

CURRICULUM VITAE

Laura Ferreri · PhD

- **Date and place of birth:** 25/11/1987, Trescore B. - Bergamo, Italy
- **Address :** Dipartimento di Scienze del Sistema Nervoso e del Comportamento, Piazza Botta, 27100 Pavia, Italia
- **E-mail:** laura.ferreri@unipv.it
- **Languages:** Italian (mother tongue) · French (full professional proficiency) · English (full professional proficiency) · Spanish (full professional proficiency) · Catalan (elementary proficiency)



Diplomas and University degrees

2014	PhD in Cognitive Psychology LEAD CNRS, Université de Bourgogne, Dijon, France.	<i>Supervisor:</i> Pr. Emmanuel Bigand <i>Co-supervisor:</i> Pr. Aurélia Bugaiska <i>Final note:</i> très honorable <i>Grant :</i> EBRAMUS, Marie Curie FP7 ITN MC FP7, GA 238157
2011	M. Sc. in Cognitive Neuroscience Università San Raffaele, Milan, Italy.	<i>Supervisor:</i> Pr. Daniela Perani <i>Co-supervisor:</i> Dr. Danilo Spada <i>Final note:</i> 110/110 cum laude and honors
2009	Bachelor's Degree in Psychological Sciences Università San Raffaele, Milan, Italy.	<i>Supervisor:</i> Pr. Daniela Perani <i>Co-supervisor:</i> Dr. Danilo Spada <i>Final note:</i> 110/110.
2006	Classical Liceum Diploma Treviglio (BG), Italy.	<i>Final note:</i> 100/100

Current and previous positions

From 1 May 2022	Researcher (<i>rtdB</i>), Department of Brain and Behavioral Sciences, Università di Pavia
2018 – present	Associate Professor (<i>Maître de Conférences</i>), Faculty of Psychology, Laboratoire EMC, Université Lumière Lyon 2, Lyon, France.
2017 – 2018	Associate Professor (<i>Profesor Asociado</i>), Faculty of Psychology, Universitat de Barcelona, Barcelona, Spain.
2015 – 2017	Post-Doc Researcher, Brain Cognition & Plasticity Unit, Universitat de Barcelona, Barcelona, Spain.
2014 – 2015	Post-Doc Assistant Professor in Cognitive Psychology (ATER), Université de Bourgogne, Dijon, France.
2011 – 2014	PhD student - Early Stage Researcher (ESR) European Brain and Music (EBRAMUS) consortium, Marie Curie FP7 Initial Training Network (ITN MC FP7, GA 238157), LEAD CNRS UMR 5022 - Dijon, France.
2010 – 2011	Research Internship, Cognitive Neuroscience Centre, Università San Raffaele, Milan, Italy.

Scientific publications

Published / In Press (* for shared first authorship)

