

**SUMMER SCHOOL FOR THE BIOLOGICAL TREATMENT OF CHRONIC  
SPINAL CORD INJURY**

**Vienna, Austria**

**October 5-10, 2008**

**Program**

**October 5, Sunday**

**SESSION I – PART 1**

Chairman: Byron Kakulas, University of Western Australia, Perth, Australia.

- 0800-0805    Opening of the Summer School
- 0805-0830    Milan Dimitrijevic: **“Conceptional design of the summer school.”** Department of Physical Medicine and Rehabilitation, Baylor College of Medicine, Houston, Texas, USA; Vienna Program for Restoration of Locomotion, Vienna, Austria; Institute of Clinical Neurophysiology, Ljubljana, Slovenia.
- 0830-0920    Sten Grillner: **“Spinal Locomotor CPG: From Ion Channels to Neuronal Networks.”** Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden.
- 0920-0925    Questions and Answers
- 0925-1015    Ole Kiehn: **“Locomotor circuits in the mammalian spinal cord.”** Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden.
- 1015-1020    Questions and Answers
- 1020-1050    Coffee break
- 1050-1140    Carlos Lima: **“Olfactory Mucosal Autografts and Overground Gait Training: a Combination Therapy for Human Chronic SCI Recovery.”** Hospital de Egas Moniz, Lisbon, Portugal.
- 1140-1145    Questions and Answers
- 1145-1235    Alan Mackay-Sim: **“Autologous olfactory ensheathing cell transplantation in human paraplegia: a 3 year clinical trial.”** National Centre for Adult Stem Cell Research, Griffith University, Nathan, Australia.

1235-1240 Questions and Answers

1240-1340 Lunch

### SESSION I – PART 2

Chairman: Byron Kakulas, University of Western Australia, Perth, Australia.

1340-1430 Daniel P. Lammertse: “**Autologous cellular therapy in SCI: lessons learned from the multicenter macrophage trial.**” Craig Hospital, Englewood, Colorado, University of Colorado Denver Health Sciences Center, Denver, Colorado, USA.

1430-1435 Questions and Answers

1435-1500 General discussion

### SESSION II: Demonstration workshops for assessment of human spinal cord functions

Chairman: Winfried Mayr, Center of Biomedical Engineering and Physics, Vienna, Austria.

1500-1530 Karen Minassian: “**Outline of Protocol for Assessment of Lumbar Neuronal Circuitry. Program for demonstration workshops in the following days.**” Vienna Program for Restoration of Locomotion, Vienna, Austria.

1530-1600 Arthur Sherwood, Barry McKay: “**Assessment of Spinal Cord Injury by the Protocol for Brain Motor Control Assessment (BMCA). Program for demonstration workshops in the following days.**” National Institute on Disability and Rehabilitation Research, Washington, DC, USA; University of Louisville, Department of Neurological surgery, Kentucky, USA.

1600-1630 Vedran Deletis: “**Neuromonitoring of Descending Spinal Tract.**” Institute of Neurology and Neurosurgery, New York, USA.

1630-1700 Paulo Costa: “**Neuromonitoring of Acute Spinal Cord Injury – Torino data.**” Traumatological Center, Torino, Italy.

1700-1730 Francesco Sala: “**Neuromonitoring of Acute Spinal Cord Injury – Verona data**” Department of Neurosurgery, Verona, Italy.

1900 Social event to be announced

**October 6, Monday**

SESSION III – PART 1

Chairman: Sten Grillner, Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden.

- 0800-0850 Serge Rossignol: “**CPG in the recovery of locomotion after partial spinal cord lesions.**” Université de Montréal, Québec, Canada.
- 0850-0855 Questions and Answers
- 0855-0945 Abdel El Manira: “**Endocannabinoid signaling in the spinal locomotor circuitry.**” Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden.
- 0945-0950 Questions and Answers
- 0950-1020 Coffee break
- 1020-1110 Jonathan R. Wolpaw: “**Plasticity of the spinal cord.**” Wadsworth Center, New York State Department of Health and State University of New York, New York, USA.
- 1110-1115 Questions and Answers
- 1115-1205 Hongyun Huang: “**Long term follow-up results of fetal OEC transplant for patients with chronic spinal cord injury.**” Beijing Hongtianji Neuroscience Academy, Beijing, China.
- 1205-1210 Questions and Answers
- 1210-1310 Lunch

SESSION III – PART 2

Chairman: Sten Grillner, Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden.

- 1310-1400 Wise Young: “**Collaborative Neuosciences and Biological Therapy of Spinal Cord Injured People**”. Rutgers, The State University of New Jersey, New Jersey, USA.
- 1400-1405 Questions and Answers
- 1405-1430 General discussion

#### SESSION IV

Chairman: Justin Brown, Washington University, St Louis, Missouri, USA.

- 1430-1730 Demonstration workshops for assessment of human spinal cord functions.
- 1730-1800 Report on the Symposium on **“From the Bench to the Bedside, the Latest Discoveries in SCI Research.”** January 14-16, 2008, New York Academy of Sciences, New York, USA.
- 1800-1805 Questions and Answers
- 2000 Social event to be announced

#### **October 7, Tuesday**

#### SESSION V

Chairman: Frank Rattay, Vienna University of Technology, Vienna, Austria.

