Faculty Present Research at United Nations

Student Scholarships & Awards

Faculty Honors

Topics in this issue include
Antimicrobial resistance, digital health, proteomics, research ethics, sexual and reproductive health and rights, vaccine safety

Student Profile
Ryan Thompson
MSPH ’19

Faculty Profile
Dr. Smisha Agarwal

Student Profile
Maria Garcia Quesada
MSPH ’19
This year, the Bloomberg School launched an exciting new strategic plan called “The Power of Public Health.” The plan will help us address emerging public health challenges by reshaping what we do and how we do it. To complement the School’s efforts, we’re developing our own five-year strategic plan for International Health. Over the past few months a team of faculty, staff and students has been meeting with groups across the Department to discuss priorities and opportunities for the future. As the plan takes shape, we are also engaging collaborators to learn about their needs and how we can work better together. We hope this process will make for a robust strategic plan that strengthens our commitment and ability to help the world’s most vulnerable and disadvantaged people improve their health and well-being.

In this issue of The Globe, you’ll see examples of how our faculty, alumni and students are working with people across the world to improve access to health care and health equity. For example, Professor Anthony So recently presented the United Nations (UN) Secretary General António Guterres with expert recommendations on antimicrobial resistance. With the threat of antibiotic-resistant diseases pushing millions of people into extreme poverty, the recommendations stress the need for equitable and affordable access to antimicrobials.

Associate Professor Caitlin Kennedy also presented at the UN this year. She and her team of researchers, including many Hopkins students and partners, have led a BMJ series on self-care interventions for sexual and reproductive health and rights. Dr. Kennedy spoke at the UN about her findings and their implications for expanding access to self-care tests and medications, especially among vulnerable and disadvantaged populations.

We recently welcomed our first faculty for digital health, Assistant Professor Smisha Agarwal. Agarwal is one of the top researchers and practitioners in the field. As part of a World Health Organization (WHO) development group, she was instrumental in the development of WHO’s first guideline on digital health. The group, co-chaired by Associate Professor Alain Labrique, examined and interpreted the evidence and formulated the final recommendations. The guideline emphasizes the importance of reaching vulnerable populations, and ensuring that digital health does not put them in danger.

And finally, congratulations to our 2019 graduates. Twenty-four dissertations were defended successfully and more than 66 masters’ degrees were awarded. International Health alumni are one of our greatest assets. Through our strategic planning process, we are working on ways of building even stronger connections with you. We always welcome your suggestions and advice.

—David Peters, Edgar Berman Professor and Chair, International Health, Johns Hopkins Bloomberg School of Public Health

**First WHO Guideline on Digital Interventions for Health System Strengthening**

The World Health Organization (WHO) recently released its first-ever guideline on digital health. The guideline includes 10 recommendations on ways digital health technology, such as mobile phones and tablets, can be used to improve people’s health and essential services. The recommendations are based on 2 years of extensive evaluation of the evidence in consultation with experts from governments, academia, implementation agencies, and multilateral organizations from every region around the world.

“This WHO guideline is more than a milestone in the field of digital health,” says Alain Labrique, PhD, MHS, MS, an associate professor in International Health at the Bloomberg School. “It provides a roadmap for research and a call for more high-quality evidence. The guideline’s recommendations are an inspiration to implementers to use digital health strategies to solve persistent health systems problems, especially for vulnerable and disadvantaged populations, on the road to universal health coverage.”

Labrique co-chaired the WHO Guideline Development Group, which reviewed and approved the final guideline. The Group also examined and interpreted the evidence and formulated the final evidence-based recommendations.

“They present aspirational but achievable guidelines that are an inspiration to implementers to use digital health strategies to solve persistent health systems problems, especially for vulnerable and disadvantaged populations, on the road to universal health coverage,” says Professor Anthony So, International Health, Health Systems Program.

The recommendations cover topics such as birth notification via mobile devices, digital tracking of patients’ health, and training of health workers via mobile devices. For each recommendation, a summary of the evidence on the effects of the intervention is given, its acceptability and feasibility, the equity, gender and human rights impacts, and the available resources for implementation.

The 10 recommendations are not meant to replace the fundamental parts of the health system, such as health workers, instead, they should complement and enhance important functions, such as data collection, service provision and training. Their overall aim is to equip health policymakers and other stakeholders with recommendations for making informed investments into digital health interventions.

“Digital interventions depend heavily on the context and ensuring appropriate design,” cautions Garrett Mehl, PhD, MHS, an International Health alumna who spearheaded the WHO Guideline as a lead coordinator at WHO’s Department of Reproductive Health and Research. “This includes structural issues in the settings where they are being used, available infrastructure, the health needs they are trying to address, and the ease of use of the technology itself.”

The guidelines are a culmination of a decade-long investment in digital health by the WHO. During that time Hopkins
International Health Welcomes First Faculty for Digital Health

For over a decade, the Department of International Health has been a leader in the new and quickly evolving field of digital health. The Department has been at the forefront of using digital technology, such as mobile phones, to help expand health services to hard-to-reach and vulnerable populations in low- and middle-income countries. Faculty, students and alumni have also been central in shaping frameworks and defining terminology, essential building blocks of a new field. To maintain this leadership, the Department recently recruited Assistant Professor Smisha Agarwal, one of the top researchers and practitioners in the field, as our first tenure-track faculty for digital health.

