

Director's Report

Mid-term Update

January-October 2010

Dear Colleagues,

Provost **Peter Lange** often says: "Global health is part of Duke's DNA." This is increasingly evident as you consider DGHI's achievements during the past nine months in faculty recruitment, student learning and engagement, and international site development. Global health has become embedded in nearly every aspect of campus life.

As examples, global health librarians are now stationed within both campus libraries; more than 40 undergraduates from 17 different majors graduated with a global health certificate, with another 50 students engaging in global health summer fieldwork; and in early 2011 a new global health module will begin in the Medical School curriculum.

As the catalyzing agent, DGHI is working with its partners to attract the best and brightest students and faculty and build the research partnerships necessary to realize Duke's bold vision as a leading global university.

Since January 2010, DGHI has jointly recruited four new faculty members with the Sanford School of Public Policy, Nicholas School of the Environment and two departments within the School of Medicine. Ten additional searches are currently under way. As with most of our faculty, these new recruitments have their primary appointments in another school or department. This type of cross-departmental collaboration allows us to expand our course offerings, research opportunities, and pool of mentors for our students. It is also inherent in DGHI's ability to be truly interdisciplinary and university-wide.

Also since January, we have significantly increased our grant-funded research portfolio. Just this month, DGHI Associate Director of Research **John Bartlett** worked with our partners at Kilimanjaro Christian Medical Centre in Moshi, Tanzania to secure a five-year, \$9 million grant from PEPFAR and the NIH Fogarty International Center to strengthen medical education in Tanzania. It is this type of grant that ultimately builds the capacity of our international partners, while also expanding Duke's contributions to the communities where we work.



In February, Merson traveled to Haiti with Chancellor **Victor Dzau** and **Ian Greenwald** to visit the Duke Medicine Emergency Response Team. DGHI will soon announce a new disaster preparedness and response program led by Greenwald.

Finally, DGHI is actively participating in the development of the Duke-Kunshan campus in China. We have proposed a Master of Environmental and Global Health Science program, a global health concentration within Fuqua's Master of Management Studies program, a global health research center, and an undergraduate global health curriculum. We are also developing a two-week global health diploma program with Mahidol University in Bangkok, Thailand, based on the program we have established with Peking University in Beijing. We are also expanding our informatics capacity in order to undertake these and other type of global educational and research initiatives.

Some of DGHI's priorities during the next 6-12 months will be 1) recruiting global health faculty in areas of greatest need, 2) expanding our MSc-GH program, 3) engaging more faculty in global health research, and 4) strengthening the capacity of our international sites.

I look forward to working with our dedicated staff and wide range of partners in building a world-class global health institute, and welcome your guidance in helping us achieve our goals.

Michael H. Merson, MD Founding Director, Duke Global Health Institute

Fund Named for Paul Farmer to Support Duke Undergraduate Fieldwork

Earlier this year, DGHI announced the creation of a new global health fieldwork fund in the name of **Paul Farmer**, a global health pioneer and member of DGHI's Board of Advisors. In his honor, The Paul Farmer Global Health Fund will support undergraduate fieldwork and research projects at Duke that exemplify Farmer's commitment to serving the world's poorest populations.

"Clearly, today's world needs more Paul Farmers and I hope that the Paul Farmer Global Health Fund enables more Duke students to experience fieldwork in global health," said **Dave Gendell**, a Duke alumnus and fraternity brother of Farmer, who established the fund. "It is imperative to continue to invest in the people who are the next leaders and innovators in the global health field."

"I am proud of the Duke community's commitment to global health—and proud to be a part of it, through the Duke Global Health Institute," said Farmer, co-founder of Partners in Health which provides medical care and social services to populations in need across 12 countries. "Having had the great benefit of early opportunities to engage in fieldwork, I know that this fund will offer valuable and transformative experiences to undergraduates, and I'm grateful to Dave Gendell for making it happen." The Paul Farmer Global Health Fund, to be administered by the Duke Global Health Institute through its summer fieldwork program, will support one Duke undergraduate student to complete a fieldwork or research project in global health. Initially, grants will range from \$2,500 to \$5,000. The fund will be expanded to support additional students in the future.



