

CURRICULUM VITAE ET STUDIORUM

Marco Gerdol



Birthplace and birthdate: Trieste (Italy), October 17th 1984

Marital status: married

Workplace address

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Scopus: <https://www.scopus.com/authid/detail.uri?authorId=36631987100>

Languages

Italian (mother language)

English (excellent, oral and written)



EDUCATION

April 2012	PhD in Environmental Biology Prof. Alberto Pallavicini (advisor)	University of Trieste, Italy
October 2008	Second level degree in functional genomics 110/110 with honors Prof. Alberto Pallavicini (relatore) Dott. Elisa Asquini (correlatore)	University of Trieste, Italy
October 2006	First level degree in biological sciences 110/110 with honors Prof. Paolo Edomi (advisor) Dott. Andrea Dardis (co-advisor)	University of Trieste, Italy
June 2003	Diploma di maturità scientifica 100/100	Liceo Scientifico Galileo Galilei Trieste, Italy

Title of the experimental PhD thesis

Delineating the molecular mechanisms at the basis of the mussel *Mytilus galloprovincialis* response to pathogens and algal biotoxin contamination: a transcriptomic approach

PhD supervisor: prof. Alberto Pallavicini

POSITION AND EMPLOYMENT

February 2020-present	Ricercatore a tempo determinato di secondo livello (RTD-B), settore scientifico disciplinare BIO/18 - Genetics Department of Life Sciences, University of Trieste, Italy
Feb 2015-January 2020	Ricercatore a tempo determinato di primo livello (RTD-A), settore scientifico disciplinare BIO/18 - Genetics Department of Life Sciences, University of Trieste, Italy
2012-14	Post-doctoral fellow Department of Life Sciences, University of Trieste, Italy Advisor: prof. Alberto Pallavicini
2009-11	PhD student Department of Life Sciences, University of Trieste, Italy Advisor: prof. Alberto Pallavicini
2007-08	Graduate student Department of Life Sciences, University of Trieste, Italy Advisor: prof. Alberto Pallavicini
2005	Undergraduate student Area Science Park - Laboratorio malattie rare Advisor: dott. Andrea Dardis

NATIONAL SCIENTIFIC HABILITATION AS ASSOCIATE PROFESSOR

Sector 05/I1 – Genetics - obtained on April 12th, 2017



RESEARCH INTERESTS

Marine invertebrates, non-model organisms, comparative genomics and transcriptomics, innate immunity, environmental stress, molecular biology, bioinformatics

PUBLICATIONS ON PEER-REVIEWED JOURNALS

Publication metrics (as of October 16th, 2022)

H-index: Web of Science = 24; Scopus = 26; Google Scholar = 30

Total number of citations - Web of Science: 2212; Scopus: 2486; Google Scholar: 3257

1. Manfrin C, Dreos R, Battistella S, Beran A, Gerdol M, Varotto L, Lanfranchi G, Venier P, Pallavicini A: **Mediterranean Mussel Gene Expression Profile Induced by Okadaic Acid Exposure**. *Environmental Science & Technology* 2010, **44(21)**:8276-8283. <https://doi.org/10.1021/es102213f>.
2. Asquini E, Gerdol M, Gasperini D, Igc B, Graziosi G, Pallavicini A: **S-RNase-like Sequences in Styles of Coffea (Rubiaceae). Evidence for S-RNase Based Gametophytic Self-Incompatibility?** *Tropical Plant Biology* 2011, **4(3-4)**:237-249. <https://doi.org/10.1007/s12042-011-9085-2>.
3. Domeneghetti S, Manfrin C, Varotto L, Rosani U, Gerdol M, De Moro G, Pallavicini A, Venier P: **How gene expression profiles disclose vital processes and immune responses in Mytilus spp.** *Invertebrate Survival Journal* 2011, **8**:179-189.
4. Gerdol M, Manfrin C, De Moro G, Figueras A, Novoa B, Venier P, Pallavicini A: **The C1q domain containing proteins of the Mediterranean mussel Mytilus galloprovincialis: A widespread and diverse family of immune-related molecules**. *Developmental & Comparative Immunology* 2011, **35(6)**:635-643. <https://doi.org/10.1016/j.dci.2011.01.018>.
5. Gerdol M, De Moro G, Manfrin C, Venier P, Pallavicini A: **Big defensins and mytimacins, new AMP families of the Mediterranean mussel Mytilus galloprovincialis**. *Developmental & Comparative Immunology* 2012, **36(2)**:390-399. <https://doi.org/10.1016/j.dci.2011.08.003>.
6. Manfrin C, De Moro G, Torboli V, Venier P, Pallavicini A, Gerdol M: **Physiological and molecular responses of bivalves to toxic dinoflagellates**. *Invertebrate Survival Journal* 2012, **9**:184-199.
7. Amemiya CT, Alfoldi J, Lee AP, Fan S, Philippe H, MacCallum I, Braasch I, Manousaki T, Schneider I, Rohner N, Organ C, Chalopin D, Smith JJ, Robinson M, Dorrington RA, Gerdol M, Aken B, Biscotti MA, Barucca M, Baurain D, Berlin AM, Blatch GL, Buonocore F, Burmester T, Campbell MS, Canapa A, Cannon JP, Christoffels A, De Moro G, Edkins AL, Fan L, Fausto AM, Feiner N, Forconi M, Gamielien J, Gnerre S, Gnirke A, Goldstone JV, Haerty W, Hahn ME, Hesse U, Hoffmann S, Johnson J, Karchner SI, Kuraku S, Lara M, Levin JZ, Litman GW, Mauceli E, Miyake T, Mueller MG, Nelson DR, Nitsche A, Olmo E, Ota T, Pallavicini A, Panji S, Picone B, Ponting CP, Prohaska SJ, Przybylski D, Saha NR, Ravi V, Ribeiro FJ, Sauka-Spengler T, Scapigliati G, Searle SMJ, Sharpe T, Simakov O, Stadler PF, Stegeman JJ, Sumiyama K, Tabbaa D, Tafer H, Turner-Maier J, van Heusden P, White S, Williams L, Yandell M, Brinkmann H, Volff J.-N, Tabin CJ, Shubin N, Scharl M, Jaffe DB, Postlethwait JH, Venkatesh B, Di Palma F, Lander ES, Meyer A, Lindblad-Toh K: **The African coelacanth genome provides insights into tetrapod evolution**. *Nature* 2013, **496**:311-316. <https://doi.org/10.1038/nature12027>.
8. Forconi M, Canapa A, Barucca M, Biscotti MA, Capriglione T, Buonocore F, Fausto AM, Makapedua DM, Pallavicini A, Gerdol M, De Moro G, Scapigliati G, Olmo E, Scharl M: **Characterization of Sex Determination and Sex Differentiation Genes in Latimeria**. *PLoS ONE* 2013, **8**:e56006. <https://doi.org/10.1371/journal.pone.0056006>.
9. Manfrin C, Tom M, De Moro G, Gerdol M, Guarnaccia C, Mosco A, Pallavicini A, Giulianini PG: **Application of D-Crustacean Hyperglycemic Hormone Induces Peptidases Transcription and Suppresses Glycolysis-Related Transcripts in the Hepatopancreas of the Crayfish Pontastacus**



