



## PERSONAL INFORMATION

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Nationality **ITALIAN**  
Date of birth **15/04/1981**  
**ORCID** **0000-0003-0246-9008**

## CURRENT POSITION

Associate Professor (BIO/05 Zoology)

## WORK EXPERIENCE

- Dates March 2019 – February 2022  
• Name and address of employer **University of Padova, Department of Comparative Biomedicine and Food Science.** Viale dell'Università 16, 35020 Legnaro (PD), Italy.  
• Occupation or position held Researcher RTDb  
• Main activities Effects of emerging contaminants on fish and shellfish species of commercial interest; Host-microbiota interactions in bivalve exposed to environmental stressors; Investigation and mitigation of climate change effects in bivalve species; Development of molecular tools for Environmental Risk Assessment
  
- Dates July 2018 – February 2019  
• Name and address of employer **University of Padova, Department of Comparative Biomedicine and Food Science.** Viale dell'Università 16, 35020 Legnaro (PD), Italy.  
• Occupation or position held Research Fellowship  
• Main activities Development of an innovative method for tracing bivalve molluscs of commercial interest.
  
- Dates January 2018 – June 2018  
• Name and address of employer **University of Padova, Department of Comparative Biomedicine and Food Science.** Viale dell'Università 16, 35020 Legnaro (PD), Italy.  
• Occupation or position held Research Fellowship  
• Main activities Identifying persistent transcriptional changes in the Manila clam *Ruditapes philippinarum* from polluted areas of the Venice Lagoon.

- Dates
- Name and address of employer
- Occupation or position held
  - Main activities

January 2017 – December 2017

**University of Padova, Department of Comparative Biomedicine and Food Science.** Viale dell'Università 16, 35020 Legnaro (PD), Italy.

Postdoctoral fellowship (Grant)

Identification of molecular markers for sex determination in *Mugil cephalus*; Ecotoxicological risk assessment for the herbicide glyphosate to non-target aquatic species. Transcriptional responses in the mussel *Mytilus galloprovincialis*;

Microbiota and environmental stress: how pollution affects microbial communities in Manila clams.

- Dates
- Name and address of employer
- Occupation or position held
  - Main activities

January 2016 – December 2016

**University of Padova, Department of Comparative Biomedicine and Food Science.** Viale dell'Università 16, 35020 Legnaro (PD), Italy.

Postdoctoral fellowship (Grant)

High-throughput sequencing in canine Diffuse Large B-cell Lymphoma;

Development of new genetic tools for the identification of biomarkers associated to different phenotypes in fish and shellfish species.

- Dates
- Name and address of employer
- Occupation or position held
  - Main activities

January 2014 – December 2015

**University of Padova, Department of Comparative Biomedicine and Food Science.** Viale dell'Università 16, 35020 Legnaro (PD), Italy.

Postdoctoral fellowship (Assegno di ricerca senior)

Environmental risk assessment in the Venice lagoon;

Pollutants bioavailability and toxicological risk from microplastics to marine mussels.

- Dates
- Name and address of employer
- Occupation or position held
  - Main activities

March 2013 – December 2013

**University of Padova, Department of Comparative Biomedicine and Food Science.** Viale dell'Università 16, 35020 Legnaro (PD), Italy.

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Identification of molecular markers associated to environmental contamination in bivalve species of commercial value

Genomic analyses of *Ruditapes philippinarum* and *Anguilla Anguilla* sampled in areas subject to different environmental conditions.

- Dates
- Name and address of employer
- Occupation or position held

March 2011 – February 2013

**University of Padova, Department of Public Health, Comparative Pathology, and Veterinary Hygiene (currently named Department of Comparative Biomedicine and Food Science).** Viale dell'Università 16, 35020 Legnaro (PD), Italy.

Postdoctoral fellowship (Assegno di ricerca junior)

- Main activities
  - Genomic analyses of oocytes, hemocytes and larval stages in *Pecten maximus*, *Mytilus galloprovincialis*, *Mytilus edulis* and *Ruditapes decussatus* through DNA microarray and RNA-seq (European project “REsearch to improve PROduction of SEED of established and emerging bivalve species in European hatcheries; REPROSEED”); Exploring effects of chemical pollution in the Manila clam *Ruditapes philippinarum*.
  
