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

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 Assemblea Regionale Siciliana.

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POSTER ABSTRACTS

Visit:
www.frescoparkinsoninstitute.com/abstract-of-the-selected-posters/
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PRESENTATION ABSTRACTS

Enter with your username and password to the platform:
www.frescofoundation.eu/login/index.php
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For information contact: ecm@frescoparkinsoninstitute.it

WI-FI INSTRUCTIONS

Free Wi-Fi

Congress Venue: Sala Meeting

Inside the Hotel: Eolian Milazzo Hotel

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 neolitic 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.

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.

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

09:50 am **Interdisciplinary care in PD: how to lead a productive team meeting**
Daniele Volpe

10:10 am **Interdisciplinary team meetings on clinical cases with tutorials**
Alessandro Di Rocco
Angelo Quartarone
Daniele Volpe
Davide Ferrazzoli

11:40 am **Adjourn**

Fresco International Workshop

THURSDAY, SEPTEMBER 19

1:00 pm **Registration**

1:20 pm **Welcome Remarks and Introduction to the Workshop**

SESSION I: Huntington and plasticity

Moderators: Peter Schmidt
Mario Zappia
Alessandro Di Rocco

1:50 pm **Corticostriatal synaptic plasticity alterations in a transgenic mouse model of Huntington's Disease.**
Veronica Ghiglieri

2:20 pm **Update on Experimental Therapeutics for Huntington's Disease.**
Andrew S. Feigin

2:50 pm **Multidisciplinary rehabilitation and care of Huntington Disease.**
Lori Quinn

3:20 pm **Fresco Fellow talk: Ambroxol improves glucocerebrosidase function and attenuates α-synuclein pathology in patient-derived midbrain organoids of GBA1-Parkinson's disease.**
Emanuele Frattini

3:55 pm **Coffee Break**

4:15 pm **Round Table. Associations of Patients with PD: analyses of functions and dysfunctions**

5:35 pm **Adjourn**

6:00 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

9:30 am **The astrocyte-neuron lactate shuttle: relevance for brain function, dysfunction and rescue.**
Anne-Karine Bouzier-Sore

10:00 am **Metabolic interactions and plasticity in neurodegenerative diseases.**
Gilles Bonvento

10:30 am **Coffee Break**

11:00 am **GLP1 receptor as a therapeutic target for clinical trials in PD and AD: effects on energy and synaptic plasticity.**
Dilan Athauda

11:30 am **Practice-related changes of EEG oscillatory activity in humans: Markers for energy consumption in PD?**
M. Felice Ghilardi

12:00 pm **Highlights from posters section**

12:15 pm **Fresco Fellow talk: Exploring the link between fatigue and functional connectivity in dopamine and noradrenaline circuits in Parkinson's disease.**
Ilaria Di Vico

12:30 pm **Panel Discussion**

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

3:00 pm **A possible role for the immune system in dystonia?**
Hyder Jinnah

3:30 pm **Parkinson disease: current views on immunity.**
David Sulzer

4:00 pm **Coffee Break**

4:30 pm **The impact of neurovascular, blood-brain barrier, and glymphatic dysfunction in neurodegenerative disorders**
Jeffrey Iliff

5:00 pm **IGF-2 in cognitive enhancement and the development of novel treatments for neurodegenerative disease.**
Cristina Alberini

5:30 pm **Highlights from posters session**

5:45 pm **Fresco Fellow talks: Prokineticin-2 expression in colonic mucosa of Parkinson's disease patients.**
Gabriele Bellini

6:00 pm **Fresco Fellow talks: Movement disorders following mechanical thrombectomy resulting in ischemic lesions of the basal ganglia: an emerging clinical entity?**
Danilo Genovese

6:15 pm **Panel Discussion**

6:15 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

9:30 am **Origin, onset and evolution of paratonia in normal aging, cognitive disorders and PD.**
Lucio Marinelli

10:00 am **Tics and plasticity.**
Alexander Munchau

10:30 pm **Coffee Break**

11:00 am **Early motor dysfunction in Alzheimer's disease: plasticity and interventions.**
Giacomo Koch

11:30 am **Highlights from posters session**

12:00 pm **Fresco Fellow talks: Oligomeric alpha-synuclein causes early striatal synaptic dysfunction associated with non-motor symptoms**
Laura Bellingacci

12:15 pm **Fresco Fellow talks: Dissecting clinical and biological phenotypes of Parkinson's disease.**
Giuletta Riboldi

12:30 pm **Panel Discussion**

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

AGENDA

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

2:45 pm **Shaping plasticity to enhance recovery after stroke.**
Vincenzo Di Lazzaro

3:15 pm **Is it possible to rewire abnormal circuits in dystonia by targeting neurotransmitter systems?**
Antonio Pisani

3:45 pm **Coffee Break**

4:10 pm **The importance of genetics in rewiring the lesioned brain in PD.**
Alessio Di Fonzo

4:40 pm **Can DBS rewire the brain? Plasticity, Learning and Habituation in movement disorders.**
Ioannis Isaias

5:10 pm **Highlights from the poster session**

5:25 pm **Panel Discussion**

5:45 pm **Summary, final remarks and conclusions**
Mark Hallett

6:00 pm **Adjourn**

ITALIAN ACCREDITATION STATEMENT

Total of 23 CME credits.
course code 6633-406993 for 4 CME and
course code 6633-408096 for 19 CME.
Accreditation for: Physician, Nurse, Physiotherapist, Occupational Therapist, Speech-Language Therapist Psychologist, Neurophysiopathology Technician and Biologist.

