IMPROVING
GLOBAL
HEALTH
through research, teaching & service
The UNC Institute for Global Health & Infectious Diseases (IGHID) has made remarkable progress toward its mission to lead and support the University community in improving global health through research, teaching and service.

The institute knows no boundaries, crossing disciplines and continents to foster synergies among faculty researchers, students, funders and populations to solve the world’s health problems. This report highlights the tapestry of programs in research, training, education and service that illustrate IGHID’s success. These woven strands are the essence of our work and impact.

Perhaps the most exciting accomplishment involves our own director, Dr. Myron Cohen, whose recent research is being called a game-changer in HIV/AIDS prevention. Proving that treatment for HIV reduces transmission by nearly 100 percent, this discovery has inspired the world to envision the end of AIDS. In December 2011, this research was named scientific “Breakthrough of the Year” by the prestigious journal Science.

Another IGHID researcher, Dr. David Margolis, received a large and prestigious research grant to study dormant HIV virus and find ways to rid the body of persistent infection—in other words, cure AIDS. The first promising results were published in Nature.

The successful recruitment of a team of seven new full-time faculty members led by Dr. Jeffrey Stringer has led to a large new program in Zambia, bringing $31 million in new research dollars and a rich portfolio of activities related to maternal and child health, gynecological cancers and infectious diseases.

IGHID has several new initiatives in Malawi. The University now operates the largest certified surgical residency training program in the region and, with the extraordinary dedication of Dr. Jeff Wilkinson, has a new maternal and neonatal care program to increase the safety of childbirth in Malawi. We are also excited about Dr. Satish Gopal’s work with cancer in Malawi – including research, screening, diagnosis and treatment.

Our first full-time faculty member in China, Dr. Joseph Tucker, an infectious disease expert, will head UNC Project – China. His expertise will help foster collaborative research into the prevalence of STDs in China and sexual health services.

IGHID continues to build opportunities for global health learning for students of all levels on campus. An exciting new collaboration with the Curriculum in Global Studies is the “Heels in the Field” global health discussion series which helps undergraduates gain access to health affairs faculty.

For the coming year, IGHID will focus on our five-year strategic and fundraising plans, continued faculty recruitment, building faculty engagement in the institute, and forming an external advisory board.
By building on the strengths of our well-established programs and embracing new opportunities, the UNC Institute for Global Health & Infectious Diseases has made remarkable progress toward its mission to lead and support the UNC community in improving global health through research, teaching and service.

The vision of IGHD is to harness the resources of the University and its partners to solve global health problems, to reduce the burden of disease and to foster the next generation of leaders in global health. The engine that drives our success is the energy and commitment of talented faculty, staff and students.

Our commitment to collaboration is fundamental to our success and ability to move forward. Developing new partnerships based on shared goals and exploring new ways to collaborate across disciplines, our team is focused on problems and projects that weave together research, training and service that have literally changed global health programs and policy at the highest levels.

From groundbreaking scientific discoveries, to critical training programs, to a large number of new faculty recruits, this report offers compelling illustrations of the ways in which the UNC Institute for Global Health & Infectious Diseases is improving the world’s health.

**Research**

Research support for global activities has grown rapidly and continuously at UNC, with total external support doubling since 2008 to $47 million. This growth reflects the creativity and hard work of faculty, staff and students worldwide (see Figure 1).

IGHD projects are built around our commitment to discovery and a complementary commitment to service and teaching. The research portfolio of IGHD faculty is exceptionally broad, but a few recent accomplishments should be highlighted.

**Major Scientific Advances in the Prevention and Eradication of HIV/AIDS**

**TREATMENT AS PREVENTION IS A GLOBAL “GAME-CHANGER” AND “BREAKTHROUGH OF THE YEAR”**

In May 2011, UNC researchers announced a major discovery in the fight against HIV/AIDS, proving a concept that had long been debated: that treating people for HIV makes them less infectious. On May 12, interim results of the HIV Prevention Trials Network (HPTN) 052 study were released to the public, indicating that early treatment of HIV with antiretroviral therapy reduced sexual transmission by 96 percent. IGHD director Myron Cohen is the architect and principal investigator of this large international study. The story received massive media coverage and garnered worldwide attention for Dr. Cohen, the institute and UNC.

The HPTN 052 study represents nearly two decades of work; UNC investigators began conducting laboratory and translational studies to determine the plausibility in the 1990s. Joseph Eron,
Mina Hosseinipour and Irving Hoffman, all infectious disease faculty at UNC, were also involved in the study, which was conducted at 13 sites in nine countries. In December 2011, this research was named scientific “Breakthrough of the Year” by the prestigious journal Science. In his remarks, Science editor Bruce Alberts wrote, “The [HPTN 052] results have galvanized efforts to end the world’s AIDS epidemic in a way that would been inconceivable even a year ago.”

“The [HPTN 052] results have galvanized efforts to end the world’s AIDS epidemic in a way that would been inconceivable even a year ago.”

—BRUCE ALBERTS, SCIENCE EDITOR

**FIGURE 1**

GROWTH IN IGHID-RELATED FUNDING*

<table>
<thead>
<tr>
<th>FY 2008</th>
<th>FY 2009</th>
<th>FY 2010</th>
<th>FY 2011</th>
<th>FY 2012†</th>
<th>FY 2013 Projected</th>
</tr>
</thead>
<tbody>
<tr>
<td>$20,019,450.00</td>
<td>$22,050,070.00</td>
<td>$26,700,565.00</td>
<td>$32,869,029.00</td>
<td>$47,030,987.00</td>
<td>$60,000,000</td>
</tr>
</tbody>
</table>

*Includes funding for research, training and service delivery activities

†The FY 2012 funding includes the addition of the Global Women’s Health / Center for Infectious Diseases Research in Zambia (CIDRZ) funding transferred to the University for the period January 1, 2012 - June 30, 2012.
This is the first time that UNC research has received such recognition.
More significantly, the HPTN 052 study and concept it proved, “treatment as prevention,” has influenced global policy in the fight against AIDS. Treatment as prevention is now a cornerstone of the global HIV prevention strategy, and news of the HPTN 052 results inspired President Barack Obama and his administration to commit to an “AIDS-free generation.” This idea was first articulated in a 2011 World AIDS Day speech by Secretary of State Hillary Clinton in which she specifically highlighted HPTN 052:

> For years, some have feared that scaling up treatment would detract from prevention efforts. Now we know beyond a doubt if we take a comprehensive view of our approach to the pandemic, treatment doesn’t take away from prevention. It adds to prevention. So let’s end the old debate over treatment versus prevention and embrace treatment as prevention.1

Beginning in June 2012, Myron Cohen and Wafaa El-Sadr (Columbia University) assumed leadership of the entire HIV Prevention Trials Network for a term of seven years. This worldwide collaborative clinical trials network, funded by the National Institute of Allergy and Infectious Diseases, develops and tests interventions to prevent HIV. There are currently 15 HPTN studies in process or in development.

#### New Progress Toward a Cure

In 2011 UNC’s research program to cure AIDS got a $32 million boost from the NIH. This first major initiative to focus on eradication has funded only three groups. UNC’s Dr. David Margolis leads one of these, the Collaboratory of AIDS Researchers for Eradication (CARE), a consortium of 19 investigators from nine universities.

