FROM THE WELL TO THE WORLD

PUTTING SCIENCE INTO PRACTICE
Public Health Foundation Incorporated

BOARD OF DIRECTORS

Delton Atkinson, MPH, MPH, PMP
President
Deputy Director
Division of Vital Statistics
National Center for Health Statistics
Centers for Disease Control and Prevention
Paula Brown Stafford, MPH
Vice President
President, Clinical Development
Quintiles
Barbara K. Rimer, DrPH
Executive Vice President
Ex Officio
Dean
Alumni Distinguished Professor
UNC Gillings School of Global Public Health
P. LaMont Bryant, PhD, RAC
Product Director, Global Marketing
Ethicon Endo-Surgery
Johnson & Johnson
Cynthia H. Cassell, PhD
Health Scientist, Epidemiology Team
Birth Defects Branch
Division of Birth Defects and Developmental Disabilities
National Center for Birth Defects and Developmental Disabilities
Centers for Disease Control and Prevention
Deniese M. Chaney, MPH
Principal
Accenture Health and Public Service
Stacy-Ann Christian, JD, MPH
Associate Director
Research Administration and Finance
Northeastern University
Michael (Trey) A. Crabb III, MHA, MBA
Managing Director
Healthcare Mergers, Acquisitions and Strategic Services
Ziegler Investment Banking
David Dodson, MDiv
President
MDC Inc.
Cynthia J. Girman, DrPH
Senior Director, Department of Epidemiology
Merck Research Laboratories
Priscilla A. Guild, MSPH
President
Gillings School of Global Public Health Alumni Association and North Carolina Citizens for Public Health
Alma (Gibbie) Harris, MSPH, RN
Health Director
Buncombe County (N.C.) Department of Health
Deborah Parham Hopson, PhD, RN
Assistant Surgeon General
Associate Administrator
AIDS Bureau
Health Resources and Services Administration
Joan C. Huntley, PhD, MPH
Adjunct Professor of Epidemiology
UNC Gillings School of Global Public Health
Joseph F. Johnson, MHA, FACHE
Administrator
Clinical Operations
The Emory Clinic Inc.
Mark H. Merrill, MSPH
President and Chief Executive Officer
Valley Health System
Stephen A. Morse, MSPH, PhD
Associate Director for Environmental Microbiology
National Center for the Prevention, Detection and Control of Infectious Diseases
Centers for Disease Control and Prevention
Douglas M. Owen, PE, BCEE
Executive Vice President
Malcolm Pirnie, the Water Division of ARCADIS
Jonathan J. Pullin, MS
President and Chief Executive Officer
The Environmental Group of the Carolinas Inc.
Roy J. Ramthun, MSPH
President
HSA Consulting Services LLC
Laura Helms Reece, DrPH
Chief Operating Officer
Rho
James Rosen, MBA, MSPH
Partner
Intersouth Partners
Jacqueline vdH Sergent, MPH, RD, LDN
Health Promotion Coordinator/Health Education Supervisor
Granville-Vance (N.C.) District Health Department
Celette Sugg Skinner, PhD
Professor and Chief, Behavioral and Communication Sciences
Department of Clinical Sciences
Associate Director for Cancer Control and Population Sciences
Harold C. Simmons Cancer Center
University of Texas Southwestern Medical Center
Edgar G. Villanueva, MHA, FACHE
Owner/Principal
Leverage Philanthropic Partners
Winston-Salem, N.C.
Alice D. White, PhD
Vice President (Retired)
Worldwide Epidemiology Department
GlaxoSmithKline
Jack E. Wilson, PE, MSENV
Member, Board of Directors
TEC Inc.
Chen-yu Yen, PhD, PE
President and Chief Executive Officer
TerraSure Development LLC
Vice President
Gannett Fleming Inc.
Senior Vice President
Gannett Fleming Sustainable Ventures Corp.

UNC Gillings School of Global Public Health

ADVISORY COUNCIL

Donald A. Holzworth, MS
Chair
Chairman
Futures Group Global
James Rosen, MBA, MSPH
Public Health Foundation Board Liaison to Advisory Council
Partner
Intersouth Partners
Marcia A. Angle, MD, MPH
Adjunct Professor
Nicholas School of the Environment
Duke University
William K. Atkinson, PhD, MPH
President and Chief Executive Officer
WakeMed
Mark E. Brecher, MD
Chief Medical Officer and Senior Vice President
LabCorp
Gail H. Cassell, PhD, DSc (hon)
Vice President, Scientific Affairs (Retired)
Distinguished Lilly Research Scholar for Infectious Diseases
Eli Lilly and Co.
William Cates Jr., MD, MPH
President, Research
FHI 360
Michael J. Cucchiara
Managing Partner
Grappins Inc. and Pangea Foods
Leah Devlin, DDS, MPH
Gillings Visiting Professor
UNC Gillings School of Global Public Health
Jeffrey P. Engel, MD
Executive Director
Council of State and Territorial Epidemiologists
Ken Eudy
Chief Executive Officer
Capstrat
James R. Hendricks Jr., MS
Vice President, Environment, Health and Safety (Retired)
Duke Energy
Michael E. Kafri, MD, MSPH
Research Scientist
Massachusetts Institute of Technology
John Dr. McCallon
Chief Executive Officer
McCallon Golf
Jesse Milan Jr., JD
Vice President and Director
Community Health Systems
Altairum Institute
James Patrick O’Connell, PhD, MPH
Chief Executive Officer
Acea Biosciences Inc.
Jane Smith Patterson
President
Jane Patterson & Associates

Virginia B. Sall
Co-founder and Director
Sall Family Foundation
Markus Wilhelm
Chief Executive Officer
Strata Solar LLC
Louise Winstanley, LLB, MSB
Attorney and Medical Ethicist
Chapel Hill, N.C.
Lloyd M. Yates, MBA
Executive Vice President
Duke Energy

MEMBERS EMERITI

Nancy A. Dreyer, PhD, MPH
Chief of Scientific Affairs
OUTCOME
Carmen Hooker Odom, MS
President
Milbank Memorial Fund
## FEATURES & NEWS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>FROM THE DEAN’S DESK</td>
</tr>
</tbody>
</table>
| 3 | IMPLEMENTATION SCIENCE  
  Translating research into real-world solutions |
| 5 | A VISION FOR PRACTICE  
  How we are engaged locally and in the world at large |
| 6 | CAPSTONE PROJECTS  
  Training students, benefiting communities |
| 7 | DR. HAJIME KANAMORI  
  A belief in ‘kizuna’ |
| 8 | SOCIAL ENTREPRENEURSHIP  
  Using innovative business principles to achieve beneficial social change |
| 10 | PUTTING KNOWLEDGE TO WORK  
  Implementation of programs, technologies and other tools |
| 14 | INFLUENCING POLICY  
  Changing the way things are done |
| 18 | RESEARCH ANNUAL REPORT |
| 20 | RESEARCH HIGHLIGHTS  
  Implementation-ready studies that may shape policy and treatment |
| 22 | ALUMNA VIEWPOINT  
  Engaging patients and physicians in China’s fight against chronic diseases |
| 23 | SCHOOL NEWS |
| 26 | IN MEMORIAM |
| 27 | AWARDS AND RECOGNITIONS |
| 29 | OUR DONORS  
  Honor roll of donors  
  Rosenau Society membership  
  Philip C. Singer Distinguished Professorship contributors  
  Hilton Foundation  
  W.K. Kellogg Foundation  
  Denise Cline  
  John and Dorothy Swartz  
  Mike & Jill Kafriessen  
  Delton Atkinson |
| 36 | 45 Annual Fund Scholarships |
| 39 | 49 Don and Jennifer Holzworth |

---

**DEAN**
Barbara K. Rimer, DrPH

**INTERIM COMMUNICATIONS DIRECTOR**
Kathy Barboriga, PhD

**EDITOR**
Linda Kastleman

**ASSOCIATE DEAN FOR EXTERNAL AFFAIRS**
Peggy Dean Glenn

**DESIGN AND PRODUCTION**
UNC Creative

**CONTRIBUTING WRITERS**
Amanda Crowe, Clancey Houston, Whitney L.J. Howell, Linda Kastleman, Kathleen Kearns, Michele Lynn, Branson Moore, Nancy Oates, and JB Shelton

Send correspondence to Editor, *Carolina Public Health*, Gillings School of Global Public Health, Campus Box 7400, Chapel Hill, NC 27599-7400, or email sphcomm@listserv.unc.edu.

**SUBSCRIBE TO**
CAROLINA PUBLIC HEALTH  
www.sph.unc.edu/cph

17,000 copies of this document were printed at a cost of $14,857.41 or $0.87 per copy.

*Carolina Public Health* (ISSN 1938-2790) is published twice yearly by the UNC Gillings School of Global Public Health, 135 Dauer Dr., Campus Box 7400, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7400.  
Vol. 2, No. 3, Fall 2012.
It’s not enough to discover. We also must implement—well. It takes far too long to move evidence from laboratories and research programs to clinics and communities where it will benefit people.

One of our responsibilities as a public university is not only to educate our state’s children, but also to benefit the people of North Carolina. As this issue of our magazine demonstrates, many of the School’s faculty members are translating research into practice and are committed not only to discover new knowledge but also to apply it. Because we are a global school, we want that benefit to be felt in North Carolina and around the world.

It’s one thing to talk about implementation, but we must help people achieve it. Over the last few years, our gift from Dennis Gillings and Joan Gillings has enabled us to support visiting professors and an executive in residence. Don Holzworth, a successful, energetic entrepreneur and former chief executive officer of Constella Group LLC, has been a guru and guide for faculty members and students who want to translate their effective devices and programs into practice. Partly because of Don’s help, we’re giving birth to new companies, and more students and faculty members are interested in entrepreneurship.

Implementation is where we could achieve our greatest impact on the public’s health. There are multiple examples of our faculty members’ research being turned into effective programs and methods, influencing policies, and reducing health threats and hazards. Decreasing dating violence, increasing availability of healthy foods in schools and other settings, realizing the vision of a cervical-cancer-free America, a better water filter, new statistical tools, graduated motor vehicle licensing, better ways of sharing water between jurisdictions, and the potential to improve women’s health through evidence-based family guidelines are just a few of the areas in which we have made a difference.

Our North Carolina Institute for Public Health, under the leadership of associate dean for practice Anna Schenck, PhD, is accelerating practice and implementation of evidence-based public health.

We’re influencing the field of implementation science by teaching it, providing critical services to other researchers, serving on prestigious editorial boards and encouraging the University to organize around it.

The speed and quality of implementation can be a matter of life and death, as statistics on maternal and child mortality numbers show. The implementation imperative is urgent if we are to achieve what Chancellor Holden Thorp defined in his 2008 acceptance speech (tinyurl.com/thorp-acceptance) as the University’s mission – to solve “the greatest problems of our time.” We’re passionate about doing just that!

Barbara K. Rimer
To address that public health challenge, Peterson looks to the field of implementation science.

“The challenge is trying to put science into service,” says Peterson, whose department at the public health school houses a World Health Organization collaborating center. The center accelerates progress in translating research evidence for sexual and reproductive health into real-world solutions. “Implementation science is about how to deliver interventions effectively,” he says.

Implementation science closes the loop that connects research to policy to practice. Researchers find out how to fix a problem; policy makers mandate programs to apply the fix. Implementation scientists observe obstacles that get in the way of carrying out the programs, determine how to resolve the sticking points, and inform researchers about what inhibits practitioners from implementing programs in the ways researchers and policy makers intended. Often, the rate-limiting step isn’t the discovery; it’s implementation ‘potholes.’

Implementation science has become one of the hottest growth areas in public health, says Dean Barbara K. Rimer. The Gillings School of Global Public Health is a leader, a position earned through many years of work in this field.

“Implementation science is important to us because we are committed to improving the public’s health,” Rimer says. “We can make groundbreaking discoveries and develop the world’s best interventions, but they mean nothing if they don’t get to the people who need them.”

Alice Ammerman, DrPH, director of the UNC Center for Health Promotion and Disease Prevention (HPDP), a Centers for Disease Control and Prevention research center, is gratified to see this field take root.

‘It’s time to move from the lab to the clinic’

The turning point came when Robert Cairns, professor of health policy and administration at the Gillings School, visited Africa and saw up close how medical interventions could have a profound effect in changing lives.

Cairns knew current adherence rates for medications prescribed for HIV/AIDS and diabetes were disturbingly low. He came back with the idea to start a center that would look into why. The HPDP was established in 2005.

Study after study has found that patients don’t take their prescribed medications, sometimes to the detriment of their health. This is a serious problem in the developed world, even if it isn’t as pronounced as in developing nations, where poverty can force patients to choose between scarce medical resources and food for themselves and their families.

The HPDP is trying to determine why patients don’t take the medications they’re prescribed so that health care providers and policy makers can develop strategies for increasing adherence and improving the health of patients.

The goal is to overcome the obstacles that get in the way of patients taking their medications and to create a system that will work better for future patients as well.

Herbert Peterson, MD, an obstetrician-gynecologist, Kenan Distinguished Professor and chair of maternal and child health, knows how to stop a postpartum hemorrhage for a patient at UNC Health Care. However, the vast majority of those life-threatening hemorrhages happen to women who are hours away from medical facilities, refrigerated pharmaceuticals, safe blood supplies and trained personnel.
center, has been appointed to the National Institutes of Health study section on dissemination and implementation research in health. In summer 2011, HPDP hosted the National Institutes of Health- and Veterans Affairs-sponsored Training Institute for Dissemination and Implementation Research in Health. HPDP also is home to the Center for Training and Research Translation, which has supported obesity interventions nationally for more than six years.

"Many interventions published in the literature attempt to maximize impact without considering feasibility and sustainability," says Ammerman. "This can make them impossible to implement or sustain in the real world. Implementation science considers the needs of the population, the setting and resource constraints."

Bryan Weiner, PhD, organizational psychologist and professor in the health policy and management department, has been principal investigator for a number of prominent studies funded by the National Cancer Institute, including one that examined the implementation, impact, sustainability and business case of the Community Clinical Oncology Program (CCOP), a provider-based research network with a 28-year history of conducting clinical research in community settings and translating research results into every-day clinical care. Weiner’s article, “A Theory of Organizational Readiness for Change,” is the most-viewed article in the history of Implementation Science, a journal on whose editorial board he serves.

“Implementation science moves us beyond the randomized controlled trial for examining implementation,” Weiner says. “We need brief, reliable and valid measures of the factors that drive implementation outcomes.”

The public health school’s range of experts underscores how the field is transdisciplinary and interdisciplinary. Bringing together researchers from different disciplines leads to innovations in the intervention itself, the technology to facilitate implementation, the process of implementation and the ability to change the context.

Susan Ennett, PhD, professor of health behavior, focuses on adolescent health-risk behaviors and has worked on national and regional studies, most recently evaluating implementation of school programs targeting substance abuse prevention and wellness promotion. Her team studies what practitioners need if they are to implement programs fully and well.

