It is clear that we are nowhere near the end of this battle.
Welcome to the inaugural edition of Continuum, a new publication designed to share news and accomplishments of our students, alumni and faculty! The editor and major contributor of this issue is Julia Nagle, MPH ’16 who is the Health Communications Scholar in the School of Public Health. We are very fortunate that her work was been made possible by an endowment from Perri A. Peltz ’82 and Eric Ruttenberg. Julia’s internship this semester was focused on creating a communication vehicle, with student, faculty and alumni content, as a way to connect the important constituents of our School.

Since becoming a school on July 1, 2013, we’ve made important research progress, had wonderful student and alumni successes, and garnered generous gifts that will advance our programs and support our mission. This is an exciting time for public health at Brown and around the world. Across the nation, student interest in public health is growing exponentially both at the undergraduate and graduate levels; Brown is experiencing similar growth in our undergraduate courses and concentrations, as well as our graduate program applications.

Our School is well positioned to have a major impact on the creation of future generations of public health policy makers and practitioners. We are also expanding the knowledge base that will improve population health around the world. I am pleased to share the accomplishments of our School in this publication, and, I am particularly pleased that so much of this edition of Continuum is written by our own students.

I hope you enjoy reading about our amazing students, alums and faculty. And let us know what you think about our new newsletter. We always enjoy hearing from you.

Terrie Fox Wetle, MS, PhD
Dean, Brown University School of Public Health
Editor’s Note by Julia Nagle MPH’16

Our publication *Continuum* is named for the many ways through which the Brown University School of Public Health contributes to the innovation and development of public health as a whole. Merriam Webster’s Dictionary defines a continuum as “a coherent whole characterized as a collection, sequence, or progression of values or elements varying by minute degrees.” At the Brown University School of Public Health we seek to bring health care services, research and education to a place of excellence. Our goal is to positively affect the health of communities and populations worldwide. We recognize that a strong public health school begins with a dedication to exceptional education and commitment to research that progresses to real-world experience. The School of Public Health has embraced this continuum to become recognized as a leader in helping build awareness of population health issues, community has made great strides over the years toward the eradication of infectious diseases through various health interventions. However, while these achievements have resulted in disease reduction, in 2015 we are surrounded by illness around the globe. Today, medical innovations such as vaccines and antimicrobials help prevent many infectious diseases and conditions; however, they do not eliminate all of the diseases threatening our population. Currently, infectious diseases cause 63% of all childhood deaths and 48% of premature deaths globally (1). We are surrounded by diseases such as HIV/AIDS and tuberculosis and in addition, diseases that we thought had been extinguished, such as measles and cholera. In a time when diseases such as Ebola are killing thousands, the need for public health and public health intervention is immense. Increasingly, our world has become more susceptible to

“Ingenuity, knowledge, and organization alter but cannot cancel humanity’s vulnerability to invasion by parasitic forms of life. Infectious disease which antedated the emergence of humankind will last as long as humanity itself, and will surely remain, as it has been hitherto, one of the fundamental parameters and determinants of human history.”


shape public policy and increase positive health outcomes. At Brown, our students and faculty bring research and education to new heights. They continually work to expand knowledge of health and translate it into public health practices that make a difference to the population.

Our first issue of *Continuum* delves into the research and initiatives of students and faculty members who explore how the study of epidemics is advancing knowledge of infectious disease on a global scale. The public health infectious diseases, as climate change, migration, population growth, and increased international travel, among other things, put us all at greater risk for infectious disease. The public health community must adopt strategies for prevention and control. Public health research, education, and practice expand our knowledge of infectious diseases and methods of disease prevention.


brown.edu/academics/public-health/
Infectious Diseases

“With today’s technology, knowledge and vaccines there is no reason why we should not have everyone in the world healthy.”

– Seth Berkley

Alumnus Seth F. Berkley, MD’78 MD’81, epidemiologist and CEO of Gavi, the Global Alliance for Vaccines and Immunization, visited Brown University on February 25, 2015 to deliver a presentation titled “Going to scale: delivering vaccines to the world’s poorest countries.”

Berkley, earned his bachelor’s degree in 1978 and his MD in 1981 at Brown and currently holds an appointment as adjunct professor of medicine at the Warren Alpert Medical School. Gavi, a global health organization that saves lives through making vaccinations more accessible to developing countries, has immunized more than half a billion children and is working toward immunizing an additional 300 million in the next five years.

Berkley’s presentation described Gavi’s mission and the changes they are working to implement on a global scale. Berkley says, “We want children to live up to their full potential.” In developing countries, children’s capacity to thrive and remain healthy is often limited. Gavi brings together both public and private sectors with the mutual goal of establishing equitable access to child vaccines. According to Berkley, vaccinations have the potential to not only save lives, but to act as a major tool in helping developing countries move forward toward economic growth and increased productivity. In fact, Berkley said, “Research suggests that having a full course of immunizations is equivalent to primary school on long-term economic growth.”

Gavi is working hard to advance its mission and increase immunization coverage. The Millennium Development Goals expire this year; one of the goals was to reduce child mortality by two thirds between 1990 and 2015. Unfortunately, that is not on pace to happen, although there has been a dramatic reduction in child deaths. Gavi has nevertheless strived to help accomplish the Millennium Development Goals. Improving accessibility to vaccines is crucial to this mission, as immunization is a key force in the battle against child mortality.

The World Health Organization (WHO) recommends all children receive 11 vaccines, and Gavi’s aim is to make sure every child receives these to be protected against those diseases. Today, however, only 5% of children receive those 11 WHO-recommended antigens. According to Berkley, the “goal moving forward will be to have 50% of children in Gavi countries fully immunized by 2020.”

