

The Ma lab at the Gregor Mendel Institute of Molecular Plant Biology will harness the power of gall-inducing insects, nature's own plant manipulators, to explore the intricate interplay between plant development and defense signaling. We are looking for a:

Postdoc

About the lab

Galling insects hijack existing plant developmental pathways to induce diverse and complex galls. Our group will establish a novel gall model between the model plant *Arabidopsis thaliana* and Swede Midge. We will integrate a range of disciplines — genetics, transcriptomics, molecular biology, biochemistry and advanced imaging — to uncover the genetic & signalling determinants of gall formation and characterise key hormonal and receptor signalling during gall formation from single cell to whole organ level. See [more](#).

Candidates

We are looking for inquisitive, goal-oriented and proactive individuals, who are independent yet happy to share. The candidate should have a strong background in molecular biology or cell biology, interested in signalling mechanisms and be fluent in English (written & oral). Experience in handling scRNA or other omics data, proficiency in programming, and experience with plant immunity/development or insects are pluses.

We offer training in advanced cell biology and molecular & genetic skillsets for investigating fundamental cellular mechanisms. We value the development of the postdoc's communication & critical thinking and future independence through supervising opportunities, conferences, reviewing, manuscript & grant writing.

About the research project

The main aspects of the project(s) include characterising major signalling & hormonal determinants for gall development using scRNAseq, metabolomics and proteomics; identifying and characterising potential gene-for-gene interactions between *Arabidopsis* and Swede Midge; dissecting defence & developmental signalling interactions using molecular genetics and advanced imaging.

Contact

Send your CV and a brief motivation letter to Yan Ma (yan.ma@unil.ch). In your letter, share why you're interested in our lab, the research questions you are most curious about, and your vision for a good research environment. All postdocs are encouraged to apply for fellowships with our help! Start date: 1st Feb 2024. The first selection round will start on 18 September and will continue until positions are filled. For more information, visit [Information for Students and Postdocs](#).

About the Gregor Mendel Institute

The Gregor Mendel Institute is an international research institute founded by the Austrian Academy of Sciences. Its main goal is to promote excellent curiosity driven research within the field of plant molecular biology. The Gregor Mendel Institute is located at the Vienna BioCenter, one of Europe's hotspots for Life Sciences.

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