

# GIULIA TORROMINO

## Curriculum Vitae

Place: Rome

Date: 01/10/2024

### Education

| Type                             | Year | Institution                 | Notes                                    |
|----------------------------------|------|-----------------------------|------------------------------------------|
| University graduation (Bachelor) | 2010 | Università della Calabria   | Biological Science (105/110)             |
| University graduation (Master)   | 2013 | Sapienza University of Rome | Neurobiology (110/110 <i>cum laude</i> ) |
| PhD                              | 2017 | Sapienza University of Rome | Behavioral Neuroscience (with honors)    |

### Appointments

#### Academic Appointments

| Start      | End        | Institution                                                                                           | Position                                                                                   |
|------------|------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 28/06/2024 | Ongoing    | University of Naples Federico II (Naples, Italy)                                                      | Research Fellow ( <i>Ricercatore a Tempo Determinato di Tipo A – proroga biennale</i> )    |
| 28/06/2021 | 27/06/2024 | University of Naples Federico II (Naples, Italy)                                                      | Research Fellow ( <i>Ricercatore a Tempo Determinato di Tipo A</i> )                       |
| 01/02/2021 | 25/06/2021 | Institute of Biochemistry and Cell Biology, National Research Council (Rome, Italy)                   | Post-Doctoral Fellow ( <i>Assegno di Ricerca</i> )                                         |
| 01/02/2020 | 31/01/2021 | Institute of Biochemistry and Cell Biology, National Research Council (Rome, Italy)                   | Post-Doctoral Fellow ( <i>Assegno di Ricerca</i> )                                         |
| 01/02/2019 | 31/01/2020 | Institute of Genetics and Biophysics “A. Buzzati Traverso”, National Research Council (Naples, Italy) | Post-Doctoral Fellow ( <i>Assegno di Ricerca</i> )                                         |
| 01/07/2018 | 31/12/2018 | Telethon Institute of Genetics and Medicine (Pozzuoli, Italy)                                         | Post-doctoral Research Fellow ( <i>Collaborazione autonoma coordinata e continuativa</i> ) |
| 01/01/2018 | 10/06/2018 | Telethon Institute of Genetics and Medicine (Pozzuoli, Italy)                                         | Post-Doctoral Research Fellow ( <i>Collaborazione autonoma coordinata e continuativa</i> ) |

|            |            |                                                                                                          |                                                                                                                       |
|------------|------------|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 01/09/2017 | 31/12/2017 | Columbia University – The Italian Academy for Advanced Studies in America (New York, USA)                | Research Associate (Fellow)                                                                                           |
| 01/05/2017 | 31/10/2017 | Telethon Institute of Genetics and Medicine at the Charles University of Pilsen (Pilsen, Czech Republic) | Post-Doctoral Research Fellow and Visiting Researcher<br>( <i>Collaborazione autonoma coordinata e continuativa</i> ) |
| 01/11/2016 | 30/04/2017 | Aix-Marseille University (Marseille, Francia) funded by Sapienza University of Rome                      | Post-Doctoral Research Fellow (Program: “ <i>Borsa di Perfezionamento all’Estero</i> ”)                               |

## Teaching experience

### Teaching experience as lecturer

| Year      | Institution                      | Lecture/Course                                                                                                                                                                                                                                                          |
|-----------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2024-2025 | University of Naples Federico II | Course “ <b>Anatomical, Physiological and Neuropsychological Basics of Psychic Activity</b> ”<br>(“ <i>Fondamenti anatomofisiologici e neuropsicologici dell’attività psichica</i> ”) – SSD PSIC-01/B, <b>8 CFU</b> , Bachelor in Psychological Sciences and Techniques |
| 2023-2024 | University of Naples Federico II | Course “ <b>Anatomical, Physiological and Neuropsychological Basics of Psychic Activity</b> ”<br>(“ <i>Fondamenti anatomofisiologici e neuropsicologici dell’attività psichica</i> ”) – SSD PSIC-01/B, <b>8 CFU</b> , Bachelor in Psychological Sciences and Techniques |
| 2022-2023 | University of Naples Federico II | Course “ <b>Psychobiology and Physiological Psychology</b> ”<br>(“ <i>Psicobiologia e Psicologia Fisiologica</i> ”) – SSD PSIC-01/B, <b>8 CFU</b> , Bachelor in Psychological Sciences and Techniques                                                                   |
| 2021-2022 | University of Naples Federico II | Course “ <b>Psychobiology and Physiological Psychology</b> ”<br>(“ <i>Psicobiologia e Psicologia Fisiologica</i> ”) – SSD PSIC-01/B, <b>8 CFU</b> , Bachelor in Psychological Sciences and Techniques                                                                   |

