Target Audience

Max. 100 participants: MDs, (micro)biologists, post-doctoral fellows and PhD students who are working in the field of microbiology and are interested in molecular diagnostics.

Faculty Members

Stephen Bustin, Chelmsford, United Kingdom
Eric Claas, Leiden, Netherlands
Sabine Dittrich, Geneva, Switzerland
Gilbert Greub, Lausanne, Switzerland
Richard Hodinka, Greenville, SC, United States
Jim Huggett, Teddington, United Kingdom
Ruud Jansen, Haarlem, Netherlands
Mirjam Kooistra, Groningen, Netherlands
Colin Mackenzie, Düsseldorf, Germany
Amy Mikhail, London, United Kingdom
Richard Molenkamp, Leiden, Netherlands
Jacob Moran-Gilad, Beer-Sheva, Israel
Bert Niesters, Groningen, Netherlands
Peter Rådström, Lund, Sweden
Marijke Raymaekers, Hasselt, Belgium
Belén Rodriguez Sanchez, Madrid, Spain
John Rossen, Groningen, Netherlands
Paul Savelkoul, Maastricht, Netherlands
Kate Templeton, Edinburgh, United Kingdom
Lieke van Alphen, Maastricht, Netherlands
Helke van Dessel, Maastricht, Netherlands
Inge van Loo, Maastricht, Netherlands
Els Wessels, Leiden, Netherlands
Carl Wittwer, Salt Lake City, UT, United States
Petra Wolffs, Maastricht, Netherlands
Aldert Zomer, Utrecht, Netherlands

Contact

Contact Person (Scientific Programme)

Paul Savelkoul
Maastricht University Medical Center
Dept. Medical Microbiology
P. Debyelaan 25
6229 HX Maastricht
Netherlands

Phone +31 43 387 6644
paul.savelkoul@mumc.nl

Administrative Secretariat

Fia Claus
Maastricht University Medical Center
Dept. Medical Microbiology
P. Debyelaan 25
6229 HX Maastricht
Netherlands

Phone +31 43 387 6644
secretariaatmmb@mumc.nl

Front picture: St. Servaas Bridge Maastricht, © Kevin van Egmond
Picture inside: MDx artist impression, © Mayk Lucchesi
Picture outside: Front view of the Maastricht University Medical Centre (MUMC), © MUMC+

ESGMD ESCMID STUDY GROUP FOR GENOMIC AND MOLECULAR DIAGNOSTICS
European Society of Clinical Microbiology and Infectious Diseases

ESGEM ESCMID STUDY GROUP FOR EPIDEMIOLOGICAL MARKERS
European Society of Clinical Microbiology and Infectious Diseases

Maastricht UMC+

ESCMID EUROPEAN SOCIETY OF CLINICAL MICROBIOLOGY AND INFECTIOUS DISEASES

ESCMID
MANAGING INFECTIONS
PROMOTING SCIENCE

ESCMID Postgraduate Education Course

3rd Course on Principles of Molecular Micro-biological Diagnostics

Maastricht, Netherlands
17 – 19 January 2018

ESCMID Postgraduate Education Course

3rd Course on Principles of Molecular Micro-biological Diagnostics

Organizers

- ESCMID Study Group for Genomic and Molecular Diagnostics – ESGMD
- ESCMID Study Group for Epidemiological Markers – ESGEM
- Maastricht University Medical Centre

Course Coordinator

Paul Savelkoul, Maastricht, Netherlands

Course Objectives

The course provides an actual overview, advantages and pitfalls of the general principles of state-of-the-art molecular techniques in the diagnosis of infectious diseases. Basic features of e.g. NGS as well as advanced features e.g. real-time PCR will be addressed in relation to their diagnostic importance and usefulness. In addition, interactive discussions on clinical interpretation and application will be held in several specific simultaneous workshops for which participants will be able to register. Each workshop has a limited number of participants. During the workshops specific subjects will be addressed based on case reports. Those will be presented by moderators with active involvement of the audience. In addition, experts in these fields will comment and, when necessary, add in depth knowledge and/or questions from the participants. Finally, additional important general subjects like (low resource) MDx laboratory setup, outbreak upscaling, validation and quality control of the different techniques are presented including future perspectives in the field.