Gavi emphasizes the importance of vaccinations around the world. Immunizations have positive long-term effects beyond the realm of health outcomes. Despite the positive impacts vaccinations can have, people remain hesitant about vaccinating their children. Berkley is a strong believer in the benefits of immunization, and encourages all parents to vaccinate their children. Created in 2000, Gavi has proceeded to take the world by storm by protecting people’s health and increasing access to immunizations. In the coming years, Gavi intends to invest in vaccinations and improve the health and well-being of people around the globe.

“With today’s technology, knowledge and vaccines there is no reason why we should not have everyone in the world healthy.”

– Seth Berkley

Gavi is working hard to advance its mission and increase immunization coverage. The Millennium Development Goals expire this year; one of the goals was to reduce child mortality by two thirds between 1990 and 2015. Unfortunately, that is not on pace to happen, although there has been a dramatic reduction in child deaths. Gavi has nevertheless strived to help accomplish the Millennium Development Goals. Improving accessibility to vaccines is crucial to this mission, as immunization is a key force in the battle against child mortality.

The World Health Organization (WHO) recommends all children receive 11 vaccines, and Gavi’s aim is to make sure every child receives these to be protected against those diseases. Today, however, only 5% of children receive those 11 WHO-recommended antigens. According to Berkley, the “goal moving forward will be to have 50% of children in Gavi countries fully immunized by 2020.”

Gavi emphasizes the importance of vaccinations around the world. Immunizations have positive long-term effects beyond the realm of health outcomes. Despite the positive impacts vaccinations can have, people remain hesitant about vaccinating their children. Berkley is a strong believer in the benefits of immunization, and encourages all parents to vaccinate their children. Created in 2000, Gavi has proceeded to take the world by storm by protecting people’s health and increasing access to immunizations. In the coming years, Gavi intends to invest in vaccinations and improve the health and well-being of people around the globe.

“With today’s technology, knowledge and vaccines there is no reason why we should not have everyone in the world healthy.”

– Seth Berkley

Gavi is working hard to advance its mission and increase immunization coverage. The Millennium Development Goals expire this year; one of the goals was to reduce child mortality by two thirds between 1990 and 2015. Unfortunately, that is not on pace to happen, although there has been a dramatic reduction in child deaths. Gavi has nevertheless strived to help accomplish the Millennium Development Goals. Improving accessibility to vaccines is crucial to this mission, as immunization is a key force in the battle against child mortality.

The World Health Organization (WHO) recommends all children receive 11 vaccines, and Gavi’s aim is to make sure every child receives these to be protected against those diseases. Today, however, only 5% of children receive those 11 WHO-recommended antigens. According to Berkley, the “goal moving forward will be to have 50% of children in Gavi countries fully immunized by 2020.”

Gavi emphasizes the importance of vaccinations around the world. Immunizations have positive long-term effects beyond the realm of health outcomes. Despite the positive impacts vaccinations can have, people remain hesitant about vaccinating their children. Berkley is a strong believer in the benefits of immunization, and encourages all parents to vaccinate their children. Created in 2000, Gavi has proceeded to take the world by storm by protecting people’s health and increasing access to immunizations. In the coming years, Gavi intends to invest in vaccinations and improve the health and well-being of people around the globe.

“With today’s technology, knowledge and vaccines there is no reason why we should not have everyone in the world healthy.”

– Seth Berkley

Gavi is working hard to advance its mission and increase immunization coverage. The Millennium Development Goals expire this year; one of the goals was to reduce child mortality by two thirds between 1990 and 2015. Unfortunately, that is not on pace to happen, although there has been a dramatic reduction in child deaths. Gavi has nevertheless strived to help accomplish the Millennium Development Goals. Improving accessibility to vaccines is crucial to this mission, as immunization is a key force in the battle against child mortality.

The World Health Organization (WHO) recommends all children receive 11 vaccines, and Gavi’s aim is to make sure every child receives these to be protected against those diseases. Today, however, only 5% of children receive those 11 WHO-recommended antigens. According to Berkley, the “goal moving forward will be to have 50% of children in Gavi countries fully immunized by 2020.”

Gavi emphasizes the importance of vaccinations around the world. Immunizations have positive long-term effects beyond the realm of health outcomes. Despite the positive impacts vaccinations can have, people remain hesitant about vaccinating their children. Berkley is a strong believer in the benefits of immunization, and encourages all parents to vaccinate their children. Created in 2000, Gavi has proceeded to take the world by storm by protecting people’s health and increasing access to immunizations. In the coming years, Gavi intends to invest in vaccinations and improve the health and well-being of people around the globe.

“With today’s technology, knowledge and vaccines there is no reason why we should not have everyone in the world healthy.”

– Seth Berkley

Gavi is working hard to advance its mission and increase immunization coverage. The Millennium Development Goals expire this year; one of the goals was to reduce child mortality by two thirds between 1990 and 2015. Unfortunately, that is not on pace to happen, although there has been a dramatic reduction in child deaths. Gavi has nevertheless strived to help accomplish the Millennium Development Goals. Improving accessibility to vaccines is crucial to this mission, as immunization is a key force in the battle against child mortality.

The World Health Organization (WHO) recommends all children receive 11 vaccines, and Gavi’s aim is to make sure every child receives these to be protected against those diseases. Today, however, only 5% of children receive those 11 WHO-recommended antigens. According to Berkley, the “goal moving forward will be to have 50% of children in Gavi countries fully immunized by 2020.”

