

Immacolata Castellano is currently Professor of Biochemistry at University of Naples Federico II, where she got her PhD in Biochemistry and Cellular and Molecular Biology (2007). After a post-doc Research Fellow at the Institute of Protein Biochemistry, Research National Council, in Naples, she joined Stazione Zoologica Anton Dohrn, as Researcher in the field of Marine Biochemistry. She was visiting scientist at University of Algarve Faro, PT; at FMP Institute in Berlin, GE; and at the University of Basel, SW.

Her main research interests focus on the study of the molecular mechanisms underpinning life and adaptation of marine organisms to the environment, with focus on the biochemistry and evolution of

enzymes involved in the regulation of redox-homeostasis. Recently she has been studying the biosynthesis, biological activities and therapeutic potential of marine derived sulphur-containing natural products.

During her career she obtained several travel grants and awards for young researchers and she presented her research activities and results in several international and national congresses. She has supervised PhD students of the Open University and students of Master in Biology. She was coordinator of the International Summer School and the PhD course on "Protein evolution" and chair of SZN Seminar Committee. She is currently academic editor of Biomed Research International journal.

She is author of 45 papers on international referenced (ISI) journals, 1 book, 4 book chapters, and inventor of 4 patents. https://scholar.google.it/citations?user=-mCeRnYAAAAJ&hl=it.

5 Main Publications

- 1.Brancaccio M, Tangherlini M, Danovaro R, **Castellano I*** (2021) Metabolic adaptations to marine environments: molecular diversity and evolution of ovothiol biosynthesis in Bacteria. *Genome Biol. Evol.* 13, evab169.
- 2. Milito A, **Castellano I**, Burn R, Seebeck FP, Brunet C, Palumbo A (**2020**). First evidence of ovothiol biosynthesis in marine diatoms. *Free Radic Biol Med*. pii: S0891-5849(19)32371-8.
- 3.Gerdol M, Sollitto M, Pallavicini A, **Castellano I***. **(2019)** "The complex evolutionary history of sulfoxide synthase in ovothiol biosynthesis" *Proc. R. Soc. B.* 286 (1916):20191812.
- 4.Brancaccio M, Russo M, Masullo M, Palumbo A, Russo GL, **Castellano I***. (**2019**). Sulfur-containing histidine compounds inhibit gamma-glutamyl transpeptidase activity in human cancer cells. *J Biol Chem.* 294, 14603-14614.
- 5. Castellano I*, Seebeck FP. (2018) On ovothiol biosynthesis and biological roles: from life in the ocean to therapeutic potential. *Nat Prod Rep.* 35, 1241 1250.