

Carlo CAPELLI, M.D.



Curriculum vitae et studiorum

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1. Personal data

First and family name Carlo CAPELLI

Place and date of birth Milan, February 26th, 1959

Nationality Italian

Civil status Married to Stefania MILESI, MD, anaesthesiologist;
One child, Iacopo, born on July 1st, 1998.

Address (home) Via Sasse 18, 37132, Verona, Italy
tel: 045 973857; +39 347 2385589 (mobile)

2. Present professional position School of Exercise Sciences, University of Verona, Via Felice Casorati, 43, 37131, Verona, tel +39 045 8425140, fax +39 045 8425131, Department of Neurosciences, Biomedicine and Movement.
January 2015 – September 2019: On-leave, full professor of physiology at the Norwegian School of Sport Sciences, Dept of Physical Performances, Oslo, Norvegia. tel +39 045 8425140, fax +39 045 8425131, e-mail: carlo.capelli@univr.it; carlo.capelli@mac.com; e-mail: carlo.capelli@univr.it; carlo.capelli@mac.com.

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ORCID: 0000-0002-3278-1337

Mother tongue Italian

Military service 1985 – 1986: Scouts, Alpine troops, Courmayeur (Aosta), Italy.

Personal interests: Sailing, member of the yachting club “Società Velica di Barcola – Grignano”, Trieste.

3. Education

1978: Classical Liceum Milano, 1978 with 60/60 (highest possible grade).

1980, 1984: Human Physiology Internal Student University of Milan, Istituto di Fisiologia Umana, School of Medicine, University of Milan, Via Mangiagalli 32, 20100 Milano, Prof. Arsenio Veicsteinas.

1982: Internal Student in Clinical Medicine, School of Medicine, University of Milan, Prof. Dario Conte.

1984: University of Milan, School of Medicine and Surgery, Graduated on October 1984 with 110/110 Cum Laude defending the experimental thesis: "Chemoreflexogenic control of ventilation in elite alpine climbers", Tutor Prof. Citterio.

1985: Scholar at the course on "Biomechanics on Motion"; International Center for Mechanical Sciences (Udine, Italy).

1989, Scholar at the course "Mikrotel Seminar", ESA – IRS, March 1989, Frascati, Italy.

1990, Scholar at the residential course "La fatica Muscolare e neuronale. Fattori Biochimici, Metabolici e Neurofisiologici", March 1990, Como, Italy.

1990, Student of the training course for "Labview 2", a software for data acquisition and analysis, May 2 – 4, Padua, Italy;

1991, Student of the International Summer Course of Calorimetry, Respirometry and Biological Energetics, 21 Luglio – 3 Agosto, 1991, Innsbruck, Austria.

1996, Post Graduate School of Sports Medicine, University of Milan discussing the experimental thesis "The energy cost of

swimming over short distance competitions”, Relatore Prof. G. Miserochi.

1998, BLS (Basic Life Support course: final performance 88%, written test: 12 / 12.

1999: Scholar of the “3rd European Practicum on Clinical Exercise Testing” September-October 1999, Ist.o di Scienza dell Sport, Roma, Director: K. Wassermann, President: R. Belardinelli.

Foreign languages

Italian (mother tongue), English (TOEFL 600), Ancient Latin and Greek (orientation on the text)

4. Professional and scientific training

1986 – 1988: sport medicine doctor at “Marathon Sport Medical Center”, Via Creta 56/d, 25125 Brescia, Italy.

October 1984 – March 1985: Member of the University of Geneva (Switzerland) Study Group on Biomechanics and Bioenergetics of Cycling at sea Level, (Milan, Italy), and Altitude (Alto Irpavi, La Paz, Bolivia), working with Prof. Pietro Enrico di Prampero, Geneva, CH.

1985 – 88, official medical doctor of the Italian Sky Federation (team biathlon).

1.12.1988 – 31.8.2000: research – teaching assistant Dipartimento di Scienze e Tecnologie Biomediche, University of Udine

July 1990: Participant to the X Parabolic Flights Campaign of ESA at Bretigny s. Orge, F (Project: Life Science Experiments: P.Is. Prof. D. Linnarsson, Stockholm, Prof. J. Karemaker, Amsterdam and P.E. di Prampero, Udine.

January 1993: Department of Physiology (host Pr. Pendergast) performing experiments on Biomechanics and bioenergetics of swimming in the Environmental Physiology Unit of the State University of New York at Buffalo, USA.

October 1993 – April 1994: appointed Assistant Research Professor at the

Department of Physiology of the State University of New York at Buffalo, USA where he performed experiments on the bioenergetics and on the performance analysis of swimming.

1993 – 1995: co-investigator in Human Physiology experiments to be done during EUROMIR 1994 (EXP 51 – I) and 1995 (EXP PHY – 34 – I) missions at Star City, Moscow.

1995 – 1997: co-investigator of the E407 experiments on the effects of space flight on biomechanics of human muscles selected by NASA to fly on the LMS Shuttle mission STS 78, L. Johnson Space Center, Huston, Texas, USA.

June – August: 1995: co-investigator of a 17 days Bed-Rest Study performed at the Human Reserch Facility Unit of the Ames res. Center, Mountain V., California, USA.

July 2000: Appointed as associate professor in human physiology at the School of Medicine, University of Udine.

2000 – 2006 Associate professor of human physiology at the Department of Biomedical Sciences, School of Medicine, University of Udine, Italy.

2000 – 2006: Director of the post graduate School of Sports Medicine, School of Medicine, University of Udine, Italy.

2001 – 2003. Principal investigator of the study *Cardiovascular consequences of short-term bed rest in humans* organised in the ESA-DLR experimental campaign STBR-IP (Short term bed rest.integrative physiology) at “DLR-Institute of Aerospace Medicine Space Physiology”, Cologne, Germany.

September 2004 – January 2005: Co-investigator of the experimental campaign “*Effects of gravity acceleration on oxygen uptake during exercise in humans*”, PI Dr. G. Ferretti (Ginevra, CH), Co.i Dr. D. Linnarsson, Karolinska Inst. Stoccolma, under the appointment of the European Space Agency.

Member of the National Medical Board of the Italian Sailing Federation (FIV) from 2004 to 2012.

July 2008 – August 2008: Co-investigator of the experimental campaign “*Cardiovascular determinants of maximal oxygen consumption after bed rest: a comparison of upright and supine posture*”, under the appointment of the Italian Space Agency, Ankaran, Slovenia.

April 2010 – September 2010: Co investigator of the experiment *Determinants of bed rest induced deterioration of neural cardiovascular regulation and implication for countermeasures: role of the arterial and cardioventilatory components of the baroreflex, of muscular afferents, and of arterial modifications.*, Toulouse, France, PI. Prof Massimo Pagani, University of Milan, Italy

5. Scientific Activity

Main fields of research

Human locomotion and best performance prediction in humans;
Exercise physiology;
Muscle oxidative metabolism during exercise
Mechanisms of physiological adaptations to microgravity in humans.

Programming languages

Microsoft MS-DOS
Apple Inc MacOS
Labview, National Instr.
BASIC

Softwares

Office Suite (Microsoft Corp)
SYSTAT (Systat Inc)
StatView (SAS Institute Inc)
NIH Image (NIH)
LabView (National Instruments)
Graph III (Cricket Software)
DeltaGraph5 (Pantone)
XLSTAT2009 (addinsoft Corp)
Prism (GraphPad)

Editorial activity

Occasional reviewer of
European Journal of Applied Physiology;
Journal of Applied Physiology;
International Journal of Sports Medicine;

Pflügers Archive (European Journal of Physiology);
Journal of Physiology (London)
Journal of Science and Medicine in Sport
Medicine and Science in Sport and Exercise
British Journal of Sport Medicine
Acta Physiologica
American Journal of Physiology
Scandinavian Journal of Medicine & Science in Sports
International Journal of Sport Physiology and Performance
Respiration Physiology and Neurobiology
Lung
PlosONE
Journal of Biomechanics
Applied Physiology, Nutrition and Metabolism
Settembre 1999: membro del comitato editoriale de *The Journal of Sports Medicine and Physical Fitness*, Roma.
Swedish National Space Board (SNSB)
Swiss National Science Foundation (SNSF)
National Institute for Academic Anaesthesia (NIAA, UK)
February 2015: Member of the advisory board of *Sport Sciences for Health*, Springer

Grants and Scholarships

ASI (Italian Space Agency)– Ricerca Scientifica 2000 I/R/171/1, 25 k€.
Regional research funds FVG 2000 L.R. 3/98, 10 k€.
Italian Space Agency (ASI) – Ricerca Scientifica 2001 I/R/300/02, 50 k€.
ASI-DCMC Contract # PR-DCMC-GO-1B133-003 and PR-DCMC-GO-1B127-003, 85.0 k€.
PRIN (Research Programme of Relevant National Interest) 2007: sub unit project “Effect of heavy exercise training on cardiopulmonary responses, gas exchanges and muscular oxygen extraction in CHF patients during exercise”, 33 k€
2007-2009: PACIS activity in the contest of the project “Disorders of the human movement” financed by the Charity CARIVERONA, 110 k€.
2011, European Space Agency MAP, main Contractor Prof. P. Tesch, Ostersund

University, Sweden, Sub project “Cardiovascular and skeletal muscle responses to chronic concurrent exercise using flywheel technology in old men”, 100 k€.

Scientific Societies

Italian Physiological Society, from 1994.
American College of Sports Medicine, from 1995.
European College of Sport Science, from 1996.
Istituto Nazionale Biostrutture e Biosistemi, from 1996.
American Association for the Advancement of Science, from 1995
International Human Powered Vehicle Association from 1997
New York Academy of Sciences, from 1999.
American Physiological Society, from 2006.
Italian Institute of Myology, from 2005.

6. Teaching activity

1988 – 1993: Teaching assistant of human physiology.

1993: Teacher at the “9th Lecture Course on *Biophysics and Molecular Biology MUSCLE CONTRACTION FROM CROSS BRIDGES TO HUMAN LOCOMOTION*”, July 4-10, 1993, Cividale del Friuli (Udine, Italy).

a.a. 1993 – 1999: Professor of Applied Physiology at the School of Medicine, University of Udine, Italy.

1998 – 2006: Professor of Human Physiology in the University Course per “Tecnico Sanitario di Laboratorio Biomedico e di Radiologia Medica.

2000-2006: Professor of human physiology in the course “Functional basis of the organism”, School of Medicine, University of Udine, Italy.

2006-: Professor of Sports Physiology, School of Exercise and Sport Sciences, University of Verona, Italy.

2006- professor of Human and General Physiology, School of Exercise and Sports Sciences, University of Verona, Italy.

2015 – 2019: Professor of Physiology, Dept. of Human Performances, Norwegian School of Sport Sciences, Oslo, Norway.

1997 – Tutor in the preparation of the thesis “Un Modello Matematico della Bioenergetica Muscolare”, School of Computer Science, University of Udine, Dr. Daniele Terdina.

1998 – Tutor in the preparation of the thesis “Scambi gassosi ed adeguamenti cardiovascolari all’inizi del lavoro muscolare”, School of Medicine, University of Udine, Dr. S. Zacchini.

1999 – Tutor in the preparation of the thesis “Cinetica degli scambi gassosi all’inizio del lavoro muscolare: confronto di due metodi per la sua determinazione respiro per respiro “, School of Medicine, University of Udine, Dr. A. P. Beltrami.

2000 – Tutor in the preparation of the thesis “Dispendio Energetico e Fonti Energetiche di un Interval Training di Judo”, Post-graduate School of Sports Medicine, University of Udine, Dr Alessandro Colò.

2001 – Tutor in the preparation of the thesis “Profilo Fisiologico ed Antropometrico del Calciatore di Elite”, Post-graduate School of Sports Medicine, University of Udine, Dr. Livia Aita.

2002 – Tutor in the preparation of the thesis “Valutazione predimissioni del paziente con infarto miocardico non complicato”, School of Medicine, University of Udine, Dr. Gaetano Nucifora.

2000 - 2003 – Tutor in the preparation of the PhD thesis “Un Nuovo metodo per la

determinazione del Ricambio Gassoso Alveolare Respiro per Respiro”, Dr. Ing. Michela Cautero, PhD Programme in Biomedical and Biotechnological Sciences, Dep.t of Biomedical Sciences, University of Udine, Italy

2003 - Tutor in the preparation of the thesis “Effetto dell’esercizio muscolare sulla cinetica degli scambi respiratori e della gettata cardiaca”, School of Medicine, University of Udine, Dr Paola Baracchini.

