



# 8<sup>o</sup> I.S.Mu.L.T. Congress

Open mind and new technologies in muscles,  
ligaments and tendons

Salerno - 30<sup>th</sup> November - 1<sup>st</sup> December 2018  
Grand Hotel Salerno

Congress President

**Nicola Maffulli**  
**Alfonso Maria Forte**

Programme Committee

Lucio Cipollaro, Giovanna Della Porta, Antonio Frizziero,  
Lorenzo Giordano, Francesco Oliva, Antonio Oliviero,  
Alfonso Maria Romano, Giovanni Felice Trinchese.

**3 Awards of € 1.000 each**

Sponsored by **IBSA Foundation** for scientific research.

Friday, 30 November

7:30 ○ Registration

8:30 ○ Welcome from the authorities

○ **SESSION 1**

**Tendinopathy: Not Always that easy!**

Chairman: A. Giai Via, N. Maffulli

9:00 Acute and chronic tendinopathies - **C. Rugiero (Roma)**

9:10 High ankle partial sprain arthroscopic treatment - **M.Krochmalski (Poland)**

9:20 Biological therapies for tendinopathy - **W. Murrell (UAE)**

9:30 Tendinopathy: pain management during return to sport - **C. Foti (Roma)**

9:40 **DISCUSSION**

○ **SESSION 2**

**Mainlectures**

Chairman: F. Oliva

9:50 Biomechanical Bioscaffold Test for cartilage degeneration - **B. Innocenti (Belgium)**

○ **I.S.Mu.L.T. Guidelines**

Chairman: N. Maffulli, G. Nanni

Muscles Injuries Guidelines Update after 5 Years.

10:30 ○ **COFFEE BREAK**

○ **AULA CILENTO “PARALLEL SESSION BASIC SCIENCE “ REGENERATIVE MEDICINE SOLUTIONS FOR THE MUSCULOSKELETAL SYSTEM**

Chairman: B. Barboni, A. C. Berardi, M. Fini, G. Della Porta, E. Giordano

11:00 Tenogenic commitment of Mesenchymal Stem Cells in a 3D scaffold and dynamic culture - **M.C. Ciardulli (Salerno)**

11:10 Biopolymer Tendon Biomimetic Scaffolds and the behavior of Amniotic Epithelial Stem Cells - **M. El Khatib (Teramo)**

11:20 Micro/nano-carriers engineering for the controlled release of bio-actives - **I. Palazzo (Italy)**

11:30 Amplification protocol to improve tendon regenerative potential of amniotic epithelial derived cells - **A. Canciello (Italy)**

11:40 Medium perfusion flow improves osteogenic commitment of human stromal cells - **J. Lovecchio (Bologna)**

11:50 Stem cells in the treatment of osteoarthritis: an experimental model in sheep - **A. Muttini (Teramo)**

12:00 **DISCUSSION**

## SESSION 3

### Mainlectures

Chairman: N. Maffulli, F. Oliva, R. Romeo

11:00

Prof. Kessler History and tendon Repair - **A. Oron (Israel)**

11:20

In memory of Prof John B King - **N. Maffulli (Salerno)**

## SESSION 4

### Tenosynovitis and Peritenonitis

Chairman: A. Frizziero, A. Siano

11:30

Pathological conditions related to tenosynovitis - **G. Criscuolo (Salerno)**

11:40

The role of power doppler and US evaluation for the best treatment - **A. Mahmoud (Egypt)**

11:50

Rheumatological conditions - **P. Moscato (Salerno)**

12:00

**DISCUSSION**

12:10

## WORKSHOP FIDIA “HYALURONIC ACID AND TENDINOPATHIES”

Chairman: M. Fini, M. Fogli, L. Osti

The Role Of Hyaluronic Acid In Tendinopathies: In-Vivo And In-Vitro Studies - **F. Veronesi (Bologna)**

Therapeutic Effects Of Hyaluronic Acid Injections In Tendinopathies - **A. Frizziero (Padova)**

