MESSAGE FROM THE CHAIR

First, let me applaud this year’s graduates for all your hard work and perseverance during this academic year. I am very proud of your accomplishments, especially given that the classroom and workplace were almost entirely virtual. I was fortunate to be able to hold one in-person class this year, and along with the students and teaching assistant, learned how to do group work while masked and at a distance from each other. Everyone showed great patience and flexibility, while being open to experimentation and carefully listening to each other.

For more than a year, public health researchers and practitioners have been working tirelessly to contain and end the COVID-19 pandemic. Along with faculty, staff, and alumni, our graduates have also been a part of this effort. The practicums and research papers documented in this yearbook demonstrate just how dedicated and resourceful they are. Despite the challenges, our students continued learning and contributing to public health and the greater good. Whether working on COVID-19 or other critical public health issues—which have not gone away just because of this pandemic—International Health students have played important roles in advancing science and improving health.

COVID-19 has demonstrated what the Department of International Health has long known: public health is both local and global. And viruses still don’t respect borders. I think this past year has taught the world this lesson—one that all International Health students know well. From its founding, the Department has recognized the central importance of understanding and working within local and national contexts, as well as with international agencies. And in each of those settings, we must stand on the health equity foundations of our work, and rely on science and collaboration to improve people’s health and well-being. These building blocks, along with the skills, tools and methods that you’ve learned, should serve you well in your careers.

I know we were all hoping for an in-person graduation this year. But a virtual celebration does not diminish your achievements. Fourteen doctoral students successfully defended their dissertations, and 77 master’s degrees were awarded. Even though you are no longer students, you will always be part of the Johns Hopkins alumni network, which will support you wherever you may be.

Lastly, I want to commend all of our students, faculty, and staff for making this such a productive and successful academic year. I thank you for all your efforts to improve the health and well-being of communities and peoples around the world.

David Peters, MD, DrPH ’93, MPH ’89
Edgar Berman Professor & Chair
Department of International Health
Johns Hopkins Bloomberg School of Public Health
**DOCTOR OF PUBLIC HEALTH DISSERTATIONS**

Allyson Bear, DrPH  
**Hypertension and Diabetes Among Childbearing Women in Rural Bangladesh: An Exploratory Study of Health Service Delivery and Pregnancy Outcomes.** Adviser: Associate Scientist Emily Gurley

N. Ilona Varallyay, DrPH  
**Health System Decision Makers at the Helm of Implementation Research: A Comparative Case Study Evaluation of an Embedded Implementation Research Model in Latin America and the Caribbean.** Adviser: Chair David Peters

**GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM MSPH CAPSTONES**

Joshua Mak, MSPH  
**Practicum:** Assessing the validity of WUENIC assumptions for publishing national vaccination coverage estimates  
**Capstone:** Measles in Zambia: Modeling the Cost of Vaccinating a Zero-dose Child Using Three Different District-level SIA Strategies. Adviser: Associate Professor Agbessi Amouzou

Jenna Sinkevitch, MSPH  
**Practicum:** Modeling pneumococcal burden of disease in children 5-19 years old  
**Capstone:** Modeling Pneumococcal Burden of Disease in Children 5 to 19 Years Old. Adviser: Assistant Professor Melinda Munos

Elizabeth Smith, MSPH  
**Practicum:** COVID-19 Health Security Research  
**Capstone:** A Preliminary Analysis Comparing U.S. State Level Non-Pharmaceutical Interventions, Closure, and Reopening Orders During the COVID-19 Pandemic. Adviser: Assistant Professor Melissa Marx

**GLOBAL DISEASE EPIDEMIOLOGY AND CONTROL PROGRAM MSPH CAPSTONES (continued)**

Sarah Arciniegas, MSPH  
**Practicum:** Unicef Adolescent Health in the Context of COVID within a larger NCDs framework  
**Capstone:** Proyecto VILLA: A Study of Violence Victimization and Access to Healthcare among Latinx Immigrants in the United States. Adviser: Professor Anna Durbin

