

# Federico Gennaro

Fixed-term researcher • Art. 24 c. 3 lett. a) L. 240/201  
University of Padua, Department of Biomedical Sciences

Via Marzolo 3, 35131 Padova, Italy  
+39 (049) 827-5212 • federico.gennaro@unipd.it

## EDUCATION

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**ETH Zurich**, doctoral degree  
Doctor of Sciences (Dr. sc. ETH Zurich)  
Department of Health Sciences and Technology (D-HEST)  
Zurich, Switzerland  
23/04/2015 – 16/03/2020  
Doctoral Examination held on 16/12/2019  
Doctoral Degree Awarded on 12/08/2020

**University of Turin**, master's degree  
Sciences and Techniques of Adaptative Physical Activities (LM-67)  
Turin, Italy  
20/11/ 2011 – 26/03/2014

**University of Turin**, graduate specialization  
Kinesiology: health education, quality of life and its sustainability  
Turin, Italy  
31/03/2011 – 17/11/2011

**University of Turin**, bachelor's degree  
Physical Education and Sport (L-33)  
Turin, Italy  
26/09/2005 – 31/03/2011

## RESEARCH EXPERIENCE

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**University of Padua**, Fixed-term researcher type-A  
Department of Biomedical Sciences (DSB)  
Padua, Italy  
06/02/2023 – Present

**University of California, Los Angeles (UCLA)**, Postdoctoral Scholar  
Department of Neurology, David Geffen School of Medicine  
Los Angeles, CA, United States  
01/06/2022 – 31/01/2023

**Children's Hospital Los Angeles**, Postdoctoral Research Fellow  
Division of Research on Children, Youth and Families  
Los Angeles, CA, United States  
26/07/2021 – 31/05/2022

**Istituto Italiano di Tecnologia**, Postdoc  
Multiscale Brain Communication, CTNSC@UniFe  
Genoa, Italy  
16/01/2020 – 15/03/2021

**ETH Zurich**, Research Assistant  
Institute of Human Movement Sciences and Sport, Department of Health Sciences and Technology  
Zurich, Switzerland  
15/02/2015 – 31/12/2019

## FELLOWSHIPS

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**Research Project Grant**, University of Padua (Padua, Italy)  
*Investimento Strategico di Dipartimento (SID) 2024*  
19 415 EUR  
2024

**Research Fellowship**, AILA-OIL (Lugano, Switzerland)  
50 000 CHF  
2019

**Graduate Scholarship**, Fondazione ISEF Piemonte (Turin, Italy)  
500 EUR  
2011

## HONORS & AWARDS

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**AO Foundation Research Opportunity Award in Health Sciences and Technology**,  
AO Foundation (Davos, Switzerland) & ETH Zurich Foundation (Zurich, Switzerland)  
2 000 CHF  
2018

## PUBLICATIONS (\*denotes role as corresponding author)

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1) Schättin A., Arner R., **Gennaro F.**, de Bruin ED (2016). Adaptations of prefrontal brain activity, executive functions, and gait in healthy elderly following exergame and balance training: A randomized-controlled study. *Frontiers in Aging Neuroscience*, 8:278.