"The fund is open to contributions from anyone in the Duke community and beyond, who cares deeply about global health and wants to encourage Duke undergraduates to pursue a Global Health Certificate," said Gendell. "I am hopeful this fund will become one of the cornerstones of DGHI."

DGHI's Global Health Certificate provides Duke students with a deeper understanding of the social determinants that contribute to global health disparities, while encouraging innovative ways to tackle these challenges. Students are required to complete a field experience for the certificate program.

Students Team Up on Research, Service Projects Targeting Youth in Kenya

In partnership with the Kenyan nongovernmental organization Mama na Dada, this summer **Jori Sheade, Alice Zhang and Maddy McEwen** conducted projects on nutrition and waterborne diseases, and educated youth about the causes, risk behaviors and impacts associated with HIV/AIDS. Their work included creating and administering an epidemiological survey and working to spread positive health messages in the community, both of which can help inform future Mama na Dada health projects.

As part of their research, the students collected and shared data from physical examinations and urine/stool samples of more than 100 children living in the community, by which they identified the presence of water-borne diseases, connected them to specific water sources, and identified risk factors. From this data, the students found that 40 percent of the children suffered from intestinal parasites at the time of the screening.

"The students really worked well with everyone involved and collected some very interesting data," said **Martina Oneko**, a

pediatrician working with Mama na Dada, who used the data to prescribe the necessary medications. "I did not expect this, but especially for the upcoming water project in the area, they have given us excellent baseline data."

After making home visits to dispense the prescribed medications, the students gave a presentation on their project findings to community leaders, including the chief officer and the assistant chief.

The team also volunteered at the Mama na Dada's Circle of Hope Daycare Center, which serves 42 orphaned children with HIV in need of nutrition, medical attention, clothing, guidance and adult supervision.

The experience brought to life what the students learned in their global health courses at Duke. "It is one thing to read that 53 percent of the 9.7 million deaths of children under five are indirectly caused by malnutrition," said Sheade, "It's a completely different experience to interact with these children on a personal level."

43 Seniors Graduate with Global Health Certificate

DGHI awarded 43 seniors with a global health certificate at a commencement ceremony held May 14, 2010. The largest group of global health certificate students to date, they represent 17 different majors, 10 minors, and a wide range of intellectual interests.

"You have taken your diverse talents and backgrounds and learned to work together, which is the very nature of global health," said **Sherryl Broverman**, certificate program director and associate professor of the practice of biology. "You are the first class who could participate in the global health certificate from your first year, and you are teaching us what it means to study global health at Duke."

The global health certificate, now in its fifth year at Duke, is among the most popular certificate programs on campus, and many students say it has been the highlight of their undergraduate experience.

"Global health has definitely been my defining experience at Duke and the area in which I've learned the most and am excited to continue learning and serving after graduation," said global health certificate recipient **Chrissy Booth**, who received a degree in religion and began a job at Teach for America this fall. "The program has an incredible impact on students and provides amazing opportunities both on campus and everywhere else on earth."

The six-course global health certificate provides students with an interdisciplinary understanding of the causes of global health disparities, and the strategies for addressing these issues in underserved communities around the world. In addition to coursework, the certificate requires students to engage in a summer fieldwork experience. The program culminates with the Capstone, in which students research and design an intervention for a global health topic of their choice.

"The global health courses were my most fascinating classes at Duke," said **Katherine Rock**, who majored in public policy studies. "Particularly, the Capstone course was a unique opportunity because it allowed me to create a project that could have realworld applications."

As they begin their careers, global health certificate recipients will take with them new knowledge about the most dire challenges of the world. Speaking to the students, DGHI Director **Michael Merson** said he expects new graduates "to build on



the accomplishments made in global health by taking the field in new directions through your creativity, intellect and compassion. Whatever your path, I know you will make a difference."

Global health certificate and history graduate **Lizzy Do**, who found a passion for reducing health disparities in maternal health while in the program, wants to pursue a career as an OB/ GYN or primary care physician.

