

**PROGRAMMA SCIENTIFICO  
VIII CONGRESSO ANNUALE**

**FONDAZIONE MEDIATERRANEO  
SESTRI LEVANTE (GE)  
27-29 OTTOBRE 2011**

**Giovedì 27 Ottobre**

**15.00 OPENING**

Saluto Del Direttore; Introduzione dei Lavori

**15.20-15.40**

Andrea Pietrangelo: Webmaster IIM  
Il Sito Web IIM: Novità e Prospettive

**SESSIONE 1**

**15.40-17.00**

**FUNCTIONAL PROPERTIES OF SKELETAL MUSCLE FIBERS**

*Chairman: Maria Angela Bagni; Paola Lorenzon*

**1. TRANSCRIPTIONAL SIGNATURES OF SKELETAL MUSCLE FIBER TYPES**

*F. Chemello, C. Bean, P. Cancellara, G. Busolin, P. Martini, C. Romualdi, P. Laveder, C. Reggiani, and G. Lanfranchi*

**2. MODIFICATIONS IN FUNCTIONAL PARAMETERS AND MYOSIN CONCENTRATION IN AGING AND DISUSE.**

*Longa E, Mascaro A, Brocca L, Campbell EI, Seynnes O, Mcphee J, Narici M, Bottinelli R*

**3. CROSSBRIDGE PROPERTIES DURING FATIGUE IN MAMMALIAN MUSCLE FIBRES**

*M. Nocella, B. Colombini, J. Bruton, G. Cecchi and M.A. Bagni.*

**4. EXPLORING THE MECHANISMS THAT CONTROL THE ADAPTIVE POTENTIAL OF SKELETAL MUSCLE FIBERS**

*G. Busolin, F. Chemello, C. Bean, B. Blaauw, P. Cancellara, P. Laveder, C. Reggiani, and G. Lanfranchi*

**17.00 - 17.30 Coffee break**

## SESSIONE 2

17.30-19.10

### EXCITATION-CONTRACTION COUPLING

*Chairman: Feliciano Protasi; Vincenzo Sorrentino*

#### 5. OREXIN A (OXA) ACTIVATES STORE OPERATED $Ca^{2+}$ CHANNELS OF MOUSE DUODENUM FIBRES

*R. Squecco, R. Garella, M. Baccari, F. Francini*

#### 6. JUNCTOPHILINS INTERACTIONS IN SKELETAL MUSCLE

*L. Golini, A.C. Aiello, E. Giacomello, V. Barone, V. Sorrentino*

#### 7. THE LESSON OF CALSEQUESTRIN-1 ABLATION IN VIVO: MUCH MORE THAN A BUFFER, AFTER ALL.

*C. Paolini, M. Quarta, M. Canato, R. La Rovere, S. Fulle, C. Reggiani, F. Protasi.*

#### 8. GRADUAL FORMATION AND ACCUMULATION OF TUBULAR AGGREGATES IN FAST-TWITCH MUSCLE FIBERS: SERCA AND CALSEQUESTRIN INVOLVEMENT.

*S. Boncompagni, F. Protasi and C. Franzini-Armstrong*

#### 9. EXERCISE COUNTERACT THE AGE-RELATED DECAY OF EC-COUPLING AND MITOCHONDRIAL APPARATUSES IN HUMAN SKELETAL MUSCLE.

*A. D'Incecco, S. Boncompagni, H. Kern and F. Protasi*

19.15-20.30 *Riunione comitato scientifico IIM*

20.45- CENA IIM

## Venerdì 28 Ottobre

## SESSIONE 3

### CELL BIOLOGY OF MUSCLE DISEASES-I

*Chairmen: Maurizio Sampaolesi; Libero Vitiello*

9.00-10.40

#### 10. IL-6 IS A PIVOTAL PATHOGENIC FACTOR AND A POTENTIAL THERAPEUTIC TARGET OF MUSCULAR DYSTROPHY

*Pelosi L, Spelta E, Berardinelli MG, Carvello F, Nicoletti C, Catizone A, Rizzuto E, De Benedetti F, Musarò A*

#### 11. THE NATURAL OCCURENCY OF DYSTROPHIN POSITVE MUSCLE FIBRES IN DYSTROPHIC MUSCLE: A TIME-COURSE STUDY IN THE MURINE MODEL OF DUCHENNE MUSCULAR DYSTROPHY

*S.R. Pigozzo, L. Da Re, S. Fletcher, S.D. Wilton, L. Vitiello.*

#### 12. HISTONE DEACETYLASES: CRUCIAL REGULATORS OF SKELETAL MUSCLE HOMEOSTASIS

*V. Moresi, M. Carrer, A. H. Williams, J. Backs, R. L. Montgomery, R. Bassel-Duby and E. N. Olson.*