- Dates
    - January 2011 – February 2011
  - Name and address of employer
    - University of Padova, Department of Public Health, Comparative Pathology, and Veterinary Hygiene (currently named Department of Comparative Biomedicine and Food Science).** Viale dell’Università 16, 35020 Legnaro (PD), Italy.
  
- Occupation or position held
  - Scholarship
  - Main activities
    - Genetic structure of fish populations and traceability of fish and shellfish products (European Project FishPopTrace)
  
- Dates
    - January 2008 – December 2010
  - Name and address of employer
    - University of Florence, Department of Animal Biology and Genetics.** Via Romana 17-19, 50125 Firenze.
  
- Occupation or position held
  - PhD in Ethology and Animal Ecology
  - Main activities
    - Toxicogenomic analyses of *Ruditapes philippinarum* by DNA microarray: new tools for anthropogenic impact assessment on the Venice Lagoon;
    - Development and validation of oligo-DNA microarray platforms for gene expression profiling in *Ruditapes decussatus*, *Sparus aurata* and *Dicentrarchus labrax*.
  
- Dates
    - November 2008 – March 2009
  - Name and address of employer
    - IFREMER - Technopôle Brest-Iroise. BP70. 29280 Plouzané, France**
  
- Occupation or position held
  - Visiting student (supervisor Dr. Pierre Boudry)
  - Main activities
    - NPY signaling for reproduction in the Pacific oyster
  
- Dates
    - October 2006 - November 2007
  - Name and address of employer
    - University of Padova, Department of Public Health, Comparative Pathology, and Veterinary Hygiene (currently named Department of Comparative Biomedicine and Food Science).** Viale dell’Università 16, 35020 Legnaro (PD), Italy.
  
- Occupation or position held
  - Scholarship
  - Main activities
    - Isolation and characterization of Major Histocompatibility Complex class I genes in *Dicentrarchus labrax*.

## EDUCATION AND TRAINING

- Dates
    - January 2008 – December 2010
  - Name and type of organisation providing education and training
    - Department of Animal Biology and Genetics, University of Florence.**
  - Principal subjects
    - Development of new genomic tools for anthropogenic impact assessment on the Venice Lagoon;
  - Title of qualification awarded
    - PhD** in Animal Ethology and Ecology.

- Title of dissertation

Toxicogenomic analyses of *Ruditapes philippinarum* by DNA microarray: new tools for anthropogenic impact assessment on the Venice Lagoon.

Supervisor: Guido Chelazzi.

- Dates

October 2004 – September 2006

- Name and type of organisation providing education and training

**University of Padova - Faculty of Agriculture, Medicine and Veterinary Medicine**

- Principal subjects

Biotechnology

- Title of qualification awarded

**Second-cycle degree** (Master Degree) "Biotechnologies for Food Science" (Laurea specialistica in Biotecnologie per l'Alimentazione). Mark 110/110 magna cum laude

- Title of dissertation

Genetic structure of seabass (*Dicentrarchus labrax*) populations from different localities of Atlantic Ocean and Mediterranean sea. Supervisor: Prof. Patarnello Tomaso.

- Dates

October 2001- September 2004

- Name and type of organisation providing education and training

**University of Padova. Faculty of Medicine and Surgery, Pharmacy, Veterinary Medicine.**

- Principal subjects

Biotechnology

- Title of qualification awarded

**First Degree** (First cycle degree in "Biotechnologies"; Laurea triennale in Biotecnologie Sanitarie). Final mark 103/110.

- Title of dissertation

Construction of co-expression plasmid for human  $\alpha$ - and  $\beta$ - sarcoglycan in bicistronic format. Supervisor: Prof. Doriana Sandonà

- Dates

September 1996 - July 2001

- Name and type of organisation providing education and training

**Istruzione secondaria superiore ordine tecnico statale per attività sociali. Indirizzo biologico. Istituto Vendramin Corner (Venezia).**

- Title of qualification awarded

High School Degree (Final mark:76/100)

## PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE

**ITALIAN**

## OTHER LANGUAGES

Self assessment  
European level\*

**ENGLISH**

**FRENCH**

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Vantage	C1	Effective operational proficiency	B2	Vantage	B2	Vantage	B2	Vantage
B2	Vantage	C1	Effective operational proficiency	B2	Vantage	B2	Vantage	B1	Threshold

\*Common European Framework of Reference for Languages

## POSTER PRESENTATION

**PRIMO 21 (Pollutant Responses in Marine Organism), Gotemborg (Sweden), 22-25 May 2022.** A quantitative index to incorporate transcriptomic data into Weight-of-Evidence approaches for ecological risk assessment.