2003 Tutor in the preparation of the thesis “Accumulo di lattato nel corso di esercizio sottomassimale: effetti del disallenamento e del bed rest”, Graduation in Motor Science, Riccardo Muzzi.

2003 – Tutor in the preparation of the thesis “Ricostruzione del legamento crociato anteriore nello sportivo: trattamento riabilitativo e criteri gestionali., Post-graduate School of Sports Medicine, University of Udine, Dr. Paolo Magrin.

2004 - Tutor in the preparation of the thesis “Determinazione del $V'O_{2max}$ in una popolazione studentesca: confronto tra i dati di laboratorio e dati ottenuti su campo”, Graduation in Motor Science, Dr Francesco Grazzina.

2004 - Tutor in the preparation of the thesis “Bioenergetica dell’esercizio intermittente: possibili applicazioni pratiche”, Graduation in Motor Science, Dr. Angela Bianchi.

2004 – Tutor in the preparation of the thesis “Il costo energetico del nuoto in atleti di gran fondo d’élite”, Post-graduate School of Sports Medicine, University of Udine, Dr. Alessandro Milan.

2003 – 2005 - Tutor in the preparation of the PhD thesis “Effects of simulated microgravity on human cardiopulmonary system in during exercise” Dr. Enrico Tam,

PhD Programme in Biomedical and Biotechnological Sciences, Dept. of Biomedical Sciences, University of Udine, Italy.

2006 – 2009 - Tutor in the preparation of the PhD thesis of Dott. Alessandra Adami “Alveolar gas exchange kinetics in humans during moderate and supra-maximal intensity exercise”, PhD Programme in Science of Physical Exercise and Human Movements, Dept. of Neurological and Vision Sciences, University of Verona, Italy.

2006 – 2009 - Tutor in the preparation of the PhD thesis of Dott. Luca Plaino “Utilization of GPS systems for estimating energy cost and expenditure during human locomotion”, PhD Programme in Biomedical and Biotechnological Sciences, Dept. of Biomedical Sciences, University of Udine, Italy.

2005 – 2009 - – Tutor in the preparation of the PhD thesis of Dott. Valeria Marconi nel XXIII Cycle of PhD: “Energy cost of locomotion and cardiovascular responses in children with cerebral palsy”, Dottorato in Scienze dell’Esercizio Fisico e del Movimento Umano, Dip.to di Scienze Neurologiche, Neuropsicologiche, Morfologiche e Motorie, Università degli Studi di Verona.

2006 - 2009 – Tutor in the preparation of the PhD thesis of Dott. Davide Conte nel XXIV Cycle of Ph: “MUSCLE MECHANICAL WORK IN WALKER-ASSISTED LOCOMOTION: INSTRUMENTATION AND MODELLING FOR AN INTEGRATED GAIT ANALYSIS IN CEREBRAL PALSY, Dottorato in Scienze dell’Esercizio Fisico e del Movimento Umano, Dip.to di Scienze Neurologiche, Neuropsicologiche, Morfologiche e Motorie, Università degli Studi di Verona.

2012 - 2015 – Tutor in the preparation of the PhD thesis of Dott. Dott. Paolo Bruseghini nel XXVII Ciclo di dottorati nella preparazione della tesi dal titolo “CARDIOVASCULAR AND SKELETAL MUSCLE RESPONSES TO CHRONIC CONCURRENT EXERCISE USING HIT AND FLYWHEEL TECHNOLOGY IN OLDER ADULTS, Dottorato in Scienze dell’Esercizio Fisico e del Movimento Umano, Dip.to di Scienze Neurologiche e Motorie, Università degli Studi di Verona.
2016: Human Physiology, 15 CFU, Norwegian School of Sport Sciences, Undergraduate course; lectures for master Students;

2016 – 2020: Co-supervisor of a PhD project entitled The importance of muscular adaptations for oxygen delivery and oxygen uptake, candidate Øyvind Skattebo, NIH. Oslo

7. Organizing activity

Member of the scientific organizing committee of the “9th Lecture Course on Biophysics and Molecular Biology MUSCLE CONTRACTION FROM CROSS BRIDGES TO HUMAN LOCOMOTION”, July 4-10, 1993, Cividale del Friuli (Udine, Italy).

Member of the scientific organizing committee of the Course “Biomeccanica e Bioenergetica della Marcia e della Corsa ne Soggetto Sano e nel Portatore di Protesi d’Anca o Ginocchio”, organized by C.I.S.M, Udine, 25 –27 November, 1998.

Member of the scientific organizing committee of the School of Physiology and Biophysics of the Italian Physiological Society “Physiology of Human Locomotion” Rovereto (TN, Italy) September 2001.

Member of the organizing committee of the 2nd Congress on Mountain, Sport & Health, Rovereto (TN), Italy, November 2005.

2006-: Member of the Scientific Board of the Research Center CEBISM, University of Trento, Italy.

Member of the organizing committee of the 3rd Congress on Mountain, Sport & Health, Rovereto (TN), Italy, 12-14 November 2009.

-Member of the local organizing committee, 63rd National Congress of the Italian Physiological Society, September 21-23 2013, Verona, Italy.

Member of the organizing committee of the 5th Congress on Mountain, Sport & Health, Rovereto (TN), Italy, December 29-31 2013.

Member of the Programme Committee of Biodevices/Biostec 2016, February 21-23 2016, Rome, Italy

Member of the Programme Committee di Biodevices/Biostec 2017, 21-23 February, 2017, Porto, Portugal

Member of the Programme Committee di Biodevices/Biostec 2018, 19 - 21 January, 2018, Madeira, Portugal

Member of the Programme Committee di Biodevices/Biostec 2019, 22 - 24 February, 2019, Prague, Czech Republic

Member of the Programme Committee di Biodevices/Biostec 2020, 24 - 26 February, 2020, Valletta, Malta.

8. Activity in academic board

2000 – 2006: Member of Board for promoting Students International exchanges, School of Medicine, University of Udine. Italy

2000 – 2007: Director of the post graduate school of Sports Medicine, School of Medicine, University of Udine, Italy.

2000 – 2006: Faculty member of the PhD Course in Biomedical Sciences, Department of Biomedical Sciences, University of Udine, Italy.

2000 – 2006: member of the Committee for promoting the sports activities of the University of Udine, Italy.

2006- Faculty member of the PhD course in Sciences of Human Exercise and Movement, University of Verona, Italy.

2008-: Member of the Board of The PhD School in Biomedical Translational Sciences, University of Verona, Italy

2008 - 2013: member of the University Board (Senato Accademico) of the University of Verona , Italy, as representative of the full professors of the School of Sports and exercise Sciences.

2008 – 2013: member of the Permanent Board of Research of the University of Verona, Italy.

2010: Member of the Scientific Board of the Research Center of the University of Verona, CERiSM (Rovereti, TN, Italy), Vice Director of CERiSM.

2013: Coordinator of the PhD Course in Exercise and Movement Sciences, University of Verona

8. LIST OF PUBLICATIONS

H INDEX 27; SUM OF TIMES CITED; 2066; AVERAGE CITATIONS PER ITEM 17.7. FROM WEB OF SCIENCE, ACCESS ON APRIL 25TH 2020

1) JOURNALS WITH EDITORIAL BOARD

1. Negrini D, **Capelli C**, Morini M e Miserocchi G. Gravity dependent distribution of parietal subpleural interstitial pressure. *J. Appl. Physiol.*, 63: 1912 - 1918, 1987. (#citations WOS: 21, IF 2018: 3,256)
2. **Capelli C**, Donatelli C, Moia C, Valzer C., Rosa G. e di Prampero PE. Energy cost and efficiency of sculling a Venitian gondola. *Eur. J. Appl. Physiol.*, 60: 175 - 178, 1990. (#citations WOS: 8, IF 2018: 2,401).
3. Brueckner. JC, Atchou G, **Capelli C**, Duvallet A, Barrault D, Jousselin E, Rieu M e di Prampero PE. The energy cost of running increases with the distance covered. *Eur. J. Appl. Physiol.*, 62: 385 - 389, 1991. (#citations WOS: 69, IF 2018: 2,401).
4. **C. Capelli** e P. E. di Prampero. Maximal explosive power and aerobic exercise in humans. *Schweiz. Ztschr. Sportmed.* 39: 103-111, 1991 (#citations WOS: 4).
5. Antonutto G, **Capelli C** e di Prampero P.E. Pedalling in space as a countermeasure to micro - gravity deconditioning. *Microgravity Quart.*, 1: 93 - 101, 1991. (#citations WOS: 17)
6. Zamparo P, **Capelli C** e Antonutto G. Blood Lactate during leg exercise in micro - gravity. *Acta Astronautica* , 27: 61 - 64, 1992. (#citations WOS: 4, IF 2018: 2,227)
7. **Capelli C**, Antonutto G, Zamparo P, Girardis M e di Prampero PE. Effects of prolonged cycloergometric exercise on maximal power and oxygen

- uptake on humans. *Eur. J. Appl. Physiol.* , 66: 189 - 195, 1993. (#citations WOS: 26, IF 2018: 2,401)
8. di Prampero PE, **Capelli C**, Pagliaro P, Antonutto G, Girardis M e Zamparo P. Energetics of best performances in middle distance running. *J. Appl. Physiol.*, 74: 2318 - 2342, 1993. (#citations WOS: 151, IF 2018: 3,256).
 9. **Capelli C**, Rosa G, Butti F, Ferretti G, Veicsteinas A e di Prampero PE. Energy cost and efficiency of riding "Aerodynamic Bicycles". *Eur. J. Appl. Physiol.*, 67: 144 - 149, 1993. (#citations WOS: 62, IF 2018: 2,401).
 10. Antonutto G., Girardis M, Tuniz D, Petri E e **Capelli C**. Assessment of cardiac output from non-invasive determination of arterial pressure profile in subjects at rest. *Eur. J. Appl. Physiol.* , 69: 183 - 188, 1994. (#citations WOS: 12, IF 2018: 2,401).
 11. **Capelli C**, Zamparo P, Cigalotto A, Francescato MP, Soule RG, Termin B, DR Pendergast e di Prampero PE. Bioenergetics and biomechanics of front crawl swimming. *J. Appl. Physiol.*, 78: 674 - 679, 1995. (#citations WOS: 39, IF 2018: 3,256)
 12. Minetti AE, **Capelli C**, Zamparo P. di Prampero PE e Saibene FB. Effects of speed and stride frequency on mechanical power and energy expenditure of walking. *Med. Sci. Sports Exer.*, 27: 1194 - 1202, 1995. (#citations WOS: 93, IF 2018: 4,291)
 13. **Capelli C** e di Prampero PE. Effects of altitude on top speeds during 1 hour unaccompanied cycling. *Eur. J. Appl. Physiol.*, 71: 469 - 471, 1995. (#citations WOS: 13, IF 2018: 2,401)
 14. Antonutto G., **Capelli C**, Girardis M, Zamparo P e di Prampero PE. Effects of micro - gravity on muscular explosive power of the lower limbs in humans. *Acta Astronautica*, 36: 8 - 12, 1995. (#citations WOS: 11, IF 2018: 2,227).