I.S.Mu.L.T. Guidelines For Achilles Tendon Ruptures - **F. Oliva (Italy)**

**DISCUSSION**

## SESSION 5

### Mainlecture

Chairman: N. Maffulli

12:50

Circulating HRNA during training - **G. Banfi (Milano)**

13:20

## LUNCH

## SESSION 6

### Management of Sport

Chairman: V. Agosti, C. Foti, M. Sirico

14:20

The role of nutraceuticals in tendinopathies - **S. Bisicchia (Roma)**

14:30

Recover-sensibility of neuromuscular performances in clinically healthy soccer players under fatigue conditions - **L. Riela (Croatia)**

14:50

Muscle injury and nutrition - **A. Paoli (Padova)**

15:00

**DISCUSSION**

## AULA CILENTO "PARALLEL SESSION ATHENA BIOMEDICAL INNOVATION" CELL THERAPY UPDATE IN MUSCLE LIGAMENTS AND TENDON REGENERATION

Chairman: S. Rossi

- 15:00 Peripheral Blood Mononuclear Cells (PBMNC) : Mechanism of action and scientific rationale - **L. Rehak (Roma)**
- 15:15 Cell therapy in vascular surgery. The Italian college of vascular surgery - experience - **S. Furgiuele (Roma)**
- 15:30 PBMNC preliminary data on tendons regeneration: ultrasound and clinical findings - **F. Occhigrossi (Roma)**
- 15:45 **DISCUSSION**

## ASSEMBLEA PLENARIA SOCI

A. Frizziero, N. Maffulli, F. Oliva

- 15:10 Adeguamento Statuto previsto dal D.M. del 2 agosto 2017 - **A. Fusco (Roma)**

15:20 **Votazione Soci**

## WORKSHOP IBSA

Chairman: N. Maffulli, F. Oliva

Efficacy of topical diclofenac eplamine patch for treatment of musculoskeletal pain - **A. Forte (Salerno)**

High and low-molecular weight hyaluronic acids for the treatment of Osteoarthritis:

What's new? - **A. Frizziero (Padova)**

## AULA CILENTO SESSION PARALLEL SITOD "OPEN MIND AND NEW POTENTIALITIES FOR ESWT"

Chairman: E. Amelio, A. Notarnicola, M. C. Vulpiani

- 16:00 ESWT and self - healing: the present and new perspectives - **M. C. D'Agostino (Milano)**

16:10 ESWT in bone diseases - **S. Gigliotti (Napoli)**

16:20 ESWT in muscle - **A. Notarnicola (Bari)**

16:30 ESWT in tendinopathies - **M. Vetrano (Roma)**

16:40 **DISCUSSION**

## SESSION 7

### The Traumatic knee

Chairman: P. Farsetti, E. Pintore

- 16:30 Management of Floating Knee - **G. F. Trinchese (Napoli)**

16:40 Management of Knee Dislocation - **L. Panarella (Roma)**

16:50 Complex Fractures associated with soft tissue injuries - **V. Calvisi (L'Aquila)**

17:00 **DISCUSSION**

## AULA CILENTO PARALLEL SESSION BASIC SCIENCE 2 “ADVANCED TARGET AND CONTROLLED DELIVERY OF THERAPEUTICS FROM LAB TO BED SIDE”

Chairman: A. C. Berardi, F. Oliva, G. Della Porta

- 17:00 Liposomes: novel fabrication technology and perspective from drug delivery in orthopaedics - **P. Trucillo (Salerno)**
- 17:10 Musculoskeletal applications of liposomes technology - **L. Cipollaro (Salerno)**
- 17:20 Heat shock induces the expression of pro-inflammatory cytokines in human Achilles tendon tenocytes - **A. D'Addona (Salerno)**
- 17:30 Therapeutic potential of MicroRNA in tendon injuries - **L. Giordano (Salerno)**
- 17:40 MicroRNA in osteoarthritis physiopathology diagnosis and therapeutic challenge - **A. Oliviero (Salerno)**
- 17:50 **DISCUSSION**