### Thesis and experimental research laboratory supervision

- **Thesis supervisor for 40 Bachelor Students** in *Psychological Sciences and Techniques* at the University of Naples Federico II: Cinque Sara, Marolda Martina, Arvonio Fabiana, Cacciopoli Giovanni, Caso Maria Elena, Marchisano Federica, Pagliaro Mario, Gambardella Cristina, Matrullo Melissa, Polisi Ilaria, Buonauro Matteo, Cianciulli Alessia, Coppa Sabrina, De Luca Iolanda, Esposito Roberta, Martone Mara, Montella Bruna, Vastola Maria Rosaria, Passaro Alessandra, Russo Maria Francesca, Mancuso Vittoria, Chiozzini Alberto, Di Bonito Gabriella, Lucci Nancy, Merone Rosa, Romano Martina, Serra Eleonora, Navarra Marina, Esposito Iolanda, Manzo Sara, Molletta Giovanna, Nazzaro Andrea, Palmaccio Sara Maria, Sigona Maria Cristina, Donnarumma Cristina Pia, Agnes Domenica, Zambrano Carmen, Schiavetta Marco, Di Giacomo Martina, Simeone Antonio.
- **Experimental research supervisor of 1 PhD student** in Behavioral Neuroscience at the Institute of Biochemistry and Cell Biology of the National Research Council (IBBC-CNR): *Vittorio Loffredo*.
- **Experimental research supervisor of 9 students** in Neurobiology and Biological Sciences at the Institute of Biochemistry and Cell Biology of the National Research Council (IBBC-CNR) and the

Institute of Genetics and Biophysics “A. Buzzati Traverso”, National Research Council (Naples, Italy): *Antonio La Rocca, Brunella Mongiardi, Diletta Cavezza, Francesco Crupi, Gregorio Sonsini, Greta Fabiani, Maria Sanzari, Marina Colucci, Miriam Cerullo.*

- **Experimental research supervisor of 4 students** in Neurobiology at the Dept. of Biology and Biotechnology “Charles Darwin”, Sapienza University of Rome: *Francesco Grassi, Giorgia Morgan Biasini, Livia Autore, Valentina Khalil.*

### Third Mission

| Year | Activity                                                                                                                                                                                                                                                                                                                           |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2024 | <b>Member of the organization team of the Festival HOBIT (How Our Brain Innovates Thinking)</b> – Topic: <i>Il ruolo dell’arte nell’epoca delle intelligenze artificiali.</i> Partners: <b>Nodes Journal of Art and Neuroscience</b> and the University of Naples Federico II <b>Task Force Human&amp;Future</b>                   |
| 2023 | <b>Member of the organization team of the Festival HOBIT (How Our Brain Innovates Thinking)</b> – Topic: <i>Arte del tatto. Il ruolo della percezione tattile nell’esperienza estetica.</i> Supported by: <b>Dana Foundation</b> e <b>FENS</b> (Federation of European Neuroscience Societies) for the <b>Brain Awareness Week</b> |
| 2022 | <b>Member of the organization team of the Festival HOBIT (How Our Brain Innovates Thinking)</b> – Topic: <i>Il concetto di Superstimolo.</i> Supported by: <b>Dana Foundation</b> e <b>FENS</b> (Federation of European Neuroscience Societies) for the <b>Brain Awareness Week</b>                                                |
| 2021 | <b>Member of the organization team of the Festival HOBIT (How Our Brain Innovates Thinking)</b> – Supported by: <b>Dana Foundation</b> e <b>FENS</b> (Federation of European Neuroscience Societies) for the <b>Brain Awareness Week</b>                                                                                           |
| 2021 | “How to use the brain for a design project” – Invited lesson for the <i>Bachelor Degree in Graphics and Visual Communication</i> at the Quasar Institute for Advanced Design, Rome                                                                                                                                                 |
| 2021 | “Come usiamo il cervello per costruire un progetto artistico”. <b>Seminar for the festival HOBIT</b> – Numero Cromatico (Rome)                                                                                                                                                                                                     |