**SIRAM (Società Italiana Ricerca Applicata Molluschicoltura) - IV Convegno Naz. Soc. It. di Ricerca Applicata alla Molluschicoltura – Chioggia (Italy), 6 novembre 2015.**

- Identificazione di marcatori genetici nella vongola filippina. *R. philippinarum*.
- Impiego della trascrittomica nella valutazione del rischio ambientale

**SIRAM (Società Italiana Ricerca Applicata Molluschicoltura) Teramo (Italy), 10 Novembre 2012**

- Nuove risorse genomiche per specie bivalvi: il progetto Europeo ReProSEED.
- Analisi del trascrittoma di oociti in *R. decussatus*.
- Analisi tossicogenomica di *Ruditapes philippinarum* mediante DNA microarray: nuovo strumento per la valutazione dell'impatto antropico nella Laguna di Venezia.

**PHYSIOMAR 2012, Santiago de Compostela (Spain), 4-8 September 2012.** Transcriptomic differences among natural populations and between growth rate classes uncovered by microarrays in the clam *Ruditapes decussatus* L.

**CRYO 2012, Rosario (Argentina), June 2012.** Can post-thaw sperm quality affect progeny from European seabass?

**6TH WORLD FISHERIES CONGRESS, Edinburgh (Scotland) 2012, 7-11 May 2012.** Transcriptomics and gene expression profiling in response to environmental pollution in the critically endangered European eel.

**SETAC 6th World, Berlin (Germany), 20-24 May 2012.** Transcriptome analysis of the brain of the gilthead sea bream (*Sparus aurata*) after exposure to environmental concentrations of human pharmaceuticals.

**GIA 2009, Bodo (Norway), 5-7 July 2009**

- NPY signaling for reproduction in the Pacific oyster : not so far from human!
- Development and validation of an oligo DNA microarray for the European sea bass *Dicentrarchus labrax* (L.).
- Identification and characterization of a novel immune-type receptor (NITR) gene cluster in the European sea bass, *Dicentrarchus labrax* (L.).
- Effects of temperature decreasing on gene expression profile of gilthead sea bream *Sparus aurata* (L.).

## ORAL PRESENTATION (AS SELECTED SPEAKER)

**Verso una molluschicoltura sostenibile, Chioggia, 11 November 2023. Invited Speaker.** Dal monitoraggio delle aree di allevamento alla valutazione dell'impatto antropico sulla molluschicoltura della laguna di Venezia

**SIRAM 2023, Cagliari, 13-14 October 2023. Invited Speaker.** Presente e futuro del miglioramento genetico applicato all'allevamento dei bivalvi: quali specie, quali caratteri, quali schemi di selezione?

**EAS2023 Congress, Wien (Austria), 19-21 September 2023.** Effects of tire particles and associated-chemicals on oyster *Crassostrea gigas* physiology, reproduction and next-generation

**ESCPB 32<sup>nd</sup> CONGRESS, Naples (Italy), 28-31 august 2022.** Effects of environmental concentrations of the fragrance Amyl salicylate on the Mediterranean mussel *M. galloprovincialis*

**CLIMCLAM KICKOFF MEETING, Brest (France), 25-28 April.** Responses of the Manila clam *Ruditapes philippinarum* to multiple stressors.

**Final meeting POR-FESR 2014-2020, virtual conference, 24 april 2021.** Development of innovative tools for bivalve species traceability.

**AMMR2019 3rd International Symposium on the Advances in Marine Mussel Research. Chioggia (Italy), 26-28 August 2019.** Ecotoxicological risk assessment for the herbicide glyphosate and its degradation product ampa: analysis of host and microbiota response in the mussel *Mytilus galloprovincialis*.