- leptodactylus*— Results of a Transcriptomic Study. *PLoS ONE* 2013, **8**:e65176. <https://doi.org/10.1371/journal.pone.0065176>.
10. Pallavicini A, Canapa A, Barucca M, Alfdi J, Biscotti M, Buonocore F, De Moro G, Di Palma F, Fausto A, Forconi M, Gerdol M, Makapedua D, Turner-Meier J, Olmo E, Scapigliati G: **Analysis of the transcriptome of the Indonesian coelacanth *Latimeria menadoensis***. *BMC Genomics* 2013, **14**:538. <https://doi.org/10.1186/1471-2164-14-538>.
 11. Toubiana M, Gerdol M, Rosani U, Pallavicini A, Venier P, Roch P: **Toll-like receptors and MyD88 adaptors in *Mytilus*: Complete cds and gene expression levels**. *Developmental & Comparative Immunology* 2013, **40**(2):158-166. <https://doi.org/10.1016/j.dci.2013.02.006>.
 12. Suárez-Ulloa V, Fernández-Tajes J, Manfrin C, Gerdol M, Venier P, Eirín-López J: **Bivalve Omics: State of the Art and Potential Applications for the Biomonitoring of Harmful Marine Compounds**. *Marine Drugs* 2013, **11**(11):4370-4389. <https://doi.org/10.3390/md11114370>.
 13. Lucafò M, Gerdol M*, Pallavicini A, Pacor S, Zorzet S, Da Ros T, Prato M, Sava G: **Profiling the molecular mechanism of fullerene cytotoxicity on tumor cells by RNA-seq**. *Toxicology* 2013, **314**(1):183-192. <https://doi.org/10.1016/j.tox.2013.10.001>.
 14. Gerdol M, De Moro G, Torboli V, Manfrin C, Rosani U, Venier P, Pallavicini A: **Genomics in bivalve aquaculture**. *Communications in agricultural and applied biological sciences* 2013, **78**(4): 153-6.
 15. Forconi M, Biscotti MA, Barucca M, Buonocore F, De Moro G, Fausto AM, Gerdol M, Pallavicini A, Scapigliati G, Schartl M, Olmo E, Canapa A: **Characterization of Purine Catabolic Pathway Genes in Coelacanths**. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution* 2014, **322**(6):334-41. <https://doi.org/10.1002/jez.b.22515>.
 16. Forconi M, Chalopin D, Barucca M, Biscotti MA, De Moro G, Galiana D, Gerdol M, Pallavicini A, Canapa A, Olmo E, Volff J-N: **Transcriptional activity of transposable elements in coelacanth**. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution* 2014, **322**: 379-89. IF: 2,432
 17. Nitsche A, Doose G, Tafer H, Robinson M, Saha NR, Gerdol M, Canapa A, Hoffmann S, Amemiya CT, Stadler PF: **Atypical RNAs in the coelacanth transcriptome**. *Journal of Experimental Zoology Part B: Molecular and Developmental Evolution* 2014, **322**(6): 342-51. <https://doi.org/10.1002/jez.b.22542>.
 18. Toubiana M, Rosani U, Giambelluca S, Cammarata M, Gerdol M, Pallavicini A, Venier P, Roch P: **Toll signal transduction pathway in bivalves: Complete cds of intermediate elements and related gene transcription levels in hemocytes of immune stimulated *Mytilus galloprovincialis***. *Developmental & Comparative Immunology* 2014, **45**(2):300-312. <https://doi.org/10.1016/j.dci.2014.03.021>.
 19. Nunez Ortiz N, Gerdol M*, Stocchi V, Marozzi C, Randelli E, Bernini C, Buonocore F, Picchiatti S, Papeschi C, Sood N, Pallavicini A, Scapigliati G: **T cell transcripts and T cell activities in the gills of the teleost fish sea bass (*Dicentrarchus labrax*)**. *Developmental & comparative immunology* 2014, **47**(2):309-18. <https://doi.org/10.1016/j.dci.2014.07.015>.
 20. Tom M, Manfrin C, Chung SJ, Sagi A, Gerdol M, De Moro G, Pallavicini A, Giulianini PG: **Expression of cytoskeletal and molt-related genes is temporally scheduled in the hypodermis of the crayfish *Procambarus clarkii* during premolt**. *Journal of Experimental Biology* 2014, **217**:4193-4202. <https://doi.org/10.1242/jeb.109009>.
 21. Gerdol M, De Moro G, Manfrin C, Milandri A, Riccardi E, Beran A, Venier P, Pallavicini A: **RNA sequencing and de novo digestive gland transcriptome assembly of the mussel *Mytilus galloprovincialis* provide insights on mussel response to paralytic shellfish poisoning**. *BMC Research Notes* 2014, **7**:722. <https://doi.org/10.1186/1756-0500-7-722>.
 22. Tom M, Manfrin C, Mosco A, Gerdol M, De Moro G, Pallavicini A, Giulianini PG: **Different transcription regulation routes are exerted by L- and D-amino acid enantiomers of peptide hormones**. *The Journal of Experimental Biology* 2014, **217**:4337-4346. <https://doi.org/10.1242/jeb.109140>.
 23. Gerdol M, Venier P, Pallavicini A: **The genome of the Pacific oyster *Crassostrea gigas* brings new insights on the massive expansion of the C1q gene family in Bivalvia**. *Developmental & comparative immunology* 2015, **49**(1):59-71. <https://doi.org/10.1016/j.dci.2014.11.007>.
 24. Manfrin C, De Moro G, Tom M, Gerdol M, Giulianini PG, Pallavicini A: **The Eyestalk Transcriptome of Red Swamp Crayfish *Procambarus clarkii***. *Gene* 2015, **557**(1):28-34. <https://doi.org/10.1016/j.gene.2014.12.001>.