Madeleine Blunt MSPH  
**Practicum:** Sustaining Access to Vaccines in India  
**Capstone:** National and State Level Stakeholder Perceptions of Vaccine Hesitancy in India: Lessons Learned from the Measles Rubella Campaign. Adviser: Associate Scientist Rupali Limaye

Haley Budigan, MSPH  
**Practicum:** Practicum Valuation of Vaccine Safety with Gavi  
**Capstone:** Impact of Vaccine Safety Disasters on Vaccine Uptake in Ukraine: A Qualitative Analysis. Adviser: Associate Scientist Christine Marie George

Emily Clifford, MSPH  
**Practicum:** Nurses Role in Disaster Preparedness  
**Capstone:** Supplementing the Gaps in Disaster Nursing Education Through Influenza Outbreak and Pandemic Preparedness Educational Module. Adviser: Professor Dan Salmon

Nhi Dinh, MSPH  
**Practicum:** Analysis of vaccination quality of care by public and private providers during Missed Opportunities for Vaccination (MOV) assessments  
**Capstone:** Private Sector Engagement to Strengthen Immunization Service Delivery in Sub-Saharan Africa: Insights from Health Facility Surveys. Adviser: Professor Alain Labrique

Siqi (Gina) Li, MSPH  
**Practicum:** COVID-19-related research at Beijing CDC, China  
**Capstone:** Potential Factors associated with Repeated Positive, a Prolonged Viral-shedding Case and an Outbreak Investigation of COVID-19 in Beijing, China. Adviser: Associate Professor Naor Bar-Zeev

**CAPSTONES, DISSERTATIONS, AND SCHOLARLY PAPERS**

Johns Hopkins Bloomberg School of Public Health
**Global Disease Epidemiology and Control Program**

**PhD Dissertations**

- **Steven Clipman, PhD**  
  *Phylogenetic and Network Approaches to Understanding HIV and Hepatitis C Transmission Dynamics among Key Populations in India.* Adviser: Professor Priya Duggal

- **Jennifer Gerber, PhD**  
  *Characterization of Current and Future Vaccination Challenges in the United States: Influenza and the Policy Implications of Vaccinomics.* Adviser: Professor Daniel Salmon

- **Taylor Holroyd, PhD**  
  *Trust in Public Health Authorities, School Immunization Policy, and Vaccine Knowledge, Attitudes, and Beliefs: Implications for Vaccine Decision-making.* Adviser: Professor Daniel Salmon

- **Anastasia Lambrou, PhD**  
  *Risk Assessment, Trade Network Analysis, and Modeling to Inform Avian Influenza Pandemic Preparedness and Surveillance in Chiang Rai, Thailand.* Adviser: Associate Professor Christopher Heaney

- **Pierre Muhoza, PhD**  
  *Understanding Routine Data Quality and use in Programmatic Decision-Making: The Case of DHIS2 in Senegal.* Adviser: Associate Professor Andrea Koffi

**Global Health Economics**

**MHS Scholarly Papers**

- **Rachid Barry, MSPH**  
  *Practicum: Assessment of Eye Care Service Marketing: A Study with Special Reference to Social Marketing Management Perspective In Nepal*  
  **Capstone:** *A Program Evaluation of the Refractive Error Among Children (REACH) program.* Adviser: Assistant Scientist Alain Koffi

- **Priyanka Das, MSPH**  
  *Practicum: Support to study on telemedicine and health in Maryland, through the Maryland Maternal Health Innovation Program; Examining the preparedness and responsiveness of private health sector providers during COVID-19, in India*  
  **Capstone:** *Understanding the Policy Landscape for Telehealth in Maternal Care and Its Utilization during the COVID-19 Pandemic in the U.S., with a Focus on Maryland.* Adviser: Associate Professor Andreea Creanga

