

Curriculum Vitae

Annamaria Locascio, Ph.D.

Current position: Senior Researcher, Stazione Zoologica Anton Dohrn, BEOM Department, Naples, Italy.

Author of 51 scientific papers in International Journals, 1 book chapter and 7 Congress Acta publications

Total citations = 9037; H-index = 24; i10-index = 34, according to Google Scholar March 31th, 2026

Education and training

2023 to date Senior Scientist, Department of Biology and Evolution of Marine Organisms (BEOM), Stazione Zoologica Anton Dohrn, Naples, Italy.

2017 National Academic Qualification as Associate Professor in Molecular Biology, SSD: BIO/11.

2009 to date Permanent position as researcher, BEOM Department, Stazione, Zoologica Anton Dohrn, Naples, Italy.

2002-2008 Contract as research investigator at the Stazione Zoologica Anton Dohrn.

1999-2002 Two Post-doc fellowships in the Neurobiology Laboratory, Cajal Institute, CSIC, Madrid, Spain

1998 PhD in Molecular and Cellular Biology and Pathology, University "Federico II" of Naples.

1993 Degree in Biology with top marks (110/110 summa cum laude).

Summary of Current Research Activity

- 1) Phenotypic, molecular and genetic alterations of the mussel *Mytilus galloprovincialis* after exposure to microplastics alone and in combination with BPA and/or Natural Organic Matter (NOM).
- 2) Ecological invasions and monitoring: effects of the alga *Caulerpa racemosa* on the reproductive system of *M. galloprovincialis*.
- 3) Comparative evolution among chordates of photoreceptors development. The conserved and divergent evolution of the genetic pathways by differential transcriptomic analyses.

Funded Research Grants:

2022-2025 Project: PRIN 2020, from Italian Ministry of University and Research. Coordinator: Prof. Sergio Minucci

2017-2020 Project: ASSEMBLE Plus. (Association of European Marine Biological Laboratories Expanded). Call: H2020-INFRAIA-2016-2017.

2016-2019 Project: Restauro ambientale e balneabilità del SIN Bagnoli-Coroglio (ABBaCo). Financed by Cipe

2013-2018 FIRB Grant: "Non-Coding RNA Explosion: Novel Implications in Neurotrophin Biology".

Awards: 27-6-2000 European Patent in Biomedicine. Patent number: 00938837.2 Title: "Snail a new marker in tumor progression and a guidance protein for new anti-tumor products".

External Collaborations:

Prof. Marco Gerdol, Applied and comparative Genomics, University of Trieste.

Prof. Massimiliano Fabbricino, Dr. Ludovico Pontoni, Civil Architectural and Environmental Engineering University of Naples "Federico II".

Prof. Rosaria Scudiero, Prof. Maria De Falco, Prof. Francesco Aniello, Prof. Aldo Donizetti, Dr. Luigi Rosati Department of Biology, University of Naples "Federico II".

Prof. Benedetta Mattei and Prof. Marina Prisciandaro, University of l'Aquila.

Prof. Maria Luisa Chiusano, University of Naples "Federico II", Portici.

Dr. Silvano Piazza, Dr. Alfonso Esposito, Computational Biology Unit, International Centre for Genetic Engineering and Biotechnology, ICGEB, Trieste.

Editorial activity:

Associate Editor *Frontiers in Cell and Developmental Biology*, Section of Evolutionary Developmental Biology

Associate Editor *Frontiers in Ecology and Evolution*, Section of Evolutionary Developmental Biology

Guest Editor Special Issue "Eye Development and Evolution: Cellular and Molecular Events" *Cells*
Journal MDPI.

PhD Tutoring Activity:

2024-2027 Director of studies of the PhD student Open University/SZN, Carolin Kurisingal Cleetus.
2022-2025 Director of studies of the PhD student Giulia Paoella. XXXVIII cycle PhD co-funded program UniNA/SZN. Successfully completed her PhD 27/01/2026.

2013-2015 Director of studies of the PhD student Open University/SZN Q.A. Vassalli. Successfully completed his PhD. From 01/02/2013 to 10/01/2016

2018-2022 Internal supervisor of the Open University/SZN PhD student E. Palomba. Successfully completed her PhD. From 01/10/2018 to 24/01/2022.