25. Gerdol M, Buonocore F, Scapigliati G, Pallavicini A: **Analysis and characterization of the head kidney transcriptome from the Antarctic fish *Trematomus bernacchii* (Teleostea, Notothenioidea): a source for immune relevant genes.** *Marine Genomics* 2015, **20**:13-15. <https://doi.org/10.1016/j.margen.2014.12.005>.
26. Gerdol M, Venier P: **An updated molecular basis for mussel immunity.** *Fish and Shellfish Immunology* 2015, **46(1)**:17-38. <https://doi.org/10.1016/j.fsi.2015.02.013>.
27. Rosani U, Varotto L, Gerdol M, Pallavicini A, Venier P: **IL-17 signaling components in bivalves: comparative sequence analysis and involvement in the immune responses.** *Developmental & comparative immunology* 2015, **52**:255-268. <https://doi.org/10.1016/j.dci.2015.05.001>.
28. Gerdol M, Puillandre N, De Moro G, Guarnaccia C, Lucafò M, Benincasa M, Zlatev V, Manfrin C, Torboli V, Giulianini PG, Sava G, Venier P, Pallavicini A: **Identification and characterization of a novel family of cysteine-rich peptides (MgCRP-I) from *Mytilus galloprovincialis*.** *Genome Biology and Evolution* 2015, **7(8)**:2203-2219. <https://doi.org/10.1093/gbe/evv133>.
29. Giacomelli S, Buonocore F, Scapigliati G, Gerdol M, Oreste U, Coscia MR: **New insights into evolution of IgT genes coming from Antarctic teleosts.** *Marine Genomics* 2015, **24(1)**:55-68. <https://doi.org/10.1016/j.margen.2015.06.009>.
30. Bergamo A, Gerdol M, Lucafò M, Pelillo C, Battaglia M, Pallavicini A, Sava G: **RNA-Seq analysis of the whole transcriptome of MDA-MB-231 mammary carcinoma cells exposed to the antimetastatic drug NAMI-A.** *Metallomics* 2015, **7**:1439. <https://doi.org/10.1039/C5MT00081E>.
31. Gerdol M[§], De Moro G, Venier P, Pallavicini A: **Analysis of synonymous codon usage patterns in sixty-four different bivalve species.** *PeerJ* 2015, **3**:e1520. <https://doi.org/10.7717/peerj.1520>.
32. Buonocore F.; Gerdol M^{*}: **Alternative adaptive immunity strategies: coelacanth, cod and shark immunity.** *Molecular Immunology* 2016, **69**:156-169. <https://doi.org/10.1016/j.molimm.2015.09.003>.
33. Pavičić-Hamer D, Baričević A, Gerdol M, Schroeder AC, Hamer B: ***Mytilus galloprovincialis* carbonic anhydrase II: activity and cDNA sequence analysis.** *Key Engineering Materials* 2016, **672**:137-150. <https://doi.org/10.4028/www.scientific.net/KEM.672.137>.
34. Biscotti MA, Gerdol M^{*}, Canapa A, Forconi M, Olmo E, Pallavicini A, Barucca M, Scharl M: **The lungfish transcriptome: a glimpse into molecular evolution events at the transition from water to land.** *Scientific Reports* 2016, **6**:21571. <https://doi.org/10.1038/srep21571>.
35. Rosani U, Domeneghetti S, Gerdol M, Franzoi M, Pallavicini A, Venier P: **Serum amyloid A in marine bivalves: an acute phase and innate immunity protein.** *Developmental & comparative immunology* 2016, **59**:136-144. <https://doi.org/10.1016/j.dci.2016.01.019>.
36. Candoito Carniel F, Gerdol M[§], Montagner A, Banchi E, De Moro G, Manfrin C, Muggia L, Pallavicini A, Tretiach M: **New features of desiccation tolerance in the lichen photobiont *Trebouxia gelatinosa* are revealed by a transcriptomic approach.** *Plant Molecular Biology* 2016, **91(3)**: 319-339. <https://doi.org/10.1007/s11103-016-0468-5>.
37. Hasan I, Gerdol M, Fujii Y, Raija S, Koide Y, Yamamoto D, Kawsar SMA, Ozeki Y: **cDNA and gene structure of MytiLec-1, a bacteriostatic R-type lectin from the Mediterranean mussel (*Mytilus galloprovincialis*).** *Marine Drugs* 2016, **14(5)**:92. <https://doi.org/10.3390/md14050092>.
38. Rosani U, Gerdol M: **A bioinformatics approach reveals seven nearly-complete RNA-virus genomes in bivalve RNA-seq data.** *Virus Research* 2017, **239**:33-42. <https://doi.org/10.1016/j.virusres.2016.10.009>.
39. Gerdol M[§], Venier P, Edomi P, Pallavicini A: **Diversity and evolution of TIR-domain-containing proteins in bivalves and Metazoa: New insights from comparative genomics.** *Developmental & comparative immunology* 2017, **40**:145-164. <https://doi.org/10.1016/j.dci.2017.01.014>.
40. Biscotti MA, Canapa A, Forconi M, Gerdol M, Pallavicini A, Scharl M, Barucca M: **The small non-coding RNA processing machinery of two living fossil species, lungfish and coelacanth, gives new insights into the evolution of the Argonaute protein family.** *Genome Biology and Evolution* 2017, **9(3)**:438-453. <https://doi.org/10.1093/gbe/evx017>.
41. Buonocore F, Stocchi V, Nunez Ortiz N, Randelli E, Gerdol M, Pallavicini A, Facchiano A, Bernini C, Guerra L, Scapigliati G, Picchiatti S: **Immunoglobulin T from sea bass (*Dicentrarchus labrax* L.):**