“There’s a big leap between the world of research and that of practice,” Ennett says. “It’s naïve to think that just because a program is available or a policy is in place it will be implemented, much less implemented well. Implementation science feeds information back into the loop so that programs coming out of research can be used effectively by practitioners.”

— Nancy Oates

To that person who devotes his life to science, nothing can give more happiness than increasing the number of discoveries. But his cup of joy is full when the results of his studies immediately find practical applications. —Louis Pasteur

WANT TO LEARN MORE?

Dean L. Fixsen, PhD, senior scientist at UNC’s Frank Porter Graham Child Development Institute, is author of Implementation Research: A Synthesis of the Literature, published in 2005 by University of South Florida’s Louis de la Parte Florida Mental Health Institute. The text is online at tinyurl.com/fixsen-implementation.

Issues of implementation became urgent in the context of the AIDS epidemic. Dr. Herbert Peterson and colleagues, in a recent series in The Lancet, highlighted the fact that understanding implementation could increase access to family planning and reduce maternal mortality. Read more at www.thelancet.com/series/family-planning.
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 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.
“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 nonprofit Plan International USA (tinyurl.com/PlanUSA-WASH) by assessing promotional efforts for sanitation issues and also 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.)

Health Behavior (HB) Capstone projects focus students on achieving real-world changes while taking part in mentored service and learning opportunities,” says Megan Ellenson Landfried, MPH, manager of the department’s Master of Public Health program. “Each project strengthens partnerships between UNC and local communities.”

The projects are as varied and complex as the teams of HB Master of Public Health candidates who apply their education, experience and passion to make the projects happen. For an entire academic year, teams of four or five students develop or improve public health programs, services and resources by collaborating with a dozen community organizations. Competition from nonprofit groups applying to become Capstone partners is fierce, Landfried reports.

Capstone projects in North Carolina have contributed to Orange County’s Master Aging Plan, El Pueblo Inc.’s adolescent reproductive health curriculum, the Northern Orange Partnership for Alcohol and Drug-Free Youth’s Social Norms marketing campaign materials and North Carolina Coalition Against Domestic Violence’s statewide primary prevention plan for intimate partner violence.

To learn more about the program, visit www.sph.unc.edu/hb/capstone.

—JB Shelton

Capstone projects train students, benefitting communities

Phoebe Goldberg, Marcia Perritt, Laura Major, Rebecca Woodruff and Hannah Prentice-Dunn (l–r) won a state planning award for their Capstone work.

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 nonprofit Plan International USA (tinyurl.com/PlanUSA-WASH) by assessing promotional efforts for sanitation issues and also 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 to 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.

“Fortunately, I can let you know I’m alive.”

Those were the sober words of Hajime Kanamori, MD, PhD, MPH, in an email to colleagues at UNC Gillings School of Global Health in March 2011. Kanamori was in the northern part of Miyagi Prefecture, high in the hills, when a 9.0-magnitude earthquake and subsequent tsunami devastated countless Japanese towns and cities. Almost immediately, he was treating survivors who had made their way to evacuation centers.

“I believe in kizuna, the idea of bonds and connections between people,” he says. “We received supplies, prayers and support from international rescue and medical teams. Japan will recover and rebuild better with our efforts and the global community’s help. I thank the world from the bottom of my heart.”

Kanamori earned a certificate in field epidemiology at UNC’s public health school in 2011 and a Master of Public Health in Public Health Leadership in 2012. A physician at Tohoku University’s Graduate School of Medicine, he works to prevent and control infectious diseases.

“Through my practicum at UNC, I came to understand the role of infection control and outbreak investigation in challenging situations such as the Great East Japan Earthquake,” Kanamori said. “I also learned how UNC hospitals reduce health-care-associated infections and learned the basic skills of hospital epidemiology. That will be of great help in promoting better infection control activities at my hospital.”

—JB Shelton
Thanks to the entrepreneurial spirit of faculty members and students, research from UNC Gillings School of Global Public Health labs is finding its way to market. Don Holzworth, MS — entrepreneur and founder of multiple global health companies, including Constella Group LLC — knows what it takes to develop a thriving business from a good idea. As the School’s executive in residence since 2009, Holzworth provides support, feedback, and sometimes, a reality check for those who want to translate research discoveries into commercial applications.

“I understand firsthand the challenges faced by people who have a dream but don’t know how to make it into a reality,” Holzworth says. “I guide students and faculty members through the steps involved in transforming an idea into a revenue-producing enterprise, including developing a business plan, refining business presentation skills and understanding markets.”

During Holzworth’s tenure at the school, faculty members have incorporated three companies: Aquagenx LLC, Biodeptronix LLC and ImmunoBenefit.

Aquagenx offers an accurate, easy-to-use and affordable method of water-quality testing. “Our goal is to become the go-to water-quality test for anyone who conducts testing in the developing world,” says Mark Sobsey, PhD, Kenan Distinguished Professor of environmental sciences and engineering (ESE). Sobsey founded the company with alumnus Lanakila “Ku” McMahan, PhD. Current ESE doctoral student Alice Wang is a principal member of the company. In April, Aquagenx received the first-place prize in Carolina Challenge, a business and social venture competition designed to promote entrepreneurship at UNC.

Will Vizuete, PhD, ESE associate professor, is co-founder of Biodeptronix (www.unc.edu/~vizuete), which offers a device that can test air toxicity. “We developed this method, which uses human lung cells as part of the testing, in our lab,” Vizuete says. “Our technology offers more accurate results in a shorter time.”

ImmunoBenefit (immunobenefit.com), founded by nutrition professor Melinda Beck, PhD, is a contract research organization that exclusively tests food, food supplements and beverages to determine whether they contain the immune system benefits they promise. “Ultimately, I would like our company to be the “Good Housekeeping Seal” for immuno-enhancing properties,” Beck says. “That would allow consumers to be confident that a product actually has health benefits.”

Sanitation Creations (sanitationcreations.com), which develops environmentally friendly sanitation solutions, is another company with roots in the School. The group designed the Dungaroo, a waterless, easy-to-empty, cost-efficient retrofit for existing portable toilets. The product seals waste in odor-blocking bags and turns it into safe-to-use fertilizer.

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, director of 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,”

**Thanks to the entrepreneurial spirit of faculty members and students, research from UNC Gillings School of Global Public Health labs is finding its way to market.**

**Don Holzworth, MS — entrepreneur and founder of multiple global health companies, including Constella Group LLC — knows what it takes to develop a thriving business from a good idea.**

“I understand firsthand the challenges faced by people who have a dream but don’t know how to make it into a reality,” Holzworth says. “I guide students and faculty members through the steps involved in transforming an idea into a revenue-producing enterprise, including developing a business plan, refining business presentation skills and understanding markets.”

During Holzworth’s tenure at the school, faculty members have incorporated three companies: Aquagenx LLC, Biodeptronix LLC and ImmunoBenefit.

Aquagenx offers an accurate, easy-to-use and affordable method of water-quality testing. “Our goal is to become the go-to water-quality test for anyone who conducts testing in the developing world,” says Mark Sobsey, PhD, Kenan Distinguished Professor of environmental sciences and engineering (ESE). Sobsey founded the company with alumnus Lanakila “Ku” McMahan, PhD. Current ESE doctoral student Alice Wang is a principal member of the company. In April, Aquagenx received the first-place prize in Carolina Challenge, a business and social venture competition designed to promote entrepreneurship at UNC.

Will Vizuete, PhD, ESE associate professor, is co-founder of Biodeptronix (www.unc.edu/~vizuete), which offers a device that can test air toxicity. “We developed this method, which uses human lung cells as part of the testing, in our lab,” Vizuete says. “Our technology offers more accurate results in a shorter time.”

ImmunoBenefit (immunobenefit.com), founded by nutrition professor Melinda Beck, PhD, is a contract research organization that exclusively tests food, food supplements and beverages to determine whether they contain the immune system benefits they promise. “Ultimately, I would like our company to be the “Good Housekeeping Seal” for immuno-enhancing properties,” Beck says. “That would allow consumers to be confident that a product actually has health benefits.”

Sanitation Creations (sanitationcreations.com), which develops environmentally friendly sanitation solutions, is another company with roots in the School. The group designed the Dungaroo, a waterless, easy-to-empty, cost-efficient retrofit for existing portable toilets. The product seals waste in odor-blocking bags and turns it into safe-to-use fertilizer.
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 put into effect obesity-prevention strategies in populations at greatest risk. Initiatives include collaborating with corner store owners to increase healthy food availability, implementing agreements to open school playgrounds to residents after hours and developing safe and inviting routes to schools and parks. Impacted communities range from rural Nash County (N.C.) to Chicago.

“ALBD’s 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.

— JB Shelton
UNC public health researchers develop and adapt evidence-based solutions for specific health challenges. Through new techniques, tools, technologies and programs, they bring research findings to bear on such problems as obesity, tobacco use, adverse drug reactions, pollution, health inequities and others. By developing innovative ways to implement their research in the real world, they provide individuals, health advocates, care givers and practitioners with the best available ways to prevent, control and treat disease.

Designing model programs

**Dianne Ward, EdD, professor, Nutrition**

**Challenge:** Childhood obesity has more than tripled in the last 30 years.

**Goal:** Promote healthy weight among young children through better nutrition and more physical activity in early care and education settings

**Intervention:** An engaging interactive online tool that gives child care providers direct access to proven strategies for healthy weight development from birth to age 5

**How it works:** Ward led the team that developed the successful Nutrition and Physical Activity Self-Assessment for Child Care (NAP SACC) program. NAP SACC improves child-care environments through free, Web-based training to health consultants in many states and addresses nutrition and physical activity practices at early care and education settings. Those consultants then help child care centers that serve children ages 2 to 5 boost food quality and physical activity. With a Blue Cross Blue Shield of North Carolina Foundation grant, Ward will create a new online resource for the state, improve its user-friendliness and adapt it for direct use by care providers in family homes and child care centers. Within the original NAP SACC model, a new “Baby NAP” component will address breastfeeding, infant feeding, and other issues related to very young children. Both projects are administered by the UNC Center for Health Promotion and Disease Prevention.

**See:** www.napsacc.org
**Challenge:** Obesity and poor health can be exacerbated by social and economic factors.

**Goal:** Develop replicable products and strategies to address these problems across North Carolina and in other states

**Intervention:** Widen the impact of the successful HOPE (Health, Opportunities, Partnerships, Empowerment) Works program originated by the late Marci Campbell, PhD, former professor of nutrition at the School.

**How it works:** With funding from the Centers for Disease Control and Prevention, Carter-Edwards and her team determine the most effective ways to expand participation in HOPE Works, which helps low-income women in three rural eastern North Carolina counties set and meet goals for improved health and financial well-being. The Seeds of HOPE project team will revise the HOPE Works materials to make them easier to use, disseminate the program more widely through women’s social networks and existing organizations, and identify which methods and products most effectively counter socio-economic impacts on health.

**See:** [www.hpdp.unc.edu/research/current-projects/seeds-of-hope](http://www.hpdp.unc.edu/research/current-projects/seeds-of-hope)

---

**Vijaya Hogan, DrPH, clinical associate professor, Maternal and Child Health**

**Challenge:** Even when health institutions request input from disadvantaged communities, barriers often prevent vulnerable populations from achieving health equity.

**Goal:** Establish a replicable model of community-centric engagement in maternal and child health

**Intervention:** Hogan and colleagues will develop a community-centered evidence base of specific and effective strategies to reduce infant mortality among African-American women in Philadelphia.

**How it works:** With funding from the W.K. Kellogg Foundation ([www.wkkf.org](http://www.wkkf.org)), the Philadelphia Roadmap to Health Equity in Maternal and Child Health actively will engage African-American women affected by preterm birth and infant mortality in decision-making processes and practices that affect their lives. The project will build the women’s research, leadership and critical thinking skills and develop their capacity to engage health and social services institutions. The women will determine how health care and social service delivery need to change and will present their recommendations to the relevant local and national institutions. Hogan’s team will develop novel recommendations and strategies that can be used to address other health disparities through community engagement.

**Email:** vijaya_hogan@unc.edu
Developing innovative techniques, tools and technologies

Kurt Ribisl, PhD, professor, Health Behavior

Challenge: Tobacco use remains the leading cause of preventable death in the U.S.
Goal: Enable tobacco control advocates to document the pervasiveness of tobacco industry activity in the retail environment and make the case for policy change
Intervention: Ribisl is developing customizable, observational assessment, mapping and policy-testing tools that will allow public health workers to gather, organize and display data about tobacco sales, marketing and promotions in stores.
How it works: Advocates collect assessment information on paper forms or with smartphones or other Web-enabled mobile devices. The mapping tool lets decision makers see where tobacco retail locations are concentrated, how close they are to schools and parks, and how the retailers will be impacted by various policy options.
See: www.countertools.org

Nabarun Dasgupta, MPH, doctoral candidate, Epidemiology

Challenge: Adverse events related to prescribed medicines and medical devices are under-reported.
Goal: Improve drug and device safety by streamlining the reporting process
Intervention: With collaborators at Children’s Hospital Boston, Dasgupta developed a smartphone application that allows health professionals and patients to report adverse drug reactions more easily. This fall, the U.S. Food and Drug Administration launched an update that also allows reporting on medical devices. Future adaptations likely will track drug shortages, counterfeit drugs and adverse events related to vaccines.
How it works: With the customizable app, patients and physicians can look up specific medicines and devices, report issues, access user forums, and receive FDA safety alerts and relevant media updates. MedWatcher also can track how devices perform during public health emergencies.
See: www.medwatcher.org
Deborah Tate, PhD, associate professor, Health Behavior, Nutrition

**Challenge:** Obesity-related illness is a significant problem among the more than 5 million veterans served by the U.S. Department of Veterans Affairs (VA).

**Goal:** Support veterans’ self-guided efforts to achieve a healthy weight and a healthy lifestyle

**Intervention:** Tate helped create a new version of the VA’s MOVE! weight-loss program by integrating evidence-based tools such as Telephone Lifestyle Coaching (TLC).

**How it works:** MOVE! TLC now provides veterans with a workbook to guide them through lessons and exercises. A trained coach calls regularly to discuss the lessons and support each veteran’s progress. The TLC version of the VA program resulted in increased weight loss and high participant satisfaction. Tate is now developing an eMOVE! version that will integrate Web-based tools.

**See:** www.move.va.gov/WhatMoveCanDoForMe.asp

— Kathleen Kearns
Leah Devlin, DDS, MPH, Gillings Professor of the Practice in health policy and management, secures economic safety and health for North Carolina’s children through her appointment to the policy group Action for Children. Currently, she tackles smoking and obesity prevention.