15. Zamparo P, **Capelli C**, Termin B, DR Pendergast e di Prampero PE. Effect of the underwater torque on the energy cost, drag and efficiency of front crawl swimming. *Eur. J. Appl. Physiol.* 73: 195 - 201, 1996. (#citations WOS: 32, IF 2018: 3,256)
16. Zamparo P, Antonutto G, **Capelli C**, Francescato MP, Girardis M, Sangoi R e Soule RG. Effects of body size, body density, sex and growth on the underwater torque. *Scand J Med Sci Sports.*, 6: 273 - 280, 1996. (#citations WOS: 42, IF 2018: 2,410).
17. Zamparo P, Sepulcri L, Antonutto G, Girardis M, **Capelli C** e di Prampero PE. Effects of elastic recoil on maximal explosive power of the lower limbs. *Eur. J. Appl. Physiol.*, 75: 289 - 297, 1997. (#citations WOS: 15, IF 2018: 3,256)
18. Zamparo P, **Capelli C**, Pagliaro P, De Luca G, Pertoldi S, Saccavini M e di Prampero PE. Quantitative evaluation of the Myotatic Reflex in Hemiplegic and Paraplegic patients. *Adv. Clin. Path.*, 1: 49 - 57, 1997.
19. **Capelli C**, Schena F, Zamparo P, Dal Monte A, Faina M e di Prampero PE. Energetics of best performances in track cycling. *Med. Sci. Sports Exer.*, 30: 614 - 624, 1998. (#citations WOS: 52, IF 2018: 4,291)
20. **Capelli C**, Pendergast DR e Termin B. Energetics of swimming at maximal speeds. *Eur. J. Appl. Physiol.*, 78: 385 - 393, 1998. (#citations WOS: 125, IF 2018: 2,401)
21. Antonutto G, **Capelli C**, Girardis M, Zamparo P e di Prampero PE. Effects of micro - gravity on maximal power of the lower limbs during very short efforts in humans. *J. Appl. Physiol*, 86: 85 - 92, 1999. (#citations WOS: 58, IF 2018: 3,256)

22. **Capelli C**. Physiological determinants of best performances in human locomotion. *Eur. J. Appl. Physiol.*, 80: 298 – 307, 1999. (#citations WOS: 29, IF 2018: 2,401)
23. Zamparo P, **Capelli C** e Guerrini G. Energetics of kayaking at sub-maximal and maximal speeds. *Eur. J. Appl. Physiol.*, 80: 542 –548, 1999. (#citations WOS: 41, IF 2018: 2,401)
24. Milesi S, **Capelli, C**, Denoth MD, Hutchinson T e Stüssi E. Effects of 17 days bedrest on the maximal voluntary isometric torque and neuromuscular activation of the plantar and dorsal flexors of the ankle. *Eur. J. Appl. Physiol*, 82: 197 – 205, 2000. (#citations WOS: 10, IF 2018: 2,401)
25. Zamparo P, Antonutto G, **Capelli C** e di Prampero PE. Effects of different after - loads and muscular lengths on maximal explosive power of the lower limbs. *Eur. J. Appl. Physiol*, 82: 381 – 390, 2000. (#citations WOS: 5, IF 2018: 2,401)
26. Zamparo P, **Capelli C**, Cautero M, Di Nino A. Energy cost of front crawl swimming at supra maximal speeds and underwater torque in young swimmers. *Eur. J. Appl. Physiol*, 83: 487-491, 2000. (#citations WOS: 57, IF 2018: 2,401)
27. Zamparo P, **Capelli C** e Cencigh P. Energy cost and mechanical efficiency of riding a four wheels human powered recumbent vehicle. *Eur. J. Appl. Physiol.*, 83: 499-505, 2000. (#citations WOS: 4, IF 2018: 2,401)
28. **Capelli C**, Cautero M e di Prampero PE. New perspectives in breath – by – breath determination of alveolar gas exchanges in humans. *Plfugers Arch.*, 441: 566-577, 2001. (#citations WOS: 39, IF 2018: 2,765)
29. Bertolissi M, Bassi F, Cecotti R, **Capelli C**, Giordano F. Pruritus: a useful sign for predicting the haemodynamic changes that occur following

- administration of vancomycin. *Crit Care*, 6(3):234 – 9, 2002. 8#citations WOS: 5; IF 2018, 6,630)
30. Cautero M, Beltrami AP, **Capelli C** e di Prampero PE. Breath – by – breath alveolar oxygen transfer at the onset of step exercise in humans: methodological implications. *Eur. J. Appl. Physiol.*, 88: 203 –231, 2002. (#citations WOS: 36, IF 2018: 2,401)
31. Cautero M, **Capelli C** e di Prampero PE. New acquisitions in the assessment of breath – by – breath alveolar gas transfer in humans. *Eur. J. Appl. Physiol.*, 90: 231 – 241, 2003. (#citations WOS: 24, IF 2018: 2,401).
32. Pendergast DR, Zamparo P, di Prampero PE, **Capelli C**, Cerretelli P, Temin A II, Craig A Jr., Bushnell D, Paschke D, Mollendorf J. Energy balance of human locomotion in water. *Eur. J. Appl. Physiol*, 90: 377 – 386, 2003. (#citations WOS: 47, IF 2018: 2,041)
33. Tam E, Kenfack M A, Cautero M, Lador F, Antonutto G, di Prampero PE, Ferretti G, **Capelli C**. Correction of cardiac output obtained by Modelflow[®] from finger pulse pressure profiles with a respiratory method in humans. *Clin Sci* 106: 371 – 376, 2004. (#citations WOS: 67, IF 2018: 5,220)
34. Kenfack MA, Lador F, Licker M, Moia C, Tam E, **Capelli C**, Morel D, Ferretti G. Cardiac output by Modelflow[®] method from intra-arterial and finger tip pulse pressure profiles. *Clin Sci*, 106: 365 – 369, 2004. (#citations WOS: 56, IF 2018: 5,220)
35. Zamparo P, Bonifazi M, Faina M, Milan A, Sardella F, Schena F, **Capelli C**. Energy cost of swimming of elite long distance swimmers. *Eur J Appl Physiol* 94: 697 – 794, 2005. (#citations WOS: 41, IF 2018: 2,401)

36. Cautero M, di Prampero PE, Tam E, **Capelli C**. Alveolar oxygen uptake kinetics with step, impulse and ramp exercise in humans. *Eur J Appl Physiol*. 95: 474 – 485, 2005 (#citations WOS: 12, IF 2018: 2,401)
37. di Prampero PE, **Capelli C**. Letter to the Editor on “Point:counterpoint: Positive effects of intermittent hypoxia. *J Appl Physiol*. 99: 2453, 2005. (#citations WOS: 2, IF 2018: 3,256)
38. Zamparo P, Tomadini S, Didone F, Grazzina F, Rejc E, **Capelli C**. Bioenergetics of a slalom kayak (K1) competition. *Int J Sports Med*. 27: 546-552, 2006. (#citations WOS: 12, IF 2018: 2,453)
39. di Prampero PE, **Capelli C**, Ferretti G Letter to the Editor on “Point:counterpoint: In health an in a normoxic environment $V'O_{2max}$ is/is not limited primarily by cardiac output and locomotor muscle blood flow. *J Appl Physiol*. 100: 1086, 2006. (#citations WOS: 2, IF 2018: 3,256)
40. Lador F, Azabji MK, Moia C, Cautero M, Morel DR, **Capelli C**, Ferretti G. Simultaneous determination of the kinetics of cardiac output, systemic O_2 delivery and O_2 uptake at exercise onset in men. *Am J Physiol Regul Integr Comp Physiol* 290: R1071 – R1079, 2006. (#citations WOS: 47, IF 2018: 3,082)
41. Perini R, Tironi A, Cautero M, Di Nino A, Tam E, **Capelli C**. Seasonal training and heart rate and blood pressure variabilities in young swimmers. *Eur J Appl Physiol*, 97: 395 – 403, 2006. (#citations WOS: 23, IF 2018: 2,401)
42. Tosoratti E, Badano LP, Gianfagna P, Baldassi M, Proclemer A, **Capelli C**, Fioretti PM. Improved delineation of morphological features of arrhythmogenic ventricular cardiomyopathy with the use of contrast – enhanced echocardiography. *J Cardiovasc Med*, 7: 566- 568, 2006 (F 2012, 2.657)

43. **Capelli C**, Antonutto G, Azabji Kenfack M, Cautero M, Lador F, Moia C, Tam E, Ferretti G. Factors determining the time course of $V'O_{2max}$ decay during bed-rest: implications for $V'O_{2max}$ limitation. *Eur J Appl Physiol*, 98: 152 – 160, 2006. (#citations WOS: 45, IF 2018: 2,401)
44. Zamparo P, Sepulcri L, Tam E, Serratore M, **Capelli C**. Effects of intermittent exercise training on performance of young basketball players. *Coaching and Sport Sci.* 2: 32 – 39, 2007.
45. Zamparo P, Carignani G, Plaino L, Sgalmuzzo B, **Capelli C**. Energy balance of locomotion with pedal-driven watercrafts. *J Sport Sciences*, 26: 75-81, 2008 (#citations WOS:87, IF 2018: 2,733).
46. di Prampero, PE, Dekerle J, **Capelli C**, Zamparo P. The critical velocity in swimming. *Eur. J. Appl. Physiol.* 102: 164-171, 2008. (#citations WOS: 27, IF 2018: 2,401)
47. Lador F, Tam E, Azabji MK, Cautero M, Moia C, Morel DR, **Capelli C**, Ferretti G. Phase I dynamics of cardiac output, systemic O₂ delivery, and lung O₂ uptake at exercise onset in men in acute normobaric hypoxia. *Am J Physiol Integr Comp Physiol*, 295: R624-R632, 2008. 2008 (#citations WOS: 21, IF 2018: 3,082)
48. **Capelli C**, Ardigò LP, Schena F, Zamparo P. Energy cost and mechanical efficiency of riding a human powered recumbent vehicle. *Ergonomics*, 51: 1565 -1575, 2008. (#citations WOS: 9, IF 2018: 2,019)
49. Wüst R, Aliverti A, **Capelli C**, Kaiser B. Breath-by-breath changes of lung oxygen stores at rest and during exercise in humans. *Resp Physiol Neurobiol*, 164: 291-299, 2008. (#citations WOS: 16, IF 2018: 1,792)
50. **Capelli C**, Antonutto G, Cautero M, Tam E, Ferretti G. Metabolic and cardiovascular responses during sub-maximal exercise in humans after 14

- days of head – down tilt bed rest and inactivity. *Eur J Appl Physiol*, 104: 909 - 918, 2008. (#citations WOS: 9, IF 2018: 2,401)
51. **Capelli C**, Tarperi C, Schena F, Cevese A. Energy cost and efficiency of Venetian rowing on a traditional, flat hull boat (Bissa) *Eur J Appl Physiol*, 105: 653 – 661, 2009. DOI: 10.1007/s00421-008-0949-6. (#citations WOS: 6, IF 2018: 2,401)
52. Zamparo P, Gatta G, Pendergast D, **Capelli C**. Active and passive drag: the role of trunk incline. *Eur J Appl Physiol* 106: 195 – 205, 2009 DOI: 10.1007/s00421-009-1007-8. 2008 (#citations WOS: 45, IF 2018: 2,401)
53. Ferretti G, **Capelli C** Maximal O₂ Consumption: Effects of gravity withdrawal and resumption, *Resp Physiol Neurobiol* 169 Suppl 1: S50 - S54, 2009, doi: 10.1016/j.resp.2009.03.012. (#citations WOS: 9, IF 2018: 1,792)
54. **Capelli C**, Adami A, Antonutto G, Cautero M, Tam E Oxygen deficits and oxygen delivery kinetics during submaximal intensity exercise in humans after 14 days of head-down tilt-bed rest. *Eur J Appl Physiol.*, 107: 51-59, 2009. doi 10.1007/s00421-009-1098. (#citations WOS: 8, IF 2018: 2,401)
55. **Capelli C**, Pogliaghi S. Comments on point: counterpoint: the kinetics of oxygen uptake during muscular exercise do/ do not manifest time-delayed phase. Time delays are not artefacts generated by the algorithms utilised for calculations. *J Appl Physiol* 107 (5) 1671- 1672, 2009 (#citations WOS: 2, IF 2018: 3,256)
56. Aliverti A, Kaiser B; Cautero M, Dellacà RL, di Prampero PE, **Capelli C**. Pulmonary V'O₂ kinetics at the onset of exercise is faster when actual changes in alveolar O₂ stores are considered. *Resp Physiol Neurobiol* 169: 78 - 82, 2009. doi:10.1016/j.resp.2009.08.012 (#citations WOS: 11, IF 2018: 1,792)

