



**Organized by
The International Alliance for Biological Standardization
IABS
Pembroke College Oxford
United Kingdom
February 6-7, 2020**

PROVISIONAL AGENDA – OCTOBER 9, 2019

v. OCTOBER 14, 2019

Scientific Committee

**Andrew Pollard, co-Chair Scientific Committee; University of Oxford, United Kingdom
Robert Sauerwein, co-Chair Scientific Committee, Radboud University Medical Center, Nijmegen
Pieter Neels, Chair Human Vaccine Committee, International Alliance for Biological Standardization (IABS)**

Ivana Knezevic	World Health Organization, Switzerland
Rebecca Sheets	International Alliance for Biological Standardization (IABS), U.S.A.
Claudia Emerson	McMaster University, Canada
Marc Gurwith	PaxVax Inc., San Diego, CA, USA.
Anna Durbin	Johns Hopkins Bloomberg School of Public Health, U.S.A.
William Ripley Ballou	GlaxoSmithKline, U.S.A.
Martin Broadstock	Medical Research Council, United Kingdom
Helen McShane	University of Oxford, United Kingdom
Paul Kaye	University of York, United Kingdom
Kirsty E.K Mehring-Le Doare	Imperial College of London, United Kingdom
Peter J.M. Openshaw	Imperial College of London, United Kingdom
Daniela Ferreira	Liverpool School of Tropical Medicine, United Kingdom
Adrian Wildfire	S.G.S., United Kingdom

THURSDAY FEBRUARY 6th

- 08:00 Registration
- 8:30 Introduction
Andrew POLLARD, co-Chair Scientific Committee; University of Oxford, United Kingdom
Robert SAUERWEIN, Radboud University Medical Center, Nijmegen, The Netherlands
Pieter NEELS, Chair Human Vaccine Committee, International Alliance for Biological Standardization (IABS)

Session 1 - The Role of Challenge Models

Chairs:

- 09:00 Overview: What is the role of challenge studies?
Myron LEVINE, University of Maryland School of Medicine, U.S.A. –
- 09:15 Case study: Group A Streptococcus
Joshua OSOWICKI, University of Melbourne, Australia
- 09:30 Case study: Typhoid/Paratyphoid
Andrew POLLARD, University of Oxford, United Kingdom
- 09:45 Case study: RSV
TBC
- 10:00 Case Study: Shigella
TBC
- 10:15 Discussion
- 10:40 Coffee break

Session 2 - Regulation – GMP and the Trial Challenge

Chairs:

- 11:10 Regulation in the U.S.
TBC
- 11:25 European survey of regulation
Nele BERTHELIS, Federal Agency for Medicines and *Health* Products (FAMHP), Belgium
- 11:40 Global variation in regulation
Pieter NEELS, Chair Human Vaccine Committee, International Alliance for Biological Standardization (IABS)
- 11:55 Case study: Leishmaniasis
Paul KAYE, University of York, United Kingdom
- 12:10 Case study: Hepatitis C
TBC
- 12:25 Case study: Malaria
Robert SAUERWEIN, Radboud University Medical Center, Nijmegen, The Netherlands
- 12:40 Discussion
- 13:00 Lunch

Session 3 - Ethics (supported by Medical Research Council Hic-Vac network)

Chairs:

- 13:45 Philosophical perspective for HIC and LMIC
Michael SELGELID, Monash University, Australia
- 14:00 Ethics of human challenge in LMIC
TBC
- 14:15 Guidelines for ethics committees in HIC
Hugh DAVIES, University of Oxford, United Kingdom
- 14:30 WHO Roadmap to ethics
Katherine LITTLER, World Health Organization (WHO), Switzerland
- 14:45 Case study: Neisseria gonorrhoea
Marcia HOBBS, University of North Carolina, U.S.A.
- 15:00 Case study: Dengue
Anna DURBIN, Johns Hopkins Bloomberg School of Public Health, U.S.A.
- 15:15 Case study: Schistosomiasis
Meta ROESTENBERG, Leiden University Medical Center, The Netherlands
- 15:30 Discussion
Led by Simon KOLSTOE, University of Portsmouth, United Kingdom
- 15:50 Tea break

Session 4 – Children

Chairs:

- 16:15 Systematic review of Challenge studies involving children
Kate EMARY, University of Oxford, United Kingdom
- 16:30 Philosophy & ethics of challenging children
Claudia EMERSON, McMaster University, Canada
- 16:45 Regulatory perspective
TBC
- 17:00 Discussion
- 17:25 Summary of the day
- 17:30 Drinks & Dinner

FRIDAY FEBRUARY 7th

- 07:30 Breakfast

Session 5 – Threat to the Community and Environmental Safety Session

Chairs:

- 08:30 Challenges in safety of enteric challenge in Asia
Cherry KANG, Christian Medical College, Vellore, India
- 08:45 Case study: Containment of respiratory viruses
Adrian WILDFIRE, S.G.S., United Kingdom

- 09:00 Case study: Norovirus –
Robert Frenck, University of Cincinnati, U.S.A.
- 09:15 Case study: Zika
Philippe MAYAUD, Uganda
- 9:30 Discussion

Session 6 – Recruitment, engagement, advertising and incentive

Chairs:

- 09:55 Compensation – how much is the right amount?
Alberto Giubilini, University of Oxford, United Kingdom
- 10:10 Volunteer’s experience
Blanché OGUTI, University of Oxford, United Kingdom
- 10:25 Coffee break
- 10:55 Public engagement in Kenya for malaria challenge
Philip BEJON, KEMRI Wellcome Trust Research Programme, Kenya
- 11:10 Risks and challenges in engagement in LMIC
Roma CHILENGI, Center for Infectious Disease Research, Zambia;
Cherry KANG, Christian Medical College, Vellore, India
- 11:25 Discussion

Session 7 – Pre-existing immunity

Chairs:

- 11:50 Where should we go for our challenge studies? Is pre-existing immunity the thing?
Wellcome and BMGF Strategy
- 12:05 Case study: Malaria case study on the influence of pre-existing immunity
Philip Bejon, KEMRI Wellcome Trust Research Programme, Kenya
- 12:20 Case study: Zika
Anna DURBIN, Johns Hopkins Bloomberg School of Public Health, U.S.A.
- 12:35 Discussion
- 13:00 Lunch

Session 8 – Clinical, immunological, and microbiological endpoints

Chairs:

- 14:00 What we should look for as immunological endpoints
Prof. Helen McShane, University of Oxford, United Kingdom
- 14:15 Case study: RSV immunity and human challenge
Peter OPENSHAW, Imperial College of London, United Kingdom
- 14:30 Case study: GBS microbiological endpoints
Kirsty E.K MEHRING-LE DOARE, Imperial College of London, United Kingdom
- 14:45 Case study: Case study: Influenza; impact of pre-existing immunity on study end points
Rebecca COX, University of Bergen, Norway
- 15:00 Case study: Malaria
Robert SAUERWEIN, Radboud University Medical Center, Nijmegen, The Netherlands
- 15:15 Discussion

Session 9 – What is the future

Chairs:

- 15:40** **Summing up – Funding challenges**
 Bill & Melinda Gates Foundation, U.S.A.; Wellcome Trust, United Kingdom
- 15:45** **Summing up – Ethical and regulatory challenges**
 Pieter Neels, Chair Human Vaccine Committee, International Alliance for Biological Standardization (IABS)
- 15:50** **Final word**
 Chairs
- 16:00** **Tea and Close**