Mario Einaudi CENTER FOR INTERNATIONAL STUDIES

Global Hubs Salon Series

Salon on "One Health" Thursday, April 28, 2022 | 8:15am – 9:30am EST

Facilitators

Wendy W. Wolford, Cornell University

Rachel Beatty Riedl, Cornell University

<u>Hosts</u>

Michael Stewart, Cornell University

Gabriel Trueba, Universidad San Francisco de Quito

Yik Ying Teo, National University of Singapore

Elaine Fuertes, Imperial College London

Krit Pongpirul, Chulalongkorn University

Saurabh Mehta, Cornell University

Ernest Kenu, University of Ghana

Renu Singh, The Hong Kong University of Science and Technology

Xiao-Nong Zhou and Kun Ying, Shanghai Jiao Tong University

Rebecca J. Nelson, Cornell University

Jing Huang, Peking University

Musso Munyeme, University of Zambia

Dipika Jain, O.P. Jindal Global University

Alexander J. Travis, Cornell University

Elaine Fuertes

Imperial College Research Fellow, <u>National Heart and Lung Institute</u>, <u>Faculty of Medicine</u>, Imperial College London

Elaine Fuertes is trained in epidemiology and statistics, having completed her Master's degree and PhD from the School of Public Health at the University of British Columbia in Canada. During her studies and throughout her post-doctoral work, Fuertes has shaped her research through academic exchanges in several European Institutions, including at the Institute for Risk Assessment Sciences in The Netherlands, the Helmholtz Centre for Environmental Research in Germany, the Karolinska Institute in Sweden, and the Barcelona Institute for Global Health in Spain.

Fuertes' program of work broadly focuses on investigating the influence of environmental factors on allergic diseases and respiratory health throughout the life course. She has contributed to several large international efforts, such as the <u>ESCAPE (European Study of Cohorts for Air Pollution Effects)</u> and <u>ALEC (Ageing Lungs in European Cohorts Study)</u> collaborations, and continues to keenly pursue environmental epidemiological research in international and collaborative settings.

Her most recent work investigates the respiratory health effects of various vegetation exposures (such as pollen, parks, forests, agriculture) in both urban and rural settings, and how interactions with pollution and ongoing climate change shape these relationships. She has published over 65 peer-reviewed papers, book chapters, and technical reports and is an active member of the International Society for Environmental Epidemiology and European Respiratory Society.

Jing Huang

Assistant Professor, <u>Department of Occupational and Environmental Health Sciences</u>, <u>School of Public</u> <u>Health</u>, Peking University

Jing Huang's research mainly focuses on environmental epidemiology, including built environment and population health, health impacts of air pollution, and intervention evaluation. Huang is an academic visitor in the Nuffield Department of Women's and Reproductive Health, University of Oxford. Her work is supported by the National Natural Science Foundation of China, the National Key Research and Development Program of China, and the China Association for Science and Technology.

As the first or corresponding author, Huang has published over 30 peer-reviewed papers in leading scientific journals in the field of environmental health, including *The Lancet Planetary Health, Journal of the American Society of Nephrology, Journal of the Hazardous Materials, Environment International, Environmental Research*, and *Environmental Pollution*. She serves as the Secretary of the Chinese Society for Environmental Sciences, Environmental Medicine and Health Branch, Young committee of Beijing Environmental Mutagen Society, and a member of the International Society of Environmental Epidemiology (ISEE).

Mario Einaudi CENTER FOR INTERNATIONAL STUDIES

Dipika Jain

Professor of Law; Vice Dean (Research); Vice Dean (Clinical Education); Director, <u>Center for Justice</u>, <u>Law and Society (CJLS)</u>, Jindal Global Law School, O.P. Jindal Global University

Dipika Jain's teaching and research are at the intersection of Law and Marginalization. She writes on Gender and Sexuality, Postcolonial Feminism, Public Health Law, Transgender Law, Minor Jurisprudence, Critical Legal Theory, Constitution and Social Movements, Reproductive Justice, Legal Education and Critical Pedagogies, and Empirical Legal Studies. At JGLS, she is the recipient of several teaching excellence and research excellence awards since 2009. Jain's research was recently cited by the Supreme Court in the landmark decision of *Navtej Johar v. Union of India* (2018). In 2020, her research was cited in the legislative debate on abortion laws in the Parliament.

