

May–October 2013
SCHOOL NEWS

READ MORE AT www.sph.unc.edu/news.

Selected Publications

John J.B. Anderson, PhD, professor emeritus of NUTR, found a relationship between calcium levels and the presence of white-matter lesions in the brain, particularly in men and in people with depression, in a study published June 18 in *Nutrients*.

Ralph Baric, PhD, EPID professor, examined the genetic make-up of a dangerous new coronavirus, the Middle East Respiratory Syndrome (MERS-CoV), in an article published online Sept. 16 in *Proceedings of the National Academy of Sciences (PNAS)*.

Noel Brewer, PhD, HB associate professor, showed that encouraging physicians to recommend human papillomavirus (HPV) vaccines to adolescent boys and their parents – and educating boys and their families about

the vaccine’s importance – are essential to reducing the cancers the virus can cause. Findings were published in the August issue of *American Journal of Public Health*.

A study led by **Alan Brookhart, PhD**, associate professor of EPID, and published June 20 in the *Journal of the American Society of Nephrology* demonstrated that a regimen of smaller doses of iron (administered to dialysis patients for anemia) given over a longer time helps avoid serious infections often caused by larger doses given over shorter periods.

Guanhua Chen, BIOS student, and **Michael Kosorok, PhD**, Kenan Distinguished Professor and chair of BIOS and professor of statistics and operations research, are two co-authors of

an article describing the development of a new data-mining tool to improve researchers’ understanding of cancer genetics. The work was published in the July 8 *Proceedings of the National Academy of Sciences (PNAS)*.

Nabarun Dasgupta, PhD, 2013 EPID alumnus, proposed a new definition of “overdose death” to garner more accurate estimates of death by illicit drugs and by prescription medicines that lend themselves to abuse. The research, published June 6 in the *Journal of Clinical Toxicology*, has implications for evaluating effectiveness of national measures to reduce overdose deaths.

Nora Franceschini, MD, MPH, EPID research assistant professor, led research that identified genes linked to high blood pressure in individuals of



John Anderson



Ralph Baric



Noel Brewer



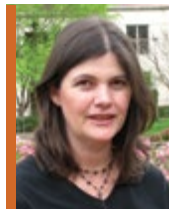
Alan Brookhart



Guanhua Chen



Nab Dasgupta



Nora Franceschini



Meredith Fry



Jen Horney



Zachary Kerr



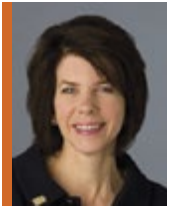
Michael Kosorok



Joseph Lee

KEY TO DEPARTMENTS

- BIOS** Biostatistics
- EPI** Epidemiology
- ESE** Environmental Sciences and Engineering
- HB** Health Behavior
- HPM** Health Policy and Management
- MCH** Maternal and Child Health
- NUTR** Nutrition
- PHLP** Public Health Leadership



Elizabeth Mayer-Davis



Mehul Patel



Tamar Ringel-Kulka



Jason West



Steve Wing



Karin Yeatts



Donglin Zeng

African ancestry. The study was published online Aug. 22 in *The American Journal of Human Genetics*.

Jennifer Horney, PhD, research assistant professor of EPID and manager of the research and evaluation unit at the School's N.C. Institute for Public Health, found that experience in applied public health may influence job choices for public health graduates. Study findings were published online Aug. 16 in the *Journal of Community Health*.

Zachary Kerr, EPID doctoral student, found that most high school football programs still do not employ the most effective measures to manage heat-stroke. His study was published online Sept. 6 in the *American Journal of Sports Medicine*.

Joseph Lee, MPH, HB doctoral student, examined lesbian, gay, bisexual and transgender (LGBT) blogs and found the blogs rarely addressed one of the LGBT community's biggest health problems – smoking. Findings were published online Sept. 17 in *LGBT Health*.

Danyu Lin, PhD, Dennis Gillings Distinguished Professor, **Donglin Zeng, PhD**, professor, and **Zhengzheng Tang**, doctoral student, all in BIOS,

developed a novel approach to analyze genetic traits in large cohorts. Their approach was published online July 11 in the *Proceedings of the National Academy of Sciences (PNAS)*.

