

Graduate Schools Infection & Immunity and Biology & Medicine

Seminars in Microbiology

Monday, 18th May, 2015

Salle de séminaire 7172, CMU

11:30 - 12:30



Prof. Ivo Boneca

Institut Pasteur, Group Biology and Genetics of the Bacterial Cell Wall, Paris, FR

Evolution of shape and peptidoglycan metabolism in the *Neisseria* genus

Ivo Boneca studies the function of cell wall biosynthesis and modifying enzymes in variety of bacterial pathogens, including *Neisseria meningitidis*, *Helicobacter pylori* and *Listeria moncytogenes*. His lab also explores the role that cell wall, and in particular, peptidoglycan (PG) metabolism has on host-microbe interactions and antibiotic resistance. Using *H. pylori* as an alternative model system, they have been dissecting the machineries involved in PG assembly and found that certain steps in PG synthesis can be disrupted by interfering with the stability of the protein complex PBP2:MreC.

Selected references:

Burke et al. J Bacteriol. 2014. 196(21):3756-67. Candela et al. Microb Drug Resist. 2014. 20(3):222-30. Viaud et al. Science. 2013. 22;342(6161):971-6. Zarantonelli et al. Cell Host Microbe. 2013. 13(6):735-45. Veyrier et al. Mol Microbiol. 2013. 87(5):1100-12

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Sandwiches will be offered after the seminar