"Having Smisha join the faculty represents an important step for the Department," says Associate Professor Alain Labrique who directs the Johns Hopkins Global mHealth Initiative. "She has been instrumental in establishing standards for methodologic rigor in this emerging field. Her thought leadership is exciting to have as a resource to faculty and students engaged in innovative research across the Bloomberg School and other divisions of Johns Hopkins." Agarwal is a population health scientist and epidemiologist whose work focuses on how community health systems can strengthen the delivery of primary health care services among disadvantaged and vulnerable populations. Her research seeks to understand how routine monitoring data can be leveraged using advanced analytical approaches, including machine learning, to enhance our understanding of quality and effectiveness of reproductive health services. She also investigates the effectiveness of digital clinical decision support tools in strengthening primary health care. In April this year, Agarwal presented a plenary session at the World Islamic Economic Forum when she was CEO of Global Health Bridge.

"Her thought leadership is exciting to have as a resource to faculty and students engaged in innovative research across the Bloomberg School and other divisions of Johns Hopkins." – Associate Professor Alain Labrique

Agarwal was a member of the WHO Guideline Development Group, which reviewed and approved the final guideline. The 10 recommendations aim to harness the power of digital technology to help achieve universal health coverage. And they emphasize the importance of digital health in reaching vulnerable and hard-to-reach populations. The Group, which was co-chaired by Associate Professor Alain Labrique, also examined and interpreted the evidence and formulated the final evidence-based recommendations.

"The guidelines are the result of nearly a decade of work by several Hopkins faculty and other colleagues dedicated to solving age-old health problems in unconventional and innovative ways," says Agarwal. "Digitizing health care holds great promise and many governments are eager to leapfrog limitations in infrastructure and skills using digital devices. These guidelines are a first and critical step to providing this essential guidance." Now at Hopkins, she is leading a multi-country project investigating incentive structures for community health workers. The project, based in Uganda, Kenya, Bangladesh, and Haiti, is a collaborative endeavor with the Population Council, USAID in-country missions, UNICEF offices and NGO and government partners in each of the countries, to understand the types of incentive packages that would enhance job satisfaction, effectiveness and retention of community health workers. The results should help inform national strategies to strengthen community health systems approaches.

Before joining Hopkins, Agarwal was with the Population Council leading the Frontline Health project, which focused on harmonizing metrics to monitor the performance of community health worker programs in seven countries and developing a research agenda to address critical gaps in scaling up community health worker projects globally.

Assistant Professor Smisha Agarwal presents during the Global Health Challenges Plenary session at the World Islamic Economic Forum when she was CEO of Global Health Bridge.

First WHO Guideline on Digital Interventions (continued from page 3)

First WHO Guideline on Digital Interventions

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Contributors to the WHO Guideline: Recommendations on digital health interventions for health systems strengthening

Review Group. The complete recommendations are available online from WHO.

faculty, under the leadership of Labrique and his team at the Global mHealth Initiative, have provided critical technical assistance to WHO. And, they have helped produce crucial documents facilitating the development of these new recommendations. These include mHealth Evaluation, Reporting and Assessment (mERA) guidelines, Mobile Technology in Support of Frontline Health Workers, and the MAPS toolkit: mHealth assessment and planning framework for scale.

Several others affiliated with Hopkins were also involved in the development of the new recommendations. Alumni and Associate Faculty Subhash Chandir and Amnesty LeFevre and alumni Lavanya Vasudevan and Patty Michael were members of the WHO Guideline Development Group. Associate Scientist Bill Weiss was a member of the External
In 2009, the Department, under the leadership of Professor Ruth Karron, developed a vaccine-related internship program to fund students placed at the World Health Organization’s (WHO) Department of Immunization, Vaccines and Biologicals. Several years ago, the program expanded to include funded internships at Gavi, the Vaccine Alliance; Pan American Health Organization; the Centers for Disease Control and Prevention, Global Immunization Division; and UNICEF. Through the program, now called PAVE (Program in Applied Vaccine Experiences), students are able to gain valuable experience in vaccine research, policy and programs of global importance while fulfilling the Department’s MSPH program requirements. PAVE is co-founded by the Bill & Melinda Gates Foundation and the Department.

Ryan Thompson, who received an MSPH from the Department’s Global Disease Epidemiology and Control Program (GDEC), completed an internship at the World Health Organization (WHO). Recently, we were able to connect and learn more about his experience at the WHO and what he’s been up to since graduating in March.

**What were you working on as a PAVE scholar at WHO?**

I was working on the Malaria Vaccine Implementation Programme (MVIP), which is a pilot implementation study being conducted by the WHO, PATH, and GSK in Kenya, Ghana, and Malawi.

The new malaria vaccine (RTS.S/AS01) finished its Phase III clinical trials a few years ago. However, the results were not quite as promising as many were hoping: the vaccine showed a clinical efficacy of about 39% against clinical malaria. This efficacy is only seen when children receive a full four-dose series of the vaccine and continue to use other malaria prevention interventions, such as bed nets, leaving a lot of challenges and uncertainty around the fate of RTS.S as a realistic malaria prevention tool in areas where malaria is endemic.

In response to these concerns about the vaccine’s efficacy and general impact, WHO mandated the MVIP. The study is introducing RTS.S vaccine in all three countries. Certain regions of each country will be randomized to either receive RTS.S vaccine or a placebo. The aim is to compare the vaccinating and placebo arms to evaluate the feasibility, safety, and impact of delivering the four-dose RTS.S vaccine.

When I was at the WHO, MVIP was still largely in its preclinical phase; the vaccine hadn’t yet been licensed. The feasibility, safety, and impact of delivering the four-dose RTS.S vaccine to children in the three countries will be evaluated.

