

CURRICULUM VITAE

INFORMAZIONI PERSONALI

SAMUEL D'EMANUELE

Via Santuario, 20/A, 10090, Trana (TO) - Italy

+39 348 8838001

10/09/1993

Italian

samuel.demanuele@gmail.com

samuel.demanuele@univr.it

<https://orcid.org/0000-0001-6232-9870>

<https://www.scopus.com/authid/detail.uri?authorId=57202904053>

https://www.researchgate.net/profile/Samuel_Demanuele

ISTRUZIONE E FORMAZIONE

- From 01/10/19 to 21/07/2023 **PhD** in Neuroscience, Psychological and Psychiatric Sciences, and Movement Sciences and **Doctor Europaeus**– XXXV cycle – University of Verona
Via Casorati 43, Verona (VR) – 37131
Title of the doctoral thesis: “Rate of force development and purely explosive contractions: from neural and muscular determinants to methods to assess central, peripheral fatigue, and asymmetries”. S.S.D. Area 06/N2 – S.S.D. M-EDF/02
Tutor: Prof. Federico Schena
- 02/03/2023 Titolo abilitazione classe di concorso A049: Concorso ordinario antecedente al 2012 - Concorso STEM (D.D. 11 giugno 2021 n. 826) - Procedura straordinaria indetta con D.D. 510/2020 e succ.mod - Concorso STEM 2022 DL 73/2021 art.59 comma 18 – Concorso ordinario 2020 e succ.modifiche.
Votazione:71
- 19/07/2022 Titolo abilitazione classe di concorso A048: Concorso ordinario antecedente al 2012 - Concorso STEM (D.D. 11 giugno 2021 n. 826) - Procedura straordinaria indetta con D.D. 510/2020 e succ.mod - Concorso STEM 2022 DL 73/2021 art.59 comma 18 – Concorso ordinario 2020 e succ.modifiche.
Votazione:63
- From 1/22 to 7/22 Visiting PhD Student at Northumbria University – Newcastle (UK) - Faculty of Health & Life Sciences – Department of Sport, Exercise and Rehabilitation.
Supervisor: Prof. Stuart Goodall
- From 21/09/2020 to 24/09/2020 Postgraduate Course in Systematic review and meta-analysis to produce evidence-based guidelines in healthcare field – Polo Santa Marta - Università degli Studi di Verona
Director: Prof. Corrado Barbui
- From 21/09/2020 to 24/09/2020 Winter School "The physiological bases of Exercise prescription"- Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131
Director: Prof. Silvia Pogliaghi
- From 1/2015 to 12/4/18 Degree in Sciences and Advanced Techniques of Sport (LM-68)
SUISM, Torino (TO), Italy
110 cum laude and publication recommended.
Experimental thesis titled: “An experimental protocol of ergonomics and kinesiology for pianists and violinists”. Supervisor: Prof. Alberto Rainoldi

• From 1/2012 to 9/2015 Degree in Sport Sciences and Motor Activity (L-22)
SUISM, Torino (TO), Italy
98/110
Thesis titled: "Hypertrophy: from biochemistry to practice". Supervisor: Prof. Rinaldo d'Isep

• From 9/2010 to 6/2015 Degree Scientific High School (Brocca Experimentation)
IIS Blaise Pascal, Giaveno - Italy
68/100

ATTIVITÀ DI DIDATTICA E DI AGGIORNAMENTO PROFESSIONALE

• 19/1/2023 Neuromuscular Fatigue – Assessment and Application in Football - Master Universitario in Teoria e tecniche della preparazione atletica nel calcio (I livello - Interateneo: sede amm. Pisa) - Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• From 11/2022 to 12/2022 Attività didattica integrativa - Metodi e didattiche della preparazione fisica – C.I. Programmazione e conduzione dell'allenamento (Verona) – Prof. Federico Schena – 40h Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• a.y. 2021/2022 Cultore della Materia in – Tecniche e Metodologia dell'allenamento – Prof. Paolo Brustio Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• a.y. 2021/2022 Cultore della Materia in - Metodi e didattiche della preparazione fisica – C.I. Programmazione e conduzione dell'allenamento (Verona) – Prof. Paolo Brustio Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• From 11/2021 to 12/2021 Attività didattica integrativa - Metodi e didattiche della preparazione fisica – C.I. Programmazione e conduzione dell'allenamento (Verona) – Prof. Paolo Brustio– 40h Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• 11/09/2021 Neuromuscular Fatigue – Assessment and Application in Football - Master Universitario in Teoria e tecniche della preparazione atletica nel calcio (I livello - Interateneo: sede amm. Pisa) - Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• From 11/2020 to 12/2020 Attività didattica integrativa - Metodi e didattiche della preparazione fisica – C.I. Programmazione e conduzione dell'allenamento (Verona) – Prof. Cantor Tarperi– 40h Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• From 11/2019 to 12/2019 Attività didattica integrativa - Metodi e didattiche della preparazione fisica – C.I. Programmazione e conduzione dell'allenamento (Verona) – Prof. Cantor Tarperi– 40h Università degli Studi di Verona - Via Casorati 43, Verona (VR) - 37131