22. Cardona, G., **Ferreri, L.**, Lorenzo-Seva, U., Russo, F., Rodriguez-Fornells, A., (2022). The forgotten role of absorption in music reward. *Annals of the New York Academy of Science*
21. **Ferreri, L.**, Versace, R., Victor, C., Plancher, G. (2022). Temporal predictions in space: isochronous rhythms promote forward projections of the body. *Frontiers in Psychology*, 1657.
20. Carraturo G., **Ferreri, L.**, Vuust, P., Matera, F., Brattico, E. (2022). Empathy but not musicality is at the root of musical reward: A behavioral study with adults and children. *Psychology of Music*, 03057356221081168.
19. **Ferreri, L.**, Brelier, M., Brunet, O., & Michael, G. A. (2021). Relaxing music and the self: Insights from the perception of spontaneous sensations. *Psychology of Music*, 03057356211055219. <https://doi.org/10.1177/03057356211055219>
18. Gatti, D., Rinaldi, L., **Ferreri, L.**, Vecchi, T. (2021). The human cerebellum as a hub of the predictive brain. *Brain Sciences*, 11(11), 1492. <https://doi.org/10.3390/brainsci11111492>
17. **Ferreri, L.**, Riba, J., Zatorre, R.J., Rodriguez-Fornells, A. (2021). Chills, bets, and dopamine: a journey into music reward. *Neuroaesthetic In Focus.*, E. Cardillo & A. Eds. [Book Chapter]
16. **Ferreri, L.**, Mas-Herrero ,E. , Cardona, G., Zatorre, R. J., Riba, J., Valle, M. Ripollés, P., &, Rodriguez-Fornells, A. (2021). Dopamine modulations of reward-driven music memory consolidation. *Annals of the New York Academy of Science*. doi: 10.1111/nyas.14656
15. **Ferreri, L.**, Singer, N., Mcphee, M., Ripollés, P., Zatorre, R. J., & Mas-Herrero, E. (2021). Engagement in music-related activities during the COVID-19 pandemic as a mirror of individual differences in musical reward and coping strategies. *Frontiers in Psychology*, 12, 2504. doi: 10.3389/fpsyg.2021.673772
14. Cardona, G., Rodriguez-Fornells, A., Nye, H. Rifá-Ros, X., **Ferreri, L.** (2020). The impact of musical pleasure and musical hedonia on verbal episodic memory. *Scientific Reports*, 10, 16113. <https://doi.org/10.1038/s41598-020-72772-3>
13. **Ferreri, L.**, Mas-Herrero, E., Zatorre, R. J., Ripollés, P., Gomez-Andres, A., Alicart, H., et al. (2019). Dopamine modulates the reward experiences elicited by music. *Proceedings of the National Academy of Sciences*, 116(9), 3793-3798. <https://doi.org/10.1073/pnas.1811878116>
12. François, C., Ripollés, P., **Ferreri, L.**, Muchart, J., Sierpowska, J., Fons, C., et al. (2019). Right structural and functional reorganization in 4-year-old children with perinatal arterial ischemic stroke predict language production. *eNeuro*, 10:1523. doi: 10.1523/ENEURO.0447-18.2019
11. **Ferreri, L.**, Moussard, A., Bigand, E., Tillmann, B. (2018). Music & the aging brain. *The Oxford Handbook of Music and the Brain*. M. Thaut & D. Hodges Eds., Oxford University Press. [Book Chapter] DOI: 10.1093/oxfordhb/9780198804123.013.25
10. Ripollés, P.*, **Ferreri, L.***, Mas-Herrero, E., Alicart, H., Gómez-Andrés, A., Marco-Pallares, J., et al. (2018). Intrinsically regulated learning is modulated by synaptic dopamine signaling. *eLife*, 7, e38113. DOI: 10.7554/eLife.38113
9. **Ferreri, L.**, & Rodriguez-Fornells, A. (2017). Music-related reward responses predict episodic memory performance. *Experimental Brain Research*, 1-11. <https://doi.org/10.1525/mp.2016.34.2.167>

8. **Ferreri, L.**, & Verga, L. (2016). Music benefits on verbal learning and memory: When and how does it work? *Music Perception*, 34(2), 167-182. <https://doi.org/10.1525/mp.2016.34.2.167>
7. Bonin, P., **Ferreri, L.**, Gelin, M., Fitamen, C., Bard, P., Bugaiska, A. (2016). Spotlight on the survival processing advantage: An fNIRS Study on Adaptive Memory. *Spatial, Long-and Short-Term memory: Functions, Differences and Effects of Injury*, Nova Science Publishers. [Book Chapter] hal-02181890
6. **Ferreri, L.**, Bigand, E., & Bugaiska, A. (2015). The positive effect of music on source memory. *Musicae Scientiae*, 19(4), 402-411. <https://doi.org/10.1177/1029864915604684>
5. **Ferreri, L.**, Bigand, E., Bard, P., & Bugaiska, A. (2015). The influence of music on prefrontal cortex during episodic encoding and retrieval of verbal information: a multichannel fNIRS study. *Behavioural Neurology*, 501, 70762. <https://doi.org/10.1155/2015/707625>
4. Bugaiska, A., **Ferreri, L.**, Bouquet, C., Tapia, G., Kalenzaga, S. & Clarys, D., (2015). Self as a moderator of age-related deficit on recollection. *Année Psychologique / Topics in Cognitive Psychology*, 115, 77-88. DOI 10.4074/S0003503314000013
3. **Ferreri, L.**, Bigand, E., Perrey, S., Muthalib, M., Bard, P. & Bugaiska, A., (2014). Less effort, better results: how does music act on prefrontal cortex in older adults during verbal memory encoding? An fNIRS study. *Frontiers in Human Neuroscience*, 8:301. <https://doi.org/10.3389/fnhum.2014.00301>
2. **Ferreri, L.**, Bigand, E., Perrey, S. & Bugaiska, A. (2014). The promise of Near-Infrared Spectroscopy (NIRS) for psychological research: a brief review. *Année Psychologique / Topics in Cognitive Psychology*, 114(3), 537-569. DOI 10.4074/S0003503314003054
1. **Ferreri, L.**, Aucouturier, JJ., Muthalib, M., Bigand, E. & Bugaiska, A., (2013). Music improves verbal memory encoding while decreasing prefrontal cortex activity: an fNIRS study. *Frontiers in Human Neuroscience*, 7:779. <https://doi.org/10.3389/fnhum.2013.00779>

