# **CURRICULUM VITAE et STUDIORUM**

## Gabriele Fusco

#### **EDUCATION**

01/2022-12/2025: Italian School of Clinical Cognitivism (APC/SPC/SICC) - Trainee in Cognitive-Behavioral Psychotherapy.

02/2017: Sapienza University of Rome — PhD in Psychology and Social Neuroscience (curriculum: CoSAN, Cognitive, Social and Affective Neuroscience).

07/2012: Sapienza University of Rome – Master's Degree in Psychology (Diagnosis and Rehabilitation of Cognitive Disorders, curriculum: Experimental).

02/2007: Sapienza University of Rome - Bachelor's Degree in Psychology (Psychological Sciences and Techniques for the Analysis of Normal and Pathological Cognitive Processes).

#### SCHOLARSHIPS and RESEARCH CONTRACTS

01/2025- Current Position: Department of Psychology, Sapienza University of Rome. Rome, Italy.

01/2024 - 12/2024: Department of Languages and Literatures, Communication, Education, and Society. Udine, Italy.

01/2023 - 12/2023: Department of Languages and Literatures, Communication, Education, and Society. Udine, Italy.

01/2020 - 12/2022: Department of Psychology, Sapienza University of Rome. Rome, Italy.

01/2019 - 12/2019: IRCSS Fondazione Santa Lucia. Rome, Italy.

07/2017 - 11/2018: IRCSS Fondazione Santa Lucia. Rome, Italy.

10/2015 - 11/2016: Sapienza University of Rome. Rome, Italy.

10/2014 - 06/2015: University of Siena, Ministry of Health. Siena, Italy.

#### PROFESSIONAL EXPERIENCES

Current Position: Research Fellow at the Laboratory of Social and Cognitive Neuroscience directed by Professor Salvatore Maria Aglioti. Department of Psychology, Sapienza University of Rome. Project: "Neuromodulation of predictive coding during virtual social interactions." Supervisor: Salvatore Maria Aglioti

06/2024 - 12/2025: Trainee Psychologist-Psychotherapist at the Mental Health Center (CSM), ASL Roma 5 Colleferro (RM). Tutor: Valentina Silvestre

01/2025: Advanced theoretical and practical training on computational simulations of ultrasound pulses delivered to the cerebral cortex and installation of the NeuroFUS device (Brainbox) for the application of transcranial focused ultrasound stimulation (tFUS)

01/2024 - 12/2024: Research Fellow at the Body Lab UdinE directed by Professor Cosimo Urgesi. Department of Languages and Literatures, Communication, Education, and Society. Project: "Neural Bases of Religiosity and the Predictive Brain: A Neuromodulation Study." Supervisor: Cosimo Urgesi

01/2023 - 12/2023: Research Fellow at the Body Lab UdinE directed by Professor Cosimo Urgesi. Department of Languages and Literatures, Communication, Education, and Society. Project: "Social Perception and Contextual Expectancies: role of the cerebellum." Supervisor: Cosimo Urgesi

09/2022 - 05/2024: Trainee Psychologist-Psychotherapist at the Psychiatric Service for Diagnosis and Treatment (SPDC), ASL Roma 5 Colleferro (RM). Tutor: Laura Bernabei

01/2022 - 12/2022: Research Fellow at the Laboratory of Social and Cognitive Neuroscience directed by Professor Salvatore Maria Aglioti. Department of Psychology, Sapienza University of Rome. Project: "Behavioral studies and non-invasive brain stimulation in patients with deficits in cognitive monitoring and control." Supervisor: Salvatore Maria Aglioti

02/2022: Registered Psychologist in Section A of the Register of the Order of Psychologists of Lazio, No. 27243

10/2021 – 11/2021: Seminar teaching activity (25 hours) in support of the teaching for the master's degree program "Cognitive Neuroscience" directed by Professor Marialuisa Martelli at the Department of Psychology, Sapienza University of Rome. Course Title: "Behavioral, electrophysiological, and neural underpinnings of cognitive control. A special focus on conflict and error monitoring."

