

PERSONAL INFORMATION

Tiziana Pedale

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IRCCS Santa Lucia Foundation,
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WORK EXPERIENCE

November 2021 – May 2022

Post-doctoral Research Fellow

Cognitive Neuroscience Group, Neuroimaging Laboratory,
Santa Lucia Foundation, I.R.C.C.S. (Rome, Italy)

Main topic: Investigation of neural circuits of hypermemory to ameliorate memory dysfunction in prodromal Alzheimer's disease.

Supervisor: Prof. Valerio Santangelo

March 2020 – October 2021

Post-doctoral Research Fellow

Cognitive Neuroscience Group, Neuroimaging Laboratory,
Santa Lucia Foundation, I.R.C.C.S. (Rome, Italy)

Main topic: Breastfeeding and cognition: neural correlate and functional connectivity.

Supervisor: Prof. Valerio Santangelo

March 2018 – February 2020

Post-doctoral Research Fellow

Umeå Center for Functional Brain Imaging,
Department of Integrative Medical Biology, Umeå University (Sweden)

Main topic: fMRI and behavioral studies on unconscious working memory.

Supervisor: Prof. Johan Eriksson

September 2016 – February 2018

Post-doctoral Research Fellow

Neuroeconomics Group,
Centre for Cognition and Decision Making,
National Research University - Higher School of Economics (Moscow, Russian Federation)

Main topic: fMRI and behavioral studies on the interaction between emotion, positive arousal and memory for advertisements.

Supervisor: Prof. Vasily Klucharev

EDUCATION AND TRAINING

December 2012 – May 2016

Ph.D. in Psychology and Cognitive Science

Department of Psychology, "Sapienza" University of Rome (Italy)
and

Cognitive Neuroscience Group, Neuroimaging Laboratory,
Santa Lucia Foundation, I.R.C.C.S. (Rome, Italy)

Thesis: "The impact of emotional salience in biasing attention and memory:
Behavioral effects and neural correlates"
Supervisor: Prof. Valerio Santangelo

January 2015 - June 2015 **Visiting Ph.D. student**

Cognitive Neuroscience of Stress Lab,
Department of Psychology, Saint Louis University (St. Louis, USA)

Topic: Psychophysiological and endocrinological studies to examine the effect of stress on
the interaction between emotion and cognition.
Supervisor: Prof. Tony W. Buchanan

7 January 2013 **Certification as Psychologist (Register A)**

Department of Psychology, University of Padova (Italy)

January 2012 - July 2012 **Internship**

Department of Neurology, Sant'Orsola Malpighi Hospital (Bologna, Italy)
Supervisor: Dr. Andrea Stracciari

July 2011 - December 2011 **Internship**

Centro Residenziale per Anziani Umberto I (retirement home)
(Pieve di Sacco, PD, Italy)
Supervisor: Dr. Angela Casole

October 2008 - April 2011 **MSc in Clinical Psychology (110/110 cum laude)**

Department of Psychology, University of Padova (Italy)

Thesis: "Monitoring mechanisms in event-based and time-based prospective memory"
Supervisor: Prof. Patrizia Bisiacchi

October 2004 - September 2008 **Bachelors in Sciences and Techniques of Psychology
of Educational Relationship (110/110)**

Faculty of Educational Science, University of Messina (Italy)

Thesis: "Being a parent of a child with Asperger syndrome:
Personal and professional issues"
Supervisor: Prof. Rosalba Larcian

February 2007 - April 2007 **Internship**

Centro Studi LOGOS (Messina, Italy)
Supervisor: Dr. Emidio Tribulato

September 2007 - July 2008 **Erasmus (Visiting exchange) student**

University of Valencia (Spain)

September 1999 - June 2004 **Scientific High School Diploma (82/100)**

Liceo Scientifico G. Seguenza (Messina, Italy)

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C2
Spanish	C1	C1	B2	B2	B2

ADDITIONAL INFORMATION

Academic activities

2022: Teacher for a 4-hours seminar on “Basics of fMRI data analysis with SPM” as part of the course “Evaluation of Cognitive Functioning through Neuroimaging”, Master course in “Assessment of Individual Functioning in Clinical and Health Psychology”, Department of Philosophy, Social Sciences & Education, University of Perugia (Italy).

