# ESCMID Postgraduate Education Course

#### Faculty Members

Barbara Van der Pol (USA)

Catherine Ong (Singapore)

Daniela Cirillo (Italy)

Diane Lindsay (United Kingdom)

Carole Kebbi Beghdadi (Switzerland)

Emanuelle Cambau (France)

Florian Tagini (Switzerland)

Gilbert Greub (Switzerland)

**Hubert Hilbi** (Switzerland)

Jorgen Skov Jensen (Denmark)

Mateja Jankovic Makek (Croatia)

Mike Beeton (United Kingdom) Mirja

Puollakainen (Finland) Oystein

Angen (Denmark)

Patrick Meyer-Sauteur (Switzerland)

Sally Cutler (United Kingdom)

Sophie Jarraud (France)

Sylvia Kleta (Germany)

Sylvia Bruisten (Netherlands)

## Target Audience

Both clinical microbiologists and infectious disease specialists interested in diagnosing and treating intracellular bacteria, namely Chlamydia spp., Legionella, Mycobacteria, Coxiella, Rickettsia, Bartonella and Listeria, as well as bacteria of fastidious growth such as Mycoplasma. The course may be interesting for infectious diseases specialists involved zoonotic infectious as well as actors involved in One-Health aspects of intracellular bacteria (epidemiologists and veterinaries). This course is suitable for early career and advanced clinicians (microbiologists infectious diseases specialists) or scientists and plenary presentations and panel discussions.

#### **Attendance Grants**

ESCMID provides many attendance grants for ESCMID "Young Scientist members". The grant covers the registration fee, but not travel or accommodation costs. Please apply via the ESCMID website at www.escmid.org/education before 10/04/2024. Applicants will be informed about their acceptance by 15/04/2024.

## Contact

### Administrative Secretariat

Kamelia Afkir

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# Organisation

#### **Course Venue**

Lausanne University Hospital (CHUV), zones des auditoires (Auditoire Chalotte-Olivier), Lausanne, Switzerland Rue du Bugnon 46, 1011 Lausanne, Switzerland www.chuv.ch/fr/chuv-home

#### **Registration Procedure**

The registration form can be found on the ESCMID website at <a href="https://www.escmid.org/education">www.escmid.org/education</a>. Please return it to the course administrative secretariat by 8.05.2024.

#### Registration Fee

EUR 500 for ESCMID members EUR 650 for all others

The fee includes tuition, meals, coffee breaks, and social activities (dinner, entrance to the museum exhibition "World of Microbes").

#### Accommodation

Accommodation is not included in the fee.

#### The organizers suggest:

#### Aquatis Hôtel

Route de Berne 148 1010 Lausanne Vaud - Suisse Website: www.aquatis-hotel.ch

Phone:+41 21 654 24 24 E-Mail: info@aquatis-hotel.ch

#### Hôtel des patients

Avenue de la Sallaz 8, 1005 Lausanne Website: <u>www.hoteldespatients.ch</u>

Phone: +41 21 545 41 11

 $\hbox{E-Mail:}\ \underline{reception.lausanne@hoteldespatients.ch}$ 



ESCMID Postgraduate Education Course

Intracellular bacteria, the latest developments: from clinical microbiology to infectious disease

# Lausanne, Switzerland 27 – 30 May 2024



#### Organisers

- ESGMAC
- ESGMD, ESGMYC, ESGVM, ESCCAR

#### Course coordinator

Prof. Gilbert Greub, Lausanne University
Hospital, Lausanne, Switzerland
Dr. Florian Tagini, Lausanne University Hospital,
Lausanne, Switzerland

#### Course objectives

In this course, participants will explore the pathogenesis of clinically important intracellular bacteria. They will learn how they infiltrate host cells, evade the immune system, and replicate within their hosts. The course will also delve into host-pathogen interactions, analysing the various molecular mechanisms developed by the bacteria to interact with the host and modify its responses. The clinical presentation of diseases caused by intracellular bacteria will be examined, enabling participants to recognize the distinct symptoms and exposure associated with such infections. In addition, particular One-Health aspects of intracellular bacteria will be discussed during this course. Participants will be introduced to various diagnostic methods (molecular assays, serology, culture, microscopy) with an emphasis on the importance of timely and accurate diagnosis in managing intracellular bacterial infections. Treatment strategies targeting these organisms will be discussed. There will be a focus on the challenges posed by drug resistance and persistence in these pathogens. The course will feature case studies and provide insight into current research in the field, to put the knowledge into real clinical experiences. Lastly, this course aims to create a networking environment between members of the field, to enable potential European collaboration for clinical or basic research as well as to offer the opportunities for early career participants to meet experts in the field (and thus promote their own careers)