Ernest Kenu

Associate Professor of Public Health (Epidemiology), <u>Department of Epidemiology and Disease</u> <u>Control</u>, School of Public Health, University of Ghana; Director, <u>Ghana Field Epidemiology and</u> <u>Laboratory Training Programme (GFELTP)</u>; Board Chairman, <u>African Field Epidemiology Network</u> (<u>AFENET</u>)

Ernest Kenu is a public health physician specialist, and has undertaken both local and international public health consultancies for Global Fund, USAID, MEASURE, ECOWAS, AFENET, and other organizations. His professional work focuses on three areas, namely, field epidemiology workforce development and research; public health project implementation, monitoring, and evaluation; and evaluation of disease surveillance systems. The One Health concept is the underpinning approach to training field epidemiologists. To consolidate the One Health training curriculum, the field epidemiology training at GFELTP trains residents in environmental epidemiology with special competencies in surveillance and response to chemical events. At the national level, Kenu's team is part of the One Health in Ghana, and subsequently contributed to drafting Ghana's One Health Policy which is awaiting parliamentary consideration.

Kenu has researched the epidemiology of non-communicable and infectious diseases, especially, HIV/AIDS, tuberculosis, malaria, and neglected infectious diseases with a special focus on the pharmacokinetics of anti-tuberculosis and anti-retroviral therapy in HIV and TB co-infected patients. These research works and resulting service provision oversee multi-million grants in AFENET, Nigeria, and Sierra Leone. From these, he has contributed to patient management protocols, book chapters, and published over 100 peer-reviewed articles. His current research focuses on the use of Geographical Information System (GIS) in disease surveillance, outbreak investigation and response. Already his research team has performed modeling of the environmental suitability of anthrax in Ghana for the estimation of populations at risk in order to inform vaccination and control. His future research will delve deeper into the use of GIS and environmental data in niche modeling to forecast public health threats, predict outbreaks, and institute appropriate measures.

Mario Einaudi CENTER FOR INTERNATIONAL STUDIES

Saurabh Mehta

The Janet and Gordon Lankton Professor and Director, <u>Program in International Nutrition</u>, <u>Division of</u> <u>Nutritional Sciences</u>, <u>College of Human Ecology</u>, Cornell University

Saurabh Mehta is a physician with training and expertise in infectious disease, nutrition, epidemiology, and diagnostics. He is co-leading the research coordinating center for the NIH-led Nutrition for Precision Health initiative that will combine the disciplines of artificial intelligence and nutrition to further our understanding of the variability in the individual response to interventions. In addition, he chairs the working group for nutritional assessment for the NIH-led initiative to identify biomarkers of Nutrition and Development in children and adolescents.

The theme of Mehta's research is the interplay between nutrition, inflammation, and immune function across a range of health and disease states. He has led several randomized clinical trials and studies with nutritional interventions in settings including East Africa, Latin America, and India among adults, infants, and children, and people living with HIV, Dengue virus, and TB infection. He is also the co-inventor of the <u>Cornell NutriPhone</u> and <u>FeverPhone</u>, an NSF- and NIH-funded platform for point-of-care diagnosis of nutritional status and infections. This also leverages an active surveillance program for maternal and child health and infectious disease that he has built in Guayaquil, the largest city in Ecuador. In addition, Mehta consults for the World Health Organization on topics such as tuberculosis, nutrition, and diagnostic test accuracy as well as infant feeding in infectious disease emergencies.

