

Curriculum Vitae

Laura Verga, PhD

ORCID: 0000-0001-8957-5027

WORK EXPERIENCE

02/2024 – present	Medical/technical writer RespiQ, Leiden, the Netherlands
07/2020 – present	Guest researcher - Cognition in health and pathology (rhythm, timing, social interaction, neuroimaging) Maastricht University, Maastricht, the Netherlands
07/2023 – 12/2023	Affiliated researcher - Comparative Neuroanatomy & Psychology (music, rhythm, timing, neuroimaging) Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands
07/2020 – 06/2023	Postdoc - Comparative Neuroanatomy & Psychology (music, rhythm, timing, neuroimaging) Max Planck Institute for Psycholinguistics, Nijmegen, the Netherlands Maastricht University, Maastricht, the Netherlands
09/2017 – 05/2020	Postdoc – Cognition in health and pathology (rhythm, timing, social interaction, neuroimaging) Maastricht University, Maastricht, the Netherlands
04/2017 – 10/2017	Psychological Resident – Cognition in health and pathology (rhythm, timing, sleep disorders) Sleep Medicine Centre, Neurology Department, San Raffaele Scientific Institute, Ville Turro, Milan, Italy
07/2016 – 03/2017	Project manager - Timing and rhythm in poetry (neuroimaging) Max Planck Institute for Human Cognitive and Brain Science, Leipzig, Germany
06/2015 – 06/2016	Parental leave
11/2014 – 06/2015	Research engineer – Cognition in health and pathology (rhythm, timing) Centre EUROMOV, Université de Montpellier, Montpellier, France
10/2012 – 11/2012	Visiting researcher – Cognition (music, social interaction) Laboratoire d'Etude de l'Apprentissage et du Développement (LEAD), Dijon, France
03/2010 – 09/2010	Research intern –Cognition (neuroimaging, music) Cognitive Neurosciences Centre, Vita – Salute San Raffaele University, Milan, Italy
03/2009 - 10/2009	Research intern –Cognition (neuroimaging, music) Centro Eccellenza Risonanza Magnetica ad Alto Campo (CERMAC; Excellence Center for High Field Magnetic Resonance), San Raffaele Hospital, Milan, Italy

04/2006 - 07/2007

Clinical intern – Sleep Pathology

Sleep Medicine Centre, Neurology Department, San Raffaele Scientific Institute, Ville Turro, Milan, Italy

EDUCATION

11/2010 – 10/2015

PhD in Cognitive Science

Max-Planck Institute for Human Cognitive and Brain Science - University of Leipzig, Leipzig, Germany
Final mark: Summa cum Laude.

10/2007 – 03/2010

Master of Science in Cognitive Neuroscience

Vita-Salute San Raffaele University, Milan, Italy.
Final mark: 110/110 and honours.

10/2004 – 07/2007

Bachelor of Science in Psychology, Clinical track

Vita-Salute San Raffaele University, Milan, Italy.
Final mark: 110/110 and honours.

10/1999 - 07/2004

High School Diploma, Experimental track in science, mathematics, and informatics

Liceo scientifico A. Tosi, Busto Arsizio, Italy.
Final mark: 100/100.

FUNDING & AWARDS

2020

Levelt Award, granted to Laura Verga and Nienke Hoeksema by the Max Planck Institute for Psycholinguistics, € 15.800

2010/2013

EBRAMUS - Marie Curie Action - ITN nr. 238157 granted to S.A. Kotz

THESES

Ph.D.

“Learning together or learning alone: Investigating the role of social interaction in second language word learning”.
Supervisor: Prof. Dr. S.A. Kotz

M.Sc.

"The neural correlates of harmonic violations of melody and accompaniment in expert pianists: A Sparse Temporal Sampling study with fMRI".
Supervisor: Prof. Dr. D. Perani / Co-supervisor: Dr. D. Spada

B.Sc.