Scientific communications

Posters

14. Cardona, G., , **Ferreri, L.**, Lorenzo-Seva, U., Russo, F.A., Rodríguez-Fornells, A. (2021). The forgotten role of transcendence in music reward. *The Neuroscience and Music VII Conference, Aarhus, Denmark (hybrid format)*, 18-21 June 2021
13. Curzel, F., Trân, E., Osiurak, F., **Ferreri, L.** (2021). Boosting reward and pro-social behaviours through shared music listening. *The Neuroscience and Music VII Conference, Aarhus, Denmark (hybrid format)*, 18-21 June 2021
12. Carraturo, G., **Ferreri, L.**, Vuust, P., Matera, F., Brattico, E. (2021). Empathy but not Musicality is at the Root of Musical Reward: A Behavioral Study with Adults and Children. *The Neuroscience and Music VII Conference, Aarhus, Denmark (hybrid format)*, 18-21 June 2021
11. Curzel, F., Ripollés, P., **Ferreri, L.** (2021). Better when shared: listening to music with others increases the musical pleasure. Society for Affective Science. *Society Affective Science Conference, online*, 13-16 April 2021

10. Mas-Herrero, E., **Ferreri, L.**, Cardona, G., Zatorre, R., Pla, F., Riba, J., Valle, M., Rodriguez-Fornells, A. (2021). The role of opioid transmission in music-induced pleasure. *The Neuroscience and Music VII Conference, Aarhus, Denmark (hybrid format)*, 18–21 June 2021
9. Lalande, P. Curzel., F. **Ferreri, L.** (2020) The implication of prefrontal cortex in musical pleasure : an fNIRS preliminary study. *Brain, Cognition, Emotion, and Music (BCEM) Conference*. Online, May 2020
8. Cardona, G., Rodriguez-Fornells, A., Nye, H., Rifà-Ros, X., **Ferreri, L.** (2020). The impact of music-related reward responses on verbal episodic memory'. *Brain, Cognition, Emotion, and Music (BCEM) Conference*. Online, May 2020
7. Cardona, G., Rodriguez-Fornells, A., Rifà-Ros, X., **Ferreri, L.** (2019) Music-related reward responses and verbal episodic memory'. *LABEX CORTEX conference "The dynamic and flexible nature of memories"*, Lyon (France), June 2019.
6. **Ferreri, L.**, Mas-Herrero, E., Zatorre, Marco-Pallares, J., Gomez-Andrés, A., Alicart, H., Olivé, G., Valle, M., Antonjoan, R., Riba, J., Rodriguez-Fornells, A. (2017). Music-related reward responses modulate episodic memory formation via the hippocampus-dependent dopaminergic circuit. *Neuroscience and Music VI*, Boston (USA), 15–18 June 2017.
5. **Ferreri, L.**, Morís-Fernandez, J., Cucurrell, D., Rodriguez-Fornells, A. (2016). From beats to music: neural entrainment in theta band. *Organization for Human Brain Mapping (OHBM) Annual Meeting*, Geneva, 26–30 June 2016.
4. Beffara, B., Bret, A., **Ferreri, L.**, Bard, P., Vermeulen, N., Bugaiska, A., & Mermilliod, M. (2016). Healthy adults with lowest levels of cooperation are more cooperative after heart rate variability biofeedback. *Annual Conference of the Society for Affective Science*, Chicago (USA), March 2016.
3. **Ferreri, L.**, Bigand, E., Bugaiska, A. (2014) Music, memory and prefrontal cortex: a multi-channels fNIRS study on encoding and retrieval of verbal material. *The Neuroscience & Music - V*, Dijon, France, 29 May -1 June 2014.
2. **Ferreri, L.**, Bigand, E., Perrey, S., Muthalib, M., Bugaiska, A. (2014). Music enhances memory performances in young and older adults by modulating prefrontal cortex activity: an fNIRS study. *9th FENS (Federation of European Neuroscience Societies) Forum*, Milan, Italy, 5–9 July 2014.
1. **Ferreri, L.**, Aucouturier, JJ., Bigand, E., Bugaiska, A. (2012). Monitoring the DLPFC during the encoding of verbal material with or without a musical context: a Near InfraRed Study. *Deuxième Journées Perception Sonore (JPS)*, Marseille, France, 11–12 December 2012.