Musso Munyeme

Senior Lecturer in Veterinary Public Health and Wildlife Medicine; Assistant Dean, Research, <u>School of</u> <u>Veterinary Medicine</u>, University of Zambia

Musso Munyeme is the One Health Coordinator of the World Bank Project, under the <u>Africa Centre of</u> <u>Excellence for Infectious Diseases of Humans and Animals (ACEIDHA)</u>. He has over 20 years' experience solving complex problems from a One Health perspective, taking into account animal, human, and environmental health interface. His main research theme has been in Zoonotic infectious diseases at the human/livestock/wildlife interface. Through this role, he has worked on national, regional, and international public health collaborative platforms including in-depth studies related to foodborne illnesses, bacterial zoonotic diseases, emerging and remerging infectious diseases. He is actively involved in the facilitation of One Health training programs in Zambia and beyond. He has <u>published his work</u> in high impact peer reviewed scientific journals and presented his findings at various international fora. He is currently PI on a number of projects including student mobility projects such as EDUPROMO, funded under the <u>Norwegian Agency for International Cooperation and Quality Enhancement in Higher</u> <u>Education (DIKU)</u> through the Norwegian Partnership Programme for Global Academic Cooperation (NORPART). Other mobility grants are under the ERAMUS + PROGRAMME Mobility programs between the University of Zambia (UNZA) and the Swedish University of Agriculture (SLU).

Mario Einaudi CENTER FOR INTERNATIONAL STUDIES

Rebecca J. Nelson

Professor, School of Integrative Plant Science Plant Pathology and Plant-Microbe Biology Section Plant Breeding and Genetics Section; Professor, <u>Department of Global Development</u>, <u>College of Agriculture</u> <u>and Life Sciences</u>, Cornell University

From 2000-2021, Rebecca Nelson served as Scientific Director for The McKnight Foundation's <u>Collaborative Crop Research Program</u>. Nelson's <u>laboratory</u> works on plant disease resistance and mycotoxin management, which has recently brought her to a focus on circular economy for organic resources with a particular interest in ecological sanitation.

Krit Pongpirul

Associate Professor, Department of Preventive and Social Medicine, <u>Faculty of Medicine</u>, Chulalongkorn University; Assistant Director, <u>Thailand Research Center for Health Services System</u> (TRC-HS)

Krit Pongpirul is a health systems researcher, preventive medicine physician, and academic strategist. His expertise in Thai public and private health care sectors at organizational, national, and international levels has enabled him to explore various aspects of human health that are parts of one health. Following his report of the first Covid-19 case outside China in the *New England Journal of Medicine*, several works on the medical service, locally developed Covid-19 test kits, and vaccines as well as the involvement of the non-healthcare individuals such as Village Health Volunteers and flight attendants have been published in reputable peer-reviewed journals. His project proposal on wastewater-based bacterial, fungal, and viral microbiomes for Covid-19 received the Henry Boulard Public Health Award 2021. Also, his computer programming background also enables him to apply AI and Big Data in several national projects on communicable and non-communicable diseases including mass tuberculosis screening (DAC4TB), nationwide skin cancer screening (DermDD), chronic kidney disease prevention and practice program (CP3), and AI-based personalized probiotics platform (AIP3).

Rachel Beatty Riedl

Director and John S. Knight Professor of International Studies, Mario Einaudi Center for International Studies; Professor, Department of Government, College of Arts and Sciences, Cornell University

Rachel Beatty Riedl's research interests include institutional development in new democracies, local governance and decentralization, and authoritarian regime legacies in Africa. Her latest book, coauthored with Gwyneth McClendon, is *From Pews to Politics: Religious Sermons and Political Participation in Africa* (Cambridge University Press, 2019). Her previous book, *Authoritarian Origins of Democratic Party Systems in Africa* (Cambridge University Press, 2019), won the African Politics Best Book award. Riedl also cohosts the <u>Ufahamu Africa</u> podcast about life and politics on the African continent. Most recently, she was a fellow at the Nantes Institute for Advanced Study and a Fulbright

Mario Einaudi CENTER FOR INTERNATIONAL STUDIES

scholar. Previously, she was director of the Program of African Studies and an associate professor in the Department of Political Science at Northwestern University.