"For my Capstone project, my group and I considered new ways to help improve pregnancy outcomes among at-risk populations, which included group therapy and a local birth and wellness center in Durham," said Do, whose degree is in history with a concentration in medicine, science and technology. "I'm really interested in patient-centered health care and maternal health, and I look forward to working with the underprivileged."

Another global health certificate recipient, **Yaoli Pu**, is attending the University of Rochester Medical School for her medical training and hopes to return to Tanzania, where she completed a fieldwork project on maternal health.

"The global health certificate has been life-changing. It altered my perspective on life, culture, and my identity as a citizen of the world," said Pu. "It's a two-way street when we walk into the lives of people in underserved communities, and they definitely walked into my life."

Duke Aids Haiti Recovery with Innovative Humanities Research Lab

When it became clear that Haitian recovery efforts following the January earthquake would not take years but decades, a number of Duke departments and institutes pooled their resources to create one of the first humanities labs at a US university. The Haiti Lab brings innovative, interdisciplinary research more fully into the undergraduate experience, with the intention of positively impacting the Haitian community.



"How do we as an institution work in a country that has experienced such a catastrophe and help with the rebuilding process? We are exploring that question with the Haiti Lab," said **Kathy Walmer**, a core faculty member of the new initiative and adjunct assistant professor of global health at DGHI.

Developed by the John Hope Franklin Humanities Institute, the Haiti Lab is a three-year initiative that will pursue a diverse set of research and teaching opportunities that range from Haitian history, society and culture, to health, law and technology. It is the latest example of collaboration across Duke's schools, departments and seven signature institutes. The initiative is co-directed by **Deborah Jenson** (pictured above), French and Romance Studies; and Laurent Dubois, History and Romance Studies. Core faculty members include Walmer, global health; and **Guy-Uriel Charles**, law.

"Through the Haiti Lab, we want to integrate more collaborative and innovative structures into humanities at the undergraduate and graduate levels, with more vertical integration of research and projects at Duke," said Jenson. "We're hoping to prepare students and assist researchers in making substantive and culturally-sensitive contributions to the recovery process, making a difference for the people of Haiti." The humanities lab will address the challenges of rebuilding women's rights and the incidence of mental health issues in the aftermath of the earthquake, the translation and publishing of correspondence between the first two former slave leaders of the Haitian revolution, a collaborative art project with a renowned Haitian artist, and a virtual seminar and conference between faculty at Duke and the Universite D'Etat d'Haiti. The Haiti Lab began last spring with the rapid development of "Creole for the Haitian Recovery," which has become a popular course for students with interest in Haiti.

"I can attest that the course is an amazing presentation of the culture and core language of Haiti that many people do not get to learn about, even for those like myself who are of the Haitian Diaspora," said junior **Sedlin Mirtil**, a biological anthropology and anatomy major pursuing the global health certificate, who plans to return to his country to assist with rebuilding efforts. "I've seen and experienced the hardships that beset the country. I intend to spend a large part of my life in Haiti, doing work related to improving the country's public health infrastructure."

This fall, Mirtil is one of 11 students enrolled in the new global health independent study, co-directed by Jenson and Walmer, who heads the nonprofit Family Health Ministries (FHM) with her husband DGHI faculty member **Dr. David Walmer**. The independent study addresses topics related to the work of FHM in rural Haiti, including cervical cancer prevention, maternal mortality, GPS mapping of post-earthquake health facilities, and a new post-traumatic stress disorder (PTSD) incidence study.

Students enrolled in the independent study will travel to Haiti during fall break to interview earthquake victims on the incidence and manifestations of PTSD, and their beliefs about shock, grief, distress and trauma.

"Understanding the individual and societal trauma created from the earthquake will be a long and complex undertaking, and I would like to do as much as I can to help in that process," said senior **Kendra Hinton**, a French and psychology double major who is studying Creole, and appreciates the multi-disciplinary focus of the Haiti Lab and the independent study. "In a time of crisis, we need to acknowledge that no single discipline has all the answers. Duke stresses the importance of interdisciplinary cooperation through its many programs, and I think that such an initiative continues in that vein."

"With all disciplines working together, we are inspiring innovation, and are getting it right the first time," said Walmer.

