


PERSONAL INFORMATION

Chiara Lauritano



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Nationality Italian

WORK EXPERIENCE

1st May 2022 – 30th April 2025

Visiting Fellow

The Open University, Walton Hall, Milton Keynes, United Kingdom, MK7 6AA

Drug discovery from marine organisms in collaboration with colleagues at Faculty of Science, Technology, Engineering and Mathematics at The Open University

1st July 2017- now (Permanent Staff from 1st October 2018)

Researcher

Stazione Zoologica Anton Dohrn

My research interests are in marine biology, functional genomics and marine biotechnology. Currently, I am analysing microalgal transcriptomes to study metabolic changes induced by stressful culturing conditions, enzymes involved in the synthesis of secondary metabolites and/or other enzymes with potential biotechnological applications. I am testing the bioactivity (e.g. antioxidant, anti-inflammatory, anticancer, anti-diabetes) of marine organisms, mainly microalgae, in order to isolate biologically active compounds for human health applications. In addition, I am also studying physiological and molecular responses to biotic and abiotic stressors (e.g. ocean acidification, cold, nutrient starvation or enrichment, exposure to microalgal secondary metabolites) in marine organisms, especially microalgae.

1st February 2013- 30th June 2017

Post-doc

Stazione Zoologica Anton Dohrn

My research was mainly focused on the activities related to the EU FP7 project PharmaSea (<http://www.pharma-sea.eu/>). Within the PharmaSea project, I was responsible for microalgae sampling, genotyping, culturing, bioactivity screening and molecular analyses (e.g. gene expression and transcriptomes). I was responsible for preparing and analysing the transcriptomes of active microalgae in order to study metabolic changes induced by stressful culturing conditions and to identify enzymes/metabolic pathways involved in the synthesis of secondary metabolites with potential biotechnological interest. I also tested bioactivity of microalgal pellets for possible anti-inflammatory, antioxidant, anti-diabetes, antibacterial, anti-biofilm and anticancer activities in order to isolate and characterise biologically active compounds for human health.

Sector Marine Biology and Biotechnology

9th of December 2015 to the 3rd of January 2016

Post-doc Scientist

Oceanographic cruise on board of the vessel "HESPERIDES" for sampling in Sub-Antarctic waters as part of a H2020 EUROFLEET2 project PharmaDeep

Expedition to the South Shetland Trench in Antarctica as part of a H2020 EUROFLEET2 project called "PHARMADEEP, Drug discovery from the deep Antartic waters". I was responsible for the planning and sampling of planktonic species, and support for deep bacteria sampling. Experiments consisted in the study of phytoplankton abundance, copepod fitness, gene expression and analyses of microalgae secondary metabolites. In addition, microalgal pellets have been used for chemical extraction and bioactivity screenings for possible activities for human health.

Sector Marine Biology and Biotechnology

17th February 2015-17th April 2015

Post-doc Scientist
University of Tromsø, Norway

I was responsible for microalgae culturing and bioactivity testing for anti-inflammatory, antioxidant, anti-diabetes, antibacterial, anti-biofilm and anticancer activities, and HPLC analyses within the EU PharmaSea project.

Sector Marine Biology and Biotechnology

23rd May- 3rd June 2011

Visiting Scientist
Göteborg University, Sven Lovén Centre for Marine Sciences, Kristineberg (Sweden)

EU FP7 Project ASSEMBLE (Association of European Marine Biological Laboratories) Transnational Access (Access to "Tjarno and Kristineberg" 3rd call; (grant no. 227799). I was responsible for experiments on the effects of diatom secondary metabolites on different copepod populations, both at physiological and molecular level. Experiments included analyses of copepod fitness (egg production, hatching success, nauplii viability and teratogenesis, adult behaviour and survival), gene expression for both zooplanktonic and phytoplanktonic species (RT-qPCR and transcriptomes) and analyses of microalgae secondary metabolites.

Sector Marine Biology and Chemical Ecology

7th of April 2011-14th of April 2011

Scientist
Oceanographic cruise on board of the vessel "URANIA"

I was responsible for *in-situ* experiments during a natural diatom bloom and the study of phytoplankton abundance, copepod fitness (egg production, hatching success, nauplii viability and teratogenesis, adult behaviour and survival), gene expression analyses for both zooplanktonic and phytoplanktonic species (RT-qPCR and transcriptomes) and analyses of microalgae secondary metabolites.

