

Feb 26 2019

Postdoc in Quantitative Gene Regulation and Chronobiology at EPFL

The [Naef-lab](#) at the Ecole Polytechnique Fédérale de Lausanne (EPFL) has an opening for a postdoctoral fellow to join the lab's longstanding research program on gene regulatory mechanisms, and notably those linking circadian rhythms, feeding/fasting cycles and liver physiology. Over the years, our group has developed interdisciplinary approaches to study how temporal rhythms in gene expression are regulated at different steps, from chromatin topology, transcription, RNA processing, all the way to translation and accumulation of proteins, and how such temporal information then specifies daily rhythms in physiology.

Two research projects are available: (i) *Circadian gene regulation at the tissue and cellular scale in mouse liver, using multi-omics* (RNA-seq, ATAC-seq, smRNA FISH, statistical modeling); (ii) *Investigating the determinants of translation elongation in mammalian cells* (RNA-seq, ribosome profiling, tRNA profiling, statistical modeling).

We are specifically looking for an outstanding new team member holding a PhD in molecular biology (or a closely-related field) with a strong background in gene regulation and/or chronobiology, at least 3 years of laboratory research experience, and at least one first-author research publication. The successful candidate will work independently to develop and drive forward an experimental research project, and collaborate in ongoing projects in the group. Previous experience with mouse experiments can be a plus, and candidates with quantitative and interdisciplinary training, e.g. in statistics, math/physics/computation, or next-generation sequencing (NGS) genomic data analysis will be highly considered.

Representative recent work from our lab, illustrating our questions and approaches that will be extended:

- Mermet, Genes Development 2018, <http://genesdev.cshlp.org/content/32/5-6/347>
- Yeung, Genome Research 2018, <https://genome.cshlp.org/content/28/2/182>
- Wang, PNAS 2018, <https://www.pnas.org/content/115/8/E1916>
- Gobet, bioRxiv 2019, <https://www.biorxiv.org/content/10.1101/551838v1>

To apply, please send your complete application in a single PDF file, including a cover letter, full CV and the contact information of 3 referees, to felix.naef@epfl.ch. Submitted applications will be evaluated immediately, ones submitted before April 1 2019 will receive priority.

For more information please visit <https://www.epfl.ch/labs/naef-lab/> or contact felix.naef@epfl.ch

Job information

Start date: the position is immediately available (spring 2019) but start date is flexible

Contract: 1 year, renewable, maximum 4 years