



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



CESNE
Centro Studi per la
Neurodegenerazione

Postdoctoral Research Fellow @ Molecular Physiology Laboratory Department of Biology, University of Padova

Two post-doctoral positions are available in our lab to work on novel disease-modifying targets for Parkinson's disease (PD).

Our Lab is interested in studying the molecular mechanisms of neurodegeneration in genetic forms of PD. PD is an incurable neurodegenerative disorder affecting more than 5 millions of people worldwide. Gain of function mutations in the gene encoding the kinase LRRK2 are common cause of disease and large efforts are in place to identify compounds that corrects LRRK2 pathological activity. Our lab is actively engaged in dissecting novel LRRK2 pathways relevant for PD pathology that can be targeted therapeutically.

Job description

We are seeking for highly motivated postdoctoral candidates with background in biochemistry, cell biology, neuroscience and molecular imaging, to develop the following research projects:

- 1) To optimize a panel of in vitro and cellular assays to test novel compounds against pathological LRRK2 activity using biochemical, cellular (including primary and organotypic cultures and iPSCs-derived brain cells) and imaging approaches.
- 2) To establish a pipeline for the validation of LRRK2 modifiers using lentiviral vectors to down or upregulate (via CRISPRa) candidate genes using high content imaging

The post-doctoral researchers will be part of a highly stimulating and collaborative environment and will have access to numerous core facilities @ the Department of Biology, University of Padova (<https://www.biologia.unipd.it/en/>). Our Lab is also part of the Centre Study for Neurodegeneration (CESNE - <https://cesne.biologia.unipd.it/>), a multidisciplinary neuroscience community @UNIPD with a strong interest on neurodegeneration.

Candidate's profile

- Should have a PhD in the fields of Neuroscience, Biological Sciences, Biochemistry or related fields
- Demonstrated records of achievements and publications
- Excellent communication skills, ability to work in a team / collaborative environment
- Ability to perform independent research and encouraged to develop his/her own research ideas
- Experience with molecular biology, in vitro and cell-based biochemistry, imaging, mouse handling.

We offer an 18-month contract (with possibility of extension) in the frame of multi-center projects with academic and industry partners funded by the Michael J Fox Foundation for Parkinson Research. The salary and related benefits are in line with the regulations of the Italian University system.

Application

Motivated candidates should send a CV, a letter outlining interest/motivations and names/contact information of two references via email to Prof. Elisa Greggio (elisa.greggio@unipd.it).

Starting date: as soon as possible