AKADEMIE DER WISSENSCHAFTEN IN HAMBURG

Press release 18 / 2023
ACADEMY OF SCIENCES AND HUMANITIES IN HAMBURG

Hamburg, 12 October 2023

Fabian Leendertz receives the Hamburg Science Prize 2023 "One Health"

Fabian Leendertz, Director of the Helmholtz Institute for One Health (HIOH) in Greifswald and a leading international expert on zoonoses, receives the Hamburg Science Prize 2023 on the topic of "One Health". The Academy of Sciences and Humanities in Hamburg honours the outstanding research work of the veterinarian and microbiologist on the One Health concept, according to which the health of humans, animals and the environment is closely linked. The prize of 100,000 euros is endowed by the Foundation "Hamburgische Stiftung für Wissenschaften, Entwicklung und Kultur Helmut und Hannelore Greve". The prize will be awarded on 30 November 2023 in Hamburg City Hall. The patron is the First Mayor of the Free and Hanseatic City of Hamburg.

Prof. Dr. Fabian Leendertz has been researching zoonoses, primarily disease agents from the animal kingdom that spread to humans, for more than 20 years. He is one of the world's leading experts in this field and has made a name for himself in ad hoc investigations into the origins of deadly disease outbreaks such as anthrax, Ebola, monkeypox and SARS-CoV-2. His research focuses on the African tropics. There, the occurrence of novel zoonoses is particularly likely due to great biodiversity, intensive and frequent human-animal contacts, strong environmental changes also caused by climate change, increasing mobility and an inadequate health infrastructure.

As the founding director of the Helmholtz Institute for One Health (HIOH) in Greifswald, which has been established in 2021, Fabian Leendertz has the opportunity to expand his research focus and use the One Health concept to research the development and ecology of zoonoses, for example. He and his team are currently working on establishing a systematic One Health long-term surveillance study in two African model regions that will run for decades. "Our goal is to use the example of two African regions to show how the One Health concept can work in a very practical way," says Fabian Leendertz. "On the other hand, it is about making such a project for surveillance and pandemic prevention copyable and scalable, i.e. transferable to other regions of the world."

By awarding the Hamburg Science Prize 2023 to Fabian Leendertz, the Academy of Sciences and Humanities in Hamburg recognises his fundamental work in the field of zoonotic infectious diseases using the One Health concept. Leendertz's research contributes significantly to a better understanding of the mechanisms of disease development and transmission between humans, animals and the environment. With the One Health long-term observation study in sub-Saharan African countries, the veterinarian and microbiologist is making an important contribution to the prevention of epidemics and pandemics.

Fabian Leendertz will use the prize money of 100,000 euros for the preliminary work on this large-scale study by the Greifswald Helmholtz Institute for One Health (HIOH). Thus, in the coming months, a team of anthropologists will explore the possibilities, limits and framework conditions of cooperation in intercultural terms with participating citizens in the Central African Republic and the Ivory Coast.

Prof. Dr. Mojib Latif, President of the Academy of Sciences and Humanities in Hamburg: "The Academy of Sciences and Humanities in Hamburg particularly promotes interdisciplinary research. We live in times of rapidly and drastically changing environmental conditions, which favours the emergence of new types of infectious diseases. To meet this challenge, we need an interdisciplinary research approach such as the One Health concept, which thinks about the health of humans, animals and the environment together. This year's laureate Fabian Leendertz is one of the pioneers in this field."

Prof. Dr. Josef Penninger, Scientific Director of the Helmholtz Centre for Infection Research (HZI): "In order to be able to meet the challenges of infectious diseases in the future, we need a holistic One Health approach that not only focuses on people, but also takes into account the interaction with climate change, animals and the environment. Fabian Leendertz is a pioneer in this field, whose previous work has provided deep insights into zoonotic disease transmission. He will continue to contribute to effective pandemic prevention and advance the One Health concept with his excellent research."

Prof. Dr. Katharina Riedel, Rector of the University of Greifswald and acting founding director of the HIOH 2021/22: "With Fabian Leendertz, the University of Greifswald has appointed a scientist with an outstanding international reputation who has gathered an excellent research team around him, with whom he is dedicating himself to the topic of 'One Health' with impressive commitment and great passion. The integration of complementary expertise from the HIOH founding partners Friedrich-Loeffler-Institut, University Medicine and the University of Greifswald, which he is driving forward, lays the foundation for a better understanding of the emergence, spread and pathogenesis of zoonoses and the development of effective and sustainable strategies for their prevention and therapy."

The award winner Prof. Dr. Fabian Leendertz

Fabian Leendertz, born in Krefeld in 1972, studied veterinary medicine at the University of Budapest and at the Free University of Berlin. For his dissertation, he investigated the clustered deaths of chimpanzees in the Taï National Park in Côte d'Ivoire and discovered a new type of anthrax. As a postdoctoral researcher, Leendertz headed the primate diseases group at the Max Planck Institute for Evolutionary Anthropology in Leipzig. After heading the junior research group on "Emerging Zoonoses" at the Robert Koch Institute, he became head of the project group

AKADEMIE DER WISSENSCHAFTEN IN HAMBURG

"Epidemiology of Highly Pathogenic Pathogens" from 2012 to 2021. In 2021, the veterinary was appointed to the ten-member WHO expert group investigating the origin of the Covid-19 pandemic. He previously led the investigation into the starting point of the West African Ebola outbreak in 2014.

