**Target Audience**
Max. 35 clinical microbiologists with an interest in antimicrobial susceptibility testing, surveillance and antibiotic therapy. Representatives from National Antimicrobial Committees (NACs) will have priority over other applicants for participation in this course (a letter supporting the application from the President or Secretariat of the corresponding NAC will be necessary to demonstrate this representation).

**Faculty Members**
- Agnes Anders, Bochum, Germany
- Petra Apfalter, Linz, Austria
- Derek Brown, Peterborough, United Kingdom
- Rafael Canton, Madrid, Spain
- Maiken Cavling Arendrup, Copenhagen, Denmark
- Susanne Friedrich, Bochum, Germany
- Sören Gatermann, Bochum, Germany
- Christian Giske, Stockholm, Sweden
- Martin Kaase, Bochum, Germany
- Gunnar Kahlmeter, Växjö, Sweden
- Anja Kaminiski, Bochum, Germany
- Miriam Korte-Berwanger, Bochum, Germany
- Michael Kresken, Rheinbach, Germany
- Felix Lange, Bochum, Germany
- Lennart Marlinghaus, Bochum, Germany
- Luis Martinez-Martinez, Santander, Spain
- Erika Matuschek, Växjö, Sweden
- Johan W. Mouton, Nijmegen, Netherlands
- Niels Pfennigwerth, Bochum, Germany
- Jesús Rodríguez-Baño, Seville, Spain
- Marc Struelens, Stockholm, Sweden

**Administrative Secretariat**
Sabine Loose-Kuhlenberg/Ulrike Jollet
Dept. Med. Microbiology
Ruhr-Universität Bochum
Universitätsstr. 150
44801 Bochum
Germany
Phone +49 234 322 64 67
Fax +49 234 32 1 41 97
sabine.kuhlenberg@rub.de
ulrike.jollet@rub.de

**Contact Person (Scientific Programme)**
Prof Dr Sören Gatermann
Dept. Med. Microbiology
Ruhr-Universität Bochum
Universitätsstr. 150
44801 Bochum
Germany
Phone +49 234 322 64 67
Fax +49 234 32 1 41 97
soeren.gatermann@rub.de

**Course Objectives**
- Explain the process of EUCAST breakpoint definition
- Understand the rationale for EUCAST clinical breakpoints including the PK/PD approach and explain implementation of EUCAST breakpoints
- Perform antimicrobial susceptibility testing by dilution, diffusion and automatic techniques with a EUCAST perspective and explain differences from the CLSI approach
- Understand the application of EUCAST expert rules for antimicrobial susceptibility testing and their clinical implications
- Explain antimicrobial surveillance systems (public versus private) and benefits for establishment of antimicrobial guidelines and the design of antibiotic policies
- Understand the importance of epidemiological cut-off values (ECOFFs) and clinical breakpoints in antimicrobial resistance surveillance systems
- Understand how ECOFFs are determined

**Course Coordinators**
- Sören Gatermann, Bochum, Germany
- Christian Giske, Stockholm, Sweden
- Johan W. Mouton, Nijmegen, Netherlands
Course Programme

Tuesday, 20 September 2016
15:00 Arrival/registration
15:30 Welcome and presentation of the course. Christian Giske, Johan W. Mouton, Gunnar Kahlmeter & Sören Gatermann
15:40 EUCAST in Europe and beyond. Christian Giske
16:10 Wild-type MIC distributions and ECOFFs. Gunnar Kahlmeter
16:50 Setting breakpoints for EUCAST. Johan W. Mouton
17:30 Why EUCAST instead of CLSI? Derek Brown
17:50 Are EUCAST breakpoints valid for all patients? Johan W. Mouton
19:00 Welcome dinner

Wednesday, 21 September 2016
09:00 Quality assurance of susceptibility testing. Derek Brown
09:40 Phenotypic detection of resistance mechanisms against beta-lactams in Gram-negative microorganisms. Martin Kause
10:20 Break
10:45 Antimicrobial susceptibility testing: manual methods. Eniko Matuschek
11:15 Antimicrobial susceptibility testing: automatic systems. Rafael Cantón
11:45 The value of national and international surveillance systems in the epidemiology of antimicrobial resistance. Luis Martínez-Martínez
12:30 Lunch
18:00 End of the day

Thursday, 22 September 2016
09:00 EUCAST expert rules. Sören Gatermann
09:40 Genotypic methods for detection of resistance mechanisms. Niels Pfenniger
10:20 Break
10:45 Susceptibility testing of fungi. Maiken Cavling Arendrup
11:20 Is report as tested the appropriate strategy in the face of carbapenemases and ESBL? Jesus Rodríguez-Baño
12:30 Lunch
13:30 Laboratory session (follow-up from Wednesday)
18:00 End of the day

Friday, 23 September 2016
09:00 Decision to switch to EUCAST: how to convince your country and how to reorganize your lab? Petra Apfalter
10:00 Break
10:30 How EUCAST guidance strengthens surveillance of antimicrobial resistance in the European Union: the ECDC perspective. Marc Struelens
11:00 Presentation and discussion of laboratory experiments conducted by the attendees
12:30 Closing and farewell lunch

Course Venue
Ruhr University Bochum
Mensa, conference room TG I
Universitätsstr. 150
44801 Bochum
Germany

Registration Procedure
Register now online on the ESCMID website at www.escmid.org/education. Registration deadline is 19 August 2016.

Registration Fee
EUR 500 for ESCMID members (Full Membership/Young Scientist Membership)
EUR 800 for all others
The fee includes educational material, lab material, handouts, lunch, coffee breaks and the welcome dinner.
Travel and accommodation are not included.

Attendance Grants
ESCMID provides a number of attendance grants for ESCMID “young scientist members”. The grant covers the registration fee. Travel and accommodation are not included. Please apply via the ESCMID website at www.escmid.org/education before 8 July 2016. Applicants will be informed about their acceptance by 22 July 2016.

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