

HEAR

Heralding Education on Antimicrobial Resistance



Roseto degli Abruzzi, Italy

March 7th-8th, 2019



MIC Test Strip (MTS) **HEAR** courses comprise an interactive two day session with lectures and laboratory work. An international faculty interacts with 20 participants from several Countries. **HEAR** allows for effective exchange of clinical experiences and expertise among clinicians, pharmacists and microbiologists with the patient's need utmost in mind. Liofilchem organizes several courses per year that cover a variety of topics with the goal of sharing the latest information to promote the rational use of antimicrobial agents.

Infections caused by resistant organisms pose significant challenges especially among immunocompromised critical care patients. The use of S-I-R categorical results to guide treatment of these "non-standardized" patients may not always be acceptable. The clinical importance of the MIC relative to PK/PD parameters to help optimize antibiotic choice and dosing regimens can be crucial in this patient population. Equally, the need to improve current methods to better detect emerging resistances such as hetero-resistance to glycopeptides among staphylococci (hGISA) is clearly being recognized.

To address some of the resistance, diagnostic and treatment challenges faced by infectious disease specialists, ICU clinicians, clinical pharmacists and microbiologists, Liofilchem has invested in non-profit **HEAR** courses dedicated to education in the field of Antimicrobial Resistance Testing.

HEAR LECTURES

- Antimicrobial agents, resistance, drug development and treatment issues.
- Resistance mechanisms in different organism groups.
- Antimicrobial Susceptibility Testing (AST) and Antimicrobial Resistance Testing (ART) concepts and methods.
- Clinical importance of MIC testing for serious infections such as bacteremia, endocarditis, meningitis and cystic fibrosis.
- Pharmacodynamic (PD)/Pharmacokinetic (PK) principles to target antibiotic therapy in critically ill patients.

- Susceptibility testing and treatment challenges posed by fastidious organisms, fungi and mycobacteria.
- Direct specimen testing and drug combination testing.
- Liofilchem® MIC Test Strip (**MTS**) predefined gradient technology for MIC testing, resistance detection and other special applications.

LABORATORY SESSIONS

- **MTS** for bacteria and fungi.
- Comparisons of AST methods e.g. disc diffusion, agar dilution and broth microdilution.
- Demonstrations of **MTS** for fastidious organisms, resistance detection and combination testing.
- Fine-tuning of **MTS** set-up, reading and interpretation of results.

OPPORTUNITIES

- Exchange of research and clinical experiences among peers.
- Foster AST and **MTS** experts to become local resources.
- Identify AST and MIC testing challenges and solutions.
- Define AST algorithms and position **MTS** as a complement.
- Explore collaborative efforts to develop new **MTS** applications.
- Enable Liofilchem to learn about customers needs.



Did you know that Abruzzi is one of the few Mediterranean regions with sunny beaches, gorgeous countryside and spectacular mountains? Roseto degli Abruzzi, our hometown, is just on the Adriatic sea and few kilometers away from the main attractions of our beautiful land.



Please email your **registration** to lioofilchem@lioofilchem.net

Courses are conducted at the Liofilchem facility in Roseto degli Abruzzi, Italy.



Scientific Program

DAY ONE – March 7th, 2019

Welcome and introduction	F. Brocco	8.45 - 9:00
MIC gradients set up and overview of laboratory session.	F. Brocco	9:00 - 9:30
Setting up different applications.	laboratory team	9:30 - 10.30
<i>Coffee</i>		10.30 - 10.45
Setting up different applications.	laboratory team	10.45 - 12.30
<i>Lunch</i>		12:30 - 13:30
Global spread of MDR/XDR Gram-negatives.	T. Walsh	13.30 - 14.15
Resistance mechanisms in Gram-positive bacteria	S. Stefani	14.15 - 15.00
<i>Coffee</i>		15.00 - 15.15
Resistance mechanisms in Gram-negative bacteria	E. Carretto	15.15 - 16.00
Dinner		20.00 - 22.00

DAY TWO – March 8th, 2019

Clinical cases.	E. Carretto	8.45 - 9.30
Low and high MIC: is only a question of genes?	S. Stefani	9.30 - 10.15
<i>Coffee</i>		10.15 - 10.30
Antibiotic pipeline.	T. Walsh	10.30 - 11.15
Demonstration stations.	laboratory team	11.15 - 12.30
<i>Lunch</i>		12.30 - 13.30
MTS reading - 24h results.	laboratory team	13.30- 14.45
<i>Coffee</i>		14.45 - 15.00
Quiz, comments on results, conclusions.	laboratory team	15.00 - 15.30

FACULTY and Presenters

Prof. Timothy R. Walsh, Cardiff University, UK

Prof. Stefania Stefani, University of Catania, Italy

Dr. Edoardo Carretto, Director of Clinical Microbiology Laboratory, Santa Maria Nuova Hospital in Reggio Emilia, Italy

Fabio Brocco, COO, Liofilchem



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