



XX Institut Guttmann Workshops Spinal cord injury: Regeneration and Rehabilitation

5th and 6th June 2008

Room 4.1. Hall 4. Fira de Barcelona Gran Vía Exhibition Centre.

Av. Joan Carles I, esquina c/ Ciències. L'Hospitalet de Llobregat

Thursday, 5th June 2008

08:30 – 09:30 | Welcome desk

09.30- 11.30 | Basic mechanisms in neural regeneration

Chairman: **Joan X. Comella**, Institut de Neurociències, Universitat Autònoma de Barcelona. (Spain).

Conferences:

Promoting axonal growth and plasticity

James Fawcett, Centre for Brain Repair, Cambridge University, Cambridge, UK.

Glial cell transplants in SCI

Xavier Navarro, Institut de Neurociències, Universitat Autònoma de Barcelona, Barcelona, Spain.

Gene therapy to promote repair of the injured peripheral and central nervous system

Joost Verhaagen, Netherlands Institute for Neuroscience, Amsterdam, Netherlands.

11.30- 12.00 | Coffee break

12.00- 13.30 | Opening conference

Natural recovery of neural Wagih El Masri , FRCS Ed President Elect of International Centre of Spinal Injuries, Robert Hospital, Oswestry, UK

15.30- 17.30 | Basic mechanisms in neural regeneration

Chairman: **Joan Vidal**, Institut Guttmann, Barcelona, Spain.

Conferences:

Nogo inhibition to enhance regeneration and functional recovery in SCI

Anita Buchli, Brain Research Institute, University and Federal Institute of Technology, Zurich, Switzerland.

Implantation of stem cells and biomaterials to enhance functional recovery in SCI

Eva Sykova, Institute of Experimental Medicine, Academy of Sciences of the Czech Republic, Prague, Czech Republic.

Novel neural stem cell lines for mechanistic studies and drug discovery approaches

Elena Cattaneo, Department of Pharmacological Sciences, University of Milano, Milan, Italy.

“From Riluzole to Rho”: Translational research approaches to reduce cell death and enhance neural plasticity after SCI

Michael Fehlings, Division of Neurosurgery, Krembil Neuroscience Center, University of Toronto, Toronto, Ontario, Canada.

Friday, 6th June 2008

09.30- 11.30 | Plasticity and rehabilitation of SCI

Chairman: **Álvaro Pascual-Leone**, Harvard University, USA Institut Guttmann, Barcelona, Spain.

Conferences:

Spinal locomotor CPG: from ion channels to neuronal networks.

Sten Grillner, Nobel Institute for Neurophysiology, Karolinska Institutet, Stockholm, Sweden.

Recovery of locomotor function in SCI subjects

Volker Dietz, Balgrist University Hospital, Spinal Cord Injury Center, Zürich, Switzerland.

Modulation of spinal reflex circuitry

Josep Valls-Solé, Institut Clínic de Neurociències, Hospital Clínic de Barcelona, Spain.

11.30- 12.00 | Coffee break

12.00- 14.00 | Robotics and neuroprostheses in SCI neurorehabilitation

Chairman: **Josep M. Tormos**, Institut Guttmann, Barcelona, Spain.

Conferences:

Peripheral nerve stimulation in motor rehabilitation

Thomas Sinkjaer, Danish National Research Foundation, Copenhagen, Aalborg University, Denmark.

Brain control of prosthetic devices by humans with tetraplegia

Leigh Hochberg, VA Medical Center and Dept. of Neuroscience, Brown University, Providence, RI, USA, Massachusetts General Hospital, Harvard Medical School, Boston, MA, USA .

Robotic systems for neurorehabilitation and personal assistance

M. Chiara Carrozza, Scuola Superiore Sant'Anna, Pontedera, Pisa, Italy.