MSc-GH Attracts International Students, Health Care Professionals

With childhood memories of the rapid spread of disease in his home country of Uganda, **Edgar Asiimwe**'s early exposure to global health motivated him to improve health in his country. This fall, he is one of 21 students who make up the second cohort of DGHI's Master of Science in Global Health (MSc-GH) program, which has gained wide appeal around the globe with students from Uganda, Kenya, Nigeria, India, Singapore and the United States.

"I remember not only having to queue up at the local dispensary during a bout of malaria, but also the numerous admonishing ads about the killer HIV/AIDS as well as the cholera epidemic of 1997. These unfortunate events were some of the motivating factors that piqued my interest in global health," said Asiimwe, who is interested in studying the epidemiology of infectious disease. "I am confident the MSc-GH will equip me with the desired skills to achieve my long-term goal of improving the health system in Uganda."

The Duke MSc-GH is among the first interdisciplinary, university-wide graduate programs in global health in the US, with faculty members and students that span the disciplines of sociology, medicine, microbiology, public policy, economics, environmental health and more. Aligning with Duke's initiative to expand its presence globally, DGHI has been able to bring together all corners of campus to study global health issues in underserved communities around the world.

"The unique approach of Duke's global health graduate program stood out to me the most as I strongly believe that incorporating people from different academic fields is key to addressing the numerous global health challenges facing our current times," said Asiimwe.

This year's cohort brings even more perspectives to the program, with students from the disciplines of political science, law and history, as well as students with varying levels of work experience. Some members of the new MSc-GH class recently completed a bachelor's degree or are pursuing the degree in tandem with medical or law school, but the program also attracted clinicians like **Nahida Chakhtoura** who are complementing an already-established career with global health expertise.

"Through the rewarding experiences of being on the front lines of women's health, I've had the unique ability to assess the limitations of current medical care to women and have developed a clear vision of what needs to be accomplished. I am pursuing the MSc-GH degree to strengthen my knowledge of health policy, global challenges and epidemiology," said Chakhtoura, an OB/GYN who brings a 16-year medical career to the pro-



gram. "Developing expertise in these areas will complement my medical and leadership abilities so that I can work to implement large-scale programs focused on women's maternal health and cancer prevention."

Chakhtoura has provided care to underserved populations in South Florida and Peru, and has worked to prevent cervical cancer through education, screening and vaccination as part of an initiative she spearheaded at the University of Miami called Project Prevent.

The 32-unit MSc-GH curriculum is predominantly focused on research, with two of five core courses involving research methods in global health science. DGHI has increased its elective course offerings this year, with new electives in global environmental health, demography and epidemiology. Other elective topics include population sciences, disease causation and prevention, and global health policy and management. Students will also engage in a field experience lasting at least ten weeks, to apply learned research methods. The second cohort will have the opportunity to use iPads as a research, data collection and communication tool, thanks to a grant awarded to DGHI last summer.

"The MSc-GH has a research component that I hope to use for my research in health systems and oncology," said **Nixon Niyonzima**, an MSc-GH student and Ugandan physician whose passion is to bridge the health gap between the wealthy and the poor. "I hope to be able to use the knowledge acquired in the MSc-GH to improve health care for Ugandans."

The program is led by DGHI member **Chris Woods**, and core teaching faculty include **Jennifer Hawkins**, **Ross McKinney**, **Manoj Mohanan**, **Brian Pence**, **Jen'nan Read and Gopal Sreenivasan**.

New Faculty Profile: Marc Jeuland



Marc Jeuland has joined Duke as assistant professor of public policy with a joint appointment at the Sanford School of Public Policy and DGHI. Jeuland came to Duke in July from the University of North Carolina at Chapel Hill, where he completed a doctoral degree in environmental management and policy and a master's in environmental engineering.

This fall, Jeuland is teaching a course on water cooperation and conflict, which explores the relationships between water resources, development, ecosystems and health. While water increasingly becomes a potential source for instability and inter- or intra-state conflict, it is essential for human well-being and health, development of industry, and preservation of food security.

"I hope this course will be stimulating to students with a wide variety of backgrounds and educational objectives," said Jeuland of the multidisciplinary course, "and I look forward to sharing my interests and knowledge of this topic as well as learning from them, and relating the course theme more generally to their particular interests."

