

Facoltà di Medicina e Chirurgia Dipartimento di Scienze Mediche e Sanità Pubblica Corsi di Laurea Triennale in Scienze delle Attività Motorie e Sportive e Magistrale in Scienze delle Attività Motorie Preventive e Adattate

# 4<sup>th</sup> UNICA SPORT SCIENCE INTERNATIONAL CONFERENCE





# Final Programme





REGIONE AUTÒNOMA DE SARDIGNA REGIONE AUTONOMA DELLA SARDEGNA







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# **Final Programme**

4th UNICA SPORT SCIENCE INTERNATIONAL CONFERENCE Cagliari/Santa Margherita di Pula, Sardinia, Italy 25-27 June 2025

Organized by



Facoltà di Medicina e Chirurgia Dipartimento di Scienze Mediche e Sanità Pubblica Corsi di Laurea Triennale in Scienze delle Attività Motorie e Sportive e Magistrale in Scienze delle Attività Motorie Preventive e Adattate

Organization

### CHAIR[S] of the SCIENTIFIC and ORGANIZING COMMITTEES

### Filippo TOCCO and Myosotis MASSIDDA Department of Medical Sciences and Public Health University of Cagliari [ITALY]

### SCIENTIFIC COMMITTEE

Sebastiano BANNI [ITALY] Carla Maria CALO' [ITALY] Mauro CARTA [ITALY] Giovanna GHIANI [ITALY] Massimiliano PAU [ITALY]

### AWARDS Committee for the Oral Presentations

Carlo CASTAGNA [ITALY] Pawel CIESZCZYK [POLAND] Malcolm COLLINS [SOUTH AFRICA] Kinga HUMINSKA-LISOWSKA [POLAND]

### ORGANIZING COMMITTEE

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### AWARDS Committee for the Poster Presentations

Attilio CARRARO [ITALY] Susanna POVOAS [PORTUGAL] Diego PRIMAVERA [ITALY] Alison V. SEPTEMBER [SOUTH AFRICA]

# Invited Speakers - Wednesday, June 25th



Malcolm COLLINS Health through Physical Activity, Lifestyle and Sport Research Centre, University of Cape Town SOUTH AFRICA



Paweł CIESZCZYK Rector of Gdansk University of Physical Education and Sport Gdansk POLAND



Kinga HUMINSKA-LISOWSKA Gdansk University of Physical Education and Sport, Gdansk POLAND



Alison V. SEPTEMBER Deputy Director of Health Through Physical Activity and Sport Research Centre, University of Cape Town SOUTH AFRICA



Ildus AHMETOV Research Institute for Sport and Exercise Science Liverpool John Moores University, Liverpool UNITED KINGDOM

# Programme – Wednesday, June 25th

Congress Venue: Sala Congressi, Blocco I, Cittadella Universitaria di Monserrato

9.00 am Registration opens

2.45 pm Registration closes

3.00 pm Conference welcome to organizer and Greetings of the Authorities

**GENETICS SYMPOSIUM** 



Chair[s]:



Myosotis Massidda Department of Medical Sciences and Public Health, University of Cagliari ITALY Carla Maria Calò Department of Life and Environmental Sciences, University of Cagliari ITALY

#### 3.30 pm KEYNOTE LECTURE

Investigating the association of genetic markers, previously identified by Genome-wide association studies, with ACL rupture in multiple cohorts. Malcolm COLLINS, [SOUTH AFRICA]

#### 4.15 pm INVITED LECTURE

MMP1 rs1799750, MMP10 rs486055, and MMP12 rs2276109 polymorphisms and ACL rupture in physically active individuals. Pawel CIESZCZYK, [POLAND]

#### 4.45 pm INVITED LECTURE

Investigating the polygenic influence of variants within HSPG2, ITGB3, and ITGB2 on Anterior Cruciate Ligament Rupture risk across multiple international cohorts.

