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Letter from the Director

Global and national challenges for international health bring a wave of uncertainty for the public health community, raising questions revolving around funding and what we will be able to accomplish as academic researchers in the U.S. While there may be an atmosphere of ambiguity and doubt regarding future policies, our mission remains unchanged. Our objective is to achieve accessible, cost-effective health care and healthy outcomes across the lifespan for families, communities and nations, prioritizing the most vulnerable and disadvantaged.

This has been a big year for women in public health, especially as the Johns Hopkins Bloomberg School of Public Health announced its first female dean, Dr. Ellen MacKenzie, who provides the Bloomberg School with expertise in improving trauma care systems and policy.

Our own faculty has grown with recruitment of a new health economist, global bioethics expert and health systems specialist, and more to come with open recruitments for digital health.

Our faculty, staff and students work hard each day to ensure the relevance and quality of our research and training programs.

We have made great strides in increasing our footprint in influencing the running of efficient and equitable health systems around the world. We have done this through both traditional channels of peer-reviewed publications and academic presentations, as well as more innovative channels using blogs, Facebook and Twitter. We have also enhanced our training programs with new long-term projects in countries like Afghanistan, Pakistan and Vietnam.

We have worked hard to raise the issue of vulnerable populations and equity on the global stage, emphasizing connections with the sustainable development goals and the need to prioritize on the global health agenda. We have also increased our expertise and involvement in new areas, such as the emerging field of ethics in health systems research, digital health for non-communicable diseases, and the growing threat of antimicrobial resistance.

We will continue to look for more opportunities to help the most vulnerable and disadvantaged, through research, service and training.

Adnan A. Hyder, MD, MPH, PhD
Director, Health Systems Program
Professor and Associate Chair, Department of International Health
About our Program

The Health Systems Program is part of the Department of International Health at the Johns Hopkins Bloomberg School of Public Health. In the past decade, the Program has conducted projects in over 50 countries, with particular expertise in South Asia and sub-Saharan Africa, where the greatest number of people continue to struggle with deep poverty and unmet health needs. We also work in Central and Southeast Asia, Latin America and the Middle East providing guidance and expertise to both low- and middle-income countries and transitional economies.

The Program incorporates more than 200 experts from around the world, including over 50 full-time faculty and a network of over 100 faculty associates that includes a diverse mix of physicians, economists, statisticians, anthropologists, demographers, policy analysts, social scientists, and experts in population health and international relations.

We are proud of our work with many top global public health organizations and grateful for the opportunities we have been given to improve the lives of the most poor and vulnerable around the world. The following pages demonstrate how these relationships are helping us address critical problems in global health.

Key Aims

To positively impact the poorest and most vulnerable segments of all societies
To improve the capacity of communities to deliver the best possible preventive and curative care to their respective members
To carry out our mission through research, service and training for sustainable results

Mission

“Our mission is focused on achieving accessible, cost-effective health care and healthy outcomes across the lifespan for families, communities and nations. Priority is given to populations stressed by economic, social and political instability, many of which have also been displaced by conflict or natural disasters.”
Centers

The Health Systems Program hosts the following Department of International Health centers:

- Global Obesity Prevention Center (GOPC)
  www.globalobesity.org/

- International Center for Maternal and Newborn Health (ICMNH)
  Maternalnewbornhealth.jhu.edu

- Johns Hopkins Center for Humanitarian Health (CHH)
  Hopkinshumanitarianhealth.org

- Johns Hopkins International Injury Research Unit (JH-IIRU)
  www.jhsph.edu/IIRU

The Health Systems Program collaborates with the following Department of International Health centers:

- Institute for International Programs (IIP)
  www.jhsph.edu/IIP

- International Vaccine Access Center (IVAC)
  www.jhsph.edu/IVAC

- Johns Hopkins Center for American Indian Health (CAIH)
  caih.jhu.edu

By the Numbers

- 53 full-time faculty on board in 2017
- 181 articles published in 2017
- 258 citations for articles published in 2017
- 598 articles published in 2014-2017
- 3,124 citations for articles published in 2014-2017
- 32 MSPH students in 2017
- 2 MHS students in 2017
- 24 PhD students in 2017
- 8 post-doctoral fellows in 2017
- 34 new grants in 2017
- $17.5 million value of new grants in 2017
- 79 active grants in 2017
- $82.6 million value of all new and continuing awards

Faculty Awards

Abdullah Baqui, DrPH, MPH, MBBS, Professor:
American Public Health Association: Carl E. Taylor Lifetime Achievement Award, 2017

Maria Merritt, PhD, Associate Professor:
Johns Hopkins Bloomberg School of Public Health: Student Assembly Special Recognition Award for Outstanding Commitment to Student Success, 2017

