



Postdoctoral Position in Human Brain Organoids and Alzheimer's disease

A postdoctoral position is open to join the 'Alzheimer's disease (AD) modeling group' led by Dr. Ira ESPUNY-CAMACHO within the laboratory of Molecular Regulation of Neurogenesis (head Dr. L. Nguyen), Unit GIGA-Stem Cells at the Campus Sart-Tilman in the city of Liège, Belgium: (https://www.giganeurogenesis.uliege.be/cms/c_4241430/en/giganeurogen)

GIGA offers Core facilities including imaging, molecular biology, genomics, and stem cell platform facilities integrated in a University Hospital setup: www.giga.ulg.ac.be/videos

The team of I. Espuny-Camacho is pioneer in the generation of novel human *in vitro* and *in vivo* models to study brain development, evolution and diseases. Our team currently focuses on the differentiation of human pluripotent stem cells (hPSC)-towards brain area-specific multicellular organoids to recapitulate hallmarks of Alzheimer's disease (AD) and the aging brain.

We are looking for a highly motivated, independent postdoctoral scientist with a good publishing track record to join our team. The candidate will work on hPSC-derived brain organoids and CRISPR/Cas9 gene-editing tools to study brain aging and Alzheimer's disease. A prior experience in stem cell culture, CRISPR/Cas9 genetic tools and/or bioinformatics will be a plus. We offer a two-year position (starting contract for one-year renewable) with the possibility of one more year extension. Starting date is from **March 1st, 2022**. If interested please send your cv, list of publications, motivation letter and three scientific references to im.espunycamacho@uliege.be

References I. Espuny-Camacho:

Magni, M., et al. Brain regional identity and cell type-specificity landscape of human cortical organoid models. **BioRxiv** **2022**.

Dickinson Bocchi, V., et al. The coding and non-coding RNA single-cell atlas of the human fetal striatum. **Science** **2021**; 372: eabf5759. doi:10.1126/science.abf5759.

Le Bail, R., et al. Learning about cell lineage, cellular diversity and evolution of the human brain through stem cell models. **Current Opinion in Neurobiology** **2020**; 66: 166-177.

Espuny-Camacho I, et al. Human Pluripotent Stem-Cell-Derived Cortical Neurons Integrate Functionally into the Lesioned Adult Murine Visual Cortex in an Area-Specific Way. **Cell Rep** **2018**; 23: 2732–2743.

Espuny-Camacho I, et al. Hallmarks of Alzheimer's Disease in Stem-Cell-Derived Human Neurons Transplanted into Mouse Brain. **Neuron** **2017**; 93: 1066-1081.e8.

Michelsen KA, et al. Area-specific reestablishment of damaged circuits in the adult cerebral cortex by cortical neurons derived from mouse embryonic stem cells. **Neuron** **2015**; 85: 982–997.

Espuny-Camacho I, et al. Pyramidal Neurons Derived from Human Pluripotent Stem Cells Integrate Efficiently into Mouse Brain Circuits In Vivo. **Neuron** **2013**; 77: 440–456.