

PhD Students in *Autophagy and Metabolic Signaling*

The [Dengjel](#) and [De Virgilio](#) Labs at the Dept. of Biology, University of Fribourg are interested in cellular signal transduction and protein homeostasis. We characterize molecular pathways critical for cell homeostasis, autophagy regulation and autophagosome biogenesis and employ mammalian and/or yeast cell culture models, protein biochemistry, and mass spectrometry-based proteomics (1-4). Current projects are supported by third-party grants from the Swiss National Science Foundation and private foundations.

We look for highly motivated PhD students with interests in the areas outlined above. Excellent communication skills in English are of benefit.

We offer:

- a stimulating, interdisciplinary scientific environment
- state-of-the-art central facilities for proteomic, imaging and bioinformatic analyses
- a coordinated graduate program (<https://www.unifr.ch/bio/en/studies/graduate-school-fglm/>)
- a competitive Swiss salary

Fribourg and its University are located in the heart of Switzerland, 30 min from Bern and 50 min from Lausanne. Research and life conditions are excellent. Major facilities are either on campus or available through national networks. The Dengjel Lab is actively engaged in [SKINTEGRITY.CH](#) and Life Science Switzerland ([LS2](#)).

The starting date for this position is July 1st, 2024 (or later). Interested candidates should send a **SINGLE PDF** application including a CV, a brief statement of their research interests, a copy of their MSc diploma, and names of three referees by email to:

stephanie.kaeser-pebernard@unifr.ch

References

- (1) Zhou, J., et al. (2023). TBK1 phosphorylation activates LIR-dependent degradation of the inflammation repressor TNIP1. *J Cell Biol* 222.
- (2) Kaeser-Pebernard, S., et al. (2022). mTORC1 controls Golgi architecture and vesicle secretion by phosphorylation of SCYL1. *Nat Commun* 13, 4685.
- (3) Dokládal L., et al. (2021). Global phosphoproteomics pinpoints uncharted Gcn2-mediated mechanisms of translational control. *Mol Cell* 81:1879-1889.e6.
- (4) Hu Z, et al. (2019). Multilayered Control of Protein Turnover by TORC1 and Atg1. *Cell Rep.* 28:3486-3496.e6.