As North Carolina’s state health director and public health division director from 2001 to 2009, Devlin accomplished a great deal, including policy changes for public schools. Under her leadership, the health department developed comprehensive school health programs, placed nurses in schools, mandated regular physical activity and required nutritious lunches. During her tenure, mental health and injury prevention services also were introduced.

“You cannot separate health and education from outcomes,” Devlin says. “Children must be healthy to learn. If a person doesn’t graduate from high school, he or she is less able to earn a decent wage and therefore less able to live in healthy environments or purchase healthy foods. The impact of poverty, lack of education and housing issues shapes health policy.”

UNC Gillings School of Global Public Health faculty members and alumni lead state, national and international programs, making an impact upon health outcomes including disease reduction, food choice improvement and enhancement of services for domestic violence victims.

California Tribal Epidemiology Center staff members collect surveys that will yield information about American Indians’ asthma incidence.

Influencing policy – Changing the way things are done
Although 2009 alumna Kristal Chichlowska, PhD, MPH, concentrates on social indicators driving California’s health disparities, her work is important to North Carolina. As director of the California Tribal Epidemiology Center at the California Rural Indian Health Board (www.crihb.org), she serves 109 American Indian tribes routinely underrepresented in epidemiologic data.

Physicians often misclassify American Indian and Alaska Native patients’ ethnicities, masking the groups’ childhood and chronic disease burdens. Without accurate data, health programs cannot secure funding to meet community needs.

“For instance, we found California’s American Indians were misclassified in state health databases up to 60 percent for some health outcomes,” Chichlowska says. “Now, we advocate for oversampling, pushing the state capital and federal agencies for data improvement.”

Since 2010, the epidemiology center has surveyed these communities about diseases and published data online, she says. This information bolsters CRIHB’s outreach effort to enhance policies.

Sandra Martin, PhD, maternal and child health professor, evaluates the performance of policies and strategies. As a Governor’s Crime Commission member, she and her co-members analyze domestic violence and sexual assault programs and helped develop a standardized, statewide reporting system.

The question, she says, is whether these programs can use the system to provide care.

“We’re surveying all programs about their capacity for using the new system, and we’ll offer necessary training,” she says. “We’re also looking at how well programs address substance abuse. It’s a sensitive topic people often ignore because they’re uncomfortable talking about it.”

Martin’s research revealed four components vital to understanding the efficacy of domestic violence and sexual assault services – the victim’s satisfaction with the services, victim’s progress toward goals, changes to violence victims experienced and changes in victims’ knowledge about services.

Martin also has studied child maltreatment in military families. She found abuse occurs more frequently when one parent – frequently the father – is deployed. Congress used these findings to increase family support services during deployments.

The School’s dean, Barbara K. Rimer, DrPH, is chair of the President’s Cancer Panel, the group charged with monitoring the nation’s cancer effort. The panel has organized a series of four workshops to develop strategies to accelerate cancer prevention by increasing the proportion of age-eligible individuals who are vaccinated against human papillomavirus (HPV) infections.

HPV causes more than 560,000 new, worldwide cases of cervical, oropharyngeal and other cancers annually. Noel Brewer, PhD, associate professor of health behavior, co-chaired the second workshop, titled “Achieving widespread vaccine uptake.”

Increasing vaccine access is critical to eliminating avoidable disease, Rimer says.

“A vaccine to prevent cancer is the Holy Grail of cancer control. Yet, only about 30 percent of girls and less than 2 percent of boys have been vaccinated,” Rimer says. “If we identify promising strategies to increase HPV vaccine use, then, indirectly at least, we’d contribute to preventing cancers. That’s why I’m doing this.”

While the advisory panel cannot mandate...
action, Rimer wants health organizations to help implement proposed policies and recommendations. Cervical Cancer Free NC (www.ccfnc.org), based at the School and led by Brewer, is one such effort, aiming to reduce or eliminate cervical cancer in North Carolina by advocating for vaccination, screening and treatment.

For Brenda Edwards, PhD, a 1975 School alumna, the goal is reducing all cancers – her objective at the National Cancer Institute (NCI) since the 1990s. Now, she is senior adviser to NCI’s Surveillance, Epidemiology and End Results (SEER) database – a registry from 15 major cities, totaling roughly 28 percent of the U.S. population. The data include patient demographics, primary tumor site and morphology, stage-at-diagnosis, first-treatment course and follow-up.

“These data look beyond clinical trial results for a better picture of how to use and apply outcomes to impact total populations,” Edwards says. “Studies and modeling groups can analyze SEER data to see who gets cancer, mortality rates, data changes over time, risk factors and how to minimize risk.”

The Food and Drug Administration uses the statistics to determine orphan drug status (an orphan drug is developed specifically to treat a rare medical condition). The statistics also help NCI extrapolate the number of new diagnoses annually. Such estimates inform Medicare and Medicaid policy decisions, Edwards says.

For many patients, health care is obtained at rural, critical access hospitals (CAHs) which often don’t monitor their financial status. To help these vital facilities track expenditures, George Pink, PhD, Humana Distinguished Professor of Healthy Policy and Management, and Mark Holmes, PhD, health policy and management assistant professor, developed the Critical Access Hospital Financial Indicators Report, based on data from 300 CAHs.

Using 21 financial ratios, the report identifies hospital financial strengths and weaknesses. Thus, facility and state program administrators can pinpoint institutions that could benefit from grant funding or consultant guidance, Pink says.

“The hope is that these data will help hospital managers think strategically and strengthen their system to adapt and survive when federal reimbursement rules change,” Holmes says. “It’s something they might not have been able to do prior to getting these reports.”
In 2009, President Obama appointed David B. Richardson, PhD, associate professor of epidemiology at the School, to the White House Advisory Board on Radiation and Worker Health.

Two years later, Japanese citizen groups and public health researchers called upon Richardson’s expertise in radiation after a national disaster. When a horrific earthquake and tsunami damaged a nuclear energy facility, Richardson advised about the development of policies that would keep the Japanese people safe and about long-term strategies to understand health effects of the disaster.

Richardson’s research investigates occupational and environmental causes of disease, with a particular focus on ionizing radiation. He has served in various capacities at UNC since 1996 when he began as a postdoctoral researcher.

He has led a number of studies of workers at U.S. Department of Energy facilities focused on occupational health and radiation exposures. Previously, he worked at the World Health Organization’s International Agency for Research on Cancer in Lyon, France, and at the Radiation Effects Research Foundation in Hiroshima, Japan.

Barry Popkin, PhD, W.R. Kenan Jr. Distinguished Professor of nutrition, improves global food choices by helping countries establish proper nutrition labeling guidelines. Currently, only The Netherlands has national labeling policies. This dearth of guidance troubled Popkin.

“I had to get involved when I saw the food industry – global and stateside – creating labeling systems to allow enormous amounts of sugary, salty and fatty foods to be labeled as healthy,” Popkin says. “I knew it was essential for a scientist to create an appropriate, science-based system.”

Based on World Health Organization and U.S. standards, these labeling policies reduce added sugars and sodium, lower trans and saturated fats, and increase whole grains, legumes, fruits and vegetables. Seven additional countries are considering a national labeling policy, Popkin says, to control obesity, diabetes and other diet-related ailments.

—by Whitney L.J. Howell
You will not find ivory tower academics in the UNC Gillings School of Global Public Health. As this edition of Carolina Public Health clearly demonstrates, our faculty members undertake state-of-the-art research to discover solutions to some of the world’s most pressing public health challenges – problems that affect the lives of people in North Carolina, our nation and the world.

However, learning “what works” to solve a public health problem is not enough. This is why many on our faculty engage in implementation science to determine and apply methods aimed at the dissemination of effective public health interventions. The goal is to ensure that the most effective public health approaches are actually put into use to improve people’s lives.

This work takes funding. In fiscal year 2012, our faculty members submitted more grant and contract applications than ever to fund their research, a 20 percent increase in requested funds from the previous fiscal year. Although we are living in an economy in which research resources are limited, our researchers’ dollars awarded from grants and contracts to principal investigators at the school (fiscal years ending June 30)

The School’s faculty members were awarded $154 million for grants and contracts in Fiscal Year 2012.
hard work has paid off. They received 417 grants and contracts totaling more than $154 million, 80 percent of which was provided by federal sources including the National Institutes of Health.

This edition of Carolina Public Health highlights some examples of these endeavors, and I’ll mention a few others here.

- Drs. Vijaya Hogan and Diane Rowley, in the Department of Maternal and Child Health, were funded by the W.K. Kellogg Foundation to engage in action research with vulnerable African-American women. They will work toward developing community-centric solutions to maternal and child health problems that are often faced by those living in poverty. Strategies identified during this project may be used to modify existing maternal and child health institutional processes to improve effectiveness of health-related services.

- Drs. Annelies Van Rie and Marcel Yotebieng, in the Department of Epidemiology, were funded to conduct research on a new diagnostic test for detecting multidrug-resistant tuberculosis, a significant public health problem in sub-Saharan Africa, especially in areas where there is also a high rate of HIV. Van Rie received a grant from the National Institute of Allergy and Infectious Diseases to work in South Africa; Yotebieng’s grant from the World Health Organization (WHO) will fund his work in the Democratic Republic of Congo. Both research projects aim dramatically to reduce the overall prevalence and number of deaths caused by tuberculosis, an airborne infectious disease that is preventable and curable.

- Drs. Jason West and Will Vizuete, in the Department of Environmental Sciences and Engineering, were funded by the U.S. Environmental Protection Agency to design and evaluate a dynamic management system for the country’s electric power sector, a system aimed at minimizing daily exceedances of ozone air quality standards. If shown to be effective, this approach could be instituted across the country to help improve air quality.

Our School is fortunate to have so many bright, hard-working, productive and dedicated faculty members. They dream of a better world, and they work hard to help make it happen. They are truly driven to accomplish our School’s mission to improve public health, promote individual well-being and eliminate health disparities across North Carolina and around the world.

Sandra L. Martin, PhD
Associate Dean for Research
Gillings School of Global Public Health

NUMBER OF GRANTS AND CONTRACTS AWARDED TO PRINCIPAL INVESTIGATORS (FISCAL YEARS ENDING JUNE 30)

In fiscal year 2012, 417 grants and contracts were awarded to principal investigators at the School – an average of 2.54 grants per faculty PI.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2007</td>
<td>370</td>
</tr>
<tr>
<td>FY 2008</td>
<td>380</td>
</tr>
<tr>
<td>FY 2009</td>
<td>400</td>
</tr>
<tr>
<td>FY 2010</td>
<td>399</td>
</tr>
<tr>
<td>FY 2011</td>
<td>429</td>
</tr>
<tr>
<td>FY 2012</td>
<td>417</td>
</tr>
</tbody>
</table>

TYPES OF FUNDING FOR GRANTS AND CONTRACTS AWARDED TO PRINCIPAL INVESTIGATORS DURING FISCAL YEAR 2012

The majority of external funding in fiscal year 2012 – 80.6 percent – was from the federal government.

- Federal government 80.6% ($124.2 million)
- Other universities 7.0% ($10.7 million)
- Foundations 4.1% ($6.3 million)
- Business and industry 2.3% ($3.5 million)
- State government 2.2% ($3.4 million)
- Nonprofit organizations 2.2% ($3.4 million)
- Other 1.6% ($2.6 million)
Innovative research at the School offers risk-reduction strategies, defines vulnerable populations and informs optimal treatments. Implementing findings such as these – and making them work for individuals and communities – will help make the public healthier faster.

**Dramatic Rise in Diabetes Among American Teens**

Diabetes increased by about 25 percent among American teens in the last decade. Noting this disturbing trend, which was seen for both Type 1 and Type 2 diabetes, nutrition professor Elizabeth Mayer-Davis, PhD, says the real public health impact of these numbers may not be felt for decades, as the current teen population ages and becomes plagued with chronic diseases.

“Youth with Type 1 or Type 2 diabetes will enter adulthood with higher risk for cardiovascular disease and other long-term, costly complications of diabetes, including eye and kidney disease,” she says.

Mayer-Davis’ research also showed that diabetic teens rarely meet health recommendations for exercise and diet, and their diabetes often is controlled poorly. She says this makes it all the more important to redouble efforts to support daily medical management, healthy food choices and opportunities for physical activity among teens with – or at risk for – diabetes.

**Adults Born During 1980s Uniquely Prone to Obesity**

Despite recent reports that obesity in the U.S. appears to be leveling off, assistant professor of epidemiology Whitney R. Robinson, PhD, has found that young adults born in the 1980s may continue to be burdened by increasing obesity rates when compared to the rest of the adult population. Her study, published in May by the *International Journal of Obesity*, found marked generational differences in the rates of obesity.

Robinson hopes the findings will help shape public health efforts to prevent incident obesity and further weight gain in these young adults, especially as they reach middle age and begin to experience obesity-related conditions like hypertension and diabetes.
Exercising, Even Later in Life, Appears to Cut Breast Cancer Risk

One in eight American women is diagnosed with breast cancer at some point in their lives—something that weighs heavily on many women’s minds, especially as they age. New research led by Lauren McCullough, doctoral candidate in epidemiology, offers promise. McCullough’s study found the risk of breast cancer can be reduced by as much as 30 percent in women who exercise 10 to 19 hours per week.

According to the study, published in the journal *Cancer*, risk reductions were observed at all levels of intensity, and exercise seemed to reduce the risk of hormone-receptor-positive breast cancers—the most commonly diagnosed tumor type among American women. McCullough says active women also need to focus on maintaining a healthy weight. Substantial weight gain, particularly after menopause, seemed to negate the cancer-reducing benefits of exercise.

Study Validates Optimal Treatment for Prostate Cancer, Informs Medical Choice

Over the last decade, Intensity-Modulated Radiation Therapy (IMRT) largely has replaced conventional conformal radiation therapy (CRT) as the primary radiation technique for treating localized prostate cancer, despite little hard data to support it. Now, UNC researchers, led by Paul Godley, MD, PhD, adjunct professor of epidemiology and professor of medicine, have helped to validate this change in practice.

In a comparative analysis, published April 18 in *Journal of the American Medical Association*, IMRT was better at preventing cancer recurrence and results in fewer side effects than conventional CRT. IMRT was associated with fewer diagnoses of gastrointestinal symptoms such as rectal bleeding or diarrhea, fewer hip fractures and less additional cancer therapy, but more difficulty with sexual function. It was as effective as proton therapy, a new high-cost technique that has been growing in popularity.

Godley and his team believe these results will provide clinicians and patients with more information upon which to base medical decisions. In 2012, approximately 241,740 American men will be diagnosed with prostate cancer.

Drug Helps Target Hidden HIV

While antiretroviral therapies (ARTs) have been effective in controlling HIV levels, they have not completely eliminated latent virus hiding within infected cells. Problems with long-term ARTs, such as drug resistance, side effects and cost, have underscored the need for a new approach to combating the virus, according to David Margolis, MD, professor of epidemiology and medicine.

