PAMELA D. RIVIERE RUIZ

San Diego, CA | P: 787-478-7783 | pamiriviere@gmail.com

EDUCATION

UNIVERSITY OF CALIFORNIA SAN DIEGO — San Diego, CA
UCSD Chancellor's Postdoctoral Fellow — July 2023 – June 2025
Ph.D. in Cognitive Science — Sep 2016 – June 2023
Dissertation Title: On the Dynamics of Hippocampal CA1 Interneurons During Associative Memory Processing
Keywords: Neural Circuits, Inhibitory Dynamics, Learning & Memory

BOSTON UNIVERSITY — Boston, MA
B.A. in Neurosciences — Sep 2011 – May 2015

AWARDS, FELLOWSHIPS, & GRANTS

INNOVATIVE RESEARCH GRANT — San Diego, CA
Kavli Institute for Brain and Mind University of California, San Diego — July 2025 – June 2026
Meenakshi Khosla, Lily Weng, Sean Trott, **Pamela Rivière**, Shreya Saha

CHANCELLOR'S POSTDOCTORAL FELLOWSHIP PROGRAM — San Diego, CA
University of California, San Diego — July 2023 – June 2025

RUTH L. KIRSCHSTEIN NATIONAL RESEARCH AWARD — San Diego, CA
National Institutes of Health, BRAIN Initiative — declined by fellow

INSTITUTIONAL RESEARCH AND ACADEMIC CAREER DEVELOPMENT AWARD — San Diego, CA
National Institutes of Health/National Institute of General Medical Science — July 2023 – June 2024

UC PRESIDENT'S DISSERTATION YEAR FELLOWSHIP — San Diego, CA
University of California, San Diego — Sep 2022 – June 2023

EDWARD A. BOUCHET GRADUATE HONOR SOCIETY (HONORABLE MENTION) — San Diego, CA
2022

GRADUATE RESEARCH FELLOWSHIP PROGRAM — San Diego, CA
National Science Foundation — July 2018 – June 2021

SAN DIEGO FELLOWSHIP AWARD — San Diego, CA
Temporal Dynamics of Learning Center — July 2017 – June 2018
University of California, San Diego

PEER-REVIEWED PUBLICATIONS

JOURNALS

Rivière & Trott (under review) Start Making Sense(s): A Developmental Probe of Attention Specialization Using Lexical Ambiguity

Cazares, Patiño, Contreras, Gorman, Burgado, Ali, van Engen, Kosik, **Rivière**, Baltz, Agba, Preston, Nagarajan, Cressy, Paredes, Santiago, White (2024) A Trainee-informed Model for Undergraduate Neuroscience Research Programs Serving Marginalized Students. *Nature Neuroscience 27, 2047–2052*

Rivière, Schamberg, Coleman, Rangel (2022) Modeling Relationships Between Rhythmic Processes and Neuronal Spike Timing. *Journal of Neurophysiology*, 128(3), 593-610

Rangel*, **Rueckemann***, **Rivière***, Keefe, Porter, Heimbuch, Budlong, Eichenbaum (2016) Rhythmic Coordination of Hippocampal Neurons During Associative Memory Processing. *eLife*

McKenzie, Frank, Kinsky, Porter, **Rivière**, Eichenbaum (2014) Hippocampal Representation of Related and Opposing Memories Develop Within Distinct, Hierarchically Organized Neural Schemas. *Neuron*, 83(1), 202-215

CONFERENCE PROCEEDINGS – Main Track

Rivière, Beatty-Martínez, & Trott (2025) Evaluating Contextualized Representations of (Spanish) Ambiguous Words: A Lexical Resource and Empirical Analysis. *In Proceedings of the 2025 Conference of the Nations of the Americas Chapter of the Association for Computational Linguistics: Human Language Technologies.*

Rivière et al. (2025) Does Language Stabilize Quantity Representations in Vision Transformers? *In Proceedings of the 47th Annual Conference of the Cognitive Science Society*

CONFERENCE PROCEEDINGS – Workshops, Findings Track

Arnett*, **Rivière***, Chang, & Trott (2024) Different Tokenization Schemes Lead to Comparable Performance in Spanish Number Agreement. *In Proceedings of the 21st SIGMORPHON Workshop on Computational Morphology, Phonology, and Phonetics*

Trott & **Rivière** (2024) Measuring and Modifying the Readability of English Texts with GPT-4. *In Proceedings of the 3rd Annual Workshop on Text Simplification, Accessibility and Readability*

BOOK CHAPTERS

Rivière & Rangel (2018) Spike-field coherence and firing rate profiles of CA1 interneurons during an associative memory task. *In: Deines A., Ferrero D., Graham E., Im M., Manore C., Price C. (eds) Advances in Mathematical Sciences. AWMRS 2017. Association for Women in Mathematics Series, vol 15 Springer, Cham.*

Rivière (2017) Entorhinal Cortex. *Chapter in Encyclopedia of Animal Cognition and Behavior. Springer*

POSTERS & PRESENTATIONS

Mechanisms of hippocampal olfactory information processing for successful goal-directed behavior. **Learning & Memory**
Rivière PD, Bladon J, Symanski C, Kullberg E, Jadhav S, Rangel LM 2023

Dentate gyrus representations of spatial and sensory cue conjunctive information. **Learning & Memory**
Heyman CR, Borzello M, **Rivière PD**, Rangel LM 2023

Recommendations for serving students from historically marginalized groups in neuroscience. **Cognitive Neuroscience**
Cazares C, **Rivière PD**, Gorman JC, Ali S, Preston MJ **Society,** 2023

Modeling neuronal engagement in rhythmic network activity **Society for Neuroscience**
Rivière PD, Schamberg G, Coleman TP, Rangel LM 2021

Model selection approach for identifying rhythmic entrainment profiles of CA1 interneurons. **Cosyne**
Rivière PD, Rangel LM 2020

Stimulation of the lateral entorhinal cortex reveals optimal frequencies for rhythmic entrainment of downstream hippocampal neurons. **Society for Neuroscience**
Rangel LM, Keefe KR, **Rivière PD**, Eichenbaum H 2015

Single cell and ensemble odor-place representations in the dentate 2014 gyrus and CA1 of the hippocampus **Society for Neuroscience**
Rangel LM, Keefe KR, **Rivière PD,** Budlong CH, Heimbuch IS, Porter BS, Eichenbaum H 2014

ADDITIONAL

Interests: AI Safety, Alignment, Interpretability, Capabilities Characterization & Forecasting
Technical Skills: Python/R programming, Statistical Modeling, Data Visualization
Research Skills: Scientific Communication, Literature Reviews, Identifying Promising Research Questions, Grant Writing