Job profile

Team Leader Name : RUA Rejane
http://www.ciml.univ-mrs.fr/science/lab-rejane-rua/immunosurveillance-central-nervous-system

Start date : october 1 , 2023
Job type : A2A43 - Engineer in biological techniques

Assignment : U1104 / CIML

Missions / main activities :

The agent will participate in the implementation of a project to study the phenotypic heterogeneity of immune populations in a mouse model of stroke. The agent will be in charge of independently managing the experiments and service missions for which he will be responsible.

Our overarching goal is to understand the role of malfunction of the cellular and acellular components of the brain barriers on stroke pathogenesis to explore options of whether stabilizing the brain barriers could be beneficial for the treatment of stroke. We hypothesize that alterations in these barrier functions change the role of barrier-associated macrophages BAMs, contribute to edema formation, and CNS infiltration of immune cells.
Analyses will encompass homeostatic conditions versus transient middle cerebral artery occlusion at stages prior to monocyte infiltration (24h reperfusion), where only resident BAMs and infiltrating neutrophils play a role, and at stages where extensive monocyte infiltration occurs (48h reperfusion).
DeCoDis will close critical knowledge gaps on the contribution of barrier dysfunction to the outcome of stroke and will identify the cellular and molecular underpinnings of brain barrier dysfunction and associated BAMs in stroke pathogenesis. DeCoDis will set the stage for exploring novel therapeutic approaches for the treatment of stroke by therapeutic stabilization of BBB function.
The research assistant ('ingénieur d'études') is expected to have a Masters's degree and should preferentially be able to perform cytometry, intravital imaging, catheter manipulation, mice injections.

Centre d'Immunologie de Marseille-Luminy
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Webiste of the consortium:
https://www.medizin.uni-muenster.de/decodis/research.html

Website of the team:
http://www.ciml.univ-mrs.fr/science/lab-rejane-rua/immunosurveillance-central-nervous-system

- Monitoring of genetically modified mouse farms
- Implementation of protocols experimental.
- Phenotypic analysis of various immune populations by flow cytometry flow and imagery
- In vitro functional tests of various populations immune
- Drafting of technical protocols, Analysis of data obtained, Drafting of reports and Presentation of results

- Please send a resume, your licence and masters' grades, and 3 letters of recommendation to rua@ciml.univ-mrs.fr.

Skills required

- Skills in flow cytometry and imaging (confocal or intravital) highly appreciated
- Skills in animal experimentation (mice): manipulations, injections, compliance with ethical rules
- Basic cell biology techniques: culture, ELISA, etc.
- Basic technique in molecular biology
- stereotactic injections appreciated

Motivation, rigor, organization, good communication, proactive spirit, adaptability
Understanding and knowledge of scientific English appreciated

Specificities of the position :
Animal handling
Need to sometimes work odd hours

Level of diploma : Master 2 or equivalent diploma .

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