A recent study by Margolis and colleagues, published online July 25 in the journal *Nature*, found that a cancer drug, vorinostat, can force HIV out of hiding and expose it to attack from conventional anti-HIV therapies. The results provide a path forward for testing this class of anti-cancer drugs, known as HDAC inhibitors, to target persistent virus, which would be an important step toward finding a cure.

In a related study, published online May 28 in *Proceedings of the National Academy of Sciences*, Margolis and colleagues found that latency develops soon after infection and slows when ART is administered.

Earlier HIV Treatment Can Help Protect Partners

In African countries with the highest HIV rates, nearly half of HIV-infected adults in stable relationships have uninfected partners. More than half of new adult infections occur within such couples, according to the World Health Organization (WHO).

A landmark study known as HPTN 052, conducted by Myron Cohen, MD, and his team, found that starting combination antiretroviral therapy (cART) dramatically cuts the rate of sexual transmission of HIV to uninfected partners (by 96 percent) and significantly reduces HIV-related illness and death in the infected partner (by 41 percent). Results, published July 18 in *The New England Journal of Medicine*, have led WHO to consider recommending early cART in its guidance to couples with one HIV-infected partner.

“HPTN 052 is the first randomized clinical trial to indicate definitively that an HIV-infected individual can reduce sexual transmission of HIV to an uninfected partner by beginning antiretroviral therapy sooner,” Cohen says.

Cohen is the J. Herbert Bate Distinguished Professor of medicine, microbiology and immunology in the UNC School of Medicine and epidemiology professor at UNC’s public health school. *Science* named HPTN 052 its “Breakthrough of the Year” in 2011.

—Amanda Crowe
This demographic shift already is having a huge impact upon the number of people living with chronic diseases, such as hypertension, infectious diseases, cancers, chronic obstructive pulmonary disease (COPD) and diabetes – China already has the largest diabetic population in the world, and it’s growing at 16 percent each year.

This burden on the health-care system drives the need for innovative approaches to disease prevention and treatment. Key to both is better education for health professionals and patients.

The health-care industry can help address this need by supporting continuing medical education for professionals at all levels – education that improves core knowledge in key therapeutic areas, introduces innovative methods for disease prevention and shares research about the newest treatments to enable selection of the most appropriate therapies.

Patients, too, increasingly are looking for ongoing support and information from a variety of sources, including private enterprise, as they take a greater role in managing their own health. Arming them with the knowledge to make smart decisions about care and treatments – for themselves and for their family members – and helping them gain access to services and therapies within their own communities will be essential if China achieves its long-term goals for health.

— Clancey Houston

Clancey Houston, MPH, is managing director of inVentiv Health Communications / China, a multidisciplinary integrated communications group dedicated to improving health through innovation and superior communication programs. For nearly twenty years, she has led integrated multinational teams in building, promoting and protecting brands and businesses in the highly complex and issues-rich markets of Asia Pacific and Africa.

Houston holds a bachelor’s degree in Chinese and political science from Middlebury College and a Master of Public Health degree in health policy and management from UNC Gillings School of Global Public Health. She is fluent in Mandarin Chinese.

Read more about the diabetes crisis in China in a recent study by nutrition professors Penny Gordon-Larsen, PhD, and W. R. Kenan Jr. Distinguished Professor Barry Popkin, PhD at tinyurl.com/nature-diabetes-in-China. Nutrition faculty members Linda Adair, PhD, Elizabeth Mayer-Davis, PhD, and Shufa Du, PhD, and biostatistics professor Amy Herring, ScD, co-authored the study.
From the journals

Increasing access to family planning will play a central role in achieving U.N. targets for maternal health, eradication of poverty, education and gender equality, according to a major new Series on Family Planning published July 10 by The Lancet. Herbert B. Peterson, MD, Kenan Distinguished Professor and chair of the Department of Maternal and Child Health, played a key role in the series.

Sally C. Stearns, PhD, and R. Gary Rozier, DDS, MPH, professors of health policy and management, led a study of the cost-effectiveness of Into the Mouths of Babes, a Medicaid program operating in North Carolina since 2000. Results were published online Aug. 27 in Archives of Pediatrics & Adolescent Medicine.

Minors easily can purchase alcohol online as a result of poor age verification, according to a study co-authored by Kurt Ribisl, PhD, professor of health behavior. Rebecca Williams, PhD, research associate at UNC’s Center for Health Promotion and Disease Prevention, was lead author of the study, published in the May Archives of Pediatrics & Adolescent Medicine.

The rapid shift from nomadic life to modern-day culture in the United Arab Emirates (UAE) exposes the population to significant indoor air quality risks that can lead to respiratory illness, according to a study led by epidemiology assistant professor Karin Yeatts, PhD. The study was published May 1 in Environmental Health Perspectives.

Harsha Thirumurthy, PhD, assistant professor of health policy and management, co-authored an article in the May Bulletin of the World Health Organization suggesting that use of text messaging and other mobile phone applications may be an increasingly effective and cost-efficient means of improving health outcomes, especially in developing countries.

A rapid growth spurt in childhood could foretell obesity in adulthood, according to a study authored by 2012 health policy and management alumnus Daniel Belsky, PhD, and published in the June Archives of Pediatric & Adolescent Medicine.

A study led by alumna and adjunct assistant professor Ashley Cockrell Skinner, PhD, published online Sept. 10 in Pediatrics, finds a surprising difference in the eating habits of overweight children between ages 9 and 17 years, compared to those younger than 9. Younger overweight children consume more daily calories than do healthy-weight peers, but older overweight children consume fewer calories than peers.

A recent clinical trial testing a combination therapy for basal-like, or triple-negative, breast cancer demonstrates that a combination of two drugs with promising preclinical results is not as effective as researchers had
hoped. Anastasia Ivanova, PhD, associate professor of biostatistics, was co-author of the study, published online June 4 in the Journal of Clinical Oncology.

New research finds a global decline in activity levels and predicts a continuing rise in inactivity in countries around the world. The study, conducted by Barry Popkin, PhD, W.R. Kenan Jr. Distinguished Professor of nutrition, and Shu Wen Ng, PhD, research assistant professor of nutrition, used extensive data from the 1960s onward to determine how people around the world spend their time and how they move in the course of their daily lives. Findings were published online June 14 in Obesity Reviews.

A study led by Cynthia Bulik, PhD, nutrition professor and Jordan Distinguished Professor of Eating Disorders (psychiatry), found that age is no barrier to disordered eating. In women ages 50 and over, 3.5 percent report binge eating, nearly 8 percent report purging, and more than 70 percent are trying to lose weight. The study was published online June 21 in the International Journal of Eating Disorders.

A diet based on American junk food could lead to more obesity-induced inflammation than a diet high in animal fat, according to a study led by Liza Makowski, PhD, assistant professor of nutrition, and published June 12 in the Public Library of Science One (PLoS ONE). The study analyzed inflammatory responses in rats fed different diets: control diets, a lard-based high-fat diet and a “cafeteria junk-food” diet consisting of nutrient-poor snacks. Researchers found that the junk-food diet caused the most inflammation and dramatic metabolic changes.

Barry Popkin, PhD, W.R. Kenan Jr. Distinguished Professor of nutrition, and colleagues found that Chinese teenagers have a rate of diabetes nearly four times greater than their U.S. counterparts. The rise in diabetes incidence parallels increases in cardiovascular risk and is the result of a Chinese population that is growing increasingly overweight. Findings were published in the September Obesity Reviews.

More than three-quarters of Chinese adults have at least one risk factor for Type 2 diabetes or cardiovascular disease, according to new data in a long-term study led by nutrition associate professor Penny Gordon-Larsen, PhD, and published July 19 in the journal Obesity. Rates of hypertension, diabetes and triglycerides are particularly high, the study reports, even in the young and trim.

A customized weight loss program may cost less to implement than a traditional weight loss program, despite having similar results, according to a study co-authored by Deborah Tate, PhD, associate professor of nutrition and health behavior, and published June 27 in The Journal of the American Medical Association. Tate and colleagues describe a stepped-care program that begins with a low-intensity intervention increased or adjusted if weight loss milestones are not achieved as planned.

Christine Rini, PhD, associate professor of health behavior, and colleagues report that cancer rumors – such as the idea that one can get cancer from being in contact with a cancer patient – may affect health-related behaviors and medical decision-making. Results of the study were published online June 22 in the Journal of Health Communication.

A study published July 9 in Occupational and Environmental Medicine found that certain jobs held by men before they conceive a child may increase risk for various birth defects. Led by epidemiology researcher Tania Desrosiers, PhD, the study found certain birth abnormalities were associated with fathers who were artists, photographers and landscapers, among other professions.
Data from national poison control centers may provide the best indicator of deaths by methadone overdose in the United States. Methadone is an opioid linked to 30 percent of deaths attributed to prescription pain-killer overdose. Nabarun Dasgupta, epidemiology doctoral candidate, led the study, published July 19 in the journal PLoS One.

A study led by senior author Jennifer Smith, PhD, research associate professor of epidemiology, strengthens the argument for human papillomavirus (HPV) vaccination in men. Published June 18 in the Journal of Infectious Diseases, the study of 2,228 Kenyan men presents the first epidemiological data in men on the type-specific associations between prevalent HPV infections and future acquisition of other HPV types.

Research that compares the effectiveness of different cancer treatments should be accelerated – and the findings promoted and accepted – according to a recent study by William Carpenter, PhD, assistant professor of health policy and management, Michael Kosorok, PhD, professor and chair of biostatistics, and Til Stürmer, MD, PhD, professor of epidemiology. Published online April 20 in Cancer, the study includes a literature review and interviews with 41 cancer comparative effectiveness research (CER) scientists.

Grants

A new $3.3 million project to combat childhood obesity while helping owners of home-based child care facilities adopt healthy practices will be undertaken by a UNC-Duke partnership. Led by the School’s Dianne Ward, EdD, professor of nutrition, and Duke’s Truls Ostbye, MD, PhD, the “Healthy You, Healthy Home, Healthy Business” project will help child-care providers become healthy role models and establish environments that support good nutrition and physical activity. Ostbye is professor of community and family medicine.

UNC’s Nutrition Research Institute (NRI), in Kannapolis, N.C., received a Grand Challenges Explorations award from the Bill & Melinda Gates Foundation. Steven H. Zeisel, MD, PhD, institute director and Kenan Distinguished University Professor of nutrition, will pursue a research project titled “Choline and Optimal Development.” Zeisel is credited with the discovery of choline’s role as an essential nutrient, particularly for fetal and infant development. The grant enables Zeisel and colleagues to design a diet intervention that can be implemented in The Gambia, where diet provides less than half of recommended adequate intake.

The U.S. Environmental Protection Agency (EPA) has awarded a three-year, $1.2 million grant for research conducted by the Carolina Center for Computational Toxicology (comp-tox.unc.edu). Ivan Rusyn, MD, PhD, professor of environmental sciences and engineering, is principal investigator for the project, “Assays, models and tools for NextGen safety assessments.” Fred Wright, PhD, professor of biostatistics, and Alexander Tropsha, PhD, professor and associate dean for research at UNC Eshelman School of Pharmacy, are project co-investigators.

Til Stürmer, MD, PhD, received a $690,502 award from the nonprofit Patient-Centered Outcomes Research Institute for his project, “Methods to Increase Validity of Comparative Effectiveness Research in the Elderly.” He leads an interdisciplinary team to examine methodologies to compare effectiveness of elderly patients’ treatment after myocardial infarction, especially in terms of their risk for re-infarction and hospitalization.

Suzanne Maman, PhD, associate professor of health behavior, received a five-year, $2.6 million grant from the National Institute of Mental Health for an innovative microfinance and health study in...
**Robert Millikan**

Dr. Robert Millikan, Barbara Sorenson Hulka Distinguished Professor in Cancer Epidemiology, died Oct. 7. He was 55.

A member since 1993 of the School’s epidemiology faculty and of UNC Lineberger Comprehensive Cancer Center, Dr. Millikan’s research brought hope for better understanding and treatment of breast cancer, particularly for young African-American women who disproportionately die from the disease.

Data from UNC Lineberger’s Carolina Breast Cancer Study, which Dr. Millikan directed for more than 15 years, demonstrated that black women under age 45 are more likely to be diagnosed with aggressive types of breast cancer than are women of European ancestry. The NCI program grant, which he led, will result in a better understanding of this significant health disparity by collecting information about more than 5,000 women to explore biological, environmental and epidemiologic reasons for the difference in cancer incidence.

Dr. Millikan earned undergraduate and doctoral degrees in veterinary medicine from University of California at Davis and a Master of Public Health and Doctor of Philosophy in epidemiology from University of California at Los Angeles. He was a postdoctoral fellow in molecular biology at Harvard Medical School and Dana-Farber Cancer Institute and completed internships in medicine and surgery at the University of Pennsylvania’s School of Veterinary Medicine.

His wisdom and kindness will be missed greatly.

---

**John Vernon**

John Andrew Vernon, PhD, 43, died on June 19. An assistant professor of health policy and management at UNC Gillings School of Global Public Health since 2008, he earned an undergraduate degree at Duke University, master’s degree at North Carolina State University and doctorate from the University of London, all in economics. He also held a doctorate in management science from the University of Pennsylvania’s Wharton School of Business. Prior to joining the UNC public health faculty, Dr. Vernon served as senior economic policy adviser in the U.S. Food and Drug Administration, faculty research fellow at the National Bureau of Economic Research and assistant professor of finance at the University of Connecticut. On several occasions, he was called upon for expert testimony at Congressional committee hearings.

---

**James Abernathy**

James R. Abernathy, PhD, retired professor of biostatistics, died Sept. 3, at age 86. He was a well-known international demographer who, over his 30-year career, pioneered statistical research in maternal and child health programs, epidemiological investigations, public health nursing and dental health services, and served as a statistical consultant to national agencies, including the National Center for Health Statistics and the World Health Organization. An alumnus, he joined the School’s faculty in 1965. He directed the International Program of Laboratories for Population Statistics (POPLAB), a USAID-funded project conducted through Carolina Population Center, from 1980 to 1983.

---

**Richard Udry**

J. Richard Udry, PhD, Kenan Distinguished Professor of maternal and child health and sociology at the University of North Carolina at Chapel Hill, died on July 29, after a long illness. He was 83. During his nearly 50-year career, Dr. Udry pioneered research that integrated biological and sociological models of human behavior in the areas of adolescent behavior and health, sexual behavior and women’s gender roles, and developed the National Longitudinal Study of Adolescent Health (Add Health). He directed UNC’s Carolina Population Center from 1977 to 1992.

---

*To learn more, please visit [www.sph.unc.edu/news](http://www.sph.unc.edu/news).*
Maman, Sen receive McGavran, Larsh awards; Rimer introduces Bloomberg

TWO PRESTIGIOUS FACULTY AWARDS were presented during the School’s May 12 commencement. Suzanne Maman, PhD, associate professor of health behavior, received the McGavran Award for Excellence in Teaching, and Pranab K. Sen, PhD, Cary C. Boshamer Distinguished professor of biostatistics, received the John E. Larsh Jr. Award for Mentorship.

