

Postdoctoral Researcher in Plant Molecular and Cell Biology

The University of Helsinki is an international scientific community of 40,000 students and researchers. It is one of the leading multidisciplinary research universities and ranks among the top 100 universities in the world. It is currently investing heavily in life sciences research and offers an attractive workplace with a variety of development opportunities and benefits. The Organismal and Evolutionary Biology Research Programme (OEB) of the Faculty of Biological and Environmental Sciences (<https://www.helsinki.fi/en/faculty-of-biological-and-environmental-sciences/research/organismal-and-evolutionary-biology>) comprises roughly 40 research groups, which employ 40 principal investigators and 120 researchers. The research programme is situated in the Viikki science park equipped with state-of-the-art instrumentation and comprehensive core facilities for molecular, biochemical and cell biological research. The Viikki Plant Science Centre (ViPS) offers a stimulating high impact research environment for plant biologists (<https://www.helsinki.fi/en/researchgroups/viikki-plant-science-centre>).

The Organismal and Evolutionary Biology Research Programme invites applications for a

POSTDOCTORAL RESEARCHER

in plant molecular and cell biology to study stomatal function and vascular water transport and the role of the receptor-like pseudokinase GHR1 and its novel interactors in these processes. We have shown that GHR1 is a central regulator of stomatal closure that likely acts as a scaffold that gathers together the molecular machinery that drives stomatal movements. We have identified eg. ion and water channels and signalling molecules in the GHR1 complex. This project aims to characterize the molecular networks through which GHR1 regulates stomatal function. We have also shown that GHR1 regulates water transport in the vasculature and the project additionally aims to decipher how stomatal function and regulation of water transport are connected at the molecular and whole plant level.

We are looking for a highly-motivated candidate with a doctoral degree in molecular or cell biology, plant biology, biochemistry or other relevant field. Experience in molecular plant sciences and biochemistry is considered an advantage. We seek a candidate who is able to conceive, execute, and complete research projects, think independently and creatively, and who has excellent written and verbal communication skills. The candidate should work well in a team as she/he will be integrated into an international research team of experts in plant stress biology and participate in extensive collaborations, including mobility exchanges within Europe. The project is funded by the Academy of Finland and a doctoral student is also being recruited. The background and interests of the successful candidates will determine their specific lines of research.



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The starting date is 1.1.2021 but can be negotiated. The position is funded for three years with a possibility for extension. The starting salary will be ca. 3300 - 3800 euros/month, depending on the appointee's qualifications and experience. There will be a trial period of six months in the beginning.

Applications should include the following documents as a single pdf file: motivation letter expressing your interest in and suitability for the project (max 1 page), CV (max 3 pages) and publication list. Include also contact information of two persons who can provide a reference letter based on request.

Please submit your application using the University of Helsinki Recruitment System via the Apply link. Applicants who are employees of the University of Helsinki are requested to leave their application via the SAP HR portal. Deadline for applications is 15th of September, 2020.

For more information, please contact the principal investigator Dr Maija Sierla: [maija.sierla\(at\)helsinki.fi](mailto:maija.sierla(at)helsinki.fi)

References:

- Sierla M. et al. 2018. The Receptor-like Pseudokinase GHR1 Is Required for Stomatal Closure. *Plant Cell*. 30: 2813–2837
- Sierla M. et al. 2016. Reactive Oxygen Species in the Regulation of Stomatal Movements. *Plant Physiol.* 171:1569-80