
Research Engineer position in Mechanical Systems Biology

DESCRIPTION

ICFO is offering a research engineer position to a well-qualified, highly motivated and dynamic young scientist who wishes to enhance his/her scientific career in a friendly and stimulating environment.

The Research engineer position at the postgraduate or postdoctoral level is offered in the lab of the **Neurophotonics and Mechanical Systems Biology group** led by **Prof. Dr. Michael Krieg** to study impact of chronic mechanical stress on metabolic functions.

The Krieg lab at ICFO is interested in the mechanical control of physiological processes involving the sensation of mechanical stresses. We primarily work with invertebrate model organisms such as *Drosophila* and *C. elegans* and guide our experiments with theoretical models and simulations. We use advanced imaging and biophysical measurements to infer how mechanical properties of molecules, cells and tissues governs neuronal biology.

The main task of the advertised position is to investigate the fundamental physical principle of how cells in general and neurons in particular cope with mechanical stresses at the molecular level. The advertised position is targeted at motivated individuals with a strong background in microscopy and biochemistry of model organisms such as *C. elegans*. He/She will make new transgenic animals and subject those to chronic mechanical insults with the aim to investigate how mechanical stresses collaborate with age during neurodegeneration. The goal is to decipher cellular and metabolic changes using fluorescent reporters and high resolution microscopy. The successful applicant has access to cutting edge photopatterning microscopy, microfluidics setups and state-of-the-art super-resolution facility.

ELIGIBILITY AND CONDITIONS

Candidates must hold an internationally-recognized MSc or Ph.D.-equivalent degree (or evidence of its completion in the nearest future) preferably in (bio)-engineering, biosystems design or biophysics.

The successful candidate should have received formal training in biochemistry (western blot, etc) and bioengineering (molecular cloning, transgenesis) with a strong personal motivation for basic science and should be willing to work weekends and holidays to perform the aging assays. Prior work with genetic model organism *C. elegans* and/or mammalian tissue culture is considered an asset. Proof of ambition, productivity, and creativity is a must, and a track record of conference presentations and first author peer-reviewed publications will be expected for PhD level candidates. We are looking for a desire to engage in discussions, collaborate with team members and enjoy thinking deeply while developing ideas independently.

ICFO is an equal employment opportunity employer. Candidates are selected exclusively on merit and potential on the basis of submitted application material. No restrictions of persons with disabilities, citizenship or gender apply to ICFO positions. ICFO abides by the principles of openness, efficiency, transparency, supportiveness, and international comparability as stated in the European Charter for Researchers and the European Code of Conduct for the Recruitment of Researchers.

The contract is offered for periods of one year, renewable for a total of up to 3 years. To ensure candidates are competitive for external fellowship opportunities, successful applicants will have completed their terminal degree no more than 1 year before the beginning of this appointment. For MSc level candidates, the possibility to perform the PhD exists through one of the any ICFO PhD calls.

APPLICATION PROCEDURE

The formal application should be submitted online via <http://jobs.icfo.eu/?detail=523>

Suitable candidates are requested to submit:

- Presentation letter with a declaration of interest, past achievements and future career goals
- Curriculum Vitae, including contact details and the Publication list
- The contact e-mail of three potential referees.

Candidates may contact jobs@icfo.eu for informal enquiries regarding the application, as well as address scientific enquiries to michael.krieg@icfo.eu.

DEADLINES

The call will remain open until September 20, 2020.

For updated information about ICFO and the group, please visit <http://www.icfo.eu/> or livinglight.icfo.eu