Thursday November 14, 2013

Terme Euganee Conference Hall, Hotel Augustus, Montegrotto Terme, Padova, Italy

16.00 Rise2-Italy Workshop: Practical Course on Stimulation of Large and Small Denervated Muscles in SCI and beyond - I
S. Masiero, U. Carraro, Chairmen

16.00 Introduction: Electrical stimulation of denervated muscle in SCI, when and how, H. Kern, Vienna, Austria

16.10 Ultra-structural rescue of long-term denervated human muscle by Functional Electrical Stimulation (FES), S. Boncompagni et al., Chieti, Italy

16.30 Stimulators and electrodes for large and small denervated muscles. Surface versus implantable devices, W. Mayr, Vienna, Austria, U. Carraro, Padova, Italy

16.50 Practical Course on Stimulation of Large and Small Denervated Muscles in SCI and beyond - II, H. Cerrel-Bazo, U. Carraro, Chairmen

16.50 FES for large denervated muscles: Comments of patients and practical demonstrations, R. Fiorucci, Città di Castello, A. Piscionei, Milan, Italy

17.10 FES for small denervated muscles. Comments of patients and educational case reports, A. Marcante, R. Zanato, S., et al., Padova, Italy

17.30 Workshop "VNS, Facts and Perspectives", D. D’Avella, W. Mayr, Chairmen

17.30 Performance of electrodes within the nerve cuff tested in vagus nerve stimulation and in vitro, J. Rozman & P. Pečlin, Ljubljana, Slovenia

18.00 Vagus nerve stimulation (VNS) and focal cerebral ischemia: a rodent model using an implantable electrical stimulator, D. D’Avella, U. Carraro, Padova, Italy, J.C. Jarvis, Liverpool, U.K.


18.30 Physical activity in warm water

20.00 Dinner

21.00 Organizing a perspective EU Horizon 2020 Program: FES4SEF - Functional Electrical Stimulation for Seniors at Early Falls - I
Friday November 15, 2013

07.30 Physical activity in warm water

Terme Euganee Conference Hall, Hotel Augustus, Montegrotto Terme, Padova, Italy

09.00 Workshop Interreg IVa “Mobility in elderly”; Force, Balance and Falls – H. Kern, F. Protasi, Chairmen

09.00 Mobility rehabilitation in denervation, aging and oncology: Introduction, H. Kern, Vienna, Austria

09.10 Histology results in sedentary seniors after 9-week of only 3 times a week Electrical Stimulation, S. Zampieri et al., Padua, Italy

09.30 Muscle activity controls the association between Ca²⁺ release units and mitochondria in skeletal fibers, F. Protasi, Chieti

10.00 Surface electrical stimulation vs. proprioceptive strength training in enhancement of muscle strength and functional performance in sedentary seniors, J. Cvecka et al., Bratislava, Slovakia

10.15 The role of strength for balance in elderly, N. Sarabon, Koper, Slovenia

10.30 Improving stair-negotiating ability in older people, C. Maganaris, Liverpool John Moores University, UK

10.45 Coffee Break

11.00 Interreg IVa “Mobility in elderly” – Molecular Biology – H. Kern, M. Sandri, Chairmen

11.00 Role of the mitochondrial fission machinery in muscle atrophy and sarcopenia, M. Sandri, Padova, Italy

11.30 Insights into the molecular and cellular mechanisms of sarcopenia and into potential therapeutic approaches, A. Musarò, Rome, Italy

12.00 ERG1a K⁺ channel induces expression of MuRF1, but not MAFbx-Aatrogin1 or E3α-II, E3 Ligases, A. Pond, Carbondale, IL, USA

12.20 The genetic association with the variable response to resistance training, R. Erskine, Liverpool John Moores University, UK

12.40 Gender differences in the decline of muscle power up to the most advanced age, Gava P, et al., Padova, Italy

12.50 Lunch, Posters & Cycling Exercise for Senior Sportsmen

14.00 Reactions of different muscle fibers to activity, denervation and aging – Session I, G. Vrbova, U. Carraro, Chairmen