"L'attacco di panico notturno: fisiopatogenesi ed aspetti clinico-diagnostici".
(*Nocturnal panic attack: Physio-pathogenesis, clinical features, and diagnostic issues*).
Supervisor: Prof. Dr. L. Ferini-Strambi / Co-supervisor: Dr. M.L. Fantini

PAPERS

* denotes shared first authorship

1. Dalla Bella, S., Janaqi, S., Benoit, C.E., Farrugia, N., Bégel, V., **Verga, L.**, Harding, E., and Kotz, S.A. (2024). Unravelling individual rhythmic abilities using machine learning. *Scientific Reports*.

2. **Verga, L.**, Kotz, S.A., Ravignani, A. (2023) The evolution of social timing. *Physics of life reviews, advance online publication*. doi:10.1016/j.plrev.2023.06.006
3. **Verga, L.**, D'Este, G., Cassani, S., Leitner, C., Kotz, S. A., Ferini-Strambi, L., & Galbiati, A. (2023). Sleeping with time in mind? A literature review and a proposal for a screening questionnaire on self-awakening. *PLOS ONE*, 18(3), e0283221. <https://doi.org/10.1371/journal.pone.0283221>
4. Leitner, C., D'Este, G., **Verga, L.**, Rahayel, S., Mombelli, S., Sforza, M., Casoni, F., Zucconi, M., Ferini-Strambi, L., & Galbiati, A. (2023). Neuropsychological Changes in Isolated REM Sleep Behavior Disorder: A Systematic Review and Meta-analysis of Cross-sectional and Longitudinal Studies. *Neuropsychology Review* 2023, 1, 1–26. <https://doi.org/10.1007/S11065-022-09572-1>
5. **Verga, L.***, Sroka, M. G. U.*, Varola, M., Villanueva, S., & Ravignani, A. (2022). Spontaneous rhythm discrimination in a mammalian vocal learner. *Biology Letters*, 18(10), 20220316. <https://doi.org/10.1098/rsbl.2022.0316>
6. Varola, M.*, **Verga, L.***, Sroka, M., Villanueva, S., Charrier, I., & Ravignani, A. (2021) Can harbor seals (Phoca vitulina) discriminate familiar conspecific calls after long periods of separation? *PeerJ*, 9:e12431
7. **Verga, L.**, Schwartze, M., Stapert, S., Winkens, I., & Kotz, S. A. (2021). Dysfunctional Timing in Traumatic Brain Injury Patients: Co-occurrence of Cognitive, Motor, and Perceptual Deficits. *Frontiers in Psychology*, 12(October), 1–10. <https://doi.org/10.3389/fpsyg.2021.731898>
8. Hoeksema, N., **Verga, L.**, Mengede, J., van Roessel, C., Villanueva, S., Rubio-garcia, A., Ćurčić, B., Vernes, S. C., & Ravignani, A. (2020). Neuroanatomy of the grey seal brain: bringing pinnipeds into the neurobiological study of vocal learning. *Phil Trans B*, 5(1), 0–6. <https://doi.org/https://doi.org/10.1101/2020.12.19.423579>
9. **Verga, L.**, & Ravignani, A. (2021). Strange Seal Sounds: Claps, Slaps, and Multimodal Pinniped Rhythms. *Frontiers in Ecology and Evolution*, 9(August), 1–5. <https://doi.org/10.3389/fevo.2021.644497>
10. Ferraro, S., Nigri, A., D'incerti, L., Rosazza, C., Sattin, D., Rossi Sebastiano, D., Visani, E., Duran, D., Marotta, G., De Michelis, Catricalà, E., Kotz, S.A. **Verga, L.**, Leonardi, M., Cappa, S.F. and Bruzzzone, M.G. (2020). Preservation of language processing and auditory performance in patients with disorders of consciousness: a multimodal assessment. *Frontiers in Neurology, section Neurotrauma*.