01/2021: Licensed to practice as a Psychologist.

01/2020 – 12/2021: Research Fellow at the Laboratory of Social and Cognitive Neuroscience directed by Professor Salvatore Maria Aglioti. Department of Psychology, Sapienza University of Rome. Project: "Application of non-invasive techniques to investigate the behavioral and electrocortical correlates associated with conflict and error monitoring." Supervisor: Salvatore Maria Aglioti

01/2019 - 12/2019: Postdoctoral Fellow at the Laboratory of Social and Cognitive Neuroscience directed by Professor Salvatore Maria Aglioti. IRCSS Fondazione Santa Lucia. Rome, Italy. Project: "Modulating cognitive control in decision conflicts through non-invasive transcranial alternating current stimulation (tACS)." Supervisor: Salvatore Maria Aglioti

09/2018: Advanced Course in "Transcranial Magnetic Stimulation (TMS) and Neuronavigation" at the Department of General Psychology, University of Padua. Instructor: Elias Casula

07/2017 - 11/2018: Postdoctoral Fellow at the Laboratory of Social and Cognitive Neuroscience directed by Professor Salvatore Maria Aglioti. IRCSS Fondazione Santa Lucia. Rome, Italy. Project: "Combined behavioral and non-invasive brain stimulation interventions for the treatment of body image distortions in Anorexia Nervosa." Supervisor: Ilaria Bufalari

02/2017: XIV Practical Course in "Transcranial Magnetic and Electric Stimulation" as part of the training program of the German Society of Neuroscience (NWG) Göttingen, Germany. Instructor: Andrea Antal

05/2016 – 11/2016: International Visiting PhD Student at the Toronto Laboratory for Social Neuroscience directed by Prof. Michael Inzlicht. Project: "The role of medial frontal theta (MFθ) activity in intertemporal choices during conflict monitoring." University of Toronto, Department of Psychology, Ontario, Canada. Supervisor: Michael Inzlicht

10/2014 - 06/2015: Visiting PhD Student at the Brain Investigation & Neuromodulation Laboratory directed by Prof. Simone Rossi. Project: "Enhancement of Memory through advanced non-invasive brain stimulation techniques: a Neuro-Rehabilitation project for patients with memory deficits." University Hospital of Siena, University of Siena, Italy. Supervisor: Matteo Feurra

02/2013 - 09/2013: Research Assistant at the Laboratory of Cognitive, Social, and Affective Neuroscience directed by Prof. Salvatore Maria Aglioti, Department of Psychology, Sapienza University of Rome, IRCSS Fondazione Santa Lucia, Rome, Italy. Supervisor: Emmanuele Tidoni

01/2010 - 06/2011: Intern (500 hours) at the Di.Vi.Na. (Visuo-Spatial and Navigation Disorders) Laboratory, Department of Psychology, Sapienza University of Rome, IRCSS Fondazione Santa Lucia, Rome, Italy. Supervisor: Cecilia Guariglia

01/2009 – 07/2011: Educational Cultural Assistant (AEC) for children with Autism Spectrum Disorder at the Sibilla Aleramo Elementary School, Home Assistant, Social Worker, and Assistant at the psychiatric family home "Prenestina" (formerly "666"). Social health cooperative ONLUS "Nuove Risposte," Rome, Italy.

09/2006 – 03/2007: Intern (500 hours) at the Neuropsychology Clinic of CEMI (Center for Aging Medicine), Policlinico "A. Gemelli," Rome, Italy. Supervisor: Caterina Silveri

05/2004 - 06/2008: Telephone Operator at American Express Services Europe Limited, Rome, Italy.