Course Programme

Wednesday, 17 January 2018

09:00 Registration
09:45 Welcome.
Paul Savelkoul
10:00 Real-time PCR and melting analysis.
Carl Wittwer
10:30 Quantitation.
Jim Huggett
11:00 Coffee break
11:30 Pre-PCR processing.
Peter Rådström
12:00 PCR mastermix – the underrated ingredient.
Stephen Bustin
12:30 Lunch
13:30 Parallel interactive workshop 1:
PCR – Basics/PCR for starters/case reports.
Moderators: Marijke Raymaekers, Els Wessels
Experts: Stephen Bustin, Ruud Jansen
13:30 Parallel interactive workshop 2:
PCR – Advanced/experienced PCR/case reports.
Moderators: Richard Molenkamp, Jim Huggett
Experts: Carl Wittwer, Kate Templeton
15:00 Coffee break
15:30 Parallel interactive workshop 3:
Nucleic acid extraction.
Moderators: Ruud Jansen, Petra Wolffs
Experts: Peter Rådström, Eric Claas
15:30 Parallel interactive workshop 4:
Clinical aspects & interpretation of MDx results.
Moderators: Colin Mackenzie, Inge van Loo
Expert: Paul Savelkoul
17:00 Alternative PCR approaches: pro's and con's.
Els Wessels
17:30 Short presentations about new developments by companies
18:00 Drinks and snacks

Thursday, 18 January 2018

09:00 Highlights of interactive workshops day 1.
Petra Wolffs
09:30 Molecular typing for infection control.
Lieke van Alphen
10:00 Molecular diagnostics in low resource settings.
Sabine Dittrich
10:30 Molecular diagnostics for outbreaks in low resource settings.
Amy Mikhail
11:00 Coffee break
11:30 Parallel interactive workshop 5:
Starting MDx in low resource settings.
Moderators: Sabine Dittrich, Amy Mikhail
Experts: Lieke van Alphen, Eric Claas
11:30 Parallel interactive workshop 6:
Typing, resistance and virulence.
Moderators: Paul Savelkoul, John Rossen
Expert: Petra Wolffs
13:00 Lunch
14:00 Next-generation sequencing:
current methods (theory).
Aldert Zomer
14:30 ISO-certification/quality control for molecular diagnostics.
Bert Niesters
15:00 Coffee break
15:30 Parallel interactive workshop 7:
Broad-range PCR – clinical interpretation of results.
Moderators: Paul Savelkoul, Mirjam Kooistra
Experts: Gilbert Greub, Colin Mackenzie
15:30 Parallel workshop 8:
CE-IVD, regulations and guidelines.
Moderators: Marijke Raymaekers, Richard Molenkamp
Expert: Bert Niesters
17:00 Applications of NGS.
Jacob Moran-Gilad
18:00 Departure (by special bus from Hotel van der Valk)
18:30 Social activity
20:00 Dinner
22:30 Departure
23:00 Arrival (Hotel van der Valk)

Friday, 19 January 2018

09:00 Highlights of interactive workshops day 2.
Lieke van Alphen
09:30 Molecular detection of antimicrobial resistance.
To be confirmed
10:00 MALDI-ToF-MS.
Gilbert Greub
10:30 Coffee break
11:00 Near bedside MDx applications.
Richard Hodinka
11:30 Parallel interactive workshop 9:
Molecular diagnostics – when to use (commercial vs. in-house).
Moderators: Eric Claas, Colin Mackenzie
Experts: Richard Hodinka, Kate Templeton
11:30 Parallel interactive workshop 10:
MALDI-ToF and its clinical applications.
Moderators: Gilbert Greub, Belén Rodriguez Sanchez
Expert: Helke van Dessel
13:00 Future developments in molecular diagnostics.
Jacob Moran-Gilad
13:30 Closing lunch
14:30 End of meeting & departure

Organization

Course Venue

Hotel van der Valk
Nijverheidsweg 35
6227 AL Maastricht
Netherlands

www.hotelvandervalkmaastricht.nl

Registration Procedure

Register now online on the ESCMID website at www.escmid.org/education. Registration deadline is 8 December 2017.

Registration Fee

- EUR 500 for ESCMID members (Full Membership/Young Scientist Membership)
- EUR 600 for all others

The fee includes all lectures and workshops, lunches, coffee & drinks, social programme including one evening dinner. Accommodation and travel are not included.

Attendance Grants

ESCMID provides a number of attendance grants for ESCMID "young scientist members".
The grant covers the registration fee. Accommodation and travel are not included. Please apply via the ESCMID website at www.escmid.org/education before 7 November 2017. Applicants will be informed about their acceptance by 1 December 2017.

CME Accreditation

The organizers of the course will apply for European CME accreditation through EACCME and for accreditation through NVMM (Dutch Society for Medical Microbiology).