- 0800-0850 Shaocheng Zhang: **“Restoration of Function After Spinal Cord Injury Using Peripheral Nerve Rerouting.”** Changhai Hospital, Shanghai, China.
- 0850-0855 Questions and Answers
- 0855-0945 Georgio Brunelli: **“The Glutamatergic Innervation of Peripheral Nerves and Muscles After CNS-PNS Connection.”** University of Brescia, Brescia, Italy.
- 0945-0950 Questions and Answers
- 0950-1015 Coffee break
- 1015-1105 Larry Jordan: **“Brainstem and spinal neural systems for the initiation of locomotion.”** Department of Physiology, Spinal Cord Research Centre, The University of Manitoba, Winnipeg, Manitoba, Canada.
- 1105-1110 Questions and Answers
- 1110-1140 General discussion
- 1140-1210 Report on the Symposium on and the **“Christopher and Dana Reeve Foundation Spinal Cord Symposium.”** May 9-11, 2008, Atlanta, USA.
- 1210-1215 Questions and Answers

1215-1315 Lunch

### SESSION VI

Chairman: Ilse Persy, Vienna University of Technology, Vienna, Austria.

1400-1700 Demonstration workshops for assessment of human spinal cord functions.

1900 Social event to be announced

### **October 8, Wednesday**

### SESSION VII

Chairman: Helmut Kern, Ludwig Boltzmann Institute of Electrical Stimulation and Physical Rehabilitation, Vienna, Austria.

0800-0850 David McCrea: **“Creating the Locomotor State: The Organization of the Mammalian Locomotor CPG.”** Department of Physiology, University of Manitoba, Winnipeg, Manitoba, Canada.

0850-0855 Questions and Answers

0855-0945 Tatiana Deliagina: **“Spinal and Supraspinal Postural Networks.”** Department of Neuroscience, Karolinska Institutet, Stockholm, Sweden.

0945-0950 Questions and Answers

0950-1020 Coffee break

1020-1110 Martin Schwab: **“Nogo Inhibition to Enhance Regeneration and Functional Recovery in SCI.”** Brain Research Institut, University of Zurich, Switzerland.

1110-1115 Questions and Answers

1115-1200 General discussion

1200-1300 Lunch

### SESSION VIII

Chairman: Christian Hofer, Ludwig Boltzmann Institute of Electrical Stimulation and Physical Rehabilitation, Vienna, Austria.

1300-1600 Demonstration workshops for assessment of human spinal cord functions.

1900 Social event to be announced

### **October 9, Thursday**

#### SESSION IX

Chairman: Gerta Vrbova, Royal Free and University College Medical School, London, UK.

0800-0850 Hans Hultborn: **“Plasticity at motoneuronal level following spinal cord lesions: changes in motoneuronal gene expression and intrinsic properties in relation to the development of spasticity - new perspectives in understanding mechanisms underlying negative and positive changes following lesions.”** University of Copenhagen, Copenhagen, Denmark.

0850-0855 Questions and Answers

0855-0945 V. Reggie Edgerton: **“Regaining stepping with epidural stimulation and pharmacological modulation.”** University of California, Los Angeles, USA.

0945-0950 Questions and Answers

0950-1030 Coffee break

1030-1115 General discussion

1115-1145 Report on the Symposium on **“Spinal Cord Injury, Regeneration and Rehabilitation.”** June 5-6, 2008, Barcelona, Catalonia, Spain.

1630-1635 Questions and Answers

1150-1300 Lunch

#### SESSION X

Chairman: Michael Vogelauer, Institute of Physical Medicine and Rehabilitation, Wilhelminenspital, Vienna, Austria.

1300-1600 Demonstration workshops for assessment of human spinal cord functions.

1900 Social event to be announced

## October 10, Friday

### SESSION XI

Chairman: Byron Kakulas, University of Western Australia, Perth, Australia.

- 0800-0850 Wagih El Masri: **“What we need to know about natural recovery following traumatic spinal cord injury.”** President Elect of International Spinal Cord Society (ISCOS), UK.
- 0850-0900 Questions and Answers
- 0900-0950 Justin Brown: **“Functional Neurosurgery of the Injured Spinal Cord.”** Washington University, St Louis, Missouri, USA.
- 0950-1000 Questions and Answers
- 1000-1030 Coffee break
- 1030-1120 Milan Dimitrijevic: **“Clinical Practice of Restorative Neurology of Spinal Cord Injury.”** Baylor College of Medicine, Houston, TX, USA; Vienna Program for Restoration of Locomotion, Vienna, Austria; Institute of Clinical Neurophysiology, Ljubljana, Slovenia.
- 1120-1130 Questions and Answers
- 1130-1200 General discussion
- 1200-1400 Lunch and concluding remarks on the Summer School by Sten Grillner, Byron Kakulas, and Gerta Vrbova.
- 1400-1415 Closing of the Vienna Summer School 2008. Nils Andresen: **“Acknowledgment Perspectives.”** Stiftelsen Foundation for Movement Recovery, Oslo, Norway.