

Post-doctoral position in Mechanical Systems Biology

ICFO is offering a Postdoctoral scholar position in the lab of **Neurophotonic 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 PostDocs with a strong background in engineering and biophysics or systems biology with prior experience in microscopy and microfluidics. He/She will create a mechanical device for long-term delivery of precise mechanical insults with the aim to investigate cellular and metabolic changes using fluorescent reporters and high-resolution microscopy. The successful applicant has access to cutting edge microscopy and optical tweezer setups and state-of-the-art clean room and imaging super-resolution facility.

Eligibility and Conditions

Candidates must hold an internationally-recognized 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 a clean room and proven track record of microfluidic design and microscopy, with a strong personal motivation for basic science. 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. 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 opportunity employer. Candidates are selected exclusively on merit and potential on the basis of submitted application material. No restrictions related to 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.

Application procedure

The formal application should be submitted online via <http://jobs.icfo.eu/?detail=451>

Suitable candidates are requested to submit:

- Presentation letter with a declaration of interest, past achievements and future career goals.
- Curriculum Vitae including the publication list.
- Contact details and 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 31.10.2019.

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