After qualifying as a specialist veterinarian in microbiology, Fabian Leendertz habilitated in microbiology at the Free University of Berlin in 2016. Since 2021, he has been Professor of One Health at the University of Greifswald and founding director of the Helmholtz Institute for One Health (HIOH) in Greifswald; the institute is a site of the Helmholtz Centre for Infection Research.

The United Nations Environment Programme (UNEP) has awarded Fabian Leendertz the "Champion of the Earth Award" in the category "Science and Innovation" in recognition of his commitment to nature conservation in 2020. Fabian Leendertz is active in a wide range of committees, including the advisory board of the One Health Initiative of the German Federal Ministry for Economic Cooperation and Development (BMZ) and the National Research Platform for Zoonoses, which will be transformed into a One Health Platform from the end of 2023.

About the Hamburg Science Prize

The Academy of Sciences and Humanities in Hamburg awards the Hamburg Science Prize every two years. The prize has been announced for the eighth time for 2023. It is endowed with 100,000 euros and is sponsored by the Foundation "Hamburgische Stiftung für Wissenschaften, Entwicklung und Kultur Helmut und Hannelore Greve".

The previous themes and award winners:

- 2021 "Artificial Intelligence in Medicine": Prof. Dr. Dr. Fabian Theis, Helmholtz Zentrum München and Technische Universität München
- 2019 "Congenital rare diseases": Prof. Dr. Jutta Gärtner, Department of Paediatrics and Adolescent Medicine, University Medical Centre Göttingen
- 2017 "Energy Efficiency": Prof. Dr. Xinliang Feng, Center for Advanced Electronics, Dresden University of Technology, and Prof. Dr. h. c. mult. Klaus Müllen, Max Planck Institute for Polymer Research, Mainz
- 2015 "Nanosciences": Prof. Dr. Prof. E. h. Dr. h. c. Roland Wiesendanger, Department of Physics, University of Hamburg
- 2013 "Dementia Research": Prof. Dr. Mathias Jucker, Hertie Institute for Clinical Brain Research, Tübingen
- 2011 "Energy Research": Prof. Dr. Ferdi Schüth, Max Planck Institute for Coal Research, Mülheim an der Ruhr
- 2009 "Infection Research": Prof. Dr. Stefan Ehlers, Borstel Research Centre and Christian-Albrechts-Universität zu Kiel

AKADEMIE DER WISSENSCHAFTEN IN HAMBURG

Free image material is available for download at (Copyright: HIOH / Johanna-Eberhardt):

https://www.awhamburg.de/aktuell/presse/pressemitteilungen/detailseite/18-2023-fabian-leendertz-erhaelt-den-hamburger-wissenschaftspreis-2023-one-health.html

Contact persons for media enquiries:

Dagmar Penzlin
Press and public relations
Academy of Sciences in Hamburg
Phone: +49 40 42 94 86 69-24

presse@awhamburg.de
www.awhamburg.de

X: https://twitter.com/awhamburg

Dr. Ruth Suchsland Scientific Coordinator Helmholtz Institute for One Health (HIOH) Fleischmannstrasse 42 17489 Greifswald

Phone: +49 3834 39 16 122

<u>ruth.suchsland@helmholtz-hioh.de</u> https://www.helmholtz-hioh.de

X: https://twitter.com/Helmholtz HIOH

If you do not wish to receive future news from the Academy of Sciences in Hamburg, please send a short email with the subject "Unsubscribe press release mailing" to: presse@awhamburg.de.

The Academy of Sciences and Humanities in Hamburg

The Academy of Sciences and Humanities in Hamburg brings together top researchers from all areas of science in northern Germany. It contributes to intensifying cooperation between subjects, universities and other scientific institutions. It promotes research on socially important issues of the future and fundamental scientific problems and makes it its special task to provide impulses for dialogue between science and the public. The Academy's basic funding is provided by the Free and Hanseatic City of Hamburg. The President of the Academy is Prof. Dr. Mojib Latif. The Academy of Sciences in Hamburg is a member of the Union of the German Academies of Sciences and Humanities.

The Helmholtz Institute for One Health (HIOH) in Greifswald

The Helmholtz Institute for One Health (HIOH) in Greifswald was founded in 2021 as an external site of the Helmholtz Centre for Infection Research (HZI). In close cooperation with its local founding partners, the University of Greifswald, the University Medical Centre Greifswald and the Friedrich-Loeffler-Institut Federal Research Institute for Animal Health Greifswald-Riems, the HIOH is dedicated to interdisciplinary research into the connections between human, animal and environmental health. The goal is a better understanding of zoonotic diseases, antimicrobial resistance and the evolution of pathogens as a prerequisite for successful pandemic preparedness and prevention.