Philip May, PhD, research professor of NUTR at UNC's Nutrition Research Institute, in Kannapolis, N.C., published two studies about fetal alcohol spectrum disorders in South Africa. The studies appeared in the May issue of *Alcoholism: Clinical and Experimental Research* and the June issue of *Journal of Developmental and Behavioral Pediatrics*.

Mehul Patel, MSPH, EPID doctoral student, surveyed North Carolina's emergency medical services (EMS) systems to determine how well they complied with stroke training and care practices. His findings – which noted significant improvements – were published online Sept. 5 in *Preventing Chronic Disease*.

Tamar Ringel-Kulka, MD, MPH, research assistant professor of MCH, led a study to analyze gut bacteria of children in N.C. Published online May 23 in *PLOS One*, the study found that the period of opportunity for treating children's microbial imbalances might be longer than previously thought.

Dangers of air pollution

Jason West, PhD, assistant professor, and **Raquel Silva** and **Yuqiang Zhang**, doctoral students, all in ESE, used computer models to estimate that more than 2M deaths result each year from human-caused increases in fine particulate matter, making outdoor air pollution a major environmental health risk. The study was published online July 12 in *Environmental Research Letters*. In a similar model study, published online Sept. 22 in *Nature Climate Change*, West compared a future with and without global climate change policies and found that policies to reduce greenhouse gas emissions would decrease premature deaths from air pollution.

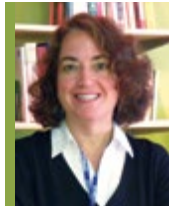
Meridith Fry, PhD, recent ESE alumna, co-authored another study with West, published May 29 in *Atmospheric Chemistry and Physics*, that found curtailing emissions of carbon monoxide can improve air quality and contribute to the reduction of greenhouse gases.



Danyu Lin



Philip May



Dorothy Cilenti



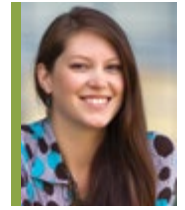
Myron Cohen



Kari North



Kurt Ribisl



Stephanie Wheeler

Steve Wing, PhD, EPID associate professor, **Jill Stewart, PhD**, assistant professor of ESE, doctoral students **Jessica Rinsky** and **Maya Nadimpalli**, and alumnus **Christopher D. Heaney, PhD**, now at Johns Hopkins, found drug-resistant bacteria associated with livestock in the noses of industrial livestock workers – but not in the noses of antibiotic-free livestock workers – in North Carolina. The study was published online July 2 in *PLoS One*.

Karin Yeatts, PhD, EPID research assistant professor, led a study to analyze incidence and burden of COPD-related emergency department visits in N.C. Her findings were published April 11 in the journal *CHEST*. With Gillings colleagues **Amy Herring, ScD**, BIOS professor, and **Eric Whitsel, MD, MPH**, EPID research associate professor, Yeatts also led a study that found a link between chemical air pollutants and cardiovascular disease, published online March 5 in

Environmental Health Perspectives. A study published in the August issue of *Science of the Total Environment* finds that the use of incense in the Arabian Gulf Peninsula may cause inflammatory response in the cells of people exposed to its smoke and gaseous combustion products.

Rebecca Cohen, master's student in ESE, her adviser **Kenneth Sexton, PhD**, now retired ESE research assistant professor, and Yeatts were co-authors.

Selected Grants

Ralph Baric, PhD, EPID professor, and colleagues at the University of Wisconsin have received a \$10M+ grant to study the pathogenic activity of viruses including severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), Ebola, highly pathogenic influenza and herpesvirus HHV8.

Frieda Behets, PhD, EPID professor, and **Stuart Rennie, PhD**, adjunct assistant professor of HPM, received the Fogarty International Center's International Research Ethics Education and Curriculum Development Award of more than \$1.3M to raise awareness and promote skills related

to bioethical issues in the Democratic Republic of Congo.

