

## **Master thesis project at the Kümmerli lab – Pathogen – pathogen interactions**

The Kümmerli lab at the Department of Quantitative Biomedicine is looking for a master student to carry out their thesis project. The project is titled “Does co-infection alter pathogen survival and virulence?” The project will involve working with experimentally evolved communities of the bacterial human pathogens, *Pseudomonas aeruginosa* (PA), *Staphylococcus aureus* (SA), and *Klebsiella pneumoniae* (KP). These opportunistic pathogens are often isolated together in both chronic and acute infections of the lung, other organs, and skin in immunocompromised patients and are a leading cause of bacteremia.

The aims of the project will be to better understand the nature of interactions between the focal pathogens when they have been evolved together in an infection mimetic growth medium. This project will involve microbiology, evolutionary biology, population biology coupled with high throughput assay development, qPCR, and sequencing (if possible).

Interested applicants can write to: [sukrit.suresh@uzh.ch](mailto:sukrit.suresh@uzh.ch) or [rolf.kuemmerli@uzh.ch](mailto:rolf.kuemmerli@uzh.ch) for more information.

Starting dates: On discussion.