- **Chaoan Dong, MSPH**  
  *Practicum: Cost-effectiveness of including the HPV vaccine in the expanded programme on immunization in China*  
  **Capstone:** *Cost-effectiveness of Adding Human Papillomavirus Vaccination in the Expanded Program on Immunization in China.* Adviser: Assistant Professor Bryan Patenaude

- **Natasha Kaushal, MSPH**  
  *Practicum: Bangladesh-Integration of Environmental and WASH interventions in rural Bangladesh*  
  **Capstone:** *Describing National Policies and Rural Health and Economic Outcomes During the COVID-19 Pandemic in Bangladesh.* Adviser: Associate Professor Shannon Doocy

**Global Health Economics**

**MHS Scholarly Papers (continued)**

- **Shyamkumar Sriram, MHS**  
  *Out-of-Pocket Health Expenditures in India.* Adviser: Associate Professor Krishna Rao

- **Arcadia Trvalik, MHS**  
  *Economic Implications of Physician Assistants and Mid-level Providers in Low-resource Health Care Systems: A Scoping Review.* Adviser: Associate Professor David Dowdy

- **Marlene Ventura, MHS**  
  *The Role of Behavioral Economics in Reducing Poverty in the U.S.: An Overview.* Adviser: Associate Professor Antonio Trujillo

**Health Systems Program**

**MSPH Capstones**

- **Breanna Buhay, MHS**  
  *Enteric Fever Cost of Illness in Nepal: Health Facility Cost and Economic Impact of the COVID-19 Pandemic.* Adviser: Assistant Scientist Cristina Garcia

- **Rachel Cooper, MHS**  
  *What is the Association Between Racial Discrimination and Hypertension in the African American Community.* Adviser: Professor David Bishai

- **Yue Jian, MHS**  
  *Economic Burden of Rare Disease in China.* Adviser: Associate Professor Antonio Trujillo

- **Alice Kuan, MHS**  
  *Analyzing the Costs of 99DOTS as a Strategy to Improve TB Treatment Adherence among Patients in Uganda.* Adviser: Assistant Scientist Andres Vecino

- **Sehr Malik, MHS**  
  *The Economics of Telemental Health.* Adviser: Associate Professor Antonio Trujillo

- **Adetoun Olateju, MHS**  
  *Costing Analysis of Conventional and GIS Sampling Methods for Household Surveys in Burkina Faso.* Adviser: Assistant Professor Bryan Patenaude

- **Pooja Sangha, MHS**  
  *Identifying the Factors Affecting COVID-19 Vaccination Intent among Pregnant and Lactating Women, Immigrants, and Young Men in Baltimore, Maryland.* Adviser: Assistant Professor Bryan Patenaude

### Congratulations New Members of the Delta Omega Honors Society

- Madeleine Blunt, MSPH
- Nhi Dinh, MSPH
- Keerthana
- Hirudayakanth, MSPH
- Joshua Mak, MSPH
- Arielle Mancuso, PhD
- Ankita Meghani, PhD
- Marwa Ramadan, PhD
- Leanne Zhang, MSPH
Hunied Kautsar, MSPH  
Practicum: Adolescent Violence and Injury Detection System; WHO Self-care for Sexual and Reproductive Health Systematic Reviews Project  
Capstone: Prescription Analysis of Primary Care Providers and Potential Excess Cost from Unnecessary Prescriptions in Bihar, India. Adviser: Associate Professor Krishna Rao

Malvikha Manoj, MSPH  
Practicum: UNICEF data and analytics; Research assistance on WHO Handbook for Conducting Assessments of Barriers to Health Services in support of Equity-oriented Reforms towards Universal Health Coverage  
Capstone: For Any Movement to Be Effective, It Must Be Home Grown: Understanding the Decolonizing Global Health Movement through the Perspectives of Actors Living & Working in Low- and Middle-Income Countries. Adviser: Associate Professor Daniela Rodriguez

