



# European Journal of Translational Myology

## Basic Applied Myology - *BAM On-Line* - Myology Reviews



University of Padua – *cirMYO* Interdepartmental Research Center of Myology

## 2010 Spring Padua Muscle Days

Terme Euganee, Padova (Italy), April 22 - 24, 2010

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](http://www.hotelaugustus.com/english/pages/hotel_augustus.php)

Topics

EU Initiative for Translational Myology - Muscle Genetics&Proteomics&Metabolomics - Malignancy&Myopathies – Monitoring&Treatments  
Organizers: H. Kern, M.C. Schaub, C. Reggiani, C. Angelini, S. Merigliano, M. Dini and U. Carraro

### Thursday April 22, 2010

Terme Euganee Conference Hall, Hotel Augustus, Viale Stazione 150 - 35136 Montegrotto Terme (Padova), Italy

14.00 – 20.00 Registration

**Workshop of the EU Initiative for Translational Myology**, H. Kern, U. Carraro, Organizers

- 14.45 Ugo Carraro, Padova, Italy: *Wp-HEALTH.2011, two promising calls for Translational Myology*
- 15.00 Winfried Mayr, Vienna, Austria: *Robotics versus FES, Competition or Synergy?*
- 15.30 Thordur Helgason, Reykjavik, Iceland: *Application of ultrasound current source density imaging on denervated muscle, some theoretical considerations*
- 15.50 Jonathan C Jarvis, Liverpool, UK: *A systems approach to muscle transformation - first steps*
- 16.10 Helmut Kern, Vienna, Austria: *Are denervated muscles a relevant model of aging?*
- 16.30 Feliciano Protasi, Chieti, Italy: *Progressive un-coupling of mitochondria from calcium release sites in aging: a possible explanation for the age-related decline of skeletal muscle performance.*
- 17.00 Break
- 17.20 Fabio Francini, Roberta Squecco, Florence, Italy: *Electrophysiological and mechanical changes in long-term denervated rat muscles*
- 17.40 Ahmet Bozkurt, Aachen, Germany: *A new/sophisticated sciatic nerve sleeve model in the rat*
- 17.55 Ahmet Bozkurt, Aachen, Germany: *Use of the CatWalk-system for functional assessment after sciatic nerve injuries in the rat*
- 18.10 Barbara Zavan, Padova, Italy: *Scaffolds screening for the improvement of the neuronal differentiation of neurospheres derived from adipose tissue and skin*
- 18.30 **cirMYO Lecture**: 40 years European Society for Muscle Research, *Marcus C. Schaub, Zurich, Switzerland*