Renu Singh

Research Assistant Professor, <u>Division of Public Policy</u>; Junior Fellow, <u>Institute for Advanced Study</u>; Faculty Affiliate, <u>Institute for Emerging Market Studies</u>, The Hong Kong University of Science and Technology

Renu Singh's research is motivated by interests in the relationship between political institutions, public opinion, and policy change in the context of public health policy, science policy, and global health security and governance. Her work has been published or is forthcoming in *BMJ Global Health*, *International Studies Quarterly*, the *Journal of Health Politics, Policy and Law, Cleaner and Responsible Consumption, The Washington Post, Foreign Policy* magazine, *The Conversation*, and the Carnegie Endowment, among others. She has also provided commentary and political analysis on health policy issues for several organizations including CNN International, DAAD, Institut Pasteur, the COVIDCalls Podcast, and the Physicians Association for Nutrition. Singh has a BA in Political Science and a BS in Microbiology from UMass Amherst, an MS in Public Policy and Administration from LSE, and an MA and PhD in Government from Georgetown.

In addition to her roles at HKUST, she is also a Scholar at the O'Neill Institute for National and Global Health Law at Georgetown, a DAAD Research Ambassador for the Deutscher Akademischer Austausch Dienst/German Academic Exchange Service, and an Executive Board Member for the International Studies Association Global Health Studies Section. Previously, Singh was a Fulbright Fellow at the Hertie School in Berlin and a DAAD Scholar at the Helmholtz Zentrum München and the Max Planck Institute for Social Law and Social Policy in Munich.

Michael Stewart

Professor and Chair, Department of Otolaryngology – Head and Neck Surgery, Weill Cornell Medicine; Senior Associate Dean for International Affairs and Affiliations, Weill Cornell Medical College; Otolaryngologist-in-Chief, New York-Presbyterian Hospital/Weill Cornell Medical Center, **Cornell University**

Michael Stewart's research interest is in outcomes and quality of life research, and he has received research funding from the NIH and AHRQ among others. He is the author of 2 textbooks, and more than 30 book chapters and 120 peer-reviewed publications. He is the former Editor-in-Chief of *The Laryngoscope* journal. He is a past-President of the American Board of Otolaryngology – Head and Neck Surgery, and also a past-President and/or Board member of several other professional societies. He has also served as Darracott Vaughan MD Senior Associate Dean for Clinical Affairs for the Medical College. He received a BE degree *summa cum laude* from Vanderbilt University, and an MD from Johns Hopkins University School of Medicine. He completed residency training at Baylor College of Medicine, and received his MPH degree from the University of Texas School of Public Health, Houston. Stewart was an Otolaryngology faculty member at Baylor before coming to Weill Cornell in 2005.

Mario Einaudi CENTER FOR INTERNATIONAL STUDIES

Stewart is listed in Best Doctors in America and in New York by Castle Connolly and *New York* magazine. He has been a visiting professor at more than 40 institutions, and has given more than 500 invited lectures, both nationally and internationally.

Yik Ying Teo

Dean, Saw Swee Hock School of Public Health, National University of Singapore

Teo Yik Ying, or commonly known as YY, was trained as a mathematician at Imperial College, and completed his MSc and DPhil at Oxford in statistical genetics. He returned to Singapore in 2010 after working for four years concurrently as a Lecturer in Oxford and a researcher at the Wellcome Trust Centre for Human Genetics. Prior to his Deanship, he was the Founding Director for NUS' <u>Centre for Health Services and Policy Research</u>, and the Director for the <u>Center for Infectious Disease Epidemiology</u> and <u>Research</u>. He is presently a member on the Council of Scientists for the International Human Frontier Science Program, as well as a governing board member of the Regional Centre for Tropical Medicine and Public Health Network for Southeast Asia.

