

# The 2024 Fresco International Workshop on Synaptic Plasticity and Advances in Parkinson's Disease

Thursday–Saturday, September 19–21, 2024

Milazzo, Italy

[www.frescoparkinsoninstitute.com](http://www.frescoparkinsoninstitute.com)

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Endorsed by the International Association of Parkinsonism and Related Disorders, the International Parkinson and Movement Disorder Society, the Parkinson's Foundation, the Società Italiana Parkinson e Disordini del Movimento/LIMPE-DISMOV ETS, the Società Italiana di Neurofisiologia Clinica, the Società Italiana di Psicofisiologia e Neuroscienze Cognitive, the Italian Neuroscience and Rehabilitation Network, the Italian Society for Neuroscience, the Società Italiana di Neurologia, the European Academy of Neurology, the Associazione Italiana Neurologi Ambulatoriali Territoriali and the Assemblée Regionale Siciliana.



# The 2024 Fresco International Workshop on Synaptic Plasticity and Advances in Parkinson's Disease

## WORKSHOP DIRECTORS

**Angelo Quartarone, MD**

**M. Felice Ghilardi, MD**

**Mark Hallett, MD**

**Monica Norcini, PharmD, PhD**

## MEETING DESCRIPTION

Join us in Sicily for the seventh edition of a Fresco Symposium focused on synaptic plasticity and Parkinson and related diseases. With the increase of life expectancy, neurodegenerative diseases will see a significant upward trend with an increasing pressure on social and health care systems. In the workshop, international experts will provide an overview of the scientific advances on different aspects of brain plasticity from bench to bedside in health and neurodegenerative disorders. Moreover, in the first day, didactic lectures and study groups will provide an overview of advances in the multidisciplinary care of Parkinson's disease and related disorders.

For almost fifteen years, the symposium has been a resourceful venue to meet scientists and clinicians from different backgrounds, to start fruitful discussion and collaborations with the goals to understand neural mechanisms, to treat symptoms and to improve quality of life of these patients.

The symposium will take place in Milazzo, a magical place where, starting from neolithic societies, the most diverse populations came, developed and disappeared, leaving magnificent signs of their presence. In this special frame, social events will merge the beauty of this place and its monuments with the science of the meeting.

## TARGET AUDIENCE

Researchers, physicians, and other care providers in the field of neurology, internal medicine, rehabilitation medicine, neurosurgery psychiatry, geriatrics and other health care professionals working with patients with Parkinson's disease and related disorders as well as neuropsychiatric disorders.

## ITALIAN ACCREDITATION STATEMENT

Total of 20 CME credits.

course code 6633-406993 for 4 CME and

course code 6633-408096 for 16 CME.

Accreditation for: Physician, Nurse, Physiotherapist, Occupational Therapist, Speech-Language Therapist and Psychologist.

## EDUCATIONAL OBJECTIVES

After this activity, participants should be able to:

- Treat motor and non-motor symptoms of Parkinson's disease with an interdisciplinary approach.
- Understand how plasticity is impaired in Huntington disease opening the way to novel treatments.
- Implement current medical, surgical, and genetic treatment of Huntington disease.
- Utilize multidisciplinary rehabilitation to impact the life of patients with Huntington disease.
- Describe how energy is used by the brain to promote plasticity and how energy-related mechanisms are altered in neurodegenerative diseases.
- Understand the basis for the use of GLP1 receptor agonists and IGF-2 as new therapies for neurodegenerative diseases.
- Understand how the immune system and plasticity are altered in neurodegenerative diseases and dystonia.
- Identify and treat motor problems in cognitive and psychiatric disorders and understand their relevance to life quality.
- Selecting novel and different approaches to rewire the brain and spinal cord circuits that are altered by neurological diseases and traumas.

## REGISTRATION

<https://rb.gy/naqntf>



After 12 pm on September 12, 2024 only onsite registration is available, provided the meeting has not reached capacity. Onsite registrants will incur an additional €20 charge. Registration is non-transferable.