#### REVIEWER AD HOC

https://www.webofscience.com/wos/author/record/516951

### **GRANTS**

2022- John Templeton Foundation (member) "Searching for the Neural Foundations of Spirituality and Religiosity in the predictive coding of the internal and external world." Prot: TEMPLETON\_2022\_CNRC\_URGESI

2022 - Bial Foundation Grant, (PI) "Modulating the brain rhythm of religious and political conflicts: theta-transcranial alternating current stimulation (theta-tACS) studies." Project: 273/2022

2022 — Sapienza University Research Grant "Avvio alla Ricerca," (PI) "Delivering midfrontal theta transcranial alternating current stimulation (MF0-tACS) to improve performance monitoring in Parkinson's Disease (PD)." Protocol No. AR2221816C57526C

2021 – "Sanità Giovani Ricercatori" Grant, (Co-PI) "Improving motor, cognitive, and social functions in patients with Parkinson's Disease: a novel approach combining electrophysiological recordings and non-invasive brain stimulation in interactive scenarios." GR-2021-12372923

2021 – Sapienza University Research Grant "Avvio alla Ricerca," (PI) "Modulating impulsivity in decision conflicts: a 'Registered Report' based on transcranial alternating current stimulation (tACS)." Protocol No. AR22117A867937A0

#### SCIENTIFIC EVENTS

**Symposium (co-chair):** ""The crossroads of conflict: Modulating decision-making, inhibitory control, and their neural signatures in social, moral, and intertemporal scenarios". ESCAN 2024 Gand, Belgium 22-25 maggio 2024 <a href="https://escan2024.com/conference-program/">https://escan2024.com/conference-program/</a>

Annual Italian Reproducibility Network- ITRN Meeting (local organizer): Department of Psychology, University of Rome "Sapienza" 24th February 2023 <a href="https://dippsi.psi.uniroma1.it/archivionotizie/neuroscience-goes-social-30-seminario-internazionale">https://dippsi.psi.uniroma1.it/archivionotizie/neuroscience-goes-social-30-seminario-internazionale</a>

Symposium (proponent): "Open Science: Building a reliable, transparent and trustworthy scientific approach in psychology and cognitive and social neuroscience". AIP sperimentale 2021- Lecce, Italy 8-10 September 2021 <a href="http://www.aipass.org/xxvii-congresso-aip-sezione-sperimentale-lecceibrido-8-10-settembre-2021">http://www.aipass.org/xxvii-congresso-aip-sezione-sperimentale-lecceibrido-8-10-settembre-2021</a>

Neuroscience goes social 3.0 (organizational committee): Department of Psychology, University of Rome "Sapienza" 25th February 2020 <a href="https://dippsi.psi.uniromal.it/archivionotizie/neuroscience-goes-social-30-seminario-internazionale">https://dippsi.psi.uniromal.it/archivionotizie/neuroscience-goes-social-30-seminario-internazionale</a>

