

Julieta Laurino, PhD

Adaptive Rationality Center, Max Planck Institute for Human Development, Berlin, Germany

CONICET — National Scientific and Technical Research Council, Argentina

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EDUCATION

2020 – 2025 PhD in Biological Sciences

Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Project: “The role of context on semantic ambiguity processing: a neurobiological and computational analysis.”

Advisor: Dr. Laura Kaczer. Dept. of Physiology, Molecular and Cellular Biology, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

2014 – 2020 Licenciada in Biological Sciences (equivalent to MSc)

Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Undergraduate thesis: “Updating the meaning of new words in adults through memory reactivation.” Thesis marked 10 (out of 10).

Advisor: Dr. Laura Kaczer. Dept. of Physiology, Molecular and Cellular Biology, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

RESEARCH EXPERIENCE

2025 – Present Postdoctoral Guest Researcher

Adaptive Rationality Center, Max Planck Institute for Human Development, Berlin

Advisor: Dr. Dirk Wulff.

Project: “Individual differences in mental representations across the lifespan: a semantic network approach.”

2020 – 2025 Doctoral Researcher

Language and Cognition Laboratory, Institute of Physiology, Molecular Biology and Neuroscience, University of Buenos Aires, CONICET, Argentina.

Advisor: Dr. Laura Kaczer.

Project: “The role of context on semantic ambiguity processing: a neurobiological and computational analysis.”

2023 – 2024 Visiting Doctoral Researcher

Speech and Bilingualism Laboratory, Basque Center on Cognition, Brain and Language (BCBL), Donostia, Spain.

Advisor: Dr. Clara D. Martin.

Project: “Effects of semantic context on cognitive effort in bilingual word processing: a pupillometry study”.

2016 – 2020 Undergraduate Researcher.

Neuroscience of Memory Laboratory, Institute of Physiology, Molecular Biology and Neuroscience, University of Buenos Aires, CONICET, Argentina.

Advisor: Dr. Laura Kaczer.

Project: “Updating the meaning of new words in adults through the process of memory reactivation.” Involved in EEG data collection and analysis.

2017 Research assistant.

Laboratory of Applied Artificial Intelligence, Dept. of Computer Science, University of Buenos

Aires, Argentina.

Advisor: Dr. Guillermo Solovey.

Projects of computational neuroscience using eye-tracker.

PUBLICATIONS

Journal Articles

- **Laurino, J.**, & Kaczer, L. (2025). Pupil Size Tracks the Effects of Global Context and Semantic Ambiguity on Word-Meaning Processing. *Journal of Cognition*, 8(1). <https://doi.org/10.5334/joc.454>
- Iglesias, I., Armstrong, B., **Laurino, J.**, Kaczer, L., & Cabana, Á. (2025). Automatic quantification of lexical ambiguity using large-scale word association data. *PsyArXiv*. https://doi.org/10.31234/osf.io/tpnxq_v1
- **Laurino, J.**, De Deyne, S., Cabana, Á., & Kaczer, L. (2023). The Pandemic in Words: Tracking Fast Semantic Changes via a Large-Scale Word Association Task. *Open Mind*, 7, 221–239. https://doi.org/10.1162/opmi_a_00081
- **Laurino, J.**, Forcato, C., Coaker, N., Pedreira, M. E., & Kaczer, L. (2022). Learning new words: Memory reactivation as a mechanism for strengthening and updating a novel word's meaning. *Memory & Cognition*, 50(4), 655–671. <https://doi.org/10.3758/s13421-021-01247-1>
- **Laurino, J.**, & Kaczer, L. (2019). Animacy as a memory enhancer during novel word learning: Evidence from orthographic and semantic memory tasks. *Memory*, 27(6), 820–828. <https://doi.org/10.1080/09658211.2019.1572195>
- Kaczer, L., Bavassi, L., Petroni, A., Fernández, R. S., **Laurino, J.**, Degiorgi, S., Hochman, E., Forcato, C., & Pedreira, M. E. (2018). Contrasting dynamics of memory consolidation for novel word forms and meanings revealed by behavioral and neurophysiological markers. *Neuropsychologia*, 117, 472–482. <https://doi.org/10.1016/j.neuropsychologia.2018.07.001>

Peer-reviewed conferences

- Gianolini, A., Paez, B., Totaro, F., **Laurino, J.**, ... & Bianchi, B. (2025). Decoding Semantic Ambiguity in Large Language Models: Aligning Human Behavioral Responses with GPT-2's Internal Representations. *Jornadas Argentinas de Informática (JAIIO)*, 11(1), 265-282. <https://revistas.unlp.edu.ar/JAIIO/article/view/19824/20059>

Book Chapters

- **Laurino, J.** & Kaczer L. Memory in the Classroom. In Nin, V. & Valle – Lisboa, J. C. (Ed.). *Contributions of Cognitive Sciences to Education*. Interdisciplinary Center on Cognition for Teaching and Learning (CICEA). Universidad de la República, Montevideo, Uruguay.