## Society memberships, Awards and Honors

### Fellowships and Awards

| Year | Title                                                                                                                                                                                                              |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2019 | <b>Acknowledgement of the abstract as Neuroscience 2019 Hot Topic</b> – 100 out of 14000 – at the International Neuroscience Congress of the Society for Neuroscience ( <b>SfN</b> ), Chicago (USA)                |
| 2019 | <b>Travel grant</b> for the National Congress of the Italian Society of Neuroscience ( <b>SINS</b> ), Perugia (Italy)                                                                                              |
| 2017 | <b>Fellow</b> of the Art, Humanities, and Neuroscience Fellowships Program of the <b>The Italian Academy for Advanced Studies in America – Columbia University</b> (New York, USA)                                 |
| 2016 | <b>Scholarship</b> by Sapienza University of Rome – Program “ <i>Borsa di Perfezionamento all’estero</i> ” – in Prof. Marianne Amalric Cognitive Neuroscience laboratory, at the Aix-Marseille University (France) |
| 2016 | <b>Young Investigator Training Program (YITP) 2016</b> – <b>FENS Forum Copenhagen 2016</b> – in Prof. Sadegh Nabavi’s laboratory, at the DANDRITE, Aarhus University (Denmark)                                     |
| 2011 | <b>Student fellowship</b> from the Dept. of Biology and Biotechnology “Charles Darwin”, Sapienza University of Rome (Italy)                                                                                        |

## Society memberships

| Year         | Title                                                                                                            |
|--------------|------------------------------------------------------------------------------------------------------------------|
| 2011-present | <b>Member</b> , Italian Society for Neuroscience (SINS)                                                          |
| 2011-present | <b>Member</b> , Federation of European Neuroscience Societies (FENS)                                             |
| 2011-present | <b>Founding Member</b> , Numero Cromatico ( <a href="http://www.numerocromatico.it">www.numerocromatico.it</a> ) |

## Organization of Scientific Meetings

| Year         | Title                                                                                                                                                                                                                               |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2024         | <b>Co-organizer and chair</b> of the conference “Empatia e non-umano”, Department of Humanities, University of Naples Federico II.                                                                                                  |
| 2023         | <b>Organizer and chair</b> of the conference “Sul Futuro dell’AI: una riflessione a partire dall’ambito umanistico”, Department of Humanities, University of Naples Federico II.                                                    |
| 2015         | <b>Organization team</b> of the meeting “10 <sup>th</sup> Years of Neurobiology” at Sapienza University of Rome.                                                                                                                    |
| 2013-2016    | <b>Organization team</b> of the annual seminars for the Master Degree in Neurobiology at Sapienza University of Rome.                                                                                                               |
| 2011-present | <b>Organization team</b> of scientific and dissemination events for the research center in art and neuroscience Numero Cromatico, Italy – <a href="https://en.numerocromatico.com/eventi">https://en.numerocromatico.com/eventi</a> |

## Institutional responsibilities

| Year | Title                                                                                                                                                            |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023 | Member of the Evaluation Committee for 1 contract per month at Sapienza University of Rome.                                                                      |
| 2023 | Member of the Evaluation Committee for 1 post-graduate fellowship at Sapienza University of Rome.                                                                |
| 2023 | Member of the Evaluation Committee for 1 post-graduate fellowship at Sapienza University of Rome.                                                                |
| 2021 | Member of the Evaluation Committee for 1 post-graduate fellowship at the Institute of Biochemistry and Cell Biology of the National Research Council (IBBC-CNR). |

## Editorial and Reviewing activities

| Year         | Activity                                                                                                                                                                                                                                          |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2018-2021    | <b>Reviewer</b> for the neuroscience journals: Scientific Reports, Frontier in Behavioural Neuroscience; Frontiers in Aging Neuroscience; Brain Research; Canadian Journal of Physiology and Pharmacology; Journal of Computational Neuroscience. |
| 2019-2020    | <b>Reviewer</b> for The French National Research Agency (ANR), France.                                                                                                                                                                            |
| 2012-present | <b>Editorial Board</b> of Nodes. Journal of Art and Neuroscience ( <b>ANVUR Class A</b> journal – ISSN: 2281-1168). Publisher: Numero Cromatico, Italy ( <a href="http://nodesjournal.com/en/">http://nodesjournal.com/en/</a> )                  |

