



Post-doctoral researchers

Exploring regeneration through single-cell molecular profiling and live imaging

The team of Michalis Averof, at the **Institut de Génomique Fonctionnelle de Lyon (IGFL)** in France, is recruiting three post-doctoral researchers to investigate the mechanisms of limb regeneration in a new experimental model, the crustacean *Parhyale hawaiensis*. The project is funded by an ERC Advanced Grant, from January 2017 to December 2021.

We are looking for candidates with a strong background in one of the following areas:

- a) Regenerative or developmental biology, especially candidates with experience in CRISPR, clonal analysis, transplantation and/or live imaging.
- b) Live imaging of morphogenesis, especially candidates with experience in advanced microscopy and quantitative image analysis.
- c) Expression profiling, especially candidates with experience in single-cell or comparative transcriptomics, notably in non-model organisms, and quantitative analysis of transcriptome data.

The project will explore fundamental questions on regeneration, including the identity of progenitor cells, the cellular diversity that these generate, the evolutionary origins of regenerative mechanisms, and their similarities to the mechanisms of development and tissue homeostasis. The research will be carried out primarily in *Parhyale hawaiensis*, which combines good regenerative abilities with genetic tractability and live imaging (see Science 343: 788-791, eLife 5: e19766, Curr Op Gen Dev 40: 23-31). Experimental approaches such as transgenesis, genetic mosaics and live imaging are already well established in the lab, and additional techniques (CRISPR, single-cell sequencing) are being developed.

The recruited researchers will be integrated in the Averof lab (www.averof-lab.org), in the new laboratories of the IGFL at the École Normale Supérieure de Lyon, which provides an exciting research environment at the interface of animal development, physiology and evolution. The working language of the lab is English.

The post-doctoral researchers will receive a salary and health/social security coverage from the CNRS. The contract will be initially for one or two years, with possible extensions until the end of the project (maximum 5 years). The starting date is negotiable.

This call has an open deadline; applications will be examined until the relevant positions are filled. Potential applicants are encouraged to contact Michalis Averof as early as possible, sending a brief description of interests and a CV to michalis.averof@ens-lyon.fr.

