

Postdoc Position – Phenotyping and Agroecology of Legume Crops (3 a, 100%)

Announcement: https://www.jobs.ethz.ch/job/view/JOPG_ethz_5yHQdlfRgIMT1dkxi2

The Crop Science Group of the Institute of Agricultural Sciences at ETH Zürich invites applications for a 3-year Postdoc research position with the option of extension. Our research focuses on high-throughput crop phenotyping in the field. Our goal is to develop approaches for image-based solutions to the grand challenges of today's crop production.

Background of the research position

Increasing the share of legume crops cultivated for direct human consumption is an important societal demand for which research related to phenotyping, breeding and agronomy in crops such as soybean, pea and various pulses is required. Our group operates a unique rope camera system – the field phenotyping platform FIP (kp.ethz.ch/FIP) in Lindau-Eschikon, 20 km outside of Zürich. On this field site, but also in fields of national and international partners, we are monitoring the development of a wide range of crops with a focus on wheat and soybean. Our interdisciplinary group of Crop Science has research specialists & technicians in crop physiology, breeding and imaging. We are involved in a wide range of teaching and outreach activities and we offer courses such as 'Crop Phenotyping', 'Crop Production', 'Alternative Crops' and 'Innovation in Smart Farming'. We have a wide range of collaborations with groups from the national center for agricultural research 'Agroscope', the technical University HAFL and with other national and international partners from robotics to social sciences.

Job description

The postdoctoral researcher will be responsible to initiate and/or contribute to projects in phenotyping of soybean, peas and/or pulses. The researcher will make best use of the above described possibilities and opportunities. We expect that the postdoctoral researcher will

- Proactively develop approaches for 'phenomic selection' in breeding of legume crops
- Explore research options in agroecology, crop rotation and intercropping of legume crops
- Collaborate with research partners and companies in robotics, food and social sciences
- Supervise students from BSc to doctoral level and contribute to teaching of the group
- Publish manuscripts and engage in grant applications of the group
- Support public outreach activities of the group (website, social media, exhibitions)

Your profile

You should, by the time of appointment, have completed a PhD in Agricultural Sciences, Crop Physiology or a related field and you should have at least one first-author manuscript published in the fields of phenotyping or agroecology of legume crops. Moreover, you have

- Experience with field phenotyping experiments
- Experience with legume crops
- Good programming and statistical modelling skills
- Sound knowledge of English is obligatory; German is highly recommended
- Good communication and time management skills as well as willingness to participate in a collaborative and multifaceted research environment.

Interested?

We look forward to receiving your online application with the following documents:

- Motivational letter and Curriculum Vitae
- One-page research concept of your envisaged activities
- Copies of Master and PhD certificates
- Two reference letters (or at least contact details of two persons of reference)

Please note that we exclusively accept applications submitted through our online application portal. Applications via email or postal services will not be considered. The position will remain open at least until 30.11.2021 and first interviews with candidates will be conducted in December. Further information about the group of Crop Science can be found on our website www.kp.ethz.ch. In case of questions, please contact Prof. Achim Walter (achim.walter@usys.ethz.ch; no applications).

Research indicates that women and individuals from marginalized groups tend to apply only when they meet all criteria. If you believe you're qualified, but don't necessarily check every box, please submit an application.

In line with our values, ETH Zurich encourages an inclusive culture. We promote equality of opportunity, value diversity and nurture a working and learning environment in which the rights and dignity of all our staff and students are respected. Visit our [Equal Opportunities and Diversity website](#) to find out how we ensure a fair and open environment that allows everyone to grow and flourish.