57. Bringard A, Pogliaghi S, Adami A, De Roia G, Lador F, Lucini D, Pizzinelli P, **Capelli C**, Ferretti G. Cardiovascular determinants of maximal oxygen consumption in upright and supine posture at the end of prolonged bed rest in humans. *Resp Physiol Neurobiol*. 171: 128 – 134, 2010; DOI: 10.1016/j.resp.2010.01.018 (#citations WOS: 12, IF 2018: 1,792)
58. Bonjour J, **Capelli C**, Antonutto G, Calza S, Tam E, Linnarsson D, Ferretti G. Determinants of oxygen consumption during exercise on cycle ergometer: The effects of gravity acceleration *Resp Physiol Neurobiol* 171: 128 – 134, 2010, doi: 10.1016/j.resp.2010.02.013. (#citations WOS: 12, IF 2018: 1,792)
59. **Capelli C**, Cautero M, Pogliaghi S. Algorithms, modelling and $\dot{V}O_2$ kinetics. *Eur J Appl Physiol*, 111 331 – 342, 2011, DOI 10.1007/s00421-010-1398-8 (#citations WOS: 30 IF 2018: 2,401)
60. Zamparo P, **Capelli C**, Pendergast D. Energetics of swimming: an historical perspective. *Eur J Appl Physiol*, 111: 367 – 378, 2011, doi: 10.1007/s00421-010-1433-7. (#citations WOS: 79, IF 2018: 2,401)
61. Adami A, Pogliaghi S, De Roia G, **Capelli C**. Oxygen uptake, cardiac output and muscle deoxygenation at the onset of moderate and supra maximal exercise in humans. *Eur J Appl Physiol*. 111: 1517-1527, 2011. DOI 10.1007/s00421-010-1786-y (#citations WOS: 18, IF 2018: 2,401)
62. **Capelli C**, Ferretti G. Comments on Viewpoint: The two-hour marathon: Who and when? Physiological determinants of best performance in marathon running. *J Appl Physiol* 110 283 - 284, 2011 (#citations WOS: 1, IF 2018: 3,256)
63. Bonjour J, Bringard A, Antonutto A, **Capelli C**, Linnarsson D, Pendergast DR, Ferretti G. Effects of gravity acceleration on human cardiopulmonary

- responses to exercise. *Eur J Appl Physiol.*: 111: 2907 – 2917, 2011, DOI: 10.1007/s00421-011-1917-0. (#citations WOS: 11, IF 2018: 2,401)
64. Smania N, Gandolfi M, Marconi V, Calanca A, Geroi C, Piazza S, Bonetti P, Fiorini P, Cosentino A, **Capelli C**, Conte D, Bendinelli M, Munari D, Ianes P, Fiaschi A, Picelli A. Applicability of a new robotic walking aid in a patient with cerebral palsy. *Eur J Phys Rehab Med* 47: 1 – 7, 2011 (#citations WOS: 8, IF 2018: 2,209)
65. El Ghoch M, Alberti M, **Capelli C**, Calugi S, Dalle Grave R. Resting energy expenditure in anorexia nervosa: measured vs. estimated. *J Nutr Met*, 2012: 1-6, 2011, Article ID 652932, doi:10.1155/2012/652932
66. Doria C, Toniolo L, Verratti V, Cancellara P, Pietrangelo T, Marconi V, 6 Paoli A, Pogliaghi S, Fano' G, Reggiani C., **Capelli C**. Improved V'O₂ uptake kinetics and shift in muscle fiber type 3 in high altitude trekkers. *J Appl Physiol*, 111: 1597–1605, 2011 doi:10.1152/jappphysiol.01439.2010.A (#citations WOS: 25, IF 2018: 3,256)
67. Adami A, Pogliaghi S, De Roia G, **Capelli C**. Comment on “On the method of fitting cardiac output kinetics in severe exercise.” Richard L. Hughson and Azmy Faisal, In stampa *Eur J Appl Physiol* 112: 397-398, 2012. doi: 10.1007/s00421-011-1947-7. (#citations WOS: 1, IF 2018: 2,401)
68. El Goch M, Alberti M, **Capelli C**, Calugi S, Battistini NC, Pellegrini M, Šubasić S, Lanza M, Dalle Grave R. Resting energy expenditure assesment in anorexia nervosa: comparison of indirect calorimetry, a multisensor monitor and Müller equation. *Int J Food Sci Nutr*, Early on line: 1-6 doi: 10.3109/09637486.2012.658761. (#citations WOS: 6, IF 2018: 2,317)
69. Tam E, Rossi H, Moia C ,Berardelli C, Rosa G, **Capelli C**, Ferretti G. Energetics of running in top level marathon runners from Kenya. *Eur J*

- Appl Physiol*, 112: 3797 – 3806; DOI 10.1007/s00421-012-2357-1 (#citations WOS: 40, IF 2018: 2,401)
70. De Roia G, Pogliaghi S, Adami A, Papadopoulou C, **Capelli C**. Effects of priming exercise on the speed of adjustment of muscle oxidative metabolism at the onset of moderate-intensity step transitions in older adults. *Am J Physiol Integr Comp Physiol* 302: R1158-R1166, 2012 , doi:10.1152/ajpregu.00269.2011 (#citations WOS: 20, IF 2018: 3,082)
71. El Ghoch M, Alberti M, Milanese C, Battistini NC, Pellegrinic M, **Capelli C**, Calugi S, Dalle Grave R. ,Comparison between dual-energy X-ray absorptiometry and skinfolds thickness in assessing body fat in anorexia nervosa before and after weight restoration. *Clinical Nutrition*, 31: 911-916, 2012, doi:10.1016/j.clnu.2012.03.009 (#citations WOS: 18, IF 2018: 5,496)
72. Marconi V, Carraro E, Trevisi E, **Capelli C**, Martinuzzi A, Zamparo P. The Locomotory Index in diplegic and hemiplegic children: the effects of age and speed on the energy cost of walking. *Eur J Phys Rehab Med*, 48: 1- 10, 2012 (#citations WOS: 7, IF 2018: 2,209)
73. Ardigò LP, **Capelli C**. Energy Expenditure during the LANY Footrace 2011 – a case study. *Appl Physiol Met Nutr*, 37; 1247-1250, 2012. (#citations WOS: 3, IF 2018: 2,518)
74. Adami A, **Capelli C**. Oxygen deficit during supramaximal exercise in humans: a new estimation method. *J Sports Med Phys Fitness*, 53: 17 - 26(#citations WOS: 1, IF 2018: 1,120)
75. Lador F, Tam E, Adami A, Azabji Kenfaca M, Bringard A, Cautero M, Moia C, Morel DR, **Capelli C**, Ferretti G. Cardiac output, O₂ delivery and V'O₂ kinetics during step exercise in acute normobaric hypoxia. *Resp Physiol Neurobiol* 186: 206 – 213, 2013, doi.org/10.1016/j.bbr.2011.03.031. citations WOS: 4, IF 2018: 1,792)

76. Alberti M, Galvani C, **Capelli C**, Lanza M, El Ghoch M, Calugi S, Dalle Grave R. Physical Fitness Before and After Weight Restoration in Anorexia Nervosa. *J Sports Med Phys Fitness*, 53:396-402, 2013 (#citations WOS: 8, IF 2018: 1,120)
77. Belloti C, Calabria E, **Capelli C**, Pogliaghi S. Determination of maximal lactate steady state in healthy adults: can NIRS help? *Med. Sci. Sports Exer.*, 45: 1208-1216, DOI: 10.1249/MSS.0b013e3182828ab2. (#citations WOS: 37, IF 2018: 4,291)
78. Adami A, Pizzinelli P, Bringard, A, **Capelli C**, Malacarne M, Lucini D, Simunič B, Pišot R, Ferretti G. Cardiovascular re-adjustments and baroreflex response during clinical reambulation procedure at the end of 35-day bed rest in humans. *Appl Physiol Nutr Met* 38: 673 – 680, 2013. [dx.doi.org/10.1139/apnm-2012-0396](https://doi.org/10.1139/apnm-2012-0396). (#citations WOS: 12, IF 2018: 2,518)
79. Alberti M, Galvani C, El Ghoch M, **Capelli C**, Lanza M, Calugi S, Dalle Grave R. Assessment of Physical Activity in Anorexia Nervosa and Treatment Outcome. *Med Sci Sports Exer* 45: 1643 – 1648, 2013. (#citations WOS: 19 IF:2018: 4,291)
80. Schena F, Pellegrini B, Tarperi C, Calabria E, Salvagno GL, **Capelli C**. Running economy during a simulated 60-km trial. *Int J Sport Physiol Perform*, 9: 604-609, 2014. (#citations WOS: 9; IF 2018: 3,384)
81. Galvani C, Ardigò LP, Alberti M, Daniele F, Capelli C. Physical activity, sleep pattern and energy expenditure in double-handed offshore sailing. *J Sports Med Phys Fitness*, 55: 1480 – 1488, 2015 (#citations WOS: 2, IF 2016: 1,120)
82. Fontolliet T, Pichot V, Antonutto G, Bonjour J, Capelli C, Tam E, Barthélémy JC, Ferretti G. Effects of gravitational acceleration on cardiovascular autonomic control in resting humans. *Eur J Appl Physiol*,

115. 1417-1427, 2015. DOI 10.1007/s00421-015-3117-9 (#citations WOS: 4, IF 2018: 2,401)
83. Ardigò L, Padulo J, Zuliani A, Capelli C. low-cost method for estimating energy expenditure during soccer refereeing. *J Sports Sci*, 33: 1853-1858, 2015. DOI: 10.1080/02640414.2015.1015150 *J Sports Sci*, 33: 1853-1858, 2015.(#citations WOS: 6, IF 2018: 2,733)
84. Bruseghini P, Calabria E, Tam E, Milanese C, Oliboni E, Pezzato A, Pogliaghi S, Salvagno GL, Schena F, Pozzi Mucelli R, **Capelli C**. Effects of eight weeks of aerobic interval training and of isoinertial resistance training on risk factors of cardiometabolic diseases and exercise capacity in healthy elderly subjects. *Oncotarget*, 6: 16998-17015, 2015. (#citations WOS: 24, IF 2016: 5,168)
85. Tam E, Bruseghini P, Calabria E, Dal Sacco, L, Doria C, Grassi B, Pietrangelo T, Pogliaghi S, Reggiani C, Salvadego D, Schena F, Toniolo L, Verratti V, Vernillo G, **Capelli C**. GOKYO KHUMBU/AMA DABLAM TREK 2012: Effects of physical training and high-altitude exposure on oxidative metabolism, muscle composition, and metabolic cost of walking in women. *Eur J Appl Physiol*, 116: 129 – 144, 2016. DOI 0.1007/s00421-015-3256-z (#citations WOS: 9, IF 2016: 2,401).
86. Lopez S, Bourgois JG, Tam E, Bruseghini P, **Capelli C**. Cardiovascular and metabolic responses to on-water upwind sailing in optimist sailors. *Int J Sport Physiol Perform* 11: 615-622, 2016. (#citations WOS: 0, IF 2016: 3,384).
- 87. Capelli C**, Rittveger J, Bruseghini P, Calabria E, Tam E. Maximal aerobic power and anaerobic capacity in cycling across the age spectrum in male master athletes. *Eur J Appl Physiol*, 116: 1395-1410, 2016. DOI: 10.1007/s00421-016-3396-9. (#citations WOS: 6, IF 2016: 2,401)
- 88.** Calabria E, Mazza EMC, Dyar KA, Pogliaghi S, Bruseghini P, Morandi C, Salvagno GL, Gelati M, Guidi GC, Bicciato S; Schiaffino S, Schena F,

- Capelli C. Aging: a portrait from gene expression profile in blood cells. *Aging*, 8: 1801-1821, 2016.(#citations WOS: 3, IF 2017: 5,515)
89. **Capelli C**, Rittweger. J. Response to the comments “Do Maximal aerobic and anaerobic capacity start really to decrease after the fourth decade of life?” written by F Borrani, G Millet to the paper “Maximal aerobic power and anaerobic capacity in cycling across the age spectrum in male master athletes”. *Eur J Appl Physiol*, in the press, 116: 2425 – 2426, 2016. DOI 10.1007/s00421-016-3461-4. (#citationsWOS: 0, IF 2016: 2,401).
90. Zandonai T, Tam E, Bruseghini P, Pizzolato F, Franceschi L, Baraldo M, **Capelli C**, Cesari P, Chiamulera C. The effects of oral smokeless tobacco administration on endurance performance. *J Sport Health Sci*, in the press. DOI: 0.1016/j.jshs.2016.12.006; (#citations WOS: 6, IF 2016: 2,591).
91. Bourgois JG, Callewaert M, Celie B, Dumortier J, **Capelli C**, Sjøgaard G, De Clercq D, Boone J. Tribute to Dr. Jacques Rogge Muscle activity and fatigue during hiking in Olympic dinghy sailing . *Eur J Sport Sci* 17: 611 – 620, 2017, <http://dx.doi.org/10.1080/17461391.2017.1300328>, (#citations WOS: 1, IF 2016:2,576)
92. **Capelli C**. Maximal Aerobic Power in Aging Men: Insights From 1-Hour Cycling Unaccompanied Record. *Int J Sport Physiol Perform*, 19: 1 – 12, 2017, <https://doi.org/10.1123/ijsp.2017-0019>, (#citations WOS: 1, IF 2016: 3,384).
93. Areta JL, Austarheim I, Wangensteen H, **Capelli C**. Metabolic and performance effects of Yerba Mate on well-trained cyclists. *Med Sci Sports Exer*, 50: 818 - 826, doi: 10.1249/MSS.0000000000001482. (#citations WOS: 3, IF 2016: 4,291)
94. Bruseghini P,2, Tam E, Monte A, **Capelli C**, Zamparo P. Metabolic and kinematic responses while walking and running on a motorised and a curved non-motorised treadmill. *J Sports Sci* 4: 396- 403, 2019; doi: 10.1080/02640414.2018.1504605 (#citations WOS: 0, IF 2016: 2,733)

