



Giuseppina Mariucci

Assistant Professor in Applied Biology

Main research interests

The research has mainly concerned topics in the neurobiology field.

The role of Heat shock protein 70 kDa (HSP70) on cerebral plasticity in both physiological (learning and memory) and pathological (cerebral ischemia and neurodegeneration) conditions.

In vivo and *in vitro* studies on neurobiological and genotoxic effects of extremely low frequency magnetic fields (ELF-MF). A recent topic concerns the relation between TSC1 and the regulation of HSP70 expression.

Collaborations

Proff. Massimo Moretti, Milena Villarini, Carmela Conte, Department of Pharmaceutical Sciences, University of Perugia.

Prof Angela Gambelunghe, Department of Medicine, University of Perugia.

Prof. Ranieri Rossi, Department of Life Sciences, University of Siena.

Prof. Carla Emiliani, Department of Chemistry, Biology and Biotechnology, University of Perugia.

Scientific Publications (2009-2014)

M Tantucci, G Mariucci, E Taha, C Spaccatini, A Tozzi, E Luchetti, P Calabresi, MV Ambrosini. Induction of heat shock protein 70 reduces the alteration of striatal electrical activity caused by mitochondrial impairment, *Neuroscience*, 163, 735-740, 2009.

M Ammassari Teule, G Mariucci and MV Ambrosini. The 70kDa heat shock protein family and learning. In A.A.A. Asea - B K. Pedersen (Eds), *Heat Shock Proteins and Whole Body Physiology*, Vol. 5, pp. 217-242, Springer Science-Business Media B.V. 2010.

G Mariucci, M Villarini, M Moretti, E Taha, C Conte, A Minelli, C Aristei, MV Ambrosini. Brain DNA damage and 70-kDa heat shock protein expression in CD1 mice exposed to extremely low frequency magnetic fields. *International Journal of Radiation Biology* 86(8): 701-710, 2010.

G Mariucci , E Taha , M Tantucci , C Spaccatini , A Tozzi , MV Ambrosini. Intravenous administration of pravastatin immediately after middle cerebral artery occlusion reduces cerebral oedema in spontaneously hypertensive rats. *European Journal of Pharmacology* 660: 381-386, 2011.

M Villarini, MV Ambrosini, M Moretti, L Dominici, E Taha, D Piobbico, C Gambelunghe, G Mariucci. Brain hsp70 expression and DNA damage in mice exposed to extremely low frequency magnetic fields: a dose-response study. *International Journal of Radiation Biology* 89: 562-570, 2013.

Congress communications (2009-2014)

Mariucci G, Taha E, Ambrosini MV, Piobbico D, Villarini M, Maestri S, Dominici L, Moretti M. Does chronic postnatal exposure to Extremely Low Frequency Magnetic Fields cause primary DNA damage, hsp70 induction and behavioural alteration in CD-1 mouse pups? 8th International Comet Assay Workshop , Perugia, 27-30 Agosto 2009.

Ambrosini MV, Mariucci G, Taha E, Tantucci M, Calabresi P. Administration of Pravastatin immediately after middle cerebral artery occlusion reduces cerebral oedema in Spontaneously Hypertensive Rats. XIII National Congress of the Italian Society for Neuroscience , Milano, 2-5 ottobre 2009.

Mariucci G, Taha E, Villarini M, Moretti M, Dominici L, Piobbico D, Ambrosini MV. Cerebral DNA Damage and HSP70 expression in mice exposed to extremely low frequency magnetic fields. Atti del XII Congresso Nazionale A.I.B.G., 74, Trento 8-9 ottobre 2010.

M. Villarini, A. Gambelunghe, S. Levorato, M. Moretti, C. Fatigoni, N. Murgia, M. dell’Omo, M.V. Ambrosini, G Muzi, G. Mariucci. Effetti di dosi non citotossiche di AlCl₃ su cellule di neuroblastoma umano. Giornale Italiano di Medicina del Lavoro ed Ergonomia 33:3 Suppl 2, 260-261, 2011.

Levorato S, Villarini M, Mariucci G, Gambelunghe A, Moretti M, Fatigoni C, Ambrosini MV. Biological effects in human neuroblastoma cells following in vitro co-exposure to extremely low frequency electromagnetic fields and aluminium. Abstracts of the 12th FISV congress, Roma 24-27 settembre, p 134, 2012.

Villarini M, Levorato S, Moretti M, Fatigoni C, Ambrosini MV, Mariucci G. Valutazione degli effetti genotossici su cellule di neuroblastoma umano della co-esposizione a campi magnetici a bassissima frequenza e alluminio. Atti 45° Congresso Nazionale SITI, Santa Margherita di Pula 3/6 ottobre, p. 700-701, 2012.

Villarini M, Gambelunghe A, Fatigoni C, Dominici L, Moretti M, Levorato S, Giuliani A, Ambrosini MV, Muzi G, Mariucci G. Effetti della coesposizione a campi magnetici a bassissima frequenza e alluminio su cellule SKNBE(2) Atti 77° Congresso Nazionale SIMLI, Bologna 15/17 ottobre 2014. G Ital Med Lav Erg, 35, Suppl 4, 171, 2014.

Teaching (academic year 2013-2014)

Lecturer in Animal and Plant Biology, Single-cycle degree course in Chemistry and Pharmaceutical Technology (CTF);

Lecturer in Animal Biology, Single-cycle degree course in Pharmacy.

Supplementary teaching activities for:

Animal and Plant Biology, Single-cycle degree course in Chemistry and Pharmaceutical Technology;

Animal Biology , Single-cycle degree course in Pharmacy;

Applied Biology, Master Degree in Pharmaceutical Biotechnology.