

Curriculum Vitae

Personal information

S. Beber

Education since leaving school

2024: **PhD in Cognitive and Brain Sciences** (Center for Mind/Brain Sciences - University of Trento); SSD = PSIC-01B (ex. M-PSI/02);
PhD's Thesis: *The neurofunctional correlates of sentence processing: focus on difficulties of morphosyntactic processing and thematic role assignment in aphasia.*
Co-Supervisors: Prof. Marco Tettamanti and Prof. Gabriele Miceli.

2017: **Master's degree in Psychology - Neuroscience** with 110/110 cum laude (Department of psychology and cognitive science - University of Trento);
Master's Thesis – Experimental research: *The neuroanatomy of sentence comprehension: an investigation on reversible sentences in people with aphasia.*
Supervisor: Prof. Gabriele Miceli.

2015: **Bachelor's degree in Cognitive psychology and psychobiology** (University of Padua);
Bachelor's Thesis – Experimental research: *Altered linguistic lateralization in patients with major depression: study of alpha, beta and delta EEG bands.*
Supervisor: Prof. Alessandro Angrilli.

Professional experience

From-to:	What:	Institution:
2025-2026	Lecturer	Free University of Bozen-Bolzano (Italy)
2024-2025	Postdoctoral Research Fellow	Free University of Bozen-Bolzano – Bressanone and NOI-Tech-Park - Bolzano (Italy)
2024-2025	Lecturer	Free University of Bozen-Bolzano (Italy)
2023	Research period abroad	Donders Institute for Brain, Cognition, and Behaviour at the Radboud University (Netherlands)
2021-2022	PhD Intern	Villa Rosa Hospital, Pergine Vals. - Neurological Rehabilitation Unit - Azienda Provinciale per i Servizi Sanitari della Provincia Autonoma di Trento (Italy)
2019	Research fellow holder	Center for Mind/Brain Sciences - University of Trento (Italy)
2018-2019	Professional postgraduate internship required for eligibility to take the State Examination for Psychologist qualification (Section A of the Italian professional register)	San Maurizio Hospital, Bolzano - Psychology and Neuropsychology Unit - Azienda Sanitaria della Provincia Autonoma di Bolzano (Italy)
2017-2018	Research intern (Cognitive Neuroscience of Language Group)	Department of Psychology and Cognitive Sciences - University of Trento (Italy)
2015	Research intern (PSYchoPHYsiology Lab)	University and Hospital of Padova (Italy)

Presentations and participations

Presentations at scientific conferences/events:

Invited speaker on a national television program for science communication, RAI 1 (Rome, April 9, 2025).

"White matter correlations of sentence processing in individuals with post-stroke aphasia" Beber, S., Beyh, A., Foulon, C., Tomasi, P., Terruzzi, S., Bonavita, J., Tettamanti, M., Miceli, G., Forkel, S.; International Conference of the Organization for Human Brain Mapping (OHBM); June 23-27, 2024, Seoul (South Korea)

"The neural correlates of thematic and morphosyntactic comprehension disorders in aphasia" Beber, S., Capasso, R., Maffei C., Tettamanti, M., Miceli, G.; European Workshop on Cognitive Neuropsychology (EWCN); January 22-26, 2024; Bressanone – BZ (Italy)

"Neurofunctional correlates of morphosyntactic processing and thematic role" Beber, S., Bontempi, G., Miceli G., Tettamanti; Annual Meeting of the Society for the Neurobiology of Language (SNL); October 24-26, 2023; Marseille (France)

"Neurofunctional correlates of sentence processing: focus on morphosyntactic processing and thematic role assignment" Beber, S.; June 8, 2023; Donders Institute, Nijmegen (Netherlands)

"BLG - Neurofunctional correlates of sentence processing" Beber, S.; Center for Mind/Brain Sciences Seminar; April 6, 2023; Virtual and in Rovereto (Italy)

"MRI and Lesion data" Beber, S.; Brain Hack – Language and Communication; May 21-24, 2023; Nijmegen (Netherlands)

"The crucial role of left temporal regions in assigning thematic roles during sentence processing: A meta-analysis and review" Beber, S., Bontempi, G., Miceli, G., M. Tettamanti; European Workshop on Cognitive Neuropsychology (EWCN); January 22-27, 2023, Bressanone - BZ (Italy)