## Funding Information [grants as PI-principal investigator or I-investigator]

| Year | Title                                           | Program                                                                      | Grant value |
|------|-------------------------------------------------|------------------------------------------------------------------------------|-------------|
| 2023 | MEM-TOUCH: Improving Memory by Touch (role: PI) | University Research Program (FRA 2022)<br>- University of Naples Federico II |             |

## Research Activities

### Research Activities

| Keywords                                                                                                                                       | Brief Description                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Behavioral neurobiology, learning and memory, brain circuits <i>in vivo</i> manipulation, subcortical-to-cortical communication, rodent models | <i>In vivo</i> neural circuits activation and inhibition through chemogenetics and optogenetics manipulation in rodents for the study of the neurobiological correlates of behavior, with a focus on learning and memory processes. |
| Aging, memory decline, mild cognitive impairment, preclinical markers, non-motor symptoms, neurodegenerative diseases                          | Identification of early cognitive and molecular markers of cognitive decline in physiological and pathological aging and in neurodegenerative diseases, such as Alzheimer's and Parkinson's Disease.                                |
| Memory, Peripheral Nervous System, Neuromodulation, Heterosynaptic Plasticity, Brain circuits, Neuroenhancement, Embodied Cognition            | Role of peripheral inputs in memory formation and possible applications of peripheral stimulation for neuroenhancement, in animal models and humans.                                                                                |

### Main Technical Skills

- Memory, emotion, perception evaluation in healthy humans.
- Behavioral tests for memory, stress and anxiety in rodents: novel object recognition, cross maze, open field, passive avoidance, operant conditioning, rotarod, hanging tests, elevated plus-maze, beam-balance test, Morris water maze, restrain.
- Stereotaxic surgery in rodents; perfusion, dissection and punching of brain tissue; systemic and intra-cerebral injections.
- DREADDs and optogenetics techniques.
- *In vivo* electrophysiology.
- DNA and RNA extraction.
- Histology: brain slicing, histochemical stains, immunofluorescence.
- Data analysis software: StatView, Statistica, Prism, DeepLabCut (basic skills).
- Management of mice colonies (*Accreditamento per le funzioni A-B-C-D (Topo - Ratto) ottenuto a Giugno 2023*).

## Summary of Scientific Achievements

| Product type           | Number | DataBase | Start/End |
|------------------------|--------|----------|-----------|
| Papers [international] | 14     | Scopus   | 2012/2024 |

|                               |                           |
|-------------------------------|---------------------------|
| Total Impact factor           | 110.8 (WoS)               |
| Average Impact Factor         | 7.9                       |
| Total Citations               | 226 (Scopus, 01/10/2024)  |
| Average Citations per Product | 16.1 (Scopus, 01/10/2024) |
| Hirsch (H) index              | 10 (Scopus, 01/10/2024)   |
| Normalized H index*           | 0.78                      |

\*H index divided by the academic seniority.

## Selected Publications

List of the publications selected for the evaluation.

- 1) Stabile, F.\*, **Torromino, G.\***, Rajendran, S., Del Vecchio, G., Presutti, C., Mannironi, C., De Leonibus, E., Mele, A., & Rinaldi, A. (2023). Short-Term Memory Deficit Associates with miR-153-3p Upregulation in the Hippocampus of Middle-Aged Mice. *Molecular Neurobiology*, 1-11.  
[IF: 4.6; Citations: 1]
- 2) Iemolo, A., De Risi, M., Giordano, N.<sup>§</sup>, **Torromino, G.<sup>§</sup>**, Somma, C., Cavezza, D., Colucci, M., Mancini, M., de Iure, A., Granata, R., Picconi, B. Calabresi, P. & De Leonibus, E. (2023). Synaptic mechanisms underlying onset and progression of memory deficits caused by hippocampal and midbrain synucleinopathy. *npj Parkinson's Disease*, 9(1), 92.  
[IF: 6.7; Citations: 2]
- 3) Pellegrini, F., Padovano, V., Biscarini, S., Santini, T., Setti, A., Galfrè, S.G., Silenzi, V., Vitiello, E., Mariani, D., Nicoletti, C., **Torromino, G.**, De Leonibus, E., Martone, J., & Bozzoni, I. (2023). A KO mouse model for the lncRNA Lhx1os produces motor neuron alterations and locomotor impairment. *iScience*.  
[IF: 4.6; Citations: 0]
- 4) **Torromino, G.\***, Loffredo, V., Cavezza, D., Sonsini, G., Esposito, F., Crevenna, A. H., Gioffrè, M., De Risi, M., Treves, A., Griguoli, M. & De Leonibus, E. (2022). Thalamo-hippocampal pathway regulates incidental memory capacity in mice. *Nature Communications*, 13(1), 4194.  
[IF: 16.6; Citations: 7]

