

# Curriculum Vitae

Update: February 2022

## Personal information

First name / Surname **Francesco Lucertini**

Address

Telephone

e-mail

Nationality

Sex - Date of birth

## WORK EXPERIENCE

### POSITIONS

Date	2021 – present
Position	<b>Associate Professor</b>
Name of employer	Department of Biomolecular Sciences – Division of Exercise and Health Sciences, University of Urbino Carlo Bo. Urbino (PU), Italy
Date	2018 – 2021
Position	<b>Assistant Professor</b>
Name of employer	Department of Biomolecular Sciences – Division of Exercise and Health Sciences, University of Urbino Carlo Bo. Urbino (PU), Italy
Date	2016 – 2017
Position	<b>Postdoc Fellow</b>
Name of employer	Department of Biomolecular Sciences – Division of Exercise and Health Sciences, University of Urbino Carlo Bo. Urbino (PU), Italy
Date	2009 – 2015
Position	<b>Research Fellow</b>
Name of employer	Department of Biomolecular Sciences – Division of Exercise and Health Sciences, University of Urbino Carlo Bo. Urbino (PU), Italy
Date	08/2007 – 01/2008
Position	<b>Visiting Scientist</b>
Name of employer	Institute for Exercise and Environmental Medicine (IEEM) - University of Texas Southwestern Medical Center and Presbyterian Hospital at Dallas. Dallas (TX), USA
Date	2006 – 2008
Position	<b>Postdoc</b>
Name of employer	Department of Biomolecular Sciences – Division of Exercise and Health Sciences, University of Urbino Carlo Bo. Urbino (PU), Italy

## TEACHING

Dates	2020 – present
Course title	<b>Fitness and health-enhancing physical activity</b>
Course level	M.Sc. (two-year postgraduate degree program in Sport Science – LM-68)
Name of employer	Department of Biomolecular Sciences – School of Human Movement Sciences, University of Urbino Carlo Bo. Urbino (PU) - Italy
Dates	2011 – present
Course title	<b>Exercise testing and prescription in health and disease</b>
Course level	M.Sc. (two-year postgraduate degree program in Exercise Science for Health and Prevention – LM-67)
Name of employer	Department of Biomolecular Sciences – School of Human Movement Sciences, University of Urbino Carlo Bo. Urbino (PU) - Italy
Dates	2008 – 2010
Course title:	<b>Exercise prescription for patients suffering from metabolic conditions</b>
Course level:	B.Sc. (three-year undergraduate degree program in Exercise and Sport Science)
Name of employer	Department of Biomolecular Sciences – School of Human Movement Sciences, University of Urbino Carlo Bo. Urbino (PU) - Italy

## RESEARCH

Present days	<p>My primary research interests include exercise testing and prescription, across the lifespan, in both healthy individuals and those affected by chronic conditions. I'm particularly interested in the modulation of exercise prescription parameters under different types and modes of exercise and training.</p> <p>Presently, my research topic is aerobic exercise prescription, with a particular focus on the exercise physiology underlying the methods used to prescribe aerobic exercise intensity.</p> <p>Studies in this field will help to understand how aerobic exercise prescription can be tailored to individual needs by using both intensity zones (e.g., light, moderate, vigorous) and the physiological parameters that identify the intensity domains (e.g., moderate, heavy, severe), with the overall goal of maximizing the health-related effectiveness of aerobic exercise prescription.</p>
In the past	<p>The research topics I've faced with in my career span from the role of kinesiologist and physical education in Italian primary school, to lactate clearance after maximal intensity cycling exercise.</p>

