



European
Research
Council

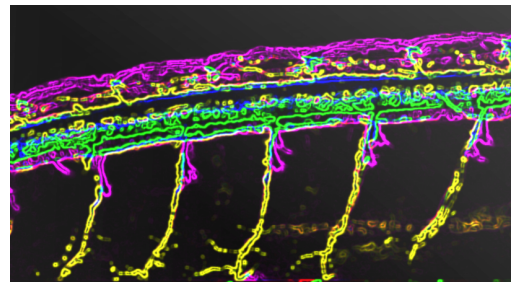
Bomont laboratory
NeuroMyogene institute -INMG
University of Lyon, France

URGENT: Engineer in Live Microscopy for a project on cytoskeleton

Job offers: engineer in microscopy

We are seeking highly motivated candidates for applying advanced optical -live cell microscopy in the field of cytoskeleton, using photoconvertible fluorescent proteins.

Science. Major cytoskeletal component of neurons, Neurofilaments (NFs) provide the structural scaffold of axons and exhibit a rich functional diversity throughout the nervous system (Bomont, Curr Opin Cell Biol 2021 <https://doi.org/10.1016/j.ceb.2020.10.011>). Important for physiology, *NF* genes are mutated in several peripheral neuropathies, producing mutant-NF aggregation that is shared by most neurodegenerative diseases in human. With such fundamental and clinical significance, our project aims at decoding the roles of NFs *in vivo* in a physiological environment, using the zebrafish model. This project has the ambition to decipher the regulation and functions of NFs, and to develop new therapeutic avenues for neurodegenerative diseases.



Profiles. 3 to 5-year position for an engineer in microscopy (depending if IE or IR). Mandatory: curious, enthusiastic & team player. We want to recruit a candidate in charge of the development of the methodology of photoconversion in live animals, who can compare the performances of different systems (scanning confocal, spinning-disk, biphoton present in on-site facilities: CIQLE & PLATIM in Lyon), and set up the optimized conditions to follow cytoskeleton dynamics *in vivo*. Flexibility: we will adapt the profile to the candidate: by proposing the advanced post-analysis of acquisition (with our collaborator in mathematics); and/or offering an interplay with the other microscopy projects of the team; and/or training the candidate to neurobiology and to the whole process of experimentation (including animal preparation). Noteworthy, on this specific project, the candidate will be joining a group of young international scientists/students with complementary profiles in neurobiology, animal experimentation (zebrafish) and disease modeling.

When/how to apply. **URGENT: starting date ASAP in 2021.** Please send your application in a SINGLE 3 page long pdf, including you CV, summary of your previous research experiences, and contact information of 2-3 references to: pascale.bomont@inserm.fr

Where. Our team recently joined the NeuroMyoGene institute, located in the Rockefeller campus, in the highly dynamic and international city of Lyon, France. Lyon is one of the most attractive metropolises in Europe, with a strong signature in biological science, architecture, & gastronomy.



Link to [Bomont](https://www.inmg.fr/bomont/?lang=en) webpage: <https://www.inmg.fr/bomont/?lang=en>

