

The Parker lab is seeking highly motivated student/ intern at late-stage Bachelor or Ms level to join our project from ~ April 2025 on Nucleotide based Immune-potentiating Small molecules in Plants (NISP). NISP is part of the i-HEAD research consortium with a focus on immunometabolism. Our work is based on research done in the lab (see Huang et al., 2022. PMID: 35857645; Locci & Parker, Open Biology 2024). This project has two components that the student can participate in.

- i) Investigating the in vivo and in vitro bioactivity of immune infochemicals using established assays. These include RT-qPCR, pathogen resistance, in vitro protein complex reconstitution using purified proteins from insect cells and *E. coli*, reaction oxygen species burst quantification and MPK activation assays.
- ii) Taking forward genetic approach to build a plant mutant library to characterize infochemical-insensitive mutants. A reverse genetics approach will be done in parallel, harnessing transcriptome and interactome data.

If you're interested please send an up-to-date CV, a half-page motivation letter and contacts of 2 academic referees to Dr Steven Cheng scheng@mpipz.mpg.de and Prof Dr Jane Parker parker@mpipz.mpg.de. Informal inquiries are also welcome.