# The 2022 Fresco International Workshop on Synaptic Plasticity and Advances in Parkinson's Disease

Tuesday–Friday, June 7–10, 2022

Florence, Italy

nyulmc.org/frescocme







# The 2022 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

#### **COURSE DIRECTORS**

Andrew S. Feigin, MD Steven J. Frucht, MD Un Kang, MD Monica Norcini, PharmD, PhD

#### **MEETING DESCRIPTION**

Join us in Florence, Italy for the Fresco meeting in June focusing on synaptic plasticity and Parkinson's disease. 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 movement disorders. On the last day, NYU Langone faculty will present didactic lectures, providing an overview of advances in diagnosis and treatment of Parkinson's disease and related disorders. Participants will gain a deeper understanding of brain function and its relevance to diagnosis and treatment of Parkinson's disease, parkinsonisms, and movement disorders.

#### **EDUCATIONAL OBJECTIVES**

After this activity, participants should be able to:

- Describe the mechanisms of plasticity and their relevance in the genesis and treatment of symptoms of Parkinson's disease and parkinsonisms
- Evaluate the latest development in the deep brain stimulation treatment of Parkinson's disease and dystonia
- Assess the use of rehabilitation techniques in parkinsonisms
- Integrate the latest technology in the diagnosis and treatment of patients with Parkinson's disease, parkinsonisms, and other movement disorders
- Identify non-motor problems in Parkinson's disease and determine specific treatments
- Utilize different types of testing to their full advantage and identify some of their limitations as well as benefits in assessing patients with Parkinson's disease, parkinsonisms, and other movement disorders
- Describe the role of glia activity in inflammation in neurodegenerative disorders
- Recognize visual and speech changes associated with Parkinson's Disease

# 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

# **MEETING APP**

Meeting materials will be distributed electronically via an app. Emails regarding the app will be sent beginning two weeks prior to the meeting. You will be able to download the app and view the meeting materials in advance, as well as on the day of the meeting. The app can also be viewed on a desktop or laptop. The meeting presentations will be available for view/download/print the week of the meeting. The meeting app will remain available for one year after the meeting.

# REGISTRATION nyulmc.org/frescocme

After 12 pm on May 31, 2022 only onsite registration is available, provided the meeting has not reached capacity. Onsite registrants will incur an additional \$20 charge. Registration is non-transferable.

# EACCME® ACCREDITATION STATEMENT



The 2022 Fresco International Workshop on Synaptic Plasticity and Advances in Parkinson's Disease, Florence, Italy, 6/7/2022–6/10/2022 has been

accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 20 European CME credits (ECMEC®s). Each medical specialist should claim only those hours of credit that he/she actually spent in the educational activity.

Through an agreement between the Union Européenne des Médecins Spécialistes and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 CreditsTM. Information on the process to convert EACCME® credit to AMA credit can be found at www.ama-assn.org/educatio /earncredit-participation-international-activities.

Live educational activities, occurring outside of Canada, recognised by the UEMS-EACCME® for ECMEC®s are deemed to be Accredited Group Learning Activities (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada. CCME® for CME accreditation of this event.

# **ITALIAN ACCREDITATION STATEMENT**

Total of 23 CME credits. Course code: 6633-317921. Accreditation for: Physician, Nurse, Physiotherapist, Occupational Therapist, Speech-Language Therapist and Psychologist.







