## Graduate Schools Infection Immunity and Cancer, UniGe & UniL: CUS Biology & Medicine, CMU

## Seminar in Microbiology

Monday, October 26, 2015

Salle de séminaire 7172, CMU

11:30 - 12:30



## **Nathalie Campo**

Laboratoire de Microbiologie et Génétique Moléculaires Toulouse, France

## Competence-Programmed Cell Division Delay in *Streptococcus pneumoniae*: Genetic Control and Biological Role

Nathalie Campo is an expert in molecular genetics, cell biology and genetic transformation (genetic exchange) of *S. pneumoniae* as well as in biochemistry of membrane proteins. By combining these methodologies, she setup an integrated approach allowing the direct visualization, in live cells and in real time, of the pneumococcal transformation process by time-lapse fluorescence microscopy. She now focuses on the molecular characterization of the cell growth arrest that occurs during transformation in the pneumococcus, with the aim of understanding how this bacterium coordinates transformation with its life cycle.

<u>Johnston C., N. Campo</u>, M.J. Bergé, P. Polard and J.P. Claverys. 2014. *Streptococcus pneumoniae*, le transformiste. *Trends Microbiol.* **22:**113-19

Bergé M.J., A. Kamgoué., B. Martin, P. Polard, **N. Campo\*** and J.P. Claverys\*. 2013. Midcell Recruitment of the DNA Uptake and Virulence Nuclease, EndA, for Pneumococcal Transformation. *PLoS Pathog.* 9: e1003596

Quevillon-Cheruel S., N. Campo, N. Mirouze, I. Mortier-Barrière, M.A. Brooks, M. Boudes, D. Durand, A.L. Soulet, J. Lisboa, P. Noirot, B. Martin, H. van Tilbeurgh, M.F. Noirot-Gros, J.P. Claverys and P. Polard. 2012 Structure-function analysis of pneumococcal DprA protein reveals that dimerization is crucial for loading RecA recombinase onto DNA during transformation. *Proc Natl Acad Sci U S A*. doi:10.1073/pnas.1205638109

Contact: P. Viollier & Matthieu Berge Sandwiches will be offered after the seminar