

Fondazione Don Carlo Gnocchi - Onlus and  
Società Italiana di Analisi del Movimento in Clinica  
organize the:



**Congress Chairman**

Maurizio Ferrarin, IRCCS Fondazione Don Carlo Gnocchi, Milano

**Scientific Committee**

Pietro Caliandro, Fondazione Policlinico Universitario Agostino Gemelli, Roma

Stefano Cavazza, Azienda Ospedaliero-Universitaria di Ferrara

Andrea Cereatti, Università degli Studi di Sassari

Lorenzo Chiari, Università di Bologna

Alessandra Colazza, IRCCS Ospedale Pediatrico Bambino Gesù, Roma

Andrea Giovanni Cutti, Centro Protesi INAIL, Budrio (BO)

Ugo Della Croce, Università degli Studi di Sassari

Alberto Leardini, Istituto Ortopedico Rizzoli, Bologna

Davide Mazzoli, Sol et Salus, Rimini

Antonio Nardone, IRCCS Fond. Salvatore Maugeri, Veruno (NO) and Univ. degli Studi del Piemonte Orientale

Stefano Negrini, Università di Brescia and IRCCS Fondazione Don Carlo Gnocchi, Milano

Maurizio Petrarca, IRCCS Ospedale Pediatrico Bambino Gesù, Roma

Marco Rabuffetti, IRCCS Fondazione Don Carlo Gnocchi, Milano

Rita Stagni, Università di Bologna

**Congress venue**

Centro Congressi Cariplo, via Romagnosi 8, Milano (Italy)

**Venue of pregress courses**

Fondazione Don Carlo Gnocchi Onlus, IRCCS S. Maria Nascente, via Capecelatro 66, Milano (Italy)

**Local organising committee**

Jessica Matera (Organising Secretariat)

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**For information**

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Congress Website (English version): [http://siamoc2016.dongnocchi.it/ENG/Index\\_eng.HTM](http://siamoc2016.dongnocchi.it/ENG/Index_eng.HTM)

### **Aims of the Congress**

To foster the development and clinical applications of instrumented movement analysis for: the study of pathophysiology of movement disorders, the prevention and functional diagnosis of diseases affecting the locomotor system, facilitating clinical decision making process and evaluating the efficacy of therapeutic and rehabilitation treatments.

### **Target groups**

The annual SIAMOC meeting attracts clinicians and researchers from multiple disciplines such as physical medicine and rehabilitation physicians, physiatrist, neurologists, orthopaedic surgeons, paediatricians, geriatricians, sport medicine physician, psychologists as well as physiotherapists, prosthetists and orthotists, occupational therapists, neurophysiopathology technicians, human movement scientists, Biomechanical / Biomedical / Rehabilitation / Robotics engineers, and others interested in human movement.

### **Main topics**

- Cortical and subcortical control of movements
- Applications of movement analysis in neurology, orthopaedics and rehabilitation
- Biomechanics and simulation of movement
- Wearable systems, monitoring systems and actigraphy
- Methodological developments: protocols, models and algorithms
- Gait analysis & clinical decision making (for functional surgery, botulinum toxin, physiotherapy)
- Outcome assessment
- Prosthetics and orthotics, 3D printing
- Movement analysis of upper limb and trunk
- Movement analysis in sport
- Energetics of locomotion
- Robotics and virtual reality: rehabilitation and evaluation

### **Scientific sessions and Call for Abstracts**

Scientific sessions will be introduced by plenary lectures given by invited world experts (see next page). Large spaces will be reserved for scientific contributions from participants, both in form of oral and poster presentations. Foreign participants can hold their presentations in English. The slides of oral presentations and the posters will be written in English, to facilitate foreign participants. Abstract submission must be done online through the congress website at the following link:

[http://siamoc2016.dongnocchi.it/ENG/Pagina\\_Abstract\\_Invio\\_eng.htm](http://siamoc2016.dongnocchi.it/ENG/Pagina_Abstract_Invio_eng.htm)

### **Pre-Congress courses**

On 5 October 2016 pre-congress courses will be held at Don Carlo Gnocchi Foundation, S. Maria Nascente Scientific Institute, Via Capecelatro, 66 in Milano:

- 1) Gait Analysis in patients with spasticity: clinical decision making, treatment and outcome assessment
- 2) Clinical movement analysis by means of inertial and magnetic sensors
- 3) Movement analysis and rehabilitation: quantitative measurement of outcome (in coll. with GIS Neuroscience)

### **Awards & Scholarships**

- SIAMOC awards for the best clinical and methodological papers
- Don Carlo Gnocchi Foundation award "Silvano Boccardi" for the best rehabilitative paper
- Stage award for young researcher
- SIAMOC Congress Scholarships for young members
- SIAMOC award for university degree dissertation