• From 10/2018 to 10/2019 Cultore della Materia in – Teoria dell'allenamento – Prof. Brustio
SUISM – C.so Trento, 13 – Turin (TO) - <https://scienzemotorie.campusnet.unito.it/do/home.pl>

ESPERIENZA PROFESSIONALE

From 1/02/2023 to 31/01/2024 Assegnista di ricerca per il progetto "Funzione muscolare per la qualità della vita nella popolazione anziana coinvolta nei programmi di attività fisica del progetto S.T.E.P.S - STEPS: SCHENA_STEPS_UIA05-383 - CUP: B31D20002660006".
Settore scientifico-disciplinare: M-EDF-02 METODI E DIDATTICHE DELLE ATTIVITÀ SPORTIVE

• From 1/09/2023 to the current date Professore in Scienze Motorie (Classe A-49) nella scuola secondaria di I grado (in congedo straordinario per assegno di ricerca).
I.I.S. Arturo Prever, Pinerolo (TO), Via Carlo Merlo, 2, 10064

- From 1/9/2022 to 31/08/2023
Professore in Scienze Motorie (Classe A-48) nella scuola secondaria di II grado (in congedo straordinario per motivi di dottorato e poi per assegno di ricerca. Regolarmente in servizio dal 1/1/23 al 31/1/23).
I.I.S. Amaldi-Sraffa, Orbassano (TO), Via F.lli Rosselli, 35, 10043
- From 10/2021 to 06/2022
Professore in Scienze Motorie (Classe A-49) nella scuola secondaria di I grado (in congedo straordinario per motivi di dottorato).
I.C.S. Giovanni Pascoli, Grezzana (VR), Via Vittorio Emanuele Rossi, 16, 37023
- From 02/2019 to 09/2019
Project "**Palestre della Salute**"
SUISM, Torino (TO)
The aim was the health and fitness in **elderly subjects**.
Supervisor of master's trainees within the project promoted and coordinated by the University of Turin.
- From 09/2017 to 12/2017
Internship at the education structure of SUISM
Educatore della Provvidenza, Corso Trento 31, Torino (TO) -
<http://www.suism.unito.it/do/home.pl>
Organization and support for secretariat and didactics
- From 06/2017 to 07/2017
Internship at the Research Center of SUISM
Piazza Bernini 13, Torino (TO)
Research activity for the SPRINTT (**Sarcopenia e Phisycal fRaily IN older people**) project
- From 09/2013 to 08/2014
Internship at the secondary school
Scuola Media Statale Gonin, Giaveno (TO), Italy
Teaching Support

LINGUE CONOSCIUTE

- Capacità di lettura
- Capacità di scrittura
- Capacità di espressione orale

ENGLISH

B1
B1
B1

PUBLICATIONS

D'Emanuele, S., Boccia, G., Angius, L., Hayman O., Goodall, S., Schena, F., Tarperi, C. (2023). Reduced rate of force development under fatigued conditions influences the decline in force complexity. (15/11/23 - Under review)

Boccia, G., **D'Emanuele, S.**, Brustio, P. R., Rainoldi, A., Schena, F., & Tarperi, C. (2023). Decreased neural drive affects the early rate of force development after repeated burst-like isometric contractions. *Scandinavian journal of medicine & science in sports*, 10.1111/sms.14528. Advance online publication. <https://doi.org/10.1111/sms.14528>

Skroce, K., Bettega, S., **D'Emanuele, S.**, Boccia, G., Schena, F., & Tarperi, C. (2023). Flat versus Simulated Mountain Trail Running: A Multidisciplinary Comparison in Well-Trained Runners. *International journal of environmental research and public health*, 20(6), 5189. <https://doi.org/10.3390/ijerph20065189>

