REHABILITATION
a future challenge of Robotics

EDUCATION

The objective of national interest: technical-professional contents (knowledge and skills) specific to each profession

- Acquisition of technical-professional skills: technological innovation; evaluation, improvement of management processes of biomedical technologies and medical devices; Health technology assessment (25)
- Acquisition of process skills: clinical documentation, diagnostic and rehabilitative and clinical-assistance procedures, assistance profiles, therapeutic profiles (3)
- Acquisition of system skills: application in practice of the principles and procedures of evidence based practice (EBM - EBN - EBP) (1)

Accredited professions:

- Physiotherapist
- Nurse
- Medical doctor (All disciplines)
- Occupational therapist

Event Code: 1449-276904

Maximum number of participants: 150

DATE AND PLACE

Monday, 9th December 2019
SAN RAFFAELE SPA
Via di Val Cannuta 247, Rome

PROVIDER (ID ECM 1449)
IRCCS San Raffaele
Pisana
IRCCS SAN RAFFAELE PISANA ROME
Via della Pisana, 235 - 00163 Rome
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ORGANIZING SECRETARIAT

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Registration deadline: Monday, 25th November 2019


The registration form is available on the following site:

RESIDENTIAL EVENT

President of the Congress:
Marco Franceschini
Numerous evidence-based efficacy studies demonstrate that a high-intensity, repetitive early rehabilitation can promote the recovery of specific impairments following neurological disease and, thus, improving the body functions. Robotic technologies represent an innovative therapeutic opportunity for patients not only regarding their effect on motor recovery but also for optimizing the quality of treatments and, as a result, improving the autonomy of the patient and his/her quality of daily living and participation to social life. Accordingly, robotics supporting rehabilitation activities allows patients with severe disability to achieve a better quality of life.

Also at the IRCCS San Raffaele Pisana Rome, robotic systems are applied to perform more effective and personalized rehabilitation treatments, providing a significant contribution to the excellent routine health care and scientific research activities. This cutting edge scientific event emphasizes the importance of robotics for the future of rehabilitation. Several international and national world-leading experts in Robotic Rehabilitation will share and discuss their most recent experiences and findings related to this theme.

**President of the Congress**

**Marco Franceschini**

Coordinator of neuro-rehabilitation research
IRCCS San Raffaele Pisana Rome

Full professor in Physical Medicine and Rehabilitation
San Raffaele University Rome

**Scientific Program**

**Monday, 9th December 2019**

**SESSION I**

**CHAIRS:** Marco Franceschini, Paolo M. Rossini

**9:00-12:50**

**Welcome address**

**Greeting from the authorities**

**Introduction:** Marco Franceschini

**9:30**

**Brain plasticity:** from synapses to connections

**Paolo Maria Rossini**

**10:00**

**Biological recovery:** the role of robotics

**Franco Molteni**

**10:20**

**Robotic interventions:** for acute and chronic rehabilitation of gait

**Partnership Exponential**

**10:45**

**End-effector and exoskeleton robots in neurological rehabilitation**

**Michela Goffredo**

**11:00**

**Discussion**

**11:20**

**Break**

**SESSION II**

**CHAIRS:** Pietro Fiore, Francesca Gimigliano

**11:30-12:50**

**Robots and research in Italy**

**Maria Chiara Carrozza**

**11:50**

**Upper limb robotic assisted rehabilitation after stroke:** review of the evidence

**Thierry Lejeune**

**12:10**

**Tailoring robotic treatment and assessment**

**Federico Posteraro**

**12:30**

**Robot assisted training for the upper limb after stroke and biomarkers to predict outcome**

**Hermano Igo Instructor**

**12:50**

**Discussion**

**13:00**

**Break**

**SESSION III**

**CHAIRS:** Paolo M. Rossini, Maria Chiara Carrozza

**13:30-14:50**

**Robotics and research in Italy**

**Francesca Gimigliano**

**13:50**

**Robot-assisted treatments for upper limb rehabilitation in subacute stroke patients.**

**A multicenter study of Fondazione Don Carlo Gnocchi Rome**

**14:10**

**Italian rehabilitation multicenter studies: a critical view**

**Donatella Bonaiuti**

**14:30**

**Innovative neurological multimodal approach to assess new clinical, predictive and prognostic markers: role of high-field MRI, genetic analysis and computer assisted rehabilitation**

**Dino Bramanti**

**15:00**

**Update in the treatment of patients with spinal cord injuries**

**Giorgio Felzani**

**15:10**

**Clinical experience in robotic applications: updating rehabilitation education and research**

**Alexandre Giusti**

**15:30**

**Robot-assisted treatments for neurorehabilitation: assessment metrics and integration among technologies**

**Stefano Mazzoleni**

**15:50**

**Upper limb rehabilitation robotics and bionics: UCBM experience**

**Federico Bressi, Loredana Zollo**

**16:10**

**Roundtable: Which innovative Technologies are the future?**

**Chairs:**

**Maria Chiara Carrozza**

**Hermano Igo Instructor**

**Partecipants:**

**Mario Francesco Da Pianis**

**Sandro Iannaccone**

**Francesco Internaito**

**Maria Crocifissa Lanzilotti**

**Thierry Lejeune**

**Domenica Le Pera**

**Saniz Pousmaj**

**Fabrizio Vecchio**

**Discussion and conclusions**

**Moderators:**

**Fabrizio Tagliavini**

**Valter Santilli**

**Partecipants:**

**Maria Chiara Carrozza**

**Hermano Igo Instructor**

**Discussion and conclusions**

**Moderators:**

**Fabrizio Tagliavini**

**Valter Santilli**