

EDUCATION AND TRAINING

SAPIENZA, UNIVERSITY OF ROME

November 2021- Present

Doctor of Philosophy (PhD), Psychology and Cognitive Science

Tutor: Professor Mariella Pazzaglia

Main research topic: action and body perception in patients with central nervous system lesions

Main topics of Seminars, Lectures and Classes attended: epistemology and philosophy of science, methodology and statistics in experimental psychology, programming for data analysis, graphical representation, and experiment management

DEPARTMENT OF PSYCHOLOGY – SAPIENZA, UNIVERSITY OF ROME

September 2021 –2022

Internship in psychology: Theoretical and practical training in clinical psychology, cognitive and behavioural neuroscience under the supervision of Professor Mariella Pazzaglia

Main topics: Cognitive and executive functioning in clinical and healthy populations, body representation in individuals with CNS lesions

Research techniques: NIBS, brain imaging and autonomic measurements

FONDAZIONE SANTA LUCIA IRCCS, ROME

June 2021

Advanced Professional Course, Highly Specialized Neurorehabilitation: the course trains professionals to manage all aspects of neurorehabilitation with specific expertise and an innovative interdisciplinary approach

Main topics: Neuropsychology, Biological bases of neurorehabilitation, Neurorehabilitation

Diagnosis, prognosis, and treatment programmes of cerebrovascular diseases and severe post-traumatic acquired brain injury; normal ageing, dementia, and neurodegenerative diseases; movement disorders and demyelinating diseases; spinal cord injury

Final manuscript: The employment of transcranial magnetic stimulation in ataxic patients

SAPIENZA, UNIVERSITY OF ROME

July 2021

Master's Degree, Cognitive Neuroscience and Psychological Rehabilitation

Two-year master's degree (EU classification) focusing on neural systems and basic neurobiological mechanisms underlying emotions, language, attention, memory, etc. The programme offers a broad theoretical perspective of the different rehabilitation methods available for various disorders and guidance on how to communicate with patients, clients, and other professionals

Thesis: Interoception for the stability of the bodily self after Spinal cord injury

Final grade: 110/110 with honours

SAPIENZA, UNIVERSITY OF ROME

July 2018

Bachelor's Degree, Psychology and Social Processes

Three-year bachelor's degree (EU classification) providing basic knowledge in all fields of psychology

Thesis: Plasticity and stability of cortical body maps following upper limb amputation and Phantom Limb Syndrome

Final grade: 107/110

AWARDS

Master's Degree Award

March 2022

The thesis titled “Interoception for the stability of the bodily self after Spinal cord injury” has been awarded as “Thesis on disability discussed in the academic year 2020/2021” by Sapienza, University of Rome

GRANTS AND SCHOLARSHIPS

Travel grant September 2023
to participate in the “XXIX Congresso AIP - Sezione Sperimentale” held in Lucca from 18 to 20 September - funded by the Italian Association of Psychology (AIP)

Starting grant November 2022
for the research project “Rebuilding the body from the inside: interoception and the bodily self after Spinal cord injury” - funded by Sapienza, University of Rome

Scholarship November 2021
for the three-year PhD programme in Psychology and Cognitive Science – fully-funded by Sapienza, University of Rome

RESEARCH EXPERIENCE

FONDAZIONE SANTA LUCIA IRCCS, ROME July 2022 – November 2022

Research Collaboration Grant:

Recording, acquisition, and analysis of behavioural data in SCI patients while using the exoskeleton as part of the research project: 'STAND-ALONE: "Stand and walk" Optimising the Embodiment and agency of the exoskeleton (EXO) in spinal cord injury patients (SCIp)' (cod. RF-2018 12365682) funded by the Italian Ministry of Health

SAPIENZA, UNIVERSITY OF ROME July 2021 – Present

Research Assistant for PhD and Senior researchers:

Behavioural and physiological data collection regarding executive functions in clinical and healthy populations; employment of non-invasive stimulation techniques (mainly taVNS and tDCS) to modulate brain activity.

PUBLICATIONS

Forte, G.; Giuffrida, V.; **Scuderi, A.**; Pazzaglia, M. Future Treatment of Neuropathic Pain in Spinal Cord Injury: The Challenges of Nanomedicine, Supplements or Opportunities? *Biomedicines* 2022, *10*, 1373.
<https://doi.org/10.3390/biomedicines10061373>

CONGRESS PROCEEDINGS

Scuderi, A.; De Martino, M.L.; Leemhuis, E.; Giannini, A.M.; Pazzaglia, M. “Ridefinire il corpo supportato da ausili per la mobilità: l'uso di esoscheletri e carrozzine nelle rotazioni mentali dei pazienti con lesione midollare.” “XXIX Congresso AIP - Sezione Sperimentale” – 18-20 September 2023, Lucca, Italy

Scuderi, A.; De Martino, M.L.; Leemhuis, E.; Giannini, A.M.; Pazzaglia, M. “Embodiment of assistive tools in spinal cord injury: evidence from mental rotation tasks of wheelchairs and exoskeletons.” “ECNR 2023” – 30 August-2 September 2023, Lyon, France

Scuderi, A.; De Martino, M.L.; Leemhuis, E.; Pazzaglia, M. “Rebuilding the body from the inside: interoception and the bodily self following spinal cord injuries.” “*Neuroscience 2022*” – 12-16 November 2022, San Diego, California

Favieri, F.; **Scuderi, A.**; Pazzaglia, M. "Neural hacking for healthy eating: investigating the potential of transauricular vagus nerve stimulation in the food-pictures stroop task." "XXIX Congresso AIP - Sezione Sperimentale" – 18-20 September 2023, Lucca, Italy

De Martino, M.L.; **Scuderi, A.**; Leemhuis, E.; Giannini, A.M.; Pazzaglia, M. "Lost in time: il legame tra interocezione e percezione del tempo in pazienti con lesione al midollo spinale." "XXIX Congresso AIP - Sezione Sperimentale" – 18-20 September 2023, Lucca, Italy

De Martino, M.L.; Tranquilli, S.; Leemhuis, E.; **Scuderi, A.**; Giannini, A.M.; Pazzaglia, M. "Beyond the wheelchair: how exoskeleton training redefines mobility and somatic sensation for incomplete spinal cord injury patients." "ECNR 2023" – 30 August-2 September 2023, Lyon, France

De Martino, M.L.; Leemhuis, E.; **Scuderi, A.**; Pazzaglia, M. "An interoceptive perspective of time perception in spinal cord injury." "Neuroscience 2022" – 12-16 November 2022, San Diego, California

TEACHING EXPERIENCE

SAPIENZA, UNIVERSITY OF ROME

Teaching Assistant for Professor M. Pazzaglia in her courses:

September 2021 – Present

Neuroscience in Educational Contexts (code 10599961)

Cognitive Neuroscience (code 1036137)

Advanced Psychophysiology (code 1045025)

SKILLS AND EXPERTISE

JOB-RELATED: Cognitive Neuroscience, Clinical Neuroscience, Cognitive Neuropsychology, Neuroimaging
Neuroplasticity, Data Analysis

DIGITAL SKILLS: ECDL (European Computer Driver License), MATLAB Onramp Certificate, STATISTICAL ANALYSIS
SOFTWARES

LANGUAGES: ITALIAN – Mother tongue, ENGLISH – B2

In compliance with the GDPR, the Italian Legislative Decree no. 196 dated 30/06/2003,
and Article 15, paragraph 1, Legislative Decree no. 33 dated 14/03/2013
I authorise the processing of my personal data in this document for the purpose of publication.

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