

Target Audience

Clinical microbiologists, microbiologists, infectious diseases doctors and other professionals working in diagnostics microbiology and interested in MALDI-TOF, molecular diagnostics, genomics, metagenomics, automation, and others new innovative tools.

Faculty Members

Cecile Bebear, Bordeaux, France
Claire Bertelli, Lausanne, Switzerland
Alix Coste, Lausanne, Switzerland
Emmanuelle Cambau, Paris, France
Eric Claas, Leiden, Netherlands
Adrian Egli, Zurich, Switzerland
Christian Giske, Stockholm, Sweden
Gilbert Greub, Lausanne Switzerland
Colin Mackenzie, Düsseldorf, Germany
Surbhialhotra Kumar, Antwerpen, Belgium
Frédéric Lamoth, Lausanne, Switzerland
Elisabeth Nagy, Szeged, Hungary
Onya Opota, Lausanne, Switzerland
Robin Patel, Rochester, USA
Belén Rodriguez-Sanchez, Madrid, Spain
John Rossen, Groningen, Netherlands
Katja Seme, Ljubljana, Slovenia
Olivier Vandenberg, Bruxel, Belgium
Hege Vangstein Aamot, Oslo, Norway
Els Wessels, Leiden, Netherlands

Registration Procedure

Register on the ESCMID website at www.escmid.org/education by 9 May 2023.

Registration Fee

Onsite Registration Fee EUR for ESCMID Members: €600

Onsite Registration Fee EUR for all others: €750

Ticket cost notes for ESCMID Young Scientist Members/those from LMICs: On average an plane ticket from major cities of Europe to Geneva plus train to Lausanne costs €400. Anyway, ESCMID may consider support for 5 attendees for LMICs.

Attendance Grants

ESCMID provides a number of attendance grants for ESCMID “young scientist members”. The grant covers the registration fee, but not travel costs. Please apply via the ESCMID website at www.escmid.org/education before 18 April 2023. Applicants will be informed about their acceptance by 2 May 2023.

CME Accreditation

The organiser of the course will apply for European CME accreditation through EACCME.

Contact

Contact Person (Scientific Programme)

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Administrative Secretariat

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Course Venue

CHUV, Lausanne University Hospital
Rue du Bugnon 46 Auditoire Alexandre Yersin
1011 Lausanne, Switzerland

www.chuv.ch/fr/chuv-home



ESCMID Postgraduate Technical Workshop

Diagnostic Microbiology: MALDI-TOF, Genomics, Metagenomics, Automation and Molecular Microbiology 2nd course

Lausanne, Switzerland
12 – 15 June 2023



ESCMID Postgraduate Technical Workshop

Diagnostic Microbiology: MALDI-TOF, Genomics, Metagenomics, Automation and Molecular Microbiology 2nd course

Organisers

ESCMID Study Group for Molecular Diagnostics (ESGMD)
CHUV, Lausanne University Hospital, University of
Lausanne

Course Coordinator

Gilbert Greub, Lausanne, Switzerland
Onya Opota, Lausanne, Switzerland

Course Objectives

To further improve patients care, it is crucial to continue to develop new tools providing faster results, with a broader diversity of pathogenic agents with very high sensitivity and specificity. To reach these goals, it is important to be aware of the state of the art and of new innovative methods that have recently been developed and to exchange knowledge and ideas on the future of diagnostic microbiology, including the emerging indications of metagenomics for non-infectious diseases such as obesity and asthma. This course thus aims to provide a unique platform to learn about the strengths and limitations of current and new diagnostic tools including MALDI-TOF, molecular diagnosis, genomics and metagenomics, as well as novel innovative techniques such as nanomechanical sensors and atomic force microscopy. The course also offers a unique opportunity for participants to gain practical experience during the practicals led by local microbiologists. This course is intended for people with a basic knowledge of microbiology, infectious disease or infection control. It is suitable both for trainees and for more advanced people who would like to further deepen their expertise.

