The Science of Malaria Eradication

February 2–7, 2014
Merida, Yucatan, Mexico

Scientific Organizers: Pedro L. Alonso, Chetan E. Chitnis and Lee Hall

Organized in collaboration with MESA – Malaria Eradication Scientific Alliance. Part of the Keystone Symposia Global Health Series, travel awards supported by the Bill & Melinda Gates Foundation.

Global Health Travel Award Application Deadline: September 4, 2013
Discounted Abstract Deadline: October 10, 2013
Student/Postdoc Scholarship Application Deadline: October 10, 2013
Abstract Deadline: November 5, 2013
Discounted Registration Deadline: December 3, 2013

For more information and to view the program, visit www.keystonesymposia.org/14F1.
The Science of Malaria Eradication

Meeting Program

SUNDAY, FEBRUARY 2, 2014
Arrival and Registration

MONDAY, FEBRUARY 3, 2014
Keynote Address
Speaker to be Announced

Different Strategies for Disease Eradication
Dyann F. Wirth, Harvard School of Public Health, USA
The Parasite Population in Control, Elimination and Eradication
Fabrizio Tediosi, Swiss Tropical and Public Health Institute, Switzerland
Eradication: The Economic Case
Frank O. Richards, Carter Center, USA
Pragmatic Approaches: Where to Start with Elimination

Reducing Vectorial Capacity
Jetsumon Prachumsri, Mahidol University, Thailand
Inhibition of Parasite Development in Different Vectors
Anthony A. James, University of California, Irvine, USA
Genetic Manipulation of Mosquitos
Marcelo Jacobs-Lorena, Johns Hopkins Bloomberg School of Public Health, USA
Fighting Malaria with Engineered Symbiotic Bacteria from Vector Mosquitoes

Health Systems Research
Speaker to be Announced
David Smith, Johns Hopkins Bloomberg School of Public Health, USA
How Stable is Elimination?
Thomas A. Smith, Swiss Tropical and Public Health Institute, Switzerland
Modeling Intervention Mixes

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, FEBRUARY 4, 2014

Drugs and Drug-Based Strategies for Eradication
Elizabeth Ann Winzeler, University of California San Diego, School of Medicine, USA
Genetic Approaches to Identify New Targets
Timothy N.C. Wells, Medicines for Malaria Venture (MMV), Switzerland
Drug Discovery for Malaria Eradication, Liver Stages and Gametocytoidal Agents
Marcus G. Lacerda, Tropical Medicine Foundation of Amazonas, Brazil
Drugs for Plasmodium vivax
Speaker to be Announced
Short Talk(s) Chosen from Abstracts

Health Systems Research
Speaker to be Announced
David Smith, Johns Hopkins Bloomberg School of Public Health, USA
How Stable is Elimination?

Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, FEBRUARY 5, 2014

Vaccines for Eradication
David Kaslow, PATH, USA
Profiling Immune Responses to Inform Vaccine Development
Patrick E. Duffy, National Institute of Allergy and Infectious Diseases, USA
Targeting Transmission Stages
Stephen L. Hoffman, Sanaria, USA
Whole Cell Organisms
Speaker to be Announced
Short Talk(s) Chosen from Abstracts

Measurement of Transmission
Richard W. Steketee, Malaria Control Program, PATH, USA
Measuring Transmission
Ivo Mueller, Barcelona Centre for International Health Research (CRESIB) and the Walter & Eliza Hall Institute, Spain
Transmission of Plasmodium vivax
Sarah K. Volkman, Harvard School of Public Health, USA
Using Genomics to Understand Malaria Transmission toward Elimination and Eradication

Short Talk Chosen from Abstracts

Poster Session 3

THURSDAY, FEBRUARY 6, 2014

Parasite-Host Interactions
Robert E. Sinden, Imperial College London, UK
Identifying Biological Challenges: Trojan Horses of the Parasite Life-Cycle
Hernando Del Portillo Obando, Barcelona Centre for International Health Research (CRESIB), Spain
Reticulocyte-Derived Exosomes: An Intercellular Communicator in Plasmodium vivax Malaria?
Oliver Billker, Wellcome Trust Sanger Institute, UK
Signaling Pathways for Development of Transmission Stages

