

Target Audience

Microbiologists, basic researchers, biologists, medical doctors and laboratory personnel

Faculty Members

Jean Armengaud, Paris, France
Ana Candela, Madrid, Spain
Elena DeCarolís, Rome, Italy
Lucia Grenga, Madrid, Spain
Didier Hocquet, Besançon, France
Hugo López Fernández, Vigo, Spain
James O'Connor, Cork, Ireland
Marina Oviaño, Coruña, Spain
Belen Rodriguez-Sanchez, Madrid, Spain
David Rodriguez-Temporal, Hospitalet de Llobregat, Spain
Jean-Marc Rolain, Marseilles, France
Linda Veloo, Groningen, The Netherlands
Stefan Zimmerman, Heidelberg, Germany
Estreya Zvezdanova, Madrid, Spain

Contact

For the Scientific Programme

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ESCMID Postgraduate Technical Workshop

Applications of MALDI- TOF Mass-Spectrometry in Clinical Microbiology

Online Education Course
19 - 20 October 2021



ESCMID Postgraduate Technical Workshop

Applications of MALDI- TOF Mass-Spectrometry in Clinical Microbiology

Organisers

ESCMID Study Group for Molecular Diagnostics (ESGMD)

Other Organising Groups

Department of Clinical Microbiology, Hospital Gregorio Marañón, Madrid

Course Coordinators

Belén Rodríguez-Sánchez, Madrid, Spain

Course Objectives

This course aims to provide participants with the tools to do their best with their MALDI instruments: methodology for new MALDI applications and analytical tools for spectra analysis. The attendees will have the opportunity to interact with leading researchers in the field of MALDI-TOF mass-spectrometry applications in clinical microbiology and discuss recent breakthroughs and new applications. The workshop will include theoretical presentations and practical training, and will represent an excellent chance for networking between clinical microbiologists, basic researchers, MALDI experts, bioinformaticians and others.



Course Programme

Tuesday 19 October 2021

Session 1

- 09:30 Welcome and introduction to the Course
Belén Rodríguez-Sánchez
- 09:45 New (and old) applications of MALDI-TOF in Clinical Microbiology
Belén Rodríguez-Sánchez
- 10:30 Mass Spectrometry for virus detection and characterisation
Lucía Grenga

11:15 Coffee break

Session 2

- 11:30 MALDI-TOF for the identification of anaerobes
Linda Veloo
- 12:00 Identification of filamentous fungi and yeasts with MALDI-TOF
Elena De Carolis
- 12:30 Identification of mycobacteria isolates with MALDI-TOF
James O'Connor

13:00 Lunch

Practical Session 1

- 14:00 Analysis of aerobic and anaerobic bacteria
Belen Rodriguez-Sanchez, Ana Candela
- 14:30 Analysis of mycobacteria
David Rodríguez-Temporal
- 15:00 Coffee break

Practical Session 2

- 15:15 Analysis of fungi
Estreya Zvezdanova, Belén Rodríguez-Sánchez
- 15:45 Questions and Answers
- 16:30 End of day

Wednesday 20 October 2021

09:15 Welcome

Session 3

- 09:30 Detection of antibiotic resistance mechanisms with MALDI-TOF: Review and future applications
Marina Oviaño
- 10:15 Application of MALDI-TOF for bacterial typing
Didier Hocquet

11:00 Coffee break

Session 4

- 11:30 Dealing with protein spectra from MALDI-TOF: how to analyze them
Hugo López Fernández
- 12:00 Mass Spectrometry: new diagnostic tools for the near future
Jean Armengaud
- 12:30 Application of IR spectroscopy for bacterial typing
Stefan Zimmerman
- 13:00 Lunch

Practical Session 3

- 14:00 Detection of antibiotic resistance mechanisms.
Belen Rodriguez-Sanchez, Marina Oviaño
- 14:30 Spectra analysis: comparison of populations and typing
Hugo López Fernández
- 15:00 Questions and answers
- End of day and farewell

Organization

Registration Procedure

Register on the ESCMID website at www.escmid.org/education by 16 October, 2021.

Registration fee

EUR 80 for ESCMID members
EUR 150 for all others

Online Access

Links for online access will be provided to registrants prior to the commencement of the course.

The programme is specified in Central European Summer Time (CEST)