2021: Contract Professor of “General Psychology” (M-PSI/01), Undergraduate Course in Psychology, Department of Philosophy, Social Sciences & Education, University of Perugia, Italy.

2016 - Present: Supervisor of undergraduate, and graduate students.

2021: Teacher for a 6-hours seminar on “Basics of fMRI data analysis with SPM” as part of the course “Evaluation of Cognitive Functioning through Neuroimaging”, Master course in “Assessment of Individual Functioning in Clinical and Health Psychology”, Department of Philosophy, Social Sciences & Education, University of Perugia (Italy).

2020: Teacher for a 6-hours laboratory on “Automation in data acquisition and data analysis via Matlab”, as part of the Ph.D. program in “Human Science”, Department of Philosophy, Social Sciences & Education, University of Perugia (Italy).

2020 - now: Subject Expert in “Cognitive Psychology” and “Evaluation of Cognitive Functioning through Neuroimaging” at the Department of Philosophy, Social Sciences & Education, University of Perugia (Italy).

April 2014 - June 2014: Graduate Teaching Assistant in “General and Physiological Psychology”, Department of Philosophy, Social Sciences & Education, University of Perugia (Italy).

Research topics / Expertise

Attention; Memory; Executive functions; Consciousness; Emotions; Development; Functional Magnetic Resonance Imaging (fMRI); Statistical Parametric Mapping (SPM); Functional Connectivity; Multi-Voxel Pattern Analysis (MVPA); Eye-Movement Analysis; Psychophysics; Programming (MatLab, Cogent, E-Prime, R, Python); Statistical analysis (SPSS, R, Statistica, JASP); Psychological and neuropsychological tests.

Grants Awarded

2012 – 2015: Ph.D. scholarship awarded by the Department of Psychology, “Sapienza” University of Rome.

2007 – 2008: Erasmus (study exchange) grant, awarded by the Faculty of Educational Science, University of Messina for University of Valencia.

2006 – 2007: Academic scholarships (two awards), Faculty of Educational Science, University of Messina.

Oral Presentations

Pedale, T., Santangelo, V. (2021). Perceptual salience enhances short-term memory performance to a similar extent from childhood to young adulthood. XXVII National Conference of the Italian Association of Psychology (AIP) in Experimental Psychology, Lecce (Italy): September, 8-10.

Pedale, T. (2017). Functional MRI: fMRI data and preprocessing. The IV international school for young scientists “Active and passive methods of the brain research”, Moscow (Russian Federation): November, 2-5.

Pedale, T., Macaluso, E., Santangelo, V. (2017). Enhanced insular-prefrontal connectivity when searching for neutral targets in emotional scenes. The XVIII International Vygotsky Conference, Moscow (Russian Federation): November, 15.

Pedale, T. (2016). Functional MRI: Bold signal as an index of neural activity. Basics of fMRI data analysis. The III international school for young scientists "Active and passive methods of the brain mapping", Moscow (Russian Federation): November, 2-5.

Poster Presentations

Pedale, T., Fontan, A., Grill, F., Bergström, F., Eriksson, J. (2019). Leftward bias in visuospatial attention during a non-conscious working memory task. Society for Neuroscience, Chicago (USA): October, 19-23.

Fontan, A., Lindgren, L., **Pedale, T.**, Bergström, F., Brorsson, C., & Eriksson, J. (2019). Changes in the global state of consciousness affect brain activity related to conscious and non-conscious visual perception differently. Society for Neuroscience, Chicago (USA): October, 19-23.

Eriksson, J., **Pedale, T.**, Fontan, A., Grill, F., & Bergström, F. (2018). Distractor avoidance in a non-conscious working-memory task. XXII Annual meeting for the Association for the Scientific Study of Consciousness, Krakow (Poland): June 27.

Pedale, T., Basso, D., & Santangelo, V. (2017). Processing of negative stimuli facilitates event-based prospective memory only under low memory load. ESCOP, XX Conference of the European Society of Cognitive Psychology, Potsdam (Berlin): September, 3-6.

Pedale, T., Buttafuoco, A., Buchanan, T. W., Santangelo, V. (2017). Only "efficient" emotional stimuli affect the content of working memory during free-recollection from natural scenes. ESLP, the X Annual Embodied and Situated Language Processing Conference, Moscow (Russian Federation): September, 10-12.

