

18th IFESS
Annual Conference 2013

Bridging Mind and Body

DON'T MISS:

The “COST European Network on Robotics for Neurorehabilitation” workshop and the “Neurorehabilitation in the future. 4 visions” symposium opened to public will be held on the 5th of June 2013.

www.conference2013.ifess.org

5-8 JUNE 2013

Miramar Palace
Donostia-San Sebastián
(Spain)

ORGANISERS

tecnalia  Inspiring
Business

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IFESS, the International Functional Electrical Stimulation Society, the **specialized society on neural interfaces and neurorehabilitation**, is pleased to announce the 18th IFESS conference “Bridging Mind and Body”. The conference will be held adjacent to the *COST European Network on Robotics for Neurorehabilitation workshop* featuring a joint scientific conference day to **bridge together neural and motor science, mechanical and electrical co-activity**. The conference will feature an exciting program combining **latest achievements in science** with new breakthroughs and directions, all presented at **one of worlds most beautiful places** for leisure, culture and culinary experience.



CONFERENCE OBJECTIVES

The conference will include **hands-on workshops**, numerous **keynote presentations, special sessions, oral and poster presentations**. The overlap with the *COST European Network on Robotics for Neurorehabilitation meeting*, including a joint workshop day and a special session day enlarging a **networking experience**. This way it will promote the exchange of two distinct complementary rehabilitation and assistive technology fields for exploring new joint approaches and exchange of experience. The dialog between users, clinical oriented participants, technologists and engineers should create an impact on the future of advanced rehabilitation and assistive technologies for a **better health and quality of life of individuals with neurological conditions**.

CONFERENCE TOPICS

- Assessment and therapy
- Bladder / Bowel stimulation
- Clinical applications
- Cochlear Implants, Phrenic stimulation
- Control and activation
- Gait, posture and balance
- Hybrid FES / Robotics
- Lower extremity neuro prostheses
- Motor control, adaptation and learning
- Neural Interfaces, sensors, FES technology
- Neuromodulation, sensory stimulation, afferent feedback
- Physical training, cycling, rowing, fitness
- Upper extremity neuroprostheses



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WHO SHOULD ATTEND

Practitioners and researchers interested in functional electrical stimulation, rehabilitation robotics, motor control and neuroscience, such as, educators, FES users, Occupational therapists, Physical therapists, Rehabilitation engineers, Roboticists, Scientists, Suppliers, Students and Technologists.

WHY SHOULD YOU ATTEND

The Participants will exchange their latest technological advances and knowledge in the fields of FES, motor control, neuroscience and rehabilitation technologies.

Researchers and scientists will review their contributions, communicate and dispute their latest findings and advances.

Technology providers will have the opportunity to showcase their latest devices to researchers, users and health care providers.

Advanced rehabilitation technology users will have the opportunity to feedback and communicate their experience with the technology and express their needs.

IMPORTANT DATES

Pre-conference IFESS / COST joint workshops	5 th June 2013
Neurorehabilitation in the future. 4 visions	5 th June 2013
IFESS 2013 conference	6-8 th June 2013

DEADLINES

Early registration	15 th January - 30 th April 2013
Registration	1 st May - 8 th June 2013
One day registration	15 th January - 8 th June 2013
Submission of special session and workshop topics	25 th February 2013
Submission of papers	22 nd March 2013
Notification of acceptance	6 th April 2013

JUNE 5: IFESS / COST WORKSHOP DAY

- 09:00 - 13:00 Half day WS
13:00 - 14:30 Lunch
14:30 - 18:30 Half day WS
09:00 - 18:30 Full day WS
18:30 - 20:30 TECNALIA Welcome Event, opened symposium: "Neurorehabilitation in the future. 4 visions" presented by key experts in the field.

JUNE 6: IFESS / COST JOINT SPECIAL SESSION DAY

- 09:00 - 09:05 Opening Remarks, *Dr. Thierry Keller (Conf. chair)*
09:05 - 09:15 Welcome Address, *Prof. Dejan Popovic (Program chair)*
09:15 - 10:00 Keynote I - *Speaker: Prof. José Carmena, USA: Harnessing Neuroplasticity and Closed-Loop Decoder Adaptation in Brain-Machine Interfaces*
10:05 - 11:30 Special Sessions ES1-I: Clinical FES Applications; CT1-I: Combined Robotic/ES Technologies I; RR1-I: Rehabilitation Robotics I
11:30 - 12:00 Break
12:00 - 13:30 Special Sessions ES1-II: Upper Extremity FES; CT1-II: Combined Robotic/ES Technologies II; RR1-II: Rehabilitation Robotics II
13:30 - 14:45 Lunch
14:45 - 16:15 Special Sessions ES1-III: Motor control, adaptation and learning; CT1-II: Combinational Robotic Therapies; RR1-III: Rehabilitation Robotic Assessment
16:15 - 16:45 Break
17:15 - 18:00 Keynote II - *Speaker: Prof. Marco Molinari, Italy: Advanced Technology and Neurorehabilitation. What Patients and Clinicians Want Versus What Neuroengineering Research Provides*
18:00 - 22:00 Opening Reception/Poster Evening

JUNE 7: IFESS CONFERENCE DAY 2

- 09:00 - 09:45 Keynote III - *Speaker: Prof. Robert F. Kirsch, USA: Reanimating the Limbs: FES Research in Cleveland - Accomplishments and Plans*
09:45 - 11:15 Session ES2-I: Control and activation
11:15 - 11:45 Break
11:45 - 13:15 Session ES2-II: Neural Interfaces, Sensors, FES technology
13:15 - 14:30 Lunch
14:30 - 16:00 Session ES2-III: Physical training, cycling, rowing, fitness
16:00 - 19:30 Free Activity in San Sebastian and surroundings
20:00 - 23:00 Conference Dinner and Presentation of the Bohdan V. Olijnyk Study Participant Award

JUNE 8: IFESS CONFERENCE DAY 3

- 09:00 - 09:45 Keynote IV - *Speaker: Prof. Herman van der Kooij, The Netherlands: Reanimating the Limbs: Rehabilitation Robotics and Novel Assessment Methods for the Lower Extremities*
09:45 - 11:15 Session ES3-I: Lower Extremities
11:15 - 11:45 Break
11:45 - 13:15 Session ES3-II: Neuromodulation, sensory stimulation, afferent feedback
13:15 - 14:30 Lunch
14:30 - 15:15 IFESS General Assembly, Vodovnik Award
15:15 - 16:00 Keynote V - *Speaker: Prof. Philip Troyk, USA, Engineering Neural Prostheses: Meeting the Challenges of FES*
16:00 - 16:30 Break
15:15 - 16:00 Session ES3-III: Neural Interfaces, Sensors, FES Technology
18:15 End