Investigating phospholipid biosynthesis in *Mycobacterium tuberculosis*

Irwin R. Selvam*, Kristīne Grāve*, Matthew D. Bennett*, Dan Sjöstrand* and Martin Högbom*

*Department of Biochemistry and Biochemistry, Stockholm University, Stockholm

Mycobacterium tuberculosis (*Mtb*) is the causative agent of tuberculosis (TB) in humans. In 2022 alone, 10.6 million people fell ill with TB and there were 1.3 million deaths. This places TB as the leading cause of death due to a single infectious agent worldwide. Given the prevalence of drug-resistant strains, there is an urgent need for novel therapeutics. The complex *Mtb* cell envelope is a key determinant of pathogenicity. The biosynthesis of phospholipids in *Mtb* that make up the cytoplasmic membrane involves a number of essential enzymes, including the recently published PgsA1. Our work focuses on the characterisation of members of this pathway with a view towards developing new inhibitors of these enzymes.