# HELMHOLTZ Institute for One Health

At HIOH, we acknowledge that human, animal and environmental health are tightly interconnected. In a comprehensive approach, we explore fundamental mechanisms of disease emergence, pathogen transmission and antimicrobial resistance - for effective pandemic preparedness and prevention.

# **Research at HIOH**

In line with the One Health approach, we focus on three main research areas, represented by three departments: Ecology and Emergence of Zoononotic Disease, Epidemiology and **Ecology of Antimicrobial Resistance and Pathogen Evolution.** 





Two central core units enable the long-term collection and analysis of samples and data from multiple sites, which form the basis for our research: The **One Health Surveillance (OHS)** Core Unit and the **Data Management and Analysis (DMA)** Core Unit.



One Health: Human, animal and environmental health are intertwined.

## Sites

**NIN** 

Our research focuses on two model regions: In the African tropics, hotspots for the emergence of zoonotic diseases and antimicrobial resistance (AMR), we have a long history of research activities and close cooperation with local partners. In addition, we examine rural regions in Mecklenburg-Vorpommern, in HIOH's immediate vicinity.

One Health Surveillance will be implemented along gradients from forests to rural areas to cities in Sub-Saharan Africa and Germany.

## Background



Globalization, climate change, increased human mobility, and loss of natural habitats enhance outbreaks and rapid global spread of infections, which cross species boundaries and often develop multi-drug resistance. As dramatically demonstrated by the Corona pandemic, our understanding of such zoonotic infections is still limited. HIOH addresses this knowledge gap, setting the stage for effective pandemic preparedness and prevention measures.



Research at HIOH relies on close eye-level cooperation with international partners and scientific excellence.

Our closest relatives, the great apes, can be sentinels for zoonitic disease.

## Cooperations

As an ideal complement to HIOH's scientific profile and competencies, close cooperation with our **local partners** University of Greifswald, University Medicine Center Greifswald and Friedrich Loeffler Institute, as well as with our **national and international partners**, strengthens our research excellence.



### About us

As an institute of the HZI, HIOH unites a variety of scientific disciplines and research interests under one roof. Since its founding ceremony in April 2022, HIOH has grown steadily and significantly. We are pleased that our team of more than 80 scientific, technical and administrative staff from more than ten nations will continue to grow over the coming months and years.

Interested in One Health? Curious about working at HIOH and living in Greifswald? Please find further background information at **www.helmholtz-hioh.de**.







We are a young and motivated team from all over the world – join us!

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