Sector Marine Biology and Chemical Ecology

17th – 29th May 2010

Visiting Scientist
Station Biologique de Roscoff, Roscoff (France)

EU FP7 Project ASSEMBLE (Association of European Marine Biological Laboratories) Transnational Access (Access to "Roscoff" 1st call). I was responsible for experiments on copepod-diatom interactions. In addition to diatoms, other microalgae have been tested and studied, i.e. two dinoflagellate species. Experiments included analyses of copepod fitness (egg production, hatching success, nauplii viability and teratogenesis, adult behaviour and survival), gene expression for both zooplanktonic and phytoplanktonic species (RT-qPCR and transcriptomes) and analyses of microalgae secondary metabolites.

Sector Marine Biology and Chemical Ecology

7th January 2009- 14th December 2011

PhD student
Stazione Zoologica Anton Dohrn

The aim of the thesis was to study the interactions between copepods (e.g. *Calanus helgolandicus* and *Calanus sinicus*) and different microalgae, both diatoms and flagellates. I was responsible for the following analyses/investigations:

- Toxic algal diet effects on copepod fitness (egg production, hatching success, nauplii viability and teratogenesis, adult behaviour and survival) and gene expression (RT-qPCR and transcriptomic approaches).
- Stress response in different copepod populations and identification of key stress gene markers.

Analyses of microalgae secondary metabolites and their possible bioactivities.

Sector Marine Biology and Chemical Ecology

2005-2006 (1 Year)

Training (“Internato”)

University Federico II of Napoli, Italy, Faculty of Veterinary Medicine

During the training, I studied anticancer drug effects on rat cardiocytes. I acquired expertise in *in vitro* and *in vivo* studies, molecular biology and pharmacological techniques.

Sector Cellular and Molecular Biology

EDUCATION

7th January 2009 - 14th December 2011

PhD in Animal Biology

University of Calabria, Italy and Stazione Zoologica Anton Dohrn, Italy

The aim of the thesis was to study the effects of toxic diets in the copepod *Calanus helgolandicus* at gene level. The genes of interest were analysed in various experimental conditions, as copepods exposed to algae (both dinoflagellates and diatoms) which produce or not toxic metabolites, during field or laboratory experiments. In addition, the effects of the oxylipin producing diatom *Skeletonema marinoi* have been tested on three different *C. helgolandicus* populations. Gene expression level patterns in the different experimental conditions tested may help to understand the copepod defence systems and stress response.

I was responsible for the genotyping of both microalgae and copepod species, microalgae maintenance and culturing, and molecular analyses (e.g. RNA and DNA extraction, gene expression and sequence analyses, transcriptomes).

2006-2008

(Thesis discussion 24th June 2008)

M.Sc. in Pharmaceutical Biotechnologies

University Federico II of Napoli, Italy, Faculty of Biotechnology

110/110 cum laude

Including 1 year laboratory training

Study of the inflammatory process.

Thesis: ODN DECOY for NF-kappaB released by PLGA microspheres in rat chronic inflammation

2003-2006 (Thesis discussion 19th December 2006)

B.Sc. in Biotechnology

University Federico II of Napoli, Italy, Faculty of Biotechnology

110/110 cum laude

Including 150 hours laboratory training

Study of the inflammatory process.

Thesis: Pro- and anti-apoptotic protein analyses in rat chronic inflammation

PERSONAL SKILLS

Mother tongue

Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2.2	B2.2	B2.2	B2.2	B2.2
Certificate American study center, Sequoia school					
French	A2	A2	A2	A2	A2
Attestation de réussite, Institut Français de Naples, Le Grenoble					

Scuba diver

▪ OPEN WATER DIVER PADI

Grants

1. **EU FP7 ASSEMBLE Project:** Grant by ASSEMBLE EU Project to perform the project "Molecular investigations of the stress response induced by diatom oxylipins in the copepod *Calanus helgolandicus*" at the Station Biologique de Roscoff, France, from 17th to 29th May 2010. Experiments included analyses on copepod fitness (egg production, hatching success, nauplii viability and teratogenesis, adult behaviour and survival), gene expression for both zooplanktonic and phytoplanktonic species (RT-qPCR and transcriptomes) and analyses of microalgae secondary metabolites.
2. **EU FP7 ASSEMBLE Project:** Grant by ASSEMBLE EU Project to perform the project "Stress response in the copepods *Calanus helgolandicus* and *Calanus finmarchicus* after feeding on the oxylipin-producing diatom *Skeletonema marinoi*" at the Sven Lovén Centre for Marine Sciences, Kristineberg, Sweden, from 23rd May 2011 to 3rd June 2011. Experiments included analyses on copepod fitness (egg production, hatching success, nauplii viability and teratogenesis, adult behaviour and survival), gene expression for both zooplanktonic and phytoplanktonic species (RT-qPCR and transcriptomes) and analyses of microalgae secondary metabolites.
3. Grant by **COST** (European Cooperation in Science and Technology) to participate in COST Action ES0906: Seagrass productivity: from genes to ecosystem management, performed in Vulcano (Aeolian Island, Italy) on 6-11 May 2013.
4. Travel Grant by **EUR-OCEANS** to participate to the EOC hot topics conference PLOCAN (Gran Canaria, 6-8 Nov. 2013).
5. Travel Grant by **COST** of 500,00 euro (COST Action ES0906) to participate to the Congress Seagrasses in Europe: Threats, Responses and Management (4-6 March, 2014, Olhão, Portugal)
6. **H2020 EUROFLEET2** project called "PHARMADEEP, Drug discovery from the deep Antarctic waters", consisting in an oceanographic cruise on board of the vessel "HESPERIDES" for sampling in Sub-Antarctic between 9th December 2015 and 3rd January 2016. Grant agreement n° 312762.
7. Grant Transnational Access program of **ASSEMBLE Plus**, application n. 13151, "Microalgal Metabolites For Human Biotechnological Applications" (MICROBIO) 2021.
8. • Grant Transnational Access program of MIRRI: 'Microalgae effects Against pathoGenIC bacteria and fungi' (PID: 21841) 2022.

