

POST-DOC RESEARCH CONTRACT



Molecular Nutrition and Health





One full-time ERC funded position with a competitive salary in **Molecular Nutrition and Cellular Neurosciences**, initially for 6 months, renewable up to the end of the project is available for a highly motivated post-doc to join our multidisciplinary team. Selection will begin now until **end of March** to **start in mid-April 2019** but will continue until the right post- doc is found. To apply, send your **CV**, a **motivation letter and the name of 3 referees**, to <u>claudia.nunes.santos@nms.unl.pt</u>.

Project summary

Cláudia Nunes dos Santos laboratory focuses on the molecular mechanisms underlying the protective action of nutrients/bioactives and their derivatives on health and disease. Our approaches include mechanistic studies using model organisms and cellular models as well as rodent and human intervention and clinical studies. We are seeking a highly talented and motivated postdoc to work on the ERC project *LIMBo- Zooming the link* between diet and brain health: how phenolic metabolites modulate brain

CEDOC Institution

CEDOC is a new research center of NOVA Medical School with an international reputation on cutting edge research in Biomedical research, with focus in mechanisms of ageing and chronic diseases and is committed to training the next generation of research scientists. The Nunes dos Santos lab is involved in several national and international projects that cover from basic research to translational and nutrition research.

http://cedoc.unl.pt

CEDOC is located in the historical center of **Lisbon**. Lisbon has a large scientific community doing top level science and provides affordable living conditions in a very safe and well-connected European capital.

Requirements

- PhD in Life Sciences (Nutrition, Biochemistry, Neurobiology, Cell Biology, or other relevant areas)
- Knowledge in Molecular Nutrition and Neuroscience areas, particularly in neuroinflammation mechanisms (preferential)
- Strong publication record
- Experience in rodent models (preferential) and with certification for handling animals desirable
- Hands-on experience with fluorescence microscopy, flow cytometry and cell culture;
- Excellent knowledge of English

Project description

Currently a big concern of our aging society is to efficiently delay the onset of neurodegenerative diseases, which are progressively rising in incidence. The paradigm that a diet rich in the phenolics, prevalent e.g. in fruits, is beneficial to brain health has reached the public. However, their mechanistic actions in brain functions remain to be seen, particularly since the nature of those acting in the brain remains overlooked. LIMBo wish to address this gap by identifying candidate compounds that can support development of effective strategies to delay neurodegeneration.

Specifically, LIMBo will be analysing the potential of dietary phenolics in both prevention and treatment (i.e delay) of neuroinflammation – key process shared in neurodegenerative diseases. To break down the current indeterminate status of "cause vs effect", we will be focused on metabolites derived from dietary phenolics that reach the brain. Their effects in both established and unknown response pathways of microglia cells - the innate immune cells of the central nervous system, either alone or when communicating with other brain cells will be investigated. Ultimately, to attain an integrated view of their effects it will establish nutrition trials in mice.

Key responsibilities:

- Developing specific research activities under guidance from Group Leader;
- Reporting and presenting work at MNH and eventually at national and/or international meetings;
- Sharing knowledge and expertise;
- Providing contribution to the production of research papers for publication;
- Improving established protocols and/or developing new protocols.