Dorothy Cilenti, DrPH, MCH clinical assistant professor and senior investigator at the NCIPH, received a \$5.5M award from the U.S. Health Resources and Services Administration to establish a national MCH Workforce Development Center at UNC. The award will provide workforce development for program leaders and prepare them to succeed in the public health system under the Affordable Care Act.

Myron Cohen, MD, Yeagan-Bate Eminent Distinguished Professor of Medicine, Microbiology and

Immunology, and Epidemiology, received a grant from the National Institutes of Health's Fogarty International Center to train medical personnel in southern China to prevent and treat sexually transmitted diseases, including hepatitis B and C. The award is one of six new Fogarty grants totaling \$5.6M.

Joanne Jordan, MD, MPH, adjunct EPID professor and director of UNC's Thurston Arthritis Research Center, was awarded a \$5.6M National Institutes of Health grant to address the public health challenges caused by osteoarthritis.

Elizabeth Mayer-Davis, PhD, NUTR professor and interim chair, was awarded \$7M by the NIH's National Institute of Diabetes and Digestive and Kidney Diseases to test effectiveness of her Flexible Lifestyles (FL3X) program to help adolescents with Type 1 diabetes manage their disease and improve quality of life.

MEASURE Evaluation, a consortium led by UNC's Carolina Population Center, was awarded \$15M from the U.S. Agency for International Development for HIV health information systems efforts in South Africa. The consortium is directed by **James Thomas, PhD**, associate professor of EPID.

Kari North, PhD, associate professor of EPID, received a \$3.1M National Institutes of Health grant to uncover connections between genetic variants and some of the complex diseases that affect Hispanics and African-Americans.

Stephanie Wheeler, PhD, assistant professor of HPM, will receive \$727K through an American Cancer Society Mentored Research Scholar Grant. Wheeler aims to improve use of guideline-recommended endocrine therapy among racially diverse breast cancer patients and shed light on reasons for disparities in outcomes.

Kurt Ribisl, PhD, HB professor, directs the new UNC Center for Regulatory Research on Tobacco Communication (CRRTC), one of 14 new national centers funded by the U.S. FDA and NIH. The CRRTC was awarded \$20M to conduct research on tobacco prevention communication and regulation. Based in UNC Lineberger Comprehensive Cancer Center (LCCC), the new center houses projects by UNC faculty members including **Noel Brewer, PhD**, associate professor of HB. Ribisl and Brewer are members of the LCCC.

Other News

The Gillings School class of 2013, under student government president **Katlyn Donohue**, raised more than \$10K, including a \$3K contribution from the School's Alumni Association, for scholarships. Awardees included **Reuben Adatorwovor** (BIOS), **Lakshmi Gopalakrishnan** (MCH), **Jasmine Hutchinson** (HPM), **Eli Lovell** (NUTR), **Zinaida Mahmutfendic** (PHLP), **Alycia Overbo** (ESE),

Shabbar Ranapurwala (EPID) and **Kathryn Stein** (HB).

Experts at the **19th annual National Health Equity Research Webcast** on June 4 emphasized the role of comprehensive early childhood education programs in combating the effects of poverty. A webcast of the event is available at www.minority.unc.edu/institute/2013.

Barry Popkin, PhD, W.R. Kenan Jr. Distinguished Professor of NUTR, led The Bellagio Declaration (BellagioObesity2013.org), a call to action made at the International Congress on Nutrition in Spain in September. The declaration calls upon governments and other groups to take specific actions to counteract lobbying forces by multinational food corporations.

in MEMORIAM

Edward Michael Foster, PhD, professor of health care organization and policy at University of Alabama-Birmingham's School of Public Health, and former professor at the Gillings School, died on May 14.

Mary Reid, program coordinator for PHLP's Health Care and Prevention concentration, died June 30.

As we went to press, we learned of the Nov. 5 passing of **Robert Moorhead, MPA**, who served in leadership roles at the School from 1967 until the 1990s. Through his efforts, faculty and staff members were provided for the first time in 1982 with computers and email services.

Read more at sph.unc.edu/news.