Pedale, T., Macaluso, E., Santangelo, V. (2015). The impact of emotional stimuli in biasing attentional selection during visual search in natural scenes. ICSC, VI International Conference on Spatial Cognition, Rome (Italy): September, 7-11.

Pedale, T., Macaluso, E., Santangelo, V. (2015). L'impatto di stimoli emotigeni nella cattura attentiva in compiti di ricerca visiva con scene complesse (The impact of emotional stimuli in biasing attentional selection during visual search in natural scenes). XXI National Conference of the Italian Association of Psychology (AIP) in Experimental Psychology, Rovereto (Italy): September, 10-12.

Pedale, T., Macaluso, E., Santangelo, V. (2015). The impact of emotional stimuli in biasing attentional selection during visual search in natural scenes. ESCOP, XIX Conference of the European Society of Cognitive Psychology, Paphos (Cyprus): September, 17-20.

Pedale, T., Santangelo, V. (2015). Working memory capacity affects quantitatively but not qualitatively the deployment of attention resources. ESCOP, XIX Conference of the European Society of Cognitive Psychology, Paphos (Cyprus): September, 17-20.

Pedale, T., Passarelli, T., Santangelo, V., Buchanan, T. W. (2015). Emotionally-arousing stimuli modulate visual search in real-life scenes irrespective of stress manipulation. ESCOP, XIX Conference of the European Society of Cognitive Psychology, Paphos (Cyprus): September, 17-20.

Mastroberardino, S., **Pedale, T.**, Macaluso, E., Santangelo, V. (2014). The interplay between emotions and high-level semantics on working memory encoding and retrieval. OHBM, the XX Annual Meeting of the Organization for Human Brain Mapping, Hamburg (Germany): June, 8-12.

Conference Organization

3 November 2017, Organizer and chair of the fMRI day at the IV international school for young scientists "Active and passive methods of the brain research", Moscow (Russian Federation).

Attended Courses

2013 - The Italian Psychological Association's Summer School of Bertinoro (FC, Italy): "Mixed linear models and their application to repeated measures, hierarchical models and longitudinal studies", Prof. Marcello Gallucci and Dott. Matteo Forgiarini.

2013 - The I.R.C.C.S Fondazione Santa Lucia Summer Course (Rome, Italy): "Introductory course on medical imagining".

2013 - Matlab Course at the Faculty of Economy (Rome, Italy): "LABECOSTATIMAT – ADVANCED LEVEL".

2013 - Training event at the I.R.C.C.S Fondazione Santa Lucia (Rome, Italy): "Training course on security issues in magnetic resonance", Prof. Pietro Luigi Indovina.

2009 - Course funded by European Social Fund (ESF) (Padova, Italy): "Data collection and analysis in the neurosciences", Prof. Egidio Robusto.

2006 - Seminar funded by the Assessorato alle Politiche sociali (Reggio Calabria, Italy): "The promotion of public health and psychosocial well-being".

2006 - "Ugo Gullino" seminar funded by the Azienda Sanitaria Locale n°11 (Municipal health agency) (Messina, Italy): "New complexities in psychiatric care", Dr. Biagio Gennaro.

Editorial activities

Frontiers in Psychology, section "Consciousness Research": *Review Editor* (<https://www.frontiersin.org/journals/psychology/sections/consciousness-research#editorial-board>).

Frontiers in Psychology, section "Cognition": *Review Editor* (<https://www.frontiersin.org/journals/psychology/sections/cognition#editorial-board>).

Ongoing international cooperations

Umeå University, Sweden (Prof. Johan Eriksson).

Saint Louis University, USA (Prof. Tony W. Buchanan).

University of Birmingham, UK (Prof. Andrew J. Bremner).

University of Twente, NL (Prof. Rob H. J. van der Lubbe).

Professional memberships

Full member of the Italian Psychological Association, AIP, 2021-now.