Gavi emphasizes the importance of vaccinations around the world. Immunizations have positive long-term effects beyond the realm of health outcomes. Despite the positive impacts vaccinations can have, people remain hesitant about vaccinating their children. Berkley is a strong believer in the benefits of immunization, and encourages all parents to vaccinate their children. Created in 2000, Gavi has proceeded to take the world by storm by protecting people’s health and increasing access to immunizations. In the coming years, Gavi intends to invest in vaccinations and improve the health and well-being of people around the globe.
Trained as a health economist, Dr. Omar Galarraga has three main research interests: cost-benefit analysis, health care reform - particularly surrounding insurance concerns - and the application of behavioral-economic approaches to impact behavioral change.

Galarraga feels he has the potential to improve health outcomes through behavioral economics, a field that incorporates insights from both economics and psychology. He is currently working on a project in South Africa studying HIV prevention and incentives for linkage to care among young women. Through qualitative observation, researchers have found that many individuals who find out that they are HIV positive do not come back to the clinic for immediate treatment. Instead, they wait until they are severely ill, which negatively impacts both the patient and their sex partners. So through behavioral economics, Galarraga hopes that his research will improve treatment uptake of ART (antiretroviral therapy) and ultimately reduce HIV transmission.

In addition to his project in South Africa, Galarraga has also accomplished notable work in Mexico City. Working through the city’s largest HIV clinic, Galarraga managed to interview over 18,000 men who have sex with men – including sex workers – on their willingness to receive regular check-ups and avoid new STIs for varying financial incentives. These findings have since been published and used as the basis for an incentive-providing pilot program.

Beyond his work in Mexico and South Africa, Galarraga also works closely with Lawrence Were, a PhD candidate in Brown’s department of Health Services, Policy and Practice focusing on health economics. With Lawrence, Galarraga is evaluating the impact of Kenya’s National Hospital Insurance Fund on prevention of mother-to-child transmission of HIV outcomes. Also in Kenya, Galarraga is working with AMPATH - a large consortium that currently provides treatment to over 150,000 people in western Kenya. In the past, AMPATH has been funded by PEPFAR (President’s Emergency Plan for AIDS Relief). Galarraga and colleagues are looking to evaluate the feasibility of alternative funding mechanisms, particularly the use of a community-based health insurance pilot through Zurich Health.

The findings have since been published and used as the basis for an incentive-providing pilot program. Dr. Galarraga and colleagues are very proud of this work.
Everyday experience and psychological studies alike tell us that there are two different types of extroverts: The gregarious “people-persons” who find reward in sharing affection and affiliation with others, and the ambitious “go-getters” who flash those bright-white smiles in their pursuit of achievement and leadership agendas. A new study shows that these overlapping yet distinct personalities have commensurately overlapping yet distinct signatures in the anatomy of the brain.

“These are people just sharing with you how they tend to experience the world and what’s important to them,” said Tara White, assistant professor (research) of behavioral and social sciences at the Brown University School of Public Health and corresponding author of the new study. “The fact that that’s validated in the brain is really exciting. There’s a deep reality there.”

The report, published in Cognitive, Affective, and Behavioral Neuroscience, is based on structural MRI scans of 83 men and women ranging in age from 18 to 54. That makes it the first study to produce evidence of the physical similarities and differences between extrovert types in the brain across adulthood. One other study had made such observations only in seniors.

“They are people that have different ways of looking at the world and how they experience the world. The gregarious people are more motivated by social reward, whereas the go-getters are more driven by achievement and self-improvement,” said White, who is based at Brown’s Center for Alcohol and Addiction Studies. She studies the neural basis of personality and how such personality differences change the way people respond to drugs and alcohol.

**STUDY MAPS EXTROVERSION TYPES IN THE BRAIN’S ANATOMY**

Tara White, PhD
Assistant Professor of Behavioral and Social Sciences

In this study, subjects were first screened for mental and physical health and then were given standard personality tests that measured scores of both kinds of extroversion (psychologists call the people persons “affiliative” and the go-getters “agentive” (a-JEN-tick). The subjects then underwent MRI scans designed to detect the volume of gray matter in different regions of their brain. From the psychological literature on extroversion, White and lead author Erica Grodin, a graduate student, knew they wanted to look in regions of interest such as the medial orbitofrontal cortex, which is involved in making choices based on reward, but they also cast a broader net of analysis across the whole brain using a technique called voxel-based morphometry. As expected, they found that higher degrees of either kind of extroversion significantly correlated with higher gray matter volumes in the right and left medial orbitofrontal cortex, even after controlling for possible confounding factors such as age. But among the people with higher agentic extroversion scores, they also found several other regions that had significantly larger gray matter volumes: the parahippocampal gyrus (involved in learning and memory for reward); the precentral gyrus, cingulate gyrus, and caudate (involved in the cognitive control of behavior and the initiation, planning, and execution of voluntary movement toward goals); and, among the men in the study, the nucleus accumbens (involved in incentive reward).

“So while both kinds of extroverts had higher volumes in one key brain region, agentic extroverts also had higher...
volumes in several other areas. White and Grodin found many of those other areas through the VBM analysis of the whole brain.

The authors caution that the study shows only an association, not whether or how larger volumes result in the personality traits. It also does not explain when larger volumes develop — for example, whether people are born with or acquire the larger volumes associated with either extroversion tendency. But with further research, the new data could help scientists to better understand changes in emotionality over time.

“[The] findings provide a developmental benchmark from which to better understand the etiology of problems in agentic extroversion and affiliative extroversion, such as can occur in normal aging and neurodegenerative disease,” Grodin and White wrote.

This research was supported by grants from the National Institute on Drug Abuse (DA R01 020725, DA R21 029189), the Lifespan/Tufts/Brown Center for AIDS Research, the Foundation for Alcohol Research, and the National Institute on Alcohol Abuse and Alcoholism (AA P01 019072).