#### SCIENTIFIC PUBBLICATIONS

- C. Costa, R. Pezzetta, E. Toffalini, M. Grassi, G Cona, C Miniussi, P. J. Bauer, S. Borgomaneri, M. Brysbaert, C. D. Chambers, N. Edelstyn, A. Eerland, S. J. Gilbert, M. A. Nitsche, R. A. Poldrack, A. Puce, K. R. Ridderinkhof, T. Y. Swaab, C. Umiltà, M. Wiener & C. Scarpazza on behalf of the PECANS Extended Working Group (2025). Enhancing the quality and reproducibility of research: Preferred Evaluation of Cognitive and Neuropsychological Studies-The PECANS statement for human studies. Behavior Research Methods, 57(7), 182. (IF: 3.9; citations: 0)
- Zogmaister C., Vezzoli M., Facchin A., Conte F. P., Rizzi E., Giaquinto F., Cavicchiolo E., Fusco G., Pegoraro S., Simioni M., (2024). Assessing the Transparency of Methods in Scientific Reporting. Collabra: Psychology, 10(1). (IF: 3.2; citations: 2)
- Fusco, G., Scandola, M., Lin, H., Inzlicht, M., & Aglioti, S. M. (2024). Modulating preferences during intertemporal choices through exogenous midfrontal transcranial alternating current stimulation: A registered report. Cortex, 171, 435-464. (IF: 3.4; citations: 2)
- Fusco, G., Ciccarone, S., Petrucci, M., Cozzani, B., Vercelli, G., Cotugno, A., & Bufalari, I. (2023). Altered processing of conflicting body representations in women with restrictive anorexia nervosa. Psychological Research, 1-14. (IF: 2.3; citations: 5)
- Fusco, G., Cristiano, A., Perazzini, A., & Aglioti, S. M. (2022). Neuromodulating the performance monitoring network during conflict and error processing in healthy populations: Insights from transcranial electric stimulation studies. Frontiers in Integrative Neuroscience, 16. (IF: 3.5; citations: 7)
- Fusco, G., Fusaro, M., & Aglioti, S. M. (2022). Midfrontal-occipital θ-tACS modulates cognitive conflicts related to bodily stimuli.
   Social cognitive and affective neuroscience, 17(1), 91-100. (IF: 4.2; citations: 16)
- Fusco, G., Tieri, G., & Aglioti, S. M. (2020). Visual feedback from a virtual body modulates motor illusion induced by tendon vibration. Psychological Research, 1-13. (IF: 2.3; citations: 15)
- Fusco, G., Scandola, M., Feurra, M., Pavone, E. F., Rossi, S., & Aglioti, S. M. (2018). Midfrontal theta transcranial alternating current stimulation modulates behavioural adjustment after error execution. European Journal of Neuroscience, 48(10), 3159-3170. (IF: 2.78; citations: 35)
- Tidoni, E., Gergondet, P., Fusco, G., Kheddar, A., & Aglioti, S. M. (2017). The role of audio-visual feedback in a thought-based control of a humanoid robot: a BCI study in healthy and spinal cord injured people. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 25(6), 772-781. (IF: 3.47; citations: 34)
- Tidoni, E., Abu-Alqumsan, M., Leonardis, D., Kapeller, C., Fusco, G., Guger, C., ... & Aglioti, S. M. (2017). Local and remote cooperation with virtual and robotic agents: a P300 BCI study in healthy and people living with spinal cord injury. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 25(9), 1622-1632. (IF: 3.47; citations: 47)
- Fusco, G., Tidoni, E., Barone, N., Pilati, C., & Aglioti, S. M. (2016). Illusion of arm movement evoked by tendon vibration in patients with spinal cord injury. Restorative Neurology and Neuroscience, 34(5), 815-826. (IF: 2.52; citations: 22)

- Tidoni, E., Fusco, G., Leonardis, D., Frisoli, A., Bergamasco, M., & Aglioti, S. M. (2015). Illusory movements induced by tendon vibration in right-and left-handed people. Experimental brain research, 233(2), 375-383. (IF: 2.52; citations: 42)

#### **Under Review**

- Pyasik, M., Marini, E., Ippolito, G., Fusco, G., Tarasi, L., Finisguerra, A., ... & Urgesi, C. Biasing predictive processing of interoceptive information affects implicit spirituality but not religiosity.
- Fusco, G., Scandola, M., Spitaleri, M., Aglioti, S.M. Differential Interference of Body- and Non-Body-Related Representational Conflicts on Error and Performance Monitoring in Flanker Tasks.