Harshini Devi Sampathkumar, MSPH  
Practicum: Preparation and Response to COVID-19 in a resource-constrained setting: A case-study from Uttar Pradesh, India  
Capstone: A Narrative of Community Engagement in Preparedness and Response to COVID-19 Epidemic in Uttar Pradesh, India. Adviser: Professor Jeremy Shiffman

Aziz Sandhu, MSPH  
Practicum: Supporting the JHU / International Institute for Primary Health Care – Ethiopia Collaboration  

Ivy Stein, MSPH  
Practicum: Bloomberg Initiative for Global Road Safety  
Capstone: In Pour Taste? How the Alcohol Industry Exploited the COVID-19 Pandemic. Adviser: Assistant Professor Ligia Paina

Lauren Tejkl, MSPH  
Practicum: Public Health Standards in Migration Detention Facilities Project  
Capstone: Responsive & Resilient Health Systems for Climate-Induced Sudden-Onset Natural Disasters. Adviser: Associate Professor Shannon Doocy

Catherine Villanueva, MSPH  
Practicum: Campaign Effectiveness; Establishing an International Working Group for Health Systems and COVID-19  
Capstone: Applying Systems Thinking to 30 Years of Polio Eradication: Understanding the Dynamics Between Polio Campaigns, Frontline Health Workers, and Communities in Ethiopia, India, and Nigeria. Adviser: Associate Scientist Shivam Gupta

Sudip Bhandari, PhD  
Identification, Tool Development and Validation, and Assessment of Core Competencies of Public Health Professionals in Uttar Pradesh, India. Adviser: Chair David Peters

Arielle Mancuso, PhD  
Implementation of Health-Related Smartphone Applications in Low- and Middle-Income Countries: Scoping Review and Learnings from the ChildSafe Application in Malaysia. Adviser: Associate Professor Abdulgafoor Bachani

Ankita Meghani, PhD  
Examining the Policy and Practice Disconnect: The Impact of Data-Driven Performance Monitoring on Data Quality in India’s Public Health Sector. Adviser: Professor Sara Bennett

Marwa Ramadan, PhD  
Economic and Educational Disparities in Access, Quality and Coverage of Primary Healthcare Services in Conflict Affected Fragile States: A Sub-national Analysis of Geographic Proximity to Organized Violence and Magnitude of Disparities in Cameroon, Democratic Republic of Congo, Mali, and Nigeria  
Adviser: Professor William Brieger

Mary Champeny, MSPH  
Practicum: Registered Dietitian Practicum, Johns Hopkins WIC  
Capstone: Supporting Child Nutrition by Promoting WIC Participation from Birth Through Age Four. Adviser: Professor Laura Caulfield

Shelby Eidel, MSPH  
Practicum: Registered Dietitian Practicum, Moveable Feast  
Capstone: Increasing Hypertension Awareness through Home Blood Pressure Monitoring and Medical Nutrition Therapy in Economically Disadvantaged HIV/AIDS Patients. Adviser: Professor Laura Caulfield

Laina Ewoldt, MSPH  
Practicum: Registered Dietitian Practicum, PATH Internship  
Capstone: Assessing Measurement Tools and Interventions for Addressing Micronutrient Deficiencies in LMICs: An Overview and Call for Change Regarding the Current Paucity of Global Micronutrient Status Data. Adviser: Professor Laura Caulfield

Madeline Holt, MSPH  
Practicum: Registered Dietitian Practicum, Nutrition policy and advocacy, United States  

Mengyang (Alice) Lu, MSPH  
Practicum: Registered Dietitian Practicum, “Keep Your Pressure Down” Lifestyle Intervention Program  
Capstone: Promoting Healthy Behavioral Changes to Manage High Blood Pressure Among Johns Hopkins Medicine Employees: Lessons Learned from the “Keep Your Pressure Down” Lifestyle Intervention Program. Adviser: Professor Laura Caulfield
Jaime Marquis, MSPH  
Capstone: Addressing the Double Burden of Malnutrition for Refugees Resettling to the United States. Adviser: Assistant Professor Amanda Palmer

