

**Giovedì 14 Ottobre**

**SESSIONE 1**

**15.00 OPENING**

**SKELETAL MUSCLE STRUCTURE AND FUNCTION**  
CHAIRMAN: G. CECCHI (15.30 – 18.30)

**15.30-17.00**

**KEYNOTE LECTURE: "Crossbridges, tension and stiffness in skeletal muscle fibres" G. CECCHI**

**1. STATIC STIFFNESS IN SINGLE FIBRES FROM EDL AND SOLEUS MOUSE MUSCLE.**

M Nocella, G Benelli, MA Bagni, B Colombini, G Cecchi and J Bruton.

**2. DEVELOPMENT OF AN EXPERIMENTAL SET-UP TO CHARACTERIZE MECHANICAL PROPERTIES OF AN IN VITRO MUSCLE ENGINEERED TISSUE WITHIN THE USE OF DIGITAL IMAGE CORRELATION TECHNIQUE.**

E. Rizzuto, S.Carosio, A. Musarò, Z. Del Prete.

**3. INTRAMEMBRANE CHARGE MOVEMENTS AND L-TYPE  $Ca^{2+}$  CURRENT ARE AFFECTED IN ANKYRIN 1.5 NULL MICE.**

Roberta Squecco, Emiliana Giacomello, Alessandra Gamberucci, Vincenzo Sorrentino, Fabio Francini.

**4. PROGRESSIVE UN-COUPPLING OF MITOCHONDRIA FROM CALCIUM RELEASE SITES IN AGEING: IMPLICATIONS FOR MUSCLE PERFORMANCE.**

A.D'Incecco, L. Pietrangelo, S. Boncompagni, F. Protasi.

**17.00 - 17.30 Coffee break**

**17.30-18.30**

**5. MOLECULAR INTERACTIONS IN THE ASSEMBLY OF CALCIUM RELEASE UNITS IN SKELETAL MUSCLE.**

Maritati M., Bencini C., Lorenzini S., Rossi D., Sorrentino V.

**6. MICROGENOMICS OF TYPE 1 AND TYPE 2B SKELETAL MUSCLE FIBRES.**

Francesco Chemello, Camilla Bean, Pasqua Cancellara, Giorgia Busolin, Francesco Martinati, Paolo Laveder, Carlo Reggiani, Gerolamo Lanfranchi.

**7. SPHINGOSINE 1-PHOSPHATE RECEPTORS IN SKELETAL MUSCLE.**

Samantha Peron, Elena Germinario, Elisa Bianchini, Dorianna Sandonà, Romeo Betto and Daniela Danieli-Betto.

**8. GENE PROFILE IN HUMAN SKELETAL MUSCLE SUBJECT TO SURFACE ELECTRICAL STIMULATION.**

Rosa Mancinelli, Tiziana Pietrangelo, Rita La Rovere, Ester Sara Di Filippo, Giorgio Fanò and Stefania Fulle.

# Venerdì 15 Ottobre

## SESSIONE 2

### MUSCLE ATROPHY

CHAIRMEN: M. SANDRI (8.30 – 10.00)

#### 8.30-10.00

**KEYNOTE LECTURE: "Novel regulators of muscle mass" M. SANDRI**

**1. REGULATION OF FOXO3 TRANSCRIPTION FACTOR DURING MUSCLE ATROPHY.**

Enrico Bertaglia, Luisa Coletto, Marco Sandri.

**2. GHRELIN AND DES-ACYL GHRELIN PROTECT SKELETAL MUSCLE FROM ATROPHY.**

Paolo E. Porporato, Nicoletta Filigheddu, Simone Reano, Viola F. Gnocchi, Michele Ferrara, Giulia Ronchi, Stefano Geuna, Andrea Graziani

**3. ACUTE AND CHRONIC EXPOSURE TO BRANCHED CHAIN AMINO ACID ENRICHED MIXTURE ACTIVATES BASAL AND CONTRACTION MEDIATED MTOR/P70 SIGNALING IN SOLEUS MUSCLE OF ELDERLY RATS.**

Cannavino J, Pellegrino MA, Bottinelli R, D'Antona G.

