Public Health Quality Improvement Exchange (PHQIX), to help public health professionals share information about quality improvement initiatives in public health, and we added a collection of substance abuse and addiction-related measures to the PhenX Toolkit, which promotes data sharing and collaboration by providing standard measures for human subjects research. We also began developing a registry that will help engage scientists in the nanomaterials community to promote common nanomaterials standards. The Nanomaterials Registry has the potential to accelerate the translation of new nanomaterials for biomedical and environmental applications.

In the past six years, RTI has provided online education for a wide variety of forensic professionals. This year we added nearly 20 new courses, including two in Spanish, bringing the total number of RTI-provided courses to more than 50 and boosting our total enrollment to more than 23,000 students worldwide. In 2012, the program was awarded the Learning in Practice Bronze Award for Global Learning Practitioner by *Chief Learning Officer* magazine. We also led efforts for the Forensic Technology Center of Excellence, providing testing, evaluation, and technology assistance to the research and development of technologies to aid forensics laboratories. Additionally, we continued to manage the National Laboratory Certification Program, which accredits forensic workplace drug testing laboratories conducting more than 5 million tests under federal regulation annually.

RTI was awarded a contract to establish and lead the National Center for Innovation in Career and Technical Education. The center will conduct research to inform how career and technical education programs operate and provide training for educators and administrators.

50
courses
23,000 students trained in forensic science in 6 years



Laura Knapp, senior education analyst *Growing up, I witnessed firsthand that education creates opportunities, whether that means a traditional four-year degree or a technical education program. My work in education research helps to identify better strategies for helping children and youth believe that college is a possibility for them and to improve government policies that fund such strategies.*

In our effort to improve the environment, during FY2012 we developed several tools to address a range of environmental and public health issues. We used a modeling system we developed to evaluate ecologic responses to changes in stream flow in North Carolina and made improvements to a tool that helps solid waste planners evaluate the cost and life cycle of environmental aspects of solid waste management strategies. In addition, we developed a program that allows public health modelers to generate synthetic population datasets, which are computerized representations of households or individuals, for specific geographic study areas.

An RTI geospatial application called Synthia™ generates synthetic populations, mapping representations of households or individuals at different scales for up to **300+ million** people.

Additionally, we helped understand individual practices. We found that more care needs to be taken toward educating seniors about food safety. Older adults are more likely to experience severe complications and death as a result of foodborne illness, yet our researchers found that many health care providers and older-adult caregivers don't have the knowledge to educate adults over age 60 about recommended food practices. We also found that older adults are not prepared to ensure food safety during power outages.

Researchers in RTI Health Solutions—a business unit of RTI that provides research and consulting services to biopharmaceutical and medical device clients—conducted a series of studies on risk tolerance for new treatments that offer significant improvements in treating chronic illnesses but also carry risks of fatal side effects. We found that patients are often willing to accept safety risks when their medications offer significant health improvements.

This year, the U.S. Food and Drug Administration (FDA) medical device division issued guidance on benefit-risk evaluations that was influenced by a case study we conducted with FDA on weight-loss surgery. The case study will help FDA evaluate how to incorporate patient preference data into regulatory review of medical devices.

F. Reed Johnson, PhD, economist *After 15 years at RTI, I still look forward to going to work each day to find better ways for giving patients a voice in developing and evaluating new treatments. And I feel fortunate to work with smart, hard-working young colleagues who are as enthusiastic about our studies as I am.*

synthetic chemistry ELECTRONICS PHARMACOLOGY
ENERGY environment discovery science
drug development
materials science APPLIED R&D
CLINICAL RESEARCH bioengineering

Work That Advances

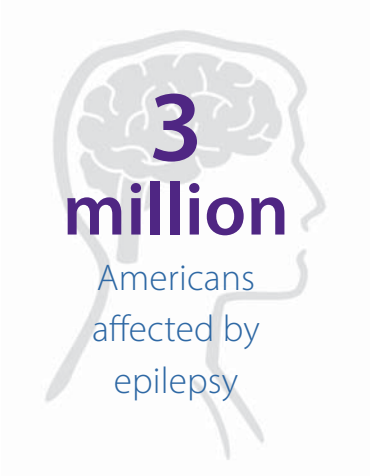
Science and Technology to Improve Lives

The search for solutions to today's complex issues takes place not only at the level of social systems and human behaviors, but also at the microscopic and molecular level. One thing that makes RTI unique is our ability to contribute at all levels. Our experienced investigators and lab scientists come to the bench every day to study and characterize new molecules, develop novel scientific methods to accelerate the pace of research, and engineer advanced technologies that will improve the lives of people around the world.

Engineering Innovations in Patient Care and Preclinical Testing

With expertise that includes sensors and microfluidics, bioengineers at RTI conduct R&D to address specific challenges in biology and medicine.