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ECM ITALIAN INSTRUCTIONS

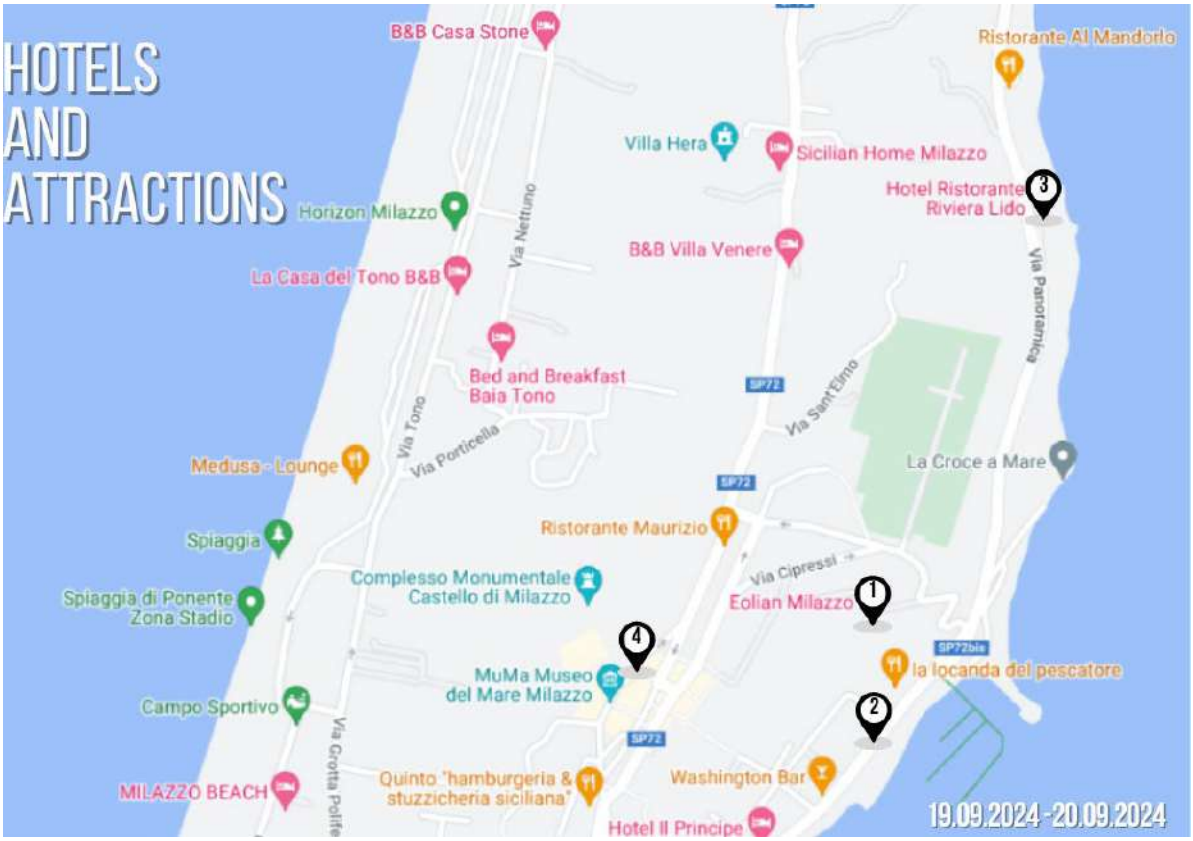
On the first day of the course, you will have to:
• Confirm your personal data on paper
• Declare any recruitment by sponsors on paper

Every day of course you will have to:
• Be present for at least 90% of the duration of the conference
• This will be verified by the check-in and check-out at the registration table
• Completion of the learning assessment test (you will need a 75% to pass) and the mandatory satisfaction questionnaire by accessing the platform **https://www.frescofoundation.eu/login/index.php**

If you have questions regarding Italian Accreditation, please email ecm@frescoparkinsoninstitute.it or call 055-598 999

INTERNATIONAL CME ACCREDITATIONS

For the recognition of the Continual Medical Education (CME) Credits in countries other than Italy, it is necessary to request recognition and conversion from the relevant authority. The rules may vary from country to country.



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