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CALL FOR INTEREST:

INRIA APPLICATION IN COMPUTATIONAL NEUROSTIMULATION AT THE INSTITUTE OF NEURODEGENERATIVE DISEASES IN BORDEAUX

We are looking for a young and motivated researcher to join our hybrid CNRS and Inria team led by Dr. Fabien Wagner (CNRS) and Dr. Amélie Aussel (Inria). We are currently collaborating within the Neuromodulation and Neuroprosthetics team at the Institute of Neurodegenerative Diseases (IMN, CNRS UMR 5293) in Bordeaux, France: <https://www.bordeaux-neurocampus.fr/en/team/neuromodulation-and-neuroprosthetics/>

Over the past few years, we have initiated a multifaceted research program that aims at developing new neuromodulation strategies for manipulating neural oscillations that support neurological functions, especially cognition. More precisely, our program is based on four key components:

I) Computational modeling of neural oscillations in limbic (in particular the hippocampal formation) and cortical structures and how they are affected by neurostimulation;

II) Invasive neurostimulation in non-human primates (NHP) using novel intracranial brain implants that target large-scale brain networks (ERC project MEMOPROSTHETICS);

III) Non-invasive neurostimulation in humans using EEG recordings and transcranial electrical or magnetic stimulation (as part of the new Vascular Brain Health Institute: <https://ihu-vbhi.fr/>);

IV) Neuroimaging in non-human primates, especially diffusion MRI, to build personalized models of the NHP brain.

We believe that the synergy between these research axes has the potential to create an integrated understanding of how neuromodulation strategies may improve neurocognitive functions, and lead to a novel class of digital therapeutics for neurological disorders such as Alzheimer's disease or neurovascular disorders.

In this context, we are now seeking **a young and talented researcher with a mix of computational and experimental skills and specialized in neuromodulation techniques (e.g. DBS, tACS, TI, or TMS)**, with the intention to support her / his application for a **permanent researcher position at Inria**. The ideal candidate will strongly complement our group, currently composed of a neurophysiologist and neuroengineer at CNRS, Dr. Fabien Wagner, and a computational neuroscientist at Inria, Dr. Amélie Aussel, as well as several PhD students, postdocs and engineers. We expect the candidate to lead her / his own research program, but in strong interaction with the topics and other projects of the team.

Please find information about the recruitment process at Inria: <https://www.inria.fr/en/recruitment-campaign-researchers-2024>. In a single application, the candidate will have the possibility to apply to both a permanent research position (CRCN) and an Inria starting faculty position (ISFP). A first stage requires the submission of a written application. **The deadline for applications will be in the first trimester 2024**, and will be posted on the Inria website. If preselected, the candidate will then defend her/his project orally in front of a jury (second and last recruitment stage).

Please contact us and send us your CV if you think you could be a good fit for this position, and also thank you for circulating it to anyone who might be interested.

Best wishes,

Amélie Aussel and Fabien Wagner



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