11. Ravignani, A., **Verga, L.**, & Greenfield, MD. (2019). Interactive rhythms across species: the evolutionary biology of animal chorusing and turn-taking. *Annals of the New York Academy of Sciences*, nyas.14230. <https://doi.org/10.1111/nyas.14230>
12. **Verga L.**, Kotz SA. (2019). Spatial attention underpins social word learning in the right fronto-parietal network. *NeuroImage*, 195:165–73. doi:10.1016/j.neuroimage.2019.03.071.
13. Galbiati, A.* & **Verga, L.***, Giora, E., Zucconi, M., Ferini-Strambi, L. (2019). The risk of neurodegeneration in REM Sleep Behavior Disorder: A systematic review and meta-analysis of longitudinal studies. *Sleep Medicine Reviews*, 43: 37-46. doi: 10.1016/j.smrv.2018.09.008
14. Galbiati, A., Sforza, M., Poletti, M., **Verga, L.**, Zucconi, M., Ferini-Strambi, L., Castronovo, V. (2018). Insomnia patients with subjective short total sleep time have a boosted response to cognitive behavioral therapy for Insomnia despite residual symptoms. *Behavioral Sleep Medicine*. doi: 10.1080/15402002.2018.1545650
15. **Verga, L.** & Kotz, S.A. (2018). Putting language back into ecological communication contexts. *Language, Cognition, and Neuroscience*. doi: 10.1080/23273798.2018.1506886
16. Begel, V.* & **Verga, L.***, Benoit, C.E., Kotz, S.A., Dalla Bella, S. (2018). Test-retest reliability of the Battery for the Assessment of Auditory Sensorimotor and Timing Abilities (BAASTA). *Annals of Physical and Rehabilitation Medicine*. doi: 10.1016/j.rehab.2018.04.001
17. **Verga, L.** & Kotz, S.A. (2017). Help me if I can't: Social interaction facilitates adult contextual word learning. *Cognition*, 168: 76-90. doi: 10.1016/j.cognition.2017.06.018
18. Ferreri, L.* & **Verga, L.*** (2016). Music benefits on verbal learning and memory: When and how does it work? *Music Perception*, 34(2): 167-182. doi: 10.1525/mp.2016.34.2.167.
19. Dalla Bella, S., Farrugia, N., Benoit, C.-E., Begel, V., **Verga, L.**, Harding, E., & Kotz, S. A. (2016). BAASTA: Battery for the Assessment of Auditory Sensorimotor and Timing Abilities. *Behavior Research Methods*, 1–18. doi: 10.3758/s13428-016-0773-6
20. **Verga, L.**, Bigand, E., & Kotz, S. A. (2015). Play along: Effects of music and social interaction on word learning. *Frontiers in Psychology*, 6: 1316. doi: 10.3389/fpsyg.2015.01316
21. Spada, D., **Verga, L.**, Iadanza, A., Tettamanti, M., Perani D. (2014) Melody, accompaniment and the auditory scene: an fMRI study with professional pianists. *NeuroImage*, 102(2): 764-775. doi: 10.1016/j.neuroimage.2014.08.036
22. **Verga, L.**, & Kotz, S.A. (2013). How relevant is social interaction in second language learning? *Frontiers in Human Neuroscience*, 7:550. doi: 10.3389/fnhum.2013.00550

BOOK CHAPTERS

1. **Verga, L.**, Kotz, S.A. & Schwartz, M. (in press) Speech rhythm in the perception-action-cycle. *In Rhythm of Speech and Language*. Lars Meyer & Antje Strauss eds. Cambridge University Press.
2. **Verga, L.**, Schwartz, M., & Kotz, S.A. (2023) Neurophysiology and speech-language pathologies. *In Language Electrified. Techniques, Methods, Applications, and Future Perspectives in the Neurophysiological Investigation of Language*. Springer publishing - Methods in Neuroscience