Publications: ISI Papers

1. Lauritano C.[§], Borra M., Carotenuto Y., Biffali E., Miralto A., Procaccini G., Ianora A. (2011) First molecular evidence of diatom effects in the copepod *Calanus helgolandicus*. **Journal of Experimental Marine Biology and Ecology**, 404(1-2):79-86. [§] **Corresponding author.**
2. Lauritano C.[§], Borra M., Carotenuto Y., Biffali E., Miralto A., Procaccini G. and Ianora A. (2011) Molecular evidence of the toxic effects of diatom diets on gene expression patterns in copepods. **PLoS One**, 6(10):e26850. [§] **Corresponding author.**
3. Lauritano C.[§], Procaccini G. and Ianora A. (2012) Gene Expression Patterns and Stress Response in Marine Copepods. **Marine Environmental Research**, 76:22-31. [§] **Corresponding author.**
4. Serra I.A.*, Lauritano C.*, Dattolo E., Puoti A., Nicastro S., Innocenti A.M., Procaccini G. (2012) Reference genes assessment for the seagrass *Posidonia oceanica* in different salinity, pH and light conditions. **Marine Ecology**. DOI 10.1007/s00227-012-1907-8 ***First two authors share equal responsibility.**
5. Carotenuto Y., Esposito F., Pisano F., Lauritano C., Pema M., Miralto A., Ianora A. (2012) Multi-generation cultivation of the copepod *Calanus helgolandicus* in a re-circulating system. **Journal of Experimental Marine Biology and Ecology**, 418-419 (2012) 46–58.
6. Lauritano C.[§], Carotenuto Y., Miralto A., Procaccini G. and Ianora A. (2012) Copepod population-specific response to a toxic diatom diet. **PLoS One**, 7(10): e47262. [§] **Corresponding author.**
7. Lauritano C.[§], Carotenuto Y., Procaccini G., Turner JT, Ianora A. (2013) Changes in expression of stress genes in copepods feeding upon a non-brevetoxin-producing strain of the dinoflagellate *Karenia brevis*. **Harmful Algae**, 28:23-30. [§] **Corresponding author.**
8. Carotenuto Y., Dattolo E., Lauritano C., Pisano F., Sanges R., Miralto A., Procaccini G. and Ianora A. (2014) Insights into the transcriptome of the marine copepod *Calanus helgolandicus* feeding on the oxylipin-producing diatom *Skeletonema marinoi*. **Harmful Algae**, 31:153–162.
9. Dattolo E., Ruocco M., Brunet C., Lorenti M., Lauritano C., D'Esposito D., De Luca P., Sanges R., Mazzuca S., Procaccini G. (2014) Response of the seagrass *Posidonia oceanica* to different light environments: Insights from a combined molecular and photo-physiological study. **Marine Environmental Research**, 101:225-36.
10. Asai S., Ianora A., Lauritano C. and Carotenuto Y. (2015) High-quality RNA Extraction from Copepods for Next Generation Sequencing: A Comparative Study. **Marine genomics**. 24:115-118. doi: 10.1016/j.margen.2014.12.004.
11. Lauritano C., Carotenuto Y., Vitiello V., Buttino I., Romano G. Hwang J.S. and Ianora A. (2015) Effects of the oxylipin-producing diatom *Skeletonema marinoi* on gene expression levels in the calanoid copepod *Calanus sinicus*. **Marine Genomics**. pii: S1874-7787(15)00008-2. doi: 10.1016/j.margen.2015.01.007.
12. Lauritano C.[§], Orefice I., Procaccini G., Romano G., Ianora A. (2015) Key Genes as Stress Indicators in the Ubiquitous Diatom *Skeletonema marinoi*. **BMC Genomics**, 16:411. [§] **Corresponding author.**
13. Orefice I., Lauritano C., Procaccini G., Romano G., Ianora A. (2015) Insights in possible cell-death markers in the diatom *Skeletonema marinoi* in response to senescence and silica starvation. **Marine Genomics**, 24:81-88.
14. Lauritano C., Ruocco M., Dattolo E., Buia M.C., Silva J., Santos R., Olivé I., Costa M.M., Procaccini G. (2015) Response of key stress-related genes of the seagrass *Posidonia oceanica* in the vicinity of submarine volcanic vents, **Biogeosciences**, 12:4185–4194.
15. Jeanine L. Olsen, Pierre Rouzé, Bram Verhelst, Yao-Cheng Lin, Till Bayer, Jonas Collen, Emanuela Dattolo, Emanuele De Paoli, Simon Dittami, Florian Maumus, Gurvan Michel, Anna Kersting, Chiara Lauritano, Rolf Lohaus, Mats Töpel, Thierry Tonon, Kevin Vanneste, Mojgan Amirebrahimi, Janina Brakel, Christoffer Boström, Mansi Chovatia, Jane Grimwood, Jerry W. Jenkins, Alexander Jüterbock, Amy Mraz, Wytze T. Stam, Hope Tice, Erich Bornberg-Bauer, Pamela J. Green, Gareth A. Pearson, Gabriele Procaccini, Carlos M. Duarte, Jeremy Schmutz, Thorsten B. H. Reusch, & Yves van de Peer. (2016) The genome of the seagrass *Zostera marina* reveals angiosperm adaptation to the sea, **Nature**, 530, 331–335. doi:10.1038/nature16548.