## SESSION 8

### Training and Rehabilitation

Chairman: D. Falera, A. M. Forte, S. Rossi

- 17:10 The HIPSTER programme for rehabilitation after joint arthroplasty - **V. Guarino (Napoli)**
- 17:20 Tendinopathy - **D. Sessa (Salerno)**
- 17:30 Muscle Lesion - **C. S. Ramponi (Treviso)**
- 17:40 ACL - **M. C. Calabrese (Salerno)**
- 17:50 **DISCUSSION**

## SESSION 9

### Peripheral Nerve Ailments

Chairman: F. Esposito, G. Iaconetta

- 18:00 Diagnostic evaluation EMG - **G. Iaconetta (Salerno)**
- 18:10 Ultrasound - **M. Zappia (Napoli)**
- 18:20 Surgical procedures for drop foot - **N. Maffulli (Salerno)**
- 18:30 Upper Limb Nerve compression Syndrome - **G. Criscuolo (Salerno)**
- 18:40 **DISCUSSION**

21:00 **GALA DINNER**

Saturday, 1 December

## SESSION 10

### It is swollen! Should we stick a needle in it?

Chairman: G. Borsellino, P. Somma, A. Tucciarone

8:30

Synovitis - **C. Albeni (Roma)**

8:40

Recalcitrant swollen knees - **P. Moscato (Salerno)**

8:50

Management of blunt injury to the thigh. How I do it. - **A. Valent (Modena)**

9:00

DISCUSSION

## SESSION 11

### Bone Oedema

Chairman: S. Gatto, G. Maccauro, A. Toro

9:10

PEMS in bone oedema - **M.Fini (Bologna)**

9:20

Post-traumatic bone oedema - **A. De Carli (Roma)**

Systematic collection of clinical data: a web based registry for physical and rehabilitative medicine - **N. Maffulli (Salerno)**

9:55

DISCUSSION

## AULA CILENTO "PARALLEL SESSION SISPEC"

Chairman: A. Basile, E. Pintore

10:00

Os Trigonum Syndrome - **E. Tagliatela (Caserta)**

10:10

Luxation Of Lesser Toes: Percutaneous - **G. Lucattelli (Perugia)**

10:20

Treatment Of Morton's Neuroma - **O. Catani, F. Sergio, F. Zanchini (Napoli)**

10:30

Compartment Syndrome Of The Foot - **F. Barca (Modena)**

10:40

A New Mt-P1 Flexible Hinge Implant - **S. Fieschi (Verona)**

10:50

DISCUSSION

## WORKSHOP AGAVE

### "TENDINOPATHY: UPDATE ON DIAGNOSTIC AND THERAPEUTIC STRATEGY"

Chairman: Prof. N. Maffulli

10:00

Epidemiology, risk factors and diagnostic approach - **F. Oliva (Roma)**

10:10

Critic role of Nitric Oxide in hypoxic condition - **D. Tiso (Rimini)**

10:20

Impact of nutraceuticals to improve extracorporeal shock wave therapy effectiveness in the treatment of plantar fasciopathy - **M. Barazzuol (Mestre)**



10:40

## COFFEE BREAK

### SESSION 12

#### Tendinopathies around the Knee

Chairman: F. Bruno, F. Oliva, G. Di Rienzo

11:10

Distal Ileo tibial tendinopathy - **M. Vetrano (Roma)**

11:20

Pes Anserinus Tendinopathy - **V. De Luna (Roma)**

11:30

Quadriceps Tendinopathy- **F. Vittadini (Venezia)**

11:40

**DISCUSSION**

### AULA CILENTO “ PARALLEL SESSION SIA “ MINIMIZING ACL REINJURIES IN SOCCER

Chairman: A. Corsini, L. Moretti

12:00

I'm orthopedic: my point of view - **A. Russo (Enna)**

12:15

I'm radiologist: my point of view - **F. Di Pietto (Napoli)**

12:30

I'm team doctor: my point of view - **G. Nanni (Bologna)**

12:45

**DISCUSSION**

### SESSION 13

#### Shoulder fracture when Prosthesis

Chairman: N. Capuano, F. Lisanti, M. Spoliti

11:50

Shoulder prosthesis for failed osteosynthesis of Proximal humerus fractures - **M. Spoliti (Roma)**