This year, those challenges included an effort to develop the first reliable monitor for patients, especially children, with epilepsy. We are gathering data from Children's National Medical Center on the changes in heart rate and rhythm, respiration, and other vital signs that are hallmarks of many types of seizures. Using data from a small clinical study that support the feasibility of developing an effective monitor to detect generalized seizures, biomedical engineers at RTI are developing an algorithm and a wearable monitor that can detect a seizure and alert caregivers. If it proves effective, such a monitor would alleviate some of the stress for parents and others who care for people who suffer from seizures.



Ann Pitruzzello, PhD, biomedical engineer *One reason I chose biomedical engineering as a career was for the opportunity to have an impact on people's lives. This project focuses on improving the quality of life for people with epilepsy by helping them live more independently. I also like the idea of helping a population that has been somewhat neglected in terms of research funding.*

Our **"lung on a chip"** uses human cells to provide better information about how the body responds to natural and bioengineered pathogens.

Also this year, RTI undertook two major efforts with the potential to accelerate clinical testing of new therapeutic drugs.

With new funding from the Defense Threat Reduction Agency, we began working with researchers at the University of North Carolina at Chapel Hill to develop a sophisticated model that closely emulates the human lung. This 3-D in vitro cell culture—or "lung on a chip"—uses human cells to provide better information about how the human body responds to natural and bioengineered pathogens and to avoid pitfalls due to physiological differences between animals and humans.

We are also conducting and evaluating an emerging technique for assessing drug cardiac toxicity, a major concern and a leading cause of failures during clinical development. Our evaluations suggest that the technique, which is based on electrical recording of cardiac cell cultures derived from human stem cells, may be a better predictor of a compound's clinical behavior than conventional in vitro and in vivo assays.

Drug and Biomarkers Research

Because much of our work in drug discovery is publicly funded, we are able to share results with the greater scientific community in the hope of contributing to additional advancements in human health and well-being. This year, one of our fundamental discoveries played a critical role in groundbreaking work by The Scripps Research Institute. Researchers were able to use the kappa opioid receptor antagonist JDTic, which was synthesized by RTI chemists in 2001, to determine the structure of a critical receptor in the human brain that influences pain, addiction, depression, and psychosis. With an accurate map of the atomic structure of this receptor, scientists are better armed to develop a new generation of therapeutic drugs to treat these afflictions.

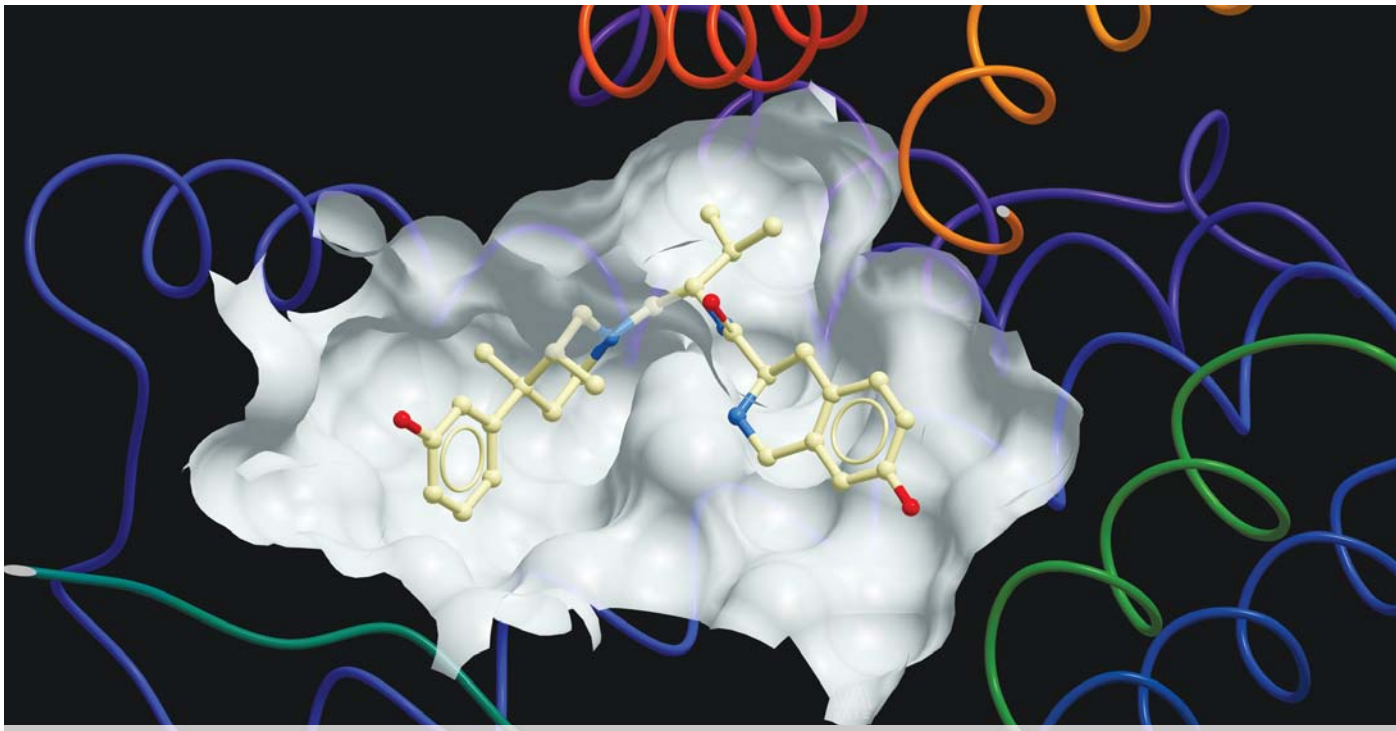
In September 2012, we were awarded a grant from the National Institutes of Health Common Fund to serve as a Regional Comprehensive Metabolomics Resource Core (RCMRC) for the eastern United States. The RTI RCMRC will help establish national standards for collection and analysis of metabolomics data and will also provide quality data for storage in a central repository. The RTI RCMRC will study a wide range of disease and therapeutic areas, conduct pilot and feasibility studies that employ metabolomics in clinical and translational research, and help train the next generation of researchers.