16. **Lauritano C.**[§], Romano G., Roncalli V., Amoresano A., Fontanarosa C., Bastianini M., Braga F., Carotenuto Y., Ianora A. (2016) New oxylipins produced at the end of a diatom bloom and their effects on copepod reproductive success and gene expression levels. **Harmful Algae**. 55: 221–229. [§] **Corresponding author**.
17. **Lauritano C.**[§], Ianora A. (2016) Marine Organisms with Anti-diabetes properties. **Marine Drugs**. 14(12): 220. doi: 10.3390/md14120220. [§] **Corresponding author**.
18. **Lauritano C.**[§], Andersen J.H., Hansen E., Albrigtsen M., Escalera L., Esposito F., Helland K., Hanssen K.Ø., Romano G., Ianora A. (2016) Bioactivity screening of microalgae for antioxidant, anti-inflammatory, anticancer, anti-diabetes and antibacterial activities. **Frontiers in Marine Science**. 3, 68. doi: 10.3389/fmars.2016.00068. [§] **Corresponding author**.
19. Romano G., Costantini M., Sansone C., **Lauritano C.**, Ruocco N., Ianora A. (2017) Marine microorganisms as a promising and sustainable source of bioactive molecules. **Marine Environmental Research**. 128:58-69. doi: 10.1016/j.marenvres.2016.05.002.
20. Olivè I., Silva J., **Lauritano C.**, Costa M.M., Ruocco M., Procaccini G., Santos R. (2017) Linking gene expression to productivity to unravel long- and short-term responses of seagrasses to CO₂ in volcanic vents. **Scientific Reports**. 7: 42278. doi: 10.1038/srep42278.
21. Procaccini G., Ruocco M., Marin-Guirao L., Dattolo E., Brunet C., D'Esposito D., **Lauritano C.**, et al. (2017) Depth-specific fluctuations of gene expression and protein abundance modulate the photophysiology in the seagrass *Posidonia oceanica*. **Scientific Reports**. 7:42890. doi: 10.1038/srep42890.
22. Rasmusson L.M.; **Lauritano C.**; Procaccini G.; Gullström M.; Buapet P.; Björk M. (2017) Respiratory oxygen consumption in the seagrass *Zostera marina* varies on a diel basis and is partly affected by light. **Marine Biology**. 164(6): 140. doi: 10.1007/s00227-017-3168-z.
23. **Lauritano C.**[§], De Luca D., Ferrarini A., Avanzato C., Minio A., Esposito F., Ianora A. (2017) De novo transcriptome of the cosmopolitan dinoflagellate *Amphidinium carterae* to identify enzymes with biotechnological potential. **Scientific Reports**. 7, Article number: 11701. doi:10.1038/s41598-017-12092-1. [§] **Corresponding author**.
24. Ravaglioli C., **Lauritano C.** et al. (2017) Nutrient Loading Fosters Seagrass Productivity Under Ocean Acidification. **Scientific Reports**. 7, Article number: 13732. doi:10.1038/s41598-017-14075-8
25. **Lauritano C.**[§], Martín J., de la Cruz M., Reyes F., Romano G., Ianora A. (2018) First identification of marine diatoms with anti-tuberculosis activity. **Scientific Reports**. 8:2284 | DOI:10.1038/s41598-018-20611-x. [§] **Corresponding author**.
26. Ruocco N, Costantini S, Zupo V, **Lauritano C.**, Caramiello D, Ianora A, Budillon A, Romano G, Nuzzo G, D'Ippolito G, Fontana A, Costantini M. (2018) Toxicogenic effects of two benthic diatoms upon grazing activity of the sea urchin: morphological, metabolomic and de novo transcriptomic analysis. **Scientific Reports**. 8:5622. doi: 10.1038/s41598-018-24023-9.
27. Brillatz T.* , **Lauritano C.***[§], Jacmin M.* , Khamma S., Marcourt L., Righi D., Romano G., Esposito F., Ianora A., Queiroz E.F., Wolfender J.L. and Crawford A.D. (2018) Zebrafish-based identification of the antiseizure nucleoside inosine from the marine diatom *Skeletonema marinoi*. **PLoS One**. 13:e0196195. doi: 10.1371/journal.pone.0196195. ***First author shared**. [§] **Corresponding author**.
28. Martinez Andrade K.A., **Lauritano C.**, Romano G., Ianora A. (2018) Marine microalgae with anticancer properties. **Marine Drugs**. 16(5). pii: E165. doi: 10.3390/md16050165.
29. Giordano D., Costantini M., Coppola D., **Lauritano C.**, Núñez Pons L., Ruocco N., di Prisco G., Ianora A., Verde C. (2018) Biotechnological applications of bioactive peptides from marine sources. **Advances in microbial physiology**. vol. 73, p. 171-220.
30. **Lauritano C.**[§], De Luca D., Amoroso M., Benfatto S., Maestri S., Racioppi C., Esposito F., Ianora A. (2019) New molecular insights on the response of green algae to nitrogen starvation. **Scientific Reports**. 9,3336. [§] **Corresponding author**.
31. **Lauritano, C.**; Ferrante, M.I.; Rogato, A. (2019) Marine Natural Products from Microalgae: An -Omics Overview. **Mar. Drugs**, 17, 269.