LIU WINS AHA RESEARCH AWARD FOR DIABETES, HEART DISEASE

Simin Liu, MD, MPH, Professor of Epidemiology, Professor of Medicine
The work of Dr. Simin Liu, professor of epidemiology and medicine at Brown University, focuses on understanding the deep complexity and connections underlyng type 2 diabetes, cardiovascular disease and their risk factors. On Nov. 16 the American Heart Association announced that it will back him in those studies with a new high-profile award.

The AHA will provide Liu with $500,000 over two years as one of the first researchers funded under its Cardiovascular Genome-Phenome initiative.

“These scientists are building the future on the power of the past and are following in the footsteps of the American Heart Association’s founders in a bold and novel way,” AHA President Dr. Elliott Antman said while announcing the grant winners during his presidential address at the AHA’s annual meeting in Chicago Nov. 16, 2014.

Liu said he is honored and grateful to the AHA for the award recognizing his team’s work in systems medicine and epidemiology. Last month Liu and his collaborators published a study in the journal Circulation: Cardiovascular Genetics revealing common genes and biological pathways connecting type 2 diabetes and cardiovascular disease. Now, he said, he’ll be able to build on that, for instance by looking at the interactions of genes and diet among different ethnic groups.

“The AHA CVGPS Award will allow us to harness the rich genetic, genomic, and phenotypic resources from the Framingham Heart Study, the Women’s Health Initiative, and the Jackson Heart Study to comprehensively investigate biological pathways, gene regulatory networks, and key regulatory genes perturbed by genetic and dietary factors of vascular diseases, using multiple computational and statistical approaches,” Liu said.

His ultimate goal is for the work to yield improved strategies for fighting the diseases, which affect tens of millions of people worldwide, he said.

“By applying systems biology principles and innovative computation strategies that integrate multi-omics data with dietary information in the well-characterized multiethnic populations, we will gain better understanding of both shared and ethnic-specific mechanisms for vascular disease development,” he said. “The mechanistic insights will ultimately lead to improved strategies for the prevention, diagnosis, and treatment of these highly prevalent diseases and help address health disparity.”

NEW CENTER TO INCREASE PHYSICAL THERAPY RESEARCH

Linda Resnik, PhD, Associate Professor of Health Services, Policy and Practice (Research)
The Foundation for Physical Therapy has awarded Brown University a $2.5-million, five-year grant for a new center of excellence to spur research in the field. In the Center on Health Services Training and Research (CoHSTART), Brown, Boston University, and the University of Pittsburgh will train researchers and seed new studies to build the evidence base for physical therapy care and to improve how care is delivered.
“Physical therapists are integral parts of the health care system,” said CoHSTAR director Linda Resnik, a physical therapist, associate professor of health services, policy and practice in the Brown University School of Public Health, and a research career scientist at the Providence VA Medical Center. “Every day there are 750,000 people who see a physical therapist. There’s great clinical research that goes on, but there have been very few physical therapist researchers with the skills to conduct health services research. Because of that we are lacking the kind of evidence that we need to inform improvements in health service delivery and policy.”

The center will focus on three areas of research: rehabilitation outcomes measurement, implementation science and quality assurance, and analysis of large datasets. CoHSTAR’s faculty members will expand the capacity for research in these areas by training, nine postdoctoral students and five to six visiting scientists during its five years of funding. Those programs will begin this summer and fall.

Other programs will include curriculum development and annual summer institutes and webcasts, led by Boston University, to reach many more physical therapy scholars. Although the center grant was announced this week at the combined sections meeting of the American Physical Therapy Association (APTA) in Indianapolis, work is already underway.

“We are beginning recruitment immediately for our first cohort of trainees,” said Resnik, a physical therapist who came to Brown in 2002 as a postdoctoral trainee in health services research. “We plan to be reviewing applications as soon as possible.”

In addition, CoHSTAR has already selected the first three research projects to earn seed grants, to be administered by the University of Pittsburgh. One will examine the effect on care and costs of physical therapy being the first point of care — rather than, for instance the primary care doctor or chiropractor — for people with lower back pain. A second will seek to develop a linking of measures for tracking patient functioning through the many settings of post-acute care, such as inpatient rehabilitation, nursing home, and then home. The third will accelerate the development and testing of a pilot registry for management of knee pain.

Resnik said she is pleased to lead a multi-institution team in creating more opportunities for people to study physical therapy services and policy.

“I have had the opportunity to be in this kind of training environment and to launch my career in this area, but I’ve been one amongst a very small number of physical therapist health services researchers,” she said. “Health services research has never been more important than in this era of health care reform as the United States tries to determine how to provide its citizens with the best quality care and the best value of care. As the call for others to enter the field has grown louder and louder there really have been limited opportunities for physical therapist training.”

Funding for the foundation’s grant came from the APTA and from dozens of physical therapists, foundations, and corporations.

**GRANT SUPPORTS USE OF DATA SCIENCE TO OPTIMIZE HIV CARE**

**Joseph Hogan, ScD, Professor of Biostatistics**

HIV can be treated, but not every infection responds the same way. Treatment requires monitoring and testing, a practice that can become expensive for health care systems in the developing world. With a new grant from the National Institutes of Health, Brown University professors Joseph Hogan and Rami Kantor will lead an effort to develop data-driven techniques to improve the effectiveness of monitoring treatment and to maximize the benefits associated with using expensive diagnostic procedures. Hogan, professor of biostatistics in the School of Public Health, and Kantor, associate professor of medicine at the Warren Alpert Medical School, will combine their expertise to develop statistical methods, software, and laboratory technologies that use clinical data from patient records to improve HIV treatment monitoring decisions. Their work will develop strategies to optimize timing and frequency of costly diagnostic procedures such as drug resistance testing and new methods for ‘batch testing’ to reduce the number of laboratory assays needed to determine individual patient viral loads.

