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

Seminar in Microbiology

Monday, 26nd June, 2017

Salle de séminaire, E07.3347.a, CMU

11:30 – 12:30

Dr. Katy Jeannot

Laboratory of Bacteriology, French National Reference Centre for Antibiotic Resistance, University Hospital Jean Minjoz, Besançon, FR

Polymyxin resistance in Gram-negative bacteria

Dr. Jeannot is interested in resistance mechanisms of Gram-negative pathogens including. *Acinetobacter baumannii* and Pseudomonas aeruginosa. She studied resistance to carbapenems conferred by carbapenemases and recently has explored the resistance to polymyxins that are often used as antibiotic of last resort to treat infections of carbapenem- and multidrug-resistant bacteria. However, the emergence of intrinsic and transferable resistance mechanisms, including the spread of the *mcr* resistance gene is becoming an increasing clinical problem and will be discussed in the context of relevant bacterial pathogens *Escherichia coli*, *Klebsiella pneumoniae*, *Acinetobacter baumannii* and *Pseudomonas aeruginosa*.

Recent publications:

- Toxic Electrophiles Induce Expression of the Multi-Drug Efflux Pump MexEF-OprN in *Pseudomonas aeruginosa* Through a Novel Transcriptional Regulator, CmrA. Juarez et al. *Antimicrob Agents Chemother*. 2017
- Resistance to polymyxins in Gram-negative organisms. Jeannot et al. *Int J Antimicrob Agents*. 2017
- Clinical features and prognostic factors of listeriosis: the MONALISA national prospective cohort study. Charlier et al. *Lancet Infect Dis*. 2017
- First Detection of GES-5 Carbapenemase-Producing *Acinetobacter baumannii* Isolate. Al-Agamy et al *Microb Drug Resist*. 2016
- Phenotype and toxicity of the recently discovered *exlA*-positive *Pseudomonas aeruginosa* strains collected worldwide. Reboud *et* al *Environ Microbiol*. 2016
- Amino Acid Substitutions Account for Most MexS Alterations in Clinical nfxC Mutants of *Pseudomonas aeruginosa*. Richardo et al. *Antimicrob Agents Chemother*. 2016
- Genetic and biochemical characterization of OXA-405, an OXA-48-type extended-spectrum β-lactamase without significant carbapenemase activity. Dortet et al. *Antimicrob Agents Chemother*. 2015

Contact: P.VIOLLIER & P. LINDER