CARE is undertaking more than a dozen research projects to discover how HIV can remain dormant and virtually invisible, identify drugs and treatments capable of ridding the body of persistent infection and evaluate these new strategies in relevant animal models so that they can be translated into people.

In 2012, Margolis and his team published their first research findings in the journal Nature. This exciting research showed that a drug used to treat certain types of lymphoma was able to dislodge hidden virus in patients taking antiretroviral therapy for HIV. The findings garnered significant media attention for Dr. Margolis and UNC.

#### HIV/AIDS and Water, Sanitation and Hygiene (WASH)

IGHID has worked closely with The Water Institute at UNC since it was founded in 2010. The two organizations began research focused on WASH Interventions and HIV/AIDS, and together with Procter & Gamble’s Children’s Safe Drinking Water Program, IGHID hosted a high-level panel on WASH and HIV/AIDS at the Water and Health Conference held at UNC in October 2011. The panel featured key representatives from PEPFAR, WHO and international WASH-related organizations.

In 2012, IGHID and the Water Institute engaged with faculty from the London School of Hygiene & Tropical Medicine on this research, and a project is currently underway on WASH and the prevention of...
HIV and Global Mental Health
By 2020, it is anticipated that clinical depression will be the leading cause of loss of productivity worldwide. Building on the strength of UNC’s global and HIV programs, Bradley Gaynes, professor of psychiatry, has begun studying psychiatric problems from a global public health perspective. Specifically, Dr. Gaynes and his colleagues have been studying depression among people with HIV in Cameroon and the effects of treatment on HIV drug adherence. Their research was facilitated by Cameroonian epidemiologist Julius Atashili, who was trained at UNC under the Fogarty AIDS International Training and Research Program. Dr. Gaynes is exploring the possibility of conducting similar research at UNC Project-Malawi.

UNC Research at the International AIDS Conference in Washington, DC
In July 2012, research from every corner of campus was presented at the XIX International AIDS Conference in Washington, D.C. With 20,000-25,000 scientists, policy makers and activists from more than 200 countries in attendance, the IAC is the largest gathering of its kind. UNC faculty and students were authors on more than 100 abstracts. The research covered all aspects of the AIDS pandemic and featured research conducted in more than ten countries, including the United States, China, the Dominican Republic, Kenya, Malawi and Zambia.

Drs. Myron Cohen, Adaora Adimora and Peter Leone were honored to be invited to a reception at the White House held during the conference. “Courage on the Frontlines” celebrated people living with HIV/AIDS, the International AIDS Conference and the extraordinary leadership of those fighting the disease. In his address to guests, President Obama emphasized the collaborative nature of the global response to HIV/AIDS and the importance of working together to create an AIDS-free generation.

A Robust New Program in Zambia
IGHID has shown significant growth over the past year due to the recruitment of an impressive number of talented new faculty based in Chapel Hill and around the world (see Table 1). In fact, IGHID worked very hard to recruit an entire team of internationally recognized global health researchers working in Zambia. In partnership with the department of obstetrics and gynecology, IGHID recruited seven new full-time faculty members with expertise in maternal and child health, gynecological cancers and infectious diseases. The team is led by Dr. Jeffrey Stringer, an obstetrician-gynecologist who helped to build one of the largest HIV prevention and treatment programs in the world.

Their rich portfolio of activities are conducted at the Centre for Infectious Disease Research in Zambia (CIDRZ), a nonprofit corporation founded in 2001 in Lusaka, Zambia by Stringer and others. The new UNC faculty and staff recruits are seconded to CIDRZ to help carry out our shared mission of improving health in Zambia and beyond.

CIDRZ is one of the largest infectious disease programs in Zambia and is the Zambian government’s most important partner in the areas of AIDS and maternal and child health. Since 2001 it has completed over 42 research studies and enrolled over 14,000 patients in prospective clinical protocols.

The addition of the UNC team in Zambia brings more than $31 million in new grant funding to the University, as well as research and training opportunities for students. The program in Zambia further increases UNC’s regional presence in sub-Saharan Africa.

Dr. Stringer is now based in Chapel Hill and has been named associate director for research at IGHID. Dr. Charles Holmes, former medical director at PEPFAR, was recruited to UNC in December 2012 to be the new CEO of CIDRZ.

UNC Global Women’s Health
IGHID also collaborated with the department of OB-GYN to establish a new global division. UNC Global Women’s Health (GWH) brings together a faculty with
diverse expertise in the health issues facing women and children in low-resource countries. The creation of UNC GWH is made possible through the recruitment of five new faculty based at CIDRZ and one based at UNC Project-Malawi.

GWH seeks to improve the health of women and their families through research, service delivery and training programs. Under the leadership of GWH director Dr. Stringer, the new division aims to raise the profile of global health within the OB-GYN specialty and to train the next generation of global OB-GYN leaders.

Among the most exciting new projects in this division is the maternal and neonatal health program in Malawi. A partnership between UNC, the Centers for Disease Control and Prevention (through PEPFAR funding), and Bwaila Maternity Hospital in Lilongwe, this program is dedicated to improving the safety of childbirth in Malawi and addressing the systemic issues that prevent healthy deliveries and healthy newborns. Bwaila is the busiest maternity hospital in the country, with nearly 15,000 deliveries per year, and Dr. Jeff Wilkinson and his team are working closely with local hospital administration to address the institution’s specific priorities and needs. They have developed a robust training protocol for Malawian health care providers based on an individualized training and mentoring plan. They are also training Malawian midwives and clinical officers to be trainers and mentors in emergency obstetrics and neonatal care. Dr. Wilkinson has just been awarded funding to establish a new OB-GYN residency training program in Malawi.

New Initiatives in China

The IGHID program in China has taken a huge step forward with the recruitment of our first full-time UNC faculty member in China, Dr. Joseph Tucker. An infectious disease physician who has worked in China since 1999, Dr. Tucker joined the faculty as assistant professor in the division of infectious diseases in February 2012. With a master’s degree from Harvard in Chinese Studies, Dr. Tucker well understands the importance of cultural competency in conducting international research.

Dr. Tucker has been appointed director of UNC Project-China, and he will focus his efforts on developing close ties with Chinese counterparts in order to spur collaborative research and training.

South China has a disproportionate burden of syphilis and other sexually transmitted infections. In May 2012, IGHID opened the UNC-South China STI Research Training Center in Guangzhou, China. As part of the launch, a dozen UNC faculty and several trainees took part in the inaugural UNC-South China STI Research Training Course. Supported by Chinese counterparts and a grant from the NIH, this training workshop focused on building local capacity among junior Chinese STI researchers.

Dr. Tucker’s China group has been at the forefront of a global project using social entrepreneurship to improve sexual health. Launched in November 2011, this project focuses on developing new organizational and financial models for delivering sexual health services for the populations that are most at risk. It is supported by grants from the Bill and Melinda Gates Foundation, an NIH Fogarty Career Development Award and the American Society for Tropical Medicine and Hygiene.