Alison V. SEPTEMBER, [SOUTH AFRICA]

#### 5.15 pm COFFEE BREAK

5.45 pm INVITED LECTURE

The genetic of muscle strength. Ildus AHMETOV, [UNITED KINDOM]

6.15 pm INVITED LECTURE The role of CFDNA and key cytokine polymorphisms in athletic potential. Kinga HUMINSKA-LISOWSKA, [POLAND]

6.45 pm CLOSING STATEMENT

7.00 pm AUDARYA Wine Testing (Activity reserved to Speakers, Authorities and Commettes Members)

# Invited Speakers and Chair[s] - Thursday, June 26th

#### **Invited Speakers**











Heather GIBSON University of Florida USA

Attilio CARRARO University of Bolzano ITALY

Carlo CASTAGNA Thelematic University of Pegaso, ITALY

Chair[s]:

Angelo GIANNUZZI Forte Village Resort, ITALY

Susanna POVOAS University of Maia, PORTUGAL



Filippo TOCCO Dept of Medical Sciences and Public Health University of Cagliari ITALY



Myosotis MASSIDDA Dept of Medical Sciences and Public Health University of Cagliari ITALY



Mauro CARTA Dept of Medical Sciences and Public Health University of Cagliari ITALY



Sebastiano BANNI Dept of Biomedical Sciences University of Cagliari ITALY



Paweł CIESZCZYK Gdansk University of Physical Education and Sport, Gdansk POLAND



Malcolm COLLINS Health through Physical Activity, Lifestyle and Sport Research Centre University of Cape Town, SOUTH AFRICA



Alberto CONCU AC Technology SRL Cagliari ITALY



Massimilano PAU Dept of Mechanical, Chemical and Materials Engineering University of Cagliari ITALY

# Programme – Thursday, June 26th

Congress Venue: Cristalli Hall, Forte Village Resort	
8.45 – 9.15 am Registration	
9.15 – 9.30 am Conference welcome to organizer	
9.30 - 10.00 am	INVITED LECTURE The multidimensional benefit of greenness exposure and outdoor activities. Attilio CARRARO [ITALY] Chair: Mauro Carta [ITALY]
10.00 - 10.30 an	n INVITED LECTURE Le Méthode Naturelle. Carlo CASTAGNA [ITALY] Chair: Filippo Tocco [ITALY]
10.30-11.20 am	OUTDOOR TRAINING & ACTIVE SPORT TOURISM Oral presentations Chair[s]: Alberto Concu, Myosotis Massidda, Filippo Tocco [ITALY]
11.20 – 11.50 am COFFEE BREAK – Cristalli Garden	
11.50-12.20 pm	INVITED LECTURE Alternative outdoors exercise concepts – feasibility, physiological demands and health effects. Susanna POVOAS [PORTUGAL] Chair: Filippo Tocco [ITALY]
12.20-12.50 am	INVITED LECTURE Active Sports Tourism in Sardinia and the winner philosophy e of a World's Leading Sports Resort. Angelo GIANNUZZI [ITALY] Chair: Myosotis Massidda [ITALY]
1.00 pm LUNCH BREAK, Cavalieri Restaurant	
3.00-3.30 pm	KEYNOTE LECTURE Active Sport Tourism. Heather GIBSON [FLORIDA] Chair[s]: Myosotis Massidda [ITALY], Filippo Tocco [ITALY]
3.30-4.00 pm	BIOMECHANICHS & PSYCHOLOGY Oral presentations Chair[s]: Massimiliano Pau [ITALY], Mauro Carta [ITALY]
4.00-4.30 pm	GENETICS & EPIGENETICS Oral presentations Chair[s]:Malcolm Collins [SOUTH AFRICA], Pawel Cieszczyk [POLAND]
4.30 pm COFFEE BREAK- Cristalli Garden	
Poster Area: 5.00-6.00 pm – POSTER SESSION, Cristalli Hall	
6.00-6.40 pm	TRAINING & TESTING AND EXERCISE MEDICINE & HEALTH Oral presentations Chair[s]: Alberto Concu, Myosotis Massidda, Filippo Tocco [ITALY]
6.40-7.20 pm	PHYSIOLOGY & NUTRITION Oral presentations Chair[s]: Sebastiano Banni [ITALY], Alberto Concu [ITALY]
7.45 pm CLOSING STATEMENT and AWARDS CEREMONY	

