The benefit of being slow – a long lag phase yields a fitness advantage in constant environments

**INTRODUCTION**

Microorganisms are subjected to changes in their environment

→ Cells need to adapt to the new environment

→ Takes time and energy resulting in a period of no or reduced growth: lag

**DISCUSSION & CONCLUSION**

The benefit of having a long lag phase in a fluctuating environment is not immediately clear at first glance. However, the results from competition experiments as well as the analysis of a large dataset of genetically different strains from a variety of ecological niches suggest that lag duration, and by extension YLR108C, could be evolutionarily tuned to the carbon sources present in the environment in combination with oxygen availability.