RTI is home to

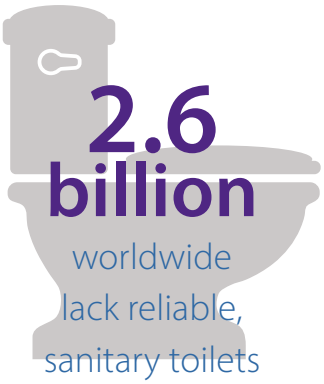
1 of 3

metabolomics resource cores

established by the NIH Common Fund



Our JDTic compound enabled researchers to elucidate the structure of a key receptor in the brain. This discovery could lead to new therapeutic drugs to treat addiction, chronic pain, anxiety, and depression.



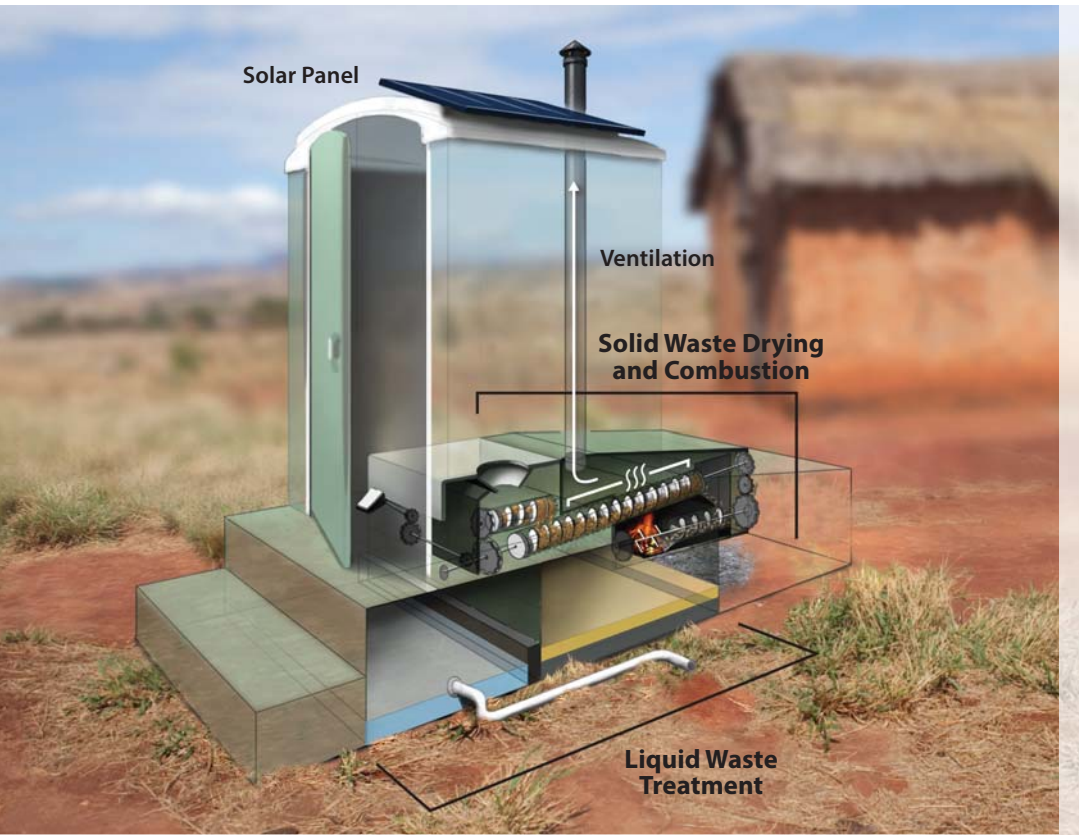
Breakthrough Technologies in Water and Sanitation

In the summer of 2012, RTI engineers took on two new challenges, both with significant potential to improve lives in the developed and developing worlds.

