



Postdoc Position — Molecular and Biochemical Analysis of a Novel Type of Race-Specific Resistance Gene from Wheat

The successful applicant will use biochemical, molecular and genetic approaches to characterize LR14a, a novel type of disease resistance protein in wheat that confers race-specific resistance against leaf rust and encodes a membrane-bound ankyrin-repeat protein (see *Nature Communications* <https://doi.org/10.1038/s41467-020-20777-x>). The applicant will play a key role in the further biochemical and molecular characterization of this novel type of resistance protein to gain a mechanistic functional understanding. The envisaged project involves identifying interaction partners from the host and the pathogen, as well as protein functional studies in homologous and heterologous systems. For recent publications in the group, also see: scholar.google.com/ (Beat Keller).

Requirements and requested skills:

- Proven experience in *in-vitro/in-vivo* protein biochemistry and molecular biology, ideally in the field of plant-microbe interactions. It is expected strong skills in at least one of the following techniques: IP-MS, two-hybrid screenings; protein expression, purification and biochemical characterization.
- Experience with mammalian expression systems will be advantageous.
- Good publication record in international well-recognized journals.
- Ability to frame questions and test them experimentally.
- Writing skills for scientific publications.
- Excellent English communication skills and the ability to both work in a team and individually.

Starting date: Ideally, January 2022 (position is open immediately), but given the current COVID19 situation, we are flexible. The position is available for 2-3 years. The successful candidate will be involved in some teaching activities (1 week/year).

Application procedure:

- Send a single PDF titled **LR14aposition_familyname** to javier.sanchezmartin@botinst.uzh.ch, with CV including publication list, a short (max. 2 pages) motivation letter explaining your interest in, and qualification for the position and contact details of 2-3 referees.
- Applications will be reviewed from December 1, 2021 until the position is filled.

The Department of Plant and Microbial Biology provides an excellent in-house infrastructure as well as access to the Central Microscopy and Genomics/Proteomics facilities (<https://fgcz.ch/>). We offer an international, English-speaking work environment. Zürich is located centrally in Europe and offers easy access to outdoor activities, particularly in the Swiss Alps.

The position is funded by a grant from the Swiss National Science Foundation and in-house funding. Questions on this position can be addressed to Dr. Javier Sánchez-Martín (javier.sanchezmartin@botinst.uzh.ch) and Prof. Dr. Beat Keller (bkeller@botinst.uzh.ch).