**In April, Associate Professor Caitlin Kennedy was a featured speaker at the United Nations (UN) for the launch of a new BMJ series on self-care interventions for sexual and reproductive health and rights. She spoke about several systematic reviews of evidence she led on the feasibility and effectiveness of self-care tests and medications, and on the implications for expanding access to these, especially among vulnerable and disadvantaged populations.**

Self-care is broadly defined as the ability of individuals and groups to prevent disease, maintain health, and cope with illness and disability with or without the support of a health-care provider. Given the personal and sometimes sensitive nature of sexual and reproductive health, self-care options could play a valuable role in improving the well-being of vulnerable populations and communities in lower-resourced areas. For example, one of the studies Kennedy presented at the UN was on self-administration of injectable contraception. Her research found growing evidence that self-administered injectable contraception can equal or improve the continued use of contraception, compared to when administered by a provider. This approach could be especially valuable for women whose limited resources make regular visits to a health provider impossible.

Kennedy led five systematic reviews as part of the special series. Her team, which included Research Associate Teresa Yeh and International Health doctoral student Yasmim Ogale, reviewed peer-reviewed, high-quality evaluations of self-care interventions selected and commissioned by the World Health Organization (WHO) steering group. The interventions examined included HPV screening, STI testing, ovulation predictor kits, self-injection of hormonal contraception, and over-the-counter access to oral contraceptives.

**The research found solid evidence that implementing these self-care interventions more widely, especially among vulnerable populations, could have a positive impact on people’s health and well-being.**

One review, for instance, found that women who self-screen for HPV, the virus that can lead to cervical cancer, are more likely to seek cervical cancer screening.

The series was published in collaboration between the WHO and the BMJ and BMJ Global Health journals to collect the best and most up-to-date evidence in the field. The series includes research articles, which Kennedy led, as well as analysis of the latest evidence and best opinion pieces on recommended next steps. The series is intended to help guide the WHO as it develops new recommendations for key self-care interventions for sexual and reproductive health and rights, with a focus on vulnerable populations and settings with health systems that have limited capacity and resources.

The WHO Guidelines on self-care interventions for sexual and reproductive health and rights will be released later this year.

“Self-care is an integral component of the health system,” says Kennedy. “With the right approach, evidence-based self-care interventions for sexual and reproductive health can help achieve universal health coverage by making these interventions more widely available to vulnerable and disadvantaged people around the world.”

The development of the series was led by the WHO Department of Reproductive Health and Research and HRP UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme for Human Reproduction, which is the main instrument within the United Nations system for research in human reproduction. All the articles are available online. Many Hopkins students and alumni from the Department of International Health and across the University also contributed in various capacities to the five systematic reviews in the series. They include Melissa Camila Alamo, Afla Amoah, Kaitlyn Atkins, Caroline Carrasco, Po-Yu Teresa Chiang, Anita Dam, Chergai Gao, Nicole Garbarino, Teresa Yeh, and Ashley Germann.
Student Spotlight | Maria Garcia Quesada, MSPH ’19, Global Disease Epidemiology and Control

In 2018, the Johns Hopkins Center for Global Health awarded Maria Garcia Quesada a Global Health Established Field Placement to help fund her master’s practicum. Every year, the Center offers awards of up to $3,500 for Johns Hopkins students to work overseas at a Hopkins-affiliated global health program in low- and middle-income countries.

Maria worked on two projects led by Dr. Stefan Baral from the Johns Hopkins Center for Public Health and Human Rights: Leveraging Adaptive Implementation Strategies to Achieve Universal Coverage of Antiretroviral Treatment in Senegal and Ending Aids in West Africa (eAFAWA) project, in collaboration with FIH360 and NGO Enda Santé.

She spent about 5 months working in Senegal, Togo, and Burkina Faso. Recently I had a chance to speak with her about her experience in the Field Placement program and to find out what she’s doing now.

Can you describe the projects you worked on as part of your Field Placement Award?

In Senegal I worked on a study that aimed to improve patient adherence to antiretroviral treatment, or ART, among people living with HIV. The intervention consisted of assigning a case manager to each patient, who would then guide the patient through their treatment plan and help them identify and overcome barriers to treatment. The study is looking to evaluate whether this intervention improves people’s adherence to ART as compared to the Senegalese standard of care, and to assess how feasible and cost-effective it would be to scale up.

I also spent several weeks in Togo and Burkina Faso supporting the eAFAWA project, which aimed to improve HIV care among key populations, including men who have sex with men, sex workers, and transgender people. All of whom bear a disproportionate burden of the HIV epidemic. In collaboration with our partners, I helped implement a capacity assessment of local HIV organizations. The goal was to identify organizations’ needs in different areas, ranging from management to evaluation, to then inform the development of a training curriculum that would provide them with tools to function more efficiently and reach their full potential. It was a great opportunity to meet local NGOs and community leaders who support the community in a variety of ways, from clinical and testing services to social and emotional support.

I had the opportunity to participate in many of the planning and decision-making meetings for both of these projects with our Baltimore- and Dakar-based teams, as well as with our partners at Enda Santé and FIH 360. Through this experience I was exposed firsthand to the importance of building relationships and trust, within an organization, with partners, and with the community, for a program to be successful.

Maria Garcia Quesada, MSPH ’19, far left, in Senegal with coworkers from the Hopkins team based in Baltimore and local partner organization Enda Santé.

What are you working on now?