12:00

Main causes of shoulder prosthetic dislocation - **F. Spiezia (Potenza)**

12:10

Management of Shoulder Prosthetic instability - **A. M. Romano (Napoli)**

12:20

**DISCUSSION**

### SESSION 14

#### Shoes and insoles

Chairman: J.Padulo, M. C. Vulpiani

12:30

From foot plantar pressure analysis to Insoles prescription - **L. Russo (L'Aquila)**

12:40

Shoes and insoles related to the motor task - **J. Padulo (Novredate)**

12:50

News on Insole - **M. D'Antuono (Roma)**

13:00

Scientific update on shoes: from daily life to sports and treatment - **M.Frezza (Napoli)**

13:10

**DISCUSSION**

13:30

## LUNCH

## SESSION 15

### Ankle instability what is new?

Chairman: L. Di Lorenzo, D. Notarfrancesco, F. Oliva

14:30

Chronic Syndesmosis Injuries - **A. Saxena (USA)**

14:40

Anterior Talofibular Ligament Reconstruction - **F. Treia (Roma)**

14:50

Deltoid ligament reconstruction - **C. Biz (Padova)**

15:00

Rehabilitation after ligament repair - **F. Forte (Salerno)**

15:10

**DISCUSSION**

15:20

### ISMULT & IBSA Foundation "Award 2018"

Chairman: B. Innocenti, N. Maffulli, F. Oliva, J. Padulo

## SESSION 16

### Mainlecture

Chairman: N. Maffulli

15:30

Evidence of Posterior lengthening for Equinus Deformity - **A. Saxena (USA)**

15:40

Prolotherapy: The evidence is mounting - **W. Murrell (UAE)**

## SESSION 17

### The aged patients fractured

Chairman: G. Lenza, N. Maffulli, B. Moretti

15:50

Decades of pharmacological treatment for osteoporosis: does it really help? - **F. Gimigliano (Napoli)**

16:00

Evidence based nails and plates for femur fractures - **A. Medici (Avellino)**

16:10

Sarcopenia and risk of fractures - **A. M. Martone (Roma)**

16:20

Balance and proprioception in aged patients - **A. Servadio (Roma)**

16:30

**DISCUSSION**

## SESSION 18

### Stiff shoulder

Chairman: G. Cotugno, A. M. Romano

16:40

Injection therapies - **C. Costantino (Parma)**

16:50

Calcific tendinopathy and stiff shoulder - **A. Gai Via (Milano)**

17:00

Scapular dyskinesia and stiff shoulder - **A. Frizziero (Padova)**

17:10

Frozen shoulder and stiff shoulder: same joint, much differences - **M. Vetrano (Roma)**

17:20

Proprioception training for management and prevention - **D. Creta (Bologna)**

17:30

**DISCUSSION**



## SESSION 19

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### Spastic muscle and botulinum toxin therapy

Chairman: L. Cannaviello, C. Cisari, P. Fiore

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17:40

Physiopathology and therapy of spasticity - **A. Santamato (Foggia)**

17:55

Rationale of botulinum toxin treatment for spasticity in adult patients - **L. Cannaviello (Salerno)**

18:10

Beyond botulinum toxin: post injection treatment and functional surgery - **A. Baricich (Novara)**

18:25

**DISCUSSION**

18:40

### **CLOSING REMARKS AND PRESENTATION OF ISMULT 2019**

Prof. N. Maffulli

## GENERAL INFORMATION

### Congress Venue

#### Grand Hotel Salerno - Auditorium Tafuri

Lungomare Clemente Tafuri 1, 84127 Salerno

### Official Language

Italian. Italian/English and vice versa simultaneous translation will be provided.