32. Martínez K.A.*, **Lauritano C.**^{*,§}, Druka D., Romano G., Grohmann T., Jaspars M., Martín J., Díaz C., Cautain B., de la Cruz M., Ianora A., Reyes F. (2019) Amphidinol 22, a new cytotoxic and antifungal amphidinol from the dinoflagellate *Amphidinium carterae*. **Marine Drugs**. 17(7):385. doi: 10.3390/md17070385. *First author shared. [§] **Corresponding author**.
33. Vingiani G.M., De Luca P., Ianora A., Dobson A., **Lauritano C.**[§] (2019) Microalgal Enzymes with Biotechnological Applications. **Marine Drugs**. 17, 459; doi:10.3390/md17080459. [§] **Corresponding author**.
34. Riccio G. and **Lauritano C.**[§] Microalgae with immunomodulatory activities (2020) **Marine Drugs**. 18, 2; doi:10.3390/md18010002. [§] **Corresponding author**.
35. Elagoz A. M., Ambrosino L., **Lauritano C.**[§]. (2020) *De novo* transcriptome of the diatom *Cylindrotheca closterium* identifies genes involved in the metabolism of anti-inflammatory compounds. **Scientific Reports**. 10:4138 | <https://doi.org/10.1038/s41598-020-61007-0>. [§] **Corresponding author**.
36. **Lauritano C.**[§], Helland K., Riccio G., Andersen J.H., Ianora A., Hansen E.H. (2020) Lysophosphatidylcholines and Chlorophyll-Derived Molecules from the Diatom *Cylindrotheca closterium* with Anti-Inflammatory Activity. **Mar. Drugs** 2020, 18, 166; doi:10.3390/md18030166. [§] **Corresponding author**.
37. **Lauritano C.**^{*,§}, Martínez K.A.*^{*,§}, Battaglia P., Granata A., de la Cruz M., Cautain B., Martín J., Reyes F., Ianora A., Guglielmo L. (2020) First evidence of anticancer and antimicrobial activity in Mediterranean mesopelagic species. **Scientific Reports** 10, 4929, <https://doi.org/10.1038/s41598-020-61515-z>. *First author shared. [§] **Corresponding author**.
38. Coppola D., Oliviero M., Vitale G.A., **Lauritano C.**, D'Ambra I., Iannace S., de Pascale D. (2020) Marine collagen from alternative and sustainable sources: extraction, processing and applications. **Marine Drugs**. 18(4), 214. <https://doi.org/10.3390/md18040214>.
39. Riccio G., De Luca D., **Lauritano C.**[§] (2020) Monogalactosyldiacylglycerol and sulfolipid synthesis in microalgae. **Marine Drugs**. 18, 237; doi:10.3390/md18050237 [§] **Corresponding author**.
40. Damiano S, **Lauritano C.**, Longobardi C, Andretta E, Elagoz AM, Rapisarda P, Di Iorio M, Florio S, Ciarcia R. (2020) Effects of a Red orange and Lemon Extract in Obese Diabetic Zucker rats: role of nicotinamide adenine dinucleotide phosphate oxidase. **Journal of Clinical Medicine**. 9(5), 1600; <https://doi.org/10.3390/jcm9051600>
41. De Luca D. and **Lauritano C.**[§] (2020) *In silico* identification of type III PKS chalcone and stilbene synthase homologs in marine photosynthetic organisms. **Biology**. 9, 110; doi:10.3390/biology9050110. [§] **Corresponding author**.
42. Saide A, **Lauritano C.**[§], Ianora A. (2020) "Pheophorbide α : state of the art". **Marine Drugs**. 18, 257, ISSN: 1660-3397, doi: 10.3390/md18050257 [§] **Corresponding author**.
43. Damiano S., Longobardi C., **Lauritano C.**, Andretta E., Capasso G., Florio S., Ciarcia R. (2020), P0988 THE PROTECTIVE EFFECT OF RED ORANGE AND LEMON EXTRACT (RLE) IN DIABETIC OBESE ZUCKER RATS IS RELATED TO ITS ACTION ON THE NADPH OXIDASE SUBUNIT, **Nephrology Dialysis Transplantation**, Volume 35, Issue Supplement_3, June 2020, gfaa142.P0988, <https://doi.org/10.1093/ndt/gfaa142.P0988>.
44. Riccio G., Ruocco N., Mutalipassi M., Costantini M., Zupo V., Coppola D., de Pascale D., **Lauritano C.**[§] (2020) Ten-year research update review: antiviral activities from marine Organisms. **Biomolecules**. 10, 1007; doi:10.3390/biom10071007 [§] **Corresponding author**.
45. Vingiani G.M., Stalberga D., De Luca P., Ianora A., De Luca D., **Lauritano C.**[§](2020) De novo transcriptome of the non-saxitoxin producing *Alexandrium tamutum* reveals new insights on harmful dinoflagellates. **Marine Drugs**. 18, 386; doi:10.3390/md18080386. [§] **Corresponding author**.
46. Asai S., Sanges R., **Lauritano C.** et al. (2020) De Novo Transcriptome Assembly and Gene Expression Profiling of the Copepod *Calanus helgolandicus* Feeding on the PUA-Producing Diatom *Skeletonema marinoi*. **Marine Drugs**. 18, 392; doi:10.3390/md18080392.
47. D'Ambra I. and **Lauritano C.** (2020) A Review of Toxins from Cnidaria. **Marine Drugs**. 18(10), 507; <https://doi.org/10.3390/md18100507>.
48. Russo E., **Lauritano C.** et al. (2020) RNA-Seq and differential gene expression analysis in *Temora stylifera* copepod females with contrasting non-feeding nauplii survival rates: an environmental transcriptomics study. **BMC Genomics** 21:693. <https://doi.org/10.1186/s12864-020-07112-w>