TALKS

1. **Verga, L.** (2023) The evolution of social timing: A cross-species guide to interactive communication. Talk presented at the Radboud University, Research Master's course "Neurobiology of Language", Radboud University, NL
2. **Verga, L.** (2022) The evolution of social timing. Talk presented at the Radboud University Summer School 2022, Radboud University, NL.
3. **Verga, L.** (2021) Learning, rhythm, and talking seals. Talk presented at the IMPRS Introduction Days, MPI, Nijmegen, NL.
4. **Verga, L.** (2017) Shared timing: Effects of temporal coordination on learning. Talk presented at IPEM, Ghent, Belgium.
5. **Verga, L.** (2013) The role of music in word re-learning in aphasia: What's the role of the therapist? Talk presented at Workshop "Music in the rehabilitation of patients with memory and learning deficits". Lille, France.
6. **Verga, L.** (2012) Music & social interaction: Who holds the key to verbal learning? Talk presented at Donders Discussions 2012. Nijmegen, the Netherlands.

Other talks

7. **Verga, L.** (2018) No man is an island: Is learning easier with others? Talk presented at the NPPP Lunch Talk. Maastricht University, Maastricht, the Netherlands
8. **Verga, L.** (2013) Word learning in adults: Effect of music and social interaction. Talk presented at New Perspectives for Stimulating Cognitive and Sensory Processes: EBRAMUS Consortium Final Conference. Pavia, Italy.
9. **Verga, L.** (2013) Vocabulary learning in adults: Effects of musical context. Talk presented at EBRAMUS Consortium Advisory Board Meeting. Montpellier, France.
10. **Verga, L.** (2013) Vocabulary learning in adults: Effects of social and musical context. Talk presented at EBRAMUS Consortium Advisory Board Meeting. Warsaw, Poland.
11. **Verga, L.** (2012) Exploring the role of context in word learning. Talk presented at EBRAMUS Consortium Workshop. Leipzig, Germany.
12. **Verga, L.** (2012) Learning L2 words in interaction: Preliminary results & future directions. Talk presented at EBRAMUS Consortium Meeting Workshop. Ghent, Belgium.
13. **Verga, L.** (2011) Does music enhance the (re) learning of words? Talk presented at EBRAMUS Consortium meeting Workshop. Delmenhorst, Germany.
14. **Verga, L.** (2011) Playing the game of word learning: An interactive approach based on music. Talk presented at EBRAMUS Consortium Midterm Review Meeting. Edinburgh, United Kingdom.