When I returned to Baltimore, I started working with Dr. Maria Knoll and Dr. Kyla Hayford from the International Vaccine Access Center (IVAC) on the Pneumococcal Serotype Replacement and Distribution Estimation (PSERENADE) project, which is a collaboration with the WHO and PAHO. The goal of this project is to evaluate the global impact of pneumococcal vaccine introduction. The vaccine has been vastly successful in reducing disease among children, but it hasn’t worked exactly the same way in every country and region. These analyses will help us better understand the impact of the vaccine in these two countries and contribute to regional and global analyses. We hope the results of this project will help inform future vaccine development and vaccine policy.

Any advice for new students?

Keep an open mind, get to know professors, and reach for any opportunities that come your way. Additionally, get to know your cohort. Every person in my GDEC cohort has inspired, taught, and supported me in a million different ways. They were my team and my backbone through the hardest days. They were my team and my backbone through the worst of it. They were my team and my backbone through the best of it too.

In 2019, Maria attended the Synergies – Innovative Partnerships in Global Health (SIPGH) event, in collaboration with the Johns Hopkins Bloomberg School of Public Health. This event brought together professionals from all sectors and disciplines to discuss the latest global health challenges and solutions. Maria was thrilled to meet and network with other Hopkins students and alumni, as well as with experts from around the world.

She is now planning to attend the Global Health Conference, where she will present her research on the impact of the pneumococcal vaccine introduction. This conference is a great opportunity for her to share her findings and learn from other researchers in the field.

Maria Garcia Quesada, MSPH ’19, presented her research on the impact of the pneumococcal vaccine introduction at the Global Health Conference.

International Health Student and Faculty Publish New Vaccine Safety Book

According to research led by the Johns Hopkins Institute for Vaccine Safety, anti-vaxxers make up merely 1-2 percent of the U.S. population. However, a much larger proportion have questions about the safety of vaccines, especially when it comes to their children. With the worst-ever measles outbreak raging in the US in 20 years, it’s critical for the public to know the facts about vaccines. For over two decades, the Institute, which is based in the Department of International Health, has been a leader in providing comprehensive and trusted vaccine safety information.

To help combat the rise in vaccine misinformation, International Health Faculty Associate Matthew Dudley, PhD ’19, led the development of The Clinician’s Vaccine Safety Resource Guide. Dudley, an epidemiologist at the Institute, finished the book while he was a doctoral student in the Department’s Global Disease Epidemiology and Control Program.

As parents’ most trusted source of information on vaccines, the Guide offers health care providers approaches and concrete examples of how to better address parents’ concerns. The book helps physicians, who receive little to no training on how to communicate about vaccines, shift conversations away from vaccine falsehoods and fears to focus on the reality that if children remain unvaccinated. Each topic, from specific vaccines to safety concerns, is based upon systematic reviews of the latest scientific literature and includes talking points to use with patients.

Other International Health authors in the collaborative effort include Professor Dan Salmon, Director of the Institute for Vaccine Safety (IVS); Emeritus Professor Neal Halsey, Founding Director of IVS, and Assistant Scientist Rupali Limaye, Associate Director for Behavioral Research at IVS. Researchers from Emory University and the University of Colorado School of Medicine were also contributing authors. The book, which is available in print and digitally from Springer, has already been downloaded over 12,000 times.

Bestselling Author Johnny Saldana Leads Qualitative Data Workshops

Leading qualitative data analysis expert and bestselling author Johnny Saldana (pictured here teaching) conducted a series of qualitative methods workshops for about 140 Hopkins faculty, students and staff in April. The workshops, which were free to those attending, were sponsored by the departments of International Health and Health, Behavior and Society and the Center for Qualitative Studies in Health and Medicine (CQSHM) at the Bloomberg School. Associate Professor Steve Harvey, who coordinated the visit, said that registration filled up within 24 hours. “It’s evident that there is great interest in qualitative research methods on campus.” He also added that “Johnny’s workshops lived up to their reputation. His teaching is as masterful as his writing.” Given the enthusiastic response to this event, according to Harvey, discussions are already underway about possible follow-up events in coming years.

Matt Dudley, PhD ’19, Epidemiologist, Institute for Vaccine Safety, lead author of The Clinician’s Vaccine Safety Resource Guide.
**News & Highlights**

### Student Awards and Scholarships

**Diana Hess Scholarship**  
Alexandra Zimmer, Global Disease Epidemiology & Control (GDEC)

In 1983 the Diana Hess Memorial Fund was established with contributions from her family and friends. Diana Hess, a former Peace Corps volunteer in Kenya, was devoted to improving public health in Africa. The Hess Fund provides an annual scholarship to students in the Department of International Health. Preference is given to those planning to work in Africa.

**Nancy Stephens Award**  
Prakriti Shrestha, Health Systems

Established in 1970 as the International Health Fund, this fund provides grants to master’s or doctoral students in the Department who are completing their degrees. For 37 years Nancy Stephens was the immensely popular student coordinator in the Department. At her retirement in 2001, Dr. Robert Black renamed the fund in her honor.

**Harry D. Kruse Fellowship in Nutrition**  
Farah Bebehansi, Human Nutrition

The Kruse family established the Harry D. Kruse Fellowship in Nutrition in 1987 to support a continuing doctoral candidate in the Program in Human Nutrition who has displayed outstanding achievement and promise. The fellowship honors Dr. Harry Kruse who received his ScD degree in 1926 and was a distinguished faculty member in the Department of Biochemistry.