In addition to developing the statistical framework and theory for these ideas, Hogan and Kantor will create practical laboratory methods and protocols that can be tested, refined, and implemented in AMPATH, a comprehensive HIV care program based in Eldoret, Kenya, that sees more than 130,000 HIV-infected patients a year.
Brown University is a member of the AMPATH Consortium, whose 18 North American institutions collaborate with Moi University in Eldoret on HIV research, care, and training. Hogan is co-director of biostatistics and Kantor is research director of the Brown University-Kenya Program. He studies the effectiveness of HIV treatment and its relationship to drug resistance.

Hogan said the project, supported with $3.5 million over five years, could demonstrate how more sophisticated use of data can improve medical care.

“This grant is emblematic of the emerging field of ‘data science,’ wherein new and innovative methods of statistical analysis and computing are directly motivated by and applied within a specific context,” Hogan said. “Despite the fact that most of the world’s people with HIV live in low- and middle-income countries, patients and doctors in places like Kenya do not have the resources needed to follow treatment guidelines that are used in the United States and Europe. The President’s Emergency Plan for AIDS Relief, which funds many aspects of care in AMPATH, is narrowing this gap. We hope that projects like ours can help AMPATH and programs like it make the best use of the information and resources available to them.”

Kantor said the work will produce not only academic but clinical benefits.

“It will combine multidisciplinary clinical, laboratory, and statistical expertise to improve care for HIV-infected patients in settings where physicians need to limit the tests they conduct for patient care due to infrastructure and resource constraints,” Kantor said. “Development of methods and close work with and training of clinicians and laboratory personnel in Kenya, as we propose to do, will impact patient care and optimize resource use.”

In addition to Hogan and Kantor, the team includes Tao Liu, Allison DeLong, and Mia Coetzer of Brown, Michael Daniels of the University of Texas, and Lameck Diero, Wilfred Emonyi, and Ann Mwangi of Moi University in Eldoret.

Dr. Zheng comes to Brown from the Yale University School of Public Health, where he was the Susan Dwight Bliss professor of epidemiology and the chairman of the department of environmental health sciences for the past 12 years. Dr. Zheng earned a ScD in epidemiology from Harvard University and a medical degree from the Tongji Medical School, Huazhong University of Science and Technology. Dr. Zheng has been conducting epidemiological research to investigate the relationship between environmental exposures, genetic polymorphisms, epigenetic factors and gene-environment interactions in the risk of various cancers in the US and in China.

Dr. Zheng has authored or co-authored over 380 articles and book chapters and co-edited the textbook, Epidemiology and Biostatistics. He has been leading two Fogarty training programs in China and he is currently building three large cohort studies in China. He is the Chief Scientific Advisor for China National Institute of Environmental Health Sciences, and he has served as a senior advisor and member on several committees for the National Academy of Sciences and the International Agency for Research on Cancer (WHO).

Dr. Zheng’s office is Room 214, located on the second floor of 121 South Main Street, and his Brown email address is tongzhang_zheng@brown.edu. His immediate plans include hosting workshops and symposia at Brown and in China to facilitate collaboration between Brown investigators and counterparts in China, and he is forming collaborations with several groups at Brown, including the Watson Institute and the Institute at Brown for Environment and Society. He is a member of the Center for Environmental Health and Technology.

Please stop by and welcome him to the School!
Learn by Doing

Julia Nagle MPH’16 talks to Sarah Davey about life in the MPH program at Brown.
WHY DID YOU CHOOSE TO GET YOUR MPH?
WHY DID YOU CHOOSE BROWN?

I chose to pursue an MPH degree so that I could learn the practical elements of public health that would best prepare me for a career in the field. I chose Brown University for its strong focus on learning public health by doing public health, which I found to be very important, particularly given that I was pursuing a concentration in Global Health. When I was offered a position at Brown as a Global Health Scholar, I knew that I had been given an amazing opportunity. Before I even began my first course credits, I had already been in close contact with my advisor (Professor Steve McGarvey), who was encouraging me to start working on my thesis and finding my field placement. I was immediately drawn into the practical and personal relationships at Brown.

I KNOW THAT YOU Recently WENT TO HAITI TO DO AN INTERNSHIP. COULD YOU TELL ME ABOUT HOW THIS OPPORTUNITY CAME ABOUT AND WHAT YOU WERE WORKING ON THERE?

As part of the requirements for being a Global Health Scholar, I had always known that I would spend my MPH internship and field experience in a foreign country. I spent much of my first semester at Brown researching faculty throughout the university and medical school who had research interests that aligned with my own. One of my biggest public health heroes is Dr. Paul Farmer, so Haiti had always been in the forefront of my mind as to where I would spend my field experience. Eventually, I met Dr. Michael Koster, an infectious disease pediatrician at Women and Infants and professor in the Warren Alpert Medical School, who had been traveling to Haiti since the earthquake to work at St. Damien Pediatric Hospital in Tabarre, Haiti. Koster, alongside other Brown and Haitian colleagues, established an educational collaborative between a Haitian medical school and Brown that allowed residents to gain international experience. Dr. Koster knew that I was interested in program monitoring and evaluation, so he suggested that I do an evaluation of a PEPFAR-funded HIV training program for physicians at St. Damien Hospital. With only 200 pediatricians for the entire country, there is a severely limited human resources field in Haiti for treating pediatric HIV. The objective of this training program is to train physicians from all over Haiti in pediatric HIV care and protocol. We carried out a program evaluation using a structured survey that was distributed to all program graduates, evaluating program statistics such as testing scores, and facilitating a focus group.