## EDUCATION AND TRAINING

Date	10 February 2010
Degree/Certification	<b>Clinical Exercise Physiologist</b> (level 2 postgraduate specialization)
Institution	University of Urbino Carlo Bo – Urbino (PU), Italy and “San Salvatore” Hospital – Pesaro (PU), Italy.
Date	16 February 2006
Degree/Certification	<b>Ph.D. in Exercise Physiology</b> (doctorate)
Institution	University of Urbino Carlo Bo – Urbino (PU), Italy
Date	06 March 2001
Degree/Certification	<b>M.Sc. in Exercise and Sport Sciences</b> (master degree)
Institution	University of Urbino Carlo Bo – School of Human Movement Sciences. Urbino (PU) - Italy
Date	11 March 1998
Degree/Certification	<b>B.Sc. in Kinesiology</b> (bachelor degree)
Institution	University of Urbino Carlo Bo – School of Human Movement Sciences. Urbino (PU) - Italy

## MEMBERSHIPS

### SCIENTIFIC SOCIETIES

Date 2016 – present  
Scientific body **Italian Society of Exercise and Sport Sciences**  
(Società Italiana delle Scienze Motorie e Sportive – SISMeS)

Date 2015 – present  
Scientific body **Italian Society of Physical Education and Kinesiology**  
(Società Italiana di Educazione Motoria e Sportiva – SIEMeS),

### EDITORIAL BOARDS

Date 2019 – present  
Journal **BMC Geriatrics**  
(ISSN: 1471-2318)

Date 2019 – present  
Journal **PLoS ONE**  
(ISSN: 1932-6203)

Date 2015 – present  
Journal **Sport & Medicina**  
(ISSN: 0392-9647)

Date 2012 – present  
Journal **Journal of Science & Cycling**  
(eISSN: 2254-7053)

### ACADEMIC BOARDS

Date 2019 – present  
Position **Academic Board Member of the Ph.D. program “Biomolecular and Health Sciences”**  
Name of employer Department of Biomolecular Sciences, University of Urbino Carlo Bo. Urbino (PU), Italy

Date 2013 – 2016  
Position **Academic Board Member of the Ph.D. program “Life Science, Health and Biotechnology – Curriculum: Exercise and Health Sciences”**  
Name of employer Department of Biomolecular Sciences, University of Urbino Carlo Bo. Urbino (PU), Italy

### PERSONAL SKILLS

#### LANGUAGES

Mother tongue **Italian**  
Other languages

<b>(American) English</b>				
UNDERSTANDING		SPEAKING		WRITING
Listening B2	Reading B2	Spoken interaction B2	Spoken production B1	B2

## JOB-RELATED SKILLS

Laboratory Vast experience with measurements, tests, techniques and devices commonly used in human performance laboratories, such as anthropometrics and body composition (skinfold thickness, bioimpedance, etc.), oxygen uptake and metabolic thresholds (breath-by-breath portable and lab carts), maximal strength (1-RM) and power assessments, surface EMG, etc.

## COMPUTER SKILLS

Software Vast experience with the software needed to use the devices listed within the laboratory skills section of this CV. Proficient with all MS Windows operating systems and office applications, included MS Excel and Access. Good with statistical software such as SPSS and R.

## RESEARCH PROJECTS

### PRINCIPAL INVESTIGATOR

- 2008-2011 Project "Concurrent Aerobic and Resistance in Type 2 Diabetic Patients", in collaboration with Dr. Mauro Andreani (Servizio di Diabetologia e Malattie Metaboliche, ASUR AV1 Ospedale di Urbino, Urbino - ITALIA). Main paper: "Concurrent Aerobic and Resistance Training Has Anti-Inflammatory Effects and Increases Both Plasma and Leukocyte Levels of IGF-1 in Late Middle-Aged Type 2 Diabetic Patients. OXID MED CELL LONGEV. 2017;2017:3937842".
- 2011-2012 Project "Kids", in collaboration with Dr. Liana Spazzafumo (INRCA, Ancona - ITALIA). Main paper: "Effectiveness of professionally-guided physical education on fitness outcomes of primary school children. EUR J SPORT SCI. 2013;13(5):582-90".
- 2016-2020 Project "One-to-One", in collaboration with Prof. Claude Bouchard (Louisiana State University, Pennington Biomedical Research Center - USA) and Prof. James Skinner (Indiana University - USA). Main paper: "HRR and VO2R fractions Are Not Equivalent: Is It time to Rethink Aerobic Exercise Prescription Methods? MED SCI SPORTS EXERC. 2021, 53(1):174-182".
- 2018-2019 Project "Progetto Regionale Sport Senza Età - 2018" (**Grant ASUR Marche and Marche Region € 40.000**).
- 2019-2020 Project "Progetto Regionale Sport Senza Età - 2019" (**Grant ASUR Marche and Marche Region € 40.000**).