**Henry & Lola Beye Award**  
Sarah Elaraby, Social & Behavioral Interventions (SBI)

This fund was established in 2001 through the estate of Lola Beye, widow of Henry Beye, MD. Dr. Beye received his MPH degree from the School in 1942 and was an influential epidemicologist. He conducted intensive studies on elephantiasis, hemorrhagic fever, filariasis, and schistosomiasis. Mrs. Beye, a nurse, often worked in the field with Dr. Beye. This fund supports an outstanding student who has completed a medical degree and is pursuing a graduate degree in the Department.

**John Snow Award**  
James Kumwenda, Health Systems

Lex Londino, SBI

John Snow, Inc.’s mission is to provide an extensive range of research and consulting services to the health care and service sectors. Its International Division provides technical assistance designed to enhance the effectiveness and quality of public health programs. The John Snow, Inc. Award, an annual award created in 2001, provides financial assistance to outstanding, second-year master’s students in the Department who are engaged in internships in the field.

**Mary and Carl Taylor Fund**  
Jennifer Gerber, GDEC

The Mary and Carl Taylor Fund was created in 1995 with contributions from faculty and alumni in honor of the Taylors’ commitment to the students of the School of Public Health and to improving international health through research and action. The fund provides support to students working in the area of international bioethics.

**The Harry J. Prebluda Fellowship in Nutritional Biochemistry**  
Monica Pasqualino, Human Nutrition

This fellowship was established in 1990 by Mrs. Harry J. Prebluda and her children in memory of her late husband. Harry Prebluda earned his doctorate degree in Biochemistry at the School in 1937 and worked closely with E.V. McCollum. The fellowship fosters the careers of outstanding young scientists focusing on nutritional biochemistry and metabolism.

**Fulbright Award**  
Lex Londino, SBI

The goal of the Fulbright is to improve intercultural relations, cultural diplomacy, and intercultural competence between the people of the United States and other countries through the exchange of persons, knowledge, and skills. It is one of the most prestigious and competitive fellowship programs in the world.

### Student Awards and Scholarships

**Arole-Taylor Underserved Community Health Fellowship Award**  
Rashel Rabinovitch, SBI

Marwa Ramadan, Health Systems

Dr. Mabelle and Raj Arole received their MPHs from Johns Hopkins and were on to distinguished careers in underserved communities. This scholarship was established to support an outstanding student whose interests reflect those of Drs. Mabelle Arole, Raj Arole and their mentor Dr. Carl Taylor, a founder of the International Health Department.

**The Elsa Orent Keiles Fellowship in Human Nutrition**  
Quinn Marshall, Human Nutrition

This fellowship was established in 1996 with a bequest from the estate of Elsa Orent Keiles, ScD ’25, a graduate of the Department of Chemical Hygiene (now Biochemistry and Molecular Biology). In keeping with Dr. Keiles’ research interests, the award provides tuition support for graduate students with demonstrated financial need in the Department of Biochemistry and Molecular Biology or the Program in Human Nutrition in International Health.

**The Social & Behavioral Interventions (SBI) Alumni Award**  
Fiona Grubin, SBI

A merit-based award from contributions by master’s and doctoral graduates of the SBI program and their families in recognition of academic excellence and need.

**2018 Delta Omega Scholarship Competition**  
Andika Meghani, Health Systems

Wons first place in the Policy and Practice category for her submission entitled, “Unraveling the complexities of district-level decision-making for health: how to empower decision-makers to act on data in Uttar Pradesh, India.”

### Humanitarian Assistance Award

**Marwa Ramadan, Health Systems**  
Kathleen Fallon, SBI

This fund provides support to master’s and doctoral students who are committed to improving humanitarian response and health for refugees, displaced persons and populations affected by conflict and natural disasters.

**Georgeda Buchbinder Award**  
Laura Beres, SBI

Dr. Georgeda Buchbinder received her MPH from the School in 1984. She then moved to Hawaii and began a public health career by teaching Population Science and International Health. Her career was progressing extraordinarily well when she was diagnosed with cancer. This fund was established by friends and colleagues after her death to celebrate her all-too-brief career in public health. This fund annually supports students, junior faculty, or other priority projects in international health.

**JHU Graduate Student Employee of the Year Award**  
Seema Kacker, Health Systems

This award is presented annually to an outstanding student who has made a significant contribution to the university through a student job by consistently demonstrating good work ethics, reliability, initiative, creative thinking, and professionalism; either on-campus or off. Seema has worked for the Johns Hopkins Technology Ventures (JHTV) as a senior corporate partnerships fellow for 18 months. In her role, she evaluates and assists in the translation of Johns Hopkins research to industry. During her time with JHTV, she has gained invaluable technology transfer experience and exposure to related career paths.
Faculty Highlights

Professor Peter Winch was named co-chair of the newly created Sustainability Leadership Council (SLC) for Johns Hopkins University. The SLC will address a variety of issues to help reach the University’s goal of reducing its carbon emissions by 51 percent by 2025. In addition to energy efficiency in buildings, waste disposal and recycling, the committee will focus on linking sustainability directed programs at different Hopkins campuses and encourage collaborations across University campuses. The SLC will include student voices in addition to faculty and administrators.

Assistant Scientist Yusra Shawar was awarded the Best Early Investigator Paper Prize by the International Studies Association (ISA) for her work on the paper entitled, “The World Bank and the right to health: A study of the institutions rights-based discourse.” Shawar was presented the honor at ISA’s 60th annual convention. ISA is the primary gathering of international relations scholars around the world. The Global Health Section of the ISA established this award to recognize the best paper presented at the previous year’s conference by a researcher in the early phase of his or her career.

