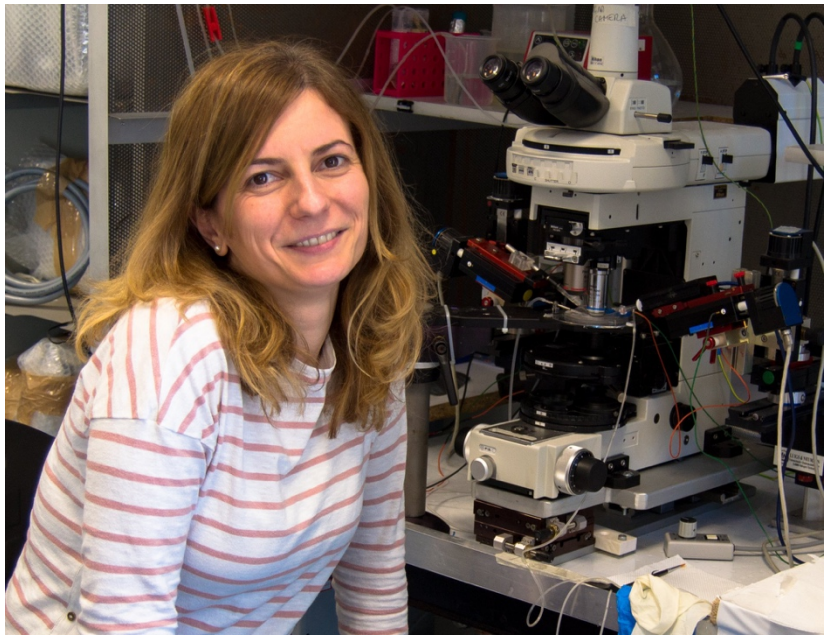
MARILENA GRIGUOLI



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Marilena Griguoli graduated in Biological Sciences at Sapienza University (Rome) in 2006 with, a thesis on the molecular features of the ectopic lymphoidogenesis in multiple sclerosis. She received her Ph.D. in neuroscience from International School for Advanced Studies (SISSA, Trieste) in 2010, under the supervision of Prof Enrico Cherubini. In Trieste, she investigated the role of nicotinic acetylcholine receptors in controlling the activity of inhibitory neurons in the hippocampus. In 2011, she moved to Interdisciplinary Institute for Neuroscience (IINS, Bordeaux, France) in Dr Mulle's laboratory, where she expanded her technical skills including *in vivo* recordings combined with opto-chemogenetic manipulation of distinct neuronal populations. In 2015, she moved in Rome to work at EBRI-Rita Levi-Montalcini Foundation in Prof Cherubini's laboratory, where she started to dissect out inhibitory circuits involved in social behavior in physiological conditions and in models of autism spectrum disorders. Currently she holds a permanent position as researcher at the National Research Council-Institute of Neuroscience in Pisa (2020-) and a group leader position at EBRI- Rita Levi-Montalcini Foundation in Rome (2021-). Her research focuses on

the role of inhibitory and cholinergic neurons in social behavior in both physiological and pathological states such as neurodevelopmental disorders.

Education and Positions

2006 Degree in Biological Sciences, Sapienza University (Rome, Italy)

2010 PhD in Neuroscience, International School for Advanced Studies (SISSA) (Trieste, Italy)

2011-2014 Post-doctoral Fellow, Interdisciplinary Institute for Neuroscience (IINS) (Bordeaux, France)

2015-2020 Post-doctoral Fellow, European Brain Research Institute (EBRI)- Rita Levi-Montalcini Foundation (Rome, Italy)

2020-Present Researcher, National Research Council, Institute of Neuroscience (Pisa, Italy)

2021-Present Group Leader, European Brain Research Institute (EBRI)- Rita Levi-Montalcini Foundation (Rome, Italy)

Publications

Pimpinella D, Mastrorilli V, Giorgi C, Coemans S, Lecca S, Lalive AL, Ostermann H, Fuchs EC, Monyer H, Mele A, Cherubini E, **Griguoli M***. Septal cholinergic input to CA2 hippocampal region controls social novelty discrimination via nicotinic receptor-mediated disinhibition. eLife 2021;10:e65580, *corresponding author, **2021**

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Pizzarelli R, **Griguoli M**, Zacchi P, Petrini EM, Barberis A, Cattaneo A, Cherubini E. Tuning GABAergic inhibition: gephyrin molecular organization and functions. Neuroscience 4522: 30520-3052. DOI: 10.1016/j.neuroscience.2019.07.036, Review article, **2019**

Torromino G, Autore L, Khalil V, Mastrorilli V, **Griguoli M**, Pignataro A, Centofante E, Biasini GM, De Turris V, Ammassari-Teule M, Rinaldi A, Mele A. Offline ventral subiculum-ventral striatum serial communication is required for spatial memory consolidation. Nat Commun 10, 5721 DOI:10.1038/s41467-019-13703-3, **2019**

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Griguoli M, Sgritta M, Cherubini E. Presynaptic BK channels control transmitter release: physiological relevance and potential therapeutic implications. Journal of Physiology, 594(13):3489-3500, Review article, **2016**

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Griguoli M & Cherubini E. Regulation of hippocampal inhibitory circuits by nicotinic acetylcholine receptors. Journal of Physiology, 590 (4):655-666, Review article, **2012**

Cherubini E, **Griguoli M**, Safiulina V, Lagostena L. The depolarizing action of GABA in the hippocampus controls early network activity in the developing hippocampus. Molecular Neurobiology, 43 (2) 97-106, Review article, **2011**

Griguoli M, Maul A, Nguyen C, Giorgetti A, Carloni P, Cherubini E. Nicotine blocks the hyperpolarization-activated current I_h and severely impairs the oscillatory behaviour of O-LM interneurons. Journal of Neuroscience, 30 (32):10773-10783, **2010**

Griguoli M, Scuri R, Ragozzino D, Cherubini E. Activation of nicotinic acetylcholine receptors enhances a slow calcium-dependent potassium conductance and reduces the firing of stratum oriens interneurons. European Journal of Neuroscience, 30(6):1011-1022, **2009**

Columba-Cabezas S, **Griguoli M**, Rosicarelli B, Magliozzi R, Ria F, Serafini B, Aloisi F. Suppression of established experimental autoimmune encephalomyelitis and formation of meningeal lymphoid follicles by lymphotoxin beta receptor-Ig fusion protein. Journal of Neuroimmunology, 179 (1-2):76-86, 2006