- 5) Pisano, F., **Torromino, G.**, Brachi, D., Quadrini, A., Incoccia, C., & Marangolo, P. (2021). A standardized prospective memory evaluation of the effects of COVID-19 confinement on young students. *Journal of Clinical Medicine*, 10(17), 3919.  
[IF: 4.9; Citations: 14]
- 6) De Risi, M., Tufano, M., Alvino, F. G., Ferraro, M. G., **Torromino, G.**, Gigante, Y., Monfregola, J., Marrocco, E., Pulcrano, S., Tunisi, L., Lubrano, C., Papy-Garcia, D., Tuchman, Y., Salleo, A., Santoro, F., Bellenchi, G., Cristino, L. Ballabio, A., Fraldi, A. & De Leonibus, E. (2021). Altered heparan sulfate metabolism during development triggers dopamine-dependent autistic-behaviours in models of lysosomal storage disorders. *Nature communications*, 12(1), 3495.  
[IF: 17.7; Citations: 22]
- 7) **Torromino, G.**, Maggi, A., & De Leonibus, E. (2021). Estrogen-dependent hippocampal wiring as a risk factor for age-related dementia in women. *Progress in Neurobiology*, 197, 101895.  
[IF: 10.9; Citations: 18]
- 8) Rinaldi, A., De Leonibus, E., Cifra, A. **Torromino, G.**, Minicocci, E., De Sanctis, E., López-Pedrajas, R.M., Oliverio, A., & Mele, A. (2020). Flexible use of allocentric and egocentric spatial memories activates differential neural networks in mice. *Scientific Reports* 10, 11338.  
[IF: 4.4; Citations: 19]
- 9) De Risi, M.\*, **Torromino, G.\***, Tufano, M., Moriceau, S., Pignataro, A., Rivagorda, M., Carrano, N., Middei, S., Settembre, C., Ammassari-Teule, M., Gardoni, F., Mele, A., Oury, F. & De Leonibus, E. (2020). *Mechanisms by which autophagy regulates memory capacity in ageing*. *Aging Cell*: e13189.  
[IF: 9.3; Citations: 26]
- 10) **Torromino, G.**, Autore, L., Khalil, V., Mastroiilli, V., Griguoli, M., Pignataro, A., Centofante E, Biasini, G.M., De Turreis, V., Ammassari-Teule, M., Rinaldi, A., & Mele, A. (2019). Offline ventral subiculum-ventral striatum serial communication is required for spatial memory consolidation. *Nature Communications*, 10(1), 5721.  
[IF: 12.1; Citations: 18]
- 11) Cappucci U.\*, **Torromino G.\***, Casale A.M., Camon J., Capitano F., Berloco M., Mele A., Pimpinelli S., Rinaldi A., & Piacentini L. (2018). Stress-induced strain and brain region-specific activation of LINE-1 transposons in adult mice, *Stress* 1-6.  
[IF: 2.2; Citations: 12]
- 12) Ztaou, S., Lhost, J., Watabe, I., **Torromino, G.**, & Amalric, M. (2018). Striatal cholinergic interneurons regulate cognitive and affective dysfunction in partially dopamine-depleted mice. *European Journal of Neuroscience*, 48(9).  
[IF: 2.8; Citations: 25]

\* Co-first authors; § Co-author.

### Other Publications, not selected for evaluation (indexed in Scopus and/or Web of Science)

- 13) Chiarella, S. G.\*<sup>#</sup>, **Torromino, G.\*<sup>#</sup>**, Gagliardi, D. M., Rossi, D., Babiloni, F., & Cartocci, G. (2022). Investigating the negative bias towards artificial intelligence: Effects of prior assignment of AI-

authorship on the aesthetic appreciation of abstract paintings. *Computers in Human Behavior*, 137, 107406.