Jeuland's research interests include environmental health, water and sanitation, nonmarket valuation, the planning and management of trans-boundary water resources and the impacts and economics of climate change.

As a consultant to the World Bank since 2006, Jeuland has worked on projects involving economic modeling in the Ganges Basin in Asia, economic planning in the eastern Nile river basin, rural sanitation in Egypt, and wastewater reuse in the Middle East and Northern Africa. Jeuland was also a Peace Corps volunteer in Mali, where he designed and monitored construction of a pilot wastewater treatment system and trained management personnel at the plant's managing firm. In addition, Jeuland has coordinated fieldwork for a willingness-to-pay study of cholera vaccines in Mozambique, and worked on an evaluation of the sustainability and performance of rural water supply systems in Ghana and Bolivia.

DGHI Members appointed since January 2010

Marc Jeuland (Public Policy) Wendy O'Meara (Medicine) Elizabeth Reddy (Medicine) Kathy Sikkema (Psychology and Neuroscience) Krishna Udayakumar (Medicine) David Walmer (OB/GYN) Daniel Westreich (OB/GYN)

DGHI Affiliates appointed since January 2010

Alex Cho (Medicine) Ian Greenwald (Surgery) Alessandro Tarozzi (Economics)

Kramer Named Associate Director for Strategy

DGHI member **Randy Kramer,** professor of Environmental Economics at the Nicholas School of the Environment, was named Associate Director for Strategy at DGHI last summer.



In his new role, Kramer oversees DGHI's strategic

planning and related activities, faculty recruitment and development, and international operations. He also leads DGHI's signature research initiative on global environmental health, and continue to teach and conduct research at the Nicholas School.

"Randy brings a great deal of experience to the position, including more than 20 years at Duke and a passion for global health," said Michael Merson. "I know he will be a tremendous asset as we continue to build a world-class institute."

Study Finds Less Reported HIV-related Stigma against Orphans in Institutional Care

A group of researchers at the DGHI's Center for Health Policy have found greater acceptance of orphans and abandoned children (OAC) in institution-based care as opposed to community-based care, according to a study of 2,000 caregivers of OAC in five less wealthy nations.

The study found that 84 percent of institution-based caregivers compared to 66 percent of community-based caregivers said they would be willing to care for a relative with HIV. A similar disparity was evident for the proportion of caregivers who said they would be willing to let their child play with an HIV-infected child (81 percent vs. 64 percent).



These findings challenge recent policy statements that have recommended de-emphasizing institution-based care on the basis that community-based care results in better child outcomes. Further research on the prevalence of HIV-related acceptance and stigma among caregivers and implications of such stigma for child development will be critical as the policy community responds to the global HIV/AIDS orphan crisis.

Authors of the paper published in the August issue of BMC Public Health include Lynne Messer, Brian Pence, Kathryn Whetten, Rachel Whetten, Nathan Thielman, Karen O'Donnell, and Jan Ostermann.

Bacterial Infections a Common Cause of Illness, Death in Africa

Bacterial bloodstream infections rival malaria as a common cause of illness and death in sub-Saharan Africa, according to an analysis by Duke University researchers of more than 58,000 hospitalized patients across a dozen countries. However, clinicians with limited resources are more likely to treat these patients for malaria, not bacterial infection.

"Clinicians in resource-limited settings face a diagnostic and therapeutic challenge when confronted with a patient who has a fever, especially when the patient does not show evidence of malaria and has no symptoms that easily indicate the source of infection," said **Elizabeth A. Reddy**, instructor in the Department of Medicine, DGHI member and lead author of the study.

"Bacterial bloodstream infection is one of the most important considerations for a patient with fever, but its role may be under-appreciated or under-emphasized in some areas in Africa," said Reddy. "This can result in persistent attempts to treat malaria even in the absence of evidence that the illness is caused by malaria."

The study, published in The Lancet Infectious Diseases in June, includes an analysis of 22 studies over a 22-year period that used blood cultures to identify non-malaria bloodstream infections among adults and children admitted to hospitals in 12 African countries.