The following Department of International Health and Health Systems Program faculty received an Excellence in Teaching Award from the Johns Hopkins Bloomberg School of Public Health for the Academic Year of 2016-2017:

Sara Bennett, Professor
William Brieger, Professor
Gilbert Burnham, Professor
Anbrasi Edward, Associate Scientist
Connie Hoe, Assistant Scientist
Adnan Hyder, Professor
Qingfeng Li, Assistant Scientist
Maria Merritt, Associate Professor
Henry Perry, Senior Scientist
David Peters, Professor
 Daniela Rodriguez, Assistant Scientist
Kristen Speakman, Research Associate
The Health Systems Program works to reduce the burden of maternal morbidity in the United States by integrating clinical decision-making tools into electronic medical records.

Uganda

The Health Systems Program is working with Makerere University School of Public Health and Iganga-Mayuge Health and Demographic Surveillance Site to build local capacity to conduct research on the burden and risks of non-communicable diseases through the use of innovative digital health technologies.

Colombia

As part of Bloomberg Philanthropies Data for Health Initiative, Health Systems Program faculty are conducting research to determine how to design and deliver effective mobile phone surveys on non-communicable disease risk factor data to help guide their future use in low- and middle-income countries. In 2017, Pontificia Universidad Javeriana (ISP) in Colombia was added as a new partner.

Qatar

The Johns Hopkins International Injury Research Unit aims to strengthen high-quality research on injury prevention and control through a sustainable model of stakeholder engagement, testing interventions, and establishing injury research tools and databases through the Workplace Injury Unified Registry (WURQ) and Young Kids in Safe Seats (Y-KISS) programs.

United States

The Health Systems Program Center for Humanitarian Health is working with a wide range of local partners across multiple disciplines to prepare for and rapidly respond to public health emergencies of international concern in an agile, context-appropriate, scalable and sustainable manner.

India

Project Samuday, based in rural India’s Uttar Pradesh (UP) state, envisions creating a source code for the integrated social and economic development of its villages. UP is India’s most populous state and home to some of the country’s worst social and health indicators. Samuday is a five-year project that focuses on the holistic development of villages through optimal interventions in six sectors: livelihood, health, education, agriculture, water and sanitation and infrastructure. The three pillars of Samuday’s vision are sustainability, scalability and social involvement.

Legend

Countries where the Health Systems Program has worked

Highlighted projects as examples
The annual Consortium of Universities for Global Health (CUGH) conference features two sessions led by Health Systems Program faculty.

The second Health Systems Summer Institute hosts 39 students and offers 11 courses.

The Johns Hopkins International Injury Research Unit attends PREVCON, the Safe Kids Worldwide Childhood Injury Prevention Convention.

In collaboration with three other centers across Johns Hopkins University, the Center for Humanitarian Health hosts a symposium to discuss the health of refugees and displaced persons in Iraq and Syria.

Body of work on mobile health research is featured in a special issue of the Journal of Medical Internet Research.

Five Health Systems Program faculty members receive funding in the first round of planning grants from the Johns Hopkins University Alliance for a Healthier World Initiative.

Ethics of health systems research emerges as a field due to research conducted by the Future Health Systems Consortium, with key contributions from Health Systems Program faculty.

Dr. Abdullah Baqui, director of the International Center for Maternal and Newborn Health, receives the 2017 Carl E. Taylor Lifetime Achievement Award at the American Public Health Association Annual Meeting.

A community-based primary health care journal supplement is published by the Journal of Global Health, comprising a decade of research conducted by Dr. Henry Perry and other faculty in the Department of International Health.
Project Highlights

The Health Systems Program is a global leader in research, teaching and strategic collaborations to achieve accessible, cost-effective and healthy outcomes across the lifespan for the world’s families, communities and nations. Together with our centers and collaborators, we apply the tools and skills of research to yield discoveries that reduce the global burden of disease and disability, enhancing the health and well-being of millions of people.

Health Systems Program

Lessons Learned from Polio Eradication: In 2017, the Health Systems Program received a 5-year grant from the Bill & Melinda Gates Foundation to lead a global multidisciplinary team to help prevent decades of practical knowledge from being lost. Working with the Global Polio Eradication Initiative, the Health Systems Program will document, preserve and disseminate the polio program’s best practices to help inform future global health policy and implementation. Collaborating with academic institutions from around the world, the Health Systems Program will also develop short courses and hands-on clinics for public health students and professionals.