Following the completion of my field experience, I began to work with a Haitian non-profit organization, The St. Luke Foundation for Haiti, as a Development Consultant. The St. Luke Foundation for Haiti is a 100% Haitian-led nonprofit organization that provides education, medical care, and humanitarian outreach to the traditionally underserved populations in Haiti. I recently returned to Haiti in January to work on a grant proposal for the Gates Foundation’s “Grand Challenges: Putting Women and Girls at the Center of Development.” While there, we also held services and memorials in remembrance of the five-year anniversary of the devastating 2010 earthquake.

WHAT DID YOU LEARN IN YOUR TIME ABROAD?

The most important lesson that I learned in Haiti was the difference between solidarity and subsidiarity. There is a huge difference between developing a project and implementing it within a foreign community without their own input, and developing a project in collaboration with a foreign community and letting them determine the course. The first is an example of solidarity, which has been a common trend in public health in Haiti. Especially following the earthquake, a lot of nonprofits and NGOs filtered a lot of money into the country with many big plans as to how to spend it. Five years later, however, many of the Haitians have no idea where that money went or are able to see the outcomes. Subsidiarity, on the other hand, is something that I experienced every single day at St. Damien and with the St. Luke Foundation for Haiti. In these environments, no projects were developed a project in collaboration with a foreign community and letting them determine the course. The first is an example of solidarity, which has been a common trend in public health in Haiti. Especially following the earthquake, a lot of nonprofits and NGOs filtered a lot of money into the country with many big plans as to how to spend it. Five years later, however, many of the Haitians have no idea where that money went or are able to see the outcomes. Subsidiarity, on the other hand, is something that I experienced every single day at St. Damien and with the St. Luke Foundation for Haiti. In these environments, no projects were able to be implemented or carried out without local Haitian leadership and decision-making playing a huge role. Outside the realm of public health, I think I can say that I learned more about humanity and the power of love and compassion while in Haiti than I ever had leading up to that time.

Outside the realm of public health, I think I can say that I learned more about humanity and the power of love and compassion while in Haiti than I ever had leading up to that time.

brown.edu/academics/public-health/
SHARON CHAKKALACKAL, MPH
Currently, Sharron Chakkalackal is enjoying the communication and relationship management involved in her role as a Stakeholder Engagement Advisor at the Ontario Ministry of Health and Long-Term Care. The past two years have afforded her the opportunity to travel around Ontario and hear the concerns of health service providers (hospital and community care) within the fiscal constraints and reform that has taken place there.

Chakkalackal professional interests include research, policy, evaluation, and implementation to improve the mental health system. A few years ago, she managed an eight-site research project collecting data and forming research from local hospitals and health centers in Toronto and Montreal. Prior to working at the Hospital for Sick Children as a Manager, she consulted on a similar project in the USA. At the Institute for Community Health in Cambridge, Massachusetts, funded by Harvard University, she sought to address issues of health care access for non-insured and non-status populations.

At Brown, she focused on understanding social determinants of mental health and community-based participatory knowledge translation related to mental health policies and programs that serve immigrants and refugees. She continues to dedicate after-work hours to learning municipal and urban policy issues (transportation, economy, health).

ESTEFANY FLORES-CORTEZ, MPH
After graduation in May 2014 with her MPH, Estefany Flores-Cortez returned to Hope of Life (HOL) in rural Zacapa, Guatemala with a mentee from East Greenwich High School, Wei Li, to conduct a week-long Women’s Health Clinic. The women at HOL are rescued from homelessness and/or domestic abuse, and many have never received any type of women’s health care. Their children, who are often malnourished, receive care and treatment. However, due to the lack of resources and staff, many of the women’s health issues are not addressed (mental health/gynecological care, etc.). Flores-Cortez’s interest in public health research and women’s health has motivated her to pursue a nursing degree. She was recently accepted into Columbia University School of Nursing in their Nurse Midwifery program. She hopes to someday be a clinician researcher who provides and promotes quality health care to women near and far.

ALAN KRINSKY, MPH, PhD
After working for more than seven years as an Analyst and Senior Analyst at UMass Memorial Health Care in Worcester, MA, Alan Krinsky returned to the Rhode Island health care community in November 2014 as the Health Analytics Manager for the East Bay Community Action Program (EBCAP). EBCAP runs two federally-qualified health centers and many programs, serving the entire East Bay, from East Providence to Newport. Krinsky served on the Board of the Rhode Island Public Health Association from 2006-2010, and looks forward to getting re-involved in public health and health care in Rhode Island. He lives with his family in Providence, RI and can be contacted at adkrinsky@netzero.net.

W. CURT LaFRANCE JR., MD, MPH
Dr. William Curt LaFrance, Jr ’07 recently led a new study at Rhode Island Hospital, which found that cognitive behavior therapy-informed psychotherapy significantly reduces seizures in patients with psychogenic non-epileptic seizures (PNES), a conversion disorder present worldwide that affects up to 400,000 people in the United States.

MARC MANSEAU, MD, MPH
Marc Manseau completed his medical training in June 2014 with a fellowship in public psychiatry at Columbia University. He then started a job as an attending psychiatrist in the Bellevue Hospital Outpatient Psychiatry Clinic and clinical assistant professor of psychiatry at the NYU School of Medicine. In addition to seeing patients and supervising residents, his role includes some research on better managing first episodes of psychosis. He expects his work with people who are early in their psychotic illness to expand soon, both with continued research as well as new clinical/program work. For instance, Manseau will soon be the psychiatrist for a new state-funded program opening at Bellevue, aimed at intervening early and intensively amongst people who have had a first episode of psychosis, with the intention of improving long-term psychosocial and clinical outcomes. He has also been working with the Preventive Psychiatry Committee of the Group for the Advancement of Psychiatry (a psychiatric think tank) on multiple publications about the social determinants of mental health. His committee recently published
I KNOW THAT YOU ARE WORKING AT CORNELL UNIVERSITY COULD YOU TELL ME A LITTLE ABOUT YOUR JOB?

