

Seminar in Microbiology

Monday, May 2, 2016

Salle de séminaire Salle E07.3347.a, CMU

11:30 – 12:30

Marc Lecuit

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New insights in the pathogenesis of *Listeria monocytogenes*

Listeria monocytogenes is a fascinating pathogen that can invade epithelial cells and survive in the cytoplasm. Invasion is mediated by species-specific bacteria-cell interactions. *L. monocytogenes* is an environmental bacterium that can also cross the placental barrier and therefore is a major concern for pregnant women. The laboratory of Marc Lecuit has made seminal work on *Listeria* invasion and pathogenicity, from which only very few of the recent publications are listed here.

- Maury et al., 2016. Uncovering *Listeria monocytogenes* hypervirulence by harnessing its biodiversity. *Nat Genet.* 2016 Mar;48(3):308-13. doi: 10.1038/ng.3501. Epub 2016 Feb 1.
- Eugster et al., 2015. Bacteriophage predation promotes serovar diversification in *Listeria monocytogenes*. *Mol Microbiol.* 2015 Jul;97(1):33-46. doi: 10.1111/mmi.13009. Epub 2015 Apr 24.
- Gessain et al., 2015. PI3-kinase activation is critical for host barrier permissiveness to *Listeria monocytogenes*. *J Exp Med.* 2015 Feb 9;212(2):165-83. doi: 10.1084/jem.20141406. Epub 2015 Jan 26.
- Blériot et al., 2015 Liver-resident macrophage necroptosis orchestrates type 1 microbicidal inflammation and type-2-mediated tissue repair during bacterial infection. *Immunity.* 2015 Jan 20;42(1):145-58. doi: 10.1016/j.immuni.2014.12.020. Epub 2014 Dec 25.
- Leclercq et al., Global burden of listeriosis: the tip of the iceberg. *Lancet Infect Dis.* 2014 Nov;14(11):1027-8. doi: 10.1016/S1473-3099(14)70903-X. Epub 2014 Sep 15. No abstract available.
- Tsai et al., 2013. Murinization of internalin extends its receptor repertoire, altering *Listeria monocytogenes* cell tropism and host responses. *PLoS Pathog.* 2013;9(5):e1003381.
- Travier et al., 2013. ActA promotes *Listeria monocytogenes* aggregation, intestinal colonization and carriage. *PLoS Pathog.* 2013 Jan;9(1):e1003131.