- molecular characterization, tissue localization and expression after nodavirus infection. *BMC Molecular Biology* 2017, **18**:8. <https://doi.org/10.1186/s12867-017-0085-0>.
42. Gerdol M[§]: Immune-related genes in gastropods and bivalves: a comparative overview. *Invertebrate Survival Journal* 2017, **14**:95-111.
 43. Stocchi V, Wang T, Randelli E, Mazzini M, Gerdol M, Pallavicini A, Secombes C, Scapigliati G, Buonocore F: Evolution of Th2 responses: characterization of IL-4/13 in sea bass (*Dicentrarchus labrax* L.) and studies of expression and biological activity. *Scientific Reports* 2017, **7**:2240. <https://doi.org/10.1038/s41598-017-02472-y>.
 44. Gerdol M[§], Fujii Y, Hasan I, Koike T, Shimojo S, Spazzali F, Yamamoto K, Ozeki Y, Pallavicini A, Fujita H: The purplish bifurcate mussel *Mytilisepta virgata* gene expression atlas reveals a remarkable tissue functional specialization. *BMC Genomics* 2017, **18**:590. <https://doi.org/10.1186/s12864-017-4012-z>.
 45. Leoni G, De Poli A, Mardirossian M, Gambato S, Florian F, Venier P, Wilson DN, Tossi A, Pallavicini A, Gerdol M[§]: Myticalins: a Novel Multigenic Family of Linear, Cationic Antimicrobial Peptides from Marine Mussels (*Mytilus* spp.). *Marine Drugs* 2017, **15**:261. <https://doi.org/10.3390/md15080261>.
 46. Gerdol M[§], Luo YJ, Satoh N, Pallavicini A: Genetic and molecular basis of the immune system in the brachiopod *Lingula anatina*. *Developmental & comparative immunology* 2018; **82**:7-30. <https://doi.org/10.1016/j.dci.2017.12.021>.
 47. De Iudicibus S, Lucafò M, Vitulo N, Martellossi S, Zimbello R, De Pascale F, Forcato C, Naviglio S, Di Silvestre A, Gerdol M, Stocco G, Valle G, Ventura A, Bramuzzo M, Decorti G: High-Throughput Sequencing of microRNAs in Glucocorticoid Sensitive Paediatric Inflammatory Bowel Disease Patients. *International Journal of Molecular Sciences* 2018; **19**(5):1399. <https://doi.org/10.3390/ijms19051399>.
 48. Biscotti MA; Adolfi M, Barucca, M; Forconi M, Pallavicini, A, Gerdol M, Canapa A, Scharl M: A comparative view on sex differentiation and gametogenesis genes in Lungfish and Coelacanth. *Genome Biology & Evolution* 2018. **10**(6):1430-1444. <https://doi.org/10.1093/gbe/evy101>.
 49. Peruzza L, Gerdol M, Oliphant A, Wilcockson D, Pallavicini A, Hawkins L, Thatje S, Hauton C: The consequences of daily cyclic hypoxia on a European grass shrimp: from short-term responses to long-term effects. *Functional Ecology* 2018. **32**:2333–2344. <https://doi.org/10.1111/1365-2435.13150>.
 50. Gerdol M, Cervelli M, Oliverio M, Modica MV: Piercing fishes: porin expansion and adaptation to hematophagy in the vampire snail *Cumia reticulata*, *Molecular Biology and Evolution* 2018. **35**(11):2654–2668. <https://doi.org/10.1093/molbev/msy156>.
 51. Fujii Y, Gerdol M[§], Hasan I, Koide Y, Matsuzaki R, Ikeda M, Rajia S, Ogawa Y, Abe Kawsar SM, Ozeki Y: Phylogeny and properties of a novel lectin family with β -trefoil folding in mussels. *Trends in Glycoscience and Glycotechnology* 2018. **31**(179):E1-E14. <https://doi.org/10.4052/tigg.1717.1E>.
 52. Moro G, Buonocore F, Barucca M, Spazzali F, Canapa A, Pallavicini A, Scapigliati G, Gerdol M[§]: The first transcriptomic resource for the Antarctic scallop *Adamussium colbecki*. *Marine Genomics* 2019. **44**:61-64. <https://doi.org/10.1016/j.margen.2018.09.007>.
 53. Roncevic T, Gerdol M, Spazzali F, Florian F, Mekinic S, Tossi A, Pallavicini A: Parallel identification of novel antimicrobial peptide sequences from multiple anuran species by targeted DNA sequencing. *BMC Genomics* 2018. **19**:827. <https://doi.org/10.1186/s12864-018-5225-5>.
 54. Fernández Robledo JA, Yadavall R, Allam B, Pales-Espinosa E, Gerdol M, Greco S, Stevick RJ, Gómez-Chiarri M, Zhang Y, Heil CA, Tracy AN, Bishop-Bailey D, Metzger MJ: From the raw bar to the bench: Bivalves as models for human health. *Developmental & Comparative Immunology* 2018; **92**:260-282. <https://doi.org/10.1016/j.dci.2018.11.020>.
 55. Jalili M, Jin Y, Bones AM, Olsen Y, Vadstein O, Østensen MA, Buonocore F, Gerdol M[§], Pallavicini A, Scapigliati G: Dietary fatty acid source has little effect on the development of the immune system in the pyloric caeca of Atlantic salmon fry. *Scientific Reports* 2019; **9**:27. <https://doi.org/10.1038/s41598-018-37266-3>.
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- DNA sequencing.** *Biochimica et Biophysica Acta - Biomembranes* 2019; **1861**(3):651-659. <https://doi.org/10.1016/j.bbamem.2018.12.014>.
57. Gerdol M[§], Fujii Y, Pallavicini A, Ozeki Y: **Response to the editorial “Fake news” (Feb. 2018) by Prof. Brian Morton.** *Marine Pollution Bulletin* 2019; **141**:363-365. <https://doi.org/10.1016/j.marpolbul.2019.02.061>.
58. Gerdol M, Cervelli M, Mariottini P, Oliverio M, Dutertre Sebastien, Modica Maria Vittoria: **A recurrent motif: diversity and evolution of ShKT domain containing proteins in the vampire snail *Cumia reticulata*.** *Toxins* 2019; **11**(2):106. <https://doi.org/10.3390/toxins11020106>.
59. Hasan I, Gerdol M, Fujii Y, Ozeki Y: **Functional characterization of OXYL, a sghC1qDC LacNAc-specific lectin from the crinoid feather star *Anneissia japonica*.** *Marine Drugs* 2019; **17**(2):136. <https://doi.org/10.3390/md17020136>.
60. Gerdol M, Lucente D, Buonocore F, Poerio E, Scapigliati G, Mattiucci S, Pallavicini A, Cimmaruta R: **Molecular and structural characterization of MHC class II β genes reveals high diversity in the cold-adapted icefish *Chionodraco hamatus*.** *Scientific Reports* 2019; **9**:5523. <https://doi.org/10.1038/s41598-019-42003-5>
61. Rosani U, Domeneghetti S, Gerdol M, Pallavicini A, Venier P: **Expansion and loss events characterized the occurrence of MIF-like genes in bivalves.** *Fish & Shellfish Immunology* 2019; **93**:39-49. <https://doi.org/10.1016/j.fsi.2019.07.019>
62. Novoa B, Figueras A, Rey-Campos M, Moreira R, Gerdol M, Pallavicini A: **Immune tolerance in *Mytilus galloprovincialis* haemocytes after repeated contact with *Vibrio splendidus*.** *Frontiers in Immunology* 2019; **10**:1894. <https://doi.org/10.3389/fimmu.2019.01894>
63. Troppo S, Pellegrino D, Garofalo F, Ferro D, Place S, Tolomeo AM, Carraro A, Gerdol M, Bakiu R, Santovito G: **Molecular characterization of mitochondrial peroxiredoxins from the Antarctic emerald rockcod and its involvement in physiological response to environmental warming.** *Comparative Biochemistry and Physiology - Part C: Toxicology & Pharmacology* 2019; **225**:108580. <https://doi.org/10.1016/j.cbpc.2019.108580>
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103. **Gene expression profiling of *Trematomus bernacchii* in response to thermal and stabling stress.** Greco S, Gaetano AS, Furlanis S, Capanni F, Manfrin C, Giulianini PG, Santovito G, Edomi P, Pallavicini A, Gerdol M[§]. *Fishes* 2022. **7**(6):387. <https://doi.org/10.3390/fishes7060387>