"Behavioral and neuroimaging evidence on semantically reversible sentence processing: focus on morphosyntactic processing and thematic role assignment" Beber, S., Bontempi, G., M. Tettamanti., Miceli, G.; European Workshop on Cognitive Neuropsychology (EWCN); January 23-28, 2022, Virtual;

"PhD project" Beber, S.; Doctoral Student Day; January 28, 2021, Center for Mind/Brain Sciences (University of Trento, Italy)

"PhD project" Beber, S.; Doctoral Student Day; January 23, 2020, Center for Mind/Brain Sciences (University of Trento, Italy)

"Neurofunctional correlates of auditory and visual sentence comprehension: Evidence from aphasia" Beber, S., Capasso, R., Miceli, G; International Science of Aphasia Conference (SoA); September 23-26, 2019, Roma (Italy)

"The neurofunctional correlates of sentence comprehension: Evidence from aphasia" Beber, S., Capasso, R., Maffei C., Miceli, G; International Conference of the Organization for Human Brain Mapping (OHBM); June 9-13, 2019, Roma (Italy)

Participations at scientific conferences/events:

"Convegno Autismo" (Anffas Trentino Onlus); September 24, 2025; Trento (Italy)

"Autismo e adulti - conoscere per intervenire: elementi di base sullo spettro autistico" (Fondazione Franco Demarchi); September 25, 2025; Virtual

"Autismo e minori - conoscere per intervenire: elementi di base sullo spettro autistico" (Fondazione Franco Demarchi); September 18, 2025; Virtual

"V Congresso Nazionale - Psicologia CP e CPPed: Riconoscere le fragilità per rispettare e rispondere a diritti e bisogni dei Pazienti Vulnerabili"; November 8, 2024; Trento (Italy)

"Disturbo bipolare e dintorni"; September 27, 2024; Trento (Italy)

"Conference Brain Matters – Connectivity concepts in neuronal network modelling (Human Brain Project)"; February 13-14, 2023; Vienna (Austria) and Virtual

"Network. Behaviour. Recovery: Understanding changes in connectivity after stroke"; February 3-4, 2023; Freiburg (Germany) & Virtual

"Sixth Annual World Conference on Brain Mapping (IamBrain)"; April 1-3, 2022; Virtual

"Think Open Symposium - Power analysis for Neuroimaging"; November 18, 2021; Rovereto (Italy)

"Think Open Symposium - La Scienza Aperta nelle applicazioni cliniche"; June 17, 2021; Virtual

"Open Science Seminar - Open Science, a new perspective for research evaluation"; February 18, 2021; Virtual

"Brain imaging Course"; Swiss Federation of Clinical Neuro-Societies (SFCNS); October 26, 2019; Lausanne (Switzerland)

"Lesion Analysis Workshop. Theory and practical application of modern statistical lesion analysis"; Universitätsklinikum Tübingen, Neurologische Klinik; April 12-13, 2019, Tübingen (German)

"Ruolo della risonanza magnetica convenzionale e avanzata nella diagnosi e prognosi delle principali patologie neurologiche"; Congresso nazionale della Società Italiana di Neurologia (SIN) - October 27- 30, 2018; Roma (Italy)

Courses during my PhD (in Italy and Netherlands):

- Methods: EEG
- Methods: MEG
- Teaching training and dissemination of scientific knowledge
- Machine Learning for Neuroimaging Data Analysis
- Python for Data Analysis and Machine Learning
- Elan, spoken language annotation and transcription
- Data Science: R
- High-Performance Computing
- Server crash
- Project design and writing
- Figures and posters
- Data visualization
- Writing, how to respond to reviewers
- Funding opportunities and how to apply

Teaching

Lecturer "Developmental and Educational Psychology (lab.)" at the University of Bozen-Bolzano (Italy); Teaching language: English; Academic Year: 2025-2026

Lecturer "Developmental and Educational Psychology (lab.)" at the University of Bozen-Bolzano (Italy); Teaching language: English; Academic Year: 2024-2025

Tutor of 3 master's students in the Lab rotation at Radboud University (Netherlands). Year: 2023

Tutor of 2 master's students in the Master's Degree Internship in Psychology – Neuroscience at the University of Trento (Italy). Years: 2021-2022

Co-supervisor of 4 master's students at the University of Trento. Years: 2021-2022-2023

Member of the master's degree commission in the Linguistic Sciences of the University of Bologna; March 19, 2021

Assistant for the following exams at the University of Trento: Neurology; Neuropsychological Rehabilitation. Years: 2019-2022

Memberships

Member of the Ordine degli Psicologi della Provincia di Trento (Sezione: A) – Italy.

