

Frontiers in Microbial Systems 2025

Classes will take place at ENS, Biology department, 46 rue d'Ulm, in room 305. The broad theme of antimicrobial strategies and their escape has been selected as an Ariadne's thread for the week.

Monday November 10th — Welcome at the frontiers

- 9h – 10h30 **Olivier Espéli**, CIRB (Collège de France) — Introduction to bacterial cell physiology.
- 10h45 – 12h15 **Alice Lebreton**, IBENS (ENS-PSL) — Introduction to infection biology.
- 13h45 – 15h15 **Laurent Aussel**, LCB (CNRS-Aix-Marseille Université), TBA
- 15h30 – 17h **Zeynep Baharoglu**, Institut Pasteur & IBPC — TBA

Tuesday November 11th — Holiday

Wednesday November 12th — Epidemiology and antimicrobial strategies

- 9h – 10h30 **Valérie Choumet**, Institut Pasteur — Disarming the vector: How mosquito and tick saliva shape pathogen transmission — Implications for anti-microbial strategies and their evasion.
- 10h45 – 12h15 **Sylvain Brisse**, Institut Pasteur — Global genomic surveillance of antimicrobial resistance.
- 13h45 – 15h45 **Alexandra Aubry**, Cimi (Paris) — TBA
- 16h – 17h *Group chalk presentations: selection of topics related to the course.*

Thursday November 13th — Host antimicrobial defences; tolerance to antimicrobials

- 9h – 10h *Preparation of flash group chalk presentations on the selected topics.*
- 10h15 – 12h15 **Caroline Demangel**, Institut Pasteur — TBA
- 13h45 – 15h15 **Olivier Cunrath**, Université de Strasbourg — TBA
- 15h30 – 17h **Alessandro Pagliuso**, Micalis (INRAE Jouy-en-Josas) — TBA

Friday November 14th — Antimicrobial mechanism: from molecules to cells and populations

- 9h – 10h30 **Meriem El Karoui**, LBPA (ENS Paris-Saclay) — TBA
- 10h45 – 12h15 *Flash group chalk presentations on the selected topics.*
- 14h – 16h **Mireille Ansaldi**, LCB (CNRS-Aix-Marseille Université) — TBA

The exam will be scheduled during the week of December 8 to 12