Tara Maudrie, MSPH  
Practicum: Strengths Based Participatory Research in American Indian/Alaska Native  
Capstone: “We Can’t Follow the Right Diets Because We Can’t Get the Right Foods”: Food Stress and Diabetes Related Psychosocial Outcomes in American Indian Communities. Adviser: Professor Joel Gittelsohn

Isabelle Page, MSPH  
Practicum: Registered Dietitian Practicum, Comprehensive Nutrition Care for Pregnant Women with “Obesity” in Baltimore, MD  

Aliya Allen-Valley, MSPH  
Practicum: Understanding and addressing community perceptions related to COVID-19 and other priority zoonotic diseases through social-behavioral research and interventions in Côte d’Ivoire  

Indira Chakravarti, MSPH  
Practicum: The CoVET study / Defining and assessing the role U.S.-based zoo and wildlife animal care workers play in infectious disease outbreak response under a One Health paradigm  
Capstone: Defining and Assessing the Role U.S.-based Zoo and Wildlife Animal Care Workers Play in Infectious Disease Outbreak Response Under a One Health Paradigm. Adviser: Associate Professor Steve Harvey

Jennifer Ching, MSPH  
Practicum: Piloting Sustainable and Scalable Strategies to Separate Young Children from Poultry and Poultry Feces  
Capstone: A Study in Poultry Poop: Piloting Sustainable and Scalable Strategies to Separate Young Children from Poultry and Poultry Feces in Rural Bangladesh. Adviser: Associate Professor Steve Harvey

Benjamin Cramer, MSPH  
Practicum: Dehumanization and Food: A Qualitative Analysis of Interviews with Incarcerated Individuals - Maryland, United States  
Capstone: The Maryland Prison Food System: As Told by Currently and Formerly Incarcerated Individuals and Prison Staff. Adviser: Professor Joel Gittelsohn

Xiaodi Xu, MSPH  
Practicum: A pilot lifestyle intervention via WeChat for prediabetic and diabetic patients in China  
Capstone: A Pilot Lifestyle Intervention for Patients with Prediabetes or Type 2 Diabetes via WeChat in China. Adviser: Assistant Professor Vanessa Garcia Larsen

Junmeng Zhang, MSPH  
Practicum: Exploration of the linkage between maternal and infant nutritional status with human milk as a mediator at 3 months postpartum in rural Bangladesh: An analysis for the JIMMI Study  
Capstone: Exploration of the Linkage Between Maternal and Infant Nutritional Status with Human Milk as a Mediator at 3 Months Postpartum in Rural Bangladesh: An Analysis for the JIMMI Study. Adviser: Senior Scientist Kerry Schulze

Monica Pasqualino, PhD  
Consumption of Eggs and Other Animal Source Foods During the Early Complementary Feeding Period in Rural Bangladesh: Strengthening Evidence for Interventions. Adviser: Assistant Professor Amanda Palmer

**CONGRATULATIONS TO THE JHSPH STUDENT ASSEMBLY AWARD RECIPIENTS FOR THEIR OUTSTANDING COMMITMENT TO STUDENT SUCCESS**

**Staff Recognition Award**

Audrey Lindahl, Senior Academic Program Coordinator International Health

**Golden Apple Award Mid-Size Class Econometrics I**

Antonio J. Trujillo, PhD  
Associate Professor  
Director, Master of Health Science in Global Health Economics  
Degree Program International Health