- 2) Knols RH, Swanenburg J., De Bon D., **Gennaro F.**, Wolf M., Krüger B., Bettex D., de Bruin ED (2017). Investigating the usability and acute effects of a bedside video console to prefrontal cortical activity alterations: A preclinical study in healthy elderly. *Frontiers in Systems Neuroscience*, 11:85.
- 3) **Gennaro F.\*** & de Bruin ED (2018). Assessing brain-muscle connectivity in human locomotion through mobile brain/body imaging: opportunities, pitfalls and future directions. *Frontiers in Public Health*, 6:39.
- 4) Schättin A., **Gennaro F.**, Egloff M., Vogt S., De Bruin ED (2018). Physical Activity, Nutrition, Cognition, Neurophysiology, and Short-Time Synaptic Plasticity in Healthy Older Adults: A Cross-Sectional Study. *Frontiers in Aging Neuroscience*, 10:242.
- 5) de Bruin ED, Patt N., Ringli L., **Gennaro F.** (2019). Playing exergames facilitates central drive to the ankle dorsiflexors during gait in older adults; a quasi-experimental investigation. *Frontiers in Aging Neuroscience*, 11:263.
- 6) Adcock M., Thalmann M., Schättin A., **Gennaro F.**, de Bruin ED (2019). A Pilot Study of an In-Home Multicomponent Exergame Training for Older Adults: Feasibility, Usability and Pre-Post Evaluation. *Frontiers in Aging Neuroscience*, 11:304
- 7) Liepa A., Knols RH, Lāriņš V., **Gennaro F.**, de Bruin ED (2019), A systematic review: a comparison of traditional with motor learning core stability training approaches regarding the effect on lower and upper extremities use, balance and functional performance in older adults. *LASE Journal of Sport Science*, 10(1)
- 8) Adcock M., Sonder F., Schättin A., **Gennaro F.**, de Bruin ED (2020). A usability study of a multicomponent video game-based training for older adults. *European Review of Aging and Physical Activity*, 17:3.
- 9) **Gennaro F.\*** & de Bruin ED (2020). A pilot study assessing reliability and age-related differences in corticomuscular and intramuscular coherence in ankle dorsiflexors during walking. *Physiological Reports*, 8(4):e14378
- 10) **Gennaro F.\***, Maino P., Kaelin-Lang A., De Bock K., de Bruin ED (2020). Corticospinal Control of Human Locomotion as a New Determinant of Age-Related Sarcopenia: An Exploratory Study. *Journal of Clinical Medicine*, 9(3):720.
- 11) Deng W., Marmelat V., Vanderbilt D.L., **Gennaro F.**, & Smith, B.A. (2023). Barcoding, linear and nonlinear analysis of full-day leg movements in infants with typical development and infants at risk of developmental disabilities: Cross-sectional study. *Infancy*, 28(3).
- 12) Paoli A., Cerullo G., Bianco A., Neri M., **Gennaro F.**, Charrier D., & Moro T. (2024). Not Only Protein: Dietary Supplements to Optimize the Skeletal Muscle Growth Response to Resistance Training: The Current State of Knowledge. *Journal of Human Kinetics*, 91: 225-244.
- 13) da Silva Costa A.A., Moraes R., den Otter R., **Gennaro F.**, Bakker L., Dos Santos P.C.R. & Hortobágyi, T. (2024). Corticomuscular and intermuscular coherence as a function of age and walking balance difficulty. *Neurobiology of Aging*, 141:85-101.
- 14) Sampieri A., Marcolin G., **Gennaro F.**, Magistrelli E., Del Vecchio A., Moro T., Paoli A. & Casolo A. (2024). Alterations in magnitude and spatial distribution of erector spinae muscle activity in cyclists with a recent history of low back pain. *European Journal of Applied Physiology*, 1-10.
- 15) Fortunati M., Febbi M., Negro M., **Gennaro F.**, D'Antona G., & Crisafulli O. (2024). Lower-Limb Exoskeletons for Gait Training in Parkinson's Disease: The State of the Art and Future Perspectives. *Healthcare*, 12(16):1636.
- 16) Pizzigalli L., **Gennaro F.**, Nazzi G., Rainoldi A. (2013). Golfisti professionisti e dilettanti: quali differenze nel putt?. *Strength & Conditioning*; Vol. 6: 27-34 (ISSN 2281-3772). [not indexed/peer-reviewed]

## PROFESSIONAL AFFILIATIONS

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<b>European College of Sport Science</b> , Membership	2016, 2020, 2024
<b>National Postdoctoral Association</b> (United States), membership # 67654505	2022
<b>International Parkinson and Movement Disorder Society</b> , membership # 113829	2022
<b>Società italiana delle Scienze Motorie e Sportive</b> , socio ordinario	2023

## EDITORIAL BOARD/AD HOC REVIEWER ROLES

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**Editorial Board Member** (2024 – Present) for *Gait & Posture*

**Review Editor** (2023 – Present) for *Frontiers in Aging Neuroscience*

**Ad hoc Reviewer** for the following scientific journals: *Frontiers in Aging Neuroscience*, *Frontiers in Neurology*, *Journal of NeuroEngineering and Rehabilitation*