

KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

Antimicrobials and Resistance: Opportunities and Challenges (T4)

October 29-November 1, 2017 • Eldorado Hotel & Spa • Santa Fe, New Mexico, USA

Scientific Organizers: Gautam Dantas and Jennifer A. Leeds

Supported by the Directors' Fund

Abstract & Scholarship Deadline: / Abstract Deadline: / Discounted Registration Deadline:

SUNDAY, OCTOBER 29

Arrival and Registration

MONDAY, OCTOBER 30

Welcome and Keynote Address

Ramanan Laxminarayan[†], Center for Disease Dynamics, Economics and Policy, USA

Antimicrobials and Resistance: Managing a Shared Global Resource

Surveillance and Treatment of Resistant Bacterial Infections in Clinical Practice

John Marriott[†], University of Birmingham, UK

Combinations of Antibiotics and Repurposing Non Antibiotics - A Marriage Made in Heaven or Hell?

Carey-Ann D. Burnham, Washington University School of Medicine, USA

Next-Generation Diagnostics: Translating Rapid Pathogen and Resistance Detection to Optimal Antibiotic Prescription

Jean Patel[†], Centers for Disease Control and Prevention, USA

US and WHO Standards for Global Surveillance of AMR

Short Talk(s) Chosen from Abstracts

Fate and Lessons Learned from Recent Drug Development Programs Focused on Resistant Pathogens or Narrow-Spectrum Agents

Lorraine D. Hernandez[†], Merck Research Laboratories, USA

Neutralizing Antibodies Against Clostridium Difficile Toxins

Paul Ambrose[†], Institute for Clinical Pharmacodynamics, USA

PK/PD and Choosing Clinical Doses to Suppress Resistance

Lynn Connolly[†], Achaogen, USA

Late-Stage Drug Development: Lessons Learned from Running Colistin-Resistant Pathogen Focused Clinical Trials

Short Talk Chosen from Abstracts

Poster Session 1

TUESDAY, OCTOBER 31

Alternative Approaches to Tackling Resistant Infections

Speaker to be Announced

Paolo Ruggerone[†], Università degli studi di Cagliari, Italy

Interaction of Antibiotics and Inhibitors with Efflux Pump Proteins

Aileen Rubio[†], Spero Therapeutics, USA

Challenges with Animal Models in Advancing Novel Anti-Infectives

Scott Hultgren[†], Washington University School of Medicine, USA

Discovery and Development of Anti-Virulence Therapeutics Against UTI Adhesins

Short Talk(s) Chosen from Abstracts

Multidrug Evolutionary Strategies to Invert Resistance Selection

Roy Kishony[†], Technion – Israel Institute of Technology, Israel

Systems Biology Modeling of Multidrug Activity and Resistance

Gavin Barlow[†], University of York, UK

Treating Patients with Infections in the 21st Century - Are Antibiotic Cycling and Novel Combinations a Viable Clinical Option?

Karen Bush, Indiana University, USA

Enzymatic Antimicrobial Resistance and the Search for New Inhibitors

Short Talk Chosen from Abstracts

Poster Session 2

WEDNESDAY, NOVEMBER 1

Ecology and Evolution of AMR Transmission Dynamics Across Habitats

Gautam Dantas, Washington University School of Medicine, USA

Networks of Exchanging AMR between Environmental, Human Commensal, and Pathogenic Bacteria

Speaker to be Announced

Gerry D. Wright[†], McMaster University, Canada

The Resistome Concept as a Driver of Novel Antimicrobial Discovery

Sharon J. Peacock[†], University of Cambridge, UK

Pathogen Genomic Epidemiology and Reservoirs of AMR in Hospital-Connected Environments

Short Talk(s) Chosen from Abstracts

Tackling AMR – Challenges in Drug Development

Jennifer A. Leeds, Novartis Institutes for Biomedical Research, USA

Evaluation of the Fitness Cost of Selected Compound-Resistant Mutants when Profiling a Potential Clinical Candidate

Folkert Reck[†], Novartis Institutes for Biomedical Research, USA

Early-Stage Drug Development: Impact of Chemical Starting Points on Fate of Clinical Candidates

Phillip Bergen[†], Monash University, Australia

Impact of Fosfomycin Combinations on Resistance Suppression in vitro

Meeting Wrap-Up: Outcomes and Future Directions (Organizers)

THURSDAY, NOVEMBER 2

Departure