

Lecture Series & Workshops 2019-2021

From Single Organisms to Systems Ecology and Evolution

Infection Biology in the era of microbiomes: the *Listeria* paradigm

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- 4th of March 2020, 12 PM
- Campus Belval, Maison du Savoir; Amphi 3.510

For individual afternoon meetings with Pr. Cossart, please **register** by mail to secretary@microbiology.lu.

During more than three decades, the intracellular bacterium *Listeria monocytogenes* has been our tool to investigate the molecular and cellular basis of infections by intracellular bacteria. This food-borne pathogen disseminates from the gut to the brain and the placenta providing an interesting way to address several questions such as how bacteria cross host barriers, and survive in different niches of the body and how cells react when invaded by a bacterium. These investigations have led to general concepts not only in infection biology but also in cell biology, epigenetics and fundamental microbiology. Some of our recent studies have shed light on fundamental aspects of bacterial physiology such as novel RNA-mediated regulations/mechanisms, the first bacterial RNA-binding secreted protein, a never described mechanism of antibiotic resistance, a new component involved in mitochondrial fission and the targeting of specific bacteria in gut microbiotas by bacteriocins, revealing for example the intriguing role of *Prevotella copri*.

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