POSTERS

1. **Verga L.**, Kotz SA, Ravignani A. (2022) Evolution of social timing: a comparative approach to interactions in time. Poster presented at JCOLE 2022, Kanazawa, Japan (online).
2. **Verga L.**, et al. (2022) Neural underpinnings of vocal production learning and rhythm in the seal brain. Poster presented at FENS forum 2022, Paris, France.
3. Sforza, M., Poletti, M., Galbiati, A., **Verga, L.**, Zucconi, M., Ferini-Strambi, L., Castronovo, V. (2017) Evaluation of the outcome of cognitive behavioral therapy for insomnia in patients with subjective short or normal total sleep time. Poster presented at World Sleep Congress 2017, Prague, Czech Republic.
4. Marelli, S., Galbiati A., Zucconi, M., **Verga, L.**, Ferini-Strambi, L. (2017) Disorders of arousal: evaluation of neurocognitive function in 69 consecutive patients. Poster presented at World Sleep Congress 2017, Prague, Czech Republic.
5. Galbiati, A., Giora, E., **Verga, L.**, Zucconi, M., Ferini-Strambi, L. (2017) Worry and rumination traits are associated with polysomnographic indices of disrupted sleep in insomnia disorder. Poster presented at World Sleep Congress 2017, Prague, Czech Republic.
6. Marelli, S., Galbiati A., Zucconi, M., **Verga, L.**, Ferini-Strambi, L. (2017) Impaired neurocognitive functions in patients with disorders of arousal. Poster presented at the 3rd Congress of the European Academy of Neurology (EAN), Amsterdam, the Netherlands.
7. Kotz, S. A., & **Verga, L.** (2015) Social interaction and contextual constraints influence adult word learning. Poster presented at 7th Annual Meeting of the Society for the Neurobiology of Language, Chicago, IL, USA.
8. Begel, V., Farrugia, N., Benoit, C.E., **Verga, L.**, Harding, E., Kotz, S.A., & Dalla Bella, S. (2015) Battery for the Assessment of Auditory Sensorimotor Abilities (BAASTA): A rehabilitation perspective. Poster presented at BRAMS Tenth Anniversary Symposium, Montreal, Canada
9. **Verga, L.** & Kotz, S. A. (2014) Second language word learning in social interaction. Poster presented at Federation of European Neuroscience Societies (FENS), Milan, Italy.
10. **Verga, L.** & Kotz, S. A. (2013) Neural correlates of contextual variability in second language vocabulary learning. Poster presented at Society for Neuroscience (SfN) Annual Meeting, San Diego, CA, USA.
11. **Verga, L.** & Kotz, S. A. (2012) Introducing ECOLE: A language - music bridging paradigm to study the role of Expectancy and Context in social LEarning. Poster presented at Joint Conference 12th International Conference on Music Perception and Cognition (ICMPC) 8th Triennial Conference of the European Society for the Cognitive Sciences of Music (ESCOM), Thessaloniki, Greece.
12. **Verga, L.** & Kotz, S. A. (2012) Investigating the role of expectancy and context in social learning. Poster presented at Interdisciplinary Conference on Social Interaction, Engagement and the Second-Person Perspective, Cologne, Germany.
13. **Verga L.**, Spada D, Iadanza A, Tettamanti M, Perani D. (2010) Harmony in melody and accompaniment: functional evaluations and perspectives. Poster presented at Congresso Nazionale della Società Italiana di Neurofisiologia Clinica, Siena, Italy.

EDITORIAL ACTIVITY

Reviewer

Brain Research | Cortex | European Journal of Neurology | Experimental Aging Research | Frontiers in Behavioral Neuroscience | Frontiers in Neuroscience | Frontiers in Psychology | Language, Cognition and Neuroscience | Language Learning | NeuroImage | Neuroscience Letters | NPJ Science of Learning | PLOS Computational Biology | PloS ONE | Journal of Cognitive Psychology | Psychomusicology: Music, Mind, and Brain | Scientific reports | Sleep Medicine | REPRIZE | Cognitivismo Clinico

Editor

Frontiers in Psychiatry | Frontiers in Marine Science

MEDIA COVERAGE

- Zijn dieren muzikaal? (Are animals musical?) – Article appeared on Quest, 05/2021 <https://www.quest.nl/natuur/dieren/a36320436/muzikale-dieren-muzikaal-maatgevoel-kaketoe-zeeleeuw/> (in Dutch)

- Media coverage on several outlets (BBC, New York Post, etc.) of the paper “Spontaneous rhythm discrimination in a mammalian vocal learner” for a combined reach of ~200 million on the 4/11/2022

OUTREACH

- 2022/2023: “The sound of seals: An overview of (how we study) communication in seals”. Cycle of talks for staff and visitors at the Sealcenter Pieterburen (NL)
- 2023: “The sound seals” – Presentation at the Science Fair for primary school Rivers Arnhem (NL), organized by the organisation of Spanish Scientist in the Netherlands (CENL)
- 2021: Presentation of work on the seal brain at the Sealcenter Pieterburen (NL) in occasion of the Dutch Weekend Of Science

TEACHING EXPERIENCE

Course co-instructor

2022 - 2023

Critical Reading & Peer Review

Max Planck PhD program (IMPRS)