On May 13, Dean Barbara K. Rimer introduced New York City mayor Michael Bloomberg, who gave the UNC commencement address. Read his speech at tinyurl.com/unc-bloomberg.

Ibrahim receives dual ASA appointments

JOSEPH G. IBRAHIM, PhD, Alumni Distinguished Professor of biostatistics and director of UNC’s Center for Innovative Clinical Trials (www.sph.unc.edu/clinical_trials), was appointed last spring as coordinating editor of the Journal of the American Statistical Association (JASA) and editor of JASA’s section on Applications and Case Studies.

Stürmer to lead international society

TIL STÜRMER, MD, PhD, professor of epidemiology, was chosen as president-elect of the International Society for Pharmacoepidemiology. His three-year term of service began at the society’s 2012 annual meeting in Barcelona in August. Stürmer directs UNC’s Center of Excellence in Pharmacoepidemiology and Public Health.

Harris honored at Kiev conference

DEAN M. HARRIS, JD, clinical associate professor of health policy and management, accepted the Health and Law Bioethics Award at the International Congress on Medical and Pharmaceutical Law, Bioethics and Social Policy in Kiev, Ukraine.

Herring accepts prestigious award

BIOSTATISTICS PROFESSOR Amy H. Herring, ScD, accepted the Gertrude M. Cox Award in June at the Washington Statistical Society annual dinner, held at RTI International in Washington, D.C. The award, jointly sponsored by the Society and RTI, recognizes early- to mid-career statisticians for significant contributions to survey methodology, experimental design, biostatistics or statistical computing.

Allgood, Parham Hopson selected as distinguished alumni

SCHOOL ALUMNI Gregory Allgood, PhD, and Deborah Parham Hopson, PhD, won UNC’s Distinguished Alumni Award. All-
good led a Procter & Gamble team that developed an easy way to purify drinking water. Parham Hopson is associate administrator for the U.S. HIV/AIDS Bureau. The two were honored on University Day, Oct. 12.

HB student wins AHA fellowship

STEPHANIE BAKER, doctoral student in health behavior, received a two-year predoctoral fellowship from the American Heart Association. The award helps students initiate careers in cardiovascular and stroke research. Baker studies ways that environmental and contextual factors contribute to racial disparities in sedentary behavior and physical activity.

Kranz wins APHA award

ASHLEY KRAZN, health policy and management doctoral student, was selected by the American Public Health Association’s oral health section as winner of the 2012 Anthony Westwater Jong Memorial Community Dental Health Post-Professional Student Award. Kranz’s study compared effects of preventive dental services for children three and younger on their having cavities later.

First Marci Campbell award presented

NUTRITION DOCTORAL STUDENT Carmina G. Valle, MPH, received the inaugural Marci Kramish Campbell Dissertation Award, a competitive $5,000 award to be used for her dissertation research on cancer and the population sciences. The prize honors Dr. Campbell, a respected UNC cancer researcher, who died in 2011.

School alumnus named NCIOM VP

ADAM ZOLOTOR, MD, MPH, DRPH, School alumnus and assistant professor in UNC’s Department of Family Medicine, was selected as vice president of the North Carolina Institute of Medicine (NCIOM).

Marshall appointed IPRC director

STEPHEN W. MARSHALL, PHD, was named director of the UNC Injury Prevention Research Center, effective Aug. 1. Marshall is professor of epidemiology and has an adjunct appointment in UNC’s Department of Exercise and Sport Science. He has served as interim director of the Injury Prevention Research Center (IPRC) since August 2011.

Alumna to work with energy commission

N.C. GOV. BEVERLY PERDUE has appointed School alumna Marva Mizell Price (MPH, 1974; DrPH, 1977), associate professor of nursing at Duke University, for a four-year term on the Mining and Energy Commission. The new commission will develop and oversee regulations for hydraulic fracturing (fracking) in the state.

Student entrepreneur wins $100K

TARA SESAN, a senior Bachelor of Science in Public Health student in environmental sciences and engineering, has received a $100,000 Thiel Fellowship to launch an innovative health services company. Seshan is the entrepreneur behind Chek.Up (www.chekuphealth.com), which seeks to provide better health monitoring and evaluation in low-resource settings. Burcu Bozkurt, undergraduate in health policy and management, is also on the Chek.Up team. The fellowship is awarded annually to 20 young innovative thinkers under age 20.

Gillings Award recipients named

DOCTORAL CANDIDATES Allison Groves (health behavior) and Heather Paich (nutrition) received the 2012 Gillings Dissertation Award, a $5,000 prize to support doctoral research and dissertation writing at the School. Groves is studying intimate partner violence in South Africa, and Paich studies the impact of obesity upon people’s response to influenza infection.

Gillings Merit Scholarships awarded

TWELVE STUDENTS were designated as 2012–2013 Gillings Merit Scholarship recipients. The scholarships, established in 2010 to help the School recruit graduate students with exceptional promise, are made possible through a generous gift to the School from Dennis Gillings and Joan Gillings. Awardees include Erika Helgeson (biostatistics); Julia Naman (environmental sciences and engineering); Eboneé Butler (epidemiology); Maria Priscilla Brietzke and Rachel Clad (health behavior); Daniel Douthit, Meredith Webb and Lei Zhou (health policy and management); Shane Khan (maternal and child health); Gina Tripicchio (nutrition); and Heidi Harkins and Virginia Moye (Public Health Leadership Program).
“YOUR GIFTS ARE AN INVESTMENT IN IMPACT. You help us recruit and retain the strongest faculty, support innovations in research, practice and teaching, and train the next generation of public health leaders. Your support enables us to achieve the most important bottom line on our most important balance sheet — to find solutions to threats and problems across North Carolina and around the world. That’s the difference your gifts make — and the difference we can make together!”

— BARBARA K. RIMER, DRPH
DEAN AND ALUMNI DISTINGUISHED PROFESSOR
$1,000,000 to $5,000,000
Conrad N. Hilton Foundation
Robert Wood Johnson Foundation
W. K. Kellogg Foundation

$500,000 to $999,999
Anonymous (2)
Columbia University
Connecticut Children’s Medical Center
Jennifer & Donald Holzworth
Kraft Foods Inc.
Virginia & John Sall
Wyeth Nutritional Inc.

$250,000 to $499,999
American Academy of Pediatrics
Dana-Farber Cancer Institute
Emory University
GlaxoSmithKline
Merk & Co.
North Carolina State University
Tufts University
University of Southern California
University of Washington
World Health Organization

$100,000 to $249,999
American Institute for Cancer Research
Amgen Inc.
Avon Foundation
BlueCross BlueShield of N.C. Foundation
Bristol-Myers Squibb Co. – Houston
Centers for Disease Control Foundation
ChildFund International
Children’s Hospital – Boston
Children’s Hospital of Philadelphia
Duke University
Duke-UNC Rotary Center for International Studies in Peace and Conflict Resolution
Eisai Research Institute
Bill & Melinda Gates Foundation
Harvard University
Low Country Healthy Start
Nestle Infant Nutrition
Penn State University
Plan International USA
Barry M. Popkin
R.L. Roudebush VA Medical Center
The COPD Foundation
University of California – San Francisco
University of Leeds
University of Minnesota
Washington University in St. Louis

$50,000 to $99,999
Albert Einstein College of Medicine
American Egg Board
Association of State & Territorial Health Officials
Austrian Institute of Technology
Bromine Compounds Ltd.
Center for Child and Family Health

$25,000 to $49,999
Anonymous (2)
American Diabetes Association
Eisai Research Institute
International Association of Plumbing and Mechanical Officials
Jackson Medical Mall Foundation
Mathile Institute
Mid-Course Coalition/Baker Botts LLP
PATH
Sanofi
Sloan-Kettering Institute
University of California at Davis
University of Illinois at Chicago
University of Kentucky Research Foundation
University of Maryland at Baltimore
Wake Forest University School of Medicine

$10,000 to $24,999
Sheryl Wallin Abrams & Steven Abrams
in memory of Mary Rose Tully
Astellas Pharma US Inc.
David J. Ballard & Michela Caruso
BioDelivery Sciences International
NiveditaBuzzetta
CAMC Health Education and Research Institute
Cedars-Sinai Medical Center
Celgene Corporation
Stacy-Ann Christian
The COPD Foundation
Cytokinetics Inc.
Dainippon Sumitomo Pharma America Inc.
Davidson County (N.C.) Health Department
Depomed Inc.
ExxonMobil

$5,000 to $9,999
John & Hattie Aderholdt in memory of Marcus L. Aderholdt Jr.
Arizona State University
Delton Atkinson & Sherry Holbrook-Atkinson
Sterling Wilson Bell
Patricia W. & Edward Carroll Bryant
Burroughs Wellcome Fund
Patricia Canessa in memory of Enrique Canessa Jorquera
Deniese May Chaney
Deutsche Bank
Leah McCall Devlin in honor of Barbara K. Rimer
Howard J. Dunn
Gaston County (N.C.) Health Department
Joan Heckler Gillings
Elizabeth Leverage Hilles in honor of Scott Hilles
Estate of Dorothy Ann Huskey
Peter B. Imrey in honor of Gary Koch
Estate of Lenni William Kangas
Jonathan & Anne Kotch
C.L. Lassiter
ROSENAU SOCIETY

Membership

July 1, 2011 – June 30, 2012

President’s Circle
($5,000–$25,000)
John and Hattie Aderholdt
in memory of Marcus L. Aderholdt Jr.
Marcia Angle & Mark Trustin
Sterling Wilson Bell
Patricia W. & Edward Carroll Bryant
Denise May Chaney
Joan Heckler Gillings
Deniese May Chaney
Patricia W. & Edward Carroll
Sterling Wilson Bell
Marcia Angle & Mark Trustin

Chancellor’s Circle
($2,000–$4,999)
Sheryl Wallin Abrahams &
Steven Abraham
in memory of Mary Rose Tully
Michael D. Atikten & Betsy Rudolph
in honor of Jason West &
Amy Davenport
Antonio S. & Mary Fox
Braithwaite
Laura & Fred Brown
Cynthia Girman
Andrea & Michael Griffin
Nancy Haigwood
in honor of
Benjamin Paul Scandella
Karen and David Harper
Barbara & Jerry Hukula
James D. & Virginia Midgett
Kinard
Charles Wayne Kinsey
Peggy Leatt & George Pink
Hong Li
Molly Loomis
Kit & John McConnell
Dara Lee Murphy
Jeannine Little Nelson
Charlotte & Miguel Nunez-Wolff
Andrew Olshan & Linda Levich
Julie & David Potenziani
Rebecca Raymond &
Michael Stangl
Jennifer and James Rosen
Linda Martin Sanders &
Brian O. Sanders
Anna Pittman Schenck &
James Simpson Schenck IV
Ruth Anne Shults
Anna Maria Siega-Riz
Irene C. Siegler &
Charles D. Edelman
Allen & Susan Willey Spalt
Lydia Lansangan Tiosejo
in honor of Norman Weatherly
John Chester Trippett
Robert E. Vollinger Jr.
Alice D. White
Jack Eugene Wilson

Dean’s Circle
($1,000–$1,999)
Alice Sue Ammerman &
Thomas Charles Keyserling
Delton Atkinson &
Sherry Holbrook-Atkinson
Susan Shearer Atkinson
Kathleen D. Barbiorak
Jamie Bartram & Jane Bailey
Peggy Bentley
William Cudd Blackwelder
Mark E. Beecher
LaMont Bryant
Jianwen Cai & Haibo Zhou
Ward Cates & Joan Roberts Cates
Dennis A. Clements III &
Martha Ann Keels
Joan C. & Ralph R. Cook
David E. Cooper
Barbara B. & Paul W. Coughlin
Michael A. Crabb III
Michael Cucchiara &
Marty Hayes
Leah McCall Devlin
in honor of Barbara K. Rimer
Jo Anne & Shelley Earp
Harold F. Elkin
Dan Elliot
Edward Vernal Ellis
Susan Tompkins Ennett &
Wayne Edward Pein
Sara A. Epkoss & David S.
Rubenstein
Kenneth L. Eudy Jr.
Edwin B. Fisher
Lyne Gamble & Kathryn Yandell
Jay Marshall Goldring
Andrea & Michael Griffin
Geraldine G. Guess
Priscilla Alden Guild
Leslie & Philip Gura
Richard Hammel
Sharon Nicholson Harrell
Paula Billingsley Harrison
Carolyn Cantlay Hart
James R. Hendricks
David Lee Hlavac
Suzanne Havala Hobbs
Deborah Parham Hopson
Sallie Craig Huber
Joseph G. Ibrahim
Theodore Michael Johnson II &
Susan Paul Johnson
Thomas V. Jones
Gary G. & Carolyn J. Koch
Pamela & Michael Kosorok

We have made every effort to ensure the accuracy of this list. To report an error or omission, please contact the External Affairs development specialist at (919) 966-0198.
IN JUNE 2011, PHILIP C. SINGER, DANIEL A. OKUN DISTINGUISHED PROFESSOR OF ENVIRONMENTAL ENGINEERING, RETIRED AFTER 38 YEARS AT CAROLINA. WE SALUTE THE FOLLOWING ALUMNI, FAMILY AND FRIENDS WHO HAVE ESTABLISHED THE PHILIP C. SINGER DISTINGUISHED PROFESSORSHIP IN ENVIRONMENTAL SCIENCES AND ENGINEERING IN HIS HONOR. IT IS NOT TOO LATE TO CONTRIBUTE! PLEASE CONTACT PEGGY DEAN GLENN AT (919) 966-0198 IF YOU WOULD LIKE TO ADD YOUR NAME TO THIS LIST.

THE PHILIP C. SINGER DISTINGUISHED PROFESSORSHIP
in Environmental Sciences and Engineering

Michael D. Aitken & Betsy Rudolph
Robert Glenn Arnold & Katherine Fox Arnold
Mark Oldham Barnett
Mark Dean Beuehler
George Cameron Budd Jr.
Stephen Emory Cabaniss
Grace Robinson Chan
Shengder David Chang
Jean Marie Colthurst
Carrie Anne Delcomyn
Ann DiGiano & Francis A. DiGiano
William Bruce Dowbiggin
Howard J. Dunn
Kevin Michael Fitzpatrick
Robert Harold Forbes Jr.
Alice Harris Fulmer
Richard Warren Gullick
Nora J. Han
Hazen and Sawyer P.C.