D'Emanuele, S., Tarperi, C., Rainoldi, A., Schena, F., & Boccia, G. (2022). Neural and contractile determinants of burst-like explosive isometric contractions of the knee extensors. *Scandinavian journal of medicine & science in sports*, 10.1111/sms.14244. Advance online publication. <https://doi.org/10.1111/sms.14244>

Brustio, P. R., Mulasso, A., **D'Emanuele, S.**, Zia, G., Feletti, L., Del Signore, S., & Rainoldi, A. (2022). Indoor Mobility, Frailty, and Disability in Community-Dwelling Older Adults: A Mediation

Model. *International journal of environmental research and public health*, 19(18), 11386.
<https://doi.org/10.3390/ijerph191811386>

Boccia, G., **D'Emanuele, S.**, Brustio, P. R., Beratto, L., Tarperi, C., Casale, R., Sciarra, T., & Rainoldi, A. (2022). Strength Asymmetries Are Muscle-Specific and Metric-Dependent. *International journal of environmental research and public health*, 19(14), 8495.
<https://doi.org/10.3390/ijerph19148495>

Aranceta-Garza, A., Russo, A., **D'Emanuele, S.**, Serafino, F., & Merletti, R. (2021). High Density Surface Electromyography Activity of the Lumbar Erector Spinae Muscles and Comfort/Discomfort Assessment in Piano Players: Comparison of Two Chairs. *Frontiers in physiology*, 12, 743730. <https://doi.org/10.3389/fphys.2021.743730>

D'Emanuele, S., Maffiuletti, N. A., Tarperi, C., Rainoldi, A., Schena, F., & Boccia, G. (2021). Rate of Force Development as an Indicator of Neuromuscular Fatigue: A Scoping Review. *Frontiers in human neuroscience*, 15, 701916. <https://doi.org/10.3389/fnhum.2021.701916>

Russo, A., Aranceta-Garza, A., **D'Emanuele, S.**, Serafino, F., & Merletti, R. (2019). HDsEMG Activity of the Lumbar Erector Spinae in Violin Players: Comparison of Two Chairs. *Medical problems of performing artists*, 34(4), 205–214. <https://doi.org/10.21091/mppa.2019.4034>

Cattarello, P., Vinelli, S., **D'Emanuele, S.**, Gazzoni, M., & Merletti, R. (2018). Comparison of chairs based on HDsEMG of back muscles, biomechanical and comfort indices, for violin and viola players: A short-term study. *Journal of electromyography and kinesiology: official journal of the International Society of Electrophysiological Kinesiology*, 42, 92–103.
<https://doi.org/10.1016/j.jelekin.2018.06.013>

POSTER/ABSTRACT

D'Emanuele, S., Angius, L., Hayman, O., Goodall, S., Schena, F., Tarperi, C., Boccia, G. (2022) Repeated submaximal explosive contractions of dorsiflexor muscles effect the rate of force development and maximal voluntary force. *SISMES XIII National Congress*. Milano, 4 – 6 Nov 2022.

D'Emanuele, S., Boccia, G., Rainoldi, A., Schena, F., Tarperi, C. (2022). Central and peripheral fatigue induced by 100 purely explosive isometric contractions. *The Biomedical Basis of Elite Performance 2022*, The Physiological Society, at the Monica Partridge Building, University of Nottingham, UK on 12 – 13 April 2022

D'Emanuele S, Boccia G, Rainoldi A, Schena F, Tarperi C. Neural and contractile determinants of purely explosive isometric contractions of knee extensors. *SISMES XII National Congress*. 8-10 Oct 2021.

Boccia G, **D'Emanuele S**, Brustio PR, Tarperi C, Schena F, Rainoldi A. Purely explosive contractions induce greater central than peripheral fatigue. *SISMES XII National Congress*. 8-10 Oct 2021.

Budel L, Skroce K, **D'Emanuele S**, Bettega S, Schena F, Tarperi C. The Effects of Uphill and Downhill High-Intensity Interval Training on Running Performance in Recreational Runners. *SISMES XII National Congress*. 8-10 Oct 2021

Mulasso A, Brustio P, **D'Emanuele S**, Cuomo S, Rainoldi A. Effects of adapted physical exercise on dual-task ability and frailty in people with chronic diseases: preliminary results of the "Palestra Salute" (Piedmont Region) (SISMES, 2019).

Brustio, P. R., Mulasso, A., Giacone, D., **D'Emanuele, S.**, Galfano, V., Luisi, F., ... & Rainoldi, A. Correlations of ADAMO mobility index with physical functioning and health status: preliminary results of an IMI SPRINTT Living Lab (SIAMOC, 2017).

