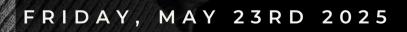
# I TRANSVERSAL WORKSHOP NEUROLOGY-GASTROENTEROLOGY

The Origin of Parkinson's Disease: Connection between Gastroenterology and Neurology







## CONTEXT

In recent decades, the intestine has been valued as a second brain. Thus, different lines of research have focused on the study of the connections between the intestine and the brain, mainly in the area of mental health. Recent evidence points to the neuroendocrine communication between both organs as a potential mechanism underlying the development of neurological pathologies.

Deposits of the synuclein protein have been found in the intestine early in relation to brain deposits, although its functional relevance is unknown up to date. In addition, results from different lines of research suggest that alterations in intestinal homeostasis at the level of the microbiota and barrier function (permeability) could be present in the very early stages of PD.

Finally, recent observational studies in patients with Parkinson's point to the presence of symptoms of the gastrointestinal tract domain, mainly constipation and irritable bowel without predominance of diarrhea, as early non-motor manifestations prior to the development of motor manifestations, and therefore, with predictive potential for the future development of PD.

Despite the growing interest that these findings have aroused in both fields, there is no defined line of joint research between the area of neurogastroenterology and the area of neurology in our environment.

This workshop aims to bring knowledge about the connection between both fields to the respective specialists, answering questions such as: Is the intestine a gateway for neurological conditions? And is there a connection between neurogastroenterology and neurology in the onset of PD?

Furthermore, this workshop is a unique opportunity to connect different professionals from both areas, both in the clinical field and in the field of basic research, and promote collaboration between different research groups with the consequent generation of transversal research projects of a translational nature that delve into the study of disease mechanisms and have a high impact on practical application.

## **OBJECTIVES**

Present and update the evidence on the relevance of the gut-brain axis interaction in the development of neurological pathologies such as Parkinson's Disease.

Generate collaborations between the field of gastroenterology, especially neurogastroenterology, and the field of neurology, in order to establish relationships between different professionals from both areas and joint lines of research.

# PROGRAM

15:30h Welcome and Topic Introduction

Beatriz Lobo and Ariadna Laguna

15:45h Gastrointestinal dysfunction in Parkinson disease: the neurologist perspective.

Filip Scheperjans. Helsinki, Finland.

16:15h Gastrointestinal manifestations in Parkinson's disease: the neurogastroenterologist's perspective.

Tim Vanuystel. Leuven, Belgium.

16:45h Microbes in mental health: mechanisms of Action of Gut Bacteria in Stress and Depression.

Yolanda Sanz. Valencia, Spain.

17:15h Deciphering the amylome of the intestinal microbiota and their role in neurodegeneration.

Jaione Valle. Navarra, Spain.

17:45h Round Table Discussion.

Chairs: Beatriz Lobo and Ariadna Laguna

18:05h Course Closing and Coffee

# COORDINATORS

#### Ariadna Laguna. PhD.

- Ramón y Cajal Researcher | Neurodegenerative Diseases Research Group
- World Parkinson Coalition Alumni Ambassador
- Vall d'Hebron Institut de Recerca
- Vall d'Hebron Barcelona Hospital Campus

#### Beatriz Lobo. MD, PhD.

- Specialist Doctor of gastroenterology, Digestive System Service, Vall d'Hebron University Hospital.
- Neuroimmunogastroenterology research laboratory, Vall d'Hebron Research Institute (VHIR).
- Biomedical Research Networking Center for Hepatic and Digestive Diseases (CIBERehd).

# **SPEAKERS**

### Filip Scheperjans. Prof. MD, PhD.

 Consultant neurologist. HUS University Hospital in Helsinki. Finland.

#### Jaione Valle Turrillas. PhD.

- Bacterial Communities and Disease Laboratory (BCD-Lab).
- Instituto de Agrobiotecnologia-CSIC (IdAB-CSIC).
- CSIC-GN. Pamplona, Navarra.

## Tim Vanuytsel. Prof. MD, PhD.

- Gastroenterologist.Translational Research in GastroIntestinal Disorders.
- Universitair Ziekenhuis Leuven, Belgium.

#### Yolanda Sanz. PhD Prof.

- Spanish Research Council (CSIC) Microbiome.
- Nutrition & Health Research Unit Institute of Agrochemistry and Food Technology (IATA). Paterna, Valencia.

# INFORMATION

#### WHEN

Friday, May 23rd 2025 15:30h - 18:30h

#### WHERE

Fundació Acadèmia de Ciències Mèdiques i de la Salut de Catalunya i de Balears.

C/ Major de Can Caralleu, 1-7. 08017, Barcelona.

https://institucional.academia.cat/



**B** Bus: V3, H2 or 130

FGC: Reina Elisenda or Peu de Funicular

## REGISTRATION

On site or online streaming <a href="https://inscripcions.academia.cat/form.php?id=3056">https://inscripcions.academia.cat/form.php?id=3056</a>
Deadline for registration: May 9th 2025

## **ACCREDITATION**

Accreditation has been requested from "Consell Català de Formació Continuada de les Professions Sanitàries / Comisión de Formació Continuada del Sistema Nacional de Salud"

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