IGHID-affiliated investigators have just reached the end of a five-year NIH-funded training and research project, “Partnership for Social Science Research on HIV/AIDS in China.” Led by Gail Henderson, chair of social medicine, the project brought together an interdisciplinary team of investigators from medicine, dentistry, public health and journalism, and Chinese collaborators in a project to develop local Chinese research capacity to better understand factors contributing to risk of HIV and STIs in China. The project team trained more than 20 pre-doctoral and post-doctoral Chinese trainees and facilitated 2-3 training workshops per year. In addition to the dozens of publications, posters and presentations to come out of this research, ten articles are
Being prepared as a special issue of the journal AIDS and Behavior. Pending additional funding, the project will use the collected data to develop appropriate and effective interventions, including the establishment of the South China Training Institute for Social and Behavioral HIV Intervention Research in Guangzhou (Canton).

UNC has a strategic partnership with Tsinghua University in Beijing, the premier university in China. Although this partnership was primarily cultivated through the Kenan-Flagler Business School, there is an opportunity for the institute to play a role now that Tsinghua is establishing a public health school. Professor Bentley, associate director for education at IGHID, has been appointed to the school’s international advisory committee, which has its first meeting in December 2012 in Beijing. Bentley’s on-going participation will provide opportunities for research and training collaboration as the new school of public health evolves.

Expanding Cancer and Surgical Research in Malawi

Dr. Satish Gopal, assistant professor in the divisions of infectious diseases and hematology and oncology, joined the faculty based at UNC Project-Malawi in August 2012. He is the first trained cancer specialist in Malawi, a country with a population of approximately 15 million. In Spring 2012, Gopal co-authored an important paper on the challenge of treating blood cancers in resource-limited settings and offering a clinical service and research agenda to address the growing impact of hematologic malignancies in sub-Saharan Africa.

Dr. Gopal will conduct research on clinical outcomes after HIV-associated lymphoma diagnoses. He will work with colleagues in Chapel Hill and Malawi on a variety of cancer-related projects in Lilongwe, including developing a breast cancer screening and early diagnosis intervention and HPV and cervical cancer screening using visual inspection with acetic acid, an intervention already being used successfully by Dr. Groesbeck Parham and colleagues in Zambia.

Dr. Gopal will take advantage of a substantial capacity-building program led by Dr. Carol Shores in UNC’s department of otolaryngology/head and neck surgery. With support from the Lineberger Comprehensive Cancer Center and UNC Project-Malawi, Shores has built and outfitted a clinical pathology lab on the grounds of the Kamuzu Central Hospital (KCH). This lab will allow vastly improved patient care and research, and remote examination of tissues. Dr. Shores has led development of a cancer registry at KCH, and will collaborate with Gopal and others in developing a research agenda in Malawi.

Jonathan Samuel, a former Fogarty fellow in Malawi who recently completed his general surgery residency at UNC and is currently a critical care fellow, received a career development award from the NIH to study surgical outcomes for treatment of lower-bowel obstruction at KCH.

Malaria and other Vector-borne Disease Research

The malaria research group has grown substantially in recent years. Dr. Steven Meshnick, associate chair of epidemiology, has been joined by four assistant professors, Carla Hand in epidemiology and Drs. Jonathan Juliano, Jessica Lin, and Steven Taylor (adjunct) in medicine. The group has active NIH or Gates-funded research projects in the Democratic Republic of Congo, Malawi, Thailand and Cambodia.

Dr. Meshnick has been working closely
with NCSU’s Department of Entomology, the NC State Department of Health and InsectShield, a Greensboro-based company that makes tick-repellent clothing. Current projects include a randomized controlled trial to assess the protective efficacy of InsectShield-treated uniforms against ticks for State Park, Fish and Wildlife, and Forestry rangers, and a study of the epidemiology of La Crosse encephalitis in Western North Carolina. This research in particular exemplifies the IGHID philosophy, that local health is global health.²

In Lilongwe, UNC is operating one of 11 sites in a large-scale malaria vaccine trial run by the PATH Malaria Vaccine Initiative with funding from the Bill & Melinda Gates Foundation. The initial results, published in October 2011 in the New England Journal of Medicine, showed that the vaccine reduced the risk of children experiencing clinical malaria by 56 percent and severe malaria by 47 percent. A second article in November 2012 (also in the New England Journal of Medicine) reported additional results.

Center for the Study of the Galapagos
IGHID has supported the Center for Galapagos Studies (CGS) with resources and faculty time since its inception. Under the leadership of Stephen Walsh in the geography department, CGS is a collaboration with Ecuadorian university partner, Universidad San Francisco Quito. In May 2011, UNC and USFQ dedicated its research station on San Cristobal, Galapagos. Peggy Bentley traveled with a high-level delegation from UNC, including Chancellor Holden Thorp, for the dedication. Professor Bentley is now vice-chair of the advisory board of CGS and is leading efforts for research, education and service in the Galapagos related to health, nutrition, infectious diseases, water and medical care. A new hospital is being built on San Cristobal and discussions about UNC’s role in this are on-going.

Together with Jill Stewart in environmental sciences and engineering, Bentley led research on two of the islands with students from the public health school. In addition, Stewart lead a Summer 2012 Study Abroad course that focused on linkages between health and the environment.

“Explorations in Global Health” Faculty Grants Program
Originally begun as an international travel grant program in the Gillings School of Global Public Health’s Office of Global Health under the leadership of Peggy Bentley, the Explorations in Global Health (EGH) faculty grants program was taken over by IGHID in 2010. The institute expanded the program to include funding for small research projects and in 2011 the program received a record number of applications from all over campus.

² Margaret “Peggy” Bentley, associate director for education at IGHID, co-authored two critical articles in a special issue of the North Carolina Medical Journal (September/October 2010) dedicated to international health initiatives in the state: “Global Health is (Local) Public Health” and “Understanding the Relevance of Global Health to North Carolina.”
“This funding allowed me to conduct pilot research in northern Burkina Faso, and I am now developing a larger project to understand how the country has dramatically improved food security in a region once considered synonymous with famine, desertification, and overpopulation.”

—COLIN WEST, ASSISTANT PROFESSOR OF ANTHROPOLOGY AT UNC AND 2012 EGH GRANT RECIPIENT

Since its inception in 2006, the EGH program has awarded approximately $200,000 to UNC faculty who have in turn been awarded nearly $2 million in new external dollars.

For 2011-12, the EGH program funded four projects and a total of six faculty members: “Transnational Exchange to Develop International Approaches to Reduce Health Inequity in Brazil,” “Passive Measurement of Ambient Air Quality Among Rural Households in Western Uganda,” “Exploring the Linkages Among Climatic Change, Food Security, Population and Health in Burkina Faso” and “Treatment of Upper Aerodigestive Tract Cancers in Malawi” (See Table 2). The institute arranges for all EGH grant recipients to give a talk on campus about their research.

SERVICE

Malawi
UNC Project-Malawi provides free clinical care to more than 1,700 patients per week. The UNC-affiliated Lighthouse HIV Clinic provides integrated HIV/AIDS prevention, treatment, care and support services, with about 20,000 people receiving antiretroviral therapy. Lighthouse is also a leader in providing palliative care, working through existing community groups to encourage ownership and sustainability. Well-trained community nurses provide quality care to approximately 150 patients per month.