Invited Talks · Seminars · Workshops · Symposiums

- 24 **Ferreri, L.** (2022) Musical pleasure: neurobiological bases and cognitive implications (2022). *Invited talk, Institut Jean-Nicod*, Paris, 21 March 2022.
23. Plancher, G., Tillmann, B., **Ferreri, L.** (2021). Boosting memory with temporal regularities. *Talk given by G. Plancher at Psychonomic Society (62nd annual meeting)*, Online, 4–7 November 2021.
22. **Ferreri, L.** (2021) Engagement in music-related activities during the COVID-19 pandemic as a mirror of individual differences in musical abilities and coping strategies. *Symposium at ICMPC-ESCOM 2021*, Online, 28–31 July 2021.

21. **Ferreri, L.** (2021) "Musical pleasure as a tool to improve memory and affection". *The Neuroscience and Music VII Conference, Aarhus, Denmark*, Online, 18-21 June 2021.
20. **Ferreri, L.** (2021) La musique: un moyen pour la stimulation cognitive et la remédiation". *Invited talk at Colloque Handiversité 2021, Paris Saclay*, Online, 15 April 2021.
19. **Ferreri, L.** (2020) "Music and emotion: the role of dopaminergic reward system". *Seminar at Uppsala University (Finland)*, Online, 9 October 2020.
18. **Ferreri, L.** (2020) "Musica ed emozioni". *Music and neuroscience – Seminar at G. Ferrari Music-Therapy School of Padova (Italy)*. Online, 24 May 2020.
17. **Ferreri, L.** (2020) "Musique, mémoire et émotions" – *Seminar at Université de Lille*, Lille, France, 21 January 2020.
16. **Ferreri, L.** (2019) "Musique et émotions : du plaisir à la cognition". *Invited talk at IREMUS Sorbonne*, Université Sorbonne, Paris, France, 16 November 2019.
15. **Ferreri, L.** (2019) "La musique, un universel pour l'être humain". *Invited talk at Conservatoire Paris Saclay, Colloque Handicap et Enseignement Artistique*, Paris , France, 03 March 2019.
14. **Ferreri, L.**, Cardona, G., Rodriguez-Fornells, A., (2018) "Music-related reward responses and their implications in episodic memory" *Symposium for SEPEX – SEPNECA – A/C Congress*. With Dr. Clément François, Dr. Daniele Schön and Dr. Lucía Vaquero. Madrid, Spain, 24 July 2018.
13. **Ferreri, L.**, (2018). "Musique et cerveau: plasticité cérébrale et stimulation cognitive". *Keynote for Journées de la Création by SACEM & Nuits de Fourvière*, Lyon, France, 28 June 2018.
12. **Ferreri, L.** (2018). "The implications of dopaminergic transmission in musical pleasure and memory. *Invited talk at Barcelona Lectures Series*, University of Barcelona, Barcelona, Spain, 31 May 2018.
11. **Ferreri, L.** (2017): "Musica e memoria: dal piacere alla cognizione". *Music and neuroscience - Workshop, G. Ferrari Music-Therapy School*. With Dr. Daniele Schön and Dr. Elvira Brattico, Padova, Italy, 18 November 2017
10. **Ferreri, L.**, Mas-Herrero, E., Ripollés, P. (2017): "The implications of dopaminergic transmission in affective responses and cognitive functions". *Seminar at Montreal Neurological Institute, McGill University, Canada*, 7 October 2017.
9. **Ferreri, L.** (2017): "Music-related reward responses and memory performance: a pharmacological approach". *Seminar at David Poeppel's Lab – seminar session, New York University* , New York (USA), 20 June 2017.
8. **Ferreri, L.**, et al. (2017): "Music-related reward responses modulate episodic memory formation via the hippocampus-dependent dopaminergic circuit". *Neuroscience and Music VI – Outstanding Poster Awards oral sessions*, Boston (USA), 15-18 June 2017.
7. **Ferreri, L.**, (2015): "Music and memory", *Theory and Practice of Music Cognition - Workshop, Academia Teatro alla Scala*, Milano, Italy, 10 March 2015.