EDITORIALS

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INVITED BOOK CHAPTERS

1. Venier P, Domeneghetti S, Sharma N, Pallavicini A, Gerdol M: **Immune-related signaling in mussel and bivalves.** In: *Lessons in immunity: from single-cell organisms to mammals* 2016, Chapter 7, pp. 93-105. Edited by: Ballarin L. Elsevier (Philadelphia, USA). ISBN: 978-0-12-803252-7. <https://doi.org/10.1016/B978-0-12-803252-7.00007-2>
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4. Fujii Y, Kawsar SMA, Hasan I, Fujita H, Gerdol M, Ozeki Y: **Purification and Functional Characterization of the Effects on Cell Signaling of Mytilectin: A Novel β -Trefoil Lectin from Marine Mussels**. In: *Lectin Purification and Analysis: Methods and Protocols* 2020. Edited by: Hirabayashi J. Springer. ISBN: 978-1-0716-0429-8. pp 201-213. https://doi.org/10.1007/978-1-0716-0430-4_21
5. Sollitto M, Kenny NJ, Greco S, Tucci CF, Calcino AD, Gerdol M[§]: **Detecting Structural Variants and Associated Gene Presence–Absence Variation Phenomena in the Genomes of Marine Organisms**. In: *Marine Genomics: Methods and Protocols* 2022. Edited by: Verde C, Giordano D. Springer. ISBN: 978-1-0716-2312-1. pp 53-76. https://doi.org/10.1007/978-1-0716-2313-8_4

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CONFERENCE PARTECIPATIONS (only those as a presenting author are listed)

1. Gerdol M, Manfrin C, Venier P, Pallavicini A: **Characterization of Mytimacins, a novel cationic antimicrobial peptides family in the Mediterranean mussel *Mytilus galloprovincialis***. In *45th European Marine Biology Symposium; Heriot-Watt University, Edinburgh, Scotland*. 2010
2. Gerdol M, De Moro G, Manfrin C, Rosani U, Venier P, Pallavicini A: **Genomics in bivalve aquaculture**. In *Larvi 2013 - 6th fish & shellfish larviculture symposium; September 2nd-5th; Ghent, Belgium*. 2013
3. Gerdol M, De Moro G, Manfrin C, Beran A, Pallavicini A: **The transcriptomic analysis of *Mytilus galloprovincialis* by RNA-seq reveals a specific response to toxic *Alexandrium minutum***. In *46th European Marine Biology Symposium; September 12th-16th; Rovinj, Croatia*. 2011
4. Gerdol M, De Moro G, Leoni G, Torboli V, Manfrin C, Venier P, Pallavicini A: **De novo discovery of antimicrobial peptides from invertebrate transcriptomes**. In *3rd Colloquium of Genetics; September 13th, 2013; Piran, Slovenia*. 2013
5. Gerdol M, Casagrande R, De Moro G, Manfrin C, Venier P, Pallavicini A: **Comparative sequence analysis of antimicrobial peptides in *Mytilus galloprovincialis* and *Ruditapes philippinarum***. In *XIII Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI); February, 22nd-24th; San Benedetto del Tronto, Italy*. 2012
6. Gerdol M, Bernante F, Venier P, Pallavicini A: **A survey on *Mytilus galloprovincialis* C1q-domain containing proteins**. In *ESF-FWF Conference in Partnership with LFUI: The Impact of the Environment on Innate Immunity: The Threat of Diseases; Universitätszentrum Obergurgl, Austria*. 2009
7. Gerdol M, Venier P, Pallavicini A: **Solving the jigsaw puzzle of bivalve immune response**. In *XVI Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI); February, 18th-20th; Trieste, Italy*. 2015
8. Gerdol M, Rosani U, Venier P, Pallavicini A: **Tracking the evolution of bivalve antimicrobial peptides**. In *XVI Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI); February, 18th-20th; Trieste, Italy*. 2015
9. Gerdol M, Leoni G, Venier P, Tossi A, Pallavicini A: **Myticalins: a novel family of linear cationic AMPs from *Mytilus galloprovincialis* identified by de novo bioinformatics analysis**. In *XVII Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI); February, 18th-20th; Lecce, Italy*. 2016
10. Gerdol M, Leoni G, Tossi A, Venier P, Pallavicini A: **Identification of myticalins, a novel family of linear cationic AMPs by bioinformatics transcriptome mining in the Mediterranean mussel *Mytilus galloprovincialis***. In *AMP2016 international symposium on antimicrobial peptides; June, 6th-9th; Montpellier, France*. 2016

11. Gerdol M, Leoni G, De Poli A, Venier P, Pallavicini A: **Mussels, the Adriatic side of the story. Part 2.** In *1st International Symposium on Advances in Marine Mussel Research*; September 26th-27th; Vigo, Spain. 2016
12. Gerdol M, Leoni G, De Poli A, Maridrossian M, Venier P, Tossi A, Pallavicini A: **Sequence diversity and antimicrobial activity of myticalins.** In *XVIII Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI)*; February, 8th-10th; Viterbo, Italy. 2017
13. Gerdol M, Venier P, Pallavicini A: **High heterozygosity and presence/absence variation reflect a remarkable inter-individual diversification of immune-related molecules the Mediterranean mussel *Mytilus galloprovincialis*.** In *Congresso AGI – Associazione Genetica Italiana*; September 7th-9th; Cortona, Italy. 2017
14. Gerdol M, Mardirossian M, Spazzali F, Musso V, Benincasa M, Pacor S, Tossi A, Venier P, Scocchi M, Pallavicini A: **Myticalins: towards a link between sequence diversity and antimicrobial function.** In *XIX Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI)*; February, 7th-9th; Genova, Italy. 2018
15. Gerdol M, Novoa B, Pallavicini A, Figueras A: **Comparative genomics sheds light on expansion and molecular diversification of immune receptors and effectors in bivalve mollusks: trade-offs between evolutionary costs and survival.** In *XIV Meeting of the International Society of Developmental and Comparative Immunology*; June 17th-21st; Santa fe, USA. 2018.
16. Gerdol M, Fujii Y, Ozeki Y, Pallavicini A: **Two distinct lectin families with different glycan-binding specificity share a β -trefoil fold in mussels.** In *XX Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI)*; February, 13th-15th; Rende, Italy. 2019
17. Gerdol M, Greco S, Pallavicini A: **Growing evidence of massive gene presence-absence variation in bivalve mollusks: does it provide an adaptive value?** In *EVOLOMAR – Marine Evolution, 1st Italian Congress*; November, 23rd-25th. Online conference; 2020
18. Gerdol M, Racaku M, Sollitto M, Pallavicini A, Benazzo A, Ancona L, Fava S, Iannucci A, Ciofi C, Sbordoni V, Trucchi E, Bertorelle G: **A whole-genome sequencing approach to study and protect Italian endangered endemic species: the case of the Ponza grayling *Hipparchia sbordonii*.** In *81st Meeting of the Italian Zoological Union*; September 20th-23rd; Trieste, Italy, 2022.