Associate Professor Caitlin Kennedy received a Golden Apple Award from the Student Assembly for her qualitative research course. The award recognizes excellence in teaching and is bestowed annually by the student body.

Assistant Professor Abdul Bachani was named Director of the Johns Hopkins International Injury Research Unit, which is based in the Department. Bachani has played a critical role in the Unit’s first 10 years of innovation and research in global injury prevention and control. A founding member, he first served as associate director for training and capacity development before becoming deputy director. As director, Bachani continues his leadership of a diverse, multidisciplinary team of faculty and scientists in injury prevention research, collaboration, and training.

Professor Anthony So was appointed Co-Convener of the United Nations Interagency Coordination Group to lead global efforts on antimicrobial resistance. In this role, he led efforts to draw upon evidence and expertise from those working in the field from UN member states and agencies, civil society and the private sector. Read more on the back page of this newsletter.

Student Highlight

Boren Fellowships
Sunny Liu, SBI, for Swahili
Kat Fallon, SBI, for Arabic
Maia Johnston, SBI, for Wolof

An initiative of the National Security Education Program, Boren Fellowships provide unique funding opportunities for US graduate students to study less commonly taught languages in world regions critical to US interests, and underrepresented in study abroad, including Africa, Asia, Central and Latin America, and the Middle East.

Faculty, Student & Staff Highlights

Student Assembly Staff Recognition Award for Outstanding Service
For the third time in 7 years, Academic Program Manager Cristina Salazar has been honored with the Bloomberg School’s Staff Recognition Award, given annually by the student body in recognition of outstanding contributions to the School and student life. Associate Professor and Associate Chair for Student Matters Maria Merritt commented: “It’s an honor to work with a colleague as wise and compassionate as Cristina. She cares about each of our students, and I’m learning continually from her about how we can most effectively put into practice our interest in students’ well-being and success.”

Assistant Scientist Sun Eun Lee received the 2018 Rainer Gross Award for Recent Innovations in Nutrition and Health in Developing Societies. Presented by the Hildegard Grunow Foundation, the award honors international nutrition scientists who generate and pursue innovative ideas and projects in nutrition and health in developing societies. See the full story on page 15 of this newsletter.

Fulbright-Fogarty Award in Public Health
Yasmin Ogale, SBI

The award is offered through a partnership between the Fulbright Program and the Fogarty International Center of the US National Institutes of Health. The award was established to promote the expansion of research in public health and clinical research in resource-limited settings.

Canadian Women in Global Health List
Alumna and Associate Faculty Nasreen Jessani and Assistant Scientist Rosemary Morgan were 2 of just over 100 Canadian women included in the first Canadian Women in Global Health List. Published by the Canadian Society for International Health, the List recognizes leaders across academia, government, non-governmental organizations, civil society, and international organizations who have made substantial contributions to global health.

Public Health Practice Award
Assanatou Bamogo, GDEC, received the master’s degree award for Excellence in International Public Health Practice from the Bloomberg School’s Office of Public Health Practice and Training. She worked with nonprofit African Cross Roads Development and the Women’s Association of Ouargaye on a campaign to increase awareness of chronic disease prevention and screen for cancer and other non-communicable diseases among rural communities in Burkina Faso.

News & Highlights

Congratulations to Our Delta Omega Honor Society Inductees

Graduate Students
Karam Chohan
Chloe Dillaway
Kathryn Gerber
Jinhee Hur
Belinda Jivapong
Diana Lu
Andrew Marsh
Neha Shah

Ashley Sheffiel
Jessi Silverman
Staci Sutermaster
Madeline Woo
Shirley Yan
Faculty Professor Sara Bennett

Faculty Highlights

Professor Joanne Katz was awarded the Ernest Lyman Stebbins Medal by Johns Hopkins Bloomberg School of Public Health for her extraordinary contributions to the School’s educational programs. She also received a Golden Apple Award from the Student Assembly, bestowed by the student body to acknowledge the recipient’s special contributions to student life. Katz serves as the Director of Academic Programs for the Department. In her role, she oversees all of the Department’s master’s and doctoral degrees, which involves more than 200 students.

Assistant Professor Abdul Bachani was named Director of the Johns Hopkins International Injury Research Unit, which is based in the Department. Bachani has played a critical role in the Unit’s first 10 years of innovation and research in global injury prevention and control. A founding member, he first served as associate director for training and capacity development before becoming deputy director. As director, Bachani continues his leadership of a diverse, multidisciplinary team of faculty and scientists in injury prevention research, collaboration, and training.

Professor Anthony So was appointed Co-Convener of the United Nations Interagency Coordination Group to lead global efforts on antimicrobial resistance. In this role, he led efforts to draw upon evidence and expertise from those working in the field from UN member states and agencies, civil society and the private sector. Read more on the back page of this newsletter.