In August 2012, RTI was awarded a grant from the Bill & Melinda Gates Foundation to develop a toilet for use in developing nations that converts human waste into burnable fuel, stored energy, and disinfected, nonpotable water. Our unique design effectively disposes of waste without piped-in water, a sewer connection, or outside electricity—barriers that have prevented developing nations from achieving modern levels of sanitation. Equally important, the toilet will be easy to install and maintain and will cost no more than 5 cents per person per day.

Under this effort, we are partnering with Duke University, Colorado State University, NASA, and the U.S. Naval Research Laboratory to integrate the expertise in engineering, water and sanitation, energy, and economics that is necessary to move this innovative concept from the laboratory to prototype demonstration.

If successful, our novel toilet could significantly improve public health and quality of life among people in less developed countries.



Our toilet will convert human waste into burnable fuel and disinfected, nonpotable water without the need for piped-in water, a sewer connection, or outside electricity. This novel waste treatment system is designed to improve public health and quality of life in developing nations.

In June we were awarded a $4.8 million grant by the U.S. Department of Energy to develop a new process technology that will improve the energy efficiency associated with industrial water treatment in the U.S. manufacturing sector. In partnership with Veolia Water Solutions & Technologies North America and Duke University, we will develop a hybrid membrane system that will capture waste heat from industrial processes to treat wastewater. The new technology is applicable to a wide range of industries, such as the power generation, refining, and chemical sectors.

Initial estimates indicate that the technology could provide up to a 91 percent reduction in electricity consumption, up to a 34 percent reduction in water usage, and up to a 94 percent reduction in water discharges in comparison with conventional approaches to industrial water treatment and reuse. The technology could also eliminate the significant greenhouse gas emissions associated with conventional aerobic biological water treatment.

Our wastewater treatment process could

reduce water discharge by

94%

Zachary Hendren, PhD, water technology research engineer *Developing a sustainable water supply and conserving energy are two of the most critical issues of our time. Using waste heat as the energy source to drive water treatment, we are working to eliminate cost barriers to industrial water reuse and decrease overall water consumption across a wide range of industries.*

environmental management

economic growth

global health

GOVERNANCE

MONITORING AND EVALUATION

epidemiology

education reform

information and communication technology

water and sanitation

Work That Improves

Health, Education, and Opportunity Globally

Across RTI, we are proud of our work in international development, leading projects that connect the dots between our day-to-day jobs and our mission of improving the human condition.

This year our work took us to more than 75 countries, where we helped local and national governments and civil society organizations apply science-based best practices and develop their capacity to deliver critical services to their citizens and communities.

Making the World a Healthier Place

For more than three decades, we have been leading projects designed to address the unique health challenges facing vulnerable populations around the world.

This year, we completed work under USAID's first-ever program to support integrated control of seven neglected tropical diseases (NTDs). The tremendous success of this program was honored at an event in Washington, DC, by USAID and the World Health Organization. On the heels of this success, USAID awarded RTI the follow-on contract—dubbed ENVISION—to continue our efforts for another five years. Under ENVISION, RTI will work with numerous partner organizations in at least 15 countries in Africa, Asia, and Latin America to help reach global elimination and control goals for 2020.

Dharmpal Prasad Raman, Nepal Country Director, NTD ENVISION *Our support and work in scaling up NTD control activities enables governments to meet international commitments to eliminate and control these diseases. We're helping eliminate poverty as people are treated and protected against these diseases.*

In 2012
our HIV work
took us to
45
countries

Our approach to HIV programs builds on community-based trials and other behavioral research, as well as decades of applied program experience in developing countries. This year alone, our efforts to combat the spread of HIV and help people living with AIDS took us to more than 45 countries across Sub-Saharan Africa, Asia, Latin America, the Middle East, and Eastern Europe.

One HIV project launched just this year is a close collaboration with the Government of Vietnam to implement a project funded by USAID/Vietnam through the U.S. President's Emergency Plan for AIDS Relief. Known as USAID Pathways for Participation, this project aims to improve the sustainability of civil society organizations and support their involvement in Vietnam's response to HIV and AIDS.

This year we assessed and mapped nearly 250 organizations that provide community-based HIV prevention, care, or support services or are active in policy advocacy. We also selected five local organizations that will support interventions in nine provinces for at-risk groups—including sex workers and their clients, men who have sex with men, injecting drug users, and people living with HIV.

Anne-Katrin Purkiss, Wellcome Images

In Vietnam, we are working with leaders of local organizations to support interventions for people at risk for HIV transmission.

