

WELCOME FROM PROFESSOR JJ MUYEMBE



Since the early 1970s, the world has been experiencing a resurgence of epidemics due to infectious diseases. In the Democratic Republic of Congo (DRC), the first human cases of Mpox in 1970, the first cholera epidemics in 1974, and Ebola Virus Disease in 1976 - all of which I personally investigated - mark the start of this new era, which is characterized by outbreaks with complex modes of onset and spread, thus requiring us to rethink our approaches to

managing and controlling these major public health threats. This paradigm shift can only be achieved by moving from a classical, sometimes overly reductionist approach, to a holistic approach to innovate disease control.

The holistic, or One Health, approach to disease control means taking into account the changes affecting our global environment. Indeed, the period from the early 1970s, which marked the start of the epidemic events that we still deal with today, was also marked by profound changes affecting climate and biodiversity. As far as biodiversity is concerned, the WWF's Living Planet Report of 2020 indicates that between 1970 and 2016, the average abundance of nearly 21,000 populations among almost 4,400 species assessed fell by 68%. At the same time, species extinction rates have increased by a factor of 100 to 1,000. Today, a third of the world's land surface is used for agriculture or livestock farming, while 75% of available freshwater is used for crops or livestock. Other causes of this decline in biodiversity include the over-exploitation of forests and land, followed by wildlife trade. In terms of climate, the accelerated changes in weather patterns, once again observed since the 1970s, have led to a global increase in extreme precipitation events as well as periods of extreme heat and drought, with specific spatial distribution patterns. In socio-economic and political terms, the first half of the 1970s corresponded to the first oil crisis, the consequences of which, exacerbated by more recent crises and those that followed (climate, biodiversity, ecosystems, health), have profoundly affected the resilience of our societies against health issues affecting populations and ecosystems.

In the context of this apocalyptic picture, the responsibility of political, social and scientific leaders is to propose solutions through innovative initiatives. It is within this framework that, in addition to our previous investments through the National Institute of Biomedical Research (*Institut National de Recherche Biomédicale*; INRB), in September 2014 we launched the **Master of Ecology of Infectious Diseases, Natural Hazards and Risk Management** (*Master d'Ecologie des Maladies Infectieuses, Aléas Naturels et Gestion des Risques*; ECOM-ALGER) at the University of Kinshasa Faculty of Medicine. One

of the aims of this multidisciplinary training program is to address, among other things, the gaps observed between the profile of people working in disease control and the increasingly complex challenges in the field, which are forcing us to move away from our traditional mono-disciplinary and hyperspecialized approaches.

As we celebrate the first 10 years of the ECOM-ALGER Master's program in 2024, we would like to take this opportunity to announce that, from now on, the ECOM-ALGER Master's program, which has been run by the Faculty of Medicine's Department of Basic Sciences, will be run by the One Health Institute for Africa (*l'Institut One Health pour l'Afrique*; INOHA), created by Ministerial Order N°195/ MINESU/ CABMIN/MNB/BLB/MKK/2023 of 22/03/2023. The activities of the One Health Institute for Africa focus on research, training and support for the implementation of operational innovations within the "One Health" conceptual framework.

The **One Health Institute for Africa** will be developed through the diverse partnerships and through the integration of all existing One Health platforms, both at national and international levels. This international One Health symposium is therefore an opportunity not only to present the One Health Institute for Africa, but also to establish a framework for reflection on our collective manner to materialize One Health approaches through projects that are truly integrative and implemented in the field.

Therefore, we propose that one of the resolutions of this symposium in Kinshasa will be to institutionalize the "One Health International Symposium" (*Colloque International One Health*) to be organized every two years. This initiative will enable us to have a technical framework to support the implementation of One Health approaches, to avoid remaining in the realm of incantations of good intentions through slogans without content.

In conclusion, after more than half a century of personal investment in the fight against infectious diseases, witnessing the continuing and accelerating degradation of our ecosystems and the fragility of our societies, I have come to the conclusion that the solution for our societies can only be found through greater openness to other disciplines, through the diversification of partnerships, and all within a framework where improved national management and coordination of institutions should finally become the priority. This is the secret of our collective resilience as a human society, and I hope that future generations will remember this call to humility, tolerance and openness.

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