

**Title:** From lab to wards in a large hospital: diagnostic stewardship, antimicrobial stewardship tools and practical training for an appropriate use of antibiotics

**Objectives:**

- to “practice” the principles of antimicrobial stewardship in real-world context
- to discuss the role of the diagnostic stewardship
- to increase the knowledge on new molecular diagnostic tests and their implementation in daily practice
- to improve the antibiogram interpretation skills
- to evaluate tools for an appropriate use of antibiotics

In the 2-day course, objectives of the Domain 3 and 5 of the European Training Programme of the The ESCMID Antimicrobial Stewardship Certificate 2022-2024 will be addressed.

**Course Programme**

**Faculty Members:**

*Prof Maurizio Sanguinetti, Rome, Italy*

*Dr Giulia De Angelis, Rome, Italy*

*Dr Giulia Menchinelli, Rome, Italy*

*Dr Flavio De Maio, Rome, Italy*

*Dr Rita Murri, Rome, Italy*

*Prof Roberto Cauda, Rome, Italy*

*Dr Massimo Fantoni, Rome, Italy*

*Prof Gennaro De Pascale, Rome, Italy*

*Prof Massimo Antonelli, Rome, Italy*

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### Programme

<b>Day 1 (04/10/2022)</b>			
08:30-9:00	Welcome and presentation of the 2-day course	<i>Welcome</i>	Prof Maurizio Sanguinetti – Prof Roberto Cauda
9:00-9:45	Microbiology integrated in AS: the model of FPG	<i>Lecture</i>	Prof Maurizio Sanguinetti
9:45-10:30	Most used diagnostic instruments, appropriate sampling and specimen transport methods and how to interpret the results of microbiology tests for clinical use, microbiological algorithms	<i>Lab visit</i>	Microbiologists
<b>10:45-11:00 Coffee break</b>			
10:45-11:30	Traditional or fast microbiology: which, when, and why	<i>Lecture</i>	Giulia Menchinelli
11:30-12:15	Fast identification of antibiotic resistance determinants: tools and utility	<i>Lecture and discussion of clinical cases</i>	Giulia De Angelis
12:15-13:00	Cumulative antibiogram as a tool of antibiotic stewardship	<i>Lecture and discussion of clinical cases</i>	Rita Murri and Massimo Fantoni
<b>13:00-14:00 Lunch</b>			
14:00-14:45	Molecular epidemiology and its role for antimicrobial stewardship	<i>Lecture and discussion of clinical cases</i>	Maurizio Sanguinetti and Flavio De Maio
14:45-16:00	From MIC to in vivo susceptibility: interpretation of “tricky” antibiograms and -when there are not clinical breakpoint	<i>Practical training on antibiograms</i>	Giulia De Angelis and Giulia Menchinelli
16:00-17:00	Surveillance and colonization by MDR: is the information useful to drive proper empirical therapy?	<i>Lecture and discussion of clinical cases</i>	Massimo Fantoni

<b>Day 2 (05/10/2022)</b>			
8:30-9:15	From the golden hour to the watchful waiting in common wards and in intensive care units: how can Microbiology help in uncertain situations	Clinical cases	Gennaro De Pascale – Rita Murri
9:15- 10:00	Impact of rapid diagnostic testing on antibiotic use - Improving diagnostic algorithms for severe infections: respiratory tract infections in ICU	Interactive session	Giulia Menchinelli – Massimo Antonelli
10:00-10:45	Impact of rapid diagnostic testing on antibiotic use Improving diagnostic algorithms for severe infections: the bloodstream infections	Interactive session	Giulia De Angelis - Rita Murri
<b>10:45-11:00 Coffee break</b>			
11:00-13:00	Infectious diseases consultancies in common wards and intensive care unit: how to choose an antibiotic, its dosage, its route of administration according to the pharmacokinetic and pharmacodynamic properties	<i>Practical training</i>	Infectious diseases consultancies (even Haematology and Transplanted pts)
<b>13:00-14:00 Lunch</b>			
14:00-16:00	Simulation of daily round: discussion with infectious disease physicians and microbiologist with clinical cases; when possible, involvement of specialists from other disciplines	<i>Practical training</i>	All
16:00-17:00	Wrap up and key lessons learnt		