



Vivien Denis



MeniSPYs

The meninges as a new player in post-stroke

Project Coordinator:

Vivien Denis, Caen-Normandy University, Dept of Innovation in Diagnosis and Therapeutics, Caen Hospital, Blood and Brain Caen Normandie Institute, Caen, France

Project Partners:

Karoline Degenhardt, Experimental Research in Stroke and Inflammation, Neurology Dept, University Medical Center Hamburg-Eppendorf, Hamburg, Germany

Arthur Liesz, Institute for Stroke and Dementia Research, LMU University Hospital Munich, Munich, Germany

Adam Denes, Institute of Experimental Medicine, Budapest, Hungary

The meninges have been described as an important cerebral invasion route in primary autoimmune diseases and also important in regulating cerebral blood flow, antigen drainage to the systemic immune compartment and recirculation of leukocytes from brain to blood. However, little is known about the role of meninges in ischemic stroke. Based on this knowledge, we postulate that a better understanding of the routes and mechanisms by which inflammatory cells invade the brain following stroke will open new avenues for stroke care. To address this issue, the present proposal utilizes a collaborative effort combining the latest tools in imaging, experimental models, cell- and tissue manipulation approaches and clinical research. We will focus on meningeal gateways to understand the key mechanisms controlling meningeal inflammation and inflammatory cell recruitment with particular emphasis on the role of meningeal inflammatory actions on unfavourable outcomes after stroke that could be therapeutically targeted for the benefit of patients.

The meninges as an immune hub at the brain borders

