

## **PS 2.2**

### **INTER-SECTORAL, MULTI-SECTORAL APPROACHES: CHALLENGES (PART 1)**

## | BACKGROUND

Biodiversity, healthy ecosystems and human health and well-being are inextricably linked. Yet, we continue to see the destruction of our natural world to our own detriment.

Human ecological disruption, unsustainable consumption and production, climate change and pollution have driven both infectious and noncommunicable disease risk long before the COVID 19 pandemic. Today, the risk of both infectious disease outbreaks and noncommunicable diseases is increasing rapidly, as is the incidence of antimicrobial resistance. Increased disease risk is itself driven by increasing anthropogenic changes and the impacts of human activities on the environment. In particular, unsustainable exploitation of the environment due to land-use change, agricultural expansion and intensification, unregulated animal trade and consumption, pollution, the increased use of antimicrobials in food production systems and other drivers disrupt natural interactions and ecosystem integrity and combine to drive disease risk.

Climate change has also been implicated in disease emergence (e.g. tick-borne encephalitis in Scandinavia) and will likely cause substantial health risks in future by driving the movement of people, wildlife, reservoirs, and vectors, and spread of their pathogens, in ways that lead to new contact among species, increased contact among species, disrupt natural host-pathogen dynamics, by hindering food and nutrition security and food safety, and can also drive the risk of NCDs.

Some of the questions explored through this session will examine the main reasons that we have largely failed to value healthy ecosystems as a fundamental pathway to keeping humans healthy. It will also seek to address how key stakeholders and sectors can work together to achieve transformative change required to meet the Sustainable Development Goals and other global commitments (e.g. Paris Agreement, Post 2020 Global Biodiversity Framework).

What are the main reasons that we have largely failed to value healthy ecosystems and environments as a fundamental pathway to reducing the global burden of both infectious and non-communicable diseases?

- Lack of cross-sectoral engagement
- Inadequate political leadership/political will and public support
- Inadequate financing for multisectoral collaboration (role of taxation)
- Insufficient community empowerment (political voice, authority)
- Competing private sector interests

## | OBJECTIVES

Finding synergies to maximize co-benefits can be meaningfully achieved only through concerted multi-sector, multi-stakeholder collaboration. Newly expanded initiatives and collaborations and tools to support the implementation of One Health and other integrated approaches to health, such as Ecohealth and planetary health, and other emerging or expanded partnerships, provide essential opportunities to address both global environmental challenges and infectious and noncommunicable disease risks.

The "Inter-sectoral, Multi-sectoral Approaches" session will be divided into two parts for an in depth look at the challenges (Parallel Session 2.2) associated with siloed actions to tackle the root causes of infectious and noncommunicable disease risk and opportunities (Parallel Session 2.5) and tools for cross-sectoral and multisectoral collaboration to overcome them. It will enable participants both to engage in a constructive dialogue spanning the full breadth of the biodiversity and climate challenges that we face and to discuss opportunities for engagement to catalyze cross-sectoral action through integrated approaches such as One Health, and other integrated approaches to health.



## Panelist

### John Amuasi

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Dr. John Humphrey Amuasi is a senior lecturer at the Kwame Nkrumah University of Science and Technology (KNUST), where he is Head of the Global Health Department of the School of Public Health and Leader of the Global One Health Research Group at the Kumasi Center for Collaborative Research in Tropical Medicine (KCCR). Dr. Amuasi is also a W2 Professor of Global One Health at the Bernhard Nocht Institute of Tropical Medicine and the University of Eppendorf in Hamburg, Germany, an adjunct Professor at the University of Minnesota School of Public Health in the USA, and an Honorary Visiting Research Fellow in Tropical Medicine at the University of Oxford in the UK. Dr. Amuasi trained as a physician in Ghana, and later graduated from the University of Minnesota School of Public Health, USA, with post-graduate degrees terminating in a PhD in Health Research and Policy. Dr. Amuasi set up and was the inaugural head of the Research and Development Unit at the 1,200-bed Komfo Anokye teaching Hospital in Kumasi. For over 20 years, he has engaged in Tropical Medicine and Global Health research in LMICs - including in malaria, NTDs, AMR and One Health. He has also consulted for several Global Health-focused organizations and supported civil society organizations with technical expertise on matters related to access to drugs, vaccines, and diagnostics, as well as strategic advice related to Global Health research priorities. Dr. Amuasi's current research involves clinical and field epidemiologic studies on malaria, emerging and re-emerging infectious diseases, AMR, snakebite and other neglected tropical diseases. He currently serves as an Executive Committee member of the EDCTP2-funded African Coalition for Epidemic Research, Response and Training (ALERRT), where he leads the operational readiness and resilience work package of the Network. Through ALERRT at KCCR, he is coordinating research on the clinical characterization of COVID-19 in Senegal, Guinea, Ghana, Cameroon, Uganda, Kenya and the DRC. Dr. Amuasi also serves as PI for a number of other studies on COVID-19 in Ghana, including some phase III clinical trials for drugs and vaccines involving both consortia and pharma. He further serves as Co-Chair of The Lancet One Health Commission, an adjunct to a number of academic institutions, and as a regular technical advisor/contributor to the WHO, Africa CDC, African Academy of Sciences, and several other Global Health organizations. Dr. Amuasi is passionate about mentorship and sustainably building both clinical and non-clinical health research capacities in Africa.