### SHARED PRINCIPAL INVESTIGATOR

- 2015-2018 Project "TRIPL-A" (**Grant Ricerca Finalizzata € 30.000**), in collaboration with Dott. Massimo Boemi (Unità di Diabetologia, IRCCS INRCA, Ancona, ITALIA). Main paper: "Discontinuously supervised aerobic training vs. physical activity promotion in the self-management of type 2 diabetes in older Italian patients: design and methods of the 'TRIPL-A' randomized controlled trial. BMC GERIATR. 2019 Jan 11;19(1):11".
- 2017-2020 Project "GXT", in collaboration with Dott. Matteo Vandoni (LAMA, Università di Pavia, ITALIA). Main paper: "Assessing maximal oxygen uptake: Creating personalized incremental exercise protocols simply and quickly. STRENGTH COND J. 2021, 43(1):86-92".

- Bertuccioli, A., Donati Zeppa, S., Amatori, S., Moricoli, S., Fortunato, R., Di Pierro, F., Perroni, F., Rocchi, M.B., Ferri Marini, C., **Lucertini, Francesco**, Stocchi, V., Sisti, D. A new strategy for somatotype assessment using bioimpedance analysis in adults. *JOURNAL OF SPORTS MEDICINE AND PHYSICAL FITNESS*, 2022 62(2): 296-297.
- Natalucci, V., **Lucertini, Francesco**, Vallorani, L., Brandi, G., Marchegiani, M., Pistelli, M., Berardi, R., Ceravolo, M.G., Barbieri, E., Capecci, M. A Mixed-approach program To help women with breast cancer stay active (MOTIVE program): A pilot-controlled study. *HELIYON*, 2021 7(11), e08252.
- Natalucci, V., Ferri Marini, C., Flori, M., Pietropaolo, F., **Lucertini, Francesco**, Annibalini, G., Vallorani, L., Sisti, D., Saltarelli, R., Villarini, A., Monaldi, S., Barocci, S., Catalano, V., Rocchi, M.B.L., Benelli, P., Stocchi, V., Barbieri, E., Emili, R. Effects of a home-based lifestyle intervention program on cardiometabolic health in breast cancer survivors during the covid-19 lockdown. *JOURNAL OF CLINICAL MEDICINE*, 2021 10(12), art. no. 2678
- Ferri Marini, C., Correale, L., Pellino, V.C., Federici, A., Vandoni, M., **Lucertini, Francesco**. Assessing maximal oxygen uptake: Creating personalized incremental exercise protocols simply and quickly. *STRENGTH AND CONDITIONING JOURNAL*, 2021 43(1), 86-92.
- Ferri Marini, C., Sisti, D., Leon, A.S., Skinner, J.S., Sarzynski, M.A., Bouchard, C., Rocchi, M.B.L., Piccoli, G., Stocchi, V., Federici, A., **Lucertini, Francesco**. HRR and VO<sub>2</sub>R Fractions Are Not Equivalent: Is It Time to Rethink Aerobic Exercise Prescription Methods? *MEDICINE AND SCIENCE IN SPORTS AND EXERCISE*, 2021 53(1), 174-182.
- De Santi, M., Baldelli, G., **Lucertini, Francesco**, Natalucci, V., Brandi, G., Barbieri, E. A dataset on the effect of exercise-conditioned human sera in three-dimensional breast cancer cell culture. *DATA IN BRIEF*, 2019 27 art. no. 104704.