Commissione Nazionale Formazione Continua

# TUESDAY, JUNE 7, 2022

1:00 pm Registration

- 1:45 pm Welcome Remarks Paolo Fresco Robert I. Grossman, MD Kenneth Langone
- **2:00 pm** Introduction to the Workshop M. Felice Ghilardi, MD Angelo Quartarone, MD

#### 2:10 pm Opening Panel—COVID-19 and Possible Link with Parkinson's Disease and Parkinsonism: From Bench to Bedside

David Sulzer, PhD K Ray Chaudhuri, MD Peter Schmidt, PhD Elena Moro MD, PhD

#### SESSION I: From Emotion to Motion

Moderators: Veronica Ghiglieri, PhD Peter Schmidt, PhD Hartwig R. Siebner, MD, DMSci

3:00 pm From Emotion to Motion: Cortical and Subcortical Contributions Edmund T. Rolls. MA. DPhil. DSc. Hon DSc

> **Chronic Stress: From Neuronal Plasticity to Neurodegeneration** Sheela Vyas, MD

#### **Coffee Break**

**Stress, Sex, and Plasticity** Debra Bangasser, PhD

Functional Movement Disorders: Maladaptive Plasticity in the Limbic-Motor Circuitry Mark Hallett, MD

#### **Panel Discussion**

- 6:30 pm Adjourn
- 6:45 pm Social Event: Cocktail & PD Art Exhibition

# WEDNESDAY, JUNE 8, 2022

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

Cerebellum: New Perspectives in Movement Disorders

Moderators: Matilde Inglese, MD, PhD Marco Molinari, MD, PhD Ulf Ziemann, PhD 9:00 am A New Anatomical Perspective on the Connections Between Basal Ganglia and Cerebellum: Functional Implications Angelo Quartarone, MD

> **Cognition, Emotion, Autonomic Function and Cerebellum** Jeremy D. Schmahmann, MD

**Cerebellum Contribution to Pathophysiology of Movement Disorders** Hyder A. Jinnah, MD

**Coffee Break** 

**Cerebellum and Plasticity: A Target for Non-Invasive Stimulation** John Rothwell, PhD

**Cerebellum and Plasticity: A Target for Invasive Stimulation** Andres Lozano, MD, PhD

**Panel Discussion** 

12:30 pm Lunch and Poster Session

#### **SESSION III:**

**Parkinsonisms and Plasticity** 

Moderators: Paolo Calabresi, MD Massimo Cincotta, MD Giacomo Koch, MD, PhD

2:30 pm Rehabilitation in Parkinsonisms Robert lansek, PhD, FRACP

#### Tau and the Cytoskeleton: Relevance to Synaptic Damage, Plasticity, and Neurodegenerative Diseases Francesca Bartolini, PhD

**Tau and Plasticity** Michael Rowan, PhD

Clinical Spectrum of Parkinsonisms: New Frontiers Alessandro Di Rocco, MD

#### **Coffee Break**

**Cortical Plasticity in Corticobasal Syndrome, PSP, MSA, and Lewy Body** Antonio Suppa, MD, PhD

#### Panel Discussion

6:30 pm Round Table: What Patients Want from Research

7:00 pm Adjourn

# THURSDAY, JUNE 9, 2022

8:30 am CME Sign-In

SESSION IV: Plasticity and Non-Motor Symptoms in Parkinson's Disease

Moderators: Vicenzo Di Lazzaro, MD Simone Rossi, MD, PhD Mario Zappia, PhD

9:00 am Fatigue in PD: A Plasticity-Related Disorder? K Ray Chaudhuri, MD

> Vision and Plasticity in Parkinson's Disease M. Felice Ghilardi, MD

Pain as Maladaptive Plasticity in Parkinson's Disease Michele Tinazzi, MD, PhD

# Coffee Break

**Sleep Disorders in PD: An Ultimate Disorder of Plasticity?** Raffaele Ferri, MD

Macrobioma and Parkinson's Disease: Cause, Effect, or Mere Association? Gonzalo Torres, PhD

Panel Discussion

12:30 pm Lunch and Poster Session

SESSION V: Does DBS Modulate Plasticity in Parkinson's Disease and Dystonia?