**E.C.M.**

Commissione Nazionale Formazione Continua



# Advances in Parkinson's Disease

## COURSE DIRECTORS

**M. Felice Ghilardi, MD**  
**Angelo Quartarone, MD**  
**Daniele Volpe, MD**

## COURSE DESCRIPTION

This course will focus on rehabilitation in PD based on scientific and clinical experience with a multidisciplinary team in a collaborative approach.

A team of expert clinicians and researchers representing a diverse group of professionals will lead course attendees through the progression of the disease, best rehabilitation practices and applicable clinical skills. Focus will be on the treatment of motor and non-motor symptoms and how rehabilitation and an interdisciplinary team can improve the life of patients and caregivers.

Throughout the course, participants will learn in a classroom, collaborate with faculty and discuss clinical cases and best clinical practices for treating PD population.

## THURSDAY, SEPTEMBER 19

### Interdisciplinary Care in the Rehabilitation of Parkinson's Disease

**8:00 am** Registration

**8:15 am** Introduction to the Course

**8:30 am** **Parkinson's disease: a complex disease**

Alessandro Di Rocco

**8:50 am** **Physio-pathological bases of Rehabilitation in PD**

Angelo Quartarone

**9:10 am** **Multidisciplinary Rehabilitation in PD: not if, but when and how**

Davide Ferrazzoli

**10:00 am** **Interdisciplinary care in PD: how to lead a productive team meeting**

Daniele Volpe

### Coffee Break

**10:30 am** **Interdisciplinary team meetings on clinical cases with tutorials**

Alessandro Di Rocco  
Angelo Quartarone  
Daniele Volpe

**12:00 am** Adjourn

# Fresco International Workshop

## THURSDAY, SEPTEMBER 19

**1:00 pm** Registration

**1:30 pm** Welcome Remarks and  
Introduction to the Workshop

### SESSION I: Huntington and plasticity

Moderators: Peter Schmidt  
Mario Zappia  
Alessandro Di Rocco

**2:00 pm** Corticostriatal synaptic plasticity  
alterations in a transgenic mouse  
model of Huntington's Disease.

Veronica Ghiglieri

**Medical, Surgical, and Genetic  
Treatment of Huntington  
Disease.**

Andy Feigin

**Multidisciplinary rehabilitation  
and care of Huntington  
Disease.**

Lori Quinn

**Coffee Break**

**Round Table with Patients**

**5:30 pm** Adjourn

**6:30 pm** Cocktail at the Castle

## FRIDAY, SEPTEMBER 20

**8:30 am** CME Sign-In

### SESSION II: Energy and plasticity in Neurodegenerative diseases

Moderators: Alessandro Padovani  
Sheela Vyas  
Paolo Calabresi

**9:00 am** Glycogen and Lactate: From  
Body Energy Reserve to Brain  
Plasticity.

Pierre Magistretti

**The astrocyte-neuron lactate shuttle:  
relevance for brain function,  
dysfunction and rescue.**

Anne-Karine Bouzier-Sore

**Metabolic interactions and plasticity  
in neurodegenerative diseases.**

Gilles Bonvento

**Coffee Break**

**GLP1 receptor as a therapeutic target  
for clinical trials in PD and AD: effects  
on energy and synaptic plasticity.**