## Oral presentations – Thursday, June 26th

Congress Venue: Cristalli Hall, Forte Village Resort

10.30-11.10 am OUTDOOR TRAINING & ACTIVE SPORT TOURISM Chair: Alberto Concu, Myosotis Massidda, Filippo Tocco [ITALY]

10.30 FOIS ANDREA et al. [ITALY]

CARDIOMETABOLIC AND SYSTEMIC ADJUSTMENTS AFTER AN ENDURANCE SEA RACE IN ATHLETES DRIVING MOTORBOATS ELECTRICALLY POWERED BY GREEN ENERGY SOURCES.

10.40 PALMAS MARCO et al. [ITALY] [YIA]

MORPHO-FUNCTIONAL CHANGES IN A SKILLED KAYAKER DURING A MONTH OF DAILY PADDLING ALONG SARDINIA'S ISLAND COMBINING HEALTH BENEFIT FROM PADDLING WITH ACTIONS AIMED AT SAFEGUARDING THE COASTAL ENVIRONMENT.

10.50 GHIANI MARIA GIOVANNA et al. [ITALY]

ADVENTURE TOURISM: AN INTERESTING APPROACH TO BOOSTING PHYSICAL ACTIVITY LEVELS.

11.10 VACCA MATTEO [ITALY] [YIA]

THE SUPRAMONTE AS A NATURAL LABORATORY FOR GREEN EXERCISE AND NUTRACEUTICALS: A PILOT STUDY AND REVIEW OF SCIENTIFIC EVIDENCE.

11.20 – 11.50 am COFFEE BREAK, Cristalli Garden

1.00 pm LUNCH BREAK, Cavalieri Restaurant

3.30 – 4.00 pm BIOMECHANICHS & PSYCHOLOGY Chair[s]: Massimiliano Pau [ITALY] and Mauro Carta [ITALY]

3.30 ARIPPA FEDERICO et al. [ITALY] –[YIA] AN IMU-BASED METHOD FOR ESTIMATING DYNAMIC BALANCE.

3.40 GEP ZSUZSANNA et al. [HUNGARY] -[SIA] EFFECT OF WEEKLY YOGA PRACTICE ON ATTITUDES AND MENTAL HEALTH OF UNIVERSITY STUDENTS.

3.50 LODI MATTEO BRUNO [ITALY] - [YIA] SIGNAL ANALYSIS OF CW RADAR DATA ACQUIRED ON SUBJECTS WALKING ON A TREADMILL.

4.00-4.30 pm GENETICS AND EPIGENETICS Chair[s]: Malcolm Collins [SOUTH AFRICA], Pawel Cieszczyk [POLAND]

4.00 DE BERARDINI THOMAS et al. [ITALY] - [YIA] ASSOCIATION BETWEEN ACTN-3 c.1729C>T POLYMORPHISM AND SHORT LINEAR SPRINT PERFORMANCE IN YOUTH FEMALE VOLLEYBALL PLAYERS..

4.10 PROIA PATRIZIA et al. [ITALY] - [SIA] EXERCISE-RELATED EPIGENETIC CHANGES IN HUMAN BLOOD: INSIGHTS FROM ACTIVE AND SEDENTARY SUBJECTS.

4.20 FOIS FEDERICO et al. [ITALY] - [YIA] ASSOCIATION BETWEEN ACTN-3 c.1729C>T (rs1815739) POLYMORPHISM AND MATCH-PLAY MAXIMAL RUNNING SPEED IN ELITE FOOTBALL PLAYERS: A PRELIMINARY REPORT.