Tara Lynn Hickey
Carl R. Johnson
Ryan Scott Kingsbury
Desmond Frederick Lawler & Alice Cotter Lawler
Margaret “Peggy” Layne
James Robert Leserman
Janet Martha Levy
Thomas Clifford Long
William Sheffield McCoy
Raymond Joseph Nierstedt
James Edward Nix
William Kevin O’Neil
Gretchen Dara Onstad
Douglas Martin Owen
David Edward Pinsky
David Alan Reckhow & Catherine Grace Wanat
Barbara K. Rimer
James K. Schafer & Donna Schafer
Christopher Roman Schulz

Robert James Shimp
Estate of Hattie Singer
Vanessa Lynn Speight
Gerald Eugene Speitel Jr.
Donald Jeff Spiegel
Joel Leslie Storrow & Donna Bigham Storrow
Rodger Ladd Tatken
John Eric Tobiason
Margaret Bliss Umphres
William Vizuete
Jason West & Amy Davenport
Randall Edgar Williams
Jack Eugene Wilson
Chen-Yu Yen & Ray-Whay Chen Yen
John Sterling Young Jr.

We have made every effort to ensure the accuracy of this list. To report an error or omission, please contact the External Affairs development specialist at (919) 966-0198.
Lovelace Respiratory Research Institute
Karen Mancera-Cuevas in memory of Enrique Canessa Jorquera
Mark Hamilton Merrill & Terese S. Merrill
MetLife
Stephen Allen Morse
Susanne Moulton & Thomas Wong
Jean G. Orelien
Our Childrens Place
David Edward Pinsky
SciMetrika
Rosa Williamson Small & William Thomas Small Jr.
William A. Sollecito
Rosa Small & Al Tyroler in memory of Marilyn & Al Tyroler
Richard Robert Hammel
Nancy Logan Haigwood
Philip F. Gura & Leslie Ann Gura
Nancy Logan Haigwood in honor of Benjamin Paul Sandella
Richard Robert Hammel
David K. & Karen Robbins Harper
United Water
University of Colorado
$1,000 to $2,499
American Chemical Society
American Legacy Foundation
Alice Sue Ammerman & Thomas Charles Keyserling
Association of N.C. Boards of Health
Susan Shearer Atkinson
Kathleen D. Barboriak
Barbara Anne Barr
Jamie Bartram & Jane Bailey
Peggy Bentley
Mark Dean Beuhrer
Michael N. Boyd
Antonio S. & Mary Fox Braithwaite
Mark E. Brecher
Lauria & Fred Brown
LaMont Bryant
Stephen Emory Cabaniss
Jiwan Cai & Haibo Zhou
Ward Cates & Joan Roberts Cates
Grace Robinson Chan
Ching Kuang Chen
Dennis A. Clements III & Martha Ann Keels
Denise Smith Cline
Joann C. & Ralph R. Cook
David E. Cooper
David Herman Cooper & David E. Cooper
Joann C. & Ralph R. Cook
David Edward Pinsky
Our Childrens Place
Jean G. Orelien
Susanne Moulton & Thomas Wong
Stephen Allen Morse
MetLife
Mark Hamilton Merrill & Karen Mancera-Cuevas
in honor of Chandra Caldwell
in honor of Nancy L. Calvin
in honor of Victoria Moore
Christopher Roman Schulz
Jacqueline van der Horst Sergent
Ruth A. Shults
Anna Maria Siega-Riz
Gladys Siegel
Gerald Eugene Speitel Jr.
Frank & Melanie Spencer
Donald Jeff Spiegel
Greg & Paula Brown Stafford
Paul Edward Stang
David Steffen & Jill Kerr
June Stevens & Michael Sheppa
David Stanton Strogatz & Rosalind Patricia Thomas
Senthil N. Sundaram in memory of Ernestine A. Hansen
Sandra & James Swenberg
Rodger Ladd Tatken
John C. Triplett
Douglas Blair Tully
Robert Donald Verhalen
Robert E. Vollinger Jr.
Bobbi Wallace
Dianne Stanton Ward
Alice D. White
Thomas Robison Yerg & Diane Everts Yerg
John Sterling Young Jr.
Marvin Zelen & Thelma Geier Zelen
William N. Zelman & Janet G. Zelman
$500-$999
Aetna
Amgen Foundation
Robert Glenn Arnold & Katherine Fox Arnold
Stephen Charles Ayala
Eileen Danielle Barrett
Gordon Berry & Mary Hynes-Berry
D. Mark Billings & Maire Billings
William Cudd Blackburn
Emily Trexler Blair
Michael Austin Boyd
Kerrie Eileen Boyle
Duncan Brown & Janet Elliott
S. Scott Brown
George Cameron Budd Jr.
Jenifer Haas Carson
Terri Ann Colangelo
Deborah Lee Covington
Lisa Renee Croucher
E. Stewart Crumpler

Carolina Public Health | 33
Carol Jane Dabbs
Clarence E. Davis Jr.
Francis A. DiGiano &
Ann DiGiano
David Louis Dodson
William Bruce Dowbiggin
Dow-Corning.
George Roy Elmore Jr.
&
Mary Broadhead Elmore
Douglas Henry Esposito &
Holly Jane Neckerman
Stephen Patrick Flaherty
Stuart Gansky & Karen L. Gansky
Jerry Gray Gentry
Richard Warren Gullick
Kerry Brent Hafner
Markell Edwin Hardaway
Heather Lynn Hartline-Grafton
Susan Lee Hartmaier
Omar Snowden Hopkins & Teresa
Marie Savarino
Joan C. Huntley
Jonathan V. James
Theodore Michael Johnson II &
Susan Paul Johnson
Oliver Kelly & Maighread Kelly
Amy Lansky
Kenneth Joseph Koury
Sean Laane & Patricia Suzanne
Weggel-Laane
Tally E. Lassiter Jr.
Peter J. Lauria & Kathleen S.
Sheehan
in honor of Don Lauria
Catherine Rowland Liemohn
L’Oréal
John McGuire
Gary John Mihlan
Wilbur Kearse Milhous &
Virginia Graves Milhous
Beverly Nieman Mirman
Philip Keith Mitchell
Timothy James Mukoda
in honor of Maryanne Boundy
in honor of David Leith
J. Richard Navarre & Melissa Lynn
McPheeters
Network for Good
Raymond Joseph Nierstedt
James Notaro
Timothy Wade Okabayashi
Richard Osborne
David Leonard Parks
Howard B. Perry
Stephen Praissman
Procter & Gamble
Lawrence W. Raymond
Chris & Sharon Ringwalt
in honor of Jo Anne Earp
Charles Eric Rodes
Mark & Karen Rodin
Donald Jordan Rose Jr.
John Russell & Kelley Russell
Michael Gerard Schell
Robert James Shimp
Steven Michael Snapinn
Rachel Humphries Stevens
Bryan Michael Sung
Tamuraus Jerome Sutton
John Henry Sweitzer
David Gordon Taylor &
Jeanie Driver Taylor
John Eric Tobiason
Fredrick Seymour Whaley
John Wiesman
Richard Vance Wofenden
Zeneca
$250-$499
David O. Amuda &
Michel Dawson
Elizabeth B. Andrews
Mary Susan Anthony
John Mayberry Antón &
Renee Helene Schwalberg
Nikita Arya
Carolann Diane Augustine
Patricia Michel Backus
Edmund Gerald Barron
Sheri Ruth Bates
Douglas Alan Bell
Lynn W. Blanchard
Meg Marie Booth
Douglas Donaldson Bradham
Gail Rose Brown
Kelly B. Browning &
Susan Browning
James Paul Bulman
Elizabeth Doan Bushell
Carolina Trust
Shine Chang
Coastal Community Foundation
of S.C.
The Coca-Cola Company
Anne Smith Cole
Jean Marie Colthurst
Basil Gust Constantelos
Francoise Marie Cornet
Heather Nelson Cortes
David J. Couper & Rita Couper
Mary Foster Cox
Eleanor Alene Crocker
Nancy Bosworth Crutchfield
Pedro Martin Cuatrecasas &
Carol Zies Cuatrecasas
Stephen Thomas Daly
Ralph Alphonse DeMasi
Robert Arthur Diseker
Charles Perry Dunbar
Robert O. Earl II
Shandal Shanee Emanuel
Dennis Lyn Ewalt &
Cheryl Homzak Ewalt
Laurel Ann Files
Financial Symmetry Inc.
Elizabeth Ann Franko
G. Jay Graepel
David Allan Green
Gary Norman Greenberg
Michael Craig Griffiths
Naomi Jean Hall
Rosanne Buckley Hanratty
Margaret Gates Hirsch
Elaine B. Hoffman
Home Creations LLC
George Howard & Virginia
Jackson Howard
Joseph Toy Howell III &
Emby Martin Howell
C. Christopher Idol &
Marion Wilson Idol
Nalin Johri
Baxter Lee Jones
Rhondette Lenice Jones
Wanda Kaye Jones
Joanne Marie Jordan
William H. Joyner Jr. &
Mary Brenda Joyner
Michelle Crozier Kegler
Ira Laster Jr.
Sheri Johnson Lawrence
David Ernest Layland
Kelvin K. Lee
Wilbert Liou-Lang Lee
David Leith & Carolyn L. Leith
in honor of Jason West &
Amy Davenport
Kevin Mahler
in honor of Jason West &
Amy Davenport
Monte William Masten &
Marsha Ann Smith Masten
Craig Stephen Maughan
William Sheffield McCoy
Anne Higgins McMahon
J. Barton McMillan
Hal Morgenstern
Mary Margaret H. Mundt
Erin Marie Nichols
Xumin Nie & Ming Zhong
Pamela Alston Oliver
Anne Townsend Overman
Zoe Henderson Parker
Nanci M. Pedulla
Ephraim Henry Phillippe III
Graydon O. Pleasants Jr. &
Margaret B. Scales
Lewis William Pollack
John Stephen Preissner Jr.
Cheryl Blackmore Prince
Xiang Qin
Quintiles
David Alan Reckhow &
Catherine Grace Wanat
Charles Edwin Reece &
Laura Helms Reece
Robert Ellis Reiman Jr.
Renaissance Charitable
Foundation Inc.
Thomas Cleveland Ricketts III
Christopher Rimer &
Christine Rimer
SAAPHI
Susan Marie Sanders
Patricia Gail Schnitzer
Shell Oil
Alan James Smith
Ellison Leon Smith Jr. &
Electa Alexander Smith
Jason Baker Smith &
Paige Hall Smith
Cynthia C. Snyder
in memory of John F. Moulton
Vanessa Lynn Speight
John William Stanback &
Marguerite Cooney Stanback
Maura Ellen Stokes
G. William Strein
Susan E. Strunk
Raymond John Townsend &
Jane Therese Osterhaus
Margaret Bliss Umphres
UNC Student Activities
Fund Office
Vanasse Hangen Brustlin, Inc.
John Navin Voyzey &
Julia McGovern Voyzey
Martha Wilkinson Waller
Andrea Westerfield Weyer
Deborah Marie Winn
Winston-Salem Foundation
$100 to $249
3M
Julie Adams
Daniel Bartholomew Ahern
Barbara Vineyard Alexander
Jean Elizabeth Alexander
M. Taylor Alexander Jr.
E. Jackson Allison Jr.
Brent Andrew Alternative
Carol Zielinski Anderson
in honor of Anna Maria Seiga-Riz
Terry P. Anderson
Anonymous (1)
Richard Allan Aronson
Anneliese Jackson &
Austen Community Foundation
Tom Bacon
Brendan Rogers Bailey &
Monica Reid Bailey
Tracy Brazell Baker
Alan Mills Ball & Colleen
Dooling Ball
Shrikant Ishyer Bangdiwala &
Rebecca Ann Teeter
Bank of America
Beth Baptista
in honor of Jack Eugene Wilson

DONORS
The Conrad N. Hilton Foundation has granted $1.5 million to The Water Institute at UNC to improve the lives of disadvantaged people around the world. The Institute will use the grant in liaison with the nonprofit foundation and its grantees across the globe to improve strategies for making clean water accessible to those most in need.

“The goal of this partnership is to improve the well-being of the ultra-poor in targeted developing countries by supporting sustainable access to safe water,” says Jamie Bartram, PhD, Institute director. “This is a fantastic opportunity for us to work alongside the foundation and the projects they support to improve their strategy and ultimately make an impact on water projects across the globe.”

Through the partnership, the Water Institute will help foundation grantees develop internal monitoring systems by training them to use and report data on the performance and impact of their projects.

“Central to the foundation’s Safe Water Strategy is rigorous monitoring and evaluation to improve the overall effectiveness of our grant making by providing feedback to improve ongoing programming,” said Braimah Apambire, senior adviser for water, sanitation and hygiene at the foundation. “The University of North Carolina’s Water Institute has established itself as a leader in the water, sanitation and hygiene sector, with deep, substantive expertise, demonstrated experience in conducting complex evaluations, and the capacity to effectively aggregate and disseminate learnings and findings.”
The Carolina Global Breastfeeding Institute (CGBI) has received a three-year, $900,000 grant from The W.K. Kellogg Foundation. The funding supports CGBI to translate action-oriented research and program theory into practice and develop an environment in which more women can decide to breastfeed and achieve their breastfeeding goals.

The Institute, based in the School’s Department of Maternal and Child Health, carries out innovative efforts to improve breastfeeding support for underserved populations in North Carolina and beyond.

“Breastfeeding can reduce the four major preventable killers of infants – pneumonias, Sudden Infant Death Syndrome (SIDS), infections and major causes of deaths in premature infants – as well as reducing obesity, diabetes, cancers and ear infections,” says Miriam Labbok, MD, MPH, who is CGBI director and Professor of the Practice in maternal and child health. “This support will help address the current shameful disparities in these diseases created by inequities in breastfeeding success.”

“The Kellogg Foundation is pleased to support and partner with CGBI in this work because we believe that breast milk is the optimal first food to give to all children a healthy start so that they can thrive in school, work and life,” said Diana N. Derge, program officer at the foundation.

