



Dr. Maria Agnello

PhD in Cellular and Developmental Biology
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After the degree in Biological Sciences, she achieved a PhD in Cellular and Developmental Biology and subsequently a Research fellow position at Palermo University. From 2010 to date she is President and Component of many examination commissions, adjunct lecturer of Developmental Biology, and in the last year of Comparative Anatomy, for the degree Course of Biological Sciences of Palermo University. She has been assistant supervisor of several experimental degree thesis and is an University tutor.

Her research activity has been focused on: effects of Cadmium on embryo development, stress proteins synthesis, mechanisms of apoptosis and autophagy, relationship between apoptosis and autophagy, distribution, mass and activity of mitochondria, mitochondrial hsp56. These studies have led to the publication of several articles on international scientific journals and many proceedings of national and international conferences. Her actual studies concern stress response and mitochondrial behaviour in physiological and stressful conditions in sea urchin embryos and oocytes.

The general aim of the Scientific Association to the SZN is the study of cellular and embryonic response of sea urchin and others marine model organisms against exposure to emergent xenobiotics. The main objective is the identification of key molecules involved in the response pathways against marine pollutants and the disclosure of potential biomarkers of toxicity.

REPRESENTATIVE PUBLICATIONS

1. **AGNELLO M.**, CHIARELLI R., MARTINO C., BOSCO L., ROCCHERI M.C. (2016) Autophagy is required for sea urchin oogenesis and early development. *Zygote* 24, pp. 918–926. doi:10.1017/S0967199416000253.
2. KLIONSKY D., ABDALLA F.C., ABELIOVICH H., ABRAHAM R.T., ACEVEDO-ARZENA A., ADELI K., AGHOLME L., **AGNELLO M.** et al. (2012) Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*. 8(4): 445–544.
3. **AGNELLO M.** and ROCCHERI M.C. (2010) Apoptosis: focus on sea urchin development. *Apoptosis*. 15: 322–330.
4. **AGNELLO M.**, MORICI G., RINALDI A.M. (2008) A method for measuring mitochondrial mass and activity. *Cytotechnology*. 56: 145-149.
5. **AGNELLO M.**, FILOSTO S., SCUDIERO R., RINALDI A.M., and ROCCHERI M.C. (2007) Cadmium induces apoptotic response in sea urchin embryos. *Cell Stress and Chaperones*. 12 (1), 44–50.