FUNDED RESEARCH PROJECTS

FRA [FRA Finanziamento per Ricerca di Ateneo] 2015 – Project title: “molecular characterization of myticalins: a new family of linear cationic AMPs from *Mytilus galloprovincialis*” € 17.724,80 – Project coordinator

PNRA [Italian Antarctic Research Program] 2016 – Project title: “How key components of the coastal Antarctic food web respond to global change: an “omic” approach” - € 80.200,00 – Project coordinator

PRIN [Progetti di Rilevante Interesse Nazionale] 2017 - € 78.296,00 – Project title: “Genomic susceptibility to extinction: a whole-genome approach to study and protect endangered Italian endemics” - Unit leader

MICROGRANTS 2020 – Project title: “Transcriptomic investigation of the endemic cave-dwelling “living fossil” bivalve *Congeria kusceri*” - € 3.000,00 – Project coordinator

COLLABORATIONS AND ONGOING PROJECTS

During my PhD and post-doctoral fellowship I have been involved in several collaborations with high-profile national and international research groups.



Since the beginning of my academic career I have been involved in a fruitful collaboration with the group headed by Dr. Paola Venier at the University of Padova focused on bivalve genomics and innate immunity, as certified by the literature produced on this topic. This collaboration has been extended to the laboratory of Philippe Roch (University of Montpellier 2) during my postdoctoral fellowship, which has been co-funded within the EU FP7-KBBE-2010-4 “BIVALIFE” project.

I have been part of the “Coelacanth genome consortium” led by the Broad Institute (Boston, USA), with the task of analyzing the transcriptome of the Indonesian coelacanth, thus helping to improve the annotation of the sister species, the African coelacanth *Latimeria chalumnae*. I have been in charge of providing bioinformatics support to all the members of the consortium requiring in-depth analyses of the transcriptome, as certified by the literature produced as a co-author of national and international partners.

Within my host institution, I am collaborating with other groups of the Department of Life Sciences, providing my expertise for the analyses of next generation sequence data. Other ongoing scientific collaborations involve Italian institutions, including Università della Tuscia (prof. Giuseppe Scapigliati group) and Università Politecnica delle Marche (prof. Adriana Canapa group) and Stazione Zoologica Anton Dorn (Dr. Immacolata Castellano, Dott. Enrico D’Aniello, Dott. Maria Vittoria Modica, Dott. Maria Sirakov), again focused on non-model evolutionary biology, studied using –omic approaches. I am presently involved in a project funded within the frame of the PRIN program focused on study of endangered endemic Italian species (ENDEMIXIT), using genomics approaches, in collaboration with the University of Ferrara (Prof. Giorgio Bertorelle group). I have been the first author in the mussel genome paper, which was published as the main outcome of the *Mytilus galloprovincialis* genome sequencing project, in collaboration with the group of prof. Antonio Figueras from the Consejo Superior de Investigaciones Científicas (Spain). This line of research is still ongoing and expanding, in order to investigate the presence of pan-genomic architectures in marine invertebrates.

As an independent line of research, I have led a PNRA-funded project focused on the investigation of the effects of climate change on Antarctic species using transcriptomic approaches. I have also led a project funded by UNITS focused on investigating the adaptation to the subterranean environment of the only known cave-dwelling bivalve species, *Congeria kusceri*, in collaboration with Dr. Sanja Puljas (University of Split).

My intercontinental collaborations include colleagues from the Nagasaki City University (Japan) and from the Yokohama University (Japan) with the specific aim of investigate the role of lectins in the immune response of bivalves and other invertebrates.



TEACHING EXPERIENCE

2010-2014 – Co-lecturer for the Bioinformatics course (Bsc in Biology) at the University of Trieste.

2015-2016 – Lecturer for the Genetics and Bioinformatics course (Bsc in Biology) at the University of Trieste.

From 2016 – Lecturer for the Bioinformatics course (Bsc in Science and Technology for Environment and Nature/Biological Science and Technology)

2016 - 2020 – Lecturer for the Applied Genomics course (MSc in Medical Biotechnologies)

From 2020 - Lecturer for the Applied Genomics course (MSc in Functional Genomics)

STUDENT EVALUATION OF TEACHING ACTIVITIES

SISValDidat course evaluation by students - Course: Bioinformatics

question	A.A 2014/2015 - STB	A.A 2015/2016 - STB	A.A 2015/2016 - STAN	A.A 2016/2017 - STAN	A.A 2017/2018 - STB	A.A 2018/2019 - STB	A.A 2019/2020 - STB	A.A 2020/2021 - STB	A.A 2021/2022 - STB	AVERAGE 2014-2022	AVERAGE RTD-B PERIOD (past 3 years)
D1	5,81	5,71	NV	6,95	6,68	7	6,72	7,39	7,03	6,66	7,05
D2	7,37	7,20	8,50	7,46	7,35	7,07	7,44	8,59	7,47	7,61	7,83
D3	7,91	7,67	10	7,50	8,13	8,67	8,10	8,89	8,39	8,36	8,46
D4	7,21	8,12	8,50	7,98	8,33	9,04	8,40	8,72	8,67	8,33	8,60
D5	9,32	8,61	8,50	8,74	8,6	8	8,32	9,40	8,96	8,72	8,89
D6	7,92	7,77	8,50	7,83	6,89	8,12	8,34	7,93	7,56	7,87	7,94
D7	8,09	7,64	10	7,85	8,21	8,36	8,38	7,73	8,46	8,30	8,19
D8	8,96	8,59	10	8,13	8,6	9,50	8,89	9,00	8	8,85	8,63
D9	8,57	8,18	8,50	8,30	9	8,74	8,67	9,54	9,10	8,73	9,10
D10	8,80	8,43	8,50	8,30	9,04	9,16	9,43	9,40	8,50	8,84	9,11
D11	7,19	6,32	8,50	7,75	7,16	7,67	7,67	8,11	7,18	7,51	7,65
D12	7,89	6,77	8,50	7,66	6,95	7,50	8,26	8,13	7,83	7,72	8,07