## In Preparation

- Fusco, G., Vecchio, A., Era, V., Aglioti S.M. Electrophysiological correlates of cortical- and gastric-related activity during conflict and error monitoring.
- Ciccarone S., Fusco G., Moreau Q., Bufalari. Electrocortical dynamics underpinning the processing of conflicting body representations.
- Fusco G., Perazzini A., Ruocco G., Aglioti S.M. Uncovering the functional contribution of the Medial Frontal Cortex and the Extrastriate Body Area in processing letter vs body driven conflicts: a 10Hz rTMS study.
- Fusco G., Casula A, Aglioti S.M. Body-related conflicts unveil hidden biases: a behavioural investigation into the relationship between implicit attitudes and cognitive interferences.
- Fusco G., Dell'Omo B., Ippolito G., Pyasik M., Finisguerra A., Tarasi L., Romei V., Urgesi C. Delivering occipital-tACS to alter reliance on sensorial priors and influence implicit religious self-oriented representations. (pre-registered on OSF)
- Villa Sanchez, B., Marotta, A., Pesci, U.G., Mason, G., Fusco, G., Era, V., Mattavelli, G. Probing performance monitoring impairments in Parkinson's Disease: a systematic review of behavioral and neurophysiological correlates (pre-registered on Prospero).

## TALKS and PRESENTATIONS

- Fusco G., Tidoni E., Barone N., Pilati C. "Illusion of movement in patients with Spinal Cord Injury (SCI)" V.E.R.E PhD Symposium 2014 Barcelona, Spain, 23-24 October 2014
- Fusco G., Tidoni E. "Phenomenology of the illusion of movement in patients with spinal cord injury." AIP 2015 Rovereto, Italy, 10-12 September 2015
- Tidoni E., Fusco G., Gergondet P. "Remote control of a humanoid robot through brain-computer interface in healthy and spinal cord injured people." SIPF 2015 Lucca, Italy, 19-21 November 2015
- Fusco G., Tidoni E. "Phenomenology of the illusion of movement in patients with spinal cord injury." Conference: "Cerebral representation of body, movement, and space after spinal cord injuries" IRCCS Fondazione Santa Lucia, Rome, Italy, 29
   November 2016
- Fusco G., Fusaro M. "Modulating cortical theta oscillations during the resolution of the body-Flanker task." Selected Talk, XVIII
  Congress of the Italian Society of Psychophysiology and Cognitive Neuroscience (SIPF) Real Brain in the Virtual SIPF Annual
  Meeting 22-28 November 2020
- Fusco G., Scandola M. "In Principle Acceptance (IPA) of a Registered Report: Modulating preferences during intertemporal
  choices through exogenous midfrontal theta transcranial alternating current." Symposium: "Open Science: Building a reliable,
  transparent, and trustworthy scientific approach in psychology and cognitive and social neuroscience." AIP Experimental 2021 Lecce, Italy, 8-10 September 2021
- Fusco G. "The plasticity of body representation through the phenomenology of movement illusions." The Languages of the Body Between the Real and Virtual Worlds. "Festival della Scienza 2022" Genoa, Italy, 27 October 2022
- Fusco G., Bufalari I. "Conflicting body representations and cognitive monitoring in Anorexia Nervosa." Cognitive
   Psychotherapy Between Research, Clinical Practice, Rehabilitation, and Social Commitment. XXI National Congress Bari,
   Italy, 22 September 2023
- Fusco G. "Modulating preferences during intertemporal choices through exogenous midfrontal transcranial alternating current stimulation." ESCAN 2024 – Ghent, Belgium, 22-25 May 2024
- Boukarras S., Placidi V., Aglioti S.M, Fusco G., "Exploring the relationship between midfrontal theta oscillations and autonomic responses to errors. A high-definition transcranial alternating current stimulation (HD-tACS) study." Society of Psychophysiology, Prague October 2024

