

A 2-year POST-DOC POSITION

NutriMind Team, NutriNeuro INRAE Bordeaux University

The project aims to understand how early-life exposure to a diet poor in n-3 polyunsaturated fatty acid (PUFA) contributes to mood and cognitive disorders later in life. Specifically, we aim to elucidate the cellular, molecular and circuit basis of hippocampal and accumbal dysfunction in the animal model of lipid metabolic shift.

By combining single-cell transcriptomic, cell imaging, lipidomic and electrophysiological studies on nutritional and transgenic mouse model targeting enzymes or receptors of oxylipins, which are PUFA metabolites, we will functionally interrogate specific molecular pathways and cell subtypes and their contribution to circuit dysfunction.

The successful candidate will join NutriMind, a dynamic, multidisciplinary research team focused on the molecular and cellular determinants of how lipid nutrition influence brain function, with expertise ranging from molecular (transcriptomic, exosome), cellular (primary cell culture, iPSC, mini-brain), electrophysiology to emotional behavior and cognitive evaluation.

Candidates should have a Ph.D. in neuroscience and a strong background in cellular biology and slice (patch clamp) electrophysiology. Excellent teamwork and communication skills in English are required.

This 2-year postdoctoral fellowship is funded by the JPND project "SOLID" (<https://www.optinutribrain.ulaval.ca/en/research-project/solid-project/>). Applications including a CV, motivation letter and 2-3 letters of reference should be sent to sophie.laye@inrae.fr and jean-christophe.delpech@inrae.fr