

German-African Workshop Freie Universität Berlin & Kenya Medical Research Institute

Parasite Infections in Global Health:

Socioeconomics, Nutrition, Drug Resistance & Immunity



November 21 – 22, 2023

Location: Freie Universität Berlin, Veterinarium Progressum, Oertzenweg 19b, 14163 Berlin

Meeting Link:

https://fu-berlin.webex.com/fu-berlin-en/j.php?MTID=mc6a6bb0e622f16774b508b8ba6af2a9e

Organizer:

Prof. Dr. Susanne Hartmann, Institute of Immunology, Centre for Infection Medicine, Department of Veterinary Medicine, Freie Universität Berlin

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PROGRAM

Tuesday 21st of November

9:15 Opening and Introduction by Dean for Research Prof. Marcus Fulde and Prof. Susanne Hartmann

9:30 – 11:00 Social Determinants and Economics

Chair Susanne Hartmann

Dr. Doris Njomo (KEMRI-ESACIPAC, Nairobi) Integrating Social and Behaviour Change Communication Strategies in Hygiene and Nutrition with Mass Drug Administration for Elimination of Soil-Transmitted Helminthiasis in Kenya

Prof. Dr. Lothar Wieler (Hasso-Plattner-Institute, Potsdam) Human to human transmission of nontyphoidal Salmonella by asymptomatic convalescing children under five years in low-resource settings poses a risk to vulnerable household and community members

Dr. Francisco Pozo Martin (Robert Koch-Institute, Berlin) *The economics of soil-transmitted helminth infection prevention and control*

11:00 – 11:30 *Coffee Break*

11:30 – 13:00 Tropical Diseases

Chair Sebastian Rausch

Prof. Dr. Frank Mockenhaupt (Charité Berlin, Institute of International Health) *Malaria epidemiology and disease manifestation*

Dr. Maurice Odiere (KEMRI-CGHR, Kisumu) Schistosomiasis and soil-transmitted helminthiasis research and how this is shaping NTD policy

PD Dr. Jürgen Krücken (FU Berlin, Institute for Parasitology and Tropical Veterinary Medicine) *Tungiasis, a neglected tropical disease*

13:00 – 14:00 Lunch Break

14:00 – 15:30 Nutrition and Infection

Chair Josephine Schlosser-Brandenburg

Prof. Dr. Jürgen Zentek (FU Berlin, Institute of Animal Nutrition) Nutrition and gut health in monogastric animals

Prof. Dr. Sarah Atkinson (KEMRI-Wellcome Trust, Kilifi and Oxford University) *Nutrition and* Ascaris *infection*

Philipp Höfler (FU Berlin, Institute of Immunology) Ascaris *infection and fibre nutrient supply in pigs*

15:30 – 16:00 *Coffee Break*

16:00 – 18:00 Drugs & Drug Resistance

in humans

Chair Susanne Hartmann

Prof. Dr. Georg von Samson-Himmelstjerna (FU Berlin, Institute for Parasitology and Tropical Veterinary Medicine) Anthelmintic resistance: A major health problem in animals and a considerable threat

Dr. Hannah Behrens (Bernhard Nocht Institute, Hamburg) Impact of different mutations on Kelch13 protein levels, artemisinin resistance and fitness cost in Plasmodium falciparum malaria parasites

Zaneta Kidiavai (FU Berlin, Institute of Immunology) *Energy metabolism of* Ascaris suum *larvae exposed to artemisinin and its derivatives*

Shahin Tajeri (FU Berlin, Institute for Parasitology and Tropical Veterinary Medicine) *A* Theileria annulata *parasite with a single mutation in cytochrome B is drug resistant*

Prof. Dr. Raffi Aroian (University of Massachusetts, Worcester, USA) *Developing a simple-to-manufacture anthelmintic for soil-transmitted helminths*

Wednesday, 22nd of November

9:30 – 11:00 Immunity to Malaria and Helminths

Chair Susanne Hartmann

Prof. Dr. Francis Ndungu (KEMRI-Wellcome Trust, Kilifi and Oxford University) Using experimental medicine to understand immunity to malaria

Dr. Sebastian Rausch (FU Berlin, Institute of Immunology) *T cell responses to intestinal nematode infections*

Robert Mugo (FU Berlin, Institute of Immunology) Antibodies to Ascaris excretory/secretory products as marker for an active Ascaris infection

11:00 – 11:30 *Coffee Break*

11:30 - 13:00 Coinfections

Chair Sebastian Rausch

Dr. Erick Muok (KEMRI-CGHR, Kisumu) Neglected Infectious Diseases (NIDs) in western Kenya: Historical studies in schistosomiasis and how that has shaped current interventions

Dr. Josephine Schlosser-Brandenburg (FU Berlin, Institute of Immunology) *The impact of tissue-invasive helminths on hepatic antiviral immunity*

Ankur Midha (FU Berlin, Institute of Immunology) Consequences of Ascaris-Salmonella coinfection on macrophages in pigs

13:00 – 13:45 Lunch Break

14:00 – 14:30 Veterinary Medicine Campus Tour and visit of Institute of Immunology

14:30 End of Meeting