#### 13. CHARACTERIZATION OF MECHANISMS CAUSING MYOPATHY ASSOCIATED TO THE NEUTRAL LIPID STORAGE DISEASE (NLSDM).

*E. Spelta, G. Dobrowolny, C. Nicoletti, E. Rizzuto, M. Arca, A. Musarò.*

#### 14. MECHANISMS UNDERLYING EXERCISE IN THE CONTEXT OF CANCER CACHEXIA

*P. Aulino, E. Berardi, V.M Cardillo, E. Rossi, E. Rizzuto, S. Adamo, D. Coletti.*

10.40 -11.10 Coffee break

## SESSIONE 4

### CELL BIOLOGY OF MUSCLE DISEASES-II

Chairmen: Roberto Bottinelli; Daniela Rossi

#### 11.10-12.50

##### 15. MIGRATING TUMOR CELLS AND MUSCLE WASTING IN GIST TRANSPLANTED NUDE MICE

*E. Berardi, M. Cassano, C. Ortiz, D. Coatamagna, G. Floris, A. Wozniak, M. Debiec-Rychter, P. Schöffski, and M. Sampaolesi*

##### 16. THE MECHANISMS OF SKELETAL MUSCLE ATROPHY FOLLOWING 35-DAYS BED REST

*Brocca L., Cannavino J., Coletto L., Sandri M., Pellegrino M.A., Bottinelli R.*

##### 17. THE TIME COURSE OF DISUSE ATROPHY IN A SLOW AND FAST MUSCLE OF HINDLIMB UNLOADED MICE.

*Cannavino J., Brocca L., Desaphy J.F., Sandri M., Conte Camerino D., Pellegrino M.A. and Bottinelli R.*

##### 18. COMBINATION OF ENDURANCE TRAINING AND ERYTHROPOIETIN PREVENTS CANCER-INDUCED MUSCLE ALTERATIONS

*F. Penna, S. Busquets, M. Toledo, F. Pin, F.J. Lopez-Soriano, P. Costelli, J.M. Argiles*

##### 19. AUTOPHAGY IS REQUIRED TO MAINTAIN MUSCLE MASS

*Carnio S., Masiero E., Lo Verso F., Agatea L., Blaauw B., Komatsu M., Metzger D., Reggiani C., Schiaffino S., and Sandri M.*

#### 13.00-14.30 Lunch and free time

## SESSIONE 5

### MECHANISMS OF SIGNAL TRANSDUCTION-I

Chairmen: Marco Sandri; Fabio Penna

#### 14.30-16.10

##### 20. SPHINGOSINE 1-PHOSPHATE EXERTS PRO-MIOGENIC AND PRO-MIGRATORY ACTIONS IN MURINE SATELLITE CELLS

*Cencetti F., Donati C., Calise S., Blescia S., Bernacchioni C. and Bruni P.*

##### 21. THE TRANSCRIPTION FACTOR SNAI1 REGULATES EARLY EVENTS OF MYOGENIC DIFFERENTIATION.

*Borghi S., Di Mauro V., De Clemente C., Vitiello L., Oliviero S., Galvagni F.*

##### 22. INHIBITION OF NOTCH PATHWAY IMPAIRS OSTEOGENESIS WHILE ENHANCES MYOGENESIS OF PERICYTE-DERIVED CELLS

*C. Curina, E. Pierantozzi, V. Sorrentino*

##### 23. RELEASE OF MICRO-VESICLES DURING C2C12 MYOGENIC DIFFERENTIATION PROCESS

*Guescini M, Tibollo P, Mantuano M, Vallorani L, Casadei L, Barbieri E, Battistelli M, Falcieri E, Agnati LF and Stocchi V*

##### 24. THE PRO-MYOGENIC ENVIRONMENT PROVIDED BY WHOLE ORGAN SCALE ACELLULAR SCAFFOLDS FROM SKELETAL MUSCLE

*B. Perniconi, A. Costa, P. Aulino, L. Teodori, S. Adamo, D. Coletti*

#### 16:10 – 16.40 Coffee break

#### 16.40-17.30 Keynote lecture

Chairman: Antonio Musarò

*Rosario Rizzuto (Università di Padova) A forty-kilodalton protein of the inner membrane is the mitochondrial calcium uniporter*

## SESSIONE 6

### MECHANISMS OF SIGNAL TRANSDUCTION-II

Chairmen: Stefania Fulle; Alessandro Fanzani

17.30-19.10

**25. CAVEOLIN-1 PROMOTES PROLIFERATION AND CONFERS RESISTANCE TO OXIDATIVE STRESS-INDUCED CELL DEATH IN RHABDOMYOSARCOMA CELLS**

