# Neuro Regeneration

**Is It the Common Frontier for Bioengineering, Neuroscience, Robotics and Neurorehabilitation?**

**Program**

CosmoCaixa, C/ Isaac Newton, 26, Barcelona

**Wednesday, October 23rd, 2013**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00</td>
<td>Registration</td>
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<tr>
<td>9:30</td>
<td>Welcome</td>
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<tr>
<td>9:50</td>
<td><strong>SESSION 1: NEUROREGENERATION, IS THERE ALREADY A</strong></td>
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<td><strong>TRANSLATIONAL EXPERIENCE IN CLINICAL PRACTICE?</strong></td>
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<td>Chair: Joan Vidal, Institut Guttmann, Barcelona, Spain</td>
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<td>10:00</td>
<td>Learning from Nerve Repair. Schwann Cell Transplantation into the Injured Spinal Cord</td>
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<td>James D. Guest, University of Miami, Miami, USA</td>
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<td>10:45</td>
<td>Coffee break</td>
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<td>11:15</td>
<td>Daniel P. Lammertse, University of Colorado, USA</td>
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<td>12:00</td>
<td>John Steeves, University of British Columbia, Vancouver, Canada</td>
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<td>12:45</td>
<td>Clinical Translation of Human Neural Stem Cells for Neurodegenerative Disorders</td>
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<td>Ann Tsukamoto, StemCells INC, Newark, Canada</td>
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<td>13:30</td>
<td>Lunch</td>
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NEURO
REGENERATION
IS IT THE COMMON FRONTIER FOR
BIOENGINEERING, NEUROSCIENCE,
ROBOTICS AND NEUROREHABILITATION?

Wednesday, October, 23rd, 2013

15:00  **SESSION 2: WHICH ARE THE KEYSTONES IN
NEUROREGENERATION TO BUILD UP A PATHWAY TO THE
CLINICS?**

Chair: **Anna Veiga**, Centre de Medicina Regenerativa de Barcelona, Barcelona, Spain

15:10  **Reprogramming and Regeneration Strategies for Healing and Improving Human Health**

**Juan Carlos Izpisúa**, Salk Institute for Biological Studies, San Diego, USA and Center for Regenerative Medicine, Barcelona, Spain

15:50  **Preclinical Studies of Rho Inhibition to Enhance Axonal Regeneration After SCI**

**Marina Mata**, University of Michigan, USA

16:30  Coffee break

16:40  **Preclinical Studies of Rho Inhibition to Enhance Axonal Regeneration After SCI**

**David Fink**, University of Michigan, USA

17:20  **Challenges for Clinical Translation of Stem Cells in Amyotrophic Lateral Sclerosis**

**Letizia Mazzini**, Eastern Piedmont University, Novara, Italy

18:00  Visit to CosmoCaixa

19:00  Cocktail at CosmoCaixa

B-DEBATE IS AN INITIATIVE OF:  WITH THE COLLABORATION OF:
NEURO REGENERATION
IS IT THE COMMON FRONTIER FOR BIOENGINEERING, NEUROSCIENCE, ROBOTICS AND NEUROREHABILITATION?

Thursday, October, 24th, 2013

9:30  SESSION 3: IS NEUROREGENERATION THE “NEXT STOP” IN SPINAL CORD INJURY MEDICAL CARE?
Chair: Xavier Navarro, Institut de Neurociències, UAB Barcelona, Spain

9:40  Future Regenerative Therapies
James Fawcett, University of Cambridge, United Kingdom

10:25 Coffee break

10:45 Towards the Combination of Cell Therapy and Neurosteroid Treatment to Repair the Injured Spinal Cord
François Féron, Centre National de la Recherche Scientifique, Marseille, France

11:30 Armin Blesch, Universitätsklinikum Heidelberg, Germany

12:15 Alessandro Vercelli, Neuroscience Institute of the Cavalieri-Ottolenghi Foundation, Faculty of Medicine and Surgery, and Neuroscience Institute of Turin (Torino, Italy)

13:00 Lunch
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Thursday, October, 24th, 2013

14:30 SESSION 4: IS NEUROREGENERATION FEASIBLE WITHOUT A MULTIDISCIPLINARY APPROACH?
Chair: Joan Comella, Vall d’Hebron Institut de Recerca, Barcelona, Spain

14:40 V. Reggie Edgerton, UCLA University, Los Angeles, USA

15:20 Neuroregeneration and Neuroengineering – Competition or Convergence?
Rüdiger Rupp, Universitätsklinikum Heidelberg, Germany

16:00 Coffee break

16:10 Neural Interfaces for Restoring Communication and Mobility
Leigh R. Hochberg, Brigham and Women’s Hospital, Boston, USA

16:50 Putting the Word “Cure” in Neurological Rehabilitation: a Field Comes of Age
Rajiv Ratan, Weill Cornell Medical College, New York, USA

17:30 Characterization and Modulation of Brain Plasticity: Challenges and Opportunities
Alvaro Pascual-Leone, Harvard University, Boston, USA

18:10 Conclusions and closing remarks