**PRIMO19 (Pollutant Responses in Marine Organism), Matsuyama (Japan), 30 June-3 July 2017.** Exploring microbial changes in manila clam hepatopancreas related to chemical pollution.

**MICRO 2016 (Fate and Impact of Microplastics in Marine Ecosystems: from the Coastline to the Open Sea), Lanzarote (Spain), 25-27 may 2016.** Exploring the effects of microplastics on the hepatopancreas transcriptome of *Mytilus galloprovincialis*.

**PRIMO 18 (Pollutant Responses in Marine Organism), Trondheim (Norway), 24-27 may 2015.** Can ecological history influence responses to pollutants? Analyses of transcriptomic responses to heavy metal exposure in manila clam collected in venice lagoon areas characterized by different anthropogenic impact.

**PRIMO 17 (Pollutant Responses in Marine Organism), Faro (Portogallo), 4-8 may 2013.** Which role for genomics in environmental risk assessment? A case study in the Venice lagoon.

**PHYSIOMAR 2012, Santiago de Compostela (Spagna), 4-8 September 2012.** Gene expression and biomarker responses in the clam *Ruditapes philippinarum* exposed to ibuprofen.

**GIA 2011 Genomics in Aquaculture Iraklion (Creta) 14-17 September 2011.** A toxicogenomic approach for anthropogenic impact assessment in the Venice Lagoon.

**PHYSIOMAR 2010, Quebeq City (Canada) 31 October - 4 November 2010.** Transcriptomic analysis of manila clam populations living in areas with different levels of chemical pollution.

**1- Identification and characterization of a novel immune-type receptor (NITR) gene cluster in the European sea bass, *Dicentrarchus labrax*, reveals recurrent gene expansion and diversification by positive selection.** Ferraresso S, Kuhl H, Milan M, Ritchie DW, Secombes CJ, Reinhardt R, Bargelloni L. *Immunogenetics* 2009; 61:773-88. <https://doi.org/10.1007/s00251-009-0398-3>

**2- Development of an oligo DNA microarray for the European sea bass and its**

PEER-REVIEWED  
PUBLICATIONS

**application to expression profiling of jaw deformity.** Ferraresso S\*, Milan M\*, Pellizzari C, Vitulo N, Reinhardt R, Canario AV, Patarnello T, Bargelloni L. *BMC Genomics* 2010, 11:354. <https://doi.org/10.1186/1471-2164-11-354>

\* Authors equally contributed to this work.

**3- Transcriptome sequencing and microarray development for the Manila clam, *Ruditapes philippinarum*: genomic tools for environmental monitoring.** Milan M, Coppe A, Reinhardt R, Cancela LM, Leite RB, Saavedra C, Ciofi C, Chelazzi G, Patarnello T, Bortoluzzi S, Bargelloni L. *BMC Genomics* 2011, 12:234. <https://doi.org/10.1186/1471-2164-12-234>

**4- Skin healing and scale regeneration in fed and unfed sea bream, *Sparus auratus*.** Vieira FA, Gregório SF, Ferraresso S, Thorne MA, Costa R, Milan M, Bargelloni L, Clark MS, Canario AV, Power DM. *BMC Genomics* 2011, 12:490. <https://doi.org/10.1186/1471-2164-12-490>

**5- Surviving in a toxic world: transcriptomics and gene expression profiling in response to environmental pollution in the critically endangered European eel.** Pujolar JM, Marino IA, Milan M, Coppe A, Maes GE, Capoccioni F, Ciccotti E, Bervoets L, Covaci A, Belpaire C, Cramb G, Patarnello T, Bargelloni L, Bortoluzzi S, Zane L. *BMC Genomics* 2012, 13:507. <https://doi.org/10.1186/1471-2164-13-507>

**6- Gene transcription and biomarker responses in the clam *Ruditapes philippinarum* after exposure to ibuprofen.** Milan M, Pauletto M, Patarnello T, Bargelloni L, Marin MG, Matozzo V. *Aquatic Toxicology* 2013, 15;126:17-29. doi: 10.1016/j.aquatox.2012.10.007