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50. **Lauritano C[§]**, Roncalli V, Ambrosino L, Cieslak MC, Ianora A (2020) First De Novo Transcriptome of the Copepod *Rhincalanus gigas* from Antarctic Waters. **Biology** 9 (11), 410. **§ Corresponding author.**
51. **Lauritano C[§]**, Rizzo C., Lo Giudice A. e Saggiomo M (2020) Physiological and molecular responses to environmental stressors of microalgae and associated bacteria from cold environments. **Microorganisms** vol. 8, 1957, doi: <https://doi.org/10.3390/microorganisms8121957> **§ Corresponding author.**
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53. Ruocco N., Esposito R., Bertolino M., Zazo G., Sonnessa M., Andreani F., Coppola D., Giordano D, Nuzzo G, **Lauritano C**, Fontana A, Ianora A, Verde C, Costantini M (2021) A metataxonomic approach reveals diversified bacterial communities in Antarctic sponges. **Marine Drugs**. 19(3), 173; <https://doi.org/10.3390/md19030173>.
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69. Simona Brillante†, Christian Galasso†, **Chiara Lauritano**†, Sabrina Carrella (2022) From the Sea for the Sight: Marine Derived Products for Human Vision. **Frontiers in Aging Neuroscience**. 468. †**First author shared**.
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85. **Lauritano C**,[§] Coppola D.[§] (2023) Biotechnological applications of products released by marine microorganisms for cold adaptation strategies: polyunsaturated fatty acids, antioxidants, and antifreeze proteins. *Journal of Marine Science and Engineering*. [§] **Corresponding author**