At the sexually transmitted infections clinic at Kamuzu Central Hospital, UNC Project provides STI management and treatment services to 7,000 new patients per year. UNC Project’s prevention of mother-to-child HIV transmission program (PMTCT) serves 70,000 pregnant women per year and accounts for nearly half of all such services in Malawi. This successful program, implemented at more than 40 clinics in the Lilongwe area, incorporates testing for HIV and syphilis, a prevention, treatment and referral program for mothers who test HIV-positive, partner involvement and support group programs, recruitment of traditional birth attendants and distribution of water purification packets, insecticide-treated bed nets and infant food supplements.

A new initiative, Safeguard the Family, was launched in 2011 and expands the PMTCT services throughout the Central West Region of Malawi, which includes more than 130 clinics and about 3.8 million people. A partnership with USAID, the new program improves on the existing one by introducing an electronic tracking system linking mothers to children and partners, screening for tuberculosis, routine
<table>
<thead>
<tr>
<th>NAME</th>
<th>RANK</th>
<th>DEPARTMENT</th>
<th>LOCATION</th>
<th>SPECIALTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeffrey Stringer, MD</td>
<td>Professor</td>
<td>Obstetrics and Gynecology</td>
<td>Chapel Hill</td>
<td>Treatment of HIV, clinical and operations research in the prevention of mother-to-child transmission of HIV; co-founder of CIDRZ, where he developed one of the largest HIV prevention and treatment programs in the world</td>
</tr>
<tr>
<td>Groesbeck Parham, MD</td>
<td>Professor</td>
<td>Obstetrics and Gynecology</td>
<td>Zambia</td>
<td>Gynecological oncologist specializing in the science of implementing cancer prevention technology in African settings; director of the Cervical Cancer Prevention Program at CIDRZ</td>
</tr>
<tr>
<td>Benjamin Chi, MD</td>
<td>Associate Professor</td>
<td>Obstetrics and Gynecology</td>
<td>Zambia</td>
<td>Perinatal HIV prevention, adult and pediatric HIV treatment outcomes, and international obstetrics and gynecology; director of the Global Women’s Health fellowship program and chief scientific officer of CIDRZ</td>
</tr>
<tr>
<td>Charles Holmes, MD, MPH</td>
<td>Associate Professor</td>
<td>Medicine (Infectious Diseases), Obstetrics and Gynecology</td>
<td>Zambia</td>
<td>Former chief medical officer, PEPFAR, responsible for providing technical and programmatic leadership on issues related to HIV treatment and prevention of mother-to-child transmission; new CEO of CIDRZ</td>
</tr>
<tr>
<td>Stewart Reid, MD, MPH</td>
<td>Associate Professor</td>
<td>Medicine (Infectious Diseases)</td>
<td>Zambia</td>
<td>Diagnosis and treatment of tuberculosis, HIV prevention clinical trials and operations research related to provision of health care in resource-limited settings; director of tuberculosis and antiretroviral scale-up programs at CIDRZ</td>
</tr>
<tr>
<td>Jeff Wilkinson, MD</td>
<td>Associate Professor</td>
<td>Obstetrics and Gynecology</td>
<td>Malawi</td>
<td>Maternal health in developing countries, emergency obstetrics, fistula; directs Malawi Maternal and Neonatal Health program at UNC Project-Malawi</td>
</tr>
<tr>
<td>Carolyn Bolton, MBCh, MSc</td>
<td>Assistant Professor</td>
<td>Obstetrics and Gynecology</td>
<td>Zambia</td>
<td>HIV prevention and treatment in children and women and health systems strengthening; chief medical officer at CIDRZ</td>
</tr>
<tr>
<td>Carla Chibwesha, MD, MSc</td>
<td>Assistant Professor</td>
<td>Obstetrics and Gynecology</td>
<td>Zambia</td>
<td>Cervical cancer control, family planning, and prevention of mother to child transmission of HIV</td>
</tr>
<tr>
<td>Satish Gopal, MD, MPH</td>
<td>Assistant Professor</td>
<td>Medicine (Infectious Diseases and Hematology and Oncology)</td>
<td>Malawi</td>
<td>Cancer prevention and treatment in low-resource settings</td>
</tr>
<tr>
<td>Jessica Lin, MD</td>
<td>Assistant Professor</td>
<td>Medicine (Infectious Diseases)</td>
<td>Chapel Hill</td>
<td>Malaria</td>
</tr>
<tr>
<td>Cherry Liu, MD</td>
<td>Assistant Professor</td>
<td>Obstetrics and Gynecology</td>
<td>Zambia</td>
<td>Maternal health and prevention of mother-to-child transmission of HIV</td>
</tr>
<tr>
<td>Joseph Tucker, MD, MA</td>
<td>Assistant Professor</td>
<td>Medicine (Infectious Diseases)</td>
<td>China</td>
<td>Prevention of HIV and other sexually transmitted infections</td>
</tr>
<tr>
<td>Elizabeth Stringer, MD</td>
<td>Fellow</td>
<td>Obstetrics and Gynecology</td>
<td>Chapel Hill</td>
<td>Maternal-fetal medicine, contraception for women with HIV, AIDS treatment for women</td>
</tr>
</tbody>
</table>
vaccinations and other services. By 2014, it is expected that Safeguard the Family will reach 153,000 pregnant women and their families per year.

Through another partnership with the **Freedom from Fistula Foundation**, Dr. Wilkinson and his team are also addressing a devastating condition that occurs in girls and women almost exclusively in low-resource settings. Obstetric fistula is usually caused by obstructed, prolonged labor and leaves women incontinent and therefore socially stigmatized. In June 2012, the Freedom from Fistula Foundation opened the only dedicated **Obstetric Fistula Center** in Malawi at Bwaila Maternity Hospital, at a ceremony headed by Malawi President Joyce Banda. UNC is collaborating with the foundation to prevent and treat fistula and help women reintegrate into society, often after years, or even decades, of isolation and shame. Since the fall of 2011, Dr. Wilkinson and his team have performed over 150 fistula surgeries.

The burden of burn injury in the region is significant and disproportionately affects children. Managing burn injury is both challenging and requires many resources. In February 2011, UNC opened a new 31-bed burn unit in collaboration with Kamuzu Central Hospital and with support from the **UNC Jaycee Burn Center** and Johnson & Johnson. The burn unit sees about 2,000 patients per year. By providing training to local health care providers, using mobile technologies for burn triage and consults and improving treatment protocols, including pain management, we have begun to improve burn care delivery in the central region of Malawi.

**Zambia**

Access to health care in Zambia is extremely limited. By providing both primary care and lifesaving treatment to those most in need, UNC faculty and staff at CIDRZ have greatly improved health care delivery in the country. CIDRZ is a recognized leader in cervical cancer prevention in resource-constrained environments, and using their innovative approach, they have screened more than 80,000 women for cervical cancer in just over five years, with more than 8,000 patients treated for precancerous and cancerous lesions.

