

Consultation on Global Trends of HIV Drug Resistance

Sponsored by
National Institute of Allergy and Infectious Diseases

Goals

To identify research gaps for HIV Drug Resistance (HIVDR) in low and middle income countries (LMIC) and to develop collaborations between key members of academia, government, industry, and non-profit organizations to address these gaps through an actionable plan.

May 3 and 4, 2016
5601 Fishers Lane, Room 1D13
Rockville, Maryland

*Conference attendees and/or presenters are responsible for meals and/or light refreshments on their own and at their own cost.
Government staff and/or Government contractors may not be involved in the provision or facilitation of food and/or light refreshments for conference attendees and/or presenters.*

AGENDA

May 3 (Tuesday), 2016

- 7:00-8:00 **Registration**
- 8:00-8:10 **Welcome and Opening Remarks**
Anthony Fauci (National Institutes of Allergy and Infectious Diseases)
- 8:10-9:25 **Session 1: Current State of HIVDR Monitoring in LMIC: What Do We Know & What Do We Need to Know?**
Deenan Pillay (University College London/Africa Centre)
- 8:10-8:25 **Tackling HIVDR to deliver 90 90 90: What do we need to do?**
Silvia Bertagnolio (World Health Organization)
- 8:25-8:40 **HIVDR Testing within the PEPFAR Program**
Elliot Raizes (U.S. Centers for Disease Control and Prevention)
- 8:40-8:55 **Global HIVDR after Antiretroviral Therapy Rollout**
Ravi Gupta (University College London)
- 8:55-9:25 **Discussion**

- 9:25-10:50 Session 2: Is HIVDR Still a Concern Given New Drug Regimens?**
Dan Kuritzkes (Harvard University/Brigham and Women's Hospital)
- 9:25-9:40 **High Rates of HIVDR Complicate ART Choices for Children and Adolescents**
George Siberry (Office of the U.S. Global AIDS Coordinator)
- 9:40-9:55 **Can We Use Sequential Regimens in lieu of HIVDR Testing?**
Mark Boyd (University of New South Wales)
- 9:55-10:10 **Not All Drug Regimens are Created Equal**
Mark Wainberg (McGill University)
- 10:10-10:25 **Use of Modelling to Inform Policy on Responding to Potential Future High Levels Of Pre-Treatment Drug Resistance**
Andrew Phillips (University College London)
- 10:25-10:55 **Discussion**
- 10:55-11:05 **Break**
- 11:05-12:35 Session 3: New Technologies for HIVDR Testing**
Roger Paredes (irsiCaixa AIDS Research Institute)
- 11:05-11:20 **Next Generation Sequencing for HIVDR**
Christos Petropoulos (Monogram Biosciences)
- 11:20-11:35 **Allele-specific and other New Assays for HIVDR: Implications for Point-of-Care Testing**
Lisa Frenkel (University of Washington)
- 11:35-11:50 **Use of Dried Blood Spots and Other Alternative Specimen Collection Methods For HIVDR Testing**
Deborah Persaud (John Hopkins University Children's Center)
- 11:50-12:05 **Can Phylogenetic Testing be Used to Identify HIVDR Hotspots?**
Richard Harrigan (BC Centre for Excellence in HIV/AIDS)
- 12:05-12:35 **Discussion**
- 12:35-1:40 **Lunch**

- 1:40-2:55** **Session 4: What Else Do We Need To Know About HIVDR Virology?**
John Mellors (University of Pittsburgh)
- 1:40-1:55 **New Mutations and Cross Resistance**
Robert Shafer (Stanford University)
- 1:55-2:10 **Are Minor Variants Important?**
Jonathan Li (Harvard University)
- 2:10-2:25 **Does Subtype Matter in HIVDR?**
Carole Wallis (Lancet Laboratories and BARC-SA)
- 2:25-2:55 **Discussion**
- 2:55-3:10 **Break**
- 3:10-4:40** **Session 5: Implementation Gaps in HIVDR Testing**
Jon Kaplan (U.S. Centers for Disease Control and Prevention)
- 3:10-3:25 **HIVDR Testing in the Developing World: India's Experience**
Nagalingeswaran Kumarasamy (YR Gaitonde Centre for AIDS Research and Education)
- 3:25-3:40 **Economics of HIVDR Testing**
Emily Hyle (Harvard University/Massachusetts General Hospital)
- 3:40-3:55 **Lessons Learned from Scale-Up of Viral Load Testing in LMIC: Could Viral Load Testing be Harnessed to Help Reduce HIVDR?**
Steve Reynolds (National Institutes of Allergy and Infectious Diseases & John Hopkins University School of Medicine)
- 3:55-4:10 **Challenges with HIVDR Testing in a Real-World LMIC Setting**
Arlene Chua (Institute of Infectious Diseases and Epidemiology)
- 4:10 **Discussion**

May 4 (Wednesday), 2016

- 8:30-9:45** **Session 6: Leveraging Resources within Existing Networks for HIVDR Testing**
Charles Boucher (Erasmus Medical Center)
- 8:30-8:45** **NIAID Funded Clinical Trials Networks (AIDS Clinical Trials Group {ACTG}, HIV Prevention Trials Networks {HPTN}, International Maternal Pediatric Adolescent AIDS Clinical Trials {IMPAACT})**
Robert Coombs (University of Washington)
- 8:45-9:00** **Monitoring HIVDR in Africa and Asia: Experience of the Pan-African (PASER) and TREAT Asia (TASER) Studies to Evaluate HIV Resistance**
Raph Hamers (Amsterdam Institute for Global Health & Development)
- 9:00-9:15** **Bill and Melinda Gates Foundation-Funded Cohorts (Phylogenetics and Networks for Generalized HIV Epidemics in Africa {PANGEA study})**
Deenan Pillay (University College London/Africa Centre)
- 9:15-9:45** **Discussion**
- 9:45- 10:00** **Break**
- 10:00-11:00** **What Are the High Priority Questions From Each of the Sessions?**
Douglas Richman (University of California San Diego), Deenan Pillay (University College London/Africa Centre), Dan Kuritzkes (Harvard University/Brigham and Women's Hospital), Roger Paredes (IrsiCaixa AIDS Research Institute), John Mellors (University of Pittsburgh), Jon Kaplan (U.S. Centers for Disease Control and Prevention) and Charles Boucher (Erasmus Medical Center)
- 11:00-1:00** **Develop Action Plan Items and Methods to Address Them**
Representatives from Office of the U.S. Global AIDS Coordinator (OGAC), World Health Organization (WHO), Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), and Bill and Melinda Gates Foundation (BMGF)
- 1:00** **Closing Remarks**
Carl Dieffenbach (National Institutes of Allergy and Infectious Diseases)