

Postdoctoral researcher in Structural Biology in Plant-virus interactions

Faculty of Science – Swammerdam Institute for Life Sciences

Are you trained in protein Structural biology (X-ray and/or Cryo-EM) and interested in applying research in Plant Biology, Ubiquitin-like modifiers, cell cycle regulation or DNA replication? We are seeking a Postdoctoral researcher for an ambitious research project on an emerging plant virus with devastating effects on crops. We study how Geminiviruses replicate their viral genome in infected plant cells. At least two viral proteins orchestrate DNA replication by hijacking essential processes in the nucleus, including cell cycle control (Retinablastoma-related or RBR) and DNA repair pathways (via SUMO conjugation and PCNA).

In this interdisciplinary research project we aim to identify the replication mechanism by studying the viral and plant proteins involved. The project will be executed in close collaboration with the Industry and the group of Dr. Sven Hennig (Free University of Amsterdam). Our team is dedicated to identify genetic solutions for plant diseases by studying virulence mechanisms using biochemical approaches. MPP is a research group with three group leaders, which is part of the *Green Life sciences* research cluster of SILS. At MPP we study the molecular interaction of plant pathogens, including plant viruses, fungi and bacteria. Our work aims at unravelling both plant immune mechanisms and virulence strategies of these pathogens at the molecular level. We study these aspects in model organisms, like Arabidopsis, and crop plants including cabbage, Cucurbits and tomato.

We will base our selection on your scientific track record, ideas for this project, as well as on your vision for your future (scientific) career.

What do we require?

- A PhD in Structural Biology and/or Biochemistry, preferentially with hands on experience in X-ray and/or cryo-EM and protein work, reflected by publications in respectable international journals;
- preferentially expertise with Plant Biology and/or research on (Plant) Viruses;
- an enthusiasm and willingness to learn about plant-virus & plant-microbe interactions (to become multidisciplinary);
- an ambitious team player with an open character and willingness to train and support others;
- an appreciation to contribute to valorization efforts and to foster collaborations with other academic partners and industry;
- an understanding and acceptation of the sensitivity of confidentiality in public-private collaborations;
- fluency in English, both written and spoken, with proven in experience in writing papers/grants.

Questions?

Please contact: Harrold van den Burg, associate professor (Molecular Plant Pathology; h.a.vandenburg@uva.nl)

Do you recognize yourself in the job profile? Then we look forward to receiving your application by 13 October 2020. You can apply online by https://sils.uva.nl/vacancies/faculty-of-science.html