Short Talk(s) Chosen from Abstracts

Surveillance for Elimination
David Bell, Foundation for Innovative New Diagnostics (FIND), Switzerland
Diagnostic Priorities: Sustaining Gains When Parasites and Funders Are Waning
Justin M. Cohen, Clinton Health Access Initiative (CHAI), USA
Surveillance Strategies to Guide Elimination Operations
Marcel Tanner, Swiss Tropical and Public Health Institute, Switzerland
Surveillance and Response: The Challenges for Science and Elimination Actions

Keynote Address
Peter C. Agre, Johns Hopkins Malaria Research Institute, USA
Opening Doors Worldwide through Medical Science

FRIDAY, FEBRUARY 7, 2014

Departure

Information is current as of August 6, 2013 but subject to possible change. Please visit www.keystonesymposia.org/14F1 for the most up-to-date program information.
SUNDAY, FEBRUARY 2
Arrival and Registration

MONDAY, FEBRUARY 3
Opening Remarks
Chetan E. Chitnis, International Centre for Genetic Engineering and Biotechnology, India
Lee Hall, NIAID, National Institutes of Health, USA

Different Strategies for Disease Eradication
*Lee Hall*, NIAID, National Institutes of Health, USA
Dyann F. Wirth, Harvard School of Public Health, USA
*The Parasite Population in Control, Elimination and Eradication*
Frank O. Richards, Carter Center, USA
Pragmatic Approaches: Where to Start with Elimination – Different Strategic Lessons that Can Be Learned from NTD Programs
Euzebiusz Jamrozik, Monash University, Australia
Short Talk: Bioethics of Malaria Elimination

Reducing Vectorial Capacity
*Marcel Tanner*, Swiss Tropical and Public Health Institute, Switzerland
Jetsumon Sattabongkot Prachumsri, Mahidol University, Thailand
*Inhibition of Malaria Parasite Development in Different Vectors*
Anthony A. James, University of California, Irvine, USA
Genetic Approaches for Controlling Transmission of Mosquito-Borne Diseases: Focus on Malaria
Marcelo Jacobs-Lorena, Johns Hopkins Bloomberg School of Public Health, USA
*Fighting Malaria with Engineered Symbiotic Bacteria from Vector Mosquitoes*
Austin Burt, Imperial College London, UK
Short Talk: Self-Sustaining Strategies for Reducing Malaria Transmission Using Homing Endonuclease Genes (HEGs)

Poster Session 1

TUESDAY, FEBRUARY 4

Drugs and Drug-Based Strategies for Eradication
*Stephen A. Ward*, Liverpool School of Tropical Medicine, UK
Elizabeth A. Winzeler, University of California, San Diego, USA
*Using Phenotypic Screening and Forward Genetics to Find Targets for a Malaria Elimination Agenda*
Timothy N.C. Wells, Medicines for Malaria Venture, Switzerland
*Discovery and Development of New Medicines for Eradication: Integrating with Translational Medicine*
Marcus V.G. Lacerda, Tropical Medicine Foundation Dr. Heitor Vieira Dourado, Brazil
*Drugs for Plasmodium vivax in the Context of Eradication*
Frédéric Ariey, Institut Pasteur, France
A Molecular Marker of Artemisinin-Resistant Plasmodium falciparum Malaria

Chanaki Amaratunga, NIAID, National Institutes of Health, USA
Short Talk: In vitro Correlates of Artemisinin-Resistant P. falciparum Parasite Subpopulations in western Cambodia

Ingrid Chen, University of California, San Francisco, USA
Short Talk: Low-Dose Primaquine to Reduce the Transmission of Plasmodium falciparum Malaria: A Roadmap Update

Health Systems Research
*Regina N. Rabinovich*, ISGlobal, Spain / Harvard T.H. Chan School of Public Health, USA, Spain
Marcel Tanner, Swiss Tropical and Public Health Institute, Switzerland
*Dynamics of Malaria Infection: Implications for Elimination*
David L. Smith, Institute for Health Metrics and Evaluation, USA
How Stable Is Elimination?
Felipe De Jesus Colón González, Abdus Salam International Centre for Theoretical Physics, Italy
Short Talk: A Regional-Scale, High Resolution Dynamical Model for Malaria

Sian E. Clarke, London School of Hygiene and Tropical Medicine, UK
Short Talk: Intermittent Parasite Clearance in Schools in Mali: Impact on Malaria, Anaemia and Cognition

