The German National Academy of Sciences Leopoldina brings together the expertise of some 1,500 distinguished scientists to bear on questions of social and political relevance, publishing unbiased and timely scientific opinions. The Leopoldina represents the German scientific community in international committees and pursues the advancement of science for the benefit of humankind and for a better future.

The Academy of Science of South Africa (ASSAf) aspires to be the apex organisation for science and scholarship in South Africa, recognised and connected both nationally and internationally. Through its membership which represents the collective voice of the most active scholars in all fields of scholarly enquiry, ASSAf aims to generate evidence-based solutions to national problems.

Contact:
Dr Jan Nissen
German National Academy of Sciences Leopoldina
Phone: +49 (0)345 472 39 - 834
Email: jan.nissen@leopoldina.org
www.leopoldina.org

Registration
Participation is free of charge. For participation at the symposium and/or the panel discussion, please kindly register here: www.leopoldina.org/en/infectious-diseases

New Research Perspectives on Infectious Diseases in Africa and Germany

Joint Symposium by the German National Academy of Sciences Leopoldina and the Academy of Science of South Africa (ASSAf)

Max Planck Institute for Infection Biology
Charitéplatz 1 | Campus Charité Mitte | 10117 Berlin

Infectious diseases represent an ongoing and severe threat to human health and prosperity of societies. Due to emerging and modifying diseases, increasing resistances as well as global travelling, infectious diseases can only be combated by internationally coordinated and interdisciplinary approaches. The German National Academy of Sciences Leopoldina, the Academy of Science of South Africa and the Max Planck Institute for Infection Biology organize the current symposium to discuss and coordinate most recent research results in the areas of HIV, tuberculosis, neglected diseases and resistance mechanisms. The speakers are mainly young scientists from Germany, South Africa and further African countries. Moreover, during a panel discussion with representatives from science, politics and society, ethical dimensions of clinical trials will be debated. The scientific coordinators of this event are Stefan H. E. Kaufmann ML, Max Planck Institute for Infection Biology, Germany and Quarraisha Abdool Karim, Columbia University, USA, and University of KwaZulu-Natal, South Africa.

The Schering Foundation and the Robert Bosch Foundation generously support this event financially. This includes the Science & Society Session (Schering Foundation) and the overall organisation (Robert Bosch Foundation).
Programme

Monday, 24 October 2016
9:00 – 9:30 | Registration
9:30 – 9:45 | Welcome Addresses & Introduction
Stefan H. E. Kaufmann ML
Max Planck Institute for Infection Biology, Germany
Quarraisha Abdool Karim
Columbia University, USA, and University of KwaZulu-Natal, South Africa

Keynote I
9:45 – 10:15
Emerging infections – lessons learned from recent outbreaks
Marylyn Addo
University Medical Centre Hamburg-Eppendorf, Germany

Session 1: HIV
Chair: Kerrigan McCarthy
National Institute for Communicable Diseases, South Africa
10:15 – 10:45
HIV-1 subtype C infected children
Zandile Ditsa
National Institute for Communicable Diseases, South Africa
10:45 – 11:15 | Coffee Break

11:15 – 11:45
Prevention of mother-to-child transmission of HIV: implementation and outcomes of Option B+
Stefanie Theuring
Charité – Universitätsmedizin Berlin, Germany
11:45 – 12:15
Mathematical modelling of RS and X4 HIV: from within host dynamics to the epidemiology of HIV infection
Edna Chilenje Manda
University of Zambia, Zambia
12:15 – 13:00 | Lunch Break

Session 2: Novel Intervention Strategies for Neglected Diseases
Chair: Marylyn Addo
University Medical Centre Hamburg-Eppendorf, Germany
13:15 – 13:45
Challenges in clinical research in Africa
Meral Esen
University Hospital Tübingen, Germany
13:45 – 14:15
An evolutionary approach to identify novel vaccine targets against Plasmodium falciparum
Raymond Babilis Nyasra
University of Buea, Cameroon
14:15 – 14:45
Antimycobacterial activity of the hydroethanolic extract, partitions, fractions and compounds from Solanum torvum leaves
Joseph Nguta
University of Ghana, Ghana
14:45 – 15:00 | Group Photo
15:00 – 15:15 | Coffee Break
15:15 – 15:45
Antiprotozoal and antimalarial plants from the Ethiopian flora
Mariamawit Yonathan Yeshak
Addis Ababa University, Ethiopia
15:45 – 16:15
Antibodies in urine and potential diagnosis of Schistosoma infection
Salma Medani El Hag Medani
National Center for Research, Sudan
16:15 – 16:30
Quarraisha Abdool Karim
Columbia University, USA, and University of KwaZulu-Natal, South Africa
Stefan H. E. Kaufmann ML
Max Planck Institute for Infection Biology, Germany
16:30 – 17:00 | Break

