

2019 IMMID Workshop Series on Molecular and Translational Medicine

Workshop 3

New Approaches to Control and Eliminate Malaria



DREXEL UNIVERSITY

Institute for

**Molecular Medicine
& Infectious Disease**

College of Medicine

October 23, 2019
245 N. 15th Street
Philadelphia, PA

NEW APPROACHES TO CONTROL AND ELIMINATE MALARIA

Organizers:

Akhil Vaidya, PhD

Professor, Department of Microbiology & Immunology
Drexel University College of Medicine

James Burns, PhD

Professor, Department of Microbiology & Immunology
Drexel University College of Medicine

9:30 AM *Introductory Remarks*

Brian Wigdahl, PhD

Professor and Chair, Department of Microbiology and Immunology
Director, Institute for Molecular Medicine and Infectious Disease
Drexel University College of Medicine, Philadelphia, PA

Charles B. Cairns, MD

Annenberg Dean and Senior Vice President of Medical Affairs
Drexel University College of Medicine, Philadelphia, PA

SESSION 1

9:45 AM *Opening Remarks*

Chair: **Bill Bergman, PhD**

9:55 AM **Audrey Odom John, MD, PhD**

Division Chief, Infectious Diseases
The Children's Hospital of Philadelphia

A breath of fresh air – volatiles in malaria and beyond

11:00 AM **Joshua Hoong Yu Tan, PhD**
Radcliff Department of Medicine
University of Oxford
Discovery of human monoclonal antibodies against Plasmodium falciparum

12:00 PM **Lunch**
Lunch will be provided for all meeting attendees

SESSION 2

1:00 PM *Opening Remarks*
Chair: **Michael Mather, PhD**

1:00 PM **Suyash Bhatnagar, PhD**
Postdoctoral Fellow, Department of Microbiology and Immunology
Drexel University College of Medicine
A genetic trap: Resistance imparting PfATP4 mutations result in hypersensitivity to other antimalarials

1:15 PM **Aarti Ramanathan** (PhD Candidate)
Department of Microbiology and Immunology
Drexel University College of Medicine
Oligomerization is essential for the functioning of the anti-malarial drug target PfATP4

1:30 PM **Avantika Ahiya** (PhD Candidate)
Department of Microbiology and Immunology
Drexel University College of Medicine
Discovering the unexpected role of cholesterol homeostasis in blood stages of malaria parasites

1:45 PM **Flaminia Catteruccia, PhD**
Professor, Department of Immunology and Infectious Disease
Harvard T.H. Chan School of Public Health
Harnessing mosquitoes to kill malaria parasite

2:45 PM **Break**
Snack provided

SESSION 3

3:15 PM *Opening Remarks*

Chair: **Hangjun Ke, PhD**

3:15 PM **Jacqueline Eacret, PhD**

Postdoctoral Fellow, Department of Microbiology and Immunology
Drexel University College of Medicine

A new tool to facilitate development of a multivalent, multi-stage malaria vaccine

3:30 PM **Sezin Nicklas, PhD**

Postdoctoral Fellow, Department of Microbiology and Immunology
Drexel University College of Medicine

Nonenzymatic functions of a citrate synthase-like protein in Plasmodium falciparum

3:45 PM **Swati Dass** (PhD Candidate)

Department of Microbiology and Immunology
Drexel University College of Medicine

Divergent mitochondrial ribosomes in unicellular parasitic protozoans

4:00 PM **Mike Riscoe, PhD**

Professor, Department of Molecular Microbiology and Immunology
Oregon Health and Science University

The discovery and development of ELQ-300, a new drug for prevention and treatment of malaria

5:00 PM **Adjourn**