Part B-2

Section 4 Curriculum Vitae

Name: Giovanna Maria Spano

Professional experience

11/4//2016 to date	Post-Doctoral fellow at University of Wisconsin Madison, Psychiatry Department, Center for Sleep and Consciousness

Education

29/2/2016		Phd program in Biomedical Science, curriculum Neuroscience, Section of Pharmacology, University of Sassari (UNISS) (IT).
15/4/2015 19/10/2015	to	Visiting PhD candidate at University of Wisconsin Madison (USA), Psychiatry Department, Center Of Sleep and Conscioussness
5/10/2013 31/6/2014	to	Visiting PhD candidate with Erasmus program at Department of Applied Chemistry and Environment, University Politechnica of Timisoara (RO)
29/2/ 2012		Specialized degree in Applied and Experimental Biology. School of Mathematical, Physical and Natural Sciences, Department of Molecular biology, cell biology and physiology, University of Sassari (UNISS) , (IT).With maks 110/110 and honors. Title of thesis "Analysis of molecular interactors of protein kinase LRRK2"
25/2/2010		Degree in Biology (bachelor).School of Mathematical, Physical and Natural Sciences, Department of Molecular biology, cell biology and physiology, University of Sassari (UNISS), (IT). Thesis "Site directed mutagenesis of the promoter of the gene coding for the protein Bcl2-A1"

Teaching experience

3/2015	School of Dental Medicine Lecture on "Analgesic and disinfectants"

Professional memberships

Member of SIF (Italian Society for Pharmacology) since 2015

Member of SfN (Society for neuroscience) since 2018

Professional skills

Molecular biology

Elettrochemistry

Light and fluorescent microscopy

Serial block face scanner block electron microscoopy

In vivo electrophysiology (EEG,LFP)

Microsurgery on rodents

Behavior (sleep deprivation, Rotarod and complex wheel test).

Management and supervisor experience

Coordination of daily activity and evaluation of work of 9 laboratory technicians in the past 4 years.

Invited talks and seminar Conferences

Del Giudice MG, Galioto M, Sanna G, Spissu Y, **Spano G M**, Migheli R, Serra PA, Desole MS,Crosio C, Iaccarino C (2011) Studying exocytosis in neuronal cells: effect of mutant LRRK2, responible of familial Parkinson's desease, on vescicle release. Conference Molecular mechanism in Neuroscience. October 3th- 4th 2011, Rome, Italy.

Zinellu M, Bazzu G, Biosa A, **Spano GM**, Spissu Y, Calia G, Bacciu A, Serra PA (2013). Development of nex microfluidic-amperometric device for monitoring dopamine secretion from PC12 cells suspension using a nanostructured microsensor . 36° National Congress of Italian Pharmacology Society, October, 23th-26th, 2013, Torino, Italia

Alvau MD, Zinellu M, **Spano GM**, Spissu Y, Bazzu G, Serra PA (2013). MPTP effects on oxygen, glucose and lactate striatal levels and neuroprotective role of pargyline on energy metabolism in MPTP model of Parkinson's disease . 36° National Congress of Italian Pharmacology Society, October, 23th-26th, 2013, Torino, Italia

GM. Spano , Bazzu G, Alvau MD , Migheli R , Rocchitta G , Serra PA (2015) MPTP enhances its neurotoxicity by increasing extracellular oxygen levels in the striatum of freely-moving rats . 38° National Congress of Italian Pharmacology Society; October , 27th-31th, 2015, Naples, Italy.

Bourdon A.K. , **Spano GM**, Bellesi M., Tononi G., Cirelli C, Serra PA, Baghdoyan H.A, Lydic R., Campagna S.R. (2016) Untargeted metabolomics reveal state-dependent neurochemical changes in frontal association (FrA) and motor cortex (M1) of C57BL/6J. Experimental Biology April 2016

Bourdon A.K. , **Spano GM**, Bellesi M., Bradley A., Tononi G., Cirelli C, Serra PA, Baghdoyan H.A, Campagna S.R, Lydic R. 2016 Assessing the effects of sleep and wakefulness on the metabolome of mouse cortex using ultra-performance liquid chromatography coupled with high-resolution mass spectrometry. November 2016 , Society for Neuroscience DOI10.13140/RG.2.2.33287.19364 Affiliation: Society for Neuroscience

Baer A.,Bourdon A.K. , **Spano GM**, Bellesi M., Bradley A., Tononi G., Cirelli C, Serra PA, Baghdoyan H.A, Campagna S.R, Lydic R 2017. Metabolomic Analysis of Microdialysis Samples from the Frontal Association Cortex of C57BL/6J Mouse during Isoflurane Anesthesia. April 2017Experimental Biology Ordinal: FASEB J 31:1058.12, 2017 Affiliation: American Physiological Society

Pubblications

Bourdon AK,**Spano GM**,Marshall W,Bellesi M,Tononi G,Serra PA,Baghdoyan HA,Lydic R,Campagna SR,Cirelli C. Metabolomic analysis of mouse prefrontal cortex reveals upregulated analytes during wakefulness compared to sleep. Sci Rep. 2018 Jul 25;8(1):11225. doi: 10.1038/s41598-018-29511-6.

Spano GM, Weyn Banningh S, Marshall W,de Vivo L, Bellesi M,S. Loschky S,Tononi G and Cirelli C. Sleep Deprivation by Exposure to Novel Objects Increases Synapse Density and Axon–Spine Interface in the Hippocampal CA1 Region of Adolescent Mice. Journal of Neuroscience 21 August 2019, 39 (34) 6613-6625; DOI: https://doi.org/10.1523/JNEUROSCI.0380-19.2019

de Vivo L, Nagai H,De Wispelaere N, **Spano GM**, Marshall W, Bellesi M,Nemec KM, Schiereck SS, Nagai M, Tononi G, Cirelli C. Evidence for sleep-dependent synaptic renormalization in mouse pups. *Sleep*, Volume 42, Issue 11, November 2019, zsz184, https://doi.org/10.1093/sleep/zsz184