I am the Follett Sesquicentennial Fellow and Assistant Professor of Epidemiology and Nutrition in the Division of Nutritional Sciences at Cornell University. I am also an adjunct Associate Professor at St. Johns Research Institute in Bangalore, India, where my research program is based, and a Fellow at the Center for Geographic Analysis at Harvard University.

COULD YOU TELL ME MORE ABOUT THE RESEARCH YOU ARE DOING?

My research focuses on the intersection of micronutrients, infectious diseases, and maternal and child health in resource-limited settings. As a scientist, I am intrigued by the role of micronutrients in the etiology of anemia and adverse pregnancy outcomes. As an epidemiologist, I examine these mechanistic questions at the population level, through randomized trials and cohort studies. As a public health practitioner, I think about the translation of evidence and scientific findings into programs to improve the health of at-risk populations. This approach integrates epidemiology, nutrition, immunology and infectious diseases, and biostatistics, with emphasis on translating cutting-edge laboratory findings to inform interventions and public health approaches in at-risk populations.

DID YOU ALWAYS WANT TO WORK IN PUBLIC HEALTH?

No, I started out as a biology and pre-medical student, and didn’t realize there was a field called public health. The kinds of opportunities that exist now for international experiences and global health are really incredible. For me, it was work experience in research and public health in Montreal with some passionate public health practitioners that motivated me to pursue advanced training in public health. I was interested in international work, but it was experiences in my Master of Public Health at Brown that really inspired me to pursue a career in global health.

WHAT WAS YOUR MOST INFLUENTIAL MOMENT AT BROWN UNIVERSITY?

If I had to pick a single moment, it would be my first experiences working in a resource-limited setting, in the rural highlands in Guatemala. Here I first witnessed the vicious cycle of under-nutrition and infectious diseases and its impact on the health of mothers and young children. During my fieldwork, I became intrigued with this interplay between under-nutrition and infectious disease, and the role of malnutrition as a cause and consequence of disease. Through my international field research experiences, I realized that this was something that I was meant to do, and my MPH training provided a strong foundation for me to pursue a career in epidemiology and international nutrition.

WHAT ABOUT PUBLIC HEALTH INSPIRES YOU AND DRIVES YOU TO DO WHAT YOU DO EVERY DAY?

Public health is an environment where no matter what disciplinary training or expertise, everyone can contribute. Public health is an opportunity to understand some of the most complex health problems and work across disciplines to design interventions to prevent and target health problems and improve the health of populations.

IN WHAT WAYS HAS YOUR PUBLIC HEALTH EDUCATION FROM BROWN UNIVERSITY HELPED YOU IN YOUR CAREER?

The Brown Master of Public Health program provided me with an outstanding foundation in public health. The education I received in the classroom, as well as my internships, work experiences, and my thesis research, all contributed to my Brown MPH. It’s that interdisciplinary training and critical thinking about public health issues that has prepared me for the real world. I am still connected with many of the faculty and classmates. Dean Wetle took the time to help me explore my interests, encouraged me to develop research skills, and inspired me to connect with leaders in the field of international health. Dr. Steve McGarvey, my MPH thesis advisor, inspired me to pursue a career in international health, and continues to be an incredible mentor and colleague. I have had the privilege of working across the globe in many different research settings such as Guatemala, Haiti, Mexico, Sub-Saharan Africa, India, and Ecuador. I have also worked in academic, governmental, non-governmental, and private sectors before joining the faculty here at Cornell. Brown University’s MPH program has prepared me for all of these opportunities. As a faculty member at Cornell University, I now have the opportunity to recommend the excellent Brown MPH program to my own students.

by Julia Nagle MPH’16

brown.edu/academics/public-health/
a book on the topic, and he wrote the chapter on inequality, poverty, and neighborhood deprivation. Marc plans to continue writing on topics relevant to the intersection of public health and mental health, including a few upcoming publications on cannabinoids and psychosis, including the new epidemic of synthetic cannabinoids (e.g., K2 and “spice”).

**RACHEL P. SCAGOS, MPH**

Rachel Scagos graduated with her MPH in May 2014. Due to her husband’s job relocation, she moved from RI to Virginia Beach, VA and began working at Operation Smile last fall as the Medical Oversight Coordinator. Operation Smile is an international children’s medical charity that performs safe, effective cleft lip and cleft palate surgery, and delivers postoperative and ongoing medical therapies to children in low and middle income countries. At Operation Smile, Scagos works on a variety of projects including the implementation and testing of new electronic health record (EHR) system, quality assurance audits and initiatives, and analysis of medical incidents and surgical outcomes. Operation Smile is the only organization of its kind to be tackling the challenge of developing an EHR system that can be used by our global foundations in multiple countries. In November 2014, she was fortunate enough to go on her first medical mission to Hanoi, Vietnam, where she helped implement Operation Smile’s first pilot test of full electronic screening using the new EHR system. Their team in Hanoi screened almost 300 potential patients and performed surgery on 116 patients. It was an incredible experience for her to be a part of such an amazing organization and team and to witness the impact that her work has on the lives of children and families around the world.