[IF: 9.9; Citations: 25]

- 14) Sannino S.\*, Russo F.\*, **Torromino G.**, Pendolino V., Calabresi P., & De Leonibus E. (2012). Role of the hippocampus in object memory load in mice. *Learning and memory* 19(5):211-8.

[IF: 4.1; Citations: 37]

\* Co-first authors; # Co-corresponding authors.

### Other monographs and publications (not indexed in Scopus and/or Web of Science) not selected for evaluation

- **Torromino, G. (2024).** *Environmental Enrichment in Real and Virtual Realms Fosters Neural Plasticity Related to Learning and Memory Processes*. In: Santoianni, F., Giannini, G., Ciasullo, A. (eds) *Mind, Body, and Digital Brains. Integrated Science*, vol 20. Springer, Cham. [https://doi.org/10.1007/978-3-031-58363-6\\_12](https://doi.org/10.1007/978-3-031-58363-6_12)
- **Torromino, G.**, Chiarella, S. G., Focareta, M., Cuono, S., Marengi, F., Maioli, M. & Gagliardi D. M. (2024). Art as a Supernormal Stimulus? Proposal for an Integrated Perspective Bridging Art with Neuroscience, *Journal of Comparative Literature and Aesthetics*, 47(3).
- Gagliardi, D. M., Chiarella, S. G., Marengi, F., Focareta, M., Cuono, S. & **Torromino, G. (2023).** Sull'attuale ruolo dell'intelligenza artificiale nel processo di produzione artistica. *Nodes* (21-22):8-15.
- Gagliardi, D. M., **Torromino, G.**, Focareta, M., Cuono, S., Chiarella, S. G., Marengi & F., Maioli, M. (2023). Arte come superstimolo. Attivazione biologica, stimolazione delle funzioni cognitive e sfida alle convenzioni culturali. *Nodes* (21-22):64-73.
- Gagliardi, D.M., **Torromino, G.** et al. (2023). *La tattilità come elemento nella produzione artistica dal Futurismo a oggi*. In: *Arte del Tatto* (a cura di Gagliardi D. M.), Numero Cromatico Editore. <https://doi.org/10.57633/AT2-ITA>
- Gagliardi, D.G., **Torromino, G.**, et al. (2022). Il ruolo dell'artista e il pregiudizio su intelligenze artificiali che creano opere d'arte. *Nodes* (19-20):42-53 (ITA) / Gagliardi, D.G., Torromino, G., et al. (2022). On the role of the artist and the prejudice against AI-generated artworks. *Nodes* (19-20):98-103 (ENG).
- Gagliardi, D. M., **Torromino, G.**, Focareta, M., Cuono, S., Chiarella, S. G., & Marengi, F. (2022). Sul Superstimolo: dal supernormal stimulus alla ricerca estetica di Numero Cromatico, In: *Superstimolo. Come il cervello partecipa all'opera d'arte*<sup>§</sup>, (a cura di Gagliardi D. M.), Numero Cromatico Editore pp. 10-47. <https://doi.org/10.57633/SS1-ITA>
- Gagliardi, D. M., **Torromino, G.**, Focareta, M., Cuono, S. (2021). Il ruolo dell'autorialità nell'esperienza estetica. *Rivista di Psicologia dell'Arte*, anno XLII, n. 32.

### Manuscripts under review or submitted for publication

- Caterino, M.\*, Paris, D.\*, **Torromino, G.\***, Costanzo, M., Flore, G., ..., Lania, G. Tbx1 haploinsufficiency causes brain metabolic and behavioral anomalies in adult mice which are corrected by vitamin B12 treatment. *BioRxiv* 2024.02.01.578212. Under revision for *EMBO Molecular Medicine*.



