PhD position

Role of post-translational modifications in modulating Htt aggregation and clearance

A PhD position in Neurosciences/Neurodegeneration is available in the Laboratory of Chemical Molecular Biology of Neurodegeneration (http://lashuel-lab.epfl.ch/) at the Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland (www.epfl.ch). The project is funded by the Marie Sklodowska-Curie Innovative Training Networks (MSC-ITN) under the European Commission's Horizon 2020 programme - SAND: "Secretion and Autophagy and their roles in Neurodegeneration"

Project description:
Our laboratory is working at the interface of chemical, molecular and cellular biology for discovery and validation of novel mechanisms and therapeutic targets for a variety of neurodegenerative diseases to develop novel targets for protein aggregation and clearance. The qualified candidate will work on a project to investigate the role of Huntingtin (HTT) protein post-translational modifications (PTMs) in its autophagy-mediated clearance using cellular and animal models of Huntington’s disease. Many studies suggest that autophagy enhancement can be one option to develop disease-modifying therapy for Huntington’s disease. Preliminary research from our group indicates that PTMs play a role in autophagy-mediated clearance of HTT. The project will explore the further the details of molecular mechanisms of HTT PTMs in mediating the autophagic clearance.

This PhD project will provide excellent inter-disciplinary and intersectoral research training to Early Stage Researchers (ESRs) in an emerging area of research with a close interaction from all SAND-MSC-ITN participating groups working on targeting a spectrum of diseases that is constantly rising worldwide.

Your profile:
We are looking for a highly motivated and enthusiastic person having finished or about to finish a Master’s degree and intending to obtain a Ph.D. in chemical biology of neuroscience. Excellent writing, communication skills and team spirit are essential. Prior experience in one or more of the following is highly recommended, but not required: use of models of neurodegeneration (in vivo or in vitro), standard biochemical, cellular and molecular biology techniques including cell culture, western blotting, transfection, transduction, light and electron microscopy, high-resolution microscopy, live cell imaging, PCR, etc.

Additionally, candidates will be required to meet the Marie Skłodowska-Curie Early Stage Researcher eligibility criteria: (http://ec.europa.eu/research/mariecurieactions/). At the time of appointment, candidates must have had less than four years full-time equivalent research experience and must not have already obtained a PhD. Additionally, they must not have resided in the host country for more than 12 months in the three years immediately before the appointment.

What we offer:
• Very dynamic, multidisciplinary and a highly collaborative research group with a stimulating environment.
• Access to state-of-the-art laboratories and core-facilities.
• A competitive salary.
• MSC-ITN fellowship being one of the most prestigious fellowships in Europe, gives a unique training program with its regular network meetings where you will meet experts in your field. You will be travelling to stay for a few months outside the host laboratory to do your secondments with project partners which give a great possibility to exchange knowledge and learn more on your topic.

For more information about our group, please visit our websites and review our recent publications at:

The Lashuel Laboratory: http://lashuel-lab.epfl.ch/

Brain Mind Institute: https://sv.epfl.ch/BMI
School of Life Sciences: http://sv.epfl.ch

Application / Contact:
Interested applicants should submit a letter of interest, curriculum vitae and the names and addresses of three references to Ms. Marie Rodriguez marie.rodriguez@epfl.ch  EPFL SV BMI LMNN, AI 2149 Station 19 , CH1015 Lausanne.