SISValDidat course evaluation by students - Course: Applied Genomics

question	A.A 2016/2017 - BM	A.A 2017/2018 - BM	A.A 2018/2019 - BM	A.A 2019/2020 - BM	A.A 2020/2021 - FG	A.A 2021/2022 - FG	AVERAGE 2014-2022	AVERAGE RTD-B PERIOD (past 3 years)
D1	6,18	6,51	6,16	6,35	7,27	6,92	6,57	6,85
D2	7,46	7,76	7,66	7,41	6,96	6,40	7,28	6,92
D3	6,89	8,15	7,79	8,07	8,20	7,96	7,84	8,08
D4	6,96	9,20	9,08	8,29	8,85	8,65	8,51	8,60
D5	8,96	8,95	9,17	8,75	8,92	8,89	8,94	8,85
D6	7,23	7,81	7,39	7,79	8,42	6,00	7,44	7,40
D7	8,09	8,38	7,93	8,36	8,00	7,37	8,02	7,91
D8	8,50	8,68	8,74	8,72	8,54	7,63	8,47	8,30
D9	8,18	8,50	9,04	8,74	8,64	8,32	8,57	8,57
D10	8,68	8,69	8,65	8,90	9,35	8,35	8,77	8,87
D11	7,38	7,90	6,76	6,65	7,73	7,37	7,30	7,25
D12	6,52	7,57	7,48	7,84	7,73	7,00	7,36	7,52

D1 = "is the previously acquired knowledge sufficient to allow to proficiently follow this teaching course?" ;
D2 = "Is the amount of study required for this teaching course in line with the number of assigned CFUs?" ;
D3 = "is the quality of the material indicated by the teacher appropriate to allow the study of this subject?" ;
D4 = "Have the modes of examination been clearly explained?" ; D5: "Has the time schedule of this teaching course been respected?" ; D6: "Does the teacher stimulates interest in the subject of this teaching course?" ;
D7: "Are the explanations provided by the teacher during the classes clear?" ; D8: "Are the laboratory activities useful to facilitate the comprehension of the themes studied in this teaching course?" ; D9: "Has the teaching course been carried out in a coherent manner with the Syllabus program?" ; D10: "Is the teacher available for further clarifications?" ; D11: "Are you interested in the themes of this teaching course?" ; D12: "Are you globally satisfied by this teaching course?"

Other teaching activities

-In 2017, I have been involved in the specialization course “e-Health platforms for personalized molecular medicine”, teaching a module entitled “Data management and analysis with bioinformatics methodologies” (9 hours)

-Since 2017, I have been involved in formation activities for high school students, with a laboratory activity entitled: “Bioinformatics: from DNA to proteins”, within the frames of the projects “BiMS” and “Progetto Moduli Formativi UNITS”

-On April 11th, 2019, I have been invited in a formation event for high school teachers, with a seminar entitled: “Genome browsers: exploring the complexity of the human genome with a few clicks”

-On October 8th, 2021, I was invited to provide a seminar entitled “Performing Whole Genome Sequencing, Relevant Applications, and Data Analysis” within the frame of the WIPO Re:Search Virtual Training Seminar Series

-On January 18th, 2022 I was invited to provide a seminar for high school teachers entitled “Covid: variants and vaccines” at MUSE (Trento, Italy)

SUPERVISORY EXPERIENCE

During my PhD, post-doctoral fellowship and activity as a researcher, I supervised or co-supervised the following students:

Bachelor degree

Casagrande, Riccardo; 2012; University of Trieste (Bsc in Biology)

Cociancich, Matteo; 2012; University of Trieste (Bsc in Biology)

Leoni, Gabriele; 2013; University of Trieste (Bsc in Biology)

Moro, Giulia; 2012-13; University of Trieste (Bsc in Biology)

Graziani, Lorenzo; 2018; University of Trieste (Bsc in Biology)

Rossi, Giacomo; 2018; University of Trieste (Bsc in Biology)

Fracarossi, Davide; 2019; University of Trieste (Bsc in Biology)

Bonifacio, Ruggero; 2020; University of Trieste (Bsc in Biology)

Collatuzzo, Maddalena; 2020; University of Trieste (Bsc in Biology)

Dalla Santa, Chiara; 2020; University of Trieste (Bsc in Biology)

Sossai, Massimo; 2020; University of Trieste (Bsc in Biology)

Palatinsky, David; 2022; University of Trieste (Bsc in Biology)

Puntin, Alessio; 2022; University of Trieste (Bsc in Biology)

Second level degree

Torboli, Valentina; 2010-11; University of Trieste (MSc in Environmental Biology)

Montagner, Alice; 2013; University of Trieste (MSc in Environmental Biology)

Battaglia, Marilena; 2013; University of Trieste (MSc in Functional Genomics)

Leoni, Gabriele; 2014-2015; University of Trieste (MSc in Functional Genomics)

Ansaloni, Federico; 2016; University of Trieste (MSc in Functional Genomics)

Spazzali, Francesca; 2016; University of Trieste (MSc in Functional Genomics)

De Poli, Andrea; 2016; University of Trieste (MSc in Functional Genomics)

Greco, Samuele; 2017; University of Trieste (MSc in Functional Genomics)

Moro, Giulia; 2017; University of Trieste (MSc in Functional Genomics)

Gualandi, Nicolò; 2018; University of Trieste (MSc in Functional Genomics)

Fornaini, Nicola; 2018-2019; University of Trieste (MSc in Functional Genomics)



Visintin, Andrea; 2018; University of Trieste (MSc in Functional Genomics)
Palmitessa, Sergio; 2019-2020; University of Trieste (MSc in Functional Genomics)
Gaetano, Anastasia; 2019-2020; University of Trieste (MSc in Environmental Biology)
Fin, Davide; University of Trieste (MSc in Medical Biotechnologies)
Bidoli, Carlotta; 2020-2021; University of Trieste (MSc in Medical Biotechnologies)
Scapolatiello, Annalisa; 2020-2021; University of Trieste (MSc in Functional Genomics)
Tucci, Carmen Federica; 2020-2021; University of Trieste (MSc in Functional Genomics)
D'Amico, Furio Francesco; 2020-2021; University of Trieste (MSc in Medical Biotechnologies)
Racaku, Mbarsid; 2021-2022; University of Trieste (MSc in Functional Genomics)

PhD students

Greco, Samuele; 2018-2022; University of Trieste (Environmental Life Sciences PhD program) – co-supervisor
Sollitto, Marco; 2019-ongoing; University of Trieste (Environmental Life Sciences PhD program) – co-supervisor
Zuccarotto, Annalisa; 2021-ongoing; Anton Dohrn Zoological Station – Open university (Marine Biology PhD program) – external co-supervisor
Salatiello, Federica; 2021-ongoing; University of Trieste (Environmental Life Sciences PhD program) – supervisor

OTHER ACCADEMIC ASSIGNMENTS

I am currently member of the following Teaching Boards at the University of Trieste:

SM51 - SCIENZE E TECNOLOGIE BIOLOGICHE

SM53 – GENOMICA FUNZIONALE

I am a member of the “Consiglio dei Docenti” of the PhD course “Ambiente e Vita” since 2018, and of the “Collegio dei Docenti” of the same PhD course since 2021.