Supporting Education Reform Through Better Data and Public-Private Partnerships

At RTI, we understand that quality data are vital to the making of sound policy and that the private sector is a valuable partner for sustainable education reform.

This year, one of our flagship data collection tools, the Early Grade Reading Assessment (EGRA), gained increasing support as the gold standard in the field of literacy assessment. We were proud to see ministries of education in several countries begin to act on information provided through EGRA and its companion tools for assessing math skills and gauging the effectiveness of school management. For example, driven by data from EGRA assessments, the governments of Jordan, Yemen, and Morocco have launched a range of follow-on efforts—from commissioning national-scale student assessments to reviewing curricula and launching pilot programs to involve parents and change the way children learn.

EGRA is used in

50+

countries

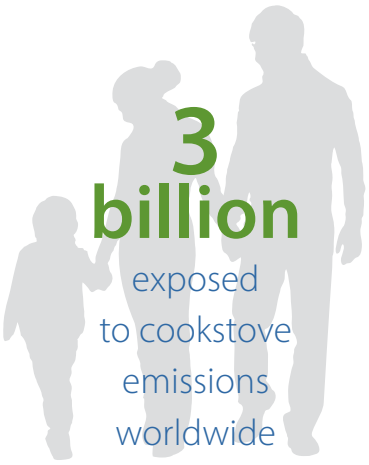
and 100 languages

To make these tools easier to use, we launched an open-source platform—dubbed Tangerine™—for collecting data via mobile devices, which are increasingly available in developing countries. So far Tangerine has been implemented in the Dominican Republic, Haiti, Kenya, Liberia, Malawi, and the Philippines.

Alianzas has leveraged **$18.4 million** from private-sector organizations to the benefit of nearly **9 million** Guatemalans.

In Guatemala, we continue to lead the USAID-funded program Alianzas, which takes an innovative approach to addressing high-priority health and education issues by involving the private sector. This year, in response to an appeal from Guatemala's Ministry of Education, Alianzas delivered 2.9 million textbooks in just two months to elementary students across the nation—all at no cost to the U.S. government.

Our study in Sri Lanka used RTI's MicroPEM™ device to measure the personal exposure of the principal cook in each household and the air quality in the cooking area.



Addressing the Global Challenge of Cookstove Pollution

As an implementing partner of the Global Alliance for Clean Cookstoves, RTI is working to foster the adoption of clean-burning stoves and fuels in 100 million households by 2020. Over the past three years, we have been independently funding cross-cutting efforts to better understand—and ultimately solve—the technical, economic, and societal challenges that make this issue so complex.

This year we completed a survey of households in Sri Lanka, where cookstove use is prevalent, that incorporated our MicroPEM™ personal exposure monitor to get accurate measurements of human exposures to cookstove emissions. Because it is small enough to be worn by study participants, the MicroPEM device is able to measure actual human exposures, dramatically reducing uncertainties in the results and providing a truly accurate picture of exposure patterns. Our data will have important implications on future research needed to define exposure-response relationships for acute-level diseases caused or exacerbated by cookstove use. In the coming year, RTI will further miniaturize the MicroPEM device to enable similar studies of children's exposure to cookstove emissions.

New Solutions for Wastewater Treatment

Across the developing world, RTI provides comprehensive environmental consulting services to government agencies, communities, and businesses, with an emphasis on developing a local strategy for each project that can ultimately be self-sustaining. In one example this year, we completed rigorous testing of a novel system for wastewater treatment that uses cocopeat, an industrial by-product prevalent throughout the Mekong Delta, as a filtration medium. Funded by the Bill & Melinda Gates Foundation, this effort aims to develop a simple and low-cost technology suitable for small communities.

Our analytical results indicate that cocopeat biofiltration is a viable technology and can improve access to wastewater treatment for poor people in coconut-producing regions around the world. In tests, cocopeat filtration reduced biochemical oxygen demand, total suspended solids, and coliform bacteria by nearly 90 percent—comparable to results for constructed wetlands, lagoons, and aerobic systems. Test results also showed that cocopeat systems can be constructed inexpensively with relatively quick set-up time.

Using locally available materials and inexpensive systems can boost local economies, improve environmental health, and help reduce the risks of certain diseases. In the coming year, we plan to pursue further development of this technology in the hopes of realizing these benefits.

Cocopeat filtration vs. constructed wetlands:

70%
cheaper

60%
less land required

90%
faster to build

David Robbins, senior water and sanitation specialist *The connection between improper sewage disposal and disease is well known. If we can make available low-cost wastewater processing technologies that are suited to the needs of developing countries, we can help lower the incidence of devastating illnesses like cholera. We're onto something here, and that's exciting.*

cafeteria composting

recycling

SUSTAINABILITY

COMMUNITY-SUPPORTED AGRICULTURE

community involvement

united way

LEED

PUBLIC TRANSIT SUBSIDIES

STEM OUTREACH

giving back

water conservation

Work That Helps

Our Community

At RTI, our mission of improving the human condition shapes the work we do around the world and in our local communities. Our commitment to responsible corporate citizenship is reflected in our staff-driven program for giving back to our communities and in our annual United Way campaign. We are also committed to using our scientific knowledge, technical expertise, and operational skills to be a leader and a role model for sustainable business practices and environmental responsibility.