Russo, A., Aranceta Garza, A., **D'Emanuele, S.**, Serafino, F., & Merletti, R. (2017). Back muscle activity in musicians: comparison between two different chairs. *Società Italiana di Analisi del Movimento in Clinica*. (SIAMOC, 2017).

CONFERENCES/ORAL PRESENTATIONS

Mulasso A, Brustio PR, Giacone D, **D'Emanuele S**, Galfano S, Luisi F, Tretyakova K, Donini LM & Rainoldi A. A comparison of ADAMO mobility index with physical performance measures for identifying frailty: results of an IMI SPRINTT Living Lab in older adults. *Sport Sciences for Health*, 13 (Suppl. 1), 2017, p. S46, doi:10.1007/s11332-016-0305-x. (SISMES, 2017).

SISMES XIV National Congress. 1 - 4 Nov 2023 - Napoli. **D'Emanuele S.**, Boccia G, Angius L, Hayman O, Goodall S, Schena F, Tarperi C. Are rate of force development and force complexity the two sides of the same coin? Concurrent effects of fatigue after repeated explosive contractions of dorsiflexor muscles.

ECSS – 4 - 7 Jul 2023 – Paris – **D'Emanuele S.**, Angius, L., Hayman, O., Goodall, S., Schena, F., Tarperi, C., Boccia, G. Repeated explosive contractions of dorsiflexor muscles affect the maximal voluntary force, rate of force development at maximal and submaximal levels, magnitude and complexity of force fluctuations.

ECSS – 30 Aug – 4 Sept – Sevilla – **D'Emanuele S.** Neural and contractile determinants of ballistic (burst-like) contraction of knee extensors.

SISMES XII National Congress. 8 - 10 Oct 2021 - Padova. **D'Emanuele S.** Neural and contractile determinants of purely explosive isometric contractions of knee extensors.

CeRiSM - 8th International Congress – Mountain Sport and Health – 7/8 Nov 2019 – Rovereto (TN) – **D'Emanuele S.**: “What high density surface electromyography can teach us about the postural activation of erector spinae muscles? The case of violinists” – Short talk

THESIS CO-SUPERVISOR

Irene Cagnina – “Sistema endocrino ed allenamento con sovraccarichi” – Bachelor’s degree – 2019 – Prof. Paolo Brustio

Cristian Esposito – “L’assunzione di caffeina negli sport di endurance: un aiuto realmente efficace?” – Bachelor’s degree. – 2019 – Prof. Paolo Brustio

Alessandro Capasso – “Mind-muscle connection: ruolo nell’allenamento ipertrofico” – 2021 - Prof. Federico Schena e Prof. Cantor Tarperi

Michela Margoni – “La pliometria stabile e instabile per il training off-ice nel pattinaggio di figura” – 2021 - Bachelor’s degree - Prof. Federico Schena e Prof. Cantor Tarperi

Veronica Zardo – “Asimmetrie degli arti superiori in pallavoliste non professioniste: valutazioni di forza massima ed esplosiva attraverso contrazioni massimali e sub-massimali” – 2023 – Master’s degree – Prof. Cantor Tarperi

COURSES/CERTIFICATIONS

- Elav Functional Fitness Specialist Certification
- Elav Personal Trainer Specialist Certification
- Elav Hypertrophy Training Specialist Certification
- Elav Slimming Training Specialist Certification
- Elav Expert Certification
- Elav Basic Certification
- ISSA Certified Body Composition Specialist BCS 3
- ISSA Certified Personal Fitness Trainer CFT3
- TRX® Group Suspension Training Course (GSTC)
- International Official Certificated Mudder’s Trainer
- Virgin Active CROSSACTIVE
- Corso di Vela Catamarano e Windsurf con la SUISM presso il Centro Velico Naregno
- B.L.S. (Basic Life Support)
- Participation at seminars ISSA about: Body Composition, Aerobic exercise planning, Training planning, Muscle Tensions and Cellulite.

REVIEWER	Journal of Electromyography and Kinesiology Journal of Cachexia, Sarcopenia and Muscle Frontiers – Integrative Physiology Aging Clinical and Experimental Research
AWARDS	Science Outside the Box Contest – PhD Day '22 – Department of Neuroscience, Psychological and Psychiatric Sciences, and Movement Sciences
AFFILIATIONS	SISMES (Società Italiana Scienze Motorie e Sportive) – 2022, 2023 ECSS (European College of Sport Science) – 2023

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali"

Luogo e data. Verona, 21.12.2023.....

Firma..... 