Dilan Athauda

**Practice-related changes of EEG  
oscillatory activity in humans: Markers  
for energy consumption in PD?**

M. Felice Ghilardi

**Panel Discussion**

**Microsymposium**

**12:45 pm** Lunch and Poster Session

### SESSION III: Immune system and plasticity in neurodegenerative disease and dystonia

Moderators: Matilde Inglese  
Michela Deleidi  
Souhel Najjar

**2:30 pm** Immune aging, dysmetabolism,  
and inflammation: protagonists in  
neurodegeneration?

Michela Deleidi

**A possible role for the immune  
system in dystonia?**

Buz Jinnah

**Parkinson disease: current views  
on immunity.**

David Sulzer

**Coffee Break**

**The impact of neurovascular,  
blood-brain barrier, and glymphatic  
dysfunction in neurodegenerative  
disorders**

Jeffrey Ilif

# AGENDA

## **IGF-2 in cognitive enhancement and the development of novel treatments for neurodegenerative disease.**

Cristina Alberini

### **Panel Discussion**

### **Microsymposium**

**6:00 pm** Adjourn

## **SATURDAY, SEPTEMBER 21**

**8:30 am** CME Sign-In

### **SESSION IV:**

#### **Motor problems in cognitive and psychiatric disorders and their relevance to life quality**

Moderators: Elena Moro  
Alberto Albanese  
Giancarlo Comi

**9:00 am** **Catatonia Revisited: looking back and moving forward.**

Christian Wolf

#### **Origin, onset and evolution of paratonia in normal aging, cognitive disorders and PD.**

Lucio Marinelli

#### **Tics and plasticity.**

Alexander Munchau

#### **Coffee Break**

#### **Early motor dysfunction in Alzheimer's disease: plasticity and interventions.**

Giacomo Koch

### **Panel Discussion**

### **Microsymposium**

**12:45 pm** Lunch and Poster Session

### **SESSION V:**

#### **Rewiring the lesioned brain**

Moderators: John Rothwell  
Hartwig Siebner  
Letizia Leocani

**2:15 pm** **Spinal cord lesions: a model for regeneration.**

Jack Martin

#### **Shaping plasticity to enhance recovery after stroke.**

Vincenzo Di Lazzaro

#### **Is it possible to rewire abnormal circuits in dystonia by targeting neurotransmitter systems?**

Antonio Pisani

#### **Coffee Break**

#### **The importance of genetics in rewiring the lesioned brain in PD.**

Alessio Di Fonzo

#### **Can DBS rewire the brain? Plasticity, Learning and Habituation in movement disorders.**

Ioannis Isaias

### **Panel Discussion**

### **Microsymposium**

#### **Summary, final remarks and conclusions**

Mark Hallett

**6:15 pm** Adjourn

# INFORMATION

<b>MEETING FEES</b>	<b>Early Registration</b> (Ending on June 30, 2024)	<b>Regular</b>
Young Investigators, Physicians, Researchers <40 years old	€250	€350
Investigators, Physicians, Researchers >40 years old	€350	€450
PT, SLT, OT, Students	€200	€300
“Interdisciplinary Care in PD” only	€50	€50

## REGISTRATION INFORMATION

Fresco Parkinson Institute Italia  
Phone: +39 055 598999  
Email: [info@frescoparkinsoninstitute.it](mailto:info@frescoparkinsoninstitute.it)  
Registration: <https://rb.gy/naqntf>

## REFUND POLICY

Submit your request for a refund of meeting fees no later than September 6. No refunds will be issued for cancellations or no-shows after that time. To request a refund, email [info@frescoparkinsoninstitute.it](mailto:info@frescoparkinsoninstitute.it). A €100 administrative fee will be deducted.

## MEETING CANCELLATION POLICY

If a meeting is cancelled due to inclement weather, or any other catastrophic reason, will refund registration fees in full. Fresco Parkinson Institute will provide at least two weeks' advance notice if cancelling due to insufficient enrollment and as soon as possible in all other circumstances. Fresco Parkinson Institute is not responsible for any airfare, hotel, or other non-cancelable costs incurred by the registrant.

## LOCATION

EOLIAN MILAZZO HOTEL  
Salita Cappuccini, 21/23  
98057 Milazzo (Messina)  
Sicily

## HOTEL AND TRAVEL INFORMATION

ADM Congressi S.r.L.  
Via E. Boner, 76  
98121 – Messina  
Phone: +39 090 9010503  
Mobile: +39 335 7786891  
[info@admcongressi.it](mailto:info@admcongressi.it)



## HOW TO REACH MILAZZO

The nearest airport to reach Milazzo is Catania Airport.  
There are shuttle buses between Catania Airport and Milazzo.  
For the shuttle bus schedule see:  
<https://giuntabus.com>

## ABSTRACT SUBMISSION

We are accepting abstract submissions for poster presentation highlighting your research findings possible on the topic of the five sessions.

Please submit your abstract with a maximum of 250 words excluding title, authors, and presenters to:

**[INFO@frescoparkinsoninstitute.it](mailto:INFO@frescoparkinsoninstitute.it)**

Poster Dimensions: 24" x 36" (60 x 90 cm).

Deadline for submission: July 26, 2024

The best abstract will be selected also for oral presentation discussion.