

From rare diseases to common mechanisms of neurodegeneration

PROJECT: The project aims at studying mechanisms of a rare disease associated with mental retardation and motor dysfunction, and resulting from dysfunction of retinoic acid signaling. Analyses will be focused on the striatum and will address diverse aspects of development and function of dopaminergic signaling. In vitro and in vivo approaches will be employed in this study and obtained data should be of direct relevance for the rare clinical condition, but also for neurodegenerative disorders of basal ganglia. Testing neuroprotective activities of synthetic or newly discovered endogenous ligands of retinoid receptors is envisaged and should highlight potential pharmacological strategies of treatment.

The project will be carried out at IGBMC and Mouse Clinical Institute (Strasbourg-Illkirch), international research institutes located in the heart of dynamic research region at crossroads of France, Germany and Switzerland. It will benefit from such location and state-of-the-art infrastructure and expertise in animal behavior and pharmacology, molecular, genomic and bioinformatics analyses.

We are looking for highly motivated PhD candidate (only the top 5% of students should apply) with strong motivation to carry out experimental research. A solid background in neuroscience or developmental biology will be the best suited for this project, although good molecular or cell biology preparation should also be suitable. The candidate should have good communication skills, good level of English and be dynamic and interactive, willing to write scientific papers, contribute to animating team's life. During the project the student will acquire skills in modeling of CNS diseases in vitro and in vivo, molecular and genomic analyses, primary cultures of diverse neural cell types, functional tests in pharmacology.

Applicants should submit their complete application file (CV, motivation letter, publication list and contact to at least two reference scientists in one PDF file) by email with "PhD candidate" indicated in the subject of the email.

Contact information:

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