

GEORGIA G GREGORIOU, Ph.D.

Education

- 2001:** Ph.D. in Neuroscience, Faculty of Medicine, University of Crete, Greece.
1997: M.Sc. in Basic Neuroscience, Graduate Program in Neuroscience, Faculty of Medicine, University of Crete, Greece.
1994: B.Sc. in Chemistry, Department of Chemistry, University of Athens, Greece.

Academic titles/Positions

- 10/2018-:** Associate Professor of Physiology, Faculty of Medicine, University of Crete
12/2016-09/2018: Assistant Professor of Physiology (tenured), Faculty of Medicine, University of Crete
04/2013-11/2016: Assistant Professor of Physiology (tenure-track), Faculty of Medicine, University of Crete
09/2009-present: Collaborating Researcher, Computational Neuroscience Group, Institute of Applied and Computational Mathematics, Foundation for Research and Technology, Hellas (FO.R.T.H.)
07/2008-03/2013: Lecturer in Physiology, Faculty of Medicine, University of Crete.
10/2006-07/2008: Research Associate, McGovern Institute for Brain Research, Massachusetts Institute of Technology (MIT) Cambridge, MA, U.S.A.
05/2003-09/2006: Research Fellow Laboratory of Neuropsychology, National Institute of Mental Health, National Institutes of Health (NIH).
11/2001-03/2003: Postdoctoral Fellow, Institute of Human Physiology, Faculty of Medicine and Surgery, University of Parma, Italy.

Recent Funding (competitive grants obtained as PI)

- 2021-2025:** H2020-MSCA-ITN-2020 (Marie Skłodowska-Curie Innovative Training Networks) “Intra- and Inter-Areal Communication in Primate Brain Networks”
2020-2023: FLAG-ERA-Human Brain Project-Basic and Applied Research “Layer-specific characterization and modeling of fronto-parietal dynamics in primate cortical networks”
2020-2024: First Call for H.F.R.I. Research Projects to support Faculty members and Researchers and the procurement of high-cost research equipment grant “Micro- and mesoscopic study of neuronal interactions and network dynamics in cognition. The role of distinct prefrontal-temporal circuits in attention and memory.”
2019-2021: Support of researchers with emphasis to young researchers, Ministry of Education, Greece “Decoding visual attention and behavioral parameters from neuronal signals”
2015-2017: Research programs of excellence IKY-Siemens for PhD research, Greece “Decoding spatial- and feature- based visual attention from neural signals”
2015-2016 & 2018-2019: Research Grant in Biomedicine, Bodossakis Foundation, Greece “Bridging neural activity and perception: correlations and causality between activity of single neurons, neuronal populations, oscillatory dynamics and attentive behavior”
2015-2017: Research Grant in Biomedical Sciences, Fondation Sante, Greece

“Neural mechanisms of attention during visual search”

2014-2015: ARISTEIA II (EXCELLENCE II), General Secretariat for Research and Technology

“Neural Mechanisms of Visual Search”

Selected Publications (full publication list [Google Scholar](#))

1. P. Sapountzis, S. Paneri, S. Papadopoulos and **G.G. Gregoriou**. (2022) [Dynamic and stable population coding of attentional instructions coexist in the prefrontal cortex](#) *Proc Natl Acad Sci U S A*. 119 (40) e2202564119 doi: 10.1073/pnas.2202564119
2. P. Sapountzis, S. Paneri and **G.G. Gregoriou**. (2018) [Distinct roles of prefrontal and parietal areas in the encoding of attentional priority](#). *Proc Natl Acad Sci U S A*. 115(37):E8755-E8764
3. P. Sapountzis and **G.G. Gregoriou** (2018) [Neural signatures of attention: insights from decoding population activity patterns](#). *Front. Biosci., Landmark Edition, Invited Review*, 23:221-246,
4. S. Paneri and **G.G. Gregoriou** (2017) [Top-down control of visual attention by the prefrontal cortex. Functional specialization and long-range interactions](#). *Front. Neurosci, Invited Article, Research topic “Prefrontal cortex and executive functions”*, 11:545,
5. **G.G. Gregoriou**, S. Paneri and P. Sapountzis (2015) [Oscillatory synchrony as a mechanism of attentional processing](#). *Brain Res. Invited Review, Special Issue on Attention and Prediction*. 1626:165-82,
6. **G.G. Gregoriou**, A.F. Rossi, L.G. Ungerleider and R. Desimone (2014) [Lesions of prefrontal cortex reduce attentional modulation of neuronal responses and synchrony in V4](#). *Nature Neurosci*. 17:1003-1011.
7. H.E. Savaki, **G.G. Gregoriou**, S. Bakola and A.K. Moschovakis (2015) [Topography of visuomotor parameters in the frontal and premotor eye fields](#). *Cerebral Cortex* 25(9):3095-106.
8. K.Q. Lepage, **G.G. Gregoriou**, M.A Kramer, M. Aoi, S.J. Gotts, U.T. Eden and R. Desimone (2012) [A procedure for testing across-condition rhythmic spike-field association change](#). *J. Neurosci Methods* 213(1): 43-62.
9. **G.G. Gregoriou**, S.J. Gotts and R. Desimone (2012) [Cell-type specific synchronization of neural activity in FEF with V4 during attention](#). *Neuron* 72(3): 581-594
10. H.E. Savaki, **G.G. Gregoriou**, S. Bakola, V. Raos and A.K. Moschovakis. (2010) [The place code of saccade metrics in the lateral bank of the intraparietal sulcus](#). *J Neurosci.*, 30(3):1118-27
11. **G.G. Gregoriou**, S.J. Gotts, H. Zhou, and R. Desimone (2009) [Long-range neural coupling through synchronization with attention](#). *Prog Brain Res* 176:35-45.
12. **G.G. Gregoriou**, S.J. Gotts, H. Zhou and R. Desimone. (2009) [High frequency long-range coupling between prefrontal and visual cortex during attention](#). *Science*, 324:1207-1210