Alexander J. Travis

Chair and Director of the <u>Master of Public Health Program</u>, Department of Public and Ecosystem Health; Professor of Reproductive Biology, Department of Biomedical Sciences, <u>College of Veterinary</u> <u>Medicine</u>, Cornell University

Alex Travis's research explores a diverse set of subjects related to One Health, which is interdisciplinary work that links the functions and wellbeing of people, animals, and the environment. His interests include animal health and fertility as well as efforts to help alleviate poverty and hunger in developing countries, work that indirectly benefits local wildlife.

Gabriel Trueba

Professor of Microbiology, Microbial Genetics, and Molecular Biology; Director, <u>PhD Program in</u> <u>Microbiology</u>, <u>College of Biological and Environmental Sciences</u>; Founder and Director, <u>Microbiology</u> <u>Institute</u>, Universidad San Francisco de Quito

Gabriel Trueba's research interests are focused on the microbial evolutionary processes associated with the transmission of pathogens and antimicrobial resistance from animals to humans. He obtained his PhD in Veterinary Microbiology at Iowa State University in 1993.

Wendy W. Wolford

Vice Provost for International Affairs; Robert A. and Ruth E. Polson Professor, Department of Global Development, College of Agriculture and Life Sciences, Cornell University

Mario Einaudi CENTER FOR INTERNATIONAL STUDIES

As vice provost, Wendy Wolford is responsible for strengthening the university's global connections and worldwide interdisciplinary initiatives. Her research focuses on international development, land use and distribution, social mobilization, and agrarian societies with a regional concentration in Latin America—particularly Brazil. For 20 years, she has worked with one of the most important grassroots social movements in Latin American history: the *Movimento dos Trabalhadores Rurais Sem Terra* (MST), or the Movement of Rural Landless Workers. Part of Cornell's faculty since 2010, Wolford served as the faculty director of economic development at the <u>Cornell Atkinson Center for Sustainability</u>, where she co-led CARE-Cornell and Oxfam-Cornell collaborations.

Kun Yin

Professor, Shanghai Jiao Tong University School of Medicine

Kun Yin is the PI of the environmental health research group, which focuses on the optical biosensor development, infectious disease diagnosis and AMR surveillance, especially at the human-environmental interface under the one health concept. His research 1) bridges gaps among different fields and opens new opportunities for the development of novel biosensors with good sensitivity and selectivity, which have outstanding advantages in practical application; 2) applies interdisciplinary approaches to develop new tools and methods to solve current challenges in life sciences, such as disease diagnostics, medical therapeutics, as well as personalized medicine; and 3) looks at the surveillance platform development of pathogens and antimicrobial resistance at the human, animal & environmental interface.

Xiao-Nong Zhou

Vice Dean, School of Global Health, Chinese Center for Tropical Diseases Research, <u>Shanghai Jiao Tong</u> <u>University School of Medicine</u>; and Director, <u>One Health Center</u>, Shanghai Jiao Tong University – The University of Edinburgh

Xiao-Nong Zhou has worked on tropical medicine for more than 30 years, and his professional works are across the fields of ecology, population biology, and epidemiology of tropical diseases. He has been invited to make keynote speech or reports at more than 50 international academic conferences, and has written extensively on parasitology and parasitic diseases, with more than 400 peer review publications in the international journals, including *New Engl. J. Med., Lancet,* and *Lancet Infect. Dis.*, etc. He is also working as Director of the National Institute of Parasitic Diseases at the Chinese Center for Disease Control and Prevention (Chinese Center for Tropical Diseases Research) and the World Health Organization (WHO) Collaborating Centre for Tropical Diseases. He is the founding Editor-in-Chief for *Infectious Diseases of Poverty* (BioMed Central as publisher). He graduated with a PhD in Biology from Copenhagen University, Denmark, in 1994.