

# Neurochemical changes associated with Parkinson´s disease and L-Dopainduced dyskinesia

<https://www.neurodegenerationresearch.eu/survey/neurochemical-changes-associated-with-parkinsons-disease-and-l-dopainduced-dyskinesia/>

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Sweden

## Title of project or programme

Neurochemical changes associated with Parkinson´s disease and L-Dopainduced dyskinesia

## Source of funding information

The Swedish Brain Foundation

## Total sum awarded (Euro)

€ 54,407

## Start date of award

01/07/2015

## Total duration of award in years

1.5

## Keywords

### Research Abstract

The main objective of the present research is to study functional neurochemical processes in Parkinson disease (PD) and specifically L-3,4-dihydroxyphenyl-alanine (L-DOPA)-induced dyskinesia (LID). To address the issues raised in the present project we have access to a comprehensive and truly unique biobank of primate brain tissue (*Macaca fascicularis*) consisting of seven experimental groups. Furthermore, we are investigating several novel drug therapeutic

approaches emerging for PD and LID and their effect on neurotransmitters, neuropeptides and proteins in rodents. The proposed project utilizes state-of-the-art proteomics and mass spectrometry technology approaches for the investigation of neurotransmitter, protein, and peptide concentrations and interactions in the basal ganglia and associated structures in dyskinetic and non-dyskinetic subjects. Pathway analysis is performed to convert quantitative data on the expression levels of proteins and peptides into the quantitative signaling status of the cells. Novel mass spectrometry methodology is used to image and quantitate neurotransmitters and their precursors directly in brain tissue sections. The present project is a continuation of the last year's funded application.

**Further information available at:**

**Types:**

Investments < €500k

**Member States:**

Sweden

**Diseases:**

N/A

**Years:**

2016

**Database Categories:**

N/A

**Database Tags:**

N/A