Max Planck Institute for Psycholinguistics (NL)

Course coordinator

2019

Executive Control

Master research track in Neuropsychology

Maastricht University, Maastricht (NL)

Tutor

2019

Brain Damage (tutor grade: 9.6/10)

Master specialization in Neuropsychology

Maastricht University, Maastricht (NL)

Executive Control (tutor grade: 9/10)

Master research track in Neuropsychology

Maastricht University, Maastricht (NL)

2018

Brain Damage (tutor grade: 7.80/10)

Master specialization in Neuropsychology

Maastricht University, Maastricht (NL)

Methods of Cognitive Neuroscience (tutor grade: 8.50/10)

Bachelor in Psychology

Maastricht University, Maastricht (NL)

Action (tutor grade: 8.33/10)

Bachelor in Psychology

Maastricht University, Maastricht (NL)

Skills II: Observing others and yourself (tutor grade: 9.67/10)

Bachelor in Psychology

Maastricht University, Maastricht (NL)

Assistant (practical)

2017/2018/2019

Neuroanatomy

Bachelor in Psychology

Maastricht University, Maastricht (NL)

Mentor

2018 - Present

Mentor

Bachelor in Psychology, 1st year
Maastricht University, Maastricht (NL)

Lecturer
2019

Executive Control, opening lecture
Master research track in Neuropsychology
Maastricht University, Maastricht (NL)

Supervisor
2021/2022

Master theses

- Jelle van der Werff. “Measuring anisochrony” (first supervisor)

PhD Students

- Christoforos Souganidis, visiting PhD student from BCBL

2018

Master theses

- Lotte Baerts, B.Sc. “Exploring the BAASTA battery in patients with Traumatic Brain Injury (first supervisor)
- Simon Brausten, B.Sc. “Where has the time gone: Applying the BAASTA to investigate timing deficits in patients with Acquired Brain Injury” (first supervisor)

Research electives

- Letitia Schneider, B.Sc. “Mapping cortical thickness with FreeSurfer: A Research Elective Report”

QUALIFICATIONS

2022 National scientific qualification to function as associate professor in Italian Universities (Abilitazione Scientifica Nazionale, Seconda Fascia, settore 11/E1)

2020 University Teaching Qualification (Basiskwalificatie Onderwijs)

SKILLS

Programming	R/Rstudio, Matlab, basic Linux shell scripting (bash, csh, tcsh), Presentation, Python
Stimulus delivery	Matlab, Presentation, PsychoPy
Statistics & Analysis	R, Matlab, SPSS, Jasp, PSPP
Imaging	SPM (5 to 12), FreeSurfer, FSL, Afni, dcm2nii/x, MriCron, SPM structural toolboxes: VBM toolbox, Computational Anatomy Toolbox (CAT)
Video annotation	Boris
Others	Illustrator, Photoshop, Audacity, productivity suites
Languages	Italian (native); English (fluent); German (basic); French (basic); Dutch (basic)

EXTRA-CURRICULAR ACTIVITIES

2023 – ongoing	Pen pal in the program “Letters to a pre-scientist” aimed at connecting students to scientists and inspiring them to explore a future in STEM.
2020	PADI Open Water Diver certification
2018/2019	Involvement in the program “Green Impact” launched by UM’s Green Office, to improve sustainability in the work environment.

MEMBERSHIPS

Since 2023	Member of NeuroMi (Milan Center for Neuroscience)
Since 2022	Member of NeuroFederatie (Dutch NeuroFederation), Federation of European Neuroscience Societies (FENS), and the International Brain Research Organization (IBRO)

SOCIAL MEDIA

<i>Google Scholar</i>	https://shorturl.at/aosuK
<i>Research gate</i>	https://www.researchgate.net/profile/Laura_Verga2
<i>LinkedIn</i>	http://it.linkedin.com/in/lauraverga
<i>Twitter handle</i>	@laura__verga

22/05/2024