CIDRZ is also a leader in the screening, diagnosis and management of tuberculosis in HIV-infected patients, working in 259 clinics in four provinces to promote integrated HIV testing in TB clinics. CIDRZ started a lay HIV counseling and testing initiative to promote HIV testing at all health clinics, through mobile services and door-to-door outreach. This program supports HIV testing for more than 90,000 people each year, the vast majority of whom are reached through home-based HIV testing. CIDRZ also provides HIV care and treatment at 71 sites throughout the country. Since 2004, nearly 300,000 people have received HIV care and more than 180,000 have been put on antiretroviral therapy. Finally, CIDRZ is launching a new initiative to improve primary health care in three districts, reaching a population of more than 300,000 people. CIDRZ’s integrated and comprehensive program includes intensive training, implementing clinical protocols for diarrhea, malaria, HIV, TB, under-five and antenatal care, and a robust community health and mobile health component to improve health outcomes.
China
In March 2012, the UNC Project-China launched a pilot African clinic at the Guangdong Provincial STD Control Center. This is the first clinic in China focused on serving the needs of the growing African diaspora and the first with a formally designated community liaison, supported by the Guangdong provincial health authorities. More than 200,000 Africans are in Guangzhou and many are vulnerable to HIV and other sexually transmitted infections. After conducting research to identify the cultural, linguistic and social barriers that adversely affect access to health care among this group, the African clinic was established. The clinic provides English-speaking primary care services regardless of insurance status. The new clinical service is staffed by Chinese physicians in collaboration with Dr. Tucker and a UNC trainee supported by the Fogarty International Clinical Fellowship. A U. S. Fulbright fellowship trainee will be continuing research among the African population in Guangzhou in order to expand clinical services and provide community-responsive and effective health care.

TRAINING AND EDUCATION

Successful Faculty Recruits
In its first years, IGHID catalyzed and supported the recruitment of three new faculty members: Clare Barrington in health behavior, Jonathan Juliano in medicine and Benjamin Mason Meier in public policy. Financial support from IGHID has now ended and all three have demonstrated impressive productivity.

CLARE BARRINGTON, PHD
Since joining the faculty at UNC in 2009, Clare Barrington has become a critical partner in developing programs and mentoring students in Latin America. Professor Barrington has developed a very productive collaboration with the Universidad del Valle de Guatemala and the CDC Global AIDS Program team in Guatemala City, Guatemala, in particular, with Gabriela Paz-Bailey and Sonia Morales. This collaboration has resulted in a number of publications, among them a comparative analysis of HIV prevalence, risk behaviors and social networks among gay and transgender populations in El Salvador.

With support from IGHID, Barrington has continued previous research in the Dominican Republic, conducting a follow-up study to her dissertation research. She has received funding from USAID and presented research in this area at the American Public Health Association meeting in 2011 and the International AIDS Conference in 2012. In addition to her work in Latin America, Barrington is collaborating on projects in Ghana and North Carolina.

In the area of teaching, Professor Barrington has developed a module on theoretical and conceptual foundations of global health for health behavior doctoral students and teaches an advanced methods course on qualitative data analysis that has attracted many students who conduct global research. Under her mentorship, several medical and public health students (masters and doctoral) have conducted short- and long-term internships in Central America, obtaining outstanding field-based experience and mentorship and producing innovative research studies and publications.

JONATHAN JULIANO, MD
IGHID provided resources to retain Dr. Jonathan Juliano at UNC after he completed his infectious disease fellowship. He was appointed assistant professor in July 2011, and he quickly established an independent laboratory. His current research is focused on drug resistance in the primary parasite that causes malaria and on reducing tick exposure in North Carolina forestry workers. His research has been published in the Journal of Infectious Diseases and the Journal of Clinical Microbiology, among others. He has lectured in both the medical school and the public health school and given grand rounds presentations on malaria and travel medicine. In fall 2012 he will take on his first MD/PhD student.

Benjamin Mason Meier, a global health policy expert, is one of the institute’s most successful faculty recruits.
In 2009, IGHIID recruited Benjamin Mason Meier to strengthen interdisciplinary scholarship in global health policy. Professor Meier’s interdisciplinary research—at the intersection of international law, public policy and global health—examines legal frameworks for global health governance. He has published and presented extensively on the development, evolution and application of human rights in a wide range of global health policies and is contributing theoretical and applied research as a fellow at UNC’s Center for AIDS Research, Water Institute, Breastfeeding Institute, Center for Bioethics and Global Research Institute.

Meier serves additionally as a scholar at Georgetown Law School’s O’Neill Institute for National and Global Health Law, as a member of the International Human Rights Committee and Governing Council of the American Public Health Association and as a consultant to international organizations, national governments and nongovernmental organizations. In just three years, Dr. Meier has already been recognized for his excellent teaching, winning numerous departmental and university-wide teaching awards. With funds from the William C. Friday Award for Excellence in Teaching, which he won in 2011, Meier worked with IGHIID to establish the Health and Human Rights Lecture at UNC. The annual lecture was inaugurated in April 2012 with health and human rights pioneer Sofia Gruskin.

International Health Offices
In 2009 IGHIID collaborated with the Office of Medical Education to launch the Office of International Activities (OIA) in the medical school. Under the leadership of Martha Carlough (director) and Sylvia Becker-Dreps and Ian B.K. Martin (associate directors), OIA has grown into a robust office that provides critical support to medical students and resident physicians interested in global health. A full-time OIA program manager, Sam Hawes, provides daily administration of the office.

IGHIID continues to play an important role in the planning and strategy of the OIA. Dr. Myron Cohen co-chairs the oversight committee, and many medical students complete elective experiences at IGHIID sites and are mentored by IGHIID faculty.

OIA has provided comprehensive pre- and post-rotation support and education for 230 medical students traveling to 40 different countries and 26 residents traveling to 13 countries over the last three years. It awards over $50,000 per year in international health fellowships to medical students and student groups and $20,000 annually to residents for global health rotations.

Additionally, the office launched a Foundations of Global Health elective course for medical students.

To support all learners in the medical school, OIA has opened a global health resource library and introduced two online modules: Travel Health and Safety and Cross-cultural Issues, Ethics and Professionalism that are now required for all medical students and physician residents going abroad as part of their education.

Finally, OIA has tripled the size of the International Visiting Student Program over the last three years and implemented new admission policies to improve admission decisions and developed an evaluation database to track performance.

The Office of Global Health (OGH), under the leadership of IGHIID’s associate director for education, Peggy Bentley, continues its role as a hub for faculty and student global health activities at the UNC Gillings School of Global Public Health (SPH). OGH continues to implement and further the school’s global reach and partnerships. In the past year, OGH co-sponsored delegations from Brunei, Pakistan, India, and China to SPH.

The Chinese delegation included 11 deans and faculty from seven schools of public health in China, as well as the director of the Medical Education Division in China’s Ministry of Education. Following the delegation’s visit, the China Medical Board included our SPH in their Next Generation Fellowships and Faculty Development Programs.
Awards prestigious grants competition. These awards provide support for China’s potential health leaders to train internationally in Health Policy and Systems Sciences.

OGH is committed to supporting faculty involved in global health, and OGH is helping to place Turkish faculty with UNC counterparts as part of an agreement forged with Hacettepe University in Ankara.

OGH currently handles full administrative and marketing activities for twelve internship programs, among them FHI 360, IntraHealth and Curamerics. OGH is conducting a review of its Global Health Certificate program to refine and further improve the certificate program and help its students achieve the competencies delivered by the certificate program. OGH, in conjunction with Office of Student Affairs, is developing a functional system targeting international students at the school to help address some of the issues specific to this student body.