#### **POSTER**

- Fusco G., Dell'Omo B., Ippolito G., Pyasik M., Finisguerra A., Tarasi L., Romei V., Urgesi C. Delivering occipital-tACS to alter reliance on sensorial priors and influence implicit religious self-oriented representations. SIPF 2024, Cesena, Italia 4-6 November 2024
- Mason G., Pesci U., Moreau Q., Pezzetta R., Fusco G., Boukarras S., Cocuzza G., Peppe A., Candidi M., Aglioti S.M., Era V.
   Dopaminergic modulation of interpersonal performance monitoring in patients with Parkinson's Disease SIPF 2024, Cesena, Italy 4-6 November 2024
- Mason, G., Pesci, U.G., Moreau, Q., Pezzetta, R., Fusco, G., Boukarras, S., Cucuzza, G., Peppe, A., Candidi, M., Aglioti, S.M., Era, V. "The role of the dopaminergic system in interpersonal performance monitoring in Parkinson's Disease patients" poster presented at the 2024 Behavioural Neuroscience Conference 19th-21st June 2024, Rome, Italy
- Placidi V., Boukarras S., Fusco G., Aglioti S.M. Exploring the modulatory role of midfrontal theta frequency on error- and congruency related autonomic activity: a study based on transcranial alternate stimulation (tACS) of anterior cingulate cortex. Workshop Transcranial Brain Stimulation in Cognitive Neuroscience 2024, Rovereto, Italy
- Fusco G., Ippolito G., Finisguerra A., Tarasi L., Romei V., Urgesi C. "Boosting reliance on exteroceptive priors to modulate implicit associations between the self and religious representations: a tACS study". ESCAN 2024 Gand, Belgium 22-25 May 2024
- Fusco G., Scandola M. Lin H, Inzlicht M, Aglioti SM "The neuromodulation of conflicts during intertemporal choice preferences. SIPF 2023, Siena, Italia 9-11 November 2023
- Fusco G., Scandola M. "Delivering midfrontal theta-tACS to modulate intertemporal decision conflicts: an In-Principle-Accepted (IPA) Registered Report." SIPF 2021, Palermo, Italia 29 September-2 October 2021
- Fusco G., Fusaro M. "Body-stimuli related modulation of cognitive conflict induced by Midfrontal-occipital θ-tACS. Transcranial Brain Stimulation in Cognitive Neuroscience Workshop Rovereto (Italy) – Center for Mind/Brain Sciences – CIMeC University of Trento online virtual workshop, 3-4 December 2020
- Ciccarone S., Moreau Q., Fusco G., Bufalari I. "Negative bias towards overweight bodies in healthy women: behavioural and EEG
  evidence in a novel Body-Flanker task". XVIII Congresso della Società Italiana di Psicofisiologia e Neuroscienze Cognitive (SIPF)Real Brain in the Virtual Sipf Annual Meeting- 22-28 November 2020
- Fusco G, Tieri G. "Visuo-proprioceptive conflicts during tendon vibration: an immersive virtual reality study. Caos (Concepts, Actions, and Objects: Functional and Neural Perspectives) 2019- Rovereto, Italia, 2-4 May 2019
- Fusco G, Scandola M, Feurra M, Pavone Enea F., Rossi S "Modulating the Error System during the Flanker Conflict: a tACS study.
   S1PF 2017- Ospedale Pediatrico Bambin Gesù, Roma, Italia, 16-18 November 2017
- Fusco G, Tidoni E, Barone N, Pilati C "Illusion of movement in patients with Spinal Cord Injury (SCI)" V.E.R.E PhD Symposium 2014 Barcelona, Spagna, 23-24 October 2014
- Tidoni E, Fusco G, Leonardis D, Frisoli A, Bergamasco M "Illusory movements induced by tendon vibration in right and left-handed people" AIP 2014 -Pavia, Italia, 15-17 September 2014
- Tidoni E, Abu-Alqumsan M, Leonardis D, Kapeller C, Fusco G "Interacting with my Virtual and Robotic surrogate: a study on healthy and spinal cord injured people" London Virtual Social Interaction Workshop 2014, Institute of Cognitive Neuroscience UCL Londra, UK, 4-5 September 2014

#### **LANGUAGES**

- Italian: Mother tongue; English: Very good; French: Basic