- Federici, A., Ferri Marini, C., **Lucertini, Francesco**, Zoffoli, L., Fanelli, V., Capriotti, A., Shoaei, V. The effect of physical activity on the perception of body image and well-being during aging. *JOURNAL OF PHYSICAL EDUCATION AND SPORT*, 2019 19 1341-1348.
- Annibalini, Giosuè; Contarelli, Serena; **Lucertini, Francesco**; Guescini, Michele; Maggio, Serena; Ceccaroli, Paola; Gervasi, Marco; Ferri Marini, Carlo; Fardetti, Francesco; Grassi, Eugenio; Stocchi, Vilberto; Barbieri, Elena; Benelli, Piero. Muscle and systemic molecular responses to a single flywheel based iso-inertial training session in resistance-trained men. *FRONT. PHYSIOL* 2019 10:554.
- Lucertini, Francesco**; Ferri Marini, Carlo; Sisti, Davide; Stocchi, Vilberto; Federici, Ario; Gregorio, Franco; Piangerelli, Donata; Chiatti, Carlos; Cherubini, Antonio; Boemi, Massimo; Romagnoli, Fabio; Cucchi, Michela; D'Angelo, Federica; Luconi, Maria Paola; Bonfigli, Anna Rita. Discontinuously supervised aerobic training vs. physical activity promotion in the self-management of type 2 diabetes in older Italian patients: design and methods of the 'TRIPL-A' randomized controlled trial. *BMC GERIATRICS*, 2019 19: 1-11
- Agostini, Deborah; Natalucci, Valentina; Baldelli, Giulia; De Santi, Mauro; Donati Zeppa, Sabrina; Vallorani, Luciana; Annibalini, Giosue'; **Lucertini, Francesco**; Federici, Ario; Izzo, Riccardo; Stocchi, Vilberto; Barbieri, Elena. New Insights into the role of exercise in inhibiting mTOR signaling in triple-negative breast cancer. *OXIDATIVE MEDICINE AND CELLULAR LONGEVITY*, 2018 2018: 1-19
- Agostini, Deborah; Donati Zeppa, Sabrina; **Lucertini, Francesco**; Annibalini, Giosue'; Gervasi, Marco; Ferri Marini, Carlo; Piccoli, Giovanni; Stocchi, Vilberto; Barbieri, Elena; Sestili, Piero. Muscle and bone health in postmenopausal women: Role of protein and vitamin d supplementation combined with exercise training. *NUTRIENTS*, 2018 10: 1-21
- Lucertini, Francesco**; Gervasi, Marco; D'Amen, Giancarlo; Sisti, Davide; Rocchi, Marco; Stocchi, Vilberto; Benelli, Piero. Effect of water-based recovery on blood lactate removal after high-intensity exercise. *PLOS ONE*, 2017 12: e0184240
- Zoffoli, Luca; Ditroilo, Massimiliano; Federici, Ario; **Lucertini, Francesco**. Patterns of trunk muscle activation during walking and pole walking using statistical non-parametric mapping. *JOURNAL OF ELECTROMYOGRAPHY AND KINESIOLOGY*, 2017 37: 52-60
- Annibalini, Giosue'; **Lucertini, Francesco**; Agostini, Deborah; Vallorani, Luciana; Gioacchini, ANNA MARIA; Barbieri, Elena; Guescini, Michele; Casadei, Lucia; Passalia, Annunziata; DEL SAL, Marta; Piccoli, Giovanni; Andreani, Mauro; Federici, Ario; Stocchi, Vilberto. Concurrent aerobic and