Non-ISI Papers:

Book Chapters:

1. De Pascale, Della Sala, Coppola, **Lauritano**, Ianora (**March 2023**) "Biotecnologie marine ecosostenibili", chapter in the book "LA VITA DEL MARE IL MARE PER LA VITA" Giunti Editore S.p.A. pag. 116.
2. De Luca D., **Lauritano C.** § (**2022**) Transcriptome Mining to Identify Genes of Interest: From Local Databases to Phylogenetic Inference. Chapter 3. Springer Science+Business Media. Cinzia Verde and Daniela Giordano (eds.), Marine Genomics: Methods and Protocols , **Methods in Molecular Biology**, vol. 2498, https://doi.org/10.1007/978-1-0716-2313-8_3, § **Corresponding author.**
3. **Lauritano C.**, Ianora A. (**2018**) Grand Challenges in Marine Biotechnology: Overview of Recent EU-Funded Projects. In: Rampelotto P., Trincone A. (eds) Grand Challenges in Marine Biotechnology. Grand Challenges in Biology and Biotechnology. **Springer**, Cham. https://doi.org/10.1007/978-3-319-69075-9_11

Others:

4. Longobardi, C.; Andretta, E.; Romano, V.; **Lauritano**, C.; Avantaggiato, G.; Schiavone, A.; Jariyawattanachaikul, W.; Florio, S.; Ciarcia, R.; Damiano, S. (**2021**) Effects of Some New Antioxidants on Apoptosis and ROS Production in AFB1 Treated Chickens. **Med. Sci. Forum**, 2, 12. doi: 10.3390/CAHD2020-08640
5. Andretta, E.; Longobardi, C.; Laselva, M.; **Lauritano**, C.; Avantaggiato, G.; Schiavone, A.; Jariyawattanachaikul, W.; Florio, S.; Damiano, S.; Ciarcia, R. (**2021**) Protective Effects of New Antioxidants in OTA-Treated Chicken Kidney. **Med. Sci. Forum**, 2, 18. doi: 10.3390/CAHD2020-08617
6. Brillatz T., **Lauritano C.**, et al. (2017). Anticonvulsant Principle Isolation of the Marine Diatom *Skeletonema marinoi*. **Planta Medica International Open**. 4, S01, Mo-PO-68. doi:10.1055/s-0037-1608118
7. **Lauritano C.**, Bulleri F., Ravaglioli C., Tamburello L., Buia M. C., Procaccini G.. (**2015**) Antioxidant and stress-related genes in the seagrass *Posidonia oceanica* in the vicinity of natural CO2 vents at different nutrient conditions. **PeerJ Journal**. <https://dx.doi.org/10.7287/peerj.preprints.1060v1>. May 2015.
8. Procaccini G., Dattolo E., **Lauritano C.**, Ruocco M., Marin-Guirao L.. (**2015**) *Posidonia oceanica* molecular adaptation to the light environment. **PeerJ Journal**. <https://dx.doi.org/10.7287/peerj.preprints.1056v1>. May 2015. Ruocco M., Brunet C., Lorenti M.,
9. Dattolo E., **Lauritano C.**, Ruocco M., Procaccini G. (**2015**) Circadian fluctuation of gene expression along a bathymetric cline in the marine angiosperm *Posidonia oceanica*. **PeerJ Journal**. <https://dx.doi.org/10.7287/peerj.preprints.1058v1>. May 2015.
10. Ruocco M., Brunet C., Lorenti M., **Lauritano C.**, D'Esposito D., Riccio M., Procaccini G.. "Posidonia oceanica photoadaptation to the depth gradient" **Biol. Mar. Mediterr.** (**2012**), 19 (1): 63-64
11. **Lauritano C.**, Carotenuto Y., Procaccini G., Ianora A.. "Changes in the molecular response to the same toxic diatom diet among different *Calanus helgolandicus* populations" **Biol. Mar. Mediterr.** (**2012**), 19 (1): 16-19