Peer-reviewed publications

Daviddi, S., **Pedale, T.**, Serra, L., Macri, S., Campolongo, P., & Santangelo, V. (2022). Altered hippocampal resting-state functional connectivity in highly superior autobiographical memory. *Neuroscience*, 480, 1-8. <https://doi.org/10.1016/j.neuroscience.2021.11.004>

Pedale, T., Mastroberardino, S., Capurso, M., Macri, S., & Santangelo, V. (2022). Developmental differences in the impact of perceptual salience on short-term memory performance and meta-memory skills. *Scientific Reports*, 12, 1-13. <https://doi.org/10.1038/s41598-022-11624-8>

Pedale, T., Fontan, A., Grill, F., Bergström, F., Eriksson, J. (in press). Nonconscious information can be identified as task-relevant but not prioritized in working memory. *Cerebral Cortex*.

Fontan, A., Lindgren, L., **Pedale, T.**, Brorsson, C., Bergström, F., & Eriksson, J. (2021). A reduced level of consciousness affects non-conscious processes. *NeuroImage*, 244, 118571. <https://doi.org/10.1016/j.neuroimage.2021.118571>

Santangelo, V., **Pedale, T.**, Colucci, P., Giulietti, G., Macri, S., & Campolongo, P. (2021). Highly superior autobiographical memory in aging: A single case study. *Cortex*, 143, 267-280. <https://doi.org/10.1016/j.cortex.2021.05.011>

Pedale, T., Mastroberardino, S., Capurso, M., Bremner, A. J., Spence, C., & Santangelo, V. (2021). Crossmodal spatial distraction across the lifespan. *Cognition*, 210, 104617. <https://doi.org/10.1016/j.cognition.2021.104617>

Santangelo, V., **Pedale, T.**, Macri, S., & Campolongo, P. (2020). Enhanced cortical specialization to distinguish older and newer memories in highly superior autobiographical memory. *Cortex*, 129, 476-483. <https://doi.org/10.1016/j.cortex.2020.04.029>

Eriksson, J., Fontan, A., & **Pedale, T.** (2020). Make the Unconscious Explicit to Boost the Science of Consciousness. *Frontiers in Psychology*, 11, 260. <https://doi.org/10.3389/fpsyg.2020.00260>

Pedale, T., Macaluso, E., & Santangelo, V. (2019). Enhanced insular/prefrontal connectivity when resisting from emotional distraction during visual search. *Brain Structure and Function*, 224, 2009-2026. <https://doi.org/10.1007/s00429-019-01873-1>

Buttafuoco, A. *, **Pedale, T.***, Buchanan, T., & Santangelo, V. (2018). Only “efficient” emotional stimuli affect the content of working memory during free-recollection from natural scenes. *Cognitive Processing*, 19, 125-132. <https://doi.org/10.1007/s10339-017-0846-1>

Pedale, T., Basso, D., & Santangelo, V. (2017). Processing of negative stimuli facilitates event-based prospective memory only under low memory load. *Journal of Cognitive Psychology*, 29, 920-928. <https://doi.org/10.1080/20445911.2017.1329204>

Pedale, T., & Santangelo, V. (2015). Perceptual salience affects the contents of working memory during free-recollection of objects from natural scenes. *Frontiers in Human Neuroscience*, 9, 60. <https://doi.org/10.3389/fnhum.2015.00060>

IL SOTTOSCRITTO, A CONOSCENZA DI QUANTO PRESCRITTO DALL'ART. 76 DEL D.P.R. 28 DICEMBRE 2000 N. 445, SULLA RESPONSABILITÀ PENALE CUI PUÒ ANDARE INCONTRO IN CASO DI FALSITÀ IN ATTI E DI DICHIARAZIONI MENDACI, NONCHÉ DI QUANTO PRESCRITTO DALL'ART. 75 DEL D.P.R. 28 DICEMBRE 2000 N. 445, SULLA DECADENZA DAI BENEFICI EVENTUALMENTE CONSEGUENTI AL PROVVEDIMENTO EMANATO SULLA BASE DI DICHIARAZIONI NON VERITIERE, AI SENSI E PER GLI EFFETTI DEL CITATO D.P.R. N. 445/2000 E SOTTO LA PROPRIA PERSONALE RESPONSABILITÀ DICHIARA CHE TUTTE LE INFORMAZIONI CONTENUTE NEL PROPRIO CURRICULUM VITAE SONO VERITIERE.

ROME, May 24, 2022

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