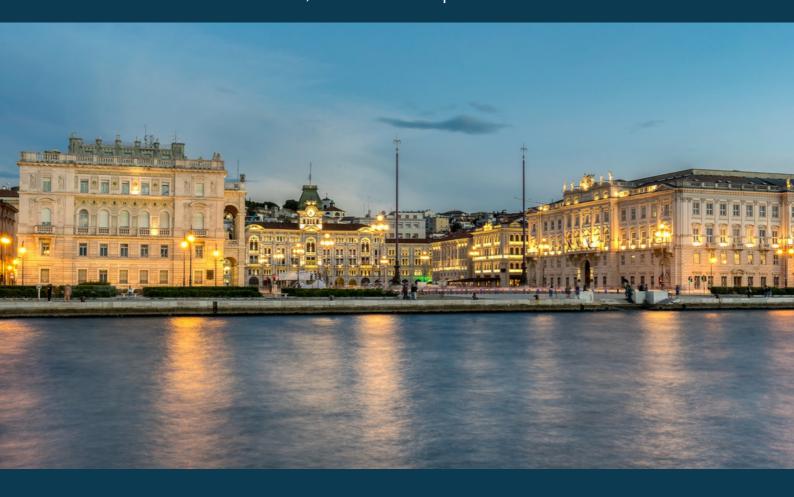


# TwinBrain WORKSHOP 3.0

Trieste, 30 March – 1 April 2023



Advances in movement disorders diagnosis and rehabilitation: from new technologies to clinical practice







## Thursday, 30 March

14:30

Registration

### I SESSION:

**Neurophysiology and Biomedical Engineering in Movement Disorders** 

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Paolo Manganotti - Milos Ajcevic - Alex Buoite Stella

15:00 - 15:15	Michele Tinazzi President Italian Parkinson and Movement Disorder Society
15:15 - 15:45	Neurophysiology Studies in Movement Disorders  Paolo Manganotti  Clinical Unit of Neurology, University of Trieste, Italy
15:45 - 16:15	COFFEE BREAK
16:15 - 16:45	Neuroimaging and EEG in Parkinson's Disease  Milos Ajcevic  Department of Engineering and Architecture, University of Trieste, Italy
16:45 - 17:15	Exploring muscle-brain crosstalk in Parkinson's disease using Mobile Brain/Body Imaging Uroš Marušič and Milos Kalc Science and Research Center (ZRS), Koper, Slovenia
17:15 - 17:45	Neural mechanisms of cognitive-motor dual tasking in early Parkinson's disease: Preliminary results of the ongoing Twin Brain project clinical trial Manca Peskar  ZRS, Koper, Slovenia / Technical University of Berlin, Germany
17:45 - 18:15	Using inertial motion sensors to assess the effect of noninvasive vagal nerve stimulation on gait in advanced Parkinson's disease patients  Vesna M. van Midden  Department of Neurology, University Medical Centre Ljubljana, Slovenia
18:15	WELCOME COCKTAIL

## Friday, 31 March

### **II SESSION:**

**Exercise and rehabilitation in movement disorders** 

#### Chairs:

Manuela Deodato - Alex Buoite Stella

9:30 - 10:00	Movement analysis in movement disorders  Eleonora Guanziroli  Bioengineering Department of Villa Beretta Rehabilitation Centre, Como, Italy	
10:00 - 10:45	Movement for movement disorders: the physiological role of active and assisted exercise  Alex Buoite Stella  Department of Medicine, Surgery and Health Sciences, University of Trieste, Italy	
10:45 - 11:15	COFFEE BREAK	
11:15 - 12:00	Which rehabilitation in Parkinson Diseases  Daniele Volpe  Scientific Coordinator of Fresco Parkinson Institute, Villa Margherita Foundation,  Vicenza, Italy	
12:00 - 12:45	The Gait in Freezing phenomenon and Rehabilitation Susanna Mezzarobba University of Genoa, Italy	
12:45 - 15:00	LUNCH BREAK	

### **III SESSION:**

Clinical, neuroimaging and neuromodulation aspects of movement disorders

#### Chairs:

Paolo Manganotti - Milos Ajcevic

15:00 - 15:45	Clinical picture and therapy, the experience of Trieste University Hospital Mauro Catalan Clinical Neurology Unit University Hospital, Italy
15:45 - 16:30	Neuroimaging in Movement Disorders  Maja Trost  Clinical Neurology Unit, University of Ljubljana, Slovenia
16:30 - 17:00	COFFEE BREAK
17:00 - 17:45	Deep Brain Stimulation: current indications and future perspectives  Maria Chiara Malaguti  Clinical Neurology Unit, University Hospital Santa Chiara, Trento, Italy
17:45 - 18:30	Deep Brain Stimulation: clinical picture and possible rehabilitation  Vladimira Vuletić  Clinical Neurology Unit, University of Rijeka, Croatia
18:30 - 19:15	The Energy Cost of Human Locomotion - From Theory to Good Practice Carlo Capelli Department of Neurosciences, Biomedicine and Movement Sciences, University of Verona, Italy

## Saturday, 1 April

#### **IV SESSION:**

Practical session - how to assess and study movement disorders

#### Chairs:

Manuela Deodato - Giulia Sgubin - Miriam Martini - Manca Peskar

9:30 - 12:30

Practical session at Rehabilitation Gym of Physiotherapy degree study program. Activities performed by physiotherapists and residents in neurology.

Practical session 1 – How to assess and study movement disorders

Practical session 2 - Application of technology-based rehabilitation strategies

Practical session 3 - Twin Brain - MoBI Technology in action

#### Scientific Committee

**Prof. Paolo Manganotti,**Clinical Unit of Neurology, University of Trieste, Italy

Assist. Prof. Milos Ajcevic,
Department of Engineering and Architecture, University of Trieste, Italy

Dr. Alex Buoite Stella,

Department of Medicine, Surgery and Health Sciences, University of Trieste, Italy