## MASTER THESIS PROJECTS at Lund University Medical Faculty Area: neuropharmacology and neuroscience

We are looking for motivated students interested in carrying out a master thesis project at the interface between neuroscience and neuropharmacology. The project will pursue timely research questions (with potential publication in very good journals). Merited students will be offered a scholarship.

#### RESEACH TOPIC

Parkinson's disease (PD) is characterized by severe degeneration of dopamine-producing neurons in the basal ganglia giving rise to typical motor deficits. These deficits are treated with L-DOPA and other dopaminergic agents. However, pharmacological dopamine replacement leads to debilitating complications in both motor and non-motor symptom domains, whose mechanisms are poorly understood, and there is a need to develop new treatments to slow down the disease course.

We study these problems from different angles, and using multiple experimental approaches, in rodent models of PD. In parallel, we probe the therapeutic potential of novel pharmacological treatment principles.

# TIME AND DURATION OF THESIS PROJECTS:

Several projects have been planned to start between Autumn 2021 and March 2022 and will thereafter continue for at least 6-8 months each. The master thesis project could start any time during this indicated period, for a minimum duration of 6 months but potentially extendable to even longer periods.

### THE RESEARCH GROUP:

The Basal Ganglia Pathophysiology Unit at Lund University - <u>bgp-lab.com</u> - has world-leading expertise in developing PD models in rats and mice in order to investigate disease mechanisms and new treatment principles. Our projects combine several state-of-the-art methodologies, and always include advanced methods of behavioural analysis and molecular histopathology. The group is embedded in a research centre of excellence for neurodegenerative diseases appointed by the Swedish Government, called *MultiPark* (Multidisciplinary research focused on Parkinson's disease) www.multipark.lu.se. The working environment will be highly stimulating and international.

### PRIMARY ACADEMIC SUPERVISOR:

Angela Cenci Nilsson, (most common author name: M. Angela Cenci), Professor of Experimental Medical Research, Head of the Basal Ganglia Pathophysiology Unit, and MultiPark Coordinator. https://orcid.org/0000-0003-2216-2900.

*Visiting address:* Wallenberg Neurocentrum, BMC A13, Sölvegatan 17. 22362 Lund (Sweden). <u>Angela.Cenci\_Nilsson@med.lu.se</u>

## HOW TO APPLY:

Send an e-mail application to Angela Cenci Nilsson including:

- (i) a short statement of motivation (why you'd be interested in doing a thesis with us);
- (ii) an indication of when you would like to start and how long you would like to stay;
- (iii) your curriculum vitae (including personal data and account of your previous education);
- (iv) the name and e-mail address of 1-2 reference persons (among these, please include an academic contact person of your ongoing university programme or course)