# Oral presentations – Thursday, June 26th

Congress Venue: Cristalli Hall, Forte Village Resort

4.30 – 5.00 pm COFFEE BREAK, Cristalli Garden

Poster Area: 5.00-6.00 pm POSTER SESSION, Cristalli Hall

6.00 pm -6.40 pm TRAINING & TESTING AND EXERCISE MEDICINE & HEALTH Chair[s]: Alberto Concu, Myosotis Massidda, Filippo Tocco [ITALY]

6.00 DZITKOWSKA ZABIELSKA MAGDALENA et al. [POLAND] –[SIA] THE ROLE OF COPEPTIN IN CARDIOVASCULAR RISK FOR ACTIVE SENIORS.

6.10 MULLIRI GABRIELE et al. [ITALY] PRELIMINARY DATA ON THE EFFECT OF NORMOBARIC HYPOXIA ON CARDIOPULMONARY EXERCISE TEST PARAMETERS IN MALE AND FEMALE AMATEUR ATHLETES.

6.20 LUBKOWSKA BEATA et al. [POLAND] -[SIA] MICROBIOLOGICAL ASSESSMENT OF FEET AND PATHOGEN RISK FOLLOWING INTENSIVE RUNNING EXERCISE.

6.30 PERRA GIOVANNI et al. [ITALY] - [SIA] EFFECT OF ENDURANCE TRAINING ON CARDIORESPIRATORY RESPONSE TO EXERCISE UNDER HYPOXIC CONDITIONS.

6.40-7.20 pm PHYSIOLOGY & NUTRITION Chair[s]: Sebastiano Banni [ITALY], Alberto Concu [ITALY]

6.40 LAI ALESSANDRO et al. [ITALY] - [YIA] SEX DIFFERENCES IN THE IMPACT OF PHYSICAL ACTIVITY ON ARTERIAL STIFFNESS.

6.50 RUGGIU MICHELE et al. [ITALY] - [YIA] POWER WEIGHT RATIO AND MAXIMAL FAT OXIDATION: ANALYSIS ON HEALTHY ADOLESCENTS AGED 15 TO 17.

7.00 FANNI MASSIMO et al. [ITALY] - [YIA] RESULTS ON THE EFFECTS OF EXERCISE AND MENTAL STRESS UNDER CONCURRENT ACUTE NORMOBARIC HYPOXIA ON PULMONARY GAS EXCHANGE KINETICS.

7.10 MURRU ELISABETTA et al. [ITALY] IDENTIFICATION OF CIRCULATING MARKERS OF ACUTE AND LONG-TERM FAT UTILIZATION CAPACITY.

7.45 pm CLOSING STATEMENT and AWARDS CEREMONY

### Poster presentations – Thursday, June 26th

Congress Venue: Cristalli Hall Poster Area, Forte Village Resort

Chair[s]: Alison V. SEPTEMBER [SOUTH AFRICA], Attilio CARRARO [ITALY], Susanna POVOAS [PORTUGAL], Diego PRIMAVERA [ITALY]

Poster Area 3: 5.00-6.00 pm - POSTER SESSION

5.00 MACULEVICZ EVELINA et al. [POLAND] - [SIA], Position n.1 Topic: Genetics & Epigenetics (GE) THE RELATIONSHIP BETWEEN MCT2 RS3763979 AND THE KINETICS OF BLOOD LACTATE PRODUCTION AND REMOVAL AFTER HIGH-INTENSITY EFFORTS.

5.05 BOJARCZUK ALEKSANDRA al. [POLAND] -[SIA], Position n.2 Topic: Genetics & Epigenetics (GE) THE RELATIONSHIP BETWEEN THE PPARGC1A GENE POLYMORPHISM RS8192678 AND THE KINETICS OF BLOOD LACTATE PRODUCTION AND REMOVAL AFTER HIGH-INTENSITY EFFORTS.

5.15 DELL'OSA ANTONIO et al. [ARGENTINA], - [YIA], Position n.3 Topic: Sports and Exercise Medicine & Health (MH) CARDIOVASCULAR ADJUSTMENTS OCCURRING IN SUBJECTS FLOATING IN A POOL WITH HIGHER TEMPERATURE WATER AND INCREASED HYDROSTATIC THRUST.

