

Globally and locally, UNC public health researchers, staff members and students touch the lives of thousands of people every day — leading the way toward healthier lives for women, children and families, victims of disease and disasters, those without safe drinking water and sanitation practices, and many others.

## THE WATER INSTITUTE AT UNC

Limited access to safe water, lack of sanitation and poor hygiene threaten the lives of three billion people, says Jamie Bartram, PhD, Holzworth Distinguished Professor of environmental sciences and engineering and director of The Water Institute at UNC. Bartram tendered the figure in response to the 2012 UNICEF/World Health Organization report (tinyurl.com/2012-water-report), which underestimates how

many global water sources are endangered by sanitation issues. Unsafe water and poor sanitation kill more young children every year than malaria, AIDS and accidents combined, he says.

"Over one million children die from diarrhea every year, and 90 percent of those deaths could be averted through better water, sanitation and hygiene (WaSH)," says Peter J. Kolsky, PhD, who joined the Institute in June as its associate director and Professor



of the Practice in environmental sciences and engineering.

"Finding out what water and sanitation facilities communities actually use is surprisingly challenging, before and after projects. Doing so is critical to the design and implementation of effective programs. Sharing global experience in monitoring and evaluation increases quality and reduces cost," says Kolsky, a former senior water and sanitation specialist at The World Bank.

The vision of The Water Institute is to bring together individuals and institutions from diverse disciplines and sectors and empower them to collaborate on critical global issues in water and health, including water scarcity and sharing, climate change and others. The Institute supports non-profit Plan International USA (tinyurl.com/PlanUSA-WASH) by assessing promotional

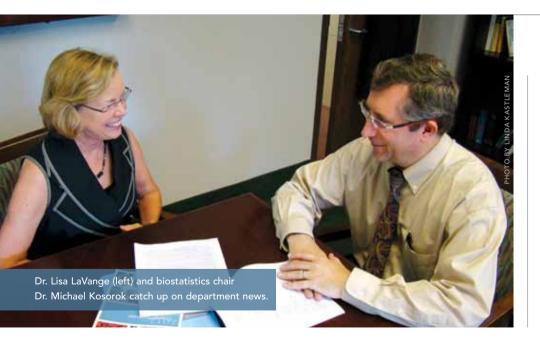
efforts for sanitation issues and also helps evaluate the impact of the Conrad N. Hilton Foundation's water initiatives (www.hiltonfoundation.org). Its presentation of the annual Water and Health Conference in October is central to the Institute's vision for research, teaching and dissemination of knowledge. (See whconference.unc.edu.)

## BIOSTATISTICS: Changing the practice of medicine

Former biostatistics professor Lisa LaVange, PhD, directed the oldest continuously funded National Institutes of Health coordinating center at UNC from 2005 to 2011. The Collaborative Studies Coordinating Center (CSCC), founded in 1971 in the UNC biostatistics department, has a rich history and tradition of conducting clinical trials and epidemiological studies.

"Biostatistics and epidemiology faculty members work with statisticians, programmers and project managers to design and conduct complex national and international studies," LaVange says. "These provide immeasurable improvements in people's lives globally."

Early on, the CSCC documented benefits of lowered cholesterol in reducing morbidity and mortality. Its longest-running study, Atherosclerosis Risk in Communities, has produced more than 1,000 manuscripts relating heart disease to risk behaviors and clinical and genomic factors. Data now are being used to identify predictors of neurocognitive functioning during aging. Today, studying health disparities among Hispanics of various backgrounds, the CSCC plays an integral role in identifying and reducing risks for disease, thus changing the practice of medicine.



"Whether examining links between indoor air pollution and respiratory disease in the United Arab Emirates, or comparing harmful antipsychotic side effects in treating schizophrenia," LaVange says, "project teams use state-of-the-art data collection systems and apply cutting-edge methodologies."

LaVange left UNC in October 2011 to direct the Office of Biostatistics in the U.S. Food and Drug Administration's Center for Drug Evaluation and Research. Read more about CSCC at www.cscc.unc.edu. Read about the center's new director, Sonia Davis, DrPH, on page 48.

## HEALTHY KIDS, HEALTHY COMMUNITIES

One-third of children and adolescents in the United States are overweight or obese, a condition associated with hypertension, diabetes, psychosocial and orthopedic problems.

"In the past few decades, overweight and obesity rates have skyrocketed, particularly in low-income communities and among people of color," says Sarah Strunk, MHA,



Sarah Strunk

director of Active Living By Design (activelivingbydesign.org) and Healthy Kids, Healthy Communities (HKHC). "Many neighborhoods lack safe and accessible spaces for physical activity and play, and healthy food may not be readily available."

HKHC is a five-year, \$33.4 million national program of the Robert Wood Johnson Foundation that launched in 2008. The Foundation chose Active Living By Design, based at the School's North Carolina Institute for Public Health, to lead the program. "The Institute is the cornerstone of our school's

outreach in service to improve public health in North Carolina and the nation," says Institute director Anna P. Schenck, PhD, who is also associate dean for practice at the School. "ALBD cultivates and supports integrating physical activity and healthy eating into daily life."

HKHC works with multidisciplinary community partners to implement obesity-prevention strategies in populations at greatest risk. Initiatives include working with corner store owners to increase healthy food availability, effecting agreements to open school playgrounds to residents after hours and developing safe, inviting routes to schools and parks. Impacted communities range from rural Nash County (N.C.) to Chicago.

"This investment in nearly 50 communities is helping to improve the lives of children

across the country," Strunk says. "They are growing up in a culture that gives them the ability to make healthier choices and contributes to a brighter future."

Learn more about the HKHC program at tinyurl.com/ALBD-healthykids).

— IB Shelton