Day 1, 27 May	EUE#
08:00 – 08:45	Registration
08:45 – 09:00	Welcome & information
09:00 – 09:30	Immunopathogenesis of Mycobacterium tuberculosis Catherine Ong, Singapore
09:30- 10:00	Tuberculosis : clinical presentation, diagnosis & treatment Emanuelle Cambau, France
10:00 – 10:30	Diagnosis of non-tuberculous mycobacterial infections Mateja Jankovic Makek, Croatia
10:30 – 11:00	Coffee break
11:00 – 11:30	Secretion systems: from Legionella to Mycobacteria Florian Tagini, Switzerland
11:30 – 12:00	<b>Legionella: clinical aspects</b> Sophie Jarraud, France
12:00 – 12:30	Added Value of PCR & genomics in the diagnosis of <i>Legionella</i> infections and for epidemiology  Diane Lindsay, United Kingdom
12:30 – 14:00	Lunch break
14:00 – 15:30	Workshop: How to develop a diagnostic PCR: C psitacci & C. burnetii as examples Barbara Van der Pol (USA), Diane Lindsay (United Kingdom), Mirja Puoallakainen (Finland), Øystein Angen (Denmark); Done in parallel with the other workshops
15:30 – 16:00	Coffee break
16:00 – 17:00	Clinical cases presentation and discussion Different speakers
16:00 – 17:00	
18:00 – 19:45	Social event: Playing with microbes

Day 2, 28 May	2024
08:45 - 09:00	Practical information
09:00 – 09:30	Classification and taxonomy of intracellular bacteria Gilbert Greub, Switzerland
09:30 – 10:00	Global current outbreak of Mycoplasma pneumoniae: the latest data Patrick Meyer-Sauteur, Switzerland
10:00 – 10:30	infections Barbara Van der Pol, USA
10:30 - 11:00	Coffee break
11:00 – 11:30	One Health aspects in outbreak investigation: the case of Chlamydia psittaci Oystein Angen, Denmark
11:30 – 12:00	Atypical pneumonia due to chlamydiae Mirja Puolakkainen, Finland
12:00 – 12:30	Mycobacterium tuberculosis from phenotypic to genotypic antibiotic susceptibility testing
	Daniela Cirillo, Italy
12:30 - 14:00	Lunch break
14:00 – 15:30	Workshop: How to perform antibiotic susceptibility testing for intracellular bacteria Sylvia Bruisten (Netherlands), Daniela Cirillo (Italy), Jorgen Skov Jensen (Denmark), Florian Tagini (Switzerland) Done in parallel with the other workshops
15:30 – 16:00	Coffee break
16:00 – 22:00	Social event: Walk in the Lavaux Vineyards (UNESCO) Gala dinner

Day 3, 29 May 2024		
08:45 – 09:00	Practical information	
09:00 - 09:30	Intracellular bacteria and free-living amoebae Sophie Jarraud, France	
09:30- 10:00	Coxiella burnetii: diagnostics approaches of Q fever infection Sally Cutler (United Kingdom)	
10:00 – 10:30	Spotted fever : clinical presentation and diagnostic aspects Gilbert Greub, Switzerland	
10:30 - 11:00	Coffee break	
11:00 – 11:30	Legionella pneumophila: one T4SS and effectors galore Hubert Hilbi, Switzerland	
11:30- 12:00	Chlamydia trachomatis: clinical presentation Florian Tagini, Switzerland	
12:00 – 12:30	<b>Chlamydia-related bacteria</b> Carole Kebbi Beghdadi, Switzerland	
12:30 – 14:00	Lunch break	
14:00 – 15:30	Workshop: How to culture intracellular bacteria Sophie Jarraud (France), Emanuelle Cambau (France), Gilbert Greub (Lausanne) Done in parallel with the other workshops.	
15:30 – 16:00	Coffee break	
16:00 – 17:00	Clinical cases presentation and discussion Different speakers	
16:00 – 17:00	<b>Q/A session</b> Different speakers	
17:45 – 19:45	Social event: Visit of the "World of Microbes" (an exhibition in a museum in Lausanne)	