AWARDS AND FELLOWSHIPS

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| 2025 | Scholarship to participate in the “School of Ideas in Neuroscience”
Nencki OpenLab, Warsaw, Poland.
Covered the cost of travel, food, accommodation and course tuition. |
| 2024 | Scholarship to participate in the “Exploring complex networks and their applications” course
Interdisciplinary Center for Data Science and Machine Learning, Universidad de la República, Montevideo, Uruguay.
Covered the cost of travel, food, accommodation and course tuition. |
| 2023 | Travel Grant for a three-month research stay
Boehringer Ingelheim Fonds Travel Grant.
The grant covered the cost of the accommodation for a three-month research stay in the |

Basque Center on Cognition, Brain and Language (BCBL), Donostia, Spain.

- 2023 **Travel Grant for a three-month research stay**
Mobility Program (+Travel) of the Faculty of Exact and Natural Sciences of the University of Buenos Aires.
Covered the travel costs for a three-month research stay in the Basque Center on Cognition, Brain and Language (BCBL), Donostia, Spain.
- 2022 **Scholarship to participate in the “Genetics and Neurobiology of Language”**
The Helmsley Trust Award.
Covered the total cost of this prestigious specialized course held at Cold Spring Harbor Laboratory, NY, USA.
- 2020 – 2026 **PhD Fellowship**
National Scientific and Technical Research Council (CONICET), Argentina.
PhD fellowship awarded by the Argentine government to pursue doctoral research in neuroscience at the Institute of Physiology, Molecular Biology and Neuroscience, University of Buenos Aires, CONICET, Argentina.
- 2018 – 2020 **Undergraduate Research Fellowship**
University of Buenos Aires.
Undergraduate fellowship awarded to engage in undergraduate training in neuroscience at the Institute of Physiology, Molecular Biology and Neuroscience, University of Buenos Aires, Argentina.

PRESENTATIONS

Selected Presentations

- 2025 **Laurino, J.**, Bavassi, L. & Kaczer, L. Context-driven meaning selection in ambiguous word processing: a semantic network approach. Meeting of Research Groups on Language Processing. Buenos Aires, Argentina. **Poster presenter.**
- 2024 **Laurino, J.**, Kaczer, L. & Martin, Clara D. Semantic Context Reduces Cognitive Effort in Bilingual Word Processing: A Pupillometry Study. XXXIX Congress of the Argentine Society of Investigations in Neuroscience, Buenos Aires, Argentina. **Poster presenter.**
- 2024 **Laurino, J.**, Kaczer, L. & Martin, Clara D. Semantic Context Reduces Cognitive Effort in Bilingual Word Processing: A Pupillometry Study. 1st Argentine Cognitive Science Meeting, Buenos Aires, Argentina. **Poster presenter.**
- 2023 **Laurino, J.**, Traverso, A., Jurado, D. & Kaczer, L. The Role of Context in Semantic Ambiguity Processing: Insights From Behavioral and Pupillometry Measures. XXXVIII Congress of the Argentine Society of Investigations in Neuroscience, San Luis, Argentina. **Poster presenter.**
- 2022 **Laurino, J.** & Kaczer, L. Time flies like an arrow; fruit flies like banana: the role of context in semantic ambiguity processing. XXXVII Congress of the Argentine Society of Investigations in Neuroscience, Buenos Aires, Argentina. **Poster presenter.**
- 2021 **Laurino, J.**, De Deyne S., Cabana A. & Kaczer, L. Semantic changes due to the COVID-19 pandemic from a large scale word association study. XXXVI Congress of the Argentine Society of Investigations in Neuroscience. Virtual. **Poster presenter.**
- 2021 **Laurino, J.**, Forcato, C., Pedreira, M.E. & Kaczer, L. Learning new words: memory reactivation as a mechanism for strengthening a novel word’s meaning. BeOnline Conference, organized by the Division of Psychology and Language Sciences, University College London. Virtual. **Poster presenter.**

- 2020 **Laurino, J.**, & Kaczer, L. Word learning and semantic integration: moving from lab-based to online experiments. BeOnline Conference, organized by the Division of Psychology and Language Sciences, University College London. Virtual. **Poster presenter.**
- 2019 Kaczer L., **Laurino, J.**, Chaves F., Forcato C. & Pedreira M.E. Updating the meaning of a word: Memory reactivation boosts integration into an existing memory trace. Society for Neuroscience Conference, Chicago, USA.
- 2017 **Laurino, J.**, Forcato, C., Pedreira, M.E. & Kaczer, L. Updating the meaning of a word: memory reactivation boosts integration into an existing memory trace. XXXIV Congress of the Argentine Society of Investigations in Neuroscience, Córdoba, Argentina. **Poster presenter.**
- 2017 Bavassi, L., Degiorgi, S., **Laurino, J.**, Forcato, C., Pedreira, M.E., Kaczer, L. Exploring memory consolidation for novel word forms and meanings: an ERP study. 2nd Congress of “Latin American Brain Mapping Network” (LABMAN), Buenos Aires, Argentina. **Poster presenter.**

Invited talks

2024 **BCBL 2024 Pupillometry Workshop**

Basque Center on Cognition, Brain & Language (BCBL), Donostia, Spain.