95. Tam E, Bruseghini P, **Capelli C**, Oliboni E, Pezzato A, Pogliaghi S, Pozzi Mucelli R, Schena F, Calabria E. Effect of endurance and strength training on the slow component of $\dot{V}O_2$ kinetics in elderly humans. *Front Physiol*, 9(10): 1-11, 2018; doi: 10.3389/fphys.2018.01353. (#citations WOS: 2, IF 2016: 3,394)
96. Del Torto A, Skattebo Ø, Hallén J, **Capelli C**. Cardiac output with modified cardio-impedance against inert gas rebreathing during sub-maxima and maximal cycling exercise in healthy and fit subjects. *Eur J Appl Physiol*, 119: 163 - 170, 2019, doi: 10.1007/s00421-018-4011-z, (#citations WOS: 1, IF 2016: 2,401).
97. Zandonai T, Tam E, Bruseghini P, **Capelli C**, Baraldo M, Chiamulera C. Exercise performance increase in smokeless tobacco- user athletes after overnight nicotineabstinence. *Scand J Med Sci Sports*, 29: 430 - 439, doi: 10.1111/sms.13333, (#citations WOS: 5, IF 2016: 3,623).
98. Rossi AP, Muollo V, Fantin F, Ascicchi E, Urbani S, Taylor M, Caruso B, Milanese C, **Capelli C**, Schena F, Zamboni M. Effects of diet combined with Nordic walking or walking programme on weight loss and arterial stiffness in postmenopausal overweight and obese women: The Walking and Aging Verona pilot study. *Eur J Prev Cardiol* iDOI: 10.1177/2047487319877712, 2019 [IF 2017, 4.452].
99. Bruseghini P, **Capelli C**, Calabria E, Rossi AP, Tam E. Effects of high intensity interval training and isoinertial training on leg extensors muscle function, structure and intermuscular adipose tissue in older adults. *Frontiers Physiol*, doi: 10.3389/fphys.2019.01260, 2019, (#citations WOS: 1, IF 2016: 3,394).
100. Calabria E, Scambi I, Bonafede R, Schiaffino L, Peroni D, Potrich V, **Capelli C**, Schena F, Mariotti R. ASCs-Exosomes Recover Coupling Efficiency and Mitochondrial Membrane Potential in an in vitro Model of ALS. *Frontiers in Neurosci*. 2019 Oct 17;13:1070. doi: 10.3389/fnins.2019.01070. (citations WOS: 1, IF 2016: 3,877).

101. Fagoni N, Bruseghini P, Adami A, **Capelli C**, Lador F, Moia C, Tam E, Bringard A, Ferretti G. Effect of Lower Body Negative Pressure on Phase I Cardiovascular responses at Exercise Onset. *Int J Sports Med*,41: 209-218, 2020; doi.org/10.1055/a-1028-7496. (#citations WOS: 0, IF 2018: 2,453).
102. Bruseghini P, Tam E, Calabria E, Milanese C, **Capelli C**, Galvani C. High intensity interval training does not have compensatory effects on physical activity levels in older adults. *Int J Environ Res Public Health*, 8:17; doi:10.3390/ijerph17031083 [IF 2018: 2,468]
103. Skattebo Ø, Wold Bjerring A, Auensen M, Imre Sarvari S, Toldnes Cumming K, **Capelli C**, Hallén. L Blood volume expansion does not explain the increase in peak oxygen uptake 1 induced by 10 weeks of endurance training. *Eur J Appl Physiol*; oi.org/10.1007/s00421-020-04336-2 (#citations WOS: 0, IF 2016: 2,401).
104. Tam E, Bruseghini P, **Capelli C**, Baraldo M, Chiamulera C, Zandonai T. Effects of nicotine on microvascular responsiveness after nicotine satiety versus overnight nicotine abstinence. *Vascular Med* doi.org/10.1177/1358863X20906029, 2020.(IF 2018: 2,393)
105. Skattebo Ø., Calbet J.A.L., Rud, B., **Capelli C.**, Hallén J. Contribution of oxygen extraction fraction to maximal oxygen uptake in healthy young men. *Acta Physiol*, 2020 May 4. doi: 10.1111/apha.1348, in the press (IF 2018: 5,930).
106. Skattebo Ø., **Capelli C.**, Rud B., Calbet J.A.L., Rud, B., Hallén J. Increased oxygen extraction and mitochondrial protein expression after small muscle mass endurance training. *Scand J Med Sci Sports*, doi: 10.1111/SMS.13707, 2020 (IF 2018: 3,631).

2) JOURNALS WITHOUT EDITORIAL BOARD

- 1) **C. Capelli** e P. E. di Prampero. Maximal explosive power and aerobic exercise in humans. *Schweiz. Ztschr. Sportmed.* 39: 103-111, 1991.
- 2) P. Zamparo, G. Antonutto, **C. Capelli**, M. Girardis, L. Sepulcri e P.E. di Prampero. Effetti del recupero di energia elastica sulla massima potenza esplosiva degli arti inferiori. *Nuova Atletica*, 158: 4 – 11, 1999.
- 3) **C. Capelli**, P. Zamparo, A. di Nino, M. Caufero. Il dispendio energetico del nuoto. *La Tecnica del Nuoto*: 3: 22- 26, 2000.
- 4) Zamparo P, **Capelli C**, Cavallazzi E, Crescenzi S, Faina M, Pezzutti L, Sardella F, Bonifazi M. Gran fondo; parametri bioenergetici e biomeccanici. *La Tecnica del Nuoto*: 3: 3- 12, 2006.
- 5) **Capelli C**. Fisiologia dei Record. *Sport e Medicina*, 29(3): 14 – 21, 2012.

BOOKS, CHAPTERS OF BOOKS

- 1) **C. Capelli**, P. Zamparo, G. Bertino, T. Dogareschi, G. Molinis, D. Tuniz e M. Valente. Energy cost of walking in post heart ischemia attack (in italian). In *“Il ritorno la lavoro dell’infartuato”*, M. Valente e G. Maisano eds, EDIFARM, Milano, Italy, pp. 89-106, 1990.
- 2) **C. Capelli**. Cycling (in italian), In *“L’Universo del Corpo”*, Volume II, opera collettiva a cura dell’Istituto della Enciclopedia Italiana fondata da Giovanni Treccani, Roma, Italy, pp 678 – 683, 1999.
- 3) **C. Capelli** e P. E. di Prampero. Physiological factors affecting running performances. In *“Running Science”*, J. Bangsbo e H.B. Larsen eds, Munksgaard, Copenhagen DK, pp 67 – 83, 2001.

- 4) **C. Capelli**. Energetics of muscular contraction (in italian). In *"Il test da sforzo cardio polmonare - Teoria ed applicazioni"*. P. Palange e F. Schena eds., Cosmed, Roma, Italy, pp. 11 – 26, 2001.
- 5) PE di Prampero, G. Antonutto, **C Capelli**, P Mognoni. Energy cost and limiting factors of best performances in cycling (in italian). In *"Bioingegneria della Postura e del Movimento"*, a cura di A Cappello, A Cappozzo e PE di Prampero, Atti della XXII Scuola Annuale del Gruppo Nazionale di Bioingegneria del CNR, Bressanone (BZ), 22 – 25 Settembre 2003, Patron Editore, Bologna, Italy, 2003, pp. 571 – 591.
- 6) **C. Capelli** – Adaptations to physical exercise (in italian), In *Fisiologia Medica*. Volume 2, F. Conti ed, edi.ermes, Milano, Italy, pp 699 – 753, 2005.
- 7) **C Capelli** e G Ferretti. *Dagli Abissi allo Spazio - Ambienti e limiti umani*, edi-ermes, Milano, 2008, pp 1- 324.
- 8) **C. Capelli** (In co operation with G. Ferretti) – *Sistema respiratorio*, In *Fisiologia Medica*. Volume 2, second edition, Conti ed, edi.ermes, Milano, Italy, 2010, pp 261 – 380.
- 9) **C. Capelli** – *Fisiologia dell'esercizio fisico: adattamenti metabolici*, In *Fisiologia Medica*. Volume 2, second edition, Conti ed, edi.ermes, Milano, Italy, 2010, pp 783 – 802.
- 10) **C. Capelli** – *Fisiologia dell'esercizio fisico: adattamenti cardiorespiratori*, In *Fisiologia Medica*. Volume 2, second edition, a cura di F. Conti, edi.ermes, Milano, 2010, pp 803 – 820.
- 11) **C. Capelli**, P. Zamparo - *Energy Expenditure*, In: *Encyclopedia of Exercise Medicine in Health and Disease*, FC Mooren ed., Springer-Verlag, Berlin Heidelberg, 2012, pp. 290 – 293.

Zamparo P, **Capelli C**, Pogliaghi S. Bioenergetics of Cyclic Sports Activities on Land. Walking, Running and Cycling. In Nutrition and Enhanced Sports Performance 1st Edition, ed Baghci & Nair & Sen, Academic Press, 2013, pp 133-142, doi: <http://10.1016/B978-0-12-396454-0.00013-8>.

- 12) **C. Capelli** – Fisiologia dell'esercizio fisico: Chapter 69: adattamenti metabolici, In Fisiologia Medica. Volume 2, third edition, Conti ed, edi.ermes, Milano, Italy, 2020, pp 601 - 614 – 802.
- 13) **C. Capelli** – Fisiologia dell'esercizio fisico: Chapter 70: adattamenti cardiorespiratori, In Fisiologia Medica. Volume 2, third edition, F. Conti, edi.ermes, Milano, 2010, pp 615 – 626.

PROCEEDINGS OF INTERNATIONAL-NATIONAL CONGRESS (INCLUDING POSTERS AND ORAL COMMUNICATIONS)

- 1) G. Rosa, G. Ferretti, **C. Capelli** e A. Veicsteinas. Right versus left leg strength in cyclists. In *"Current Topics in Sports Medicine"*, Atti del Congresso Mondiale di Medicina dello Sport, 1982, Vienna, Urban & Schwarzenberg, Vienna 1984.
- 2) P. Cerretelli, P. E. di Prampero, J.C. Brueckner, G. Ferretti, **C. Capelli**, H. Howald e O. Oelz. Respiratory and metabolic characteristics of elite alpine climbers. In *"Hypoxia and Cold"*, eds J.R. Sutton, C. S. Houston e G. Coates, Atti del *"Fourth International Hypoxia Symposium"* Febbraio 1985, Lake Louise, Canada, Praeger, New York, USA, 1987, pp. 457 – 462
- 3) **C. Capelli**, G. Antonutto, P. Zamparo, M. Girardis e P. E. di Prampero. Work Performances efficiency during all out efforts. in *"Proceedings of the XXXI International Congress of Physiological Sciences"*, 9-14 Luglio 1989, Helsinki, Finlandia.
- 4) **C. Capelli**, G. Antonutto, M. Girardis P. Zamparo, e P. E. di Prampero. Maximal muscular power and O₂ consumption during aerobic exercise in man. In atti del *"9th Regional Meeting of Biochemists, Biophysicists and Biothechnologists"*, 28 - 30 Marzo 1990, Abazia, Yugoslavia.
- 5) **C. Capelli**, G. Antonutto, M. Girardis, P. Zamparo e P.E. di Prampero. Maximal muscular power ond O₂ consumption during aerobic exercise in man. *XVII Riunione primaverile della Società Italiana di Fisiologia*, Aprile 19 - 21 1990, Firenze, Italia.
- 6) Pedalling in space to simulate gravity: the twin-bike system. G. Antonutto, **C. Capelli**, P.E. di Prampero. In Atti del *"IV European Symposium on Life*

Sciences Research in Space", 28 Maggio – 1 Giugno 1990, Trieste, ESA SP-307: 59 – 6.

