Target Audience
Max. 100 participants: MDs, (micro)biologists, postdoctoral 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 Dittlef, 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
Richard Molenkamp, Leiden, Netherlands
Jacobi Moran-Gilad, Beer-Sheva, Israel
Bert Niesters, Groningen, Netherlands
Peter Petzold, Lund, Sweden
Marjolein 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 Los, 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

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.

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

ESCMID Postgraduate Education Course
3rd Course on Principles of Molecular Microbiological Diagnostics
Maastricht, Netherlands
17 – 19 January 2018
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
15:00 Coffee break
15:30 Coffee break
15:30 Parallel interactive workshop 3:
  Nucleic acid extraction.
  Moderators: Ruud Jansen, Petra Wolfis
  Experts: Peter Rådström, Eric Claas
15:30 Parallel interactive workshop 4:
  Clinical aspects & interpretation of MDx results.
  Moderators: Colin Mackenzie, Inge van Loo
17:00 Alternative PCR approaches: pros and cons.
  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 Wolfis
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 MDs 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 Wolfis
13:00 Lunch
14:00 Next-generation sequencing: current methods (theory).
  Aldert Zomer
14:30 ISO-certification/quality control for molecular diagnostics.
  Bert Nieters
15:00 Coffee break
15:30 Parallel interactive workshop 7:
  Broad-range PCR – clinical interpretation of results.
  Moderators: Paul Savelkoul, Mirjam Koostroa
  Experts: Gilbert Greub, Colin Mackenzie
15:30 Parallel workshop B:
  CE-IVD, regulations and guidelines.
  Moderators: Marijke Raymaekers, Richard Molenkamp
  Expert: Bert Nieters
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, Belin 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

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).