### Registration Fees

	I.S.Mu.L.T. Members	No members
Registration for physicians	€ 100 (VAT exempt)	€ 200 (VAT exempt)
Registration for other professionals	€ 60 (VAT exempt)	€ 110 (VAT exempt)
I.S.Mu.L.T. annual membership	€ 50 (12 months)	

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### Registration tool

Registration form must be completed online. It is available on [ismult.com/iscrizione.php](http://ismult.com/iscrizione.php)

Accepted payment methods available online.

### CME credits

11 CME credits will be available for Physician: rehabilitation medicine specialists, sportphysicians, surgeons, rheumatologists, orthopedics and traumatology specialists, orthopedists, radiologists, x-ray technicians, physiotherapists, nurse and physical educators.

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## **POSTER 2018**

### **ALDO FERRARI**

**L'impiego della ginocchiera Teno-dol® nel trattamento conservativo non farmacologico del dolore cronico del ginocchio. Primi risultati**

A. Ferrari, E. Cuciniello, A. Ganzu

### **LORENZO RIELA**

**Functional Movement Screen in football: a pilot study**

L. Riela, M. Muratore, J. Padulo

### **VITTORIA MARIA PATANIA**

**The benefits of the music on low intensity vs. high intensity exercise on RPE**

V. Patania, A. De Giorgio, L. P. Ardigò, R. Coppola, J. Padulo

### **EDOARDO BORI**

**Analysis of the passive ligament tension in natural knee: already 40 N are enough to achieve stability. A cadaveric biomechanical study**

E. Bori, M. G. Branni, M. Ledl, M. T. Birke, T. Paszicsnyek, B. Innocenti

**Development of an experimental set-up to characterize human articular cartilage**

E. Bori, J. C. Larrieu, J. Vanlauwe, T. Scheerlinck, B. Innocenti

### **GIOVANNI GALEOTO**

**Musculoskeletal Health Questionnaire: translation, cultural adaptation and validation of the Italian version (MSK-HQ-I)**

G. Galeoto, V. Piepoli, E. Ciccone, R. Mollica, J. Sansoni, A. Servadio

### **IDA PALAZZO**

**Supercritical Emulsion Extraction technology: a case study on PLGA/PLA micro/nano-carriers engineering for the controlled release of bio-actives**

I. Palazzo, M. C. Ciardulli, E. Reverchon, N. Maffulli, G. Della Porta

### **MARCO MICELI**

**Prime esperienze di imaging dinamico muscolo-scheletrico con apparecchiatura dedicata RM**

M. Miceli, D. Olimpi

### **MARIA CAMILLA CIARDULLI**

**hGDF-5 drives the tenogenic commitment of hBM-MSCs: a case study on a 3D multiphase scaffold with the cooperative effect of cyclic strain**

M. C. Ciardulli, L. Marino, I. Palazzo, J. LoVecchio, E. Giordano, C. Selleri, N. Maffulli, G. Della Porta

**MONICA MONICI**

**Pain control and protective effect of NIR laser therapy by MLS-Mis source in a rat model of compressive mononeuropathy: an in vivo and ex vivo study**

M. Monici, F. Cialdai, A. Pacini, J. J. V. Branca, L. Morbidelli, E. Lucarini, C. Ghelardini, L. Micheli, L. Di Cesare Mannelli

**DANILO RANIERI**

**An innovative amplification protocol to improve tendon regenerative potential of amniotic membrane derived cells**

A. Canciello, V. Russo, A. Mauro, O. Di Giacinto, M. Turriani, E. Mazzotti, A. Muttini, H. Sanyal, B. Barboni

**ANGELO CANCELLO**

**Surgical Achilles Tendon Tears Using Platelet-Rich Fibrin Matrices and conventional methods: An outcomes evaluation**

M. Mangone, A. Bernetti, F. Agostini, F. Alviti, V. Santilli

**ELEONORA MAZZOTTI**

**Effects of donor age on proliferation and differentiation potential of Synovial Fluid derived mesenchymal stem cells**

E. Mazzotti, F. Mastrangelo, F. Chiarini, A. Muttini, G. Teti

**FEDERICA LEPORE**

**La sindrome ischio femorale e gli esiti di fratture trocanteriche**

F. Lepore, S. Gatto, G. Toro, A. De Cicco, A. Toro, A. Schiavone Panni

**MOHAMMAD EL KHATIB**

**The Physical and Chemical Properties of Biopolymer Scaffolds Affect the Behavior of Amniotic Epithelial Stem Cells while Mimicking Tendon Extracellular Matrix**