2020 – today: member of the “Commissione paritetica docenti/studenti”

2021 – today: referent of the Department of Life Sciences website and social media



PROFESSIONAL SERVICE

Refereeing activity performed for Research Projects & Academic Personnel

-2013 – External reviewer for post-doctoral fellowship grants – Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO, Belgium

-2015 – External reviewer for the 2016 Saltonstall-Kennedy Competitive Research Program, National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce, USA

-2019 – External reviewer for the 2019 Croatian Science Foundation (HRZZ) Research Proposal grants - IP-2019-04

-2019 - External reviewer for the 2019 FY20 Saltonstall-Kennedy Competition, National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce, USA

-2020 – External reviewer for the ANR - generic call for proposals 2020, Agence Nationale de la Recherche, France

-2020 - External reviewer for the Israel Research Program (CIRP) 2020, National Natural Science Foundation of China (NSFC) and the Israel Science Foundation (ISF), Israel and China

-2021 – External reviewer for the Fondecyt Regular 2022 Program of the Chilean National Research and Development Agency (ANID)

Editorial Board Membership

Since May 2018 - Associate editor at BMC Genomics (Multicellular Invertebrate Genomics section) (ISSN: 1471-2164). Impact factor: 3.969. Q1 journal in the “genetics” field.

Since October 2016 - Editor at the International Journal of Genomics (ISSN: 2314-437). Impact factor: 2.326. Q3 journal in the “genetics” field.

Since April 2020 – Member of the Editorial Team of ISJ – Invertebrate Survival Journal (ISSN: 1824307X). Impact factor: 1.115. Q3 in the “Animal science and zoology” field.

Guest Editor in Special Issues

2021 – Marine Gycomics – Marine Drugs (with Yasuhiro Ozeki and Yuki Fujii)

2023 – Marine Gycomics 2.0 – Marine Drugs (with Yasuhiro Ozeki and Yuki Fujii)

Refereeing activity performed for scientific journals

I am a member of the Rubriq reviewers panel since July 2015



I have contributed as a referee to the peer review process of over 50 scientific papers, in journals which include:

- PlosONE (PLOS)
- NewPhytologist (Wiley Online Library)
- OMICS: a Journal of Integrative Biology (Mary Ann Liebert, Inc. publishers)
- Journal of Advances in Genomics and Genetic, Journal of Research and Reports in Biology (Dove Press)
- Bioinformatics and Biology Insights (SAGE Journals)
- American Journal of Molecular Biology, Open Journal of Genetics, Advances in Bioscience and Biotechnology (Scientific Research)
- Genome Biology and Evolution, GigaScience, Journal of Experimental Botany (Oxford Journals)
- Marine Genomics, Comparative Biochemistry and Physiology Part D: Genomics, Gene, Molecular Immunology, Developmental and Comparative Immunology, Journal of Invertebrate Pathology, Fish & Shellfish Immunology, Immunogenetics (Elsevier)
- International Journal of Genetics and Genomics (Science Publishing Group)
- Journal of Next Generation Sequencing & Applications (OMICS)
- BMC Genomics, BMC genetics, Genetics Selection Evolution (Biomed Central)
- International Journal of Agriculture, Forestry and Fisheries (Open Science)
- PeerJ (PeerJ)
- Genes, International Journal of Molecular Sciences, Fishes (MDPI)
- Journal of Genetics, Biochemical Genetics, Applied Biochemistry and Biotechnology, Journal of Genetics (Springer)
- Royal Society Open Science (The Royal Society Publishing)
- Frontiers in Physiology, Scientific reports (Nature Publishing Group)
- African Journal of Microbiology Research (Academic Journals)
- Journal of Natural History (Taylor & Francis)
- Journal of Visualized Experiments (JOVE)
- Biochemie (Elsevier)

PROFESSIONAL MEMBERSHIP

Since 2012 - Italian society of developmental and comparative immunology (SIICS)

Since 2014 - Associazione Genetica Italiana (AGI)

Since 2017 – Società Italiana Peptidi (ItPS)

Since 2018 – International Society of Developmental and Comparative Immunology (ISDCI)

Since 2019 – Società Italiana di Biologia Evoluzionistica (SIBE)

AWARDS

2012 – Best young researchers award - Società Italiana di Immunobiologia Comparata e dello Sviluppo



INVITED SEMINARS

1. **Marine invertebrate genomics: challenges and opportunities.** Stazione Zoologica Anton Dohrn, Napoli, Italy. April 27th, 2017.
2. **Antimicrobial peptide sequence discovery: a genomics approach.** University of Split, Faculty of Science, Split, Croatia. November 27th, 2017.
3. **Presence-absence variation: how dispensable genes contribute to the diversification of functional responses to environmental stimuli in a bivalve mollusk.** Università di Padova, Padova, Italy. May 15th, 2019.
4. **International Summer School 2019 - Protein Evolution.** Stazione Zoologica Anton Dohrn, Napoli, Italy. July 25th, 2019
5. **Bivalve pan-genomes and beyond.** Marine Ecology Seminar Series GEOMAR. July 7th, 2021.
6. **International Summer School 2022 - The Evolution of Enzymes and Metabolic Pathways: analysis, understanding and implications for biotechnology.** Stazione Zoologica Anton Dohrn, Napoli, Italy. June 28th-30th, 2022
7. **Crash course in genome assembly: Functional annotation of genomes.** Meeting of the Italian Society of Evolutionary Biology, Ancona, Italy, September 4th, 2022.

CONFERENCE ORGANIZATION

-Member of the Local Organizing Committee: XVI Meeting of the Italian Association of Developmental and Comparative Immunobiology (IADCI); Trieste (Italy); February, 18th-20th 2015.

-Member of the International Scientific Committee: 3rd International Symposium on the Advances in Marine Mussel Research; Chioggia (Italy); August 26th-28th 2019.

-Member of the Scientific Committee: 1st Italian Congress of Marine Evolution; Naples (Italy); November 23rd-25th 2020.

-Member of the Local Organizing Committee: 81st Congress of the Italian Zoological Society; Trieste (Italy); September 20th-23rd 2022.