Alyssa E. Barry, Walter and Eliza Hall Institute, Australia
Short Talk: Contrasting Population Biology of Plasmodium falciparum and Plasmodium vivax in Papua New Guinea: Implications for Malaria Control

Poster Session 2

WEDNESDAY, FEBRUARY 5

Vaccines for Eradication
Chetan E. Chitnis, International Centre for Genetic Engineering and Biotechnology, India
*Plasmodium falciparum Malaria: A Roadmap Update*

Stephen L. Hoffman, Sanaria, USA
Plans for Development of the PfSPZ Vaccine for Use in Malaria Elimination

Patrick E. Duffy, NIAID, National Institutes of Health, USA
Transmission-Blocking Vaccine and Assay Development

David Kaslow, PATH, USA
Talk Title to be Announced

Carlota Dobaño, Barcelona Centre for International Health Research (CRESIB)
Approaches and Challenges in Profiling Immune Responses to the RTS/s Vaccine Candidate

Veronique Beiss, Fraunhofer IME, Germany
Short Talk: Evaluating PfGap50 as a Component of Novel Recombinant Subunit Vaccines Derived from Plants

Daria Nikolaeva, National Institutes of Health / University of Oxford, UK
Short Talk: Functional Characterization of Novel Plasmodium falciparum Transmission-Blocking Vaccine Targets

* Session Chair † Invited but not yet accepted     Program current as of October 17, 2017. Program subject to change. Meal formats are based on meeting venue. For the most up-to-date details, visit www.keystonesymposia.org/14F1.
Measurement of Transmission

*Dyann F. Wirth, Harvard School of Public Health, USA
Richard W. Steketee, PATH – MACEPA, Malaria Control Program, USA

Measuring Malaria Transmission Reduction in a Program Context in Sub-Saharan Africa

Ivo Mueller, Walter and Eliza Hall Institute, Australia

Determining Transmission of P. vivax and P. falciparum in Three Non-African Settings

Sarah K. Volkman, Harvard T.H. Chan School of Public Health, USA

Using Genomics to Understand Malaria Transmission toward Elimination and Eradication

Ana Maria Fonseca, ISGLOBAL, Barcelona Institute for Global Health, Spain

Short Talk: Dissecting VAR2CSA to Develop a Pregnancy-Specific Serologic Assay to Quantify Malaria Transmission Intensity

David M. Newman, University of Exeter, UK

Short Talk: The Use of Haemogin as a Diagnostic Biomarker at Different Stages in the Lifecycle of Plasmodium falciparum

Poster Session 3

THURSDAY, FEBRUARY 6

Parasite-Host Interactions

*Jetsumon Sattabongkot Prachumsri, Mahidol University, Thailand

Robert E. Sinden, Imperial College London, UK

Identifying Biological Challenges: Trojan Horses of the Parasite Life Cycle

Hernando del Portillo Obando, Barcelona Centre for International Health Research (CRESIB)

Reticulocyte-Derived Exosomes: An Intercellular Communicator in Plasmodium vivax Malaria?

Oliver Billker, Wellcome Trust Sanger Institute, UK

Signaling Pathways for Development of Transmission Stages

Gabriele Pradel, RWTH Aachen University, Germany

Short Talk: The Role of the Perforin-Like Protein PPLP2 during Egress of Malaria Gametocytes from the Red Blood Cell

Abhinav Sinha, R D Gardi Medical College, India

Short Talk: Identification of a Gene that Is Essential for Commitment to Gametocytogenesis in Malaria Parasites

Surveillance for Elimination

*Ivo Mueller, Walter and Eliza Hall Institute, Australia

Richard W. Steketee, PATH – MACEPA, Malaria Control Program, USA

Monitoring, Evaluation and Surveillance for Malaria Elimination Programs

Justin M. Cohen, Clinton Health Access Initiative (CHAI), USA

Defining Operational Surveillance Strategies for Malaria Elimination Programs

Thomas A. Smith, Swiss Tropical and Public Health Institute, Switzerland

Surveillance and Response: The Challenges for Science and Elimination Actions

Keynote Address

Peter C. Agre, Johns Hopkins Malaria Research Institute, USA

Opening Doors Worldwide through Medical Science

Concluding Remarks

Chetan E. Chitnis, International Centre for Genetic Engineering and Biotechnology, India

Lee Hall, NIAID, National Institutes of Health, USA

FRIDAY, FEBRUARY 7

Departure