Course Programme

Monday, 12 June 2023

08:15 – 08:45	Registration
08:45 – 09:00	Welcome and introduction <i>Gilbert Greub and Onya Opota</i>
09:00 – 09:30	Molecular diagnosis <i>Onya Opota</i>
09:30 – 10:00	Multiplex PCRs and syndromic panels <i>Colin Mackenzie</i>
10:00 – 10:30	Molecular diagnostic of sexual transmitted infections <i>Cecile Bebear</i>
10:30 – 11:00	Coffee Break
11:00 – 11:30	Laboratory diagnosis of viral infections <i>Katja Seme</i>
11:30 – 12:00	Implications of the IVDR for a routine diagnostic lab <i>Els Wessels</i>
12:00 – 12:30	Digitalization in clinical microbiology and infectious disease <i>Adrian Egli</i>
12:30 – 14:00	Lunch
14:00 – 14:45	Practical (parallel sessions)
14:45 – 15:30	Practical (parallel sessions)
15:30 – 16:00	Coffee Break
16:00 – 16:45	Practical (parallel sessions)
16:45 – 17:15	Practical (parallel sessions)
17:30 – 19:00	Social event: playing with the MyKrobs game

Tuesday, 13 June 2023

9:00 – 9:30	Antigen tests: friends or foes <i>Gilbert Greub</i>
9:30 – 10:00	MALDI-TOF Mass spectrometry <i>Robin Patel</i>
10:00 – 10:30	MALDI-TOF and typing <i>Belén Rodríguez-Sánchez</i>
10:30 – 11:00	Coffee break
11:00 – 11:30	AB susceptibility testing and multidrug resistant bacteria: new techniques <i>Christian Giske</i>
11:30 – 12:00	Microbial diagnosis of fungal infection <i>Alix Coste</i>
12:00 – 12:30	Antifungal resistance and fungal susceptibility testing <i>Frédéric Lamoth</i>
12:30 – 14:00	Lunch
14:00 – 14:45	Practical (parallel sessions)
14:45 – 15:30	Practical (parallel sessions)
15:30 – 16:00	Coffee break
16:00 – 16:45	Practical (parallel sessions)
16:45 – 17:15	Practical (parallel sessions)
17:30 – 19:00	Social event: Visit of the Hand Museum

Wednesday, 14 June 2023 (tentative)

9:00 – 9:30	Genomics: clinical applications <i>Surbhi Malhotra-Kumar</i>
9:30 – 10:00	Metagenomics for clinical microbiology <i>John Rossen</i>
10:00 – 10:30	Genomics and metagenomics: data analyses and quality controls <i>Claire Bertelli</i>
10:30 – 11:00	Coffee break
11:00 – 11:30	Gut metagenomics: beyond clinical microbiology <i>Surbhi Malhotra-Kumar</i>
11:30 – 12:00	Molecular Epidemiology <i>Hege Vangstein Aamot</i>
12:00 – 12:30	Viral metagenomics during outbreaks <i>Eric Claas</i>
12:30 – 14:00	Lunch
14:00 – 14:45	Practical (parallel sessions)
14:45 – 15:30	Practical (parallel sessions)
15:45 – 16:15	Microbiota: microscopy, culturomic and flow cytometry <i>Gilbert Greub</i>
17:00 – 20:00	Social event: Visit of the Lavaux, Vineyard Terraces (Unesco World Heritage)
20:00 – 22:00	Social event: Diner in the Lavaux

Thursday, 15 June 2023

9:00 – 9:30	Mycobacterial infections: diagnostic and antibiotic susceptibility test <i>Emmanuelle Cambau</i>
9:30 – 10:00	Diagnostic of anaerobic infection <i>Elisabeth Nagy</i>
10:00 – 10:30	Etiological diagnosis of blood culture <i>Onya Opota</i>
10:30 – 11:00	Coffee break
11:00 – 11:30	Automation in bacteriology <i>Olivier Vandenberg</i>
11:30 – 12:00	The future of diagnostic microbiology <i>Gilbert Greub</i>
12:00 – 12:30	Open panel discussion <i>Faculties</i>
12:30 – 12:45	Concluding remarks and farwell <i>Gilbert Greub and Onya Opota</i>
12:45 – 14:00	Farewell Lunch
14:00	End

- Practicals (parallel session, group of 6 to 10 persons):**
- Bacterial phenotypes and automation**
 - Rapid tests**
 - MALDI-TOF: identification of bacteria and fungi**
 - Etiologic identification from blood culture**
 - Etiological diagnosis of pneumonia**
 - Diagnosis of urinary tract infections**
 - Morphological identification of fungi**
 - Molecular diagnosis**
 - Genomics analyses: virulence factors & typing**
 - 16SrRNA amplicons & shotgun metagenomics**

The practicals will be given in laboratories by local microbiologists and conducted as 10 parallel interactive sessions of 6 to 10 persons maximum depending on the number of participants. All the participants will attend all the practicals.