*F. Faggi, S. Rossi, R. Vescovi, F. Longhena, A. Zanola, E. Monti, A. Fanzani*

**26. DIFFERENTIAL MYOGENICITY OF SATELLITE CELLS ISOLATED FROM CANINE MUSCLES OF DIFFERENT EMBRYONIC ORIGIN**

*R. La Rovere, M. Cassano, M. Quattrocelli, R. Mancinelli, L. Maccatrozzo, F. Mascarello, T. Pietrangelo, M. Sampaolesi, S. Fulle*

**27. EVALUATION OF THE PROTECTIVE EFFECTS OF NATURAL ANTIOXIDANT COMPOUNDS AGAINST SKELETAL MUSCLE IMPAIRMENT DUE TO AGING**

*S. Pierno, A. Liantonio, G. Gramegna, A. Mele, D. Tricarico, M. Cannone, L. Villanova, D. Conte Camerino*

**28. REACTIVE OXYGEN SPECIES CONTRIBUTE TO PROMOTE THE ATP-MEDIATED PROLIFERATION OF MOUSE SKELETAL MYOBLASTS**

*M. Sciancalepore, E. Luin, G. Parato, E. Ren and P. Lorenzon*

**29. INTRACELLULAR PATHWAYS REGULATING ER-STRESS-INDUCED AUTOPHAGY IN MUSCLE AND MUSCULAR DYSTROPHY**

*L. Madaro, V. Marrocco and M. Bouché...*

**19.15-20.00 Assemblea IIM.**

**DISCUSSIONE APERTA SULLE INIZIATIVE E IL FUTURO DELL'IIM**

cena libera

## Sabato 29 Ottobre

## SESSIONE 7

### MYOGENESIS AND REGENERATION-I

Chairmen: Guglielmo Sorci; Giorgio Fanò-Illic

9.00-10.20

**30. TARGETING THE DYSTROPHIC HEART: DIRECT CARDIAC REPROGRAMMING OF GRMD FIBROBLAST**

*Micheletti R, Palazzolo G, Toelen J, Ronzoni F, Sampaolesi M and Cassano M*

**31. S1P<sub>2</sub> RECEPTOR AND SKELETAL MUSCLE REGENERATION**

*Germinario E, Peron S, Betto R, Donati C, Bruni P., Danielli-Betto D.*

**32. SKELETAL MUSCLE REGENERATION IN MICE IS STIMULATED BY LOCAL OVEREXPRESSION OF V1A-VASOPRESSIN RECEPTOR**

*A. Toschi, A. Severi, D. Coletti, A. Catizone, A. Musarò, M. Molinaro, C. Nervi, S. Adamo, B.M. Scicchitano*

**33. TRANSPLANTATION OF MICROENCAPSULATED SERTOLI CELLS IN MDX MICE REDUCES MUSCLE INFLAMMATION AND PROMOTES MUSCLE REGENERATION**

*Chiappalupi S, Sorci G, Luca G, Mancuso F, Calvitti M, Calafiore R, Donato R.*

**10.20-11.00 Keynote lecture**

Chairman: Antonio Musarò

**Maria Pennuto** (IIT Genova) *Phosphorylation of polyglutamine androgen receptor in skeletal muscle attenuates disease manifestations in SBMA mice.*

11.00-11.30 Coffee break

## SESSIONE 8

### MYOGENESIS AND REGENERATION-II

Chairmen: Sergio Adamo; Marina Bouché

11.30-12.50

#### 34. ROLE OF MAGIC-F1 RECOMBINANT PROTEIN IN CARDIAC DEVELOPMENT OF TRANSGENIC MICE

*F.L. Ronzoni, S.N. Duim, R. Micheletti, S. Crippa, I. Perini, M. Cassano, L. Benedetti, G. Cusella De Angelis and M. Sampaolesi*

#### 35. PKC THETA ABLATION IMPROVES HEALING IN A MOUSE MODEL OF MUSCULAR DYSTROPHY

*L. Madaro, A. Crupi, C. Nicoletti, A. Pelle, G. Bossi, S. Soddu and M. Bouché*

#### 36. SYNTHETIC SCAFFOLDS MAY BE USED FOR THE ORIENTATION OF CARDIAC STEM CELLS PROPERTIES, DIFFERENTIATION AND EXTRACELLULAR MATRIX INTERACTIONS IN CARDIAC TISSUE ENGINEERING: IN VITRO AND IN VIVO STUDIES

*V. Di Felice, C. Serradifalco, L. Rizzuto, A. De Luca, A. Marino Gammazza, K. Fattouch, P. Di Marco, G. Cassata, R. Puleio, E.M. Cannella, L. Verin, A. Motta, A. Guercio, G. Zummo*

#### 37. GAP-43: A NEURON-SPECIFIC PROTEIN FOUND IN SKELETAL MUSCLE

*M.A. Mariggiò, S. Guarnieri, G. Caprara, C. Morabito, G. Fanò-Illic*

12.50-13.10

Closing remarks e assegnazione premi IIM

13.15 Partenza

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