

Open position for: **Research Area**

TITLE: Predoctoral Researcher

REF: CRE26-01

Call closes on: 18/06/2026

CONTRACT: Universitat de Barcelona

START DATE: September 2026

DURATION: 3 years

WORKING HOURS: 35.7h

WORK TIMETABLE: Monday to Friday, flexible split schedule (8:00–9:00 a.m. to 5:30–6:30 p.m.)

GROSS SALARY: 45.260,37 € gross salary per year

Job Summary

We are seeking a highly motivated predoctoral researcher to join the Stem Cells and Regenerative Medicine Laboratory at the Department of Biomedical Sciences, Faculty of Medicine and Health Sciences, University of Barcelona, led by the Principal Investigator Prof. Josep M. Canals.

The successful candidate will be hired within the Marie Skłodowska-Curie Doctoral Network programme of Horizon Europe (VISI-ON-BRAIN; GA No. 101227124) and will carry out a PhD project focused on modelling Huntington's disease (HD) to study its onset and progression during development and in mature neurons.

The main objective of the project is to generate human in vitro HD models to analyse neuronal parameters through:

- Developing a 2D brain on chip (BoC) system by combining cortical, striatal and dopaminergic hPSC-derived neurons;
- To integrate mini brain areas representing the cortex, striatum and substantia nigra in a 3D- BoC and study the functional readouts.
- To analyse the neuronal affections during development in a dynamic neurodevelopment model of HD.
- To characterise how neuronal functionality is altered in a human model of HD.
- To explore the neuronal connectivity affections in a human model of HD in the 2D and 3D BoC models.

Requirements

Applicants must hold:

- MSc (or equivalent) in Neuroscience, Biomedical Sciences, Biotechnology, Molecular Biology, Bioengineering or a related field.

Additional valued skills:

- Interest or experience in stem cell biology (hPSC/hiPSC).

- Experience in cell culture and molecular/cellular techniques.
- Interest in advanced in vitro models (organoids, microfluidics, brain-on-chip).
- Knowledge of or interest in neuronal functional techniques (calcium imaging, electrophysiology, MEA).
- Interest in integrating experimental and computational data.
- Demonstrable knowledge in 3Rs qualification at EMA and/or validation at JRC

Expression of interest

Candidates interested in this position should send the following documentation:

- Motivation letter (max. 2 pages)
- Curriculum Vitae
- Academic transcripts and MSc diploma (in English), including grading scale
- Contact details of two referees (or letters of recommendation)

To the email info.creatio@ub.edu

ABOUT CREATIO

Creatio is the Advanced Therapies Production and Validation Center at the Faculty of Medicine and Health Sciences of the University of Barcelona. Our mission is to provide solutions based on advanced therapies to improve healthcare system efficiency and the quality of life in society.

Our highly experienced multidisciplinary team works under high-quality standards. We establish strategic partnerships with companies, research centres, and hospitals to develop new projects and/or products in this innovative medical field.

Creatio's research area focuses on the development and characterisation of innovative cellular models for studying neurological diseases. With extensive expertise in neuroscience and stem cell biology, the team develops advanced in vitro models, including systems based on human pluripotent stem cells, organoids, and brain-on-chip technologies.

For more information, visit:

For more information, please visit: www.ub.edu/creatio