Supporting Local Charities Through Individual Efforts and Corporate Programs

Although RTI is a nonprofit institute, we support a wide variety of community-based social service organizations, scientific and educational outreach activities, and civic groups. At the individual level, many of our staff members volunteer time and money to strengthen their communities and help people in need.

During FY2012, our employees participated in a variety of volunteer efforts to enrich the lives of others. At our headquarters, for example, employees donated more than 3,000 pounds of food to the Food Bank of Central and Eastern North Carolina during a holiday food drive. In Waltham, Mass., our staff members were recognized with a Gold Footprint Award for charitable work in the Boston area, which included making fleece blankets and assembling birthday goodie bags for children in homeless shelters.

Our Community Partnerships Program supported

120

charitable organizations

Jennifer Greer, Community Partnerships Program administrator *What makes our charitable giving program so special is that it relies on our staff's involvement—from nominating to recommending the efforts we support. The program truly is a reflection of our dedication to improving the human condition, including in the communities where we live and work.*

We provided
$457,000
to the United Way

In addition, several of our researchers serve as mentors for students interested in careers in science, technology, engineering, and mathematics, or STEM. This year, our scientists volunteered at events such as the North Carolina Science and Engineering Fair and the North Carolina Science Olympiad.

Perhaps unique among corporate philanthropy programs, RTI's contributions are driven by our staff members, beginning with their involvement in and nomination of charitable organizations we support. During FY2012, our Community Partnerships Program donated $146,000 to 120 charitable organizations in the communities served by our offices.

We also continued to support the United Way. More than 40 percent of our staff members participated in the 2012 fundraising campaign, raising nearly $360,000. The bulk of these funds will go to the "Give United" program at local United Way organizations to help meet pressing needs in our communities.

Coupled with RTI's corporate donations, we provided a total of $457,000 to the United Way of the Greater Triangle and to United Way agencies serving each of our U.S. regional office locations. In recognition of our efforts, we received both the United Way Spirit of North Carolina Award and the United Way of the Greater Triangle Chairman's Award for Employee Education and Volunteerism for the second consecutive year.

At our 13th annual corporate night, **49** staff members and their guests supported FESTIVAL 2012 at UNC-TV.

In the spring, we donated seven tons of office equipment and supplies to local schools and United Way agencies in North Carolina's Triangle region.

Raising Awareness, Reducing Waste, and Building Green

At RTI, we are committed to using our scientific knowledge, technical expertise, and operational skills to be a leader and a role model for sustainable business practices and environmental responsibility.

Our sustainability efforts begin by identifying opportunities for increased efficiency, developing strategies for reductions and savings, and educating and involving our staff members. During FY2012, building on improvements made over the past several years, we initiated efforts to increase energy awareness, reduce energy consumption, and control costs while maintaining a comfortable working environment.

At our Research Triangle Park (RTP) headquarters this year, we installed charging stations for staff members who drive plug-in electric vehicles and undertook initiatives to compost waste from our cafeterias and to collect and donate unused and gently used office supplies. As part of what we dubbed our "Spring Fling It" campaign, our staff members gathered seven tons of materials—from binders to computers—from their offices and donated them over the course of three weeks to local schools and United Way agencies in the Triangle.

RTP campus impact

6%
less electricity

10%
less water

26,550 lbs
cafeteria compost

www.rti.org/sustainability

Also during FY2012, a second building on our main campus was awarded the prestigious LEED Gold certification by the U.S. Green Building Council. LEED, or Leadership in Energy and Environmental Design, is an internationally recognized mark of excellence for green buildings. Contributing to the sustainable design of the building was the use of wood obtained through sustainable forestry practices and framework made of recycled steel.

As a result of our sustainability efforts, we won an Alexander Hamilton Award for green enterprise risk management.

Built in 2012, the newest building on our North Carolina campus is the second to earn the U.S. Green Building Council's LEED Gold certification.

Chairman's Message

For more than 54 years, RTI International has conducted rigorous, independent research to inform public policy and implemented technical programs all over the world that have helped millions of people in developing nations.

The Board of Governors, comprising senior executives from the academic, business, scientific, and investment communities, is proud of our association with RTI and its mission to improve the human condition. As is our charge, we are committed to helping support and guide RTI's strategic direction and leadership.

During 2012, we were pleased to select Wayne Holden as RTI's fourth president. Dr. Holden brings to this position renewed energy, a spirit of innovation, and a commitment to RTI and its future. We selected Wayne because he has the leadership, values, experience, and business acumen to successfully lead our complex global research enterprise.