- 7) P. E. di Prampero, **C. Capelli**, G. Antonutto, M. Girardis, P. Pagliaro, P. Zamparo. Energetics of middle distance running. *XVIII Riunione primaverile della Società Italiana di Fisiologia* , Aprile 4 - 6, 1991, Firenze, Italia.
- 8) A. E. Minetti, **C. Capelli**, G. Antonutto, P. Zamparo, G. de Luca, L. Lovati, G. Cortili, P.E. di Prampero e F. Saibene. Energ expenditure and mechanical work during walking in hemiplegic patients: a preliminary report. *XLII Congresso Annuale generale della Società Italiana di Fisiologia* , 23 - 26 Settembre, 1991, Sorrento, Italia.
- 9) P. Zamparo, G. Antonutto e **C. Capelli**. Lactate accumulation in blood during dynamic exercise in short lasting microgravity. In atti del "9th IAA Man in Space Symposium", 17 - 21 Giugno, 1991, Colonia, Germania.
- 10) A. E. Minetti, F. Saibene, G. Cortili, G. Antonutto, **C. Capelli**, P. Zamparo e P. E. di Prampero. Energy expenditure and mechanical work in walking: effects of frequency and speed. Atti del "Regional Meeting of I.U.P.S.", Giugno 1991, Praga, Cecoslovacchia.
- 11) G. Rosa, **C. Capelli** e P. E. di Prampero. Effects of wheel and frame design on the aerodynamics of cycling. In "Proceedings of the Study Conference on Biomechanics of Human Movement: Applications in Rehabilitation, Sports and Ergonomics", ed. N. Berme e A. Cappozzo, 16 - 21 Giugno 1986, Formia, Bertec Corporation, Worthington, Ohio, USA, 1991, pp. 448-451.
- 12) **C. Capelli**, P. Zamparo, P. Viglino e P.E. di Prampero. Quantitative evaluation of phosphate metabolites in frog muscle by ³¹P NMR. *XIX Riunione primaverile della Società Italiana di Fisiologia* , 14 - 17 Aprile 1992, Firenze, Italia.

- 13) R. G. Soule, A. Cigalotto, **C. Capelli**, P. Zamparo, M. Girardis, M. P. Francescato e P.E. di Prampero. The development of an instrument for measuring underwater torque. *39th Annual meeting of the ACSM*, 27 - 30 Maggio 1992, Dallas, USA.
- 14) **C. Capelli**, A. Cigalotto, M. Girardis, P. Zamparo, M.P. Francescato e R. Soule. Underwater Torque and energy cost of front crawl swimming. *Proceedings of the "Eighth Meeting of the European Society of Biomechanics"*, 21 - 24 Giugno, 1992, Roma, Italia.
- 15) R. G. Soule, A. Cigalotto, **C. Capelli**, P. Zamparo, M. Girardis. Torque and the energetics of swimming the front crawl. *APS Conference on Integrative Biology of Exercise*, 23-26 Settembre, 1992 Colorado Springs, USA.
- 16) di Prampero P.E. e **C. Capelli**. Energetics of Middle Distance Running. in *"Proceedings of the Olympic Scientific Congress"*, 14 - 19 Luglio 1992, Malaga, Spagna.
- 17) P. Zamparo, **C. Capelli**, D. Pendergast, B. Termin, P.E. di Prampero. Effects of the underwater torque on the active drag and efficiency of crawl swimming. *XXXII IUPS Congress*, 1st-6th Agosto, 1993 Glasgow, Scozia.
- 18) F. Schena (FACSM), **C. Capelli**, P. Zamparo and P. E. di Prampero. Energetics of best performances in track cycling. 1995 ASCM Annual Meeting, 31 Maggio- 3, 1995 Giugno, Minneapolis, USA.
- 19) **Capelli C.** e P.E. di Prampero. Blood lactate accumulation and energy release in exercising humans. In proceedings of the *"14th Joint Meeting of Clinical Biochemists: Clinical Biochemistry of Physical exercise"*, *Biochimica Clinica* 19: 1 Giugno 1995, Padova, pp. 541 - 542.

- 20) Antonutto G., **C. Capelli**, M. Girardis, P. Zamparo and P. E. di Prampero. Effects of microgravity on muscular explosive power of the lower limbs in humans. *XIXII Riunione primaverile della Società Italiana di Fisiologia*, 20 - 22 Aprile 1995, Firenze, Italia.
- 21) **Capelli C.** e P. E. di Prampero. Breath by breath assessment of the alveolar to capillary oxygen transfer: the state of the art. In "*Selected Papers*", ed. A. Gullo, APICE 1996, 11 - 16 Novembre 1996, Trieste, pp. 304 – 307.
- 22) Schena F. e **C. Capelli**. Mechanical efficiency of riding triathlon and traditional racing bicycles. 1997 ACSM Annual Meeting, 28 - 31 Maggio 1997, Denver, USA.
- 23) **Capelli C.** e P. E. di Prampero. Breath to breath assessment of the alveolar to capillary oxygen transfer: a comparison of two methods. 1997 ACSM Annual Meeting 28 - 31 Maggio 1997, Denver, USA.
- 24) **Capelli C.** Energetics of best performances in human locomotion. Atti del "*XXXIII International Congress of Physiological Sciences*" 30 giugno - 5 Luglio 1997, St. Pietroburgo, Russia.
- 25) Milesi S., **C. Capelli**, J. Denoth, T. Hutchinson, S. B. Arnaud, E. Stüssi and P. E. di Prampero. Effects of 17 days of bed rest on the maximal voluntary isometric torque and neuromuscular activation of the plantar and dorsal flexors of the ankle. 18th Annual International Gravitational Physiology Meeting, 20 - 25 Aprile 1997, Copenhagen, Danimarca. *J. Grav. Physiol* 4(2): 125 – 126, 1997.
- 26) Zamparo P., **C. Capelli** e G. Guerrini. Energetics of Kayaking at sub - maximal and supra - maximal speeds. Atti del "*Third Annual Congress of ECSS*", July 17 - 18 1998, Manchester, England.

- 27) **C. Capelli**, J. Denoth, S. Milesi, E Stussi, PE di Prampero. Effects of microgravity on the biomechanical and bioenergetic characteristics of human skeletal muscle – E407 Life and Microgravity Spacelab Final Report, NASA/CP-1998-206960, pp 464-499.
- 28) P.E. di Prampero, G. Antonutto, **C. Capelli** e P. Zamparo. Effects of microgravity on maximal power of the lower limbs during very short efforts in humans. Proceedings of the “*Third Annual Congress of ECSS*”, July 17 - 18 1998, Manchester, England.
- 29) **C. Capelli**, M. Cautero and P.E. di Prampero. New perspectives in breath-by-breath determination of alveolar transmembrane gas exchange. Atti del “*The Physiological Society University College Scientific Meeting*”, 19 – 22 April 1999, London, England *J Physiol* 518 P, 93P.
- 30) M. Cautero, **C. Capelli**, A.P. Beltrami e P.E. di Prampero. New perspectives in breath – by - breath determination of alveolar trans – membrane gas exchange at the onset of exercise in humans. Proceedings of the “*4th Annual Congress of the European College of Sport Science*”, July 14 – 17, 1999, Rome, Italy.
- 31) **C. Capelli**, M. Cautero e P.E. di Prampero. Breath - by - breath determination of alveolar gas exchange. Proceedings of the “*34. Atmungsphysiologische Arbeitstatung*”, January 28 - 29 2000, Lubeck, Germany.
- 32) **C. Capelli**, M. Cautero e P.E. di Prampero. Assessment of breath – to - breath alveolar gas transfer: a comparison of two procedures. 2000 ACSN Annual Meeting, 31 May - June 2000, Indianapolis, USA, *Med. Sci. Sports Exerc.* 32: S332, 2000.

- 33) P. Zamparo, **C. Capelli**, A. Di Nino e M. Cautero. Energy cost of front crawl at supramaximal speeds and underwater torque in young swimmers. 2000 ACSN Annual Meeting, 31 May - June 2000, Indianapolis, USA, *Med. Sci. Sports Exerc.* 32: S335, 2000.
- 34) **C. Capelli**. Bioenergetic limits of maximal speeds in human locomotion. In Proceedings of the 51st Annual Meeting of the *Società Italiana di Fisiologia*, Catania September 25 – 27, 2000, *Pflugers Arch.* 442 (1): C52, 2001.
- 35) M. Cautero, **C. Capelli**, G. Antonutto e P. E. di Prampero. Alveolar gas exchange dynamics during step and ramp exercise in humans. Proceedings of the XXVIII Spring Meeting of the *Società Italiana di Fisiologia*, 12 – 14 Febbraio 2001, *Pflugers Arch.* 442: R91, 2001.
- 36) Ferretti G, F. Lador, M. Azabji, C. Moia, E. Tamm, M. Cautero, S. Fusi, G. Antonutto, **C. Capelli**. The time course of the decrease in maximal oxygen consumption during long-term bed rest in humans. Proceedings of the joint meeting Physiological Society- SIF. Liverpool, Luglio 2002 *J Physiol.* 543P, 91P, 2002.
- 37) M. Cautero, G. Antonutto, S. Fusi, E. Tam, P. E. di Prampero, D. Linnarsson, G. Ferretti and **C. Capelli**. Oxygen uptake at the onset of step-exercise before and after short duration bed rest in humans. ESA- ISGP meeting “Life in Space for Life on Heart”, June 2 – 7, 2002, Stockholm, Sweden.
- 38) Perini R, Tironi A, Cautero M, Tam E, **Capelli C** e di Prampero PE. Effects of seasonal training on resting autonomic control of heart rate in young athletes. Atti del “8th Annual Congress European College of Sport Science”. July9 - 12 2003, Salzburg, Austria, P110 – 01.
- 39) Antonutto G*, M Cautero, E Tam, **Capelli C**. Effects of short term bed – rest on maximal aerobic power and maximal cardiac output in humans. 2nd

European Congress "Achievements in Space medicine into Health Care Practice and Industry", March 27-29, Berlin, Germany, 2003.

- 40) Lador F, Azabji MK, Moia C, Cautero M, **Capelli**, C, Morel D, Ferretti G. Kinetics of oxygen delivery at the onset of moderate exercise in humans. Atti del "9th Annual Congress European College of Sport Science", July3 - 6 2004, Clermont Ferrand, France, P137.
- 41) **Capelli** C, Bonifazi M, Faina M, Milan A, Sardella F, Schena F, Zamparo P. Energy cost of swimming in élite long distance athletes. Atti del "9th Annual Congress European College of Sport Science", July3 - 6 2004, Clermont Ferrand, France, P243.
- 42) Tam E, Narici MV, **Capelli** C, Pearson GL. Inertial loading in old age: training adaptation. Atti del "9th Annual Congress European College of Sport Science". July3 - 6 2004, Clermont Ferrand, France, P324.
- 43) **Capelli** C. Zamparo P, Cautero M, Tam E. The energetics of competitive swimming. Tam E, Antonutto G, Cautero M, Ferretti G, **Capelli** C. Effects of short term bed – rest on exercise response in humans. Proceedings of the "15th Humans in Space Symposium, Graz (Austria) 22 - 26 Maggio 2005.
- 44) Tam E, Antonutto G, Cautero M, Ferretti G, **Capelli** C. Effects of short term bed – rest on exercise response in humans. Atti del "15th Humans in Space Symposium, May 22 – 26, Graz, Austria, 2005.
- 45) **Capelli** C. Energy cost of locomotion below and above the lactate threshold according to different types of locomotion. Proceedings of the "10th Annual Congress European College of Sport Science". July 13 – 16, Belgrade, Serbia, 2005, P10.