### **Key dates**

**30 May 2016:** abstract submission deadline

**30 June 2016:** abstract acceptance notification

**31 July 2016:** Early registration deadline

**5-8 October 2016:** Congress

## PLENARY LECTURES AND INVITED SPEAKERS

### **"Motor intention and movement awareness in normal subjects and in brain damaged patients"**

**Anna Berti**, Department of Psychology, University of Torino

### **"Modular organization of the motor system: muscle synergies and their relevance to rehabilitation"**

**Emilio Bizzi**, MIT, Boston, USA

### **"Wearable systems for motor rehabilitation"**

**Lorenzo Chiari**, Department of Electrical, Electronic, and Information Engineering & CIRI Health, University of Bologna

### **"Clinical Movement Analysis in Italy: the road traveled and future perspectives"**

**Carlo Frigo**, Department of Electronics, Information and Bioengineering, Polytechnic of Milano

### **"Clinical neurophysiology and movement analysis: towards the integration of two complementary instrumental approaches"**

**Paolo Maria Rossini**, Neurology Institute, Catholic University of The Sacred Heart, Fondazione Policlinico Universitario A. Gemelli, Roma

### **"Efficacy of Gait Analysis in Clinical Decision Making and Outcomes"**

**Tishya Wren**, Children's Orthopedic Center, Children's Hospital Los Angeles, USA

### **ROUND TABLE on "Advanced methods for the design and construction of orthoses with 3D printing"**

**Moderator: Alberto Leardini** (Orthopedic Institute Rizzoli, Bologna)

**Participants: Adriano Ferrari** (Reggio Emilia), **Marco Cavallaro** (Londra), **Andrea Giovanni Cutti** (Budrio), **Stefano Nerozzi** (Bologna)

## PRE-CONGRESS COURSES

### **1) Gait Analysis in patients with spasticity: clinical decision making, treatment and outcome assessment**

Speakers: Elena Carraro (Conegliano), Anna Castagna (Milano), Matteo Cioni (Catania), Davide Conte (Conegliano), Alessandro Crippa (Milano), Johanna Jonsdottir (Milano), Maurizio Osio (Milano)

### **2) Clinical movement analysis by means of inertial and magnetic sensors**

Speakers: Ilaria Carpinella (Milano), Andrea Cereatti (Sassari), Andrea Mannini (Pisa), Marco Rabuffetti (Milano), Rita Stagni (Bologna)

### **3) Movement analysis and rehabilitation: quantitative measurement of outcome (in collaboration with GIS Neuroscience-AIFI)**

Speakers: Denise Anastasi, Rita Bertoni, Thomas Bowman (Milano), Isabella Campanini (Reggio Emilia), Davide Cattaneo, Elisa Gervasoni (Milano), Susanna Mezzarobba (Trieste), Maurizio Petrarca (Roma), Massimiliano Pau (Cagliari)

The Congress will also host the meeting of the **SINC-SIAMOC Study Group on "Movement Neurophysiology"**.

Scientific program (draft March 2016)

	Wednesday 5/10/2016	Thursday 6/10/2016	Friday 7/10/2016	Saturday 8/10/2016	
08:00	Participant registration to pre-congress courses	Participant registration	User group meetings (provisional)		
08:15					
08:30					
08:45					
09:00	Precongress course 1: Gait Analysis in patients with spasticity: clinical decision making, treatment and outcome assessment Precongress course 2: Clinical movement analysis by means of inertial and magnetic sensors Precongress course 3 (in collaboration with GIS Neuroscience AIF): Movement analysis and rehabilitation: quantitative measurement of outcome	Keynote lecture: Anna Berti	Keynote lecture: Lorenzo Chiari	Keynote lecture: Paolo Maria Rossini	
09:15		Oral session: Sensori-motor control	Oral session: Wearable systems	Oral session: Neurophysiology and movement	
09:30					
09:45					
10:00					
10:15		Coffee break	Coffee break	Keynote lecture: Carlo Frigo	
10:30					
10:45		Oral session: miscellany	Oral session: Rehabilitation and technology	SIAMOC awards and closing session	
11:00					
11:15					
11:30					
11:45		Lunch	Lunch	ECM questionnaire	
12:00					
12:15		Lettura magistrale: Tishya Wren	Round Table: Orthotics and 3D printing (moderator Alberto Leardini)		
12:30					
12:45					
13:00					
13:15	Participant registration	Poster session 1 (clinical)	Poster session 2 (methodological)		
13:30					
13:45					
14:00					
14:15	Coffee break	Coffee break			
14:30					
14:45	Opening ceremony & welcome address	Oral session: Gait analysis in orthopaedic and neurology	Oral session: Orthotics and prosthetics		
15:00					
15:15					
15:30					
15:45	Opening lecture: Emilio Bizzi	User group meetings (provisional)	SIAMOC member general assembly		
16:00					
16:15					
16:30					
16:45	Welcome cocktail	SIAMOC-SINC study group "Movement Neurophysiology"			
17:00					
17:15					Social dinner
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