

Global challenges and opportunities for vaccines

An interdisciplinary workshop organized by the *Helmsys* consortium

When: 30th of Nov - 1st of Dec 2023

Where: Kloster Bernried at Lake Starnberg, near Munich, Germany

Organizers



M. Habib, MBBS, MPH
Center for Global Health (CGH)
Technical University
of Munich (TUM)



A. Siebner, BSc.
Institute for Tropical Medicine
(ITM)
University Clinic Tübingen

Background and context

Vaccines are one of the most successful public health interventions and their development and evaluation has mainly taken place in the Global North. Hence, this 2-day interdisciplinary workshop brought together an international and interdisciplinary group of stakeholders and scientists working in the context of vaccines to discuss exceptional challenges for vaccines especially in resource-constrained settings. The topics that contextualized were: basic understanding of the underlying host's immune system especially in the context of co-infections such as with parasites and implications for vaccine response; new vaccine targets and human challenge models; unique challenges of vaccine trials in especially in low-resource settings; understanding tools, standards, and approaches to assess the safety, efficacy, and quality of vaccines in various contexts; conceptualizing vaccine confidence in low and high resource contexts; improving vaccine equity and fair immunization globally.



Thematic areas and presenters

C. Bogdan
Friedrich-Alexander-Universität Erlangen-Nürnberg, Erlangen, DE

Standards and evaluation

Host immune system

R. Lang
University Clinic Erlangen, Erlangen, DE

Mouse models

Clinical trials

G. Hendrickx
University of Antwerp, Antwerp, BL

Vaccine confidence

New vaccine targets

M. Breloer

Bernhard-Nocht Institute for Tropical Medicine, Hamburg, DE

J.N. Komguep

Global Schistosomiasis Alliance/ University of Cape Town, SA & CR

J. Mayer

Johannes Gutenberg-University, Mainz, DE

M. Yazdanbakhsh

Leiden University Medical Center, Leiden, NL

E. Ndungo

University of Maryland School of Medicine, USA

A. Fathi

University Medical Center Hamburg-Eppendorf, Hamburg, DE

A. Elliott

LSHTM Uganda Research Unit, UK & UG

B. Mordmüller

Radboud University Medical Center, Nijmegen, NL

A. A. Adegnika

Center for Medical Research in Lambaréne (CERMEL), GA

U. Protzer

Technical University of Munich, Munich, DE

Format

The workshop was formatted as a series of presentations around thematic areas (as above) in the first part of the day and rounded off in the second part with a panel discussion (1st day) and group activity (2nd day).

The participants had a visit around the historical monastery of the workshop venue and also visited



Outcomes

The presentations and panel discussion and group activities shed light on the various, interdisciplinary aspects of vaccine research, especially within the context of 'ideal' parameters to evaluate in clinical trials for existing and novel vaccine targets, in light of emerging in vivo and experimental evidence. This also highlighted crucial research gaps in existing evidence and provided some insights into future directions for research. This will reflect in three aspects: (i) a more rich and nuanced discussion and analysis of evidence generated by the HelmSys systematic review; (ii) further opportunities for ECR, especially those connected to GLOHRA, to pursue collaborations, training and capacity building within the opportunities brought together by this workshop; (iii) an independent publication about the workshop proceedings, conceptualized and drafted by A. Siebner (UKT, HelmSys Consortium), and endorsed by all presenters and participants, expected to be published in ca. Summer 2024.

Early career researcher D. Berny and senior scientist F. Prodjionto appreciated the new collaborations fostered by our workshop especially with West African scientists



We are thankful to GLOHRA for their support!

