Laboratory title

Supervisor

Name: Véronique DEROCHE-GAMONET

E-mail: veronique.deroche@inserm.fr

phone number: 05 57 57 36 80

Fax: 0557573669

Abstract

Pharmacological and non-pharmacological factors control tobacco use. Subpopulations of tobacco addicts might exist depending on the relative weight of the two types of factors. Limited efficacy of treatment could result from restricted effect on a subpopulation of addicts. The objectives of the present PhD research project are to identify subpopulations of nicotine users (main addictive tobacco component), test if they respond differentially to available treatments and characterize them at the behavioural and neurobiological levels. Specifically, the PhD student will implement an innovative preclinical model in rats which challenges nicotine seeking by pharmacological and non-pharmacological factors and evidences subpopulations of users (nicotine intravenous self-administration is used as a model of nicotine use). To characterize the subpopulations prior to, and after, nicotine use, complementary approaches and tools will be used: associative learning tasks, multi-site electrophysiology and optogenetic in behaving rodents, molecular biology and transgenic animals.

Qualification required

The applicant should have a solid background in neurosciences. It is critical that she/he shows an interest for experimental psychopathology. A strong motivation and an interest for technological challenges are required.