14.00 Exon skipping as a potential therapy for specific laminopathies, P. Zammit, London, UK

14.30 The effects of ageing on mouse satellite cells, J.E. Morgan, London, UK

14.50 Regulation of myoblast differentiation and hypertrophy, C. Stewart, Liverpool John Moores University, UK

15.10 Hypoxia increases mouse satellite cell clone proliferation maintaining both in vitro and in vivo heterogeneity and myogenic potential, M. Pozzobon et al., Padova, Italy

15.30 Nutrient-gene interactions: manipulations of carbohydrate availability to maximize training adaptations, J. Morton, John Moores University, UK

15.50 Exercise, vitamin D and human skeletal muscle: is sarcopenia inevitable?, G. Close, Liverpool John Moores University, UK

16.10 Coffee Break

16.30 Reactions of different muscle fibers to activity, denervation and aging – Session II, G. Vrbova, A. Musarò, Chairmen


17.00 Mitochondrial functional alterations in aging muscle: cause or effect(or)?, R.T. Hepple, Montreal, Canada

17.30 The influence on muscle growth in aged animals and diet mediated starvation by Myostatin, K. Patel, Reading, UK

18.00 Bone morphogenetic protein controls muscle mass and dominates over Myostatin signaling, H. Anthor, Paris, France

18.30 How and why slow muscle fibers prevail in aging human muscle, S. Mosole, et al, Padova, Italy

19.30 Candle Dinner

21.00 Organizing a perspective EU Horizon 2020 Program: FES4SEF - Functional Electrical Stimulation for Seniors at Early Falls - II
Saturday November 16, 2013

07.30 Physical activity in warm water

Terme Eugane Conference Hall, Hotel Augustus, Montegrotto Terme, Padova, Italy

09.00 **MED** Workshop FES of Skeletal Muscles, Session I – J.C. Jarvis, Chairman

09.00 Neurouemuscular pathology in equine recurrent laryngeal neuropathy, R.J. Piercy, London, UK

09.30 Case selection and effect of functional electrical stimulation on reinnervation in a preclinical laryngeal model, J. Cheetham, et al., Ithaca, NY, USA

10.00 Early reinnervation is improved by daily electrical muscle stimulation following nerve injury and immediate repair, M.P. Willand et al., Toronto, Canada

10.30 Interest of combining posterior cricoarytenoid muscle reinnervation and functional electrical stimulation in horses with naturally occurring disease, C. Mespoulhès-Rivière, J.-P. Marie, Maison-Alfort, Rouen, France

10.45 Coffee Break

11.00 **MED** Workshop FES of Skeletal Muscles, Session II – W. Mayr, Chairman

11.00 New Vienna/Liverpool implantable stimulator, J.C. Jarvis, Liverpool, UK; M. Bijak, H. Lannueller, M. Haller, E. Unger, Vienna; W. Lindenthaler, Med-El, Innsbruck, Austria

11.20 An implantable, modular telemetry system for bio-signal recordings in large animals, L. Kneisz, et al., Vienna, Austria

11.40 Neuromuscular stimulation training for sedentary elderly, M. Krenn et al., Vienna, Austria

12.00 New model systems for activation of muscle in culture, C. Stewart, A. Sharplex, Liverpool, UK

12.20 Image processing and segmentation in preparation for the simulation of electrical field during Functional Electrical Stimulation of musculus cricoarytenoideus dorsalis, P. Gargiulo et al., Reykjavik, Iceland

12.40 Rational selection of activation patterns in electrical stimulation of muscle, J.C. Jarvis, Liverpool, UK

13.00 Lunch, Poster & Cycling Exercise

14.30 **MED** Workshop FES of Skeletal Muscles, Session III – Tessa Gordon, Franco Bassetto, Chairmen

14.30 The impact of intramuscular-inserted hooked wire electrodes and specific stimulation parameters, D. Arnold et al., Jena, Germany