- resistance training has anti-inflammatory effects and increases both plasma and leukocyte levels of IGF-1 in late middle-aged type 2 diabetic patients. *OXIDATIVE MEDICINE AND CELLULAR LONGEVITY*, 2017 2017: 1-10
- Zoffoli, Luca; Ditroilo, Massimiliano; Federici, Ario; **Lucertini, Francesco**. Local stability and kinematic variability in walking and pole walking at different speeds. *GAIT & POSTURE*, 2017 53: 1-4
- Zoffoli, Luca; **Lucertini, Francesco**; Federici, Ario; Ditroilo, Massimiliano. Trunk muscles activation during pole walking vs. walking performed at different speeds and grades. *GAIT & POSTURE*, 2016 46: 57-62
- Gatta, Giorgio; Cortesi, Matteo; **Lucertini, Francesco**; Benelli, Piero; Sisti, Davide; Fantozzi, Silvia. Path linearity of elite swimmers in a 400 m front crawl competition. *JOURNAL OF SPORTS SCIENCE AND MEDICINE*, 2015 14: 69-74
- Lucertini, Francesco**; Ponzio, Elisa; Di Palma, Michael; Galati, Claudia; Federici, Ario; Barbadoro, Pamela; D'Errico, Marcello M; Prospero, Emilia; Ambrogini, Patrizia; Cuppini, Riccardo; Lattanzi, Davide; Minelli, Andrea. High cardiorespiratory fitness is negatively associated with daily cortisol output in healthy aging men. *PLOS ONE*, 2015 10: 1-15
- Barbieri, Elena; Agostini, Deborah; Polidori, Emanuela; Potenza, LUCIA ANNA MARIA; Guescini, Michele; **Lucertini, Francesco**; Annibalini, Giosue'; Stocchi, Laura; DE SANTI, Mauro; Stocchi, Vilberto. The pleiotropic effect of physical exercise on mitochondrial dynamics in aging skeletal muscle. *OXIDATIVE MEDICINE AND CELLULAR LONGEVITY*, 2015 2015: 1-15
- Guescini, Michele; Canonico, Barbara; **Lucertini, Francesco**; Maggio, Serena; Annibalini, Giosue'; Barbieri, Elena; Luchetti, Francesca; Papa, Stefano; Stocchi, Vilberto. Muscle releases alpha-sarcoglycan positive extracellular vesicles carrying miRNAs in the bloodstream. *PLOS ONE*, 2015 10: 1-19
- Benelli, Piero; Colasanti, Franca; Ditroilo, Massimiliano; Cuesta Vargas, Antonio; Gatta, Giorgio; Giacomini, Francesco; **Lucertini, Francesco**. Physiological and biomechanical responses to walking underwater on a non-motorised treadmill: effects of different exercise intensities and depths in middle-aged healthy women. *JOURNAL OF SPORTS SCIENCES*, 2014 32: 268-277
- Polizzi, Giuseppe; Giaccone, Marcello; Gervasi, Marco; D'Amato, Antonio; Palma, Antonio; Bartolucci, Cesare; Brandoni, Gabriele; Federici, Ario; **Lucertini, Francesco**. Pilot study on cardiac and metabolic responses to moderate-altitude endurance training in middle-distance runners. *MEDICINA DELLO SPORT*, 2014 67: 633-641
- De Matteis, Rita; **Lucertini, Francesco**; Guescini, Michele; Polidori, Emanuela; Donati Zeppa, Sabrina; Stocchi, Vilberto; Cinti, Saverio; Cuppini, Riccardo. Exercise as a new physiological stimulus for brown adipose tissue activity. *NMCD. NUTRITION METABOLISM AND CARDIOVASCULAR DISEASES*, 2013 23: 582-590
- Barbieri, Elena; Sestili, Piero; Vallorani, Luciana; Guescini, Michele; Calcabrini, Cinzia; Gioacchini, Anna Maria; Annibalini, Giosue'; **Lucertini, Francesco**; Piccoli, Giovanni; Stocchi, Vilberto. Mitohormesis in muscle cells: a morphological, molecular, and proteomic approach. *M.L.T.J. MUSCLES, LIGAMENTS AND TENDONS JOURNAL*, 2013 3: 254-266
- Lucertini, Francesco**; Spazzafumo, Liana; De Lillo, Francesca; Centonze, Debora; Valentini, Manuela; Federici, Ario. Effectiveness of professionally-guided physical education on fitness outcomes of primary school children. *EUROPEAN JOURNAL OF SPORT SCIENCE*, 2013 13: 582-590
- Ditroilo, Massimiliano; Castagna, Carlo; **Lucertini, Francesco**. Post-competition blood lactate concentration in regional level and masters athletes. *NEW STUDIES IN ATHLETICS*, 2012 27: 67-74
- Ditroilo, Massimiliano; Watsford, Mark; Fernandez Pena, Eneko; D'Amen, Giancarlo; **Lucertini, Francesco**; De Vito, Giuseppe. Effects of fatigue on muscle stiffness and intermittent sprinting during cycling. *MEDICINE AND SCIENCE IN SPORTS AND EXERCISE*, 2011 43: 837-845
- Watsford, Mark; Ditroilo, Massimiliano; Fernandez Pena, Eneko; D'Amen, Giancarlo; **Lucertini, Francesco**. Muscle stiffness and rate of torque development during sprint cycling. *MEDICINE AND SCIENCE IN SPORTS AND EXERCISE*, 2010 42: 1324-1332
- Fernandez Pena, Eneko; **Lucertini, Francesco**; Ditroilo, Massimiliano. A maximal isokinetic pedalling exercise for EMG normalization in cycling. *JOURNAL OF ELECTROMYOGRAPHY AND KINESIOLOGY*, 2009 19: e162-e170