2017-2020 Internal supervisor of the Open University/SZN PhD student M.L. Macel. Successfully completed her PhD. From 01/10/2017 to 30/09/2020

2012-2014 Internal supervisor of the Open University/SZN PhD student A. K. Kamal. Successfully completed his PhD. From 01/01/2012 to 10/11/2014

Other tutoring activities:

2020-2021 Tutor of a SZN Research fellowship: "Study of the molecular alterations induced by industrial contaminants in the mussel *Mytilus galloprovincialis*" attributed to Dr. Federica Salatiello.

2019 Supervisor for the International Master in Marine Biological Resources (IMBRSea) Professional practice of Dr Hazrat Ali (University of Ghent) for the project: "Conservation of *Onecut* genetic pathway in photoreceptors differentiation during chordate evolution".

2018-2019 Tutor of a SZN post-doc research fellowships attributed to Dr. Quirino Attilio Vassalli

2018 IMBRSea Master Programme, Scientific Supervisor SZN Internship topic: Molecular tools applied to developmental biology studies.

2012-2016 Tutor of three post-doc fellowship for the project: "Characterization of the *Onecut* genetic pathway and of its functional role during embryonic development" attributed to Dr. Maria Rosa Pezzotti.

2002-2023 Tutor of 18 thesis degree students in Biological Sciences at the University "Federico II" of Naples.

Last 10 Publications

- M.C. Kurisingal Cleetus, M. Fabbricino, L. Pontoni, A. Locascio. Challenges in the analysis of microplastics and nanoplastics extracted from marine biological tissues: a review. *Environ. Chem. Letter* (2026) doi: 10.1007/s10311-026-01902-6.

- Chianese T, Galati M, Cappello T, Maisano M, Lettieri G, Marinaro C, Piscopo M, Fasciolo G, Gravato C, Napolitano G, Paoella G, Locascio A, Scudiero R, Rosati L. Exploring the impact of polystyrene microplastic beads on male gonads of the marine mussel, *Mytilus galloprovincialis*. *Environmental Toxicology* (2025)

- Paoella G, Pontoni L, Locascio A, Sirakov M, Scivicco M, Fabbricino M. Evaluation of potential bioaccumulation of Bisphenol A in the mussel *Mytilus galloprovincialis*. *J Environ Manage.* (2025) 382:125295. doi: 10.1016/j.jenvman.2025.125295

- Vassalli QA, Fasano G, Nittoli V, Gagliardi E, Sepe RM, Donizetti A, Aniello F, Sordino P, Kelsh R, Locascio A. The Zebrafish Retina and the Evolution of the *Onecut*-Mediated Pathway in Cell Type Differentiation. *Cells* (2024) 13:2071. doi: 10.3390/cells13242071

-Paoella G, Fabbricino M*, Locascio A*, Sirakov M, Pontoni L. Fate of bisphenol A in marine environment: a critical review. *Chemical Engineering Journal* (2024). 495, 153228, doi (*corresponding authors) 10.1016/j.cej.2024.153228

-Gerdol M, Greco S, Marino R, Locascio A, Plateroti M, Sirakov M. Conserved Signaling Pathways in the *Ciona robusta* Gut. *Int J Mol Sci.* (2024), 25, 7846. doi: 10.3390/ijms25147846..

-Locascio A. Ascidiarians for comparative evolutionary studies. *Genesis* (2023), e23563. doi: 10.1002/dvg.23563.

- Salatiello F, Gerdol M, Pallavicini A, Locascio A, Sirakov M. Comparative analysis of novel and common reference genes in adult tissues of the mussel *Mytilus galloprovincialis*. *BMC Genomics* (2022) 23:349. doi: 10.1186/s12864-022-08553-1
- Locascio A, Vassalli QA, Castellano I, Palumbo A. Novel Insights on Nitric Oxide Synthase and NO Signaling in Ascidian Metamorphosis. *Int. J. Mol. Sci.* (2022) 23, 3505.
- Pontoni L., La Vecchia C., Boguta P. Sirakov M., D'Aniello E., Fabbricino M., Locascio A. Natural organic matter controls metal speciation and toxicity for marine organisms: a review. *Environ Chem Lett* (2022) doi: 10.1007/s10311-021-01310-y.