- De Risi, M., Cavezza, D.<sup>§</sup>, **Torromino, G.<sup>§</sup>**, Capalbo, A., ..., De Leonibus, E. Cortico-Striatal Circuit Mechanisms Drive the Effects of D1 Dopamine Agonists on Memory Capacity in Mice through cAMP/PKA Signaling. Under revision for *Nature Communications*.
- **Torromino, G.** and Gagliardi, D. M. L'arte è nella mente di chi la osserva. Arte e patologia dalla prospettiva del fruitore. Under revision for the Volume "*Arte e patologia*" edited by Anna Donise.
- Massè, E., Fiorentini, G., Ficarella, S., **Torromino, G.<sup>#</sup>**, *Peripheral transcutaneous electrical stimulation to improve cognition: a review of the main effects in healthy humans and in mildly cognitively impaired patient populations.* Submitted to *Progress in Neuropsychopharmacology & Biological Psychiatry*.

\* Co-first authors; § co-author; # Corresponding author.

## Oral Communications

| Year | Title                                                                                                                                                                                                                                                                                                                                                         |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023 | Art as Supernormal stimulus: how the brain contributes to the work of art. <b>Seminar at the Italian Academy for Advanced Studies in America, Columbia University</b> , New York (USA).                                                                                                                                                                       |
| 2019 | Thalamus-hippocampal direct pathway regulates sex-differences in memory consolidation. <b>Nanosymposium</b> at International <b>Neuroscience Congress (SfN)</b> , Chicago (USA).                                                                                                                                                                              |
| 2019 | Synaptic Mechanisms governing the pro-cognitive effects of Spermidine in ageing at the National Symposium "Early cognitive deficits in ageing and Alzheimer's disease: from identification of disease mechanisms to implementation of rescuing strategies". XVIII <b>Congresso Nazionale della Società Italiana di Neuroscienze (SINS)</b> – Perugia (Italy). |
| 2018 | Optogenetic thalamic silencing rescues hippocampal memory engram in female subjects. <b>Seminar at the Telethon Institute of Genetics and Medicine, TIGEM</b> – Pozzuoli (Naples, Italy).                                                                                                                                                                     |
| 2018 | <b>Introductory Lecture</b> in honor of the Polish Academy of Science Award to Prof. Alberto Oliverio.                                                                                                                                                                                                                                                        |
| 2017 | Brain circuits of memory: quality versus quantity? <b>Fellow Seminar at The Italian Academy for Advanced Studies in America, Columbia University</b> , New York (USA).                                                                                                                                                                                        |
| 2017 | Hippocampal projections to ventral striatum are necessary to consolidate spatial memory. <b>Internal seminar at the Zuckerman Mind Brain Behavior Institute of Columbia University</b> , New York (USA) in Prof. Rui M. Costa's laboratory.                                                                                                                   |
| 2016 | Hippocampal projections to ventral striatum are necessary to consolidate spatial memory. <b>Invited seminar at Aix-Marseille University</b> , Marseille (France). Host: Dr. Marianne Amalric.                                                                                                                                                                 |
| 2016 | Inter-regional communication in the brain to stabilize memory. – <b>Annual Congress of the Dept. Of Biology and Biotechnology "C. Darwin"</b> , Sapienza University of Rome, Ponzano Romano (Rome, Italy).                                                                                                                                                    |
| 2013 | Development and implementation of a new model for studying the molecular mechanisms of memory load: role of protein kinases – <b>Neuroseminars at the Dept. Of Biology and Biotechnology "Charles Darwin"</b> , Sapienza University of Rome (Italy).                                                                                                          |