Student Highlight

Boren Fellowships
Sunny Liu, SBI, for Swahili
Kat Fallon, SBI, for Arabic
Maia Johnston, SBI, for Wolof

An initiative of the National Security Education Program, Boren Fellowships provide unique funding opportunities for US graduate students to study less commonly taught languages in world regions critical to US interests, and underrepresented in study abroad, including Africa, Asia, Central and Latin America, and the Middle East.
Congratulations Doctoral Students
24 Successful Theses in Academic Year 2018 – 2019

Josh Colston, PHD, Global Disease Epidemiology and Control (GDEC)
Seasonality and Hydrometeorological Predictors of Rotavirus Infection in an Eight-site Birth Cohort Study: Implications for Modeling and Predicting Pathogen-specific Enteric Disease Burden

Matthew Dudley, PHD, GDEC
How Pregnant Women in the United States Perceive Vaccines for Themselves, their Close Contacts, and their Children

Karen Finnegan, PHD, Health Systems
The Measurement of Pneumonia Incidence and Mortality in Malawi in Children Under Five

Douglas Glo, PHD, Health Systems
Developing a mosaic for front-line worker collaboration in India’s Integrated Child Development Services: A step toward measuring the “missing middle” of multi-sectoral collaboration

Jaya Gupta, PHD, Health Systems
Motivating Health Workers: The Role of Nurse Mentoring in Low and Middle-income Countries

Md. Zabir Hasan, PHD, Health Systems
Social Capital and its relationship with health-related behavior and care-seeking practice in rural Uttar Pradesh, India

Michael Humes, DRPH
Assessment of a Community-Based Approach to Birth Registration in Northern Ghana

电气和 Behavioral Interventions (SBI)
Self-efficacy in addressing Menstrual needs: Construct Conceptualization and Measurement in Bangladesh Schoolgirls

Linhee Hur, PHD, Human Nutrition
Nutritional Determinants of Pubertal Development of Girls in Rural Bangladesh

Brittany Jock, PHD, SBI
Strategies to Develop, Identify, and Sustain Structural Change for Obesity Prevention in Native American Communities: Formative Research

Findings from OPREVENT2

Eunice Kagugua, PHD, GDEC
M-Health interventions to Improve Measles Vaccination Coverage and Timeliness: An Assessment of the Immediate and Long-term Impact on Vaccine-seeking in Rural Kenya

Hyunju Kim, PHD, Human Nutrition
Plant-based Petroleum Gas (LPG) Stoves and the Risk of chronic kidney disease, cardiovascular morbidity and mortality in American adults

Amy Margolies, PHD, Health Systems
Seeding Change? Improving and Understanding Household Food Security in a Nutrition-sensitive Agriculture Program in Malawi: A Mixed-methods Study

Andrew Marsh, PHD, GDEC
Assessing the Determinants of Care-seeking for Childhood illness in Rural Pune District, Maharashtra, India

Het Oo, DRPH
Saving Mothers and Children in a Post-conflict Setting: Improving the Quality of Maternal and Child Health Services in Afghanistan

Anoop Pattnaik, DRPH
Assessing the Implementation Strength of Family Planning Programs in Malawi: Methods for Collecting Data, Creating Composite Scores, and Linking to Key Outcomes

Antonio Quispe, PHD, GDEC
Challenges and Opportunities for Pursuing Malaria Elimination in Peru

Casey Risko, PHD, Health Systems
The Health Impact of Labor Rights Violations Against Migrant Workers in Selanger State, Malaysia

Jessica Rothstein, PHD, SBI
Formula Use Among Young Infants in Peri-urban Peru: Determinants, Repercussions, and Opportunities for Intervention

Saba Rouhani, PHD, GDEC
Gut Microbes, Enteropathy and Child Growth: The Role of the Microbiota in the Cycle of Diarrhea and Undernutrition in Peru

Ashley Sheffiel, DRPH
Quality of Antenatal Care Services in Low-income Countries: Investigating its Meaning and Measurement

Angela Trude, PHD, Human Nutrition
Impact of the Most Healthy Communities for Kids Intervention on Diet and Food-related Behaviors Among Low-Income Urban African American Youth and Their Adult Caregivers

Jess Wilhelm, PHD, Health Systems
The Impact of Transitioning Donor Health Programs: Evidence from the PEPFAR Geographic Prioritization in Uganda

Kendra Williams, PHD, SBI
Adoption of Liquefied Petroleum Gas (LPD) Stoves in Puno, Peru: Exploring Exclusive Use, Fuel Needs, and Time Savings

Assistant Professor Joseph All received a new grant from the National Institutes of Health (NIH) Fogarty International Center to strengthen education and capacity in research ethics in Ethiopia. All, who is also the Associate Director for Global Programs at the Johns Hopkins Berner Institute of Bioethics, will lead the project along with Dr. Adamu Addisie, associate professor in the College of Health Sciences at Addis Ababa University, and Dr. Adnan Hyder, professor and senior associate dean for research at the Milken Institute School of Public Health of George Washington University.

The initiative, called the Johns Hopkins University-Addis Ababa University Research Ethics Training Program, aims to galvanize the research ethics landscape in Ethiopia by implementing an innovative model of sustainable capacity strengthening. The five-year award is for $1.2 million.

The grant supports the development of a research ethics specialization within the existing Master of Public Health program and the creation of a dedicated research ethics unit at Addis Ababa University (AAU). The project will also help promote research around key priorities for research ethics and support a national bioethics forum in Ethiopia. Trainees at AAU will receive support to conduct research around a wide range of nationally relevant ethical issues, including those associated with informatics, genetics and genomics, and non-communicable disease research.

The JHU-AAU collaboration builds on 18 years of continuous NIH Fogarty-funded bioethics training at Johns Hopkins. The program will work with Africa-based ethics experts and existing research programs in Ethiopia to advance training, leadership, service and scholarship.

Contributor: Melissa Read

Assistant Professor Joseph All, International Health, and Associate Director for Global Programs at the Johns Hopkins Berner Institute of Bioethics

International Health Faculty Wins Award for Innovation in Nutrition and Health in Developing Societies

Assistant Scientist Sun Eun Lee received the 2018 Rainer Gross Award for Recent Innovations in Nutrition and Health in Developing Societies at the 18th Latin American Congress of Nutrition in Guadalajara, Mexico. Presented by the Hildegard Grunow Foundation, the award honors international nutrition scientists who generate innovative ideas and projects in nutrition and health in developing societies. The award is named for Dr. Rainer Gross, a renowned nutritionist who worked for years combating micronutrient deficiencies as a senior officer at UNICEF.