Wrap-Up Day 1
16:15 – 16:30
Quarraisha Abdool Karim
Columbia University, USA, and University of KwaZulu-Natal, South Africa
Stefan H. E. Kaufmann ML
Max Planck Institute for Infection Biology, Germany
16:30 – 17:00 | Break

Science & Society Session of the Schering Foundation:
“Ethical Dimensions in Clinical Trials”
Venue: Foyer Max Planck Institute for Infection Biology
Moderator: Stefan H. E. Kaufmann ML
Max Planck Institute for Infection Biology, Germany
17:00 – 17:15 | Welcome Addresses & Introduction
Jörg Hacker ML
President Leopoldina, Germany
Stefan H. E. Kaufmann ML
Max Planck Institute for Infection Biology, Germany
17:15 – 17:40 | Input Statement
The state of health research and financing in Sub-Saharan Africa
Debrework Zewdie
City University of New York, Graduate School of Public Health and Health Policy, USA
17:40 – 19:00 | Panel & Plenary Discussion
Günter Nooke
Personal Representative of the German Chancellor for Africa in the Federal Ministry of Economic Cooperation and Development and BMZ’s Commissioner for Africa, Germany
Debrework Zewdie
City University of New York, Graduate School of Public Health and Health Policy, USA
Quarraisha Abdool Karim
Columbia University, USA, and University of KwaZulu-Natal, South Africa
David M. Serwadda
Makerere University, Uganda
19:00 | Reception

Tuesday, 25 October 2016

Keynote II
9:00 – 9:30
Emerging and re-emerging infectious diseases: challenges for Africa
David M. Serwadda
Makerere University, Uganda

Session 3: Resistance Mechanisms
Chair: Debrework Zewdie
City University of New York, Graduate School of Public Health and Health Policy, USA
9:30 – 10:00
Relationship between ldr genotypes and phenotypic-resistance to pyrethroids and DDT insecticides in Anopheles gambiae
Innocent Djegbe
Université des Sciences, Arts et Techniques de Natitingou, Benin

10:00 – 10:30
Strategies for combating bacterial infections in the light of antibiotic resistance development
Thomas Böttcher
Max Planck Institute for Infection Biology, Germany

10:30 – 11:00 | Coffee Break

11:00 – 11:30
Quantitative determinants of antibiotic resistance evolution
Tobias Bollenbach
Institute of Science and Technology Austria, Austria

11:30 – 12:00
The power of indigenous knowledge towards antimicrobial discovery
Never Mwambela Zekya
Nelson Mandela African Institute of Science and Technology, Tanzania

12:00 – 12:30
Discovery and functions of small regulatory RNAs in the major human pathogens Helicobacter pylori and Campylobacter jejuni
Sandy Peirroz
University of Würzburg, Germany
12:30 – 13:30 | Lunch Break

Session 4: Tuberculosis
Chair: Stefan H. E. Kaufmann ML
Max Planck Institute for Infection Biology, Germany
13:30 – 14:00
Human latent M. tuberculosis infection drives differentiation of ESAT-6-specific CD4 T cells to a greater degree than Ag85A-specific cells
Muynazrat Muwavi
University of Cape Town, South Africa
14:00 – 14:30
Needles in haystacks: the search for biomarkers of tuberculosis
January Weiner
Max Planck Institute for Infection Biology, Germany
14:30 – 15:00 | Coffee Break
15:00 – 15:30
Unvisited players of eicosanoid pathway in Mycobacterium tuberculosis infection: Cysteinyl leukotrienes
Mumin Ozturk
University of Cape Town, South Africa
15:30 – 16:00
Human immune system mouse model for tuberculosis
Debrework Zewdie
Max Planck Institute for Infection Biology, Germany

Wrap-Up Day 2 & Close of Symposium
16:00 – 16:30
Quarraisha Abdool Karim
Columbia University, USA, and University of KwaZulu-Natal, South Africa
Stefan H. E. Kaufmann ML
Max Planck Institute for Infection Biology, Germany
ML = Member of Leopoldina