Learn more at wkkf.org and cgbi.sph.unc.edu.
E. Charlton Prather
Rose Marie Pratt
Steven Prentice-Dunn & Laurie Prentice-Dunn
Scott Martin Presson
Lendy Wayne Priddgen
Barbara Alison Prillaman
Cynthia Johnston Probst
Alan Proia & Nancy Easter Proia
Elizabeth Larsen Pullen
PXP
Michael Lee Qualls
Robert Martin Quillin
Alan J. Rabideau
Bobby Riley Redding & Carolyn Keene Redding
Martha Jean Reddout
Roscoe Edward Reeve & Mary Ringwalt Reeve
in honor of Bryce B. Reeve III
Peralwar Regunathan
Donald William Reinfurt & Karen Hillix Reinfurt
Dennis Albert Revicki
Heidi Winn Reynolds
John Kimber Rezen & Donna Glosson Rezen
Sandra Rhyme
in memory of Jimmie Lee Rhyme
in honor of the Ryhme Family
Russell Howard Richardson
Brian D F Richmond
Martha Cornwell Riddell
John Coulter Riderhof
Thomas Andrew Ridgik
Elizabeth Rimer
in honor of Barbara K. Rimer
Kelly Elizabeth Ritrievi
Malcolm Clive Roberts
Larry Philip Robinson
Jimmy Lafon Rogers Sr.
Marjorie Sue Rosenthal
Alton Glenn Ross & Frances Turner Ross
John A. Ross
Ruth Rothman
in honor of Miriam Labbok
Catherine Palisi Rowan
Janice Butler Ryckeley
in honor of Judith Ostendorf
Marjorie Rose Sable
SABRE Health & Safety
Michael Carl Sachtlen
Carol Wendi Sackett
Jerry Salak
Susan Mertz Savite
Jennie Peroy Saxe
Mary Hagaman Saylor
James H. Schaefer Jr.
Daniel Solomon Schechter
Jerald Scott Schindler
Carol J. Shannon
Science Applications International Corporation
Chuan-Feng Shih
Valeria Denise Shropshire
Lauren Ashley Shuster
Tamara Tickel Shusterman
Carl Michael Shy
Elizabeth Hamerschlag Sims
Michael Neil Sinseheimer
Thomas Freeman Slaughter
Mary Lewis Smith
J. Clinton Smith
Claudia May Smith
Leonard Smock
C. Jean Spratt
Valerie Lewis Stallings
Morris Fearin Stamm
Gregg Martin Stave & Christine Marie Hunt
Cheryl Randy Stein
Douglas J. Stevens
Patience Bosley Stevens
Mark Stephen Stinneford &
Karen Younghblood Stinneford
Elizabeth Jane Stoller
Jane Stanfield Stutts
William Alfred Suk
Mary Charles Suther
Mary Elizabeth Hibbs Sutton
David John Svendsgaard
Robert Charles Sykes
Brian C. Taff & Kara Anne Taff
Gregory John Tallmadge
Eboni Monique Taylor
The Duke Endowment
Gene Dennis Theriault
Harsha Thirumurthy & Emily Anton Bobrow
Colin G. Thomas Jr.
Theodore Tellef Thompson
Shirley Jean Thompson
Alice Raymond Thomson
Samuel Ridley Tipton Jr.
Stephen A. Treimel
G. Earl Trevathan Jr.
John Francis Trexler
Paul David Trinkoff & Alison Miller Trinkoff
Lou Huppin Turner
Emily Thomason Tyler
David Francis Utterback & Mary Elizabeth McCutchen
William Alvin Van Wie II
Edwin van Wijngaarden
Catherine P. Vangellow
William Vizuete
Andrew Charles Voetsch & Karen Pilloyd Voetsch
Edward Harris Wagner & Pat Wagner
Robert Irving Wakeley
Charles Raymond Waid & Susan Heuer Waid
Arthur Thomas Wallace Jr.
Bruce Davis Wallace
Ralph Gene Wallace
Sheryl Farfaro Walters
Xiao Fei Wang
B. Peyton Watson
Sharon Jean Wayne
David Bruce Webster Jr.
Ganesa Rebecca Wegienka
Kathryn Wellman
Jeffrey Gale Wendle & Denise Hall Wendle
Virginia Linndley Wereszynski
Laurence A. Wescott & Constance B. Wescott
Robert R. Westerman
K. Cyrus Whaley
James Peter Wheeler
Elizabeth Anne Whelan
Connie Gayle White Revocable Living Trust
Rosita Whitman
Paige Leigh Williams
Cheryl Lindsley Williams
Edward Richard Williams
Dean Edward Willis
Janet Horsley Willis
Erika Lynn Wilmuth
Catherine Alexander Wilson
Ellen Katherine Wilson
Lucy Carver Wilson
Meta Genelle Winston
David Winterle & Carey Dawson
Steve Wisseh
Melvin Ray Witcher Jr.
Leslie Brown Wood
Linda Kay Worm
Wayne Edward Wormsley
Joy Wu
Linfeng Xu & Zhimei Liu
Sirin Yaemulti
Jingzen Yang
James R. Yankaskas &
Bonnie Cravets Yankaskas
Feng Ye & Jean Pan
Carl Nobuo Yoshizawa
Beverly Ann Young
Charles Robert Young
in memory of John F. Moulton
John Lewis Young Jr. & Lynda Tinnin Young
Jason Zaks
Zhi Zhong
Julie Witz Zupko
Under $100
Anonymous (1)
Evelyn Larsen Aabel
Omar Samy Abdelbaky
Marshall Cecil Abe
Anita Ann Abraham
Nazir Ahmed Adam & Keir Davis Adam
Laurie Quint Adler
Indu Bala Ahiwala
Lorraine Kathleen Alexander
Catherine Dove Allport
Maria Luisa Ganan Almond
Marc Robert Alston
Marquitta Plummer Alston
Heather Kay Altman
American Honda Company
Rebecca P. Amthor
Amanda Brooke Anderson
Norma Powers Anderson
Judith Virginia Anderson
Margaret Elizabeth Anderson
Paige Anderson
in honor of Jo Anne Earp
William Moseley Archer III & Ellen Hatley Archer
Mary Susan Ariosto-Coe
Susan Houts Arnold
Robert Eric Aronson
Abena Konadu Asante
Marilyn Hefta Asay
Janet Veinot Ayer
Dennis Roy Ayers & Elizabeth Livengood Ayers
Ellen DePew Bailey
Walter Phillip Bailey
Philip Morgan Baker
Jason Guy Baker
John Curry Baker Jr.
Miriam Parke Balding
Sarah C. Ball
Khula Nafia Baloch
Marissa Ellen Baltus
Allison M. Banas
Carolyn Groce Barbe
Wendy Seams Bardet
John Dallas Barile & Suzy Maynard Barile
Robert Bruce Barlow
Debora L. Barnes-Josiah
Lorna Frances Barnett
Elizabeth Spruill Barr
Lisa Cohen Barrios
David Allen Barskey & Mary Ann Baviello
Mildred Bartko
Vickie E. Bass
Eugenia Moraes Bastos
Eloise Rouse Bates
Hilda Pekarsky Baum
Samuel Baum
Rachel Tomomi Baum
Sherrill Crawford Beaman
Rita T. Beatty
Diane Beaudot & Carolyn Deans Beaudot
Phyllicia T. Bediako
Tammy Lynn Belinsky
H. Earle Belue
Jane Benson
Cecelia Potts Berkstresser
A stone from every state — Denise Cline’s memories result in a travel fund for students

Denise Cline’s father had a unique idea. “My father’s goal,” she says, “was to gather a rock from every state and use them eventually to build a fountain.”

The memory stands out when she is asked about the yearly pilgrimages her family took westward. “My parents had five children,” Cline says. “Every summer they packed us in a car, and we took ‘Steinbeck trips’ out west.”

The trips are the cornerstone for Cline’s inspiration to create a new travel fund at UNC. Named in memory of her parents, the Donald N. and Mildred K. Smith Public Health Travel Fund provides support for any undergraduate or graduate student at the School to travel in conjunction with practice, research, service or conference presentations.

More importantly for Cline, establishing the fund allowed her to honor her parents’ values. “My parents were able to make their lives better through education, and this type of gift seemed a perfect convergence of health care, education and travel,” she says.

The value of health care is especially meaningful to Cline, as her mother suffered from a debilitating illness which was never diagnosed. Through all her ordeals, Cline’s mom still maintained a positive spirit that inspired everyone who met her.

It inspired Cline as well. “I hope my gift allows students an opportunity to share their ideas with others and to gain experience abroad,” she says.

— Branson Moore

Find out how you can support students or other efforts at the School. Visit us online at www.sph.unc.edu/giving.
The Swartz Scholarship — meeting an immediate need

John and Dorothy Swartz love to travel. When they established the Swartz Scholarship at UNC Gillings School of Global Public Health, their inspiration was drawn from the many faces of public health they encountered in their trips around the world.

Their scholarship provides full tuition and fees to a Public Health Leadership Program executive doctoral student from a developing country who plans to work in the public health academic community.

“We at the School are very grateful for the Swartzes’ generous gift,” said Peggy Dean Glenn, associate dean for external affairs. “Their gift was expendable, which means it can be fully spent to provide immediate support to a student. A donor also may choose to fund an endowed scholarship, which pays out small amounts initially but grows over time and can be awarded year after year. We are so appreciative of both kinds of scholarships because they enable us to respond to students with a range of financial needs.”

Mr. Swartz, who received assistance at Duke University, Massachusetts Institute of Technology and George Washington University Law School, likes to say that his own success was due to the financial help he received along the way.

“We believe offering our scholarship to someone who will educate others in public health in the developing world will have a multiplier effect,” Mr. Swartz says. “The scholarship recipient will educate many people, who in turn, will help solve the world’s health problems.”

— Branson Moore
Leadership, vision and community responsibility are among Dr. Mike Kafrissen’s strongest attributes – and the traits he says he most admires in others.

Through the years, he has collaborated with many people who have been affiliated with the School. He knew Dr. Bill Roper, former dean of the public health school, in Roper’s role as director of the Centers for Disease Control and Prevention. He has admired Chancellor Holden Thorp’s ideas about entrepreneurship and his proposal of water as a two-year, university-wide theme. As director of research and innovation for the World Health Organization Collaboration Center, based in the School’s Department of Maternal and Child Health, he has worked closely with Dr. Herbert Peterson and Dean Barbara K. Rimer. For many years, he and his wife, Jill Kafrissen, have supported the School’s Annual Fund because they believe in the ‘visionary’ work the School sets out to do.

Now, the Kafrissens have arranged for a $5 million planned gift from their estate that will benefit the School and its goals.

“I’ve admired the caliber of Bert’s and Barbara’s leadership for a long time,” Mike says. “Our confidence in the Gillings School of Global Public Health always has been amply rewarded, and we’re proud to have offered support that met immediate needs along the way. This longer-range gift is similar to others we’ve given. It’s a vote of confidence in the future of an institution we value.”

— Linda Kastleman

Michael Edwin Kafrissen, MD, MSPH, a member of the School’s Advisory Council, is chief executive officer of STE Health International LLC. Previously, he was company head and chief scientific officer of Ortho-McNeil Janssen Scientific Affairs LLC. He holds several adjunct professorships, including at UNC, and is a research scientist at MIT’s AgeLab (agelab.mit.edu).

Jill Kafrissen, LCSW, has worked in a variety of social work settings including hospitals, family services and legislative advocacy. She is involved in a number of philanthropic activities.
Delton Atkinson, MPH, a division director in the Centers for Disease Control and Prevention’s National Center for Health Statistics, has been elected president of the School’s Public Health Foundation board. A board member since 2007, Atkinson is connected to the School in almost countless ways. He earned two Master of Public Health degrees at the School – one in biostatistics and one in health policy and administration (now health policy and management) – and serves as an adjunct faculty member in biostatistics. He has held leadership roles in the School’s alumni association and on various committees, including one to increase diversity in the School community.

“I am delighted and honored to serve as president of the School of Public Health Foundation Board,” Atkinson says. “The Foundation has a rich history of working with the dean to improve the UNC Gillings School of Global Public Health. I hope to continue prior presidents’ excellent stewardship of Foundation resources and to aid the School’s becoming more diverse and inclusive. Boosting and broadening our financial resources and base of support also will be a focus of my leadership. Achieving this goal is paramount, as people – faculty and staff members, students and alumni – are the heart and soul of the School.”

Atkinson also has established The Atkinson Scholarship Fund, which makes funds available to any student at the School, with a preference for students who enhance the social, economic and cultural diversity of the student body.