- 46) **Capelli C**, L. Sepulcri, E Tam, P Zamparo. Energy balance of supramaximal intermittent exercise. ACSM Annual Meeting, 31 Maggio - 3 Giugno 2006, Denver, USA, *Med. Sci. Sports Exerc.* 38 (5): S515, 2006.
- 47) Lador F, M Azabji-Kenfack, C Moia, M Cautero, DR Morel, **C Capelli**, G Ferretti. Kinetics of cardiac output, systemic O₂ delivery and lung O₂ uptake in normoxia and normobaric hypoxia in men. Atti del "11th Annual Congress European College of Sport Science". Losanna 5 - 8 Luglio 2006, P55.
- 48) M Azabji-Kenfack, Fagoni N, Tam E, M Cautero, F Lador, C Moia, **C Capelli**, D Linnarsson, G Ferretti. Effects of bed rest and posture on the kinetics of O₂ uptake and cardiac output. Atti del "11th Annual Congress European College of Sport Science". Losanna 5 - 8 Luglio 2006, P71.
- 49) Tam E, Fagoni N, M Azabji-Kenfack, M Cautero, C Moia , F Lador, **C Capelli**, G Ferretti. Effects of prolonged bed rest on the cardiopulmonary response to postural changes in humans. Atti del "11th Annual Congress European College of Sport Science". Losanna 5 - 8 Luglio 2006, P278.
- 50) **Capelli C**, M Cautero, PE di Prampero. Breath by breath gas exchange: getting it right. Atti del "11th Annual Congress European College of Sport Science". Losanna 5 - 8 Luglio 2006, P424.
- 51) Bonjour J, Tam E, Grazzina F, G Antonutto, , **C Capelli**, C Montmerle, D Linnarsson, G Ferretti. The effects of gravity acceleration on the cardiopulmonary response to exercise. Atti del "11th Annual Congress European College of Sport Science". Losanna 5 - 8 Luglio 2006, P514.
- 52) Dekerle J, P Zamparo, **C Capelli**, PE di Prampero. Energetic cost and D-t₀ relationship in swimming. Atti del "11th Annual Congress European College of Sport Science". Losanna 5 - 8 Luglio 2006, P520.

- 53) **Capelli C**, Antonutto G, Cautero M, Tam E, Ferretti G. Cardiovascular O₂ transport during submaximal exercise in humans after short-term bed rest. *Atti del 2° Convegno nazionale Biomedicina e Spazio*, 29-30 Marzo 2007, Bari.
- 54) **Capelli C**, [Tosoratti E](#), [Badano L](#), [Fioretti PM](#), [Cauci S](#). Sprint Triathlon Race does not induce Myocardial Dysfunction as assessed by Myocardial Deformation Imaging and Left Ventricle Torsion Analysis ACSM. Annual Meeting, 30 Maggio - 2 Giugno 2007, New Orleans, USA, *Med. Sci. Sports Exerc.* 9(5 Suppl): S287, 2007.
- 55) Tam E, Fierravanti D, Moia C, Rossi H, Bernardelli C, Rosa G, **Capelli C**, Ferretti G. Running economy of elite east African runners. ACSM Annual Meeting, 28 - 31 Maggio 2008, Indianapolis, USA, *Med. Sci. Sports Exerc.* 40(5 Suppl): S67, 2008.
- 56) **Capelli C**. Artificial gravity as a countermeasure for cardiovascular deconditioning. Estratti del 59° Congresso SIF, 17-19 Settembre 2008, Villasimius (Ca), *Acta Physiol* 194 (S665): S11, p8.
- 57) Adami A, De Roia G, Pogliaghi S, **Capelli C**. "O₂ uptake and cardiac output kinetics during moderate and supra-maximal intensity exercise in humans." Estratti del 59° Congresso SIF, 17-19 Settembre 2008, Villasimius. *Acta Physiol*, 194 (suppl. 665): 18-19.
- 58) Vallais F, Aletti F, Baselli G, Tam E, Cautero M, Pagani M, **Capelli C**. Model Based Processing of Cardio Vascular Variability Applied to Bed-Rest Case Studies. Estratti del Congresso Computers in Cardiology, 14 - 17 Settembre 2008, Bologna, Italia, 129 -132, 2008.

- 59) Marconi V, Adami A, **Capelli C**, Cevse A, De Roia GF, Ferretti G, Pogliaghi S, Schena F. Oxygen supply and oxygen utilization in muscles after chronic exposure to hypobaric hypoxia. Atti del 2009 Spring PaduaMuscleDays Terme Euganne & Padova, April 26 – 28, 2009.
- 60) Adami A, Deroia G, Pogliaghi S, **Capelli C**. Kinetics of O₂ uptake and muscle deoxygenation during moderate and supra maximal intensità cycling exercise in humans. Atti del “14th Annual Congress European College of Sport Science”. Oslo, 24 - 27 Giugno 2009, P213.
- 61) Marconi V, Conte D, Bonetti P, Casentino A, Montagnana B, Capelli C. Metabolic cost of walking at different speeds in children with cerebral palsy. Atti del 18° Meeting annuale generale dell’ESMAC, Londra, 17-19 Settembre 2009, P143.
- 62) Adami A, **Capelli C**. Total, alactic and lactic O₂ deficit during supramaximal cycling exercise in humans. 60° Congresso Nazionale SIF, Siena, 23-25 Settembre 2009.
- 63) Cosentino A, Montagnana B, Bonetti P, Vangelista A, Recalcati M, Pinto F, Bendinelli M, Smania N, Marconi V, Conte D, **Capelli C**, Fiaschi A. Changes in locomotory functions after gait trainer rehabilitation training in patients affected by cerebral palsy. Xth Congress of the Italian Society of Clinical Movement Analysis- SIAMOC 2009, Alghero, 1-3 Ottobre 2009.
- 64) Bringard A, Pogliaghi S, Adami A, De Roia G, Lador F, Lucini D, Pizzinelli P, **Capelli C**, Ferretti G. Maximal oxygen consumption in upright and supine posture at the end of prolonged bed rest in humans. FEPS 2000, 12-15 Novembre 2009, Lubiana, Slovenia, pp 226.
- 65) Aletti F, Ferrario M, Tam E, Cautero M, Cerutti S, **Capelli C**, Baselli G. Identification of vascular responses to exercise and orthostatic stress in bed

rest-induced cardiovascular deconditioning. Atti del 31° Annual International Conference of the IEEE EMBS, Minneapolis, Minnesota, USA, September 2 – 6, 2009, pp 5335 – 5338

- 66) De Roia GF, **Capelli C**, Schena FF, Pogliaghi S. Aerobic training and heavy warm-up: effect on muscle oxidative metabolism in the elderly. ACSM Annual Meeting, 1 - 5 Giugno 2010, Baltimore, USA, *Med. Sci. Sports Exerc.* 42(5 Suppl): S18, 2010.
- 67) **Capelli C**, De Roia GF, Schena FF, Pogliaghi S. Isotonic training added to aerobic training and heavy warm-up: effect on muscle oxidative metabolism in the elderly. ACSM Annual Meeting, 1 - 5 Giugno 2010, Baltimore, USA, *Med. Sci. Sports Exerc.* 42(5 Suppl): S578, 2010.
- 68) **Capelli C**. Symposium on microgravity: Cardiovascular deconditioning and exercise capacity, Proceedings of the Conference SPASS, Lignano Sabbiadoro (UD) September 5 – 9, 2010, pp 18.
- 69) Adami A, Bringard A, Pogliaghi S, De Roia G, Lador F, Lucini D, Pizzinelli P, Pagani M, Simunic B, Pisot, R, **Capelli C**, Ferretti G. Cardiovascular responses to standing at the end of 35-day bed rest in humans. Proceedings of the 61° Congress of the Italian Physiological Society, Varese September 15- 17 2010, P177.
- 70) **Capelli C**, Schena F, Chiara G, Toffoletti M, Pellegrini B. Running economy during a 60-km Race. ACSM Annual Meeting, 31 Maggio - 4 Giugno 2011, Denver, USA, *Med. Sci. Sports Exerc.* 43(5 Suppl): S73, 2011.
- 71) Calabria E, Pogliaghi S, Dyar K, Salvagno G, Morandi C, Guidi G, Schiaffino S, Schena F, **Capelli C**. Physical exercise and immunosenescence: can we play for healthy ageing? Proceedings of the Annual Meeting 2012 dell'ACSM-World Congress Exercise is Medicine, 29

- May - 2 June 2012, San Francisco, USA, *Med. Sci. Sports Exerc.* 44(5 Suppl): S616, 2012.
- 72) **Capelli C**, Galvani C, Alberti M, Ardigò L, Daniele F. The energy expenditure of long distance double-handed offshore sailing. Proceedings of the Annual Meeting 2012 dell'ACSM-World Congress Exercise is Medicine, 29 May - 2 June 2012, San Francisco, USA, *Med. Sci. Sports Exerc.* 44(5 Suppl): S704, 2012.
- 73) Alberti M, **Capelli C**, ElGhoc M, Calugi S, Dalle Grave R. Physical fitness before and after weight restoration in anorexia nervosa. Proceedings of the Annual Meeting 2012 dell'ACSM-World Congress Exercise is Medicine, 29 May - 2 June 2012, San Francisco, USA, *Med. Sci. Sports Exerc.* 44(5 Suppl): S708, 2012.
- 74) Tam E, Bruseghini P, Pogliaghi S, **Capelli C**. Can a short-term hiking training speed up V'O₂-on kinetic in healthy sedentary women? Proceedings of the del 63° Congress of the Italian Physiological Society, Verona 21 23 Settembre 2012, P149.
- 75) Calabria E, Pogliaghi S, Mazza ME, Dyark K, Bellotti C, Salvagno G, Mottes M, Guidi G, Bicciato S, Schiaffino S, Schena F, **Capelli C**. Immunosenescence and physical exercise: search for healthy ageing. Proceedings of the del 63° Congress of the Italian Physiological Society,, Verona 21 23 Settembre 2012, P38.
- 76) Pogliaghi S, Molesini M, **Capelli C**. Effect of recovery time, following moderate intensity exercise, on V'O₂-on kinetic in healthy males. Proceedings of the del 63° Congress of the Italian Physiological Society, Verona 21 23 Settembre 2012, P178.

- 77) Bruseghini P, Calabria E, Tam E, Pogliaghi S, **Capelli C**. Effect of high-intensity-interval-training (HIT) on maximal aerobic power and ventilatory threshold in older adults. Proceedings of 64th Congress of the Italian Physiological Society, Portonovo, Ancona 18 - 20 September 2013, P72.
- 78) Tam E, Bruseghini P, Calabria E, Milanese C, Pogliaghi S, Schena F, **Capelli C**. Effects of high-intensity-interval-training (HIT) on cardiovascular fitness and cardiometabolic risk in the elderly. ACSM Annual Meeting, 27 - 31 maggio 2014, Orlando, USA, *Med. Sci. Sports Exerc.* 46 (Suppl 1 5S): S269, 2014.
- 79) Bruseghini P, **Capelli C**, Tam E, Pogliaghi S, Calabria E, Schena F, Annoni I, Galvani C. Physical activity accumulation in bouts and nonbouts and relation to cardiorespiratory fitness in older adults. ACSM Annual Meeting, 27 - 31 maggio 2014, Orlando, USA, *Med. Sci. Sports Exerc.* 46 (Suppl 1 5S): S236, 2014.
- 80) Pogliaghi S, Tam E, **Capelli C**. Effect of incomplete recovery on $\dot{V}O_2$ -kinetics during moderate-intensity exercise transitions in healthy humans. ACSM Annual Meeting, 27 - 31 maggio 2014, Orlando, USA, *Med. Sci. Sports Exerc.* 46 (Suppl 1 5S): S524, 2014.
- 81) Nardello F **Capelli C**, Schena F. Running economy, maximal muscular performance and muscle damage after long distance running. Proceedings of the VI Congress of SISMES, Naples 26-28 September, 2014. *Sport Sci Health* (Suppl 1) S9.
- 82) **Capelli C**, Tam E, $\dot{V}O_2$ kinetics in response to High-Intensity-Training (HIT) and isoinertial resistance training (IRT) in older, healthy men. Proceedings of the 65th Congress of the Italian Physiological Society, Anacapri 28-30 September 2014, P41.
- 83) Bruseghini P, Tam E, Calabria E, Pogliaghi S, Rossi A, **Capelli C**. Effects of High Intensity training and isoinertial training on intermuscular adipose

tissue in older adults. Proceedings of the XX Congress of the European College of Sport Sciences, 24-27 June 2015, Malmö, S, P258 – P259.