**4. AUTOPHAGY IN MUSCLE-SPECIFIC MTOR KNOCKOUT MICE.**

Carnio S, Masiero E., Gangloff YG, Shaeffer L and Sandri M.

#### 10.00 -10.30 Coffee break

#### 10.30 – 12.00 FOCUSED SESSION ON microRNAs AND MUSCLE (PRELIMINARY)

CHAIRMAN: M. SAMPAOLESI

**KEYNOTE LECTURE: "MicroRNAs and their role in skeletal muscle development and disease" M.L. BANG**

**1. INVOLVEMENT OF THE miRNA IN REGULATING SKELETAL MUSCLE ATROPHY.**

Soares, R.J., De Pittà,C., Silvestrin, M., Lanfranchi,G., Sandri, M..

**2. SHIFTING HEART TO SKELETAL MUSCLE: MIR-669 FUNCTIONS AS A CELL FATE SWITCH BETWEEN CARDIAC AND SKELETAL MUSCLE LINEAGES.**

Stefania Crippa, Daniela Galli, Marco Cassano, Stefan Janssens, Giulio Cossu, and Maurilio Sampaolesi.

**3 . THE ROLE OF microRNAs IN NEMALINE MYOPATHY.**

Alessandra Castaldi, Marie-Louise Bang.

#### 13.00-15.00 Lunch

## SESSIONE 3

### MYOGENESIS

CHAIRMEN: A. MUSARO' (15.00 – 18.45)

#### 15.00-16.45

**KEYNOTE LECTURE: "The evolution of the regenerative medicine: from the Prometheus legend to stem cell promise" A. MUSARÒ**

**1. NEW EVIDENCE OF CREATINE SUPPLEMENTATION ON MITOCHONDRIA IN OXIDATIVELY INJURED MYOBLASTS.**

E. Barbieri, L. Potenza, C. Martinelli, M. Mantuano, C. Calcabrini, M. Guescini, E. Colombo, M. Paolillo, V. Stocchi and P. Sestili.

**2. EFFECT OF NEURAL AGRIN ON THE REGENERATIVE POTENTIAL OF AGED HUMAN SKELETAL MYOBLASTS.**

Paola Lorenzon , Elisa Luin, Elena Formaggio, Guido Fumagalli.

**3. ROLE OF SPHINGOSINE KINASE/SPHINGOSINE 1-PHOSPHATE AXIS IN THE BIOLOGICAL RESPONSE ELICITED BY IGF-1 IN MOUSE MYOBLASTS.**

Bernacchioni C, Cencetti F, Donati C, Bruni P.

**4. DORSOMORPHIN, A SELECTIVE INHIBITOR OF SMAD1/5/8 PHOSPHORYLATION, IS A POTENT ENHANCER OF MYOBLAST DIFFERENTIATION.**

Stefania Rossi, Francesca Longhena, Eugenio Monti, Alessandro Fanzani.

**5. THE EXPRESSION ANALYSIS OF IL-6 SPLICE VARIANTS IN C2C12 CELLS AND IN SEVERAL MOUSE TISSUES ARGUED AGAINST THEIR FUNCTIONAL RELEVANCE.**

G. Annibalini, M. Guescini, D. Agostini, R. De Matteis, P. Sestili, P. Tibollo, M. Mantuano, C. Martinelli, and V. Stocchi.

#### 16:45 – 17.15 Coffee break

#### 17.15-18.45

**6. GENE EXPRESSION PROFILE IN MAC1C-F1 MYOGENIC PROGENITORS.**

Flavio L. Ronzoni, Silvio Conte, Daniela Galli, Rudi Micheletti, Laura Benedetti, Iliaria Perini, Gabriella Cusella De Angelis and Maurilio Sampaolesi.

**7. PROTEIN KINASE C THETA SIGNALING IN MUSCLE DIFFERENTIATION AND HOMEOSTASIS.**

Luca Madaro, Mario Molinaro and Marina Bouché.

**8. CAVEOLIN-1 IS A MARKER OF POOR DIFFERENTIATION IN RHABDOMYOSARCOMA.**

Stefania Rossi, Pietro Luigi Poliani, Manuela Cominelli, Eugenio Monti, Alessandro Fanzani.