**JIACHEN ZHOU, MPH, PhD**

Jiachen Zhou obtained his PhD in epidemiology in 2013 and MPH in 2010, both from the Brown University School of Public Health. He currently works as a Senior Clinical Data Scientist at Royal Philips, the Dutch electronics giant. His team, located near Baltimore’s Inner Harbor, focuses on redefining health care through innovation in telehealth. His daily work includes the development of clinical process and outcomes-based quality benchmark reports, guiding development of clinical decision support tools and product design decisions, managing the world’s largest electronic clinical database of critically ill patients, and supporting internal and external research activities, as well as development of algorithms for stand-alone clinical decision support tools.

**BETH L. SUNDSTROM, MPH, PhD**

After graduating from the Brown University MPH Program with a specialization in health communication and women’s health, Sundstrom gained professional experience in strategic health communication in academic and non-profit organizations. She graduated with a PhD in health communication from the University of Maryland, College Park. At UMD, she was awarded a doctoral fellowship, conducting research and teaching undergraduate courses in new media and public relations writing.

Sundstrom is an assistant professor of communication and public health at the College of Charleston in Charleston, S.C. She is also a faculty affiliate in the Women’s and Gender Studies program and a member of the graduate faculty at the University of Charleston, South Carolina. Her research interests include health communication, social marketing, and women’s health. She teaches undergraduate and graduate courses in health communication, social marketing, and public health. Sundstrom also serves as an adjunct professor for the Brown University School of Professional Studies, co-teaching the summer course, “Understanding the Nation’s Health,” an introduction to public health for high school students. She also continues to consult in strategic health communication. Sundstrom’s long-term research goal is to raise the consciousness of women and empower them to engage in informed decision-making through community-based collective action. Sundstrom continues to collaborate with mentors and researchers at Brown University and Women & Infants Hospital in Providence, Rhode Island. A recent research project was funded by the Brown University Healthy Communities Initiative. This qualitative research project gathered opinions and insights from mothers of newborns to identify health concerns, preferred communication channels, effective messages, and current social marketing campaigns targeting health issues.

**CATHERINE ROGERS, MPH**

Catherine has settled into her routine in Boston, and is enjoying her work as a project manager at Mini-Sentinel. Her company conducts post-marketing drug and vaccine surveillance, and she works closely with the team developing analytic methods and tools. Every day brings a new question, a new challenge, and a new chance to make decisions (or facilitate making decisions) in a field she has grown deeply attached to.

**This World Famous**

**CONDOMS**

**YOUR TRAIN**
MEMORIAM

DR. DAVID S. GREER, 89
FORMER DEAN OF MEDICINE

Dr. David S. Greer, a gerontologist and former dean of medicine renowned for major contributions to the early development of the Alpert Medical School and the School of Public Health, died Tuesday, Nov. 18, 2014. Among his many accomplishments was a share of the 1985 Nobel Peace Prize for working to prevent nuclear war. Dr. Greer was a caring physician, educator and advocate who accomplished great things not only at Brown, but also in the local community and beyond. As dean of medicine in 1981 to 1992, Dr. Greer founded initiatives that have helped shape core aspects of the Medical School and School of Public Health. Dr. David Lewis, founding director of the Center for Alcohol and Addiction Studies, said, “He was a valued friend and mentor. His understanding, kindness and consistent support made it a privilege to work with him.”

DR. STANLEY M. ARONSON
INAUGURAL DEAN OF MEDICINE

Stanley Maynard Aronson, MD, was founding dean of the Warren Alpert Medical School of Brown University; those of us who have followed him on the faculty are ever-grateful for his extraordinary contributions. An accomplished neurologist and neuropathologist, esteemed educator and distinguished author, Dr. Aronson stands in the front rank of academic medical leadership. If there was a physician in America more deserving of the designation scholar and gentleman, we do not know him. Humanist, altruist, clinician, scientist, gifted teacher, loving spouse and, perhaps most of all, mensch, are also accurate identifiers of this remarkable man. In addition to his 11 years as dean of medicine, Dr. Aronson was named a University Professor at Brown in 1981. In addition to authoring > 400 scientific articles and chapters, his compelling essays on medicine and history could be read in the Providence Journal, Brown Medicine, and the Medicine and Health of Rhode Island Journal. In addition to these many accomplishments, Dr. Aronson was a central contributor to the development of laboratory tests for Tay Sachs Disease and Muscular Dystrophy.

We must also honor Dr. Aronson for his numerous community contributions, most notably recruiting fellow physicians, local clergy and the entire RI community to establish the first hospice program in our state, and the second hospice in America – Home and Hospice Care of Rhode Island – and serving as its inaugural president from 1989 to 1991; and there as a Trustee to this day. Dr. Aronson, Charlie Baldwin and other founders met in a garage on Waterman Street! They then moved to a church basement, where they were flooded out. The only expense they had was a telephone bill, to which they each contributed $3 a month. Accordingly, it is fitting that the establishment of a Lectureship in Hospice and Palliative Medicine by HHCRI at Brown would be named in Dr. Aronson’s honor.

Stanley Aronson was a remarkable renaissance man. He brought enlightenment, improvement and enjoyment to Brown, Rhode Island and the nation. His passing is an incalculable loss; we are all poorer for it.

by Richard Besdine, MD,
Director of the Center for Gerontology and Health Care Research
EDITOR
Julia Nagle, MPH’16

ART DIRECTION AND PRODUCED BY
Graphic Services

ASSISTANT EDITORS
Karen Scanlan
Matt Gannon

CONTRIBUTORS
David Orenstein
Olivia Kachingwe, MPH’15
Richard Besdine, MD

We love feedback!
Please send your suggestions to public_health@brown.edu