

## Carola Murano



Napoli (NA), 20/06/1993

Tel.: 081 5833287

Mobile : +39 3206345689

e-mail: [carola.murano@szn.it](mailto:carola.murano@szn.it)

Skype: carola.murano\_1

Twitter : MuranoCarola

Orcid: <https://orcid.org/0000-0003-4180-0410>

**Current Position:** Technologist, III level (TD)- NBFC - National Biodiversity Future Centre

### **Affiliation:**

Department of Integrative Marine Ecology, Stazione Zoologica Anton Dohrn, Napoli (Italy)

### **Education/Training/Experience**

<b>Institute and Location</b>	<b>Degree / Function</b>	<b>Year</b>	<b>Field of Study</b>
University of Naples “Parthenope”	Bachelor Degree	2012-2015	Biological sciences
University of Siena	Master Degree	2015-2017	Ecotoxicology and Environmental Sustainability
Stazione Zoologica Anton Dohrn	Post-graduate fellowship	February 2018- September 2018	Ecotoxicology
University of Siena <i>Environmental, Geological and Polar Sciences and Technologies, Cycle XXXIV</i>	Ph.D.	2018- 2021	Ecotoxicology Biochemistry
Stazione Zoologica Anton Dohrn	Post-graduate fellowship	2021-2022	Ecotoxicology Biochemistry
Stazione Zoologica Anton Dohrn	Post-Doc	2022-2023	Ecotoxicology Microbial Ecology

## List of publications of the last 10 years

Bibliometric information (Google Scholar-October 2023)

Citations: 171

H-Index: 6

i-10: 6

\*as corresponding author

-“Antioxidant and immune response of the sea urchin *Paracentrotus lividus* to different resuspension patterns of highly polluted marine sediments”. Milito A., **Murano C.**, Castellano I., Romano G., Palumbo A., 2020. Marine Environmental Research, 160, 104978. DOI: 10.1016/j.marenvres.2020.104978

-“How sea urchins face microplastics: Uptake, tissue distribution and immune system response”. **Murano C.**, Agnisola A., Caramiello D., Castellano I., Corsi I., Palumbo A., 2020. Environmental Pollution 264:114685. DOI: 10.1016/j.envpol.2020.11468

-“Interplay between nanoplastics and the immune system of the Mediterranean sea urchin *Paracentrotus lividus*”. \***C. Murano**, E. Bergami, G. Liberatori, A. Palumbo, I. Corsi, 2021. Frontiers in Marine Science, 8:647394. DOI: 10.3389/fmars.2021.647394

-“Impact of Microbial Colonization of Polystyrene Microbeads on the toxicological Responses in the Sea Urchin *Paracentrotus lividus*”. **C. Murano**, V. Donnarumma, I. Corsi, R. Casotti and A. Palumbo, 2021. Environmental Science & Technology, 55, 79908000. DOI: 10.1021/acs.est.1c00618.

-“Eco-interactions of engineered nanomaterials in the marine environment: Towards an eco-design framework” Corsi I., Bellingeri A., Eliso M.C., Grassi G., Liberatori G., **Murano C.**, Sturba L., Vannuccini M.L., Bergami E., 2021. Nanomaterials, 11, 1903. DOI: 10.3390/nano11081903

-“Occurrence of microfibrils in wild specimens of adult sea urchin *Paracentrotus lividus* (Lamarck, 1816) from a coastal area of the central Mediterranean Sea”. \***Murano C.**, Vaccari L., Casotti R., Corsi I., Palumbo A., 2022. Marine Pollution Bulletin, 176, 113448. DOI: 10.1016/j.marpolbul.2022.113448

-“A Survey on the Distribution of Ovothiol and ovoA Gene Expression in Different Tissues and Cells: A Comparative Analysis in Sea Urchins and Mussels”. **Murano C.**, Zuccarotto A., Leone S., Sollitto M., Gerdol M., Castellano I., Palumbo A., 2022. Mar. Drugs, 20(4), 268; DOI: 10.3390/md20040268

-“Response to microplastic exposure: An exploration into the sea urchin immune cell proteome”. **C Murano**, S Nonnis, FG Scalvini, E Maffioli, I Corsi, G Tedeschi, A Palumbo, 2023. Environmental Pollution 320, 121062. DOI:10.1016/j.envpol.2023.121062

-“Short-Term Thermal Stress Affects Immune Cell Features in the Sea Urchin *Paracentrotus lividus*” **C. Murano**, A. Gallo, A. Nocerino, A. Macina, S.C. Gualandi, R. Boni, 2023. *Animals*, 13(12), 1954. DOI:10.3390/ani13121954

-“Toxicological Impacts of Microplastics: Effects on Levels of Cellular Thiols in *Mytilus galloprovincialis*” **Murano C.\***, Leone S., Palumbo A., 2023. *Environmental toxicology and chemistry*. DOI:10.1002/etc.5643

-“Immune and Reproductive Biomarkers in Female Sea Urchins *Paracentrotus lividus* under Heat Stress”. A Gallo, **C Murano**, R Notariale, D Caramiello, E Tosti, S.C. Gualandi, R. Boni, 2023. *Biomolecules*, 13(8), 1216. DOI: 10.3390/biom13081216

-“The Impact of Micro-and Nanoplastics on Aquatic Organisms: Mechanisms of Oxidative Stress and Implications for Human Health—A Review”. Geremia E., Muscari Tomajoli M.T., **Murano C.**, Petito A., Fasciolo G., 2023. *Environments* 10, 161. DOI:10.3390/environments10090161

-“ PVC pellet leachates affect adult immune system and embryonic development but not reproductive capacity in the sea urchin *Paracentrotus lividus*” Eva Jimenez-Guri, **Carola Murano**, Periklis Paganos, Maria Ina Arnone. *Marine Pollution Bulletin* 196, 115604 DOI: 10.1016/j.marpolbul.2023.115604.

## **Academic Services**

From 2020: Reviewer, *Environmental Science & Technology*, American Chemical Society

From 2022: Reviewer, *Polymers*, MDPI

From 2022: Reviewer, *Microplastics*, MDPI

From 2022: Reviewer, *Marine Pollution Bulletin*, Elsevier

From 2023: Reviewer, *Science of the Total Environment*, Elsevier

From 2023: Reviewer, *Marine Environmental Research*, Elsevier

## **Memberships of Scientific Societies**

From 2020: Member, "Society of Environmental Toxicology and Chemistry" (SETAC)

From 2021: Member, "Società Italiana di Ecologia" (SITE)

From 2022: Member, "Società Italiana di Biochimica" (SIB)

From 2023: Member, "Associazione Italiana di Oceanologia e Limnologia" (AIOL)

From 2023: Member, "Association for the Science of Limnology and Oceanography" (ASLO)