Lee was honored for her paper in the Journal of Nutrition titled, “Proteomics Based Global Proteinome Is Associated with Anthropometric Status of Undernourished Nepalese School-Aged Children.” The award provides international recognition for her, and her colleagues at the Bloomberg School, seminal work on plasma proteomics as a platform on which to assess micronutrient deficiencies and other aspects of malnutrition in low-income populations.

Proteomics, the study of proteins in the blood, has been shown to offer novel insights to the nutritional status of individuals. Development in proteomics has opened up enormous possibilities for measuring population-level nutritional deficiencies and excesses. While currently batteries of tests to assess these burdens in populations exist, they require extensive resources—both technological and financial—and often take years to test, analyze and report. The development and refinement of proteomic technology offers a promising single platform that could produce similar assessments in months rather than years as typically occurs, and for a fraction of the cost and labor.

Dr. Lee earned her bachelor’s and master’s degrees in Food and Nutrition from Yonsei University where she studied complex interactions of nutrition and infection. In 2015, she earned her doctorate at the Bloomberg School in the Department of International Health’s Program for Human Nutrition. She is currently working with several biotechnology firms to develop a low-cost instrument that will be capable of assessing approximately 30 identified proteins capable of predicting nutritional and health status. Dr. Lee foresees, and is pursuing, the day where the health, nutrition, and developmental inequities of child populations can be more readily assessed in low-income societies.

Hopkins alumni and faculty, including Christine Stewart, Kerry Schulze, Robert Cole, Lee S-F Wu, James Yager, John Groopman, Subarna Khatry, Parul Christian, and Keith West Jr. were also authors, as well as Nepalese scientist Ramesh Kant Adhikari.

Assistant Scientist Sun Eun Lee was honored for her paper in the Journal of Nutrition

International Health Faculty Receives NIH Fogarty Funding to Establish Research Ethics Training Program in Ethiopia

Assistant Professor Joseph All, International Health, and Associate Director for Global Programs at the Johns Hopkins Berner Institute of Bioethics

Assistant Professor Joseph All, International Health, and Associate Director for Global Programs at the Johns Hopkins Berner Institute of Bioethics
In an official ceremony at the United Nations (UN), Professor Anthony So handed off a report from the UN Interagency Coordination Group (IACG) on Antimicrobial Resistance (AMR) to UN Secretary General António Guterres. Professor So, as one of the co-conveners of the IACG, led efforts to draw upon evidence and expertise from those working in the field from UN member states and agencies, civil society and the private sector. As drug-resistant infections mount, the UN General Assembly called for the creation of this group with a mandate to provide practical guidance for approaches needed to ensure sustained, effective global action to address AMR.

At the UN, Professor So stressed that governments must urgently act on the IACG’s recommendations. “If we hope to have a future free from the fear of untreatable infections,” he warned, “we can pay now to address antimicrobial resistance—or pay much more later.” In addition to the call for immediate, planned, and united action, the IACG report notes that the toll from drug-resistant illnesses could result in 10 million deaths annually by 2050. By 2030, inaction could force 24 million more people into extreme poverty. The recommendations underscored the need for equitable and affordable access to antimicrobials, not just their effective stewardship, and aligned with the push towards universal health coverage.

Professor So’s work helps shape policies and programs that ensure access to life-saving antibiotics will be equitable and affordable for those in need. He serves as the Director of the Strategic Policy Program for ReAct - Action on Antibiotic Resistance. ReAct is a global network dedicated to meeting the challenge of antibiotic resistance. The Strategic Policy Program is also the Secretariat of the Antibiotic Resistance Coalition, comprised of civil society organizations working in health, agriculture, consumer and development sectors. Over the past year, the Program co-organized a three-day strategy conference for civil society on addressing AMR; a global teleconsultation for the Tripartite agencies (World Health Organization, Food and Agriculture Organization of the UN and the World Organization for Animal Health) on the Global Development and Stewardship Framework in advance of a Member State consultation; and convened civil society partners to discuss “Globalizing Food Campaigns: Sharing Strategies to Address Antimicrobial Resistance” in Bangkok, Thailand.

Innovation and Access to Health Technologies

Professor So also directs the School’s Innovation+Design Enabling Access (IDEA) Initiative. The IDEA Initiative has worked to foster the innovation and design of new technologies for greater health access and impact. For the Johns Hopkins Alliance for a Healthier World, he leads the thematic work on Transformative Technologies and Institutions. Through a University-wide Technology Product Lifecycle Committee, the theme has advanced discussion of norms of open access and open science to help ensure greater reach of the knowledge and innovation generated by the University.

The Initiative supports the teaching of a Summer Institute course on “Designing Transformative Innovation in Global Health” and organized the inaugural Leaders Enabling Access to Pharmaceuticals (LEAP) workshop introducing students to policy efforts to ensure innovation and affordable access to health technologies. The Initiative partners with ReAct and the International Federation of Medical Students’ Associations (IFMSA) to sponsor a global student design competition on AMR. Called Innovate4AMR, this year’s competition challenges student teams to develop innovative solutions in resource-limited healthcare settings. The WHO will support and co-fund the capacity-building workshop for the winning teams during World Antibiotic Awareness Week in Geneva (November 18 – 24, 2019). This year’s deadline to apply is September 16.