- Master student co-tutoring and/or training support
- Darta Stalberga, Bachelor thesis, IMC Fachhochschule Krems, University of Applied Sciences, Austria (Sept 2018 – Feb 2019) - Tutor
 - Ali Murat Elagoz, Master thesis, **EU IMBRSEA program** (Jan 2019- June 2019) - Tutor
- PhD student tutoring, co-tutoring and/or training support
- Director of Study for Giorgio Maria Vingiani, **PhD Open University**, Stazione Zoologica Anton Dohrn, Italia (2018- 2022)
 - Internal supervisor for Kevin Andres Martinez, **PhD Open University**, Marie Curie fellowship, Stazione Zoologica Anton Dohrn, Italia (2017- 2020)
 - Co-tutor for Eleonora Montuori, PhD Università di Messina (2022-2024)
 - Internal supervisor for Gabriele De Falco, **PhD Open University**, Stazione Zoologica Anton Dohrn, Italia (2022- 2024)
- Post Doc
- Dr Gennaro Riccio (01/07/2019 – 30/06/22)
 - Dr Kevin Andrade Martinez (16/10/2020-16/04/2021)
 - Dr Assunta Saide (22/12/2020-31/08/2021)
 - Dr Anita Capalbo (01/12/21-30/06/22)
- Teaching activities
- Co-organizer and teacher for the PhD course in Marine Biotechnology: “New Perspectives in Marine Biotechnology” lasted 3 days (9-11 December 2020) at Stazione Zoologica Anton Dohrn, Napoli.
 - Co-organizer and teacher for the PhD course in Marine Biotechnology: “New Perspectives in Marine Biotechnology” lasted 4 days (20-23 March 2023) at Stazione Zoologica Anton Dohrn, Napoli.
- Congress organization
- FIRST ARC-OU CANCER CONFERENCE: 2nd AND 3rd DECEMBER 2021. Organising committee: Jon Golding and Dr Francesco Crea (OU), Elena Jachetti (INT), Chiara Lauritano (SZN), Mariaelena Valentino (IFOM). During this conference I also was a speaker and a session chair.
 - Member of the Organising committee for 1st International Summer school of Blue Biotechnology, held at Stazione Zoologica Anton Dohrn (Naples, Italy) 21-23 Sept. 2022.
- Other Istitutional responsibilities
- Commission member for more than 30 post-doc position evaluations at Stazione Zoologica Anton Dohrn: Assegni di ricerca, Borse di studio e co-co-co (from 2018)
 - “Seminar Commission” at Stazione Zoologica Anton Dohrn (from 23/11/2018): Selection of speakers for institutional seminars for the years 2018-2019 and 2019-2020 (till 30 November 2020).
 - Comitato elettorale (2019): Commission for voting personnel representatives
 - Membro Comitato di Coordinamento del Dottorato SZN dal 10/07/2020-9/07/23 – Member of the PhD steering Committee
 - Comitato elettorale (2021): Commission for voting Postdoc and PhD representative
 - Commission President for three PhD positions available at SZN, and member of the commission for other two PhD positions at SZN;

Talk Presentations

1. Talk presentation "Promising antiproliferative compound from the green microalga *Dunaliella tertiolecta* against human cancer cells". II WORKSHOP GIOVANI AISAM, 24 September 2021
2. Talk presentation on "Transcriptomic approach to study marine microalgae as source of bioactive secondary metabolites" at the International Conference on Bioinformatics and Computational Biology (BBCC2021) 1 December **2021**
3. Talk presentation on "Marine organisms as a source of new compounds for cancer treatment" at the First OU-ARC Cancer Conference, 2 December **2021**
4. Talk presentation on "Marine organisms as possible source of compounds for human health. 5th May **2022**. Seminar organized by SZN and Dohrn foundation for the general public.
5. Invited Talk on "Natural products and enzymes from marine microalgae" at Algaefarm. Pordenone 26th May **2022**.
6. Talk "Drugs from the Sea" at the 1st International Summer school of Blue Biotechnology, held at Stazione Zoologica Anton Dohrn (Naples, Italy), 21-23 Sept. **2022**
7. Invited Talk: "Marine organisms as source for innovative biotechnological applications" at the 52^o SIBM congress (Italian society of marine biology) - Messina, 13 June **2023**.

Other dissemination activities

Dissemination at Futuro Remoto Event (Naples, Italy), Mostra D'Oltremare (Naples, Italy), Sea turtle nest monitoring (Paestum, Italy), Dissemination event for The Open University (UK).

Referee for International Research Programs

Referee for Slovenian Research Agency (ARRS): 2021, 2023
Referee for the Science Foundation Ireland Frontiers for Partnership Awards programme (SFI): 2021, 2023

Scientometric indexes
(Scholar citation method;
determined on 15th September
2023)

Number of ISI publications: 85
H index: 33 (Scholar)
Total number of citations: 3730 (Scholar)