**Fogarty Global Health Fellows Program**

Dr. Charles van der Horst, professor in the division of infectious diseases, is leading a new Fogarty Global Health Fellowship Program to train the next generation of global health professionals. The new program provides early-career physicians, veterinarians, dentists and scientists with a mentored research experience in a developing country. The program will receive $4 million dollars over the next five years to support research fellowships at 17 sites in 13 low- and middle-income countries in Africa, Asia and South America. The UNC-led Fogarty Global Health Fellows Program (FGHF) is one of five academic consortia to receive funding under this new program.

In partnership with Johns Hopkins University, Morehouse College and Tulane University, the UNC FGHF program is built on 20 years of research and training collaboration. The FGHF will develop and support global health research training programs that provide focused mentoring for participants and diverse clinical research experiences at approximately 80 established research sites in low-resource settings. Program trainees will study traditional global health problems such as HIV/AIDS, tuberculosis, malaria and maternal and child health, and will address the chronic non-communicable diseases that cause a majority of deaths in developing countries, such as cancer, cardiovascular disease, asthma and diabetes. The first class of trainees has been selected.

**Doris Duke Fellowship**

In August 2012, UNC was one of four American universities awarded funds from the Doris Duke Charitable Foundation to support medical students in global health. The Doris Duke International Clinical Research Fellowship provides U.S. medical students with a year-long mentored clinical research project in a low- or middle-income country. IGHID will receive nearly $900,000 to support a total of 12 fellows on research projects in Malawi, Zambia and China. This was a highly competitive renewal, and UNC’s receipt of this funding is a testament to the strength of our international programs and sites.

**Fulbright-Fogarty Awards in Public Health**

The Fulbright-Fogarty Awards in Public Health were inaugurated in July 2011. Fulbright ambassadors are funded through the Fulbright program, and the international sites receive funding for training and orientation from the NIH Fogarty International Center. In the first year, the institute supported Brian Barnett (Vanderbilt University) in Malawi, where he studied HIV/AIDS, tuberculosis and mother-to-child transmission of HIV. In 2012-13, the institute will support Gordon Shen (UCLA), to work on cancer-related projects in Beijing.

**A New Surgical Residency in Malawi**

As sub-Saharan Africa improves its economic position, it faces an increase in non-communicable diseases, many of which are surgical conditions. Under the leadership of
UNC surgeons Carol Shores and Anthony Charles, the Malawi Surgical Initiative was established at Kamuzu Central Hospital in Lilongwe in July 2009. The surgical resident training program is accredited by the College of Surgeons of Eastern, Central and Southern Africa (COSECSA). There are currently 11 residents in four classes, making it the largest surgery residency certified by COSECSA.

Six surgical residents passed their written exams in September 2012 and their clinical and oral exams in December 2012. With funding from an IGHID Explorations in Global Health grant, second-year resident Dr. Charles Mabedi spent a month at UNC rotating on head and neck and trauma surgery. The Malawi Surgical Initiative (MSI) has sponsored several surgeons who now practice and teach at Kamuzu Central Hospital, including Drs. Joseph Fulton (vascular surgery), Michael Sinclair (thoracic surgery) and Shay Dean (plastic surgery).

After five years of post-medical-school training through the MSI, these surgeons will spend a lifetime providing surgical care to some of the poorest people in the world. In addition, they will become the faculty for the self-sustaining training program, guiding generations of surgeons and leaders. The program is a collaboration between surgeons at Kamuzu Central Hospital in Lilongwe, the Malawi College of Medicine in Blantyre, Haukland University Department of Surgery in Bergen, Norway, and UNC.

Courses
IGHID continues to serve as co-sponsor of Interdisciplinary Perspectives in Global Health (PUBH 510). Offered each fall semester in collaboration with the SPI Office of Global Health, this 3-credit course is open to graduate students and rising seniors and is a foundational course for the public health school’s Graduate Certificate in Global Health. The course provides an overview of key global health issues and their impacts on populations through social, economic, political and environmental factors. The class was first offered in 2005 and has since reached nearly 700 enrolled students, in addition to those who attend the open class seminars that are offered to foster campus-wide learning on key global health issues.

The institute is also co-sponsor of One Health: Philosophy to the Practical Integration of Human, Animal and Environmental Health (PUBH 705 Section 001). This 2-3 credit graduate level, inter-institutional course is cross-listed at Duke and NCSU. Faculty leads for UNC are from IGHID (Mamie Sackey Harris) and the department of emergency medicine (Dr. Larry Glickman). The interdisciplinary course introduces the concept of One Health as an increasingly important and holistic approach to understanding disease prevention and the attainment/maintenance of overall human, animal and environmental health. Since the course was first offered in spring 2011, it has gained considerable public attention and support for incorporating One Health concepts across disciplines. In 2012 attendance averaged approximately 30 professionals and students per session with some sessions bringing in over 50 attendees. A total of 19 students from UNC, Duke and NCSU enrolled in the course for credit, and due to increased demand the course will open up to undergraduates in spring 2013.

IGHID continues support for the popular campus-wide course, AIDS: Principles, Practices, and Politics, under the leadership of Dr. Ron Strauss, director of the Center for AIDS Research Office of Community Outreach, Dissemination, and Education, and executive vice provost. With over 400 students enrolled each year, the class reaches undergraduate, graduate and professional students at UNC, including students from across health affairs, the law school and the College of Arts & Sciences. Faculty affiliates of IGHID lecture in the course each year on all aspects of the epidemic.

Workshops
The annual spring Introduction to Malawi: A Workshop in Chichewa Language and Malawi Culture was held in April 2012 at the Gillings School of Global Public Health. The workshop is organized by IGHID.
in collaboration with the Department of African and Afro-American Studies and targets UNC faculty, students and staff preparing for research, internships or service in Malawi. The four-part workshop provides elementary language skills, medical interview vocabulary and health and cultural training, as well as basic knowledge on the history, geography, politics and economy of Malawi. This year more than 20 students and faculty attended the workshop sessions. Graduate and undergraduate students were primarily from the College of Arts & Sciences, public health, dentistry, nursing and medicine. Since 2007, the workshop has trained more than 150 UNC faculty, students and staff in foundational aspects of Chichewa language and Malawian culture. This year, with sponsorship from the African Studies department, the Malawian course lecturer—typically an IGHID professional and graduate student—was able to attain prestigious certification in African language training from the University of Wisconsin at Madison. The intensive two-week professional development course will enable increased rigor in the Chichewa language and Malawi culture trainings offered at UNC.

The fourth annual GO! Global Orientation on Culture and Ethics campus-wide pre-travel orientation took place on April 14, 2012. The GO! Initiative is designed to help students evaluate expectations, anticipate potential cultural and ethical challenges, prepare for engagement in communities and develop intercultural competencies. The pan-university event specifically targets undergraduates traveling abroad for varied activities including research, service-learning, study abroad or training. First organized in 2009 the event has directly engaged well over 500 students with its activities. IGHID has worked in close collaboration with the GO! Initiative since its inception in 2009 and is committed to continuing to support of the GO! Initiative.