M. El Khatib, V. Russo, M. Schnabelrauch, A. Mauro, P. Berardinelli, M. R. Citeroni, O. Di Giacinto, D. Nardinocchi, M. Turriani, M. Ancora, B. Barboni

**ROBERTO COPPOLA**

**Muscle strength, Physical exercise, Bodybuilding, Isotonic machine, Brzycki formula**

R. Coppola, F. Guerra, V. M. Patania, G. Penna, J. Padulo

**The Brzycki formula' optimization for the 1-RM calculation with isotonic machine in football player**

R. Coppola, J. Drago, V. M. Patania, G. Penna, J. Padulo

**Analysis of the effects of Dynamic Neuromuscular Stabilization technique on fitness training to develop postural stability**

R. Coppola, M. Teodora

## **The effects of the multicolor shoes on attention during basic football tasks in children**

R. Coppola, A. De Giorgio, B. Arnone, S. Costanzo, J. Padulo

### **DEBORA BURINI**

## **A morphological analysis of glenohumeral joint in patients affected by calcium pyrophosphate dihydrate crystal deposition disease**

D. Burini, S. Salucci, S. Burattini, F. Fardetti, V. Calvisi, A. Beccarini, P. Gob, E. Falcieri, D. Curzi

### **MARIA GALASSO**

## **Posture and vision**

M. Galasso, N. Di Stazio

### **GIOVANNI CAUTIERI**

## **Percutaneous medializing calcaneal osteotomy: our experience**

G. Cautiero, O. Catani, F. Sergio, F. Zanchini

### **CINZIA BONANNI**

## **Trattamento con onde d'urto nel morbo di Dupuytren: un'opzione terapeutica?**

C. Bonanni, S. Brunelli, M. Trallesi, C. Foti

### **KROCHMALSKI MAREK**

## **High ankle partial sprain arthroscopic treatment**

M. Krochmalski, J. Krochmalski

### **BIAGIO MORETTI**

## **La valutazione integrata, con test funzionali, elettromiografici e psicologici, per il ritorno in campo dopo la lesione del LCA**

L. Moretti, D. Bizzoca, I. Bortone, N. Caringella, M. Delmedico, B. Moretti

### **CARLO STEFANO RAMPONI**

## **Ratio between maximus gluteus strength and hamstring strength and correlation with muscle injuries in football players: a retrospective study**

C. S. Ramponi, D. Babameto

### **PAOLO TRUCILLO**

## **Liposomes: novel fabrication technology and perspective for drug delivery in orthopedics**

P. Trucillo, L. Cipollaro, N. Maffulli, G. Della Porta, E. Reverchon



**MARIA CRISTINA ZIELINSKI**

**Biomechanical analysis of gait disturbances in football, rugby players and skiers following anterior cruciate ligament reconstruction**

M. C. Zielinski ,R. Twycross Lewis, N. Maffulli, R. Woledge

**MARCO GOVONI**

**Innovative DBM moldable putty for the controlled release of antibiotics and osteoinductive molecules**

M. Govoni, G. Della Porta, A. Santoro, A. Oliviero, E. Reverchon, N. Maffulli, M. Fini, L. Vivarelli, G. Ruspaggiari, D. Dallari

**ANITA SOMMELLA**

**Valutazione ultra-sonografica di fascia plantare e tendine d'Achille ed impatto sulla performance del salto in atleti professionisti: studio di coorte**

A. Sommella, C. Curci, A. Palomba, A. Saponara, G. Iolascon, A. Forte

**ANNA KUNA**

**Complications of postoperative scar healing process cause pain and limit the range of motion of the knee joint**

A. Kuna, J. Krochmalski, M.Krochmalski