RESTORE, Invited: [winfried.mayr@meduniwien.ac.at](mailto:winfried.mayr@meduniwien.ac.at), [christian.hofer@wienkav.at](mailto:christian.hofer@wienkav.at), [christian.hofer@ottobock.com](mailto:christian.hofer@ottobock.com), [oskar.aszmann@meduniwien.ac.at](mailto:oskar.aszmann@meduniwien.ac.at), [manfred.frey@meduniwien.ac.at](mailto:manfred.frey@meduniwien.ac.at), [gregor.kasprian@meduniwien.ac.at](mailto:gregor.kasprian@meduniwien.ac.at), [harald.kubiena@meduniwien.ac.at](mailto:harald.kubiena@meduniwien.ac.at), [tatjana.paternoastro-sluga@meduniwien.ac.at](mailto:tatjana.paternoastro-sluga@meduniwien.ac.at), [hans.stoehr@meduniwien.ac.at](mailto:hans.stoehr@meduniwien.ac.at), [wil.pys.kern-forschung@wienkav.at](mailto:wil.pys.kern-forschung@wienkav.at), [stefan.loefler@wienkav.at](mailto:stefan.loefler@wienkav.at), [martina.grim-stieger@wienkav.at](mailto:martina.grim-stieger@wienkav.at), [nejc.sarabon@fsp.ini-lj.si](mailto:nejc.sarabon@fsp.ini-lj.si), [rupert.koller@wienkav.at](mailto:rupert.koller@wienkav.at), [s.salmons@liverpool.ac.uk](mailto:s.salmons@liverpool.ac.uk), [jcyj@liverpool.ac.uk](mailto:jcj@liverpool.ac.uk), [ugo.carraro@unipd.it](mailto:ugo.carraro@unipd.it), [corrado.angelini@unipd.it](mailto:corrado.angelini@unipd.it), [rosario.rizzuto@unipd.it](mailto:rosario.rizzuto@unipd.it), [marco.sandri@unipd.it](mailto:marco.sandri@unipd.it), [roberto.stramare@unipd.it](mailto:roberto.stramare@unipd.it), [vincenzo.vindigni@unipd.it](mailto:vincenzo.vindigni@unipd.it), [stef.masiero@unipd.it](mailto:stef.masiero@unipd.it), [aba@mail.bio.unipd.it](mailto:aba@mail.bio.unipd.it), [romeo.martini@sanita.padova.it](mailto:romeo.martini@sanita.padova.it), [pietro.traldi@adr.pd.cnr.it](mailto:pietro.traldi@adr.pd.cnr.it), [fabio.francini@unifi.it](mailto:fabio.francini@unifi.it), [vbianchi@libero.it](mailto:vbianchi@libero.it), [cesarell@unina.it](mailto:cesarell@unina.it), [pabifulc@unina.it](mailto:pabifulc@unina.it), [fprotasi@phobos.unich.it](mailto:fprotasi@phobos.unich.it), [thordur@landspitali.is](mailto:thordur@landspitali.is), [gisliein@landspitali.is](mailto:gisliein@landspitali.is), [paologar@landspitali.is](mailto:paologar@landspitali.is), [palling@landspitali.is](mailto:palling@landspitali.is), [stefanyn@landspitali.is](mailto:stefanyn@landspitali.is), [antonio.musaro@uniroma1.it](mailto:antonio.musaro@uniroma1.it), [abozkurt77@gmx.de](mailto:abozkurt77@gmx.de), [npallua@ukaachen.d](mailto:npallua@ukaachen.d), [annajakubiec@o2.pl](mailto:annajakubiec@o2.pl), [lars.dahlin@med.lu.se](mailto:lars.dahlin@med.lu.se), [goran.lundborg@med.lu.se](mailto:goran.lundborg@med.lu.se), [voigt.peter@mh-hannover.de](mailto:voigt.peter@mh-hannover.de), [gutenbrunner.christoph@mh-hannover.de](mailto:gutenbrunner.christoph@mh-hannover.de), [guy.vanderstraeten@ugent.be](mailto:guy.vanderstraeten@ugent.be), [guenter.fuhr@ibmt.fraunhofer.de](mailto:guenter.fuhr@ibmt.fraunhofer.de), [klaus-peter.hoffmann@ibmt.fraunhofer.de](mailto:klaus-peter.hoffmann@ibmt.fraunhofer.de), [wigand.poppendieck@ibmt.fraunhofer.de](mailto:wigand.poppendieck@ibmt.fraunhofer.de), [siegfried.steltenkamp@ibmt.fraunhofer.de](mailto:siegfried.steltenkamp@ibmt.fraunhofer.de), [df@hst.aau.dk](mailto:df@hst.aau.dk), [hans.dietl@ottobock.com](mailto:hans.dietl@ottobock.com), [michael.russold@ottobock.com](mailto:michael.russold@ottobock.com), [feldbacher@schuhfried.at](mailto:feldbacher@schuhfried.at), [wolfgang.grisold@wienkav.at](mailto:wolfgang.grisold@wienkav.at), [hans.lassmann@meduniwien.ac.at](mailto:hans.lassmann@meduniwien.ac.at)

20.00 *cirMYO Dinner at Hotel Augustus and Evening discussion of the EU Initiative for Translational Myology*

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### Friday April 23, 2010

Terme Euganee Conference Hall, Hotel Augustus, Viale Stazione 150 - 35136 Montegrotto Terme (Padova), Italy

#### Session 1. Muscle protein balance in health and disease, Carlo Reggiani, Organizer

09.00 **cirMYO Lecture** Effects of feeding and physical activity on muscle protein metabolism and associated signalling mechanisms - the confounding effects of age and inactivity, *Michael Rennie, Derby, UK*

09.40 Marco Sandri, Padova, Italy: *Signaling pathways that control protein breakdown and muscle loss*

10.10 Gianni Biolo, Trieste, Italy: *Regulation of muscle mass by nutrition and activity in health and disease*

10.40 Break

#### Session 2. Malignancy&Myopathies, Stefano Merigliano, Ugo Carraro, Organizers

11.00 Sandra Zampieri, Padova, Italy: *Signs of myopathy in patients affected with newly diagnosed colorectal cancer*

11.30 Olof Danielsson, Istvan Gati, Björn Lindvall, Jan Ernerudh, Linköping University, Sweden: *Classification and pathologic characterization of 99 consecutive patients with morphological findings of idiopathic inflammatory myopathy*

11.50 Donatella Biral et al., Padova, Italy: *Acquired dystrophinopathies of human muscle: Contrasting effects of early and late denervation atrophy*

12.00 **cirMYO Lecture** Role of skeletal muscle damage & regeneration in cancer cachexia, *Dario Coletti, Rome, Italy*

13.00 Lunch

#### Session 3. Muscle Genetics&Proteomics, Marcus C. Schaub, Corrado Angelini, Organizers

14.30 **cirMYO Lecture** Primer for sarcomeric muscle genetics, *Marcus C. Schaub, Zurich, Switzerland*