Other Campus-wide Academic Learning Opportunities

In 2011 the institute launched Heels in the Field: A Global Health Discussion Series in conjunction with the Curriculum in Global Studies. The purpose is to share UNC’s local and global health work and foster increased cross-campus dialogue. With three discussion sessions per semester, the series, which is held in the FedEx Global Education Center, is designed to expose students and faculty from the College of Arts & Sciences and other professional schools across campus to the extensive global health programs and expertise on UNC’s campus, with particular focus on the health sciences. Select faculty in areas relating to key global health issues are invited to share their work and research with dialogue on associated critical global health concerns. Topics for spring 2012 included HIV prevention policies, global cancer and sustainable food systems.

The third inter-institutional Triangle Global Health Case Competition took place on March 31, 2012 at Kenan-Flagler Business School. The competition provides a unique environment for interdisciplinary problem-based learning and communication and is a student-led event organized by the UNC IGHID, Duke Global Health Institute and NCSU Global Education Center, with some additional assistance from the Triangle Global Health Consortium. Student teams compete to solve critical, real-life global health issues with direct input and feedback from leading technical experts. Teams are required to be multidisciplinary, representing different schools across their university or college. In 2011, 17 interdisciplinary student teams from UNC, Duke, NCSU, Wake Forest University and Meredith College participated in the competition. In 2012, 13 interdisciplinary teams from UNC, Duke, NCSU and Meredith College competed to address cardiovascular disease in Kenya. UNC teams won first, second and third place, with Duke taking fourth place. UNC teams also won the top two positions in 2011. The number of competing teams is expected to rise next year with increased interest from local universities.

In 2012 UNC undergraduates with Students of the World traveled to Malawi to document the work of P&G Children’s Safe Drinking Water. Pictured here at Kamuzu Central Hospital.
Other Undergraduate Opportunities

For the past three years IGHID has provided support to the UNC teams of Students of the World (SOW). SOW sends students on domestic and international projects to document, through multimedia storytelling, the progress of innovative people working to solve the world’s problems. IGHID has supported undergraduate student groups to Tanzania (2010), Uganda (2011) and Malawi (2012). The 2012 team was sent to document the progress of IGHID partner P&G’s Children’s Safe Drinking Water. At UNC Project-Malawi, the company’s Purifier of Water packets are part of its clinical care services. The student journalists documented the UNC-P&G partnership in Malawi in a short video. This video may be featured as part of the University’s two-year, campus-wide theme, Water in our World.

In May 2012 Drs. Cohen and Tucker led a half-day workshop for UNC Honors undergraduates through the SoHo-Bloomsbury section of London. It was there that John Snow, considered one of the fathers of epidemiology, effectively ended the 1854 London cholera epidemic by removing the handle on a municipal water pump. The UNC students involved were newly admitted freshman starting out their UNC experience abroad as part of a new UNC Honors opportunity.

Drs. Shores and Charles mentored a medical student, Amblesed Onuma, and an undergraduate Carolina Covenant student, Alison Alpem, on a summer enrichment program through the UNC Medical Horizons Fellowship.

Communicating Success

IGHID communicates with its audiences through a variety of platforms. The IGHID website continues to be a primary means of sharing and disseminating information. Our companion blog, GH Notes, has seen growth in the number and type of contributors, from Fogarty trainees working internationally to research assistants in Chapel Hill to undergraduates engaged in global service-learning projects.

Social media is a critical tool for engaging with broad audiences. Twitter, for example has been incredibly useful for connecting with students, prospective students, journalists, funders and peer organizations, and IGHID has nearly 4,500 Twitter followers. A half-page print advertisement for UNC global health in The New York Times in September 2011 (an effort led by IGHID in partnership with the cancer center, medicine and public health) helped to significantly increase our Twitter audience. A video about Dr. Cohen’s HPTN 052 research, produced in partnership with the medical school news office, has more than 3,000 views on YouTube.

The University gained a huge media boost thanks to the groundbreaking research in HIV prevention and cure over the past two years. Capitalizing on that success, IGHID has worked aggressively and in conjunction with other communicators on campus to push these recognized “media experts” and increase visibility for the University and for UNC global health research.

IGHID has expanded its impact by producing compelling global health stories that have been repurposed and shared among multiple UNC audiences. UNC Global, University Gazette, FYI Carolina, Endeavors, the Center for AIDS Research, Water In Our World, and the UNC home page are among the outlets and units that have shared IGHID-produced stories.

The IGHID e-newsletter is undergoing a redesign and will re-launch in early 2013. The new format will target external audience more aggressively than the old newsletter. IGHID’s new development associate, Katie McKenna, who came on board in September 2012, will work closely with communications to expand communications aimed at donors and potential donors.
### Table 3

**RECIPIENTS OF EXPLORATIONS IN GLOBAL HEALTH GRANTS, 2006-2012**

#### 2006

<table>
<thead>
<tr>
<th>NAME</th>
<th>DEPARTMENT/SCHOOL</th>
<th>PROJECT</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice Ammerman</td>
<td>Nutrition (Public Health)</td>
<td>Collaboration to Develop Effective Tools and Policies to Control Obesity</td>
<td>China</td>
</tr>
<tr>
<td>Shrikant Bangdiwala</td>
<td>Biostatistics (Public Health)</td>
<td>New Research Collaboration with Prof. Mauricio Barreto and Reinforce Existing Collaboration with Dr. Leila Amorim</td>
<td>Brazil</td>
</tr>
<tr>
<td>John Grose</td>
<td>Otolaryngology (Medicine)</td>
<td>Newborn Hearing Screening with a Focus on Identification and Intervention in Infants with Auditory Neuropathy</td>
<td>Brazil</td>
</tr>
<tr>
<td>Douglas Morgan</td>
<td>Center for Digestive Diseases and Nutrition (Medicine)</td>
<td>Opportunity to Design the National Gastric Cancer Prevention Program for Honduras</td>
<td>Honduras</td>
</tr>
<tr>
<td>Betsy Sleath</td>
<td>School of Pharmacy</td>
<td>Improving Treatment Adherence of Glaucoma Patients in Southern India</td>
<td>India</td>
</tr>
<tr>
<td>Mark Sorensen</td>
<td>Anthropology and Curriculum in Global Studies (Arts &amp; Sciences)</td>
<td>Rapid Culture Change and Health among Indigenous Siberian Populations</td>
<td>Russia</td>
</tr>
</tbody>
</table>

#### 2007

<table>
<thead>
<tr>
<th>NAME</th>
<th>DEPARTMENT/SCHOOL</th>
<th>PROJECT</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean Harris and Brenda Motsinger</td>
<td>Health Policy and Administration (Public Health)</td>
<td>Addressing Health Issues as Part of the North Carolina-Moldova Partnership</td>
<td>Moldova</td>
</tr>
<tr>
<td>Matthew Howard</td>
<td>School of Social Work</td>
<td>Inpatient Abuse Treatment Centers</td>
<td>Canada</td>
</tr>
<tr>
<td>Ka He</td>
<td>Nutrition (Public Health)</td>
<td>Establishing Research Relationships with Colleagues in the Institute of Nutrition and Food Hygiene, Chinese Center for Disease Control and Prevention (CDC)</td>
<td>China</td>
</tr>
<tr>
<td>Cheryl Jones</td>
<td>School of Nursing</td>
<td>An Examination of Foreign-Trained Nurses in the U.S. Nursing Labor Market: A Research Partnership between the UNC and the University of Toronto</td>
<td>Canada</td>
</tr>
<tr>
<td>Mary Palmer</td>
<td>School of Nursing</td>
<td>Geriatric Clinical Simulations: An Educational Collaboration Between UNC School of Nursing and Flinders University School of Nursing and Midwifery</td>
<td>Australia</td>
</tr>
<tr>
<td>Jessie Satia</td>
<td>Epidemiology and Nutrition (Public Health)</td>
<td>Proposal Development Meeting for a Population-Based Case-Control Study of Diet and Prostate Cancer in Ghana</td>
<td>Ghana</td>
</tr>
<tr>
<td>Harsha Thirumurthy</td>
<td>Health Policy and Administration (Public Health)</td>
<td>Estimating the Demand for Male Circumcision in Western Kenya</td>
<td>Kenya</td>
</tr>
</tbody>
</table>