— Linda Kastleman

To explore ways your gift of time or money might make a difference at the School, call the Office of External Affairs at (919) 966-0198.
Leslie Painter Mills
Shannon Adrienne Mills
Katherine Teresa Mills
Charles Louis Milone
Jessica Louise
Minjares-Rauschenber
Kelly Marie Mitchell
Tracey Lee Mitchelson
Christine Lorraine Moe
Caroline Alicia Moffett
Joel Gedney Montague
Jonathan David Moore
Dennis Joseph Moore
Vivian Brantham Moore
Robert Burns Moorhead Jr.
Brett W. Moran & Vicki
McIntosh Moran
Victoria Stover Moredecai
Miriam C. Morey
Caryn Gee Morse
Bruce Hollifield Moss &
Janet Cox Moss
Katelyn Clark Mote
Deidre Lynnett Moyer
Juliette Gwenola Mueller
Kathryn Reumann Mullen
James J. Mullen & Dorothy
Muir Mullen
Joanne Burleigh Murach
Robert Stewart Murphy
Michael Ben Musachio
Minni Nauhria
William James Neil
Sondra A. Nelson
William Richard Nelson
Charles Michael Newton-Ward
Jeffrey Huu Nguyen
Brett R. Nishikawa
Oscar David Niswonger Jr.
Felicia C. Noonis
Deborah Ruth Norton
Alexa Obolensky
Denis F. O’Connell
Rudolph Wilhelm Oeben
John William Ogle III
Floyd Byron Oglesby Jr.
Anayo Linda Ohadugha
Claes Erik Michael Oldenburg &
Niki Cotten Oldenburg
Caleb Joseph Olliech
Sharon A. O’Neill
Gretchen Dana Onstad
Michela Osborn
Sara McMurray Osborne
Nancy Dashar Oswald
Kevin John O’Tsole
Donald Alfred Owens
Alice Kinsman Page
Lisa Ellen Palmer
Shveta Dhiren Pandya
Carol Blum Papillon
Brittany Nicole Papworth
Linwood Clark Paramore
Patricia Diane Parker
Edward A. Pascarella
William Joseph Pate
Bianca Yogesh Patel
Cristy Smathers Patten
Christine Pederson
Barbara Jane Penlin
Brian E. Pence
James Francis Penfold
Meng Peng
Jessie Valentine Pergrin
Lynn Martin Perkins
Henry B. Perry III
Christine Clark Perry
Donald Brian Personette &
Deborah Ann DiGilio
Howard August Peters
Megan Ruth Peters
Gail Boren Peterson
William Peterson &
Angela Peterson
Eric Steven Pezvner & Emily
Lynn Green-Pevzner
Suzanne Pfeifer
Robert W. Phelps
Diane Fistori Phillips
Lynette S. Phillips
Richard Norman Phillips
Virginia Dupree Phillips
Debra M. Phillips
Kellie Sikler Phillips
Robert Osborne Pickard
Vern Pidcoe
Martha Piedrasanta
Jennifer Leigh Platt
Lynanne Plummer-Plunkett
Louise Adkins Poe
Paula O’Brien Poglinco
Barbara Lillian Polhamus
Elizabeth Anne Pollock
Meghan Proctor Popielarczyk
Cedric W. Porter Jr.
Kimberly Anne Porter
Mary Beth Powell
Judith Ann Powell
Thomas John Prendergast Jr.
Timothy Wayne Prince
Earcel Gene Proctor
Barbara Pullen-Smith
Jeffrey Charles Qualls &
Laura Goettinger Qualls
Jacqueline A. Quirk
Norman DeFue Radford Jr.
Judy R. Rafton
Daniel Donald Raischel
Chirag Dipak Rajput
Barry Lee Ramaley
Myrnice McCormick Ravitch
Kimberly Jane Ray
Peter Cameron Raynor
Thomas Franklin Redick
Alison Chapin Reed
Richard Martin Rehm
George Arthur Reich
Jonathan David Reid &
Sandra Cook Reid
Linda School Reilly
Chris Joseph Reimer
Scott Michael Reinhardt
Andrew Marshall Reitinger
Jennifer M. Rellick
James Lawrence Retchin &
Carol M. Retchin
Amanda Renee Reynolds
Mary Louise Reynolds
Marylin Anne Reynolds-Canty
Victor Gregg Rhodes Jr.
William Jerry Rhodes
Susan Jones Richardson
Kathryn Maclin Riley
Kimberly Boomer Ring
Tamar Ringel-Kulka
Susan Wenger Robbins
in honor of Miriam Labbok
Elizabeth Henry Roberts
Susan Sinclair Roberts
Robin Robertson
Craig Hall Robinson
Phiplys Mangum Rocco
Eric Alan Rodgman
Marion Lane Rogers
Leon Julius Rollin
Jayne Johnson Romero
Mark Jamison Rosch
Barbara Rosenau
Nora Ellen Rosenberg
Katharine Carmen Rossitch
Aleda Vender Roth
R. Wesley Rountree &
Sage Hamilton Rountree
Lynne Schachner Roux
Nina Tiglio Ruckes
John David Runkle & Nancy Dole
Susan Russell
Karen Lee Rust
Mohammad Ihab Saad
Ruth Sacks
in memory of Marilyn Tyroler
Gina Nicole Sacks
Kristin Elizabeth Sadler
Mark Hedrick Salley
Chris N. Salmi
Maria Salvadore
Jan Ellyn Salzer-Ogden
Nat H. Sandler
Billy Murray Sandlin Sr.
Mary Mann Sappenfield
Sara Moir Sarasa
William Bishop Saunders
Paul Vincent Savard
Frederick Stevenson Saville &
Alison Whisnant Saville
Anne Rose Schaefer
Patricia Brunton Scharko
Dawn Hartsell Scheessele
Judith Ellen Schmid
Richard Michael Schulz &
Marcia Anne Coster-Schulz
Don Scott & Kay F. Scott
Edgar Franklin Seagle
Adam Alexander Seeger &
Su-Kyung Chung
Grace Rita Selicato
Kofi Alavi Semenya &
Joyce Gyamerasaw Semenya
Evgeniya Seredetchina
Kenneth Grant Sexton
Raj Jagdish Shah
George Alan Shaler &
Jill Ellen Rosenthal
Rani Theresa Shankar
Eugene Hugh Shannon
S. Drusanne Shaulis
Joyce Q. Sheats
Christine Delalio Shiffer
Starr Riddle Shive
Stanley Allen Shulman
Joseph Edward Sickles II
George William Siebert III
Ashley Elizabeth Sigmon
O. J. Sikes III
Robert S. Silvers & Penelope
Jeanne Padgett
Jillian Leigh Simmerman
Jerry Myron Simmons
Phillip Donald Simmons
Neal R. Simonsen
Barbara Pawlik Simpson
William Singsank &
Cheryl Singsank
Trudy Katriona Singzon
Elizabeth Hunter Skidmore
Eldon Flimmon Sloan III &
Jessica Marie Sloan
Michael Paul Smeltzer
Donald Lee Smith
Christopher Jon Smith
Genee Shavonne Smith
Paige Charlotte Smith
Lyle Byron Snider
James Michael Snyes Jr.
Joleen M. Soukup
Kellie Sopher Souza
Roy Follansbee Spalding II
Elizabeth Brooks Spangle
Carol Kozlowski Spangler
Yvonne Hebert Sparling
Douglas James Spegman
Denise Anne Spence
Elizabeth Ann Spencer
Joyce Annette Spencer
John I. Spivey
Danielle Laura Spruol
Laurel Marie St Martin
John Haywood Stanley
Barbara Ellen Starrett
Susan Elizabeth Steck
Doran Webster Stegura

CAROLINA PUBLIC HEALTH  |  45
<table>
<thead>
<tr>
<th>Name</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marilyn Mackson Stein</td>
<td>UnitedHealth Group</td>
</tr>
<tr>
<td>Seth Michael Steinberg</td>
<td>Marian Raid Van Nierop</td>
</tr>
<tr>
<td>Constance Ritz Stern</td>
<td>Joyce Hilleboe Vana</td>
</tr>
<tr>
<td>Parker Stevens</td>
<td>Paul Joseph Vander Straeten</td>
</tr>
<tr>
<td>Paul Wilder Stewart</td>
<td>Veronica Creech Vantuno</td>
</tr>
<tr>
<td>Stephen Ronald Stoddard</td>
<td>Linda Marie Varblow</td>
</tr>
<tr>
<td>Rodoljub Stojiljovic</td>
<td>Brenda Vasquez</td>
</tr>
<tr>
<td>Carol Elizabeth Stokes</td>
<td>Ramon Velez</td>
</tr>
<tr>
<td>William Garrett Stone &amp; Susan Lyon Stone</td>
<td>James Anthony Verderese</td>
</tr>
<tr>
<td>Elaine Kalode Stoner</td>
<td>Wendy Lee Vernon</td>
</tr>
<tr>
<td>Georgean Stoodt</td>
<td>Madhbulika Vulimiri</td>
</tr>
<tr>
<td>Woodhall Stopford</td>
<td>Gambrell Hollister Wagner</td>
</tr>
<tr>
<td>Ada Uhlrand Storm</td>
<td>David Thomas Wainscott</td>
</tr>
<tr>
<td>Becky Anne Straub</td>
<td>Cynthia Sue Walker</td>
</tr>
<tr>
<td>G. Thomas Strickland Jr. &amp; Anna Garst Strickland</td>
<td>Hilda Lee Walker</td>
</tr>
<tr>
<td>Brian Warren &amp; Clancy Sturm &amp; Bellinda Sue McSwain Sturm</td>
<td>Susan Wall Wallin</td>
</tr>
<tr>
<td>Kumara Raja Sundar</td>
<td>Emmanuel Benjamin Walter</td>
</tr>
<tr>
<td>Kathryn Rose Sunnarborg</td>
<td>Georgia Ann Walter</td>
</tr>
<tr>
<td>Elizabeth Roselle Suttle</td>
<td>Ann Marie Lee Walton</td>
</tr>
<tr>
<td>Colleen Svoboda</td>
<td>Jessie Jiarong Wang</td>
</tr>
<tr>
<td>Susan Montgomery Swafford</td>
<td>Andrea Lou Gartley Ware</td>
</tr>
<tr>
<td>Angela Wooten Swicgood</td>
<td>Scott Wood Warren</td>
</tr>
<tr>
<td>Ann Swies</td>
<td>Adeline Gracey Washington</td>
</tr>
<tr>
<td></td>
<td>William Frank Waslick</td>
</tr>
<tr>
<td></td>
<td>Norma Whittleman Wasmuth</td>
</tr>
<tr>
<td></td>
<td>Jessie Jiarong Wang</td>
</tr>
<tr>
<td></td>
<td>Andrea Lou Gartley Ware</td>
</tr>
<tr>
<td></td>
<td>Scott Wood Warren</td>
</tr>
<tr>
<td></td>
<td>Adeline Gracey Washington</td>
</tr>
<tr>
<td></td>
<td>William Frank Waslick</td>
</tr>
<tr>
<td></td>
<td>Norma Whittleman Wasmuth</td>
</tr>
<tr>
<td></td>
<td>Jessie Jiarong Wang</td>
</tr>
<tr>
<td></td>
<td>Andrea Lou Gartley Ware</td>
</tr>
</tbody>
</table>

Every gift to UNC Gillings School of Global Public Health is vitally important, and we deeply appreciate each gift.

We have made every effort to ensure the accuracy of our Honor Roll lists and regret any errors or omissions. To report an error, contact the External Affairs development specialist at (919) 966-0198.
SINCE 2009, PART OF YOUR GIFT TO THE SCHOOL’S ANNUAL FUND HAS BEEN DESIGNATED FOR SCHOLARSHIP ASSISTANCE TO OUR DESERVING STUDENTS. THIS YEAR, 11 OUTSTANDING SCHOLARS RECEIVED SUPPORT FOR THEIR GRADUATE STUDY AT UNC GILLINGS SCHOOL OF GLOBAL PUBLIC HEALTH.

THE ANNUAL FUND IS ONE OF THE MOST POPULAR WAYS TO SUPPORT THE SCHOOL AND ITS PUBLIC HEALTH INITIATIVES. PLEASE GIVE AS GENEROUSLY AS YOU ARE ABLE.

Your gift to the

ANNUAL FUND

makes a positive difference in students’ lives

This year’s Annual Fund Scholars are:

Gabriela Arandia  
Health Behavior

Ricky Camplain  
Epidemiology

Sujatro Chakladar  
Biostatistics

Christina Cordero  
Epidemiology

Rachel Davis  
Maternal and Child Health

Mary Elizabeth Grewe  
Health Behavior

Lindsay Huse  
Public Health Leadership Program

Mohamed Jollah  
Health Policy and Management

Yang Sing Lin  
Maternal and Child Health

Julia Naman  
Environmental Sciences and Engineering

Adane Wogu  
Biostatistics

For more information about Annual Fund scholarships, visit www.sph.unc.edu/giving, or contact Jerry Salak at jerry.salak@unc.edu or (919) 966-0198.
Tanzania. Maman’s team will offer small loans and leadership training to young men as a strategy to reduce HIV risk and partner violence.

**Margaret (Peggy) Bentley, PhD**, Carla Smith Chamblee Distinguished Professor of Global Nutrition, received a five-year grant of about $3 million from The Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD). Bentley’s study, “Mothers and Others: Family-based Obesity Prevention for Infants and Toddlers,” will develop and implement tailored nutrition interventions for mothers and families of non-Hispanic black infants, a group at high risk for pediatric obesity.

**Ralph S. Baric, PhD**, professor of epidemiology, and Mark T. Heise, PhD, associate professor of microbiology and immunology at UNC’s medical school, will lead a five-year, $21.4 million research study that could result in more effective treatments for life-threatening viral infections of the lungs and central nervous system, such as SARS, influenza and West Nile virus. The project’s long-term aims are to identify key immune regulatory genes and networks that control disease severity, better understand how immune compartments “talk” to one another and determine disease outcomes after infection.

**School welcomes Lytle as health behavior chair**

Leslie A. Lytle, PhD, former professor of epidemiology and community health in the University of Minnesota’s School of Public Health, became chair of the School’s health behavior department on Oct. 1. She holds a joint professorship in the School’s nutrition department. Lytle received a bachelor’s degree in medical dietetics (Pennsylvania State University), master’s degree in education (Purdue University) and doctoral degree in health education and health behavior (University of Michigan), completing post-doctoral training in cardiovascular health behavior in University of Minnesota’s epidemiology division. Lytle succeeds Jo Anne Earp, ScD.

**Davis takes on leadership of CSCC**

Sonia Davis, DrPH, is the new director of the Collaborating Studies Coordinating Center (CSCC), based in the Department of Biostatistics. Davis received bachelor’s, master’s and doctoral degrees in biostatistics from UNC and previously was a senior director at Quintiles Inc. An adjunct faculty member in the department since 1995, she is now Professor of the Practice. Read more about the CSCC’s illustrious history at tinyurl.com/CSCC-turns-40.

**In other news …**

**45TH ANNUAL FOARD MEMORIAL LECTURE THURSDAY, APRIL 11**


**TRIBUTE EVENTS TO HONOR JO ANNE EARP, SCD, professor and former chair of Health Behavior, for four decades of service to UNC FRIDAY AND SATURDAY, APRIL 12 AND 13**

For information about how you might participate, contact Steve Couch at (919) 966-0219 or spcouch@email.unc.edu.

**UNC presents 18th annual summer videoconference on minority health**

UNC’s National Health Equity Research Webcast, formerly known as the Summer Public Health Research Institute and Videoconference on Minority Health, was held June 5. This year’s topic was “Social determinants of health disparities: Moving the nation to care about social justice.” Read more at www.sph.unc.edu/minority_health_project.
On April 26, the University of North Carolina at Chapel Hill’s Board of Trustees announced that Jamie Bartram, PhD, professor of environmental sciences and engineering and director of The Water Institute at UNC, had been selected as the first Holzworth Distinguished Professor.

“We are extremely pleased that Jamie Bartram has been awarded our distinguished professorship,” Don Holzworth said. “His work on water – our world’s most precious resource – is respected by all who know him. Jamie has influenced both science and global policy while at the same time improving the lives of millions.”

Don Holzworth serves as the school’s first Gillings Executive-in-Residence, chairs the School of Public Health Advisory Council and is adjunct professor of health policy and management. A member of the Chancellor’s Innovation Circle, he has been instrumental in leading innovation at the school and in launching The Water Institute at UNC, which is part of the public health school.

“I’m honored to be selected to help advance the School’s and the Institute’s missions,” Bartram said. “Clean water and sanitation issues disproportionately affect the vulnerable – in the U.S. as well as in developing countries. We have a lot of work to do to improve health around the world through attention to water-related issues.”

The Don and Jennifer Holzworth Distinguished Professorship Fund was initiated with a $666,000 gift from the Holzworths. Matching funds through the state’s Distinguished Professors Endowment Trust Fund support the $1 million professorship.

The Holzworths’ support of the University flows from a lifetime of dedication to global public health. Don Holzworth founded Constella Group in 1983, a human health services company that employed innovative science, technology and management solutions to solve pressing health problems in more than 60 countries. Jennifer Holzworth was Constella’s chief financial officer during its start-up phase and has dedicated herself to volunteer work, most recently with emergency and other medical services in Vail, Colo. The Holzworths also have funded a series of endowed scholarships and are longtime members of The Rosenau Society.

When Don and Jennifer Holzworth established a distinguished professorship in March, they simultaneously supported two ventures that excited them – the work of UNC Gillings School of Global Public Health and UNC’s two-year campus-wide theme, water.
ON THE COVER:
Members of UNC’s Engineers Without Borders (EWB) make a practice run before the Sept. 16. “Run to Make Water Run” 6K race. Left to right are Jennifer Casanova and Johnny Kim (master’s students, environmental sciences and engineering), Blythe Carter (undergraduate, mathematics), Stephanie O’Daly (undergraduate, environmental science) and Lauren Snyder (master’s student, maternal and child health).

EWB sponsors the event each year to support its local and global engineering and development projects. Why a 6K? That’s the average distance women and children in the developing world walk each day to collect household water.

Learn more at studentorgs.unc.edu/ewb.