6. **Ferreri, L.**, (2015): "Emotions and memory: music and the aging process", *Invited talk at "Musica: un senso per tutti – strategie musicoterapiche per l'ampliamento delle capacità comunicative in ambito clinico e didattico" - Workshop*, Rovereto, Italy, 15 January 2015.
5. **Ferreri, L.**, (2014): "Less efforts for better results? Music, memory and prefrontal cortex in fNIRS studies", *Symposium for the National Congress of Experimental Psychology. With Dr. Daniele Schön and Pr. Tomaso Vecchi*, Pavia, Italy, 15 September 2014.
4. **Ferreri, L.**, (2014): "NIRS for music-therapy based investigation in premature infants", *Seminar at MANDARI meeting, Goldsmith University*, London, 2-5 July 2014.
3. **Ferreri, L.** (2013): "Investigating the effects of music on cognitive functions using fNIRS", *New perspectives for stimulating cognitive and sensory processes - Conference*, Pavia, Italy, 20-22 September 2013.
2. **Ferreri, L.**, Bigand, E., Bugaiska, A. (2013): "Near InfraRed Spectroscopy: an emerging tool for research in Cognitive Psychology", *Music in rehabilitation of patients with memory and learning deficits -Workshop*, Lille, France, 17-18 January 2013.
1. Muthalib, M., **Ferreri, L.** (2012): "Presentation of Near InfraRed Spectroscopy", *Seminar at LEAD seminar session*, Dijon, France, 6 September 2012.

Grants & Awards

2021 – 2024	ANRJC (Agence National de la Recherche – Jeune Chercheur) grant. 240k €
2019 – 2021	Lauréat IMPULSION (IDEX Lyon grant). 75k €
2018 – 2019	Grammy's Research Awards. With Dr. Ernest Más-Herrero and Dr. Robert Zatorre (McGill University, Montreal). 20k \$
2015 – 2016	Morelli-Rotary Foundation Postdoctoral Fellowship. 20k €

Other scientific activities

Peer reviewing: Aging, Neuropsychology and Cognition · Brain Structure & Function · Experimental Brain Research · Frontiers in Auditory Neuroscience · Frontiers in Psychology · Human Brain Mapping · Journal of Cognitive Psychology · Journal of Psychophysiology · Memory & Cognition · Musicae Scientiae · Music Perception · PlosONE · Psychology and Aging · Psychology and Neuroscience · Psychomusicology: Music, Mind, and Brain · Scientific Reports

Evaluation of scientific projects for: Max Planck Institute for Human Cognitive and Brain Sciences · Agence Nationale de la Recherche Scientifique (ANR)

Editor: Advances in cognitive Psychology (Associate) · Frontiers in auditory neuroscience (Associate) · Frontiers in Psychology (Guest Associate)

Scientific events organization:

- September 2021: "Music – better when together" REMEMUS ANR Workshop, Lyon, France
- October 2020: Journées d'Etude du Vieillissement (JEV), Online

Teaching activities

Qualifications:

- France, MCF Section 16 (Psychology) 2015
- France, MCF Section 69 (Neuroscience) 2017
- Spain, AQU Lecturer 2017