In the coming year, we look forward to working closely with RTI leadership to refine RTI's future business strategy and to further strengthen our close ties with our founding universities. As we go forward, we join the many dedicated scientists and staff members at RTI in their efforts to improve the world in which we live.

William M. Moore Jr.
Chairman

Executive Leadership

E. Wayne Holden
President and Chief Executive Officer

James J. Gibson
Executive Vice President and Chief Operating Officer

Michael H. Kaelin Jr.
Senior Vice President and Chief Financial Officer

Tim J. Gabel
Executive Vice President, Social, Statistical, and Environmental Sciences

Aaron S. Williams
Executive Vice President, International Development Group

Allen W. Mangel
Executive Vice President, RTI Health Solutions

James Trainham
Vice President, Strategic Energy Initiatives

G. Edward Story
Senior Vice President, General Counsel, and Corporate Secretary

Martha J. Roberts
Senior Vice President, Human Resources

Board of Governors

William M. Moore Jr. (Chair)
Managing Partner, Lookout Capital

Peter M. Scott III (Vice Chair)
Former CFO, Progress Energy; Former President and CEO, Progress Energy Services Company

Thomas F. Darden
President and Chief Executive Officer, Cherokee Investment Partners

Barbara Entwisle
Kenan Professor and Vice Chancellor for Research, University of North Carolina at Chapel Hill

E. Wayne Holden
President and Chief Executive Officer, RTI International

Robert A. Ingram
General Partner, Hatteras Venture Partners; Former CEO, GlaxoWellcome

Earl Johnson Jr.
(Distinguished Governor Emeritus) Chairman, Southern Industrial Constructors, Inc.

Peter Lange
Provost, Duke University

Terri L. Lomax
Vice Chancellor for Research and Innovation, North Carolina State University

Harold L. Martin Sr.
Chancellor, North Carolina A&T State University

W. G. Champion Mitchell
Former CEO, Network Solutions

John H. Moellering
Chairman, USAA

H. Troy Nagle
Professor, Joint Dept. of Biomedical Engineering, University of North Carolina at Chapel Hill and North Carolina State University

Hilda Pinnix-Ragland
Vice President, Corporate Public Affairs, Duke Energy

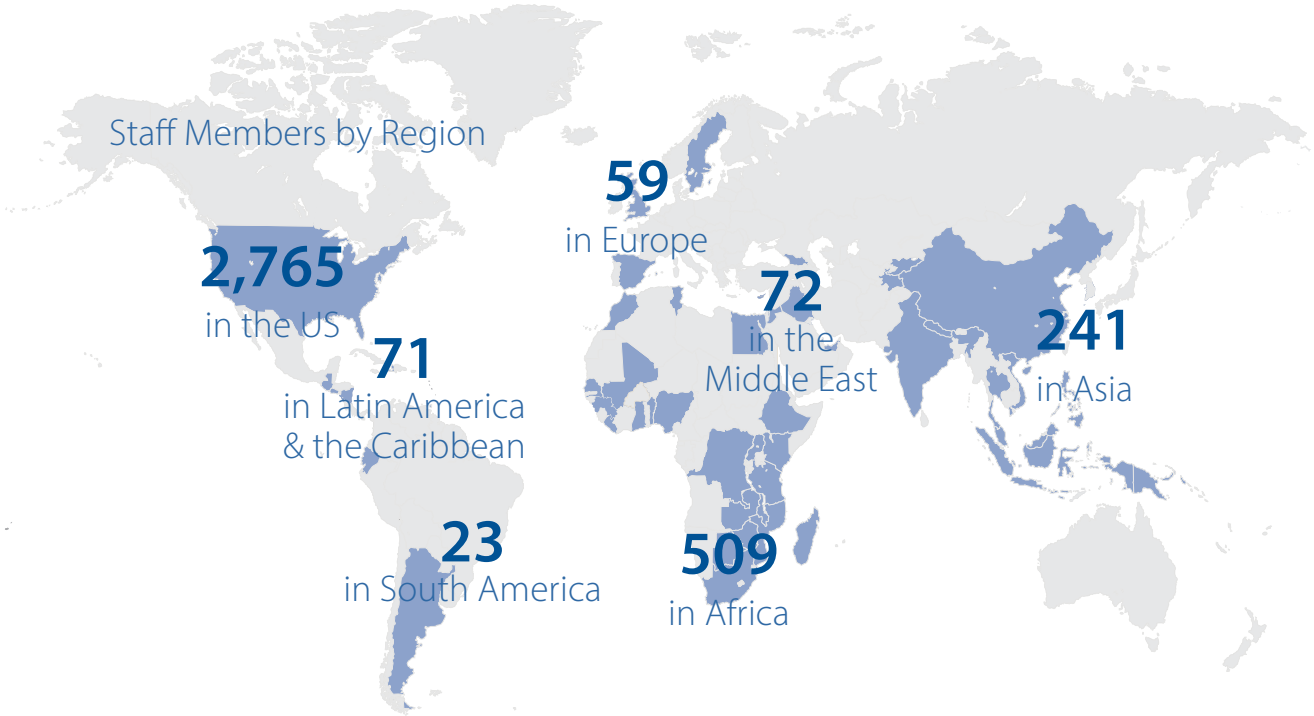
James N. Siedow
Vice Provost for Research, Duke University