**HUMAN NUTRITION PROGRAM PhD DISSERTATIONS**

**Monica Pasqualino, PhD**  
Consumption of Eggs and Other Animal Source Foods During the Early Complementary Feeding Period in Rural Bangladesh: Strengthening Evidence for Interventions. Adviser: Assistant Professor Amanda Palmer
Keerthana Hirudayakanth, MSPH
Practicum: Understanding and Promoting Health Equity among Women of Reproductive Age in Peri-urban Blantyre, Malawi
Capstone: Intimate Partner Violence Prevention Curricula Review and Conceptual Framework for Curriculum Development. Adviser: Associate Professor Julie Denison

Emily Ivanich, MSPH
Practicum: Early Childhood Needs Assessment among an American Indian Tribe during COVID-19
Capstone: A Literature Review and Proposal to Enhance Understanding of the Impact of a Pandemic on Early Care and Education in an American Indian Community. Adviser: Professor Pamela Surkan

Heather Jue-Wong, MSPH
Practicum: Exemplars in Global Health study of maternal and neonatal mortality in Bangladesh and Niger
Capstone: Drivers of Maternal and Neonatal Mortality Reduction in Bangladesh: An Exemplars in Global Health Country Case Study Literature Review. Adviser: Associate Professor Caitlin Kennedy

Jingjia (Cynthia) Li, MSPH
Practicum: Implementing Smoke-Free Policies in Chinese Cities: Barriers and Facilitators - China; ISA & QoC tools and feedback project, Malawi
Capstone: Implementing Smoke-Free Policies in Qingdao: Facilitators and Barriers. Adviser: Associate Scientist Lauren Tingey

Maximillian Morris, MSPH
Practicum: Evaluation of universal antiretroviral therapy guidelines + PREVINE
Capstone: Daily Stressors and Promoters of Resiliency Among Mothers Raising Children with Microcephaly in Recife, Brazil. Adviser: Research Associate Shea Littlepage

Sofia Ryan, MSPH
Practicum: An Adaptive Randomized Evaluation of Nurse-Led HIV Treatment Retention Interventions for Women Living with HIV - Durban, South Africa
Capstone: Exploring the Barriers and Facilitators to PrEP Uptake and PrEP Adherence Among Female Sex workers: Implications for Intervention Design. Adviser: Research Associate Hannah Marker

Khalida Saalim, MSPH
Practicum: West Africa COVID-19 Media Analysis

Sherryn Sherryn, MSPH
Practicum: Rakai, Uganda, circumcision self-report validity
Capstone: Validity of Self-reported Circumcision Status: Systematic Review of Literature. Adviser: Associate Professor Caitlin Kennedy

Lillian Shipp, MSPH
Practicum: Siyaphambili PrEP Study: Assessing feasibility and preferences for a case management intervention to promote PrEP adherence for female sex workers in Durban, South Africa

Julie Stellmann, MSPH
Practicum: Piloting Group Well Mother and Child Visits for Limited English Proficiency Latino Families at Children’s Medical Practice

Xuhao Yang, MSPH
Practicum: Transition experiences from pediatric to adult care among youth living with HIV: A phenomenological study in Ndola, Zambia
Capstone: Transition Experiences from Pediatric to Adult Care Among Youth Living with HIV: A Phenomenological Study in Ndola, Zambia. Adviser: Research Associate Teresa Yeh

Leanne Zhang, MSPH
Practicum: Optimizing PrEP Engagement Among Women and Their Long-Term Partners (OPAL) in Baltimore City

Yasmin Ogale, PhD
Improving and Expanding STI Diagnosis in a Low-resource Setting: Understanding Treatment Seeking Behavior and the Acceptability of Self-collected Samples for STI Testing Among Adults in Rakai, Uganda. Adviser: Associate Professor Caitlin Kennedy.

Soim Park, PhD
Social Support and Well-being of South Koreans and North Korean Refugees. Adviser: Associate Professor Pamela Surkan.
Most photos were taken before the COVID-19 pandemic when social distancing and mask regulations were not in effect.
Department of International Health
Snapshots