
Thursday, January 19

8:00 - 8:30 Registration

8:30 - 9:15 Welcome and Special introduction by Professor Patrice Courvalin, MD, Institut Pasteur, France

Opening Key Note Lecture:

Barbara E. Murray, University of Texas Health Science Center at Houston

Antimicrobial Research in Houston: A Personal Journey

Mechanistic Bases of Antibiotic Resistance

Session 1. Convener: Ashok Chopra

9:15 - 9:45 **Tim Palzkill, Baylor College of Medicine**

Structural Basis of Colistin Resistance

9:45 - 10:15 **Adriana Rosato, Houston Methodist Research Institute**

New Highlights and Characterization of the Molecular Bases of PBP2A Inhibitors in MRSA

10:15 - 10:30 **Selected Abstract: Wang Zhao, Baylor College of Medicine**

An Allosteric Transport Mechanism for the AcrAB-TolC Multidrug Efflux Pump

10:30 - 10:40 **Vendor Presentation: Rachel L. Atkinson, Merck & Co., Inc.**

Merck's Commitment to Fighting Infectious Diseases

10:40 - 11:00 Break

Session 2. Convener: Patrice Courvalin

11:00 - 11:30 **Robert Bonomo, Case Western Reserve University**

A Renaissance of Beta-lactamase Inhibitors

11:30 - 12:00 **Lynn Zechiedrich, Baylor College of Medicine**

Mechanistic Insights into Fluoroquinolone Resistance

12:00 - 12:15 **Selected Abstract: Ayesha Khan, UT Health**

LiaX is a Novel Protein that Mediates Daptomycin Resistance and the "See-Saw" Effect in Enterococcus faecalis

12:15 - 2:00 *Lunch and Poster session: Poster Walk-through with Patrice Courvalin, Institut Pasteur*

Pharmacological Bases of Resistance and Drug Discovery

Session 3. Convener: Julian Hurdle

2:00 - 2:30 **Vincent Tam, University of Houston**

PK/PD Considerations to Prevent the Emergence of Resistance in Gram-negative Bacteria

2:30 - 3:00 **Magnus Hook, Texas A&M, Institute of Biotechnology**

Can Virulence Factors be Targeted in Novel Antibiotic Strategies?

3:00 - 3:15 **Selected Abstract: Carolyn Sturge, University of Texas Southwestern**

Inhibition Of Pseudomonas aeruginosa By Peptide-Conjugated Phosphorodiamidate Morpholino Oligomers

3:15 - 3:25 **Vendor Presentation: Nkechi E. Azie, The Medicines Company**

Antibiotic Resistance Symposium: Novel Frontiers in Antimicrobial Research
January 19-20, 2017

The Medicines Company Dedicated to Combating Antimicrobial Resistance with Currently Available Solution and Future Solutions in the Pipeline

3:25 - 3:45 Break

Session 4. Convener: Vincent Tam

3:45 - 4:15 **Michael Rybak, Wayne State University**
Ex-vivo Models to Assess the Efficacy of Antibiotics Against MDR Gram-positive Organisms

4:15 - 4:45 **Julian Hurdle, Texas A&M, Institute of Biotechnology**
A New Paradigm for Metronidazole Treatment Failures in Clostridium Difficile Infection

4:45 - 5:15 **Ashok Chopra, University of Texas Medical Branch at Galveston**
New Therapeutics to Combat Antibiotic Resistant Bacteria

Friday, January 20, 2017

OMICS, The Microbiome and Antibiotic Resistance

Session 5. Convener: Magnus Hook

8:30 - 9:00 **Jim Musser, Houston Methodist Research Institute**
Integrative Approach to Investigating Pathogen – Host Interactions and Problems in Antimicrobial Agent Resistance

9:00 - 9:30 **Yousif Shamoo, Rice University**
Predicting Antibiotic Resistance: Moving from Reaction to Preemption of Emerging Pathogens

9:30 - 9:45 **Selected Abstract: Henrietta Abodakpi, University of Houston**
Prevalence of Extended-Spectrum β -Lactamase and Carbapenemase-Producing Bloodstream Isolates of Klebsiella pneumoniae in a Tertiary Care Hospital

9:45 - 9:55 **Vendor Presentation: Kelly Hoon, Illumina**
Illumina Sequencing Technology Updates and Application in the Microbial World

9:55 - 10:15 Break

Session 6. Convener: Yousif Shamoo

10:15 - 10:45 **Robert Britton, Baylor College of Medicine**
Diet Driven Evolution of Antibiotic Resistance in an Enteric Pathogen

10:45 - 11:15 **Danielle Garsin, UTHealth Science Center at Houston**
The Enterococcus faecalis Bacteriocin EntV Inhibits Hyphal Morphogenesis, Biofilm Formation, and Virulence of Candida albicans

11:15 - 11:30 **Selected Abstract: Imran Shaikh, Houston Health Department**
Seven Core Elements of Antibiotic Stewardship Program in Long-term Care Facilities in Houston, Texas, 2016

11:30 - 1:00 Poster session and lunch

Epidemiology of Antimicrobial Resistance and Clinical Impact

Session 7. Convener: Lynn Zechiedrich

1:00 - 1:30 **Vance Fowler, Duke University**

Antibiotic Resistance Symposium: Novel Frontiers in Antimicrobial Research
January 19-20, 2017

Clinical Research on Staphylococcus Aureus: A Model to Tackle Multidrug-resistant Organisms

- 1:30 - 2:00 **Maria V. Villegas, CIDEIM**
The KPC Epidemic in South America
- 2:00 - 2:30 **Sam Shelburne, MD Anderson Cancer Center**
Antibiotic Resistance in Cancer Patients: The Perfect Storm
- 2:30 - 3:00 **Cesar A. Arias, UTHealth Science Center at Houston**
The MRSA USA300 Latin American Variant Epidemic
-
- 3:00 - 3:30 Break
-
- 3:30 - 4:00 **Edward Septimus, HCA/Texas A&M University**
Stewardship Strategies to Combat Antimicrobial Resistance
- 4:00 - 5:00 Closing Key Note and Keck Lecture
Eric Pamer, Memorial Sloan Kettering Cancer Center
Interplay between the Microbiome and Resistant Bugs in Cancer Patients
-
- 5:00 Closing reception
-