Fernandez Pena, Eneko; **Lucertini, Francesco**; Ditroilo, Massimiliano. Training with independent cranks alters muscle coordination pattern in cyclists. JOURNAL OF STRENGTH AND CONDITIONING RESEARCH, 2009 23: 1764-1772

Giacomini, Francesco; Ditroilo, Massimiliano; **Lucertini, Francesco**; De Vito, Giuseppe; Gatta, Giorgio; Benelli, Piero. The cardiovascular response to underwater pedaling at different intensities: a comparison of 4 different water stationary bikes. JOURNAL OF SPORTS MEDICINE AND PHYSICAL FITNESS, 2009 49: 432-439

#### **BOOK CHAPTERS (4)**

Agostini, Deborah; Donati Zeppa, Sabrina; **Lucertini, Francesco**; Annibalini, Giosue'; Gervasi, Marco; Ferri Marini, Carlo; Piccoli, Giovanni; Stocchi, Vilberto; Barbieri, Elena; Sestili, Piero. Muscle and bone health in postmenopausal women: role of protein and vitamin D supplementation combined with exercise training. In: DIETARY PROTEIN AND MUSCLE IN AGING PEOPLE, 2018: 76-96. Basel, MDPI. ISBN 978-3-03897-458-1

Barbieri, Elena; Agostini, Deborah; Polidori, Emanuela; Potenza, Lucia; Guescini, Michele; **Lucertini, Francesco**; Annibalini, Giosue'; Stocchi, Laura; De Santi, Mauro; Stocchi, Vilberto. The pleiotropic effect of physical exercise on mitochondrial dynamics in aging skeletal muscle. In: CLINICAL NUTRITION AND AGING. SARCOPENIA AND MUSCLE METABOLISM, 2016: 147-182. Waretown (NJ), Apple Academic Press. ISBN 978-1-77188-370-2

**Lucertini, Francesco**; Federici, Ario. Role of professionally guided physical education in primary school. In: HANDBOOK OF PHYSICAL EDUCATION RESEARCH. ROLE OF SCHOOL PROGRAMS, CHILDREN'S ATTITUDES AND HEALTH IMPLICATIONS, 2014: 269-282. New York, Nova Science Publishers Inc. ISBN 978-1-63321-076-9

Fernández Peña, Eneko; **Lucertini, Francesco**; Ditroilo, Massimiliano; Watsford, Mark; D'Amen, Giancarlo. The effects of fatigue on calf stiffness and sprint performance in cycling. In: INVESTIGACIÓN E INNOVACIÓN EN EL DEPORTE, 2012: 747-752. Les Guixeres, Editorial Paidotribo. ISBN 978-8-49910-197-2

#### **PRIVACY**

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Urbino, 18/02/2022