Global Obesity Prevention Center

Highly Extensible Resource for Modeling Supply Chains (HERMES): This “farm-to-table” model assesses all of the various processes and components involved in getting food from their source to the consumer. HERMES can help evaluate supply chain operations and performance; identify strengths, weaknesses and potential solutions; determine the impact of new technologies, designs, processes and policy changes; and help guide strategic investments. In 2017, the HERMES logistics team is working to model ways to improve the distribution of perishable, nutritious foods in Odisha, India.
Pneumonia Etiology Research for Child Health (PERCH): PERCH is the largest multi-country study of its kind in over 20 years, with sites in 7 countries, over 4,000 cases and over 5,000 controls. Before PERCH, knowledge of the etiologies of childhood pneumonia was based largely on studies from the 1980s and 1990s. With over 140 countries using pneumococcal conjugate vaccine and more than 190 countries using Hib conjugate vaccine, as well as changes in host and environmental factors, PERCH was designed to build a new evidence base to guide treatment and prevention strategies, such as new vaccines. In 2017, the peer-reviewed research journal Clinical Infectious Diseases published a supplement with 23 articles on the Foundational Basis for the Primary Etiology Results. The etiology results will be released in 2018.

Verbal Autopsy and Social Autopsy studies (VASA): Members of the Health Systems Program faculty in the Institute for International Programs are working on a project to determine the causes of death in children under five by gathering and reviewing existing data and building models to develop estimates as well as gathering new verbal autopsy (VA) and social autopsy (SA) data to directly measure stillbirths, neonatal and child mortality and their determinants in high-priority countries.

ACTION-I and ACTION-II trials: These multi-country randomized controlled trials examined the use of antenatal corticosteroids for women at risk of imminent birth in the early and late preterm period in hospitals in low-resource countries. The aim of this research was to determine whether antenatal corticosteroids are safe for women and safe and efficacious for newborns in resource-limited settings, when given to pregnant women at risk of imminent preterm birth during the early and late preterm periods in hospitals in low-resource countries.

International Center for Maternal and Newborn Health

International Vaccine Access Center
**Johns Hopkins Center for Humanitarian Health**

**Massive Open Online Course on Humanitarian Health:** Developed and launched by faculty in the Center for Humanitarian Health, the course focuses on humanitarian health and is designed for people with interests in the public health component of humanitarian emergencies.

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**Southwest Hub for American Indian Youth Suicide Prevention:** Funded by NIH, the hub is a collaborative network of tribal leaders, investigators, service providers and service users led by the Center for American Indian Health. The Hub shares resources, cultural assets and experiences with partnering communities in the White Mountain Apache, Navajo, San Carlos Apache, Hualapai and Cherokee Nations to lower the risks and incidence of youth suicide. In addition, two southwestern tribes will test a sequence of novel preventive strategies that communities can use to sustainably reduce the burden of Native American youth suicide and promote resilience. Through the study, the Center will demonstrate the effectiveness of task shifting to local, culturally embedded paraprofessionals.

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**Johns Hopkins International Injury Research Unit**

**Chronic TRIAD/JHU-MU E-TRIAD:** In 2017, the Johns Hopkins International Injury Research Unit completed its work in both the Johns Hopkins University-Makerere University School of Public Health Consequences of Trauma, Injury, and Disability (Chronic TRIAD) and Electronic Trauma, Injuries and Disability (E-TRIAD) projects. As part of the program, trainees conducted independent research in Uganda on topics related to trauma, injury and disability.
Future Plans

Attract more students, increase our scholarship numbers and funds, and develop the Health Systems Program’s ongoing Health Systems Summer Institute.

Diversify our funding base and obtain more grants so we can provide better research and results to communities in need worldwide.

Continue to exemplify good citizenship in every service interaction, both domestically and abroad.

Attract the best talent in order to keep our program strong and achieve our strategic priorities.

Leadership

Adnan A. Hyder, MD, MPH, PhD
Director, Health Systems Program
Associate Chair and Professor, Department of International Health

Shannon Doocy, PhD
Associate Director, Academic Programs
Associate Professor, Department of International Health

W. Courtland Robinson, PhD
Associate Director, Student Affairs
Associate Professor, Department of International Health

Health Systems Summer Institute

One-day to two-week courses every year in June

Learn

• To measure the burden of disease

Evaluate

• Health systems programs

Use

• Holistic systems science approaches in health systems

Courses cover a wide range of health systems areas:

• Health Equity
• Policy Advocacy
• Injury/Trauma Surveillance
• Gender Analysis
• Designing Transformative Innovation

• Primary Health Care
• Health Economics
• Qualitative Methods
• Monitoring and Evaluation
• Health Systems Management

Coursework focuses on low- and middle-income countries, but the skills are universal.