15.15 Marie-Louise Bang, Milan, Italy: *The functional role of nebulin's SH3 domain in the sarcomeric Z-line*

15.45 Lauren Fisher, Jonathan C Jarvis, Liverpool, UK: *Time- and frequency-dependent transcriptional changes in stimulated rat muscle*

16.15 Andrew Fisher, Jonathan C Jarvis, Liverpool, UK: *Study of intra- and inter-individual variability in muscle transcripts across a rat population*

16.45 Break

17.15 Stefano Cagnin, Padova, Italy: *Characterization of altered processes and protein modifications in patients affected by inflammatory myopathies*

17.45 Sarah Pigozzo, Libero Vitiello, Padova, Italy: *Efficiency of antisense-mediated exon skipping in normal and mutated dmd genes*

18.15 Scaramozza Annarita, Bologna, Italy: *Satellite cells dysfunction may contribute to impaired skeletal muscle regeneration in sporadic amyotrophic lateral sclerosis (ALS)*

18.30 Marco Spinazzi, Padova, Italy: *Assessment of respiratory chain and antioxidant enzymes in skeletal muscle biopsies*

18.45 Enza Abruzzo et al., Bologna, Italy: *Oxidative stress in denervated rat muscle*

19.00 Carlo Borsato, Padova, Italy: *Evolution in dysferlinopathies*

19.15 Angelica Anichini, Padova, Italy: *Novel mutations and genotype-phenotype correlations in a large cohort of muscular-type *cpt-2* deficient patients*

19.30 Chiara Ferrati, Padova, Italy: *Are brain and muscle involvement related in *dm1*?*

20.00 *cirMYO Dinner at Hotel Augustus and Evening discussion of the EU Initiative for Translational Myology*

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### Saturday April 24, 2010

Terme Euganee Conference Hall, Hotel Augustus, Viale Stazione 150 - 35136 Montegrotto Terme (Padova), Italy

#### Session 4. Monitoring myopathy progression and recovery in SCI and beyond – 11 ECM Credits

H. Kern, M. Dini and U. Carraro, *Organizers*

- 08.30 Daniel Graupe, Chicago, USA: *Recognition and prediction of individual and combined muscular activations modes via surface EMG analysis*
- 09.00 Jon Cheetham, Ithaca, NY, USA: *Determination of rheobase and chronaxie in denervated laryngeal muscle in conscious horses*
- 10.00 Paolo Gargiulo, Reykjavic, Iceland: *3D-ColorComputer Tomography image assessment for skeletal muscle volume, composition and density evaluation in SCI*
- 10.20 Humberto Cerrel-Bazo, Milan, Italy: *FES in thoracic level SCI: 20-year experience in USA and Italy*
- 10.40 Emiliana Bizzarrini, Udine, Italy: *FES in thoracic level SCI: Experience of Udine Gervasutta Hospital*
- 11.00 *Break*
- 11.20 **cirMYO Lecture:** Ultrasound-based investigations of changes in myotendinous properties with disuse and ageing, *Marco V. Narici, Manchester, UK*
- 12.00 Sigrid Pillen, Nijmegen, The Netherlands: *Detecting neuromuscular disorders and spontaneous muscle activity using muscle ultrasound.*
- 12.20 Vera Nussgruber, Vienna, Austria: *Ultrasound of nerve and muscle in clinical neurology*
- 13.00 *Lunch*
- #### Tutorials on h-bFES and US Functional Echomyography – 11 ECM Credits
- H. Kern, R. Stramare, U. Carraro, *Organizers*
- 14.20 Ugo Carraro, Padova, Italy: *Translational myology: from hope to facts*
- 14.30 **cirMYO Lecture** Home-base FES of LMN denervated muscles, *Helmut Kern, Vienna, Austria*
- 15.10 **Practice** Devices and protocols of h-bFES, *Helmut Kern, Vienna, Austria*
- 16.40 *Break*
- 17.00 **cirMYO Lecture** Echogenicity, contraction and perfusion properties of skeletal muscle by US Functional Echomyography, *Roberto Stramare, Leonora Martino, Padova, Italy*
- 17.40 **Practice** Devices and protocols of US Functional Echomyography, *Leonora Martino, Riccardo Zanato, Padova, Italy*
- 18.40 **Practice** Devices and protocols of US-based investigation of myotendinous apparatus, *Marco V. Narici, Manchester, UK*
- 19.40 *ECM tests to gain the 11 Credits*
- 19.50 *Ugo Carraro Auf Wiedersehen, Sjámst, Aurevoir, Arrivederci, See You to the 2010Autum PaduaMuscleDays*
- 20.00 *cirMYO Dinner at Hotel Augustus and Evening discussion of the EU Initiative for Translational Myology*

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