

An 18-month post-doctoral position is available at the Laboratory of Neurodegenerative Diseases of MIRCen (Molecular Imaging Research Center, France) of the CEA center of Fontenay-aux-Roses (5 km south of Paris) to work on the study and modeling of the cytoarchitecture of the human cerebral cortex.

The project is funded by the CEA (Commissariat à l'Energie Atomique) and HBP (Human Brain Project), it aims to map in 3D the cytoarchitecture of the main functional areas of the human brain (Brodmann areas) by histology and high field Magnetic Resonance Imaging.

The objective of this research will be to produce 3D models of the distribution of different cell types in order to map precisely the main functional areas of the human brain (organization of cortical layers, cytoarchitecture) by histology and optical microscopy techniques. This research will be carried out with the image processing team in close collaboration with the histology platform of MIRCen. This project involves a partnership with the CEA center of Neurospin specialized in high field imaging which will exploit the histological models in order to compare them with the corresponding MRI imaging data (production of numerical simulations, study of the capacity of MRI to access the cytoarchitecture) as well as with the Laboratory of Anatomy of Tours.

The ideal candidate should hold a PhD in neuroscience.

Preference will be given to candidates with previous experience in brain neuroanatomy with a strong background in histology and light microscopy. An interest in computational image analysis methods would be a plus.

The position is available in January, 2021. Salary will depend on experience and qualifications.

*Contact:* Please send your application in a single PDF document including a cover letter, CV, list of publications and the names of 2 to 3 referees to: [thierry.delzescaux@cea.fr](mailto:thierry.delzescaux@cea.fr)