University	Hours of teaching and position	Subjects	Degree	Language
Université de Bourgogne, Psychology Department	263h Assistant/Researcher	<ul style="list-style-type: none"> • Cognitive psychology (perception, memory and language) • Experimental methods • Music psychology • Neuroscience and music • Developmental psychology • Cognitive psychology (memory) • Thinking and problem solving • Neuroscience (memory and neuroimaging) 	Bachelor's	French
Universitat de Barcelona, Psychology Department	190h Associate professor	<ul style="list-style-type: none"> • Cognitive sciences • Cognitive neuroscience • Cognitive psychology • Psychobiology • Music psychology • Neuroscience and music 	Bachelor's and Master	Spanish English
Université Lumière Lyon 2, Psychology Department	≈700h Associate professor	<ul style="list-style-type: none"> • Neuroscience and music (M-PSI/01) 	Bachelor's and Master	French
Università degli Studi di Pavia, Psychology Department	48h Invited professor	<ul style="list-style-type: none"> • Neuroscience and music (M-PSI/01) 	Master	English
Università degli Studi di Padova, Psychology Department	8h Invited professor (ERASMUS+)	<ul style="list-style-type: none"> • Music Psychology 	Master	English

Academic roles and responsibilities

Role	University	A.Y.
Coordinator of the Master Program "Sciences Cognitives Fondamentales et Appliquées"	Université Lumière Lyon 2	2020-present
Coordinator of the Teaching Unit "Cognitive Neuroscience"	Université Lumière Lyon 2	2020-present
Supervisor of PhD thesis (2 students)	Universitat de Barcelona Université Lumière Lyon 2	2019-present 2021-present
Supervisor of research internship (Bachelor's, 6 students)	Université de Bourgogne Universitat de Barcelona Université de Lyon	2013-2014 2015-2016 2018-present
Supervisor of M. Sc. Thesis (33 students)	Université de Bourgogne Universitat de Barcelona Université Lumière Lyon 2	2013-2015 2015-2018 2018-present

Dissemination activities

Selected Talks	<ul style="list-style-type: none"> Conference-debate "Musique, une drogue dure?" Peniche Pop' Paris, 21 March 2022 Conference-debate "Cerveau et Musique", Semaine du cerveau, Institut Pasteur, Paris, 19 March 2022 Conference-Concert "Musica e Scienza: il cervello musicale", with the Milano Verdi Orchestra & Maestro Ruben Jais, Auditorium Verdi, Milano, Italy, 18 February 2022. Conference-Concert "Musique, émotions et mémoire. Du plaisir aux souvenirs", Pop'Science - Jazz à Vienne, Vienne, France, 9 Juillet 2021. TEDx Milano "Che vita sarebbe senza musica?", Teatro Dal Verme, Milano, Italy, September 2019. Café débat for the 80 years of CNRS, "Sur les traces de la mémoire", with H. Chainay, , O. Koenig, G. Plancher, R. Versace, Lyon, France, January 2020. Conference-Concert, "Music and the swinging brain", with Pr. Emmanuel Bigand & Rolling String Quartet. Celebration for the 100 years of Carlo Besta Neurological Institute, Castello Sforzesco, Milan, Italy, 25 January 2018.
Popular Science Articles	<ul style="list-style-type: none"> (2019) "Musique et mémoire", with E. Bigand, <i>Révue de Santé Scolaire et Universitaire</i>. (2017) "Musique et plasticité neuronale", <i>Revue internationale d'éducation de Sèvres : Musique et éducation</i>. (2016) "Quando la musica ci fa oscillare: un viaggio nella sincronizzazione neurale" <i>Neuroscienze ANEMOS</i>.
Selected press and media	<ul style="list-style-type: none"> Focus (It), 2022 Tempo Santé (Fr), 2021 Radio Raheem (It), 2020 The Huffington Post (Fr), 2020 Le Figaro (Fr), 2020 Inverse (Eng), 2019 Psychology Today (Eng), 2019 Le Figaro (Fr), 2019 El Mundo (Esp), 2019 La Vanguardia (Esp), 2019

09/06/2022