- 84) **Capelli C**, Lopez S, Bourgois J, Tam E. Cardiovascular and metabolic responses during On-Water upwind sailing in optimist sailors. Proceedings of the XX Congress of the European College of Sport Sciences, 24-27 June 2015, Malmö, S, P342.
- 85) Zandonai T, Bruseghini P, Tam E, **Capelli C**, Chiamulera C. Peripheral and central effects of smokeless tobacco on exercise endurance in men. Proceedings of the XX Congress of the European College of Sport Sciences, 24-27 June 2015, Malmö, S, P528-P529.
- 86) Galvani C, Alberti M, El Goch M, **Capelli C**, Dalle Grave R. Physical activity associations with physical fitness in anorexia nervosa at baseline and after recovery. CSM Annual Meeting, 276 - 30 maggio 2015, San Diego, USA, Med. Sci. Sports Exerc. 47 (Suppl 1 5S).
- 87) **Capelli C**. Effects of physical training and high altitude exposure on oxidative metabolism and muscle composition in humans. Symposium - 4: Cellular and physiological adaptations to physical training and detraining in hypoxia, Proceedings of the 66th Meeting of the Italian Physiological Society SIF, September 16-18 2015, Genova, Italy, ISBN 9788894010527.
- 88) Calabria E, Dal Sacco L, Schena F, **Capelli C**, Tam E. EFFECT OF BEETROOT JUICE SUPPLEMENTATION ON MITOCHONDRIAL FITNESS IN HEALTHY ELDERLY MEN. Proceedings of the XXI Congress of the European College of Sport Sciences, 6-9 July, Vienna, A, 2017, S389.
- 89) Bruseghini P, Tam E, Calabria E, Pogliaghi S, **Capelli C**. EFFECT OF HIGH INTENSITY TRAINING AND ISOINERTIAL TRAINING ON MUSCLE FUNCTIONS IN OLDER ADULTS. Proceedings of the XXI Congress of the European College of Sport Sciences, 6-9 July, Vienna, A, 2017, S444.

- 90) **Capelli C**, Bruseghini P, Calabria E, Pogliaghi S, Tam E. EFFECT OF AEROBIC AND STRENGTH TRAINING ON GAS EXCHANGE KINETICS DURING MODERATE- AND HEAVY INTENSITY EXERCISE IN ELDERLY. Proceedings of the XXI Congress of the European College of Sport Sciences, 6-9 July, Vienna, A, 2017, S497.
- 91) Dal Sacco L, Calabria E, Spigolon G, Colosio A, **Capelli C**, Tam E. EFFECTS OF NITRATE ON O₂ COST OF EXERCISE IN HEALTHY ELDERLY MEN. Proceedings of the XXI Congress of the European College of Sport Sciences, 6-9 July, Vienna, A, 2017, S584-S585.
- 92) **Capelli C**. Endurance performances in humans. What sets the pace? Proceedings of the Proceedings of the 68th Meeting of the Italian Physiological Society SIF, September 6-8 2017, Pavia, Italy.

9. SEMINARS AND CONFERENCES

- 1) July 1993: "Bioenergetics of best performances in track running" al "*9th Lecture Course on Biophysics and Molecular Biology MUSCLE CONTRACTION FROM CROSS BRIDGES TO HUMAN LOCOMOTION*", July 4-10, 1993, Cividale del Friuli (Udine, Italia).
- 2) January 1994: Department of Physiology of the State University of New York at Buffalo, NY, USA" Invited to deliver the lecture *titolo Energetics of best performance in track cycling*.
- 3) July 1997: "Energetics of best performance in human locomotion" al Symposium "*Maximal performance in Locomotion*", "XXXIII International Congress of Physiological Sciences, 30 Giugno –5 Luglio, 1997, St. Pietroburgo, Russia.
- 4) November 1998: "*Biomeccanica e Bioenergetica della marcia e della corsa nel soggetto sano e nel portatore di protesi d'anca e di ginocchio*", organizzato dal C.I.S.M., Udine, Italia. Invited to deliver the lecture: "Il ricambio gassoso".
- 5) February 1998 e 1999: *Locomozione umana in alta quota* in the residential course *Medicina di Montagna* organized by Università di Padova, Bressanone (Bolzano).
- 6) July 1999: *Physiological basis of aerobic performance, Post-Graduate Satellite Course Laboratory and Field Assessment of Aerobic Performance*, organizzato in occasione del "*Fourth Annual Congress of the European College of Sport Science*, 10 – 14 July, Roma, Italia.
- 7) October 1999: *Energy cost of cycling* al Congresso "*Health Care and Sport Performance in Cycling Towards the "2000"*", Verona October 7th – 8th, 1999.

- 8) September 2000: *Bioenergetic limits of maximal speeds in human locomotion* in occasione della tavola rotonda "*Muscolo e Motilità Cellulare*" organized by V. Lombardi e C. Reggiani in The Fall Meeting of the Italian Physiological Society, September 25 –27 2000, Catania.
- 9) March 2001: *Costo energetico della locomozione umana* at the meeting "L'attività fisica nella prevenzione delle malattie cardiovascolari", 1° Convegno per Nuove proposte di politica sportiva, Verona March 31 2001.
- 10) September 2001: Teacher at the Scuola di Fisiologia e Biofisica 2001 della SIF "*Fisiologia della Locomozione Umana*"; Lectures on: 1) *Potenza e Capacità Lattacida*; 2) *Scambi respiratori respiro – per – respiro: algoritmi a confronto*; 3) *Simposio – Il rendimento della locomozione umana, aspetti energetici*; CeBISM, Rovereto (TN), September 12 – 15 2001.
- 11) September 2001: "*Il costo energetico del nuoto*", *Acquatics 2001*, Roma September 5 – 8 2001.
- 12) October 2001: Teacher at "Corso teorico pratico di interpretazione del test da sforzo cardiopolmonare" "*Il Costo Energetico*"; *La Cinetica del Consumo di Ossigeno e Il Calcolo del Consumo di Ossigeno.*, Organised by P:E. di Prampero. R. Belardinelli. M. Faina, P: Palange, Rome October 26 – 27 2001.
- 13) December 2001: "*Scambi alveolo – capillari nell'uomo*", Cardiological club of the Hospital of Udine, Italy
- 14) September 2002: Basi teoriche della Bioenergetica della locomozione umana, Convegno sulla Biomeccanica e Bioenergetica della Locomozione Umana in Carrozzina: applicazioni allo sportivo disabile, September 14 2002, IMFR, Udine.
- 15) September 2002: Il costo energetico del nuoto, Swimming trainer meeting, Chianciano 27 – 28 September 2002.

- 16) July 2003: Teacher at the World Seminar for Swimming coaches and trainers, FINA and Spain Swimming Ass., Barcellona (Spain), July 16 – 19 2003.
- 17) September 2003: Adattamenti cardio-respiratori all'esercizio muscolare dopo bed-rest: vecchi problemi e nuovi approcci. Atti del X Congresso Nazionale della SIRC, Rome, 24-26 Settembre.
- 18) October 2003: Valutazione del calciatore: test di laboratorio – Aspetti cardiovascolari, Quinto incontro studio “la valutazione del calciatore: un approccio scientifico”, Parma, October 6 2003.
- 19) November 2003: Simposyium in occasion of the seventieth birthday of Prof. Paolo Cerretelli, Udine, Invited to deliver the lecture “New acquisitions in the assessment of gas exchanges at alveolar level in humans”, Udine, November 27 . 29, 2003.
- 20) December 2003: Finapres-Portapres, Cardiovascular monitoring in critical care medicine, Udine Dicembre 12th , 2003.
- 21) May 2005: *Adattamenti cardiopolmonari all'esercizio dopo bed-rest di corta durata; Sindrome da Allettamento: aspetti fisiopatologici e riabilitativi*; Udine, May 13, 2005.
- 22) May 2005: *The energetics of competitive swimming*. Atti dell'International Symposium in Swimming, INSEP, Parigi 17 – 20 Maggio 2005.
- 23) June 2005: *Energetica del lavoro intermittente*. IX National Meeting of the Medical doctor of basket teams. Monza (MI), June 4-5 2005.
- 24) June 2005: I fattori determinanti la gettata cardiaca, Corso “Valutazione della funzioen cardiaca mediante monitoraggio doppler del flusso in aorta discendente, Udine, June 21 2005.

- 25) July 2005: *Ethics and Sports*. VIII International Intensive Course in Bioethics applied to the Multicultural Aspects of Biomedicine, Praga (CZ), July 11 – 21, 2005.
- 26) November 2005; *Nuove acquisizioni nella determinazione del transfer alveolo-capillare di ossigeno respiro-per-respiro nell'uomo*, Corso di Laurea in SS.MM., Verona.
- 27) July 2006; Breath by breath gas exchange: getting it right, Simposio "Measuring "real" breath-by-breath gas exchange , 11th Annual Congress European College of Sport Science, Losanne (CH), July 5 - 8 2006.
- 28) July 2006: *Ethics and Sports*. X International Intensive Course Bioethics at the Frontiers of Biomedicine, Praga (CZ), July 17 – 28 2006.
- 29) October 2006: Stile di corsa, costo energetico e prestazione sportiva, Convegno "LA PREPARAZIONE PER LA MARATONA A LIVELLO AGONISTICO ED AMATORIALE", VERONA, OCTOBER 14, 2006.
- 30) October 2006: Effetti dell' ipomobilità (bed-rest) sulle risposte cardiovascolari durante esercizio e sulla massima potenza aerobica nell'uomo, Esercizio fisico ed apparato cardiocircolatorio: dalla ricerca di base alla pratica clinica, Cagliari, October 27 – 28, 2006.
- 31) November 2006: Bioenergetica della corsa sulle lunghe distanze. Convegno Attività Fisica in Condizioni Estreme, Cordenons (PN), November 25, 2006.
- 32) April 2007: I limiti delle prestazioni umane nella corsa. Seminari di scienze dell'esercizio, Brescia, April 4, 2007.

- 33) July 2007: Human cardiopulmonary responses to exercise performed in artificial gravity, Fifth IAA Symposium on realistic near-term advanced scientific space missions, Aosta (I), July 2-4 2007.
- 34) September 2008: Artificial gravity as a countermeasure for cardiovascular deconditioning. 59^o Meeting of the Italian Physiological Society SIF, September 17-19 2008, Villasimius (Ca), Italy.
- 35) May 2009: Fattori fisiologici e velocità record nella locomozione umana, IUSM, Roma.
- 36) October 2009. I Fattori determinanti il costo energetico del nuoto. I Congresso Nazionale SISMES, Noto Marina (SR), Italia.
- 37) November 2009. Oxygen deficit and cardiovascular oxygen transport after chronic exposure to hypobaric hypoxia. 3rd MS&H – Special event – Manaslu 2008, 12 - 14 Novembre 2009, Rovereto (TN).
- 29) March 2010. Bioenergetica della locomozione in acqua con imbarcazioni a remi. Sport Remieri: canottaggio, kayak e canoa, Università degli Studi di Padova, Corso di Laurea Interfacoltà in Scienze Motorie.
- 30) September 2010 Symposium on microgravity: Cardiovascular deconditioning and exercise capacity, Proceedings of the Conference SPASS, Lignano Sabbiadoro (UD).
- 31) April 2011. Aprile 2011. Emulazione, competizione e limite. La perfezione agonistica. Infinitamente 2011, Verona, Italy
- 32) May 2013: Effects of bed rest on Maximal O₂ uptake and gas exchange kinetics. Symposium Muscle atrophy, impaired function and metabolism following inactivity (bed rest). 2013 Annual Meeting of the American College of Sport Medicine, May 28 – June 1 Indianapolis, USA

- 33) September 2015: Effects of physical training and high altitude exposure on oxidative metabolism and muscle composition in humans, 66th Meeting of the Italian Physiological Society SIF, September 16-18 2015, Genova, Italy.

- 34) November 2016: Keynote lecture, New Approaches to the Calculation and Analysis of Breath-by-breath Alveolar Gas Exchanges in Humans, icSPORTS 2016 , 4th Congress on Sport Sciences Research and Technology Support, 7th - 9th November 2016, Porto, Portugal.