14.50 Measurement of the 3D electrical field distribution with different multiplexed stimulation electrode configurations in a constant pressure ex-vivo model of the equine larynx, S. Otto, et al. Leipzig, Germany

15.10 Simulation of the electrical field during Functional Electrical Stimulation of musculus cricoarytenoideus dorsalis – a feasibility study, M. Reichel et al., Austria

15.30 EMG biofeedback muscle training with a wireless signal transmission, T. Helgason et al., Reykjavik, Iceland

15.50 Electrical Stimulation in neural repair: First experience in Padova, V. Vindigni et al., Padua, Italy

16.10 Coffee Break

16.30 Cell Stemness Capacity and Tissue Reconstruction - J-C. Chachques, M. Patruno, Chairmen

16.30 Stem cells and tissue engineering for myocardial regeneration and ventricular support, J-C. Chachques, Paris, France

17.00 Bioactive implant development to assist cardiac recovery, C. Semino, C. Castells, Barcelona, Spain

17.20 Biomimetic and biofunctionalization approaches in cardiovascular tissue engineering for stem cells differentiation: getting closer to nature, getting closer to patient, C. Spadaccio, Leuven, Belgium

17.40 Cardiac progenitor cells: current and future directions for cell therapy, I. Chimenti, G. Frati, Sapienza, Latina, Italy

18.00 In vivo application of adult stem cells and platelet rich plasma: recent experiences and future perspective in veterinary orthopaedics, M. Patruno, Padua, Italy

18.20 U. Carraro - Arrivederci, Auf Wiedersehen, Aurevoir, Bácsá, Despedida, Poslovite, Sjánsat, See You to 2014 Spring PaduaMuscleDays

18.30 Physical activity in warm water

20.00 Dinner
Skeletal muscle: Biology, Pathology, Rehabilitation

Terme Euganee, Padova (Italy), November 14 - 16, 2013

Terme Euganee Conference Hall, Hotel Augustus, Viale Stazione 150 - 35136 Montegrotto Terme, Padova, Italy
Phone +39 049 793 200 - Fax +39 049 793518 - http://www.hotelaugustus.com/english/pages/hotel_augustus.php - E-mail: info@hotelaugustus.com


Sunday November 17, 2013
07.30 Physical activity in warm water
00.90 Partners meeting of the Interreg IVa “Mobility in elderly” - Outlook 2014-2015 - H. Kern, Chairman

POSTERS
Friday November 15, 2013
Terme Euganee Conference Hall, Hotel Augustus, Montegrotto Terme, Padova, Italy

12.45 Discussion of Posters, U. Carraro, Chairman

P 1. The short-term denervated hemidiaphragm: a mixture of “hypertrophy” and “denervation” features
   Carraro U, Mosole S, Zampieri S, Gobbo V, Germinario E, Danieli D

P 2. Assessment of muscle fibers, connective tissue and fat, using μCT data: a feasibility study for meat quality control
   Gargiulo P, Rizzi C, Örlygsson G, Carraro U

P 3. Gender differences in the decline of muscle power up to the most advanced age
   Gava P, Kern H, Carraro U

P 4. Nuclear wandering and nuclear grouping in human and rodent denervated skeletal muscle
   Rossini K, Biral D, Zampieri S, Mosole S, Löfler S, Kern H, Carraro U

P 5. Scalp Potentials Changes due to Fontanels in an Infant's Head Model
   Gargiulo P, Belfiore P, Friðgeirsson E A, Vanhatalo S, Ramon C

P 6. Reinnervation of muscle fibers in aging muscle: Indirect immuno-histochemical evidence
   Mosole S, Carraro U, Zampieri S, Kern H

P 7. FES training protocols for the functional recovery of permanently complete denervated human muscles,
   Löfler S, Kern H

P 8. Myosin isoforms in small and large mammals: SDS PAGE demonstrates co-migration of slow, but not fast MHC
   Carraro U, Rizzi C, Rossini K

P 9. Ribosomal profiles of denervated muscle
   Carraro U, Catani C, Margreth A