"The fact that only 22 articles were included out of the 10,000 we reviewed is one potential indication of the degree to which the overall importance of non-malaria bloodstream infection may be under-recognized in many circles," said Reddy.

Bacterial or fungal bloodstream infections were identified among 13.4 percent of patients with fever and 7.4 percent of patients admitted to the hospital regardless of fever history. Nearly one in 13 hospitalized patients across Africa may have a non-malaria bloodstream infection.

Malaria has been the primary focus of work on fever-related illness in sub-Saharan Africa for decades because of its high prevalence and relatively simple laboratory diagnosis, while "laboratory capacity to diagnose non-malaria causes of fever has been limited," said co-author John Crump, an associate professor of medicine and site director at the Duke-Kilimanjaro Christian Medical Centre, which is supported by DGHI.

Grant Expands Tanzanian Partnership to Enhance Medical Education

With the help of DGHI, Kilimanjaro Christian Medical Centre (KCMC) has received a five year, \$10 million grant from PEPFAR, Fogarty International Center and Health Resources and Services Administration (HRSA) to strengthen medical education in Tanzania. The Medical Education Partnership Initiative grant expands the decades-long partnership between Duke and KCMC by providing a new generation of Tanzanian physicians with the knowledge, commitment and tools to become their country's leaders in academics, research and policy.

"With the extraordinary health needs in sub-Saharan Africa, in particular Tanzania, we are wise to invest in medical training as one way of addressing the challenges," said **John Bartlett**, MD, DGHI associate



director for research and co-principal investigator. "We are excited by the possibilities this grant provides to the future of Tanzania and medical education, and to extend our partnership with KCMC."

Through the new KCMC-Duke education initiative, the medical curriculum at KCMC will be reviewed and enhanced, particularly training in basic and laboratory sciences and research methodology. The curriculum will also be revised to utilize team-based, problem-based and community-based learning methods. A series of faculty workshops will be held to train KCMC faculty in these new approaches to medical education. The initiative will also transform the information technology infrastructure at KCMC and increase access to online resources and emerging technologies including streamed videos.

The Medical Education Partnership Initiative (MEPI) of the Fogarty International Center provides grants to foreign institutions in sub-Saharan African countries which receive PEPFAR support and their partners to develop or expand and enhance models of medical education. These models are intended to support PEPFAR's goal of increasing the number of new health care workers by 140,000, strengthen medical education systems in the countries in which they exist, and build clinical and research capacity in Africa as part of a retention strategy for faculty of medical schools and clinical professors.

DGHI Faculty Grants – January-September 2010

- **Bartlett, John** (Medicine), Medical Education Partnership Initiative- Tanzania. \$9 million for five years from PEPFAR, Fogarty International.
- Bartlett, John (Medicine), HIV-associated Malignancies Research Training grant. \$ 1,332,356 for three years from NIH- National Cancer Institute.
- **Benjamin-Neelon, Sara** (Community and Family Medicine), Policy-based Approaches to Childhood Obesity Prevention: Development of an action guide for the United States. \$90,000 for one year from the Centers for Disease Control.
- Bennett, Gary (Psychology and Neuroscience), Cellphone Intervention Trial for Young Adults (CITY). \$720,283 for five years from NIH-National Heart, Lung and Blood Institute.
- **Bennett, Gary** (Psychology and Neuroscience), Lung Cancer Disparities Center: Jointly addressing race and socioeconomic status. \$41,930 for five years from NIH- National Cancer Institute.
- **Broverman, Sherryl** (Biology), WISERBridge Evaluation: Identification of key components in a district-wide improvement in education scores as well as retention of girls in primary school in Muhuru Bay, Kenya. \$10,000 for two years from NIKE Foundation.
- **Broverman, Sherryl** (Biology), WISER-Robertson Inaugural Teacher Professional Development Program. \$50,000 from the Robertson Foundation.