Former member and collaborations:

- ORFARO Research Group – "Automatic optimal-reward-frequency selection by arousal estimation and optimization for the enhancement of ILF neurofeedback treatments" – Free University of Bozen-Bolzano and NOI-Tech-Park (Italy) – with Professors: Angelika Peer and Reinhard Tschiesner
- Cognitive Neuroscience of Language Group
<https://www.cimec.unitn.it/en/521/cognitive-neuroscience-of-language-group>
- Brain and Language Group
<https://www.cimec.unitn.it/en/744/brain-and-language-group>
- Stephanie Forkel Team
<https://www.stephanieforkel.com/team>
- Brain Connectivity and Behaviour Laboratory
<https://storage.googleapis.com/bcblabweb/index.html>

2019-2024:

- Organization of Human Brain Mapping (OHBM)
<https://www.humanbrainmapping.org/>
- Organization of Human Brain Mapping (OHBM) Alpine Chapter
<https://www.humanbrainmapping.org/i4a/pages/index.cfm?pageid=3823>
- Society for the Neurobiology of Language (SNL)
<https://www.neurolang.org/>
- Science of Aphasia (SoA)
<https://soaphasia.com>

Research grant and scholarships

Date granted:	Funding body:	Title:
2023-2024	Donders Institute for Brain, Cognition, and Behaviour	Donders Mohrmann Fellowship – Nijmegen (Netherlands)
2023	University of Trento	Increase of the Doctoral scholarship
2019	Ministero dell'Università e della Ricerca (MUR)	Doctoral scholarship for 4 years funded by the Department of Excellence (Law 232/2016) on "Advanced neuroimaging methods for the study of human cognition" – MUR

2018	Fondazione Caritro and Center for Mind/Brain Sciences (CIMEC) -University of Trento	Research Grant for Young Researchers by Fondazione Caritro (Italy),
2018	University of Trento	Merit Award for Master's Path & Degree in Psychology - Neuroscience

Publications

Glaubig, L., Azza, Y., **Beber**, S., Silbernagl, P., Barradas, I., Peer, A., & Tschiesner, R. (2026). Slow-Oscillation Neurofeedback: A Narrative Review on Clinical Efficacy in Pediatric Settings. *Behavioral Sciences*, 16(3), 337.

Beber, S., Capasso, R., Maffei, C., Tettamanti, M., Miceli, G. (2025). Distinct neural correlates of morphosyntactic and thematic comprehension processes in aphasia. *Brain Communications*, 7(2), fcfa093. <https://doi.org/10.1093/braincomms/fcaf093>

Beber, S., Bontempi, G., Miceli, G., & Tettamanti, M. (2024). The Neurofunctional Correlates of Morphosyntactic and Thematic Impairments in Aphasia: A Systematic Review and Meta-analysis. *Neuropsychology Review*, 1-34. <https://doi.org/10.1007/s11065-024-09648-0>

Beber, S. (2024). The neurofunctional correlates of sentence processing: focus on difficulties of morphosyntactic processing and thematic role assignment in aphasia. *Iris* <https://hdl.handle.net/11572/418870>

Beber, S. (2020). La ricerca nelle case di tutti. *Breaking Talks – Fondazione Caritro*.

Beber, S., Capasso, R., Miceli, G. (2019). Neurofunctional correlates of auditory and visual sentence comprehension: Evidence from aphasia. *Stem-Spraak-en Taalpathologie*, 24:50-54. <https://hdl.handle.net/11572/317731>

Beber, S. (2017). *Correlati neuroanatomici della comprensione di frasi reversibili: uno studio in persone con afasia*. University of Trento Library. 0707H-586 <https://webapps.unitn.it/Biblioteca/it/Web/TesiCorso/0707>

Development and Innovation

Development of a new linguistic battery to analyse linguistic processes involved in the comprehension and production of single words and sentences, with computerized implementation through human–computer interaction.

Language competence

Italian; English; German