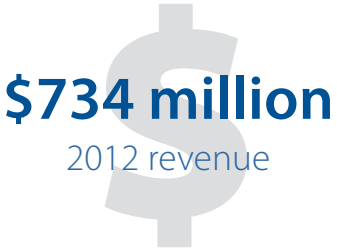
Phail Wynn Jr.
Vice President, Durham and Regional Affairs, Duke University

Global Presence and Financial Strength

Headquartered in Research Triangle Park, North Carolina, RTI maintains eight offices in the United States and 10 international offices to support our ongoing projects and evolving client needs. Our U.S.-based staff of more than 2,700 supports both domestic and international projects, working closely with more than 900 internationally based staff members on five continents. Employees in these locations support projects locally and in other countries where RTI leads efforts on behalf of our clients.

Across RTI, our staff members represent more than 80 nationalities and speak nearly 90 languages, enabling us to collaborate effectively with fellow researchers, clients, and stakeholders around the world.





RTI is a thriving institute with a strong financial position and outlook. During the fiscal year that ended September 30, 2012, we recorded revenue from contracts and grants totaling $734 million. Our equity increased to $268 million as of September 30, 2012 (a 4 percent increase over the previous year). We maintained our AA- long-term bond rating (high investment grade) and a stable outlook from Standard & Poor's Ratings Services.

As a nonprofit corporation, we reinvest net revenue in programs, facilities, and new capabilities that further our mission to improve the human condition.

Client List

U.S. Government Clients

Department of Agriculture
Department of Commerce
Department of Defense
Department of Education
Department of Energy
Department of Health and Human Services
- Administration for Children and Families
- Agency for Healthcare Research and Quality
- Centers for Disease Control and Prevention
- Centers for Medicare & Medicaid Services
- Food and Drug Administration
- Health Resources and Services Administration
- National Institutes of Health
- National Toxicology Program
- Office of the National Coordinator for Health Information Technology
- Office of Population Affairs
- Office of the Secretary
- Substance Abuse and Mental Health Services Administration

Department of Homeland Security
Department of the Interior
Department of Justice
Department of Labor
Department of State
Department of Transportation
Environmental Protection Agency
National Aeronautics and Space Administration
National Institute of Standards and Technology
National Science Foundation
U.S. Agency for International Development

Private-Sector Clients

3M
Abbott Laboratories
AMEC
Amgen
Arkema
AstraZeneca
BASF
Bayer Yakuhin, Ltd.
Biogen Idec
Boehringer Ingelheim
Bristol-Myers Squibb Co.
Buchanan Renewables
CEMEX
Chevron Corporation
Cisco Systems
Coffey International
The Dow Chemical Company
DRS Technologies
DuPont
Eli Lilly and Company
GE Healthcare
General Mills
Golden Pacific Laboratories, LLC
The Hamner Institutes for Health Sciences
The Johnson & Johnson Family of Companies
Johnson Matthey
KBR
Lockheed Martin
Medtronic
Merck & Co., Inc.
The Nielsen Company
Novartis
Novo Nordisk
Ogawa & Co. USA
Pfizer
Qualcomm
RF Micro Devices
Roche
Sanofi-Aventis
Shell
Teva Neuroscience
Tioga Pharmaceuticals
U.S. News & World Report

Other Clients

Abu Dhabi Executive Affairs Authority
American Heart Association
American Legacy Foundation
ASHRAE
Asian Development Bank
Bill & Melinda Gates Foundation
Ford Foundation
Global Alliance for TB Drug Development
Inter-American Development Bank
International Partnership for Microbicides
Ministry of Foreign Affairs of the Republic of China (Taiwan)
National Multiple Sclerosis Society
Robert Wood Johnson Foundation
The Smith Family Foundation
The Spencer Foundation
U.S. state governments
The William and Flora Hewlett Foundation
The World Bank
World Health Organization

Headquarters

Research Triangle Park
3040 East Cornwallis Road
Post Office Box 12194
Research Triangle Park, NC 27709-2194, USA
919.541.6000
listen@rti.org

www.rti.org

Regional U.S. Offices

Ann Arbor, MI
Atlanta, GA
Chicago, IL
Rockville, MD
San Francisco, CA
Waltham, MA
Washington, DC

International Offices

Abu Dhabi, United Arab Emirates
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