Matteo Guardamagna, PhD

Solberg Postdoctoral Fellow at Kavli Institute for Systems Neuroscience (NTNU) guardamagnamatteo@gmail.com or matteo.guardamagna@ntnu.no

Education

2018-2022: PhD in Neuroscience, Radboud University (Donders Institute), Nijmegen (NL).

Thesis: Temporal Coding Dynamics in the CA1 region of the hippocampus

2015-2017: MSc in Cognitive Neuroscience, University of Padua, Padua (IT).

Thesis: Functional characterization of spatially-modulated neurons in the dorsal

subiculum of the mouse

2012-2015: **BSc** in **Psychological Sciences**, University of Milano-Bicocca, Milan (IT).

Thesis: Cross-modal influences on face perception: psychophysiological study

Research Positions

2023-present: Postdoctoral Fellow

Kavli Institute for Systems Neuroscience (NTNU), Trondheim (NO)

Supervisors: Prof. Edvard Moser and Prof. May-Britt Moser

2018-2022: **PhD Candidate** (Marie-Curie Early-Stage Researcher)

Donders Institute (Radboud University), Nijmegen (NL).

Supervisors: Prof. Francesco Battaglia and Dr. Federico Stella

2020-2021: Visiting PhD Student (5 Months)

Kavli Institute for Systems Neuroscience (NTNU), Trondheim (NO)

Supervisors: Prof. Clifford Kentros

2016-2017: Visiting Research Student (MSc Thesis)

University College London (UCL), London (UK)

Supervisors: Prof. Francesca Cacucci and Prof Tom Wills

2014-2015: Undergraduate Research Student (BSc Thesis)

University of Milano-Bicocca, Milan (IT). Supervisors: Prof. Alice Mado Proverbio

Grants and Awards

2025-ongoing: **Solberg** Postdoctoral Scholarship

2023-2025: **EMBO** Postdoctoral Fellowships (ALTF 738-2022)

2018-2021: Marie Skłodowska-Curie Fellowship for Early Stage Researchers (ITN for PhD)

2016-2017: **MIUR** Scholarship for Excellent Traineeships

2016-2017: **Erasmus+** Traineeship Scholarship

2022 **Cum Laude Distinction** from the PhD in Science at Radboud University.

2017 Graduated **cum laude** (110/110 cum laude) from the M.Sc 2015 Graduated **cum laude** (110/110 cum laude) from the BSc.

Publications

Guardamagna, M., Chadney, O., Stella, F. et al. Direct entorhinal control of CA1 temporal coding. Nat Commun 16, 6430 (2025). https://doi.org/10.1038/s41467-025-61453-2

Modi, B., **Guardamagna, M.**, Stella, F., Griguoli, M., Cherubini, E., Battaglia, FP (2023). *State Dependent Coupling of Hippocampal Oscillations. eLife, https://doi.org/10.7554/eLife.80263.*

Guardamagna, **M.**, Stella, F., & Battaglia, F. P. (2023). *Heterogeneity of network and coding states in mouse CA1 place cells. Cell Reports, 42(2), 112022.* https://doi.org/10.1016/j.celrep.2023.112022

Guardamagna, M., Eichler, R., Pedrosa, R., Aarts, A., Meyer, A., & Battaglia, F. (2022). *The Hybrid Drive: A Chronic Implant Device Combining Tetrode Arrays with Silicon Probes for Layer-Resolved Ensemble Electrophysiology in Freely Moving Mice. J. Neural Eng.* 19 036030.