

# Role of the microbiome-gut-brain axis in prodromal and established Parkinson's disease

<https://neurodegenerationresearch.eu/survey/role-of-the-microbiome-gut-brain-axis-in-prodromal-and-established-parkinsons-disease/>

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## **Funder**

Academy of Finland

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## **Country**

Finland

## **Title of project/programme**

Role of the microbiome-gut-brain axis in prodromal and established Parkinson's disease

## **Source of funding information**

Academy of Finland

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€ 257,907

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4.0

## **The project/programme is most relevant to:**

Parkinson's disease & PD-related disorders

## **Keywords**

Parkinson's disease | neurology | neurodegenerative disease | microbiota | microbiome | gut-brain-axis | biomarker | metabolomics | inflammation | genotyping | microbiome host interactions

| non-motor symptoms | pathogenesis | prospective study

### **Research Abstract**

Parkinson's disease (PD) affects one in hundred persons over the age of 65. Its cause is unknown. Patients do not only suffer from slowness of movements and tremor, the majority is also affected by gut symptoms. Recent research suggests that the gut may actually be the first affected organ in PD. We recently found changes in the amounts of different gut bacteria in PD patients and suspect that they may be involved in the development of PD. In this project we will study the connection between gut bacteria and PD on many levels. We will study whether gut bacteria produce toxic substances or cause inflammation in PD and whether patients have a genetic vulnerability towards such insults. We will also look at how gut bacteria influence brain metabolism and whether gut bacteria can be used to diagnose PD earlier or more accurately than standard methods. We hope that better understanding gut bacteria in PD may eventually lead to new treatments that slow or even prevent the disease.

### **Types:**

Fellowships

### **Member States:**

Finland

### **Diseases:**

Parkinson's disease & PD-related disorders

### **Years:**

2016

### **Database Categories:**

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