

## **Post-doctoral Position in Protein Signaling and Design in the Laboratory of Protein and Cell Engineering**

The Laboratory of Protein and Cell Engineering at the Institute of Bioengineering of the Ecole Polytechnique Federale de Lausanne (<http://bioengineering.epfl.ch/welcome>) is looking for a talented and motivated post-doctoral fellow with a strong background in protein biophysics, biochemistry and molecular biology.

### **Our laboratory (<http://barth-lab.epfl.ch>):**

We belong to the Institute of Bioengineering at EPFL and are also part of the Ludwig Institute for Cancer Research (LICR) in Lausanne. While EPFL provides a world class environment for basic science and engineering, the LICR fosters translational applications of basic discoveries to cancer medicine at the highest level. Our laboratory benefits from this dual exciting environment and interdisciplinary approaches are essential to our research. We work at the interface of biophysics, chemical, structural, computational and cell biology to uncover the molecular principles that regulate protein and cellular signaling. Using this understanding, we (1) design protein systems with novel biosensing and signaling functions for synthetic biology and engineered cell therapeutic applications; (2) predict the effects of genetic variations on protein structure/function for personalized cancer medicine applications.

### **Project:**

This specific project involves: 1) the design of receptors (e.g. GPCRs) with novel ligand binding and signaling properties and their characterization using in vitro and cell-based assays, or 2) the design and characterization of novel inhibitors targeting membrane receptors of therapeutic interest. The candidate will have the opportunity to learn and apply computational modeling and design techniques of the software Rosetta and collaborate with computational scientists in our lab. This position is open immediately.

### **Skills:**

Candidates must have a strong background in protein biochemistry, biophysics and molecular biology and a good knowledge of structural biology. Candidates with strong expertise in some of the following areas are particularly welcome to apply : mammalian, insect cell cultures, membrane protein expression, purification and crystallography, cell signaling, protein engineering, protein directed evolution. In addition, candidates should have a record of relevant publications in peer-reviewed international journals, the ability to speak and write effectively, strong team skills, be self-motivated, and creative.

EPFL provides state-of-the-art facilities and is one of the leading technical universities worldwide. A competitive salary is offered. Interested applicants should send a curriculum vitae, a statement of research interests, and names of three references in one pdf-file to [patrick.barth@epfl.ch](mailto:patrick.barth@epfl.ch) (subject: post-doc position).