#### 2008

<table>
<thead>
<tr>
<th>NAME</th>
<th>DEPARTMENT/SCHOOL</th>
<th>PROJECT</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trude Bennett</td>
<td>Maternal and Child Health (Public Health)</td>
<td>Methods, Strategies and Ethics of Prenatal Genetic Screening in Vietnam</td>
<td>Vietnam</td>
</tr>
<tr>
<td>Douglas Morgan and Susan Hogan</td>
<td>Center for Digestive Diseases and Kidney Center (Medicine)</td>
<td>Collaborative Chronic Disease Initiatives in Nicaragua: Toward a Better Understanding of Digestive, Kidney and Diabetic Diseases</td>
<td>Nicaragua</td>
</tr>
<tr>
<td>Mark Sorensen</td>
<td>Anthropology (Arts &amp; Sciences)</td>
<td>Investigate the Pathways Through which Cultural and Economic Change has Impacted the Health of Indigenous Siberian Populations During the Political and Economic Transformation of the Past Decade</td>
<td>Russia</td>
</tr>
<tr>
<td>Year</td>
<td>NAME</td>
<td>DEPARTMENT/SCHOOL</td>
<td>PROJECT</td>
</tr>
<tr>
<td>------</td>
<td>-----------------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2009</td>
<td>Ashkin Evan</td>
<td>Family Medicine [Medicine]</td>
<td>Collaboration with the Proyecto Puentes de Salud in Guanajuato State, Mexico</td>
</tr>
<tr>
<td></td>
<td>Bradley Gaynes</td>
<td>Psychiatry (Medicine)</td>
<td>Collaboration with the University of Yaounde and the AITRP project in Cameroon on Mental Health</td>
</tr>
<tr>
<td></td>
<td>Wizdom Powell Hammond</td>
<td>Health Behavior (Public Health)</td>
<td>Partnership Between UNC and University of KwaZulu Natal to Conduct Cross-cultural Investigations of Masculinity, Health Behavior and Health Status among African-American and Black South African Men</td>
</tr>
<tr>
<td></td>
<td>Kamakashi Rao</td>
<td>School of Pharmacy</td>
<td>Chemotherapy and Cancer Care Service Project in Eldoret, Kenya</td>
</tr>
<tr>
<td>2010</td>
<td>Richard Billsborrow</td>
<td>Biostatistics [Public Health]</td>
<td>Migration, Vulnerability and Disease in the Amazon: Understanding Linkages along the Transoceanic Highway Monosodium Glutamate (MSH) Cessation and Changes in Body Weight: A Pilot Intervention</td>
</tr>
<tr>
<td></td>
<td>Ka He</td>
<td>Nutrition [Public Health]</td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>Clare Barrington</td>
<td>Health Behavior (Public Health)</td>
<td>Prostate Cancer in Cuba</td>
</tr>
<tr>
<td></td>
<td>Suzanne Maman and Thomas</td>
<td>Health Behavior (Public Health) and School of Law</td>
<td>Partnership with Carolina for Kibera to Integrate Legal Education and Microfinance Programs into Health Programs Assessing the Effectiveness of a Lean Quality Improvement Toolkit on Community Health Worker Performance and Innovation UNC and University of Navarra Partnership: Evaluate Risks of Injury among Pedestrians and their Association with Built Environment Characteristics</td>
</tr>
<tr>
<td></td>
<td>Kelly</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rohit Ramaswamy</td>
<td>Public Health Leadership Program (Public Health)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Andres Villaveces</td>
<td>Epidemiology [Public Health]</td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>Vijaya Hogan and Kia Caldwell</td>
<td>Epidemiology [Public Health] and African and Afro-American Studies [Arts &amp; Sciences]</td>
<td>Transnational Exchange to Develop Intersectional Approaches to Reduce Health Inequity</td>
</tr>
<tr>
<td></td>
<td>Pam Jagger and David Leith</td>
<td>Public Policy [Arts &amp; Sciences] and Environmental Science and Engineering (Public Health)</td>
<td>Passive Measurement of Ambient Air Quality among Rural Households in Western Uganda</td>
</tr>
<tr>
<td></td>
<td>Carol Shores</td>
<td>Surgery [Medicine]</td>
<td>Aerodigestive Tract Cancers in Malawi</td>
</tr>
</tbody>
</table>
A Vision for the Future

Now entering its sixth year, IGHD is successfully working to fulfill its core missions while fostering and collaborating with new, emerging and vibrant programs across many campus units.

Global health research is growing at an astounding pace, both on our campus and as a discipline generally. At IGHD, we must be sure that faculty recognize opportunities and help them to secure available research funds. At a public institution, research dollars are a critical gateway to becoming a global university. Exciting global research projects lead to the recruitment of talented students, coordinated service activities, sustained collaborations and most importantly, improved health.

IGHD leadership in setting research priorities and facilitating global health research through small grant programs has been effective, and we must increase these efforts. In addition, we must establish a coordinated program to communicate our work to an external audience of our peers and the general public. Increasing the visibility of the UNC brand—a brand backed by robust programs and world-class faculty—is the key to improving our rankings, something that is important to the University at large. The UNC AIDS research program has been recognized among the top ten by US News and World Report since the magazine began including the specialty, and we hope that other areas of research will be recognized as well.

IGHD’s ability to recruit new global faculty in the midst of an economic downturn is a testament to the strength of its programs and the irresistible momentum around global health at UNC. IGHD will continue to work to identify the areas of greatest need and growth and identify and hire the best people in those areas. It is not hyperbolic to state that the future of UNC depends on this commitment, and IGHD must continue to cultivate the collaborative and supportive atmosphere critical for retention of our most talented leaders.

IGHD is still a young organization. Having focused heavily on core missions and building human capital around global health, our institute has not dedicated sufficient time and energy toward developing some of the required infrastructure that will allow the organization to reach its fullest potential. Specifically, we have incompletely developed ideas about the best use of advisory boards, how to structure IGHD “membership” (and what services will be offered to IGHD members), and what the core message of our brand should be, both internally and externally. We believe we have now reached sufficient maturity to address these issues.

UNC is recognized as one of the great American public universities. As such, we are called upon to catalyze discovery and train the next generation of global health scientists, clinicians, policy makers and leaders, for the benefit of all of the world’s citizens, in North Carolina and beyond.