## Abstract at congresses and conferences

| Year | Title                                                                                                                                                                                                                                                                                                                                                   |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023 | Chiarella S. G., <b>Torromino G.</b> , Gagliardi D.M., Babiloni, F., Cartocci, G. “Made with AI” is like “Made by AI”? Investigating the mechanisms underlying the negative bias toward AI in aesthetic appreciation, MiniTalk at Congresso dell’Associazione Italiana di Psicologia – Sezione Sperimentale, Scuola IMT Alti Studi Lucca, 18 – 20 Sept. |
| 2023 | Chiarella, S. G., <b>Torromino, G.</b> , Gagliardi, D.M., Babiloni, F., Cartocci, G. The negative bias toward AI in aesthetic appreciation: Implicit and explicit comparison between human and AI authorship, Congress of Psychology, Art, and Neuroaesthetics, 9-10 Giugno, Bergamo.                                                                   |
| 2021 | <b>Torromino G.</b> , Loffredo V., Cavezza D., Esposito F., Crevenna A. H., Gioffrè M., De Risi M., Treves A., Griguoli M., De Leonibus E., Thalamo-hippocampal pathway regulates incidental memory load: insights from sex differences, 49th Meeting of the European Brain and Behavior Society (EBBS), Lausanne, Switzerland                          |
| 2021 | Chiarella S.G., Gagliardi, D.M., <b>Torromino G.</b> , Rossi D., Babiloni F., Cartocci G., Aesthetic appreciation in art context. Human versus AI authorship. 8th International Conference on Spatial Cognition: Cognition and Action in a Plurality of Spaces (ICSC 2021), Rome, Italy.                                                                |
| 2021 | Chiarella S.G., Gagliardi, D.M., <b>Torromino G.</b> , Rossi D., Babiloni F., Cartocci G., Aesthetic appreciation in art context. Human versus AI authorship. International Association of Empirical Aesthetics (IAEA online 2021) London, UK.                                                                                                          |
| 2018 | <b>Torromino G.</b> , Loffredo V., Esposito F., Colucci M., De Leonibus E., Sex-differences shape memory capacity decline with ageing. 7th Neapolitan Brain Group Congress, Naples, Italy.                                                                                                                                                              |
| 2018 | Kapl S., Blahna K., <b>Torromino G.</b> , Jezek K., Local field potential dynamics between hippocampus and medial prefrontal cortex during memory recall. 11th FENS Forum of Neuroscience 2018, Berlin, Germany.                                                                                                                                        |
| 2018 | Loffredo V., <b>Torromino G.</b> , Esposito F., Colucci M., De Leonibus L., Sex differences regulate memory capacity during ageing, 11th FENS Forum of Neuroscience 2018, Berlin, Germany.                                                                                                                                                              |
| 2017 | <b>Torromino G.</b> , Biasini G. M., Autore L., Khalil V., Pignataro A., Middei S., Oliverio A., Ammassari-Teule M., Mele A., Hippocampal projections to ventral striatum are necessary to consolidate spatial memory. SfN’s 47th Annual meeting, Neuroscience 2017, Washington DC, USA.                                                                |
| 2016 | <b>Torromino G.</b> , Biasini G. M., Pignataro A., Middei S., Autore L., Oliverio A., Ammassari-Teule M., Mele A., Hippocampal projections to ventral striatum are necessary to consolidate spatial memory. 10th FENS Forum of Neuroscience 2016, Copenhagen, Denmark.                                                                                  |
| 2015 | <b>Torromino G.</b> , Biasini G. M., Pignataro A., Midedi S., Autore L., Oliverio A., Ammassari-Teule M., Mele A., Cross-structural interaction between the hippocampus and the ventral striatum in spatial memories. EBBS-EBPS Meeting Verona, Italy.                                                                                                  |
| 2015 | <b>Torromino G.</b> , Biasini G. M., Oliverio A. & Mele A. Role of the ventral subiculum and the ventral striatum in the processing of spatial information: insights for a functional cross-structural interaction. Convegno dei Dottorandi in Neuroscienze, Naples, Italy.                                                                             |
| 2014 | <b>Torromino G.</b> , Perri V., Cristofoli A., Oliverio A. & Mele A. Functional disconnection between the ventral subiculum and the ventral striatum impairs spatial learning and memory in mice. 9th FENS Forum of Neuroscience, Milan, Italy.                                                                                                         |
| 2012 | De Leonibus E., Sannino S., Russo F., <b>Torromino G.</b> , Perri V., Mele A., Olivito L. How the brain deals with an increasing number of objects: the role of hippocampal NMDA-protein                                                                                                                                                                |

|      |                                                                                                                                                                                                                                                                     |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      | kinases-AMPA receptors phosphorylation pathway. 8th FENS Forum of Neuroscience, Barcelona, Spain.                                                                                                                                                                   |
| 2011 | <b>Torromino G.</b> , Sannino S., Russo F., Perri V., Fragapane A., Mele A., De Leonibus E. How the hippocampus regulates object working memory load: The role of protein kinases. 6th Meeting on Molecular Neuroscience, Rome, Italy.                              |
| 2011 | <b>Torromino G.</b> , Sannino S., Russo F., Perri V., Fragapane A., Mele A., De Leonibus E. How the hippocampus regulates object working memory load: The role of protein kinases. International Brain Research Organization (IBRO) world meeting, Florence, Italy. |