

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

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## Seminar in Microbiology

Monday, January 20, 2020

Salle de séminaire, E07.3347.a, CMU

**11:30 – 12:30**

**Michael Berney**  
Department of Microbiology and Immunology  
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## Derailing metabolic pathways in *M. tuberculosis* to eradicate persistent infections

References: <https://www.berneylab.org/>

Hasenoehrl et al., 2019. Derailing the aspartate pathway of *Mycobacterium tuberculosis* to eradicate persistent infection. *Nat Commun.* 2019 Sep 16;10(1):4215.

Chiner-Oms et al., 2019. Genome-wide mutational biases fuel transcriptional diversity in the *Mycobacterium tuberculosis* complex. *Nat Commun.* 2019 Sep 5;10(1):3994.

Lee et al., 2019. Inhibitors of energy metabolism interfere with antibiotic-induced death in mycobacteria. *J Biol Chem.* 2019 Feb 8;294(6):1936-1943.

Sekar et al., 2018. Synthesis and degradation of FtsZ quantitatively predict the first cell division in starved bacteria. *Mol Syst Biol.* 2018 Nov 5;14(11):e8623.

Tiwari et al. 2018. Arginine-deprivation-induced oxidative damage sterilizes *Mycobacterium tuberculosis*. *Proc Natl Acad Sci U S A.* 2018 Sep 25;115(39):9779-9784.

Kurthkoti et al., 2017. The Capacity of *Mycobacterium tuberculosis* To Survive Iron Starvation Might Enable It To Persist in Iron-Deprived Microenvironments of Human Granulomas. *mBio.* 2017 Aug 15;8(4). pii: e01092-17.

Kalia et al., 2017. Exploiting the synthetic lethality between terminal respiratory oxidases to kill *Mycobacterium tuberculosis* and clear host infection. *Proc Natl Acad Sci U S A.* 2017 Jul 11;114(28):7426-7431.

**Berney M**, Berney-Meyer L. 2017., *Mycobacterium tuberculosis* in the Face of Host-Imposed Nutrient Limitation. *Microbiol Spectr.* 2017 Jun;5(3). doi: 10.1128/microbiolspec.

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