

# KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

## 21st Century Drug Discovery and Development for Global Health (S3)

October 17-20, 2018 • Hotel Palace Berlin • Berlin, Germany

Scientific Organizers: Ken Duncan, Elizabeth Winzeler and Lluís Ballell

Part of the Keystone Symposia Global Health Series, supported by the Bill & Melinda Gates Foundation

Global Health Travel Award Deadline: May 15, 2018 / Abstract & Scholarship Deadline: June 19, 2018 / Abstract Deadline: July 17, 2018 / Discounted Registration Deadline: August 16, 2018

### WEDNESDAY, OCTOBER 17

#### Arrival and Registration

### THURSDAY, OCTOBER 18

#### New Therapeutics for Global Health

**Nathalie Strub Wourgaft**, Drugs for Neglected Diseases initiative, DNDi, Switzerland

*Transformative New Therapies for Human African trypanosomiasis*

**Thierry T. Diagana**, Novartis Institute for Tropical Diseases, USA  
*Progress with Cipargamin and KAF156 in Phase 2 Development for Treatment of Malaria*

**Lluís Ballell**, GlaxoSmithKline, Spain  
*Novel Drug Candidates to Address the Threat of Antibacterial Resistance in the Developing World; TB and Shigella*

**Short Talk(s) Chosen from Abstracts**

#### Robust Target Validation – What Does it Mean?

**Elizabeth A. Winzeler**, University of California, San Diego, USA  
*Multi-Disciplinary Approach to Target Identification, Validation and Prioritization in Plasmodium*

**Dirk Schnappinger**, Weill Cornell Medical College, USA  
*Combining Chemical Probes and Genetic Knockdowns to Validate Drug Targets in Mycobacterium tuberculosis*

**Boris Striepen**, University of Pennsylvania, USA  
*Using Molecular Genetics to Understand and Combat Cryptosporidium.*

**Short Talk Chosen from Abstracts**

### FRIDAY, OCTOBER 19

#### Importance of Chemical Diversity in Seeking New Leads

**Ghotas Evindar**, GlaxoSmithKline, USA  
*Experience with DNA-Encoded Libraries in Search for New Leads against TB and Malaria*

**E. Paige Stout**, Sirenas, USA  
*Application of Data-Mining and Deep Learning to Identify New Leads from Marine Natural Products*

**Judy A. Sakanari**, University of California, San Francisco, USA  
*Screening a Repurposing Library for Agents with Macrofilicidal Activity*

**Charles E. Mowbray**, Drugs for Neglected Diseases Initiative, Switzerland  
*A New Era of Orally Active Treatments for Leishmaniasis Patients*

**Short Talk(s) Chosen from Abstracts**

#### Workshop 1: Novel Clinical Trial Design

**Short Talks Chosen from Abstracts**

#### Alternative Approaches to Drug Delivery – Opportunities and Challenges

**Paul L. Feldman**, Intarcia Therapeutics, USA  
*Application of the Intarcia Medici Drug Delivery System for Long-Acting HIV Pre-Exposure Prophylaxis*

**Andrew Martin Bellinger**, Lyndra, USA

*Development of Oral, Ultra Long-Lasting, Sustained Release Therapies in the Fight against Malaria and HIV*

**Arnab Chatterjee**, Calibr, USA  
*Chemoprophylaxis for Prevention of Malaria Infection*

**Short Talk Chosen from Abstracts**

#### Poster Session 1

### SATURDAY, OCTOBER 20

#### Improving Target and Phenotypic-based Approaches

**Leann M. Tilley**, University of Melbourne, Australia  
*The Proteasome as a Target for New Antimalarial Drugs*

**Kirsten Hanson**, University of Texas, San Antonio, USA  
*Profiling Compounds against Liver Stage Malaria*

**Deborah Hung**, Broad Institute, USA  
*Multiplex Screening of an M. tuberculosis Hypomorph Library Simultaneously Identifies Lead and Target*

**Marc Gitzinger**, BioVersys AG, Switzerland  
*A SMART Approach to Reversing Drug Resistance in TB*

**Short Talk(s) Chosen from Abstracts**

#### Poster Session 2

#### Workshop 2: Opportunities for Repurposing to Discover New Candidates or Mature Starting Points

**Short Talks Chosen from Abstracts**

#### Translational Tools for Predicting Efficacy and Resistance

**Wesley C. Van Voorhis**, University of Washington, USA  
*Pharmacodynamic Modeling of Anti-Cryptosporidium Drug Efficacy*

**Yingda L. Xie**, NIAID, National Institutes of Health, USA  
*Improving Predictive Value of Phase 2a TB Models through PET/CT Imaging*

**Cristina Donini**, Medicines for Malaria Venture, Switzerland  
*Role of Controlled Human Infection Model in Decision-Making and Portfolio Management in Malaria*

**Short Talk Chosen from Abstracts**

### SUNDAY, OCTOBER 21

#### Departure