**7- Regulation of a truncated isoform of AMP-activated protein kinase  $\alpha$  (AMPK $\alpha$ ) in response to hypoxia in the muscle of Pacific oyster *Crassostrea gigas*.** Guévelou E, Huvet A, Sussarellu R, Milan M, Guo X, Li L, Zhang G, Quillien V, Daniel JY, Quéré C, Boudry P, Corporeau C. *Journal of Comparative Physiology B* 2013 Jan 25. doi: 10.1007/s00360-013-0743-6

**8- Exploring the effects of seasonality and chemical pollution on the hepatopancreas transcriptome of the Manila clam.** Milan M, Ferraresso S, Ciofi C, Chelazzi G, Carrer C, Ferrari G, Pavan L, Patarnello T, Bargelloni L. *Molecular ecology* 2013; 22:2157-72. doi: 10.1111/mec.12257

**9- Detecting genome-wide gene transcription profiles associated with high pollution burden in the critically endangered European eel.** Pujolar JM\*, Milan M\*, Marino IA, Capoccioni F, Ciccotti E, Belpaire C, Covaci A, Malarvannan G, Patarnello T, Bargelloni L, Zane L, Maes GE. *Aquatic Toxicology* 2013, 15;132-133:157-64. doi: 10.1016/j.aquatox.2013.02.012.

\* Authors equally contributed to this work.

**10- Can ecological history influence immunomarker responses and antioxidant enzyme activities in bivalves that have been experimentally exposed to contaminants? A new subject for discussion in "eco-immunology" studies.** Matozzo V, Giacomazzo M, Finos L, Marin MG, Bargelloni L, Milan M. *Fish & Shellfish Immunology*. 2013 Apr 18. <https://doi.org/10.1016/j.fsi.2013.04.013>

**11- Sex-Specific Regulation of AMP-Activated Protein Kinase (AMPK) in the Pacific Oyster *Crassostrea gigas*.** Guévelou E, Huvet A, Galindo-Sánchez CE,

Milan M, Quillien V, Daniel JY, Quéré C, Boudry P, Corporeau C. *Biology of Reproduction*. 2013 Oct 31;89(4):100. <https://doi.org/10.1095/biolreprod.113.109728>.

**12- mRNA-Seq and microarray development for the Grooved carpet shell clam, *Ruditapes decussatus*: a functional approach to unravel host-parasite interaction.** Leite RB\*, Milan M\*, Coppe A, Bortoluzzi S, António dos Anjos, Reinhardt R, Saavedra C, Patarnello T, Cancela ML and Bargelloni L. *BMC Genomics* 2013, 14:741. <https://doi.org/10.1186/1471-2164-14-741>

\* Authors equally contributed to this work.

**13- Proteomic-based comparison between populations of the Great Scallop, *Pecten maximus*.** Artigaud S, Lavaud R, Thébault J, Jean F, Strand O, Strohmeier T, Milan M, Pichereau V. *Journal of Proteomics*. 2014 Apr 3. pii: S1874-3919(14)00148-1. doi: 10.1016/j.jprot.2014.03.026.

**14- A Microarray-Based Analysis of Gametogenesis in Two Portuguese Populations of the European Clam *Ruditapes decussatus*.** de Sousa JT, Milan M, Bargelloni L, Pauletto M, Matias D, Joaquim S, Matias AM, Quillien V, Leitão A, Huvet A. *PLoS One*. 2014 Mar 18;9(3):e92202. doi: 10.1371/journal.pone.0092202. eCollection 2014.

**15- Liver transcriptome analysis in gilthead sea bream upon exposure to low temperature.** Mininni AN, Milan M, Ferrareso S, Petochi T, Di Marco P, Marino G, Livi S, Romualdi C, Bargelloni L, Patarnello T. *BMC Genomics*. 2014 Sep 6;15:765. doi: 10.1186/1471-2164-15-765

**16- Changes in the gene expression profiles of the brains of male European eels (*Anguilla anguilla*) during sexual maturation.** Churcher AM, Pujolar JM, Milan M, Hubbard PC, Martins RS, Saraiva JL, Huertas M, Bargelloni L, Patarnello T, Marino IA, Zane L, Canário AV. *BMC Genomics*. 2014 Sep 17;15:799. doi: 10.1186/1471-2164-15-799.

