



UNIVERSITÉ DE GENÈVE

FACULTÉ DES SCIENCES

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Geneva, 22 March 2021

PhD student / postdoc position available

Establishment and application of an optogenetic system based on UVR8

Roman Ulm Laboratory @ University of Geneva, Switzerland

Applications are invited for a PhD student / postdoc position to build an optogenetic system in plants based on the UVR8 photoreceptor and signaling system. Our group has a strong interest in early UVR8 photoreceptor-mediated events regulating UV-B-induced photomorphogenesis and acclimation in plants (see www.ulm-lab.ch/ for more information on our group and research). The project will apply our knowledge of UVR8-based signaling to establish an optogenetic toolset for basic plant research and to apply it by addressing interesting biological questions in *Arabidopsis*.

We are looking for a talented and creative new team member. The successful candidate is highly motivated and has a strong interest in photobiology and optogenetics. Previous substantial and demonstrated experience with molecular techniques is essential; experience with photobiology/optogenetics would be a plus. Good communication skills and fluency in spoken and written English are required.

If you are interested in joining our team to establish and apply an optogenetic system for plant research, please send your application document (incl. letter of motivation, C.V., copies of your degrees, and names of 2-3 references) as a single .pdf file to Roman Ulm (roman.ulm@unige.ch). Postdoctoral candidates should have published (or are very close to publishing) at least one first-author paper in a major international journal.

Review of applications will begin immediately and applications will be accepted until the position is filled. Starting date is flexible and upon agreement.

We offer a creative and stimulating international scientific environment, and access to state-of-the-art technologies. Geneva offers an outstanding setting for study and research in the Molecular Life Sciences, as well as beautiful natural surroundings for outdoor activities and, hopefully soon again, a vibrant cosmopolitan cultural life.

5 Project-related Publications (for all: www.ulm-lab.ch/publications):

- Podolec et al. (2021) Perception and signaling of ultraviolet-B radiation in plants. *Annu. Rev. Plant Biol.* 72: doi.org/10.1146/annurev-arplant-050718-095946.
- Podolec et al. (2021) A constitutively monomeric UVR8 photoreceptor confers enhanced UV-B photomorphogenesis. *Proc. Natl. Acad. Sci. USA* 118: e2017284118.
- Lau et al. (2019) Plant photoreceptors and their signaling components compete for COP1 binding via VP peptide motifs. *EMBO J.* 38: e102140.
- Yin et al. (2015) Two distinct domains of the UVR8 photoreceptor interact with COP1 to initiate UV-B signaling in *Arabidopsis*. *Plant Cell* 27: 202-213.
- Rizzini et al. (2011) Perception of UV-B by the *Arabidopsis* UVR8 protein. *Science* 332: 103-106.