

# SOPHIE BRAMEYER

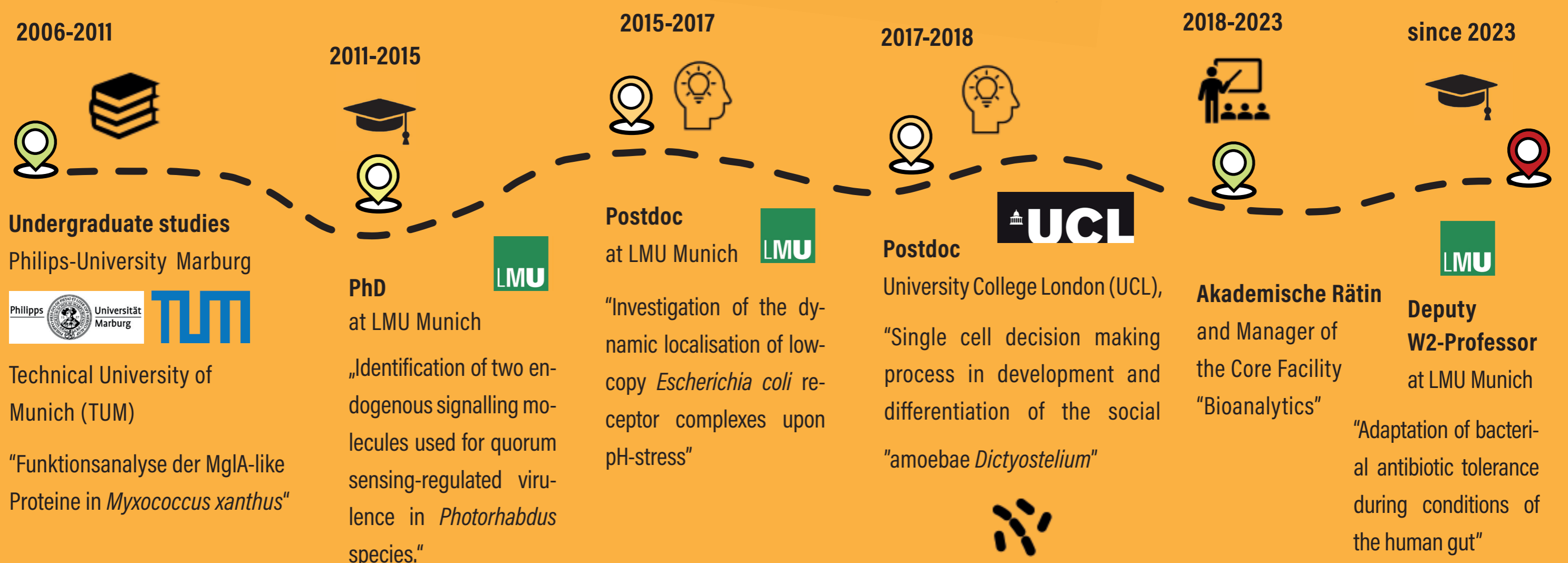
## ABOUT

Sophie Brameyer is a molecular biologist from Germany, specializing in microbiology. She began her biology studies at the Philips-University Marburg and continued at the Technical University of Munich, where she developed a strong fascination for various microscopy techniques. Directly after graduating, Sophie was awarded the PhD thesis prize by the Association for General and Applied Microbiology (VAAM) in 2016. She then conducted postdoctoral research at both LMU Munich and the University College London. In 2019, Sophie returned to LMU Munich for her role as Akademische Rätin and also manager of the Bioanalytics core facility. Since December 2023, she holds the position of Deputy W2-Professor of Microbiology at LMU Munich. Her research group aims to understand how stress conditions in the human gut affect and promote bacterial antibiotic tolerance, with the goal of developing new strategies against increasing antibiotic resistance.

### WHAT TO TELL STUDENTS

„Stay curious and follow your passion!“

## CV TIMELINE



## KEY EXPERIENCE

After completing two postdoctoral positions, I was initially uncertain about continuing in academia. Fortunately, the opportunity to lead the Bioanalytics core facility provided me with long-term vision and stability. This role allowed me to integrate various techniques for investigating biomolecular interactions in vitro with my expertise in molecular microbiology. Over the years, I have worked with a diverse range of organisms, including bacterial species such as *Myxococcus xanthus*, *Escherichia coli*, and *Vibrio campbellii*, as well as the plant *Arabidopsis thaliana* and the social amoeba *Dictyostelium discoideum*, a model organism for studying eukaryotic cell functions. Despite switching between different organisms, my research has consistently focused on understanding how single cells make decisions during fluctuating conditions such as acid stress adaptation, cell-cell signaling, development, and, most recently, antibiotic tolerance.

## MAJOR SCIENTIFIC FINDING

Throughout my academic journey, I have learned different microscopy techniques and applied them to study a variety of organisms. Among my publications employing microscopy techniques, my personal highlight is the study on the heterogeneous activation of the three inducible acid resistance systems by acid stress in *Escherichia coli*.