5.20 PANI CHIARA [ITALY] - [YIA], Position n.4 Topic: Sports and Exercise Medicine & Health (MH) HANDGRIP STRENGTH, BODY COMPOSITION AND EXPLOSIVE STRENGTH: ANALYSIS IN HEALTHY ADOLESCENTS AGED 15-17.

5.30 FRAU FEDERICA et al. [ITALY] - [YIA], Position n.5 Topic: Training and Testing (TT) VALIDITY AND RELIABILITY OF THE SIX-MINUTE WALK TEST IN HEALTHY ADOLESCENTS

5.35 BICHOWSKA-PAWESKA MARTA [POLAND] - [SIA], Position n.6 Topic: Training and Testing (TT) THE ACUTE EFFECT OF BLOOD FLOW RESTRICTION OR ISCHEMIA ON COUNTERMOVEMENT JUMP PERFORMANCE.

5.40 PORCEDDU FRANCESCO [ITALY] - [YIA], Position n.7 Topic: Training and Testing (TT) THE RELIABILITY OF THE DICK TABLE FOR PREDICTING ATHLETIC PERFORMANCE TIMES.

5.45 ABISSINI MATTIA [ITALY] - [YIA], Position n.8 Topic: Training and Testing (TT) DIFFERENCES IN PHYSICAL FITNESS VARIABLES BETWEEN COMPETITIVE MALE AND FEMALE TENNIS PLAYERS.

5.50 GAIA LIGAS [ITALY] - [YIA], Position n.9 Topic: Training and Testing (TT) SPRINT MECHANICS ASSESSMENT SCORE (S-MAS) IN THE ANALYSES OF TRACK AND FIELD SPRINT PERFORMANCE: A METHOD TO PREVENT INJURIES.

# Activities on the field- Friday, June 27th

Congress Venue: : Batteria Boggio, Località Nora – Su Guventeddu, PULA

WORKSHOP: ORIENTEERING COMPETITION Chair[s]: GIUSTO DE COLLE [FISO],

ANDREA MENTASTI [Forte Village Resort], DARIO CARBINI [Sardegna Ricerche]

9.00 – 9.20 am Registration

9.20 – 9.30 am Conference welcome to organizer

9.30 - 10.00 am Briefing for the Competition

10.00-12.00 pm Orienteering Competition

12.00-12.30 pm Analyses of the Competition results

12.30-13.00 pm Winners Awards

Congress Venue: Forte Village Resort

WORKSHOP: FORTE VILLAGE SPORTS ACADEMIES TOUR (Activities reserved to Conference's Speakers and Members of the Scientific and Organizing Commitees) Chair: ANGELO GIANNUZZI [Forte Village Resort]

3.00 – 3.15 pm Registration

3.15 – 3.30 pm Conference welcome to organizer

**STATION 1: BOXING** 3.30-4.00 pm Frank Buglioni Boxe Academy **STATION 2: FENCING** 4.00-4.30 pm Valentina Vezzali Fencing Academy **STATION 3: FOOTBALL** 4.30-5.00 pm Fundacion Real Madrid Clinic Football Academy STATION 4: STATION 2: BASKETBALL 5.00-5.30 pm Olympia Milano Football Academy EA7 STATION 5: TENNIS by HEAD 5.30-6.00 pm Rocco Loccisano Tennis Academy

Congress Venue: FRONTEMARE, Quartu Sant'Elena (Cagliari).

7.45 pm CONFERENCE SOCIAL DINNER

11.00 pm USSIC NIGHT PARTY

Headquarter hotel of USSIC 2025







# Congress Venues

SALA CONGRESSI Blocco I, Cittadella Universitaria di Monserrato SS 554, Bivio Sestu, 09042 Monserrato (CA)



June 25th

FORTE VILLAGE RESORT Località Santa Margherita di Pula, SS 195, km 39.600 09050 Pula (Sardegna)





June 26th



June 27th

# Main partners



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# See you at



Conference Social Dinner and USSIC Night Party, *Friday June 27th* 

(Reservation required)



Viale Lungomare del Golfo 150, 09045, Quartu Sant'Elena , Sardegna Italia



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