Moderators: Giancarlo Comi, MD Leonardo Lopiano, MD, PhD Elena Moro, MD, PhD

2:30 pm The Past, the Present, and the Future of DBS Alim-Louis Benabid, MD, PhD

> Subcortical Deep Brain Stimulation Modulates Cortical Excitability and Plasticity

Robert Chen, MBBChir, MSc, FRCPC

Motor Cortical Plasticity and Pathological Oscillatory Activity in Dystonia Diane Ruge, PhD

**Coffee Break** 

Towards Adaptive DBS: Retuning Gait Freezing in Parkinson's Disease Ioannis Isaias, MD, PhD

**The Present and the Future of FUS for Movement Disorders** Jose A. Obeso, MD, PhD

#### **Panel Discussion**

Final Remarks and Conclusion Mark Hallett, MD

6:00 pm Adjourn

#### **FRIDAY, JUNE 10, 2022**

8:00 am Welcome and Course Introduction Steven L. Galetta, MD

#### SESSION I:

**Genetic and Inflammation** 

Moderator: Un Kang, MD

8:10 am Astrocytes in Neurodegenerative Disorders Shane A. Liddelow, PhD

> **Glial Targeted Therapy in Huntington's Disease: The SIGNAL Trial** Andrew S. Feigin, MD

**Inflammation and Genetics in Parkinson's Disease** Giulietta M. Riboldi, MD, PhD

#### Modeling Genetic Parkinson's Disease in Patient-Derived Cell Systems Emanuele Frattini. MD

Panel Discussion

#### **SESSION II:**

Non-Motor Symptoms of Parkinson's Disease

Moderator: Andrew S. Feigin, MD

**9:35 am Visual Perception Mechanisms** Bivu J. He, PhD

> Rehabilitative Potential of Artistic Experience in Patient with PD Alberto Cucca, MD

**Speech and DBS** Federica Avantaggiato, MD

#### Panel Discussion

**Coffee Break** 

# AGENDA

SESSION III: Basic Mechanism of Plasticity and Clinical Applications

Moderator: Richard Tsien, PhD

11:00 am Keynote Speaker: Speech and Motor Learning Michael A. Long, PhD

> **Dopamine Modulates the** size of Striatal Projection **Neuron Ensembles** Marta Maltese, PhD

**Enhancement of Axonal Dopamine Release by Leptin** Maria Mancini, PhD

GABA Co-Transmission from Dopaminergic Neurons as a Potential Candidate for Striatal Modulation Riccardo Melani, PhD **Exercise Enhances DA Release and BDNF Levels in Mouse Striatum** Guendalina Bastioli. PhD

Panel Discussion

SESSION IV: Movement Disorders Video Rounds

12:25 pm Video Rounds Andrew S. Feigin, MD Steven J. Frucht, MD Un Kang, MD Mark Hallett, MD

1:00 pm Adjourn

MEETING FEES	<b>Early Registration</b> (Ending on April 7, 2022)	Regular
Young Investigators, Physicians, Researchers <40 years old	\$235	\$295
Investigators, Physicians, Researchers >40 years old	\$350	\$410

Please note: This meeting is eligible for NYU Grossman School of Medicine Alumni discount.

# **REFUND POLICY**

Submit your request for a refund of meeting fees more than \$75 no later than 7 days before the meeting start date. No refunds will be issued for cancellations or no-shows after that time. To request a refund, email cme@nyulangone.org. A \$75 administrative fee will be deducted.

# **MEETING CANCELLATION POLICY**

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

# LOCATION

Istituto degli Innocenti Piazza della Santissima Annunziata, 12 50122 Firenze

# **CONTACT INFORMATION**

NYU Grossman School of Medicine Phone: 212-263-5295 Email: cme@nyulangone.org

#### **ITALIAN CONTACT INFORMATION**

Fresco Parkinson Institute Italia Phone: +39 055 598999 Email: info@frescoparkinsoninstitute.it

# **PROVIDED BY**

NYU Grossman School of Medicine

# **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: **FI-NRP@nyulangone.org** and **monica.norcini@nyulangone.org**.

Poster Dimensions: 24" x 36" (61 x 91 cm).

Deadline for submission: May 10, 2022

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

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