

#### **Target Audience**

30 – 35 microbiologists (medical, clinical, forensics including trainees), pathologists and other professionals working in forensic science or forensic medicine, and public health practitioners.

#### **Faculty Members**

Laurent Andréoletti, Reims, France
Bruce Budowle, Forth Worth, TX, United States
Sophia David, Cambridge, United Kingdom
Amparo Fernández-Rodríguez, Madrid, Spain
Pedro Manuel Garamendi, Huelva, Spain
Fernando González-Candelas, Valencia, Spain
Alexander Herbig, Tübingen, Germany
Jacob Moran-Gilad, Jerusalem, Israel
Marijke Raymaekers, Hasselt, Belgium
John Rossen, Groningen, Netherlands
Veroniek Saegeman, Leuven, Belgium
Paul Savelkoul, Maastricht, Netherlands
Wim Van de Voorde, Leuven, Belgium
Anne-Mieke Vandamme, Leuven, Belgium

#### Contact

# Contact Person (Scientific Programme & Administrative Secretariat)

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Scientific picture: Thermocycler room / RSV bronchiolitis, © Dr B. Aguilera, Instituto Nacional de Toxicología y Ciencias Forenses, Madrid, Spain



# ESCMID Postgraduate Technical Workshop

# Application of Molecular Diagnostics in Forensic Microbiology

Leuven, Belgium 2 – 3 June 2016









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## Application of Molecular Diagnostics in Forensic Microbiology

#### **Organizers**

- ESCMID Study Group for Forensic and Postmortem Microbiology (ESGFOR)
- ESCMID Study Group for Molecular Diagnostics (ESGMD)

#### **Course Coordinators**

- Bruce Budowle, Forth Worth, TX, United States
- Amparo Fernández-Rodríguez, Madrid, Spain
- Jacob Moran-Gilad, Jerusalem, Israel
- Veroniek Saegeman, Leuven, Belgium
- Wim Van de Voorde, Leuven, Belgium

#### **Course Objectives**

The role of molecular diagnostics is increasingly being recognized in clinical and public health microbiology. In recent years, molecular methods have been used in forensic and post-mortem microbiology for establishing the cause of death due to infectious diseases and also to generate and present forensic evidence at the judicial court. This course aims to boost the knowledge of forensic microbiology and the role of molecular diagnostics in this field by allowing attendees to join leading scientists in forensic and molecular microbiology, who will present their insights into the most recent breakthroughs and current applications. Moreover, the course aims to create new networks between microbiologists, forensic pathologists and allied professions and build capacity in order to facilitate the application of molecular microbiology in this multidisciplinary field across Europe.

### Course Programme

#### Thursday, 2 June 2016

- 09:00 Welcome and introduction of the Study Groups. ESGFOR and ESGMD board representatives
- 09:30 Overview of medical forensics CSI and beyond. *Pedro Manuel Garamendi*
- 10:30 Coffee break
- 11:00 The role of microbiology in forensic science and post-mortem examinations: a special focus on molecular diagnosis.

  Amparo Fernández-Rodríquez
- 12:00 Overview of recent developments in molecular diagnostics for clinical microbiology.

  Marijke Raymaekers
- 12:45 Lunch
- 13:45 Overview of recent developments in Next-Gen Sequencing for clinical microbiology. John Rossen
- 14:30 Human microbiome analysis. Paul Savelkoul
- 15:15 Coffee break
- 15:45 Practical session on molecular diagnostics I. Industry representatives
- 16:30 New molecular typing techniques a forensic approach to cluster investigation. Sophia David
- 17:15 Perspective on microbial population analysis in forensics. Fernando González-Candelas
- 19:00 Social programme and dinner

#### Friday, 3 June 2016

- 08:30 Ancient DNA methods, quality and acceptance criteria. *Alexander Herbig*
- 09:15 How to present molecular findings on HIV/HCV as evidence in court?

  Anne-Mieke Vandamme
- 10:00 Quality control aspects of molecular diagnostics implications to forensic microbiology. *Jacob Moran-Gilad*
- 10:45 Coffee break
- 11:15 Validation requirements of molecular assays in forensic microbiology. *Bruce Budowle*
- 12:00 Practical session on molecular diagnostics II.

  Industry representatives
- 13:00 Lunch

- 14:00 Educational quiz: presentation and discussion of forensic cases. Speakers: Laurent Andréoletti, Bruce Budowle, Wim Van de Voorde, Veroniek Saegeman & Anne-Mieke Vandamme Moderator: Jacob Moran-Gilad
- 15:30 Coffee break
- 16:00 Capacity building for Europe:
  open discussion about laboratory methods,
  standards and collaborative research.
  ESGFOR and ESGMD board representatives
- 17:15 Concluding remarks & farewell.

  ESGFOR and ESGMD board representatives

## Organization

#### Course Venue

Novotel Leuven Centrum, Herestraat 49, 3000 Leuven, Belgium

#### **Registration Procedure**

Register now online on the ESCMID website at www.escmid.org/education. Registration deadline is 15 April 2016.

#### **Registration Fee**

EUR 650 for ESCMID members (Full Membership/Young Scientist Membership) EUR 850 for all others

The registration fee includes the full participation in the two day scientific programme, coffee and lunch, a social dinner and hotel accommodation for two nights. Travel is not included.

#### **Attendance Grants**

ESCMID provides a number of attendance grants for ESCMID "young scientist members". The grant covers the registration fee. Travel is not included. Please apply via the ESCMID website at www.escmid.org/education before 18 March 2016. Applicants will be informed about their acceptance by 1 April 2016.

#### **CME Accreditation**

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