- **Cho, Alex** (General Medicine), Rainwater Harvesting in Kashongi, Uganda. \$180,074 for one year from Ronald McDonald Children's Charities.
- Corey, Ralph (Medicine), Fogarty International Clinical Research Fellowship. \$42,756 for one year from Fogarty International Center.
- **Freemark, Michael** (Pediatrics), Childhood Undernutrition: Metabolomic analysis to assess the effectiveness of ready-to-use therapeutic food intervention. \$211,344 for two years from PepsiCo, Inc.
- **Kramer, Randall** (Nicholas), Malaria Decision Analysis Support Tool: Evaluating health, social and environmental impacts and policy tradeoffs. \$356,000 for three years from World Health Organization.
- **Kramer, Randall** (Nicholas), The Implementation Science to Optimize Malaria vector Control and Disease. \$2,153,859 for four years from the NIH- National institute of Allergy and Infectious.
- Laskowitz, Daniel (Neurology), Training for the Prevention and Treatment of Stroke in China. \$731,775 for five years from NIH-Fogarty International Center.
- **Meade, Christina S.** (Psychiatry), Neurobehavioral and fMRI Research in HIV Infection and Cocaine Dependence. \$835,226 for five years from NIH- National Institute on Drug Abuse.
- Merli, Giovanna (Sanford) co-Pl, Duke Population Research Institute. \$1,169,998 for five years from NIH- National Institute of Child Health and Human Development.
- **Merson, Michael** (DGHI), Innovation in Education and Training Program to Improve Mother and Child Health Outcomes in Rwanda. \$100,000 for one year from the Bill and Melinda Gates Foundation.
- **Miranda, Marie Lynn** (Nicholas), Southern Center on Environmentally-Driven Disparities in Birth Outcomes. \$1,542,734 for one year from Environmental Protection Agency.
- **Miranda, Marie Lynn (**Nicholas), Using GIS Analysis in Support of Childhood Lead Exposure Prevention Programs. \$56,728 for one year from N.C. Department of Environment and Natural Resources.
- **Miranda, Marie Lynn** (Nicholas), African Americans and Environmental Cancers: Sharing histories to build trust. \$498,687 for one year from NIH- National Institute of Environmental Health Sciences.
- Miranda, Marie Lynn (Nicholas), Duke CTSA Supplement on Health Metrics. \$499,713 for one year from NIH- National Center for Research Resources.
- **Miranda, Marie Lynn** (Nicholas), African Americans and Environmental Cancers: Sharing histories to build trust (ARRA). \$37,566 from NIH- National Institute of Environmental Health Sciences.
- **Mitchell, William G.** (Fuqua), Health Management Education Program for the Nigeria Primary Health Care Development Agency Phase Two. \$150,000 from the Bill and Melinda Gates Foundation.
- Mohanan, Manoj (DGHI), An Experimental Evaluation of Incentive Payments to Providers of Maternal and Child Health Services in India (IMATCHINE). \$1,112,331 for one year from 3ie.
- Mohanan, Manoj (DGHI), A Qualitative Supplement to IMATCHINE. \$318,942 for three years from 3ie.
- **Mohanan, Manoj** (DGHI), Evaluation of Private Provider Project in Bihar, India. \$25,260 from the Bill and Melinda Gates Foundation.
- Read, Jen'nan (Sociology), Muslim Integration in the US and England. \$75,000 for two years from the Stuart Family Foundation.
- **Read**, Jen'nan (Sociology), Pre-conference on U.S. Muslims before the Religion Newswriters Association annual meeting. \$79,500 from Social Science Research Council.
- Read, Jen'nan (Sociology), Muslims and Public Scholarship. \$50,000 from Social Science Research Council.
- **Read, Jen'nan** (Sociology), iPads for Graduate Research Methods course. \$8,000 from Duke University Center for Instructional Technology.
- Schulman, Kevin (Fuqua), Harkness Fellowship in Health Care Policy. \$5,000 for one year from the Commonwealth Fund.
- Thielman, Nathan (Medicine), North Carolina HIV/AIDS Training and Information Center. \$165,000 for one year from Emory University.
- Walker, Kimberly (Center for Health Policy), North Carolina Community AIDS Fund Challenge Grant. \$25,000 for one year from National AIDS Fund.
- Walker, Kimberly (Center for Health Policy), North Carolina Access to Care Initiative. \$310,077 for one year from National AIDS Fund.
- Walker, Kimberly (Center for Health Policy), National AIDS Fund Leadership Grant. \$75,000 for one year from National AIDS Fund.
- Wilkinson, Jeff (OB/GYN), The Use of the Bakri Postpartum Balloon in the Management of Postpartum Hemorrhage Refractory to Conservative Measures: A Multi-site prospective trial. \$420,000 from Cook Medical.