[Talk \(virtual\): “Using Growth Curve Analysis to model pupil data”.](#)

TEACHING AND MENTORING

Teaching

2024 – present **Graduate Teaching Assistant**

Dept. of Education, University of San Andrés, Buenos Aires, Argentina.

Course: Cognitive Neuroscience.

2023 **Teaching Assistant**

Neuromatch Academy. Course: Computational Neuroscience.

2023 **Teaching Assistant**

Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Course: Exactas Programa. Introduction to computational thinking and Python course for undergraduate and graduate programs.

2022 – 2023 **Graduate Teaching Assistant**

Dept. of Physiology, Molecular and Cellular Biology, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Courses: Genetics; Introduction to Molecular and Cellular Biology.

2020 – 2021 **Undergraduate Teaching Assistant**

Dept. of Physiology, Molecular and Cellular Biology, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Courses: Introduction to Molecular and Cellular Biology; Introduction to Animal Physiology.

2019 – 2020 **Undergraduate Teaching Assistant**

Dept. of Biological Chemistry, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Course: Biological Chemistry.

Supervision

2023 - 2024 **Undergraduate thesis co-advisor**

Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

Student: Dulce Jurado.

Project: "Boundary conditions of global context modulation on word-meaning access".

Thesis marked 10 (out of 10).

PROFESSIONAL DEVELOPMENT

Advanced Research Training

2022 **Genetics and Neurobiology of Language**

Organizers: Kate Watkins, Simon Fisher and David Poeppel. Cold Spring Harbor Laboratory, NY, United States. Competitively selected.

2021 **Neural signal acquisition: practical workshop IBRO-LARC**

International Brain Research Organization - Latin America Regional Committee (IBRO-LARC). Virtual. Competitively selected.

Courses

2025 **School of Ideas in Neuroscience**

Nencki OpenLab, Warsaw, Poland.

2024 **Exploring complex networks and their applications**

Interdisciplinary Center for Data Science and Machine Learning, Universidad de la República, Montevideo, Uruguay.

2024 **Machine Learning**

Computer Dept., Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

2023 **Spatial Filtering Techniques for Electroencephalography signals**

Argentine Society for Research in Neuroscience, San Luis, Argentina.

2022 **Introduction to Bayesian statistical methods**

Dept. of Ecology, Genetics and Evolution, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

2021 **Programming in Python**

School of Science and Technology of the National University of San Martín, Buenos Aires, Argentina.

2020 **Artificial intelligence and deep learning in physics**

XXII Giambiagi Winter School, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

2020 **Dynamic Systems and Artificial Intelligence Applied to the Data Modelling**

Dept. of Physics, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

2019 **Natural language processing with neural networks**

Dictated by Germán Kruszewski. School of Computer Sciences, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

2018 **Computational methods for studying language in the brain**

Dictated by Liberty Hamilton. School of Computer Sciences, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina.

SERVICE

Professional service and memberships

2022 – present **Member of the Education Committee of the Argentine Society for Research in Neuroscience (SAN).**

Engaged in planning and developing training spaces (i.e., workshops, courses, talks) in neuroscientific topics of interest to the Argentine neuroscientific community.

2020 – present **Member and co-founder of the Argentine Network of Students in Neuroscience.**
Graduate students and postdocs network dedicated to addressing the challenges encountered during academic careers. The network aims to develop practical solutions and resources for the community.

2024 Reviewer for the Language, Cognition and Neuroscience Journal.

Organisation of academic events

2023–2024 **Co-organiser, Pre-meeting Course**

Annual Congress of the Argentine Society of Neuroscience, Buenos Aires, Argentina.

2023–2024 **Co-organiser, Argentine Neuroscience Student Network Social**

Annual Congress of the Argentine Society of Neuroscience, Buenos Aires, Argentina.

2022 **Co-organiser, Workshop: “Theoretical and Practical Tools for Research in Neuroscience”**
Argentine Society of Neuroscience.

2023 – 2024 **Organizer and host of the stand “Language and Brain: The dictionary in your head.”**
Biology Week of the Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina. Organized and hosted interactive science activities, fostering public engagement and hands-on learning during an educational event organized by the University of Buenos Aires.