**9. SATELLITE CELLS ISOLATED FROM "SPECIAL" MUSCLES ARE "SPECIAL" MYOGENIC PRECURSORS.**

Rita La Rovere, Marco Cassano, Mattia Quattrocchi, Francesco Mascarello, Tiziana Pietrangelo, Maurilio Sampaolesi, Stefania Fulle.

**10. MYOGENIC PRECURSORS IN HUMAN ADULT ADIPOSE TISSUE.**

Enrico Pierantozzi, Carlo Curina, Letizia Gulino and Vincenzo Sorrentino

**11.  $\alpha$ -SARCOGLYCAN IS REQUIRED FOR SATELLITE CELL PROLIFERATION IN VITRO AND IN VIVO.**

Marco Cassano, Arianna Dellavalle, Mattia Quattrocchi, Agnese Salvade', Giulio Cossu & Maurilio Sampaolesi.

#### 20.00 CENA a Siena per tutti

## Sabato 16 Ottobre

### SESSIONE 4

#### MUSCLE DISEAS AND THERAPIES

CHAIRMEN: M. SAMPAOLESI & S. ADAMO (8.30 – 12.00)

#### 8.30-10.00

**KEYNOTE LECTURE: "NOVEL DEVELOPINGS IN THE THERAY OF MUSCULAR DYSTROPHIES" M. SAMPAOLESI**

##### **1. INFLAMMATORY-INDEPENDENT CACHEXIA IN GIST TRANSPLANTED NUDE MICE.**

Emanuele Berardi, Iliaria Perini, Marco Cassano, Giuseppe Floris, Agnieszka Wozniak, Maria Debiec-Rychter, Patrick Schöffski, and Maurilio Sampaolesi.

##### **2. EXERCISE EFFECTS IN THE CONTEXT OF CANCER CACHEXIA.**

Paola Aulino, Emanuele Berardi, Veronica M Cardillo, Emanuele Rizzuto, Barbara Perniconi, Sergio Adamo and Dario Coletti.

##### **3. STEM CELL MEDIATED MUSCLE HYPERTROPHY AS A THERAPEUTIC STRATEGY FOR MUSCULAR DYSTROPHIES.**

Iliaria Perini, Carlotta Tacconi, Flavio L. Ronzoni, Maurilio Sampaolesi.

##### **4. RAGE EXPRESSION IN RHABDOMYOSARCOMA CELLS MODULATES METASTASIS FORMATION IN VIVO.**

Sorci G., Chiappalupi S., Riuzzi F., and Donato R.

10.00 – 10.30 Coffee break

#### 10.30-11.45

##### **5. EFFICIENCY OF ANTISENSE-MEDIATED EXON SKIPPING IN NORMAL AND MUTATED DMD GENES.**

Sarah Pigozzo, Andrea Schiavo, Jennifer L Agostini, Steven D Wilton, Sue Fletcher, Libero Vitiello.

##### **6. ROLE OF VITAMIN D IN THE PATHOGENESIS OF MUSCLE WASTING IN CANCER CACHEXIA.**

A. Camperi, F. Penna, D. Costamagna, F.M. Baccino, P. Costelli.

##### **7. LACK OF CALSEQUESTRIN-1 CAUSES A CORE-LIKE MYOPATHY IN AGING SKELETAL FIBERS.**

C. Paolini, M. Quarta, M. Tomasi, R. La Rovere, S. Fulle, A. Nori, C. Reggiani and F. Protasi.

##### **8. RAGE-/- MUSCLES SHOW A HIGH ABUNDANCE OF SATELLITE CELLS BUT DELAYED MUSCLE REGENERATION.**

Riuzzi F., Sagheddu R., Sorci G., and Donato R.

##### **9. AGED VS YOUNG HUMAN SATELLITE CELLS: ALTERED EXPRESSION OF S100B AND RAGE, AND DEFECTIVE ABILITY IN CONDITIONING THE MEDIUM CONTRIBUTE TO IMPAIRED MYOGENIC POTENTIAL.**

Beccafico S., Riuzzi F., Puglielli C., Mancinelli R., Fulle S., Sorci G., and Donato R.

#### 11.45-13.00 ELEZIONI COMITATO SCIENTIFICO

13.00-14.00 Lunch

14.00 Partenza