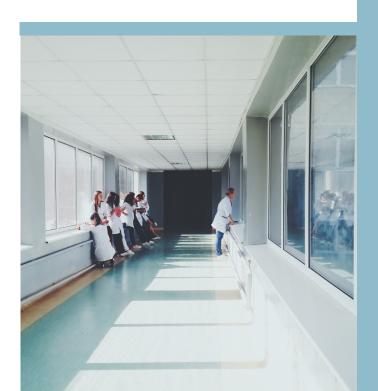
# What you will learn

Original and innovative
clinical practice aimed at connecting the
basic mechanisms of disease to clinical
symptoms

**Biomarkers and treatments** 

of neurometabolic and neurodegenerative diseases

The biochemical and cell biology bases of neurological symptoms



#### Director:

### Pr Garcia-Cazorla

Head Neurometabolic Unit Sant Joan de Déu (SJD), Barcelona

### **Coordinators:**

### Pr. Jean-Marie Saudubray

Emeritus Professor of Pediatrics and Inborn Errors of Metabolis, Paris

### Pr. Oscar Marin

Director of the Centre for Developmental Neurobiology at King's College , london

**Dr. Juliana Ribeiro**Pediatric Neurologist at SJD, Barcelona

## Pr. Fanny Mochel

Head Neurometabolic Unit, La Pitié Salpetrière, Paris

**Contact Us** 

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# Master in NEUROMETABOLISM AND CELL BIOLOGY FOR CLINICIANS



Holistic training in neurometabolism and cell biology for a new generation of talented clinicians

# **NOVEL PARADIGM**

This international master aims to lay the ground for the much-needed novel paradigm in clinical neurology. While classic approach is mainly based on clinical symptoms, here we aim to integrate different levels of complexity in agreement with the intricate operational network of the nervous system.

The neurological manifestations will be linked to genetic, molecular and biochemical markers, cellular pathways, and brain circuitries in a comprehensive manner as a necessary and new approach.

Most of all, we will provide educational tools to integrate the "pathophysiological thinking" in the clinical practice of both neurology and inborn errors of metabolism (in which >80% of diseases have neurological involvement).

This is indeed linked to the current development of new therapies

# ONLINE MASTER with on-site summer schools

Duration: 2 years
Beginning: October 2022
Credit: 45 credit/year
Dedication regime: Part Time
Language: English

Target audience:
Health professionals dedicated to
neurology (pediatric and adult) and/or
inborn errors of metabolism



# **OUR PROGRAMME**

The educational content of the first year is related to basic knowledge on brain metabolism and cellular neurobiology.

Part I: Cellular Neurochemistry and related diseases

Part II: Nervous system compartments 1: Intracellular communication and related diseases

Part III: Nervous system compartments 2: Intercellular communication and related diseases

The second year aims to connect neurochemistry and cell biology to the main neurological syndromes

Part IV: Neurodevelopment and Systems Neurobiology

Part V: Clinical syndromes and related biological mechanisms

Part VI: Biomarkers and New treatments



We empower our students to a new perspective on the knowledge of brain diseases"



## **SUMMER SCHOOLS**

This master includes two summer schools in Barcelona



# International renowned teachers

Professors of renowned international prestige will give the online lectures and will have the possibility through specific tutorial classes to interact and discuss with the students during live sessions.