DGHI Faculty Publications – January-September 2010

Buchanan AM, Muro FJ, Gratz J, Crump JA, Musyoka AM, Sichangi MW, Morrissey AB, M'rimberia JK, Njau BN, Msuya LJ, **Bartlett JA**, & **Cunningham CK**. (2010). Establishment of hematologic and immunologic reference values for healthy Tanzanian children in the Kilimanjaro Region. *Trop Med Int Health*, 15, 1011-1021.

Copersino ML, **Meade CS**, Bigelow GE, & Brooner RK. (2010). Measurement of self-reported HIV risk behaviors among injection drug users: Utility of single item versus Timeline Followback data. *Journal of Substance Abuse Treatment* 38, 60-65.

Cradock ALI, O'Donnell EM, **Benjamin SE**, Walker E, Slining M. A Review of State Regulations to Promote Physical Activity and Safety on Playgrounds in Child Care Centers and Family Child Care Homes. *Journal of Physical Activity and Health*, 2010, 7(Suppl 1), S108-S119.

Crump JA, & Mintz ED. (2010). Global trends in typhoid and paratyphoid fever. Clin Infect Dis, 50, 241-246.

Emmett SD, **Cunningham CK**, Mmbaga BT, Kinabo GD, Schimana W, Swai ME, **Bartlett JA**, **Crump JA**, & **Reddy EA**. (2010). Predicting virologic failure among HIV-1-infected children receiving antiretroviral therapy in Tanzania: a cross-sectional study. *J Acquir Immune Defic Synd* 54, 368-375.

Flores B, **Proeschold-Bell RJ**, Barton B, Belden CM, & Lombard F. (2010). Provider reports on changes and barriers to changes in HIV-HCV co-infection practices. *Journal of HIV/AIDS and Social Services*, 9(1), 27-44.

Fortune-Greeley A K, Hardy NC, Lin L, Friedman JY, Lawlor JS, Muhlbaier LH, Hall MA, **Schulman KA**, Sugarman, J, & Weinfurt KP. (2010). Patient reactions to confidentiality, liability, and financial aspects of informed consent in cardiology research. *Circ Cardiovasc Qual Outcomes*, 3(2), 151-158.

Gray S, Edwards S, & **Miranda ML** (2010). Assessing Exposure Metrics for PM and Birthweight Models. *Journal of Exposure Science and Environmental Epidemiology*.

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DGHI Student Photo Contest

DGHI held its first Global Health Student Fieldwork Photo Contest this fall. More than 50 photos were entered. The grand prize winner was junior **Nancy Yang**, who worked on a nutrition project in Naama, Uganda.

In the photo, students at Naama Millennium eagerly show off their new water bottles that are part of a solar water disinfection project. The students' excitement to receive the plastic water bottles made clear the necessity, yet relative scarcity, of clean drinking water in Naama Village. Yang's photo also won in the "change" category.



More than 250 Duke undergrads have applied to participate in Winter Forum: Pandemic 2011, hosted by DGHI and the Office of Undergraduate Education, January 9-11, 2011.

Check out these new DGHI Videos at www.youtube.com/DukeGlobalHealth

- Teaching Global Health in China
- Winter Forum: Pandemic 2011
- Fighting Childhood Obesity in North Carolina Child Care Centers
- Students Showcase Fieldwork at Annual Event

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The Duke Global Health Institute (DGHI) mobilizes resources at the University and at local, national, and international levels to reduce health disparities and improve health status worldwide. Recognizing that global health problems stem from economic, social, environmental, political and health care inequalities, DGHI promotes and supports interdisciplinary education and research, as it seeks to train the next generation of global health scholars and practitioners, solve complex health problems, and advance the field of global health.



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