

OHS Workshop Greifswald – Developing sustainable One Health Surveillance strategies
01/12/2022 - 02/12/2022

Scientific workshop supported by GLOHRA



One Health Surveillance Workshop in Greifswald

Topic: Developing strategies of One Health Surveillance

Date: 01-02 December 2022

How can we better understand the interconnectedness of human-, animal- and environmental health? How can we efficiently prepare for future pandemics and mitigate them? Which practical obstacles need to be considered when aiming at sustainable longitudinal One Health surveillance? These questions were in the center of attention at the One Health Surveillance Workshop, held 01 and 02 December 2022 in Greifswald.

During two very instructive and productive days, 35 participants from 14 research institutions in Germany, Ivory Coast, Central African Republic, and Denmark met to brainstorm, forge new alliances, and develop joint concepts. In 14 short impulse presentations, the international experts on a broad range of disciplines – from infectious diseases in humans and animals, to ecology, physiology, epidemiology, climate and even psychology and law – introduced their respective experiences with individual aspects of One Health surveillance.

Subsequently, the task was to assemble these individual components into the bigger picture. To this end, groups of five to six participants sat down together to exchange ideas on *Human*

Clinical Surveillance, Wildlife Disease Monitoring, Human Risk Group Monitoring, Vector and Reservoir Monitoring, Domestic Animal Monitoring, and Ecosystem Monitoring over coffee and cookies in an informal World Café-like setting. This specific flexible format facilitated intensive and inclusive dialogue among all participants. Specific questions to answer in this session included “Which lessons did we learn from previous public health surveillance projects in Africa?”, “How do we define risk groups (and controls) in West Africa and in Germany?”, “Which parameters should be included in the different monitoring efforts?” and many others.

It soon emerged that general definitions are required to enable such interdisciplinary exchange. “Surveillance, by definition, is continuous”, one participant remarked with respect to the difference between monitoring and surveillance. Also, it was stated that the One Health approach can be regarded as a “tool, which allows us to get the most out of limited resources.” The OHS workshop, organized and hosted by Greifswald’s newly established Helmholtz Institute for One Health (HIOH), laid the foundation for successful application of this tool, by developing first concrete recommendations for action in two distinct model regions: Mecklenburg-Western Pomerania in North-East Germany and rural areas in Sub-Saharan Africa. The general consensus was that comprehensive monitoring (invasive- and non-invasive) should provide solid and broad integrated baseline data, which can then inform pathogen-focused surveillance, but should also be able to answer research hypotheses that will arise at a later stage. This will facilitate better pandemic preparedness and allow us to mitigate future threats. Moreover, efficient transfer of the resulting data into policy recommendations was emphasized as one of the long-term goals and purpose of OHS. As two participants concluded: “there must be a binding threshold value for biodiversity loss (similar to the 1.5 °C climate target)” and “a healthy environment must be a human right”.

The OHS workshop was initiated by GLOHRA members at HIOH, the University Medicine Greifswald, and the Robert Koch Institute in Berlin. With many participants representing major Greifswald-based institutions (also including the University of Greifswald and the Friedrich-Loeffler-Institut Federal Research Institute for Animal Health), and several African collaborators from Ivory Coast (Centre Suisse de Recherches Scientifiques, Centre National de Recherche Agronomique, and Centre Hospitalier Universitaire Bouaké) and Central African Republic (WWF CAR) contributing their valuable expertise and many years of experience, the workshop brought together a truly interdisciplinary and cross-sectional international team. With systematic and longitudinal One Health Surveillance as one of HIOH’s declared central pillars, the concepts developed during this workshop will be only the beginning of many years of engagement. Along the way, the consortium will continuously share their expertise and make their findings available to the scientific community and researchers within and beyond GLOHRA in follow-up workshops.



OHS Workshop Day 1



OHS Workshop Day 2