**17- Insights into Molecular Features of *Venerupis decussata* Oocytes: A Microarray-Based Study.** Pauletto M, Milan M, de Sousa JT, Huvet A, Joaquim S, Matias D, Leitão A, Patarnello T, Bargelloni L. *PLoS One*. 2014 Dec 3;9(12):e113925. doi: 10.1371/journal.pone.0113925.

**18- Gene expression profile analysis of Manila clam (*Ruditapes philippinarum*) hemocytes after a *Vibrio alginolyticus* challenge using an immune-enriched oligo-microarray.** Moreira R, Milan M, Balseiro P, Romero A, Babbucci M, Figueras A, Bargelloni L, Novoa B. *BMC Genomics* 2014, 15(1):267. doi: 10.1186/1471-2164-15-267.

**19- Transcriptomic resources for environmental risk assessment: a case study in the Venice lagoon.** Milan M, Pauletto M, Boffo L, Carrer C, Sorrentino F, Ferrari G, Pavan L, Patarnello T, Bargelloni L. *Environmental Pollution* 2015, 197 (2015) 90e98. doi: 10.1016/j.envpol.2014.12.005.

**20- Deep transcriptome sequencing of *Pecten maximus* hemocytes: a genomic resource for bivalve immunology.** Pauletto M, Milan M, Moreira R, Novoa B, Figueras A, Babbucci M, Patarnello T, Bargelloni L. *Fish Shellfish Immunology* 2014. <http://dx.doi.org/10.1016/j.fsi.2014.01.017>

**21- Pollutants bioavailability and toxicological risk from microplastics to marine mussels.** Avio CG, Gorbi S, Milan M, Benedetti M, Fattorini D, d'Errico G, Pauletto M, Bargelloni L, Regoli F. *Environmental pollution* 2015, Mar;198:211-22. doi: 10.1016/j.envpol.2014.12.021.

**22- An immune-enriched oligo-microarray analysis of gene expression in Manila clam (*Venerupis philippinarum*) haemocytes after a *Perkinsus olseni* challenge.** Romero A., Forn-Cuní G., Moreira R., Milan M., Bargelloni L., Figueras A., Novoa B. *Fish Shellfish Immunology*. 2014 Dec 30;43(1):275-286. doi: 10.1016/j.fsi.2014.12.029.

**23- Differences in brain gene transcription profiles advocate for an important role of cognitive function in upstream migration and water obstacles crossing in European eel.** Podgorniak T, Milan M, Pujolar JM, Maes GE, Bargelloni L, De Oliveira E, Pierron F, Daverat F. *BMC Genomics*. 2015 May 12;16:378. doi: 10.1186/s12864-015-1589-y.

**24- A microarray-based analysis of oocyte quality in the European clam *Ruditapes decussatus*.** de Sousa JT, Milan M, Pauletto M, Bargelloni L, Joaquim S, Matias D, Matias AM, Quillien V, Leitão A, Huvet A. *Aquaculture* 446 (2015) 17–24. <http://dx.doi.org/10.1016/j.aquaculture.2015.04.018>

**25- Transcriptomic profiling of male European eel (*Anguilla anguilla*) livers at sexual maturity.** Churcher AM, Pujolar JM, Milan M, Huertas M, Hubbard PC, Bargelloni L, Patarnello T, Marino IA, Zane L, Canário AV. *Comparative Biochemistry and Physiology - Part D: Genomics and Proteomics*. 2015 Dec;16:28-35. doi: 10.1016/j.cbd.2015.07.002. Epub 2015 Jul 23.

**26- Can ecological history influence response to pollutants? Transcriptomic analysis of Manila clam collected in different Venice lagoon areas and exposed to heavy metal.** Milan M, Matozzo V, Pauletto M, Di Camillo B, Giacomazzo M, Boffo L, Binao G, Marin MG, Patarnello T, Bargelloni L. *Aquatic Toxicology*. Volume 174, May 2016, Pages 123–133. doi:10.1016/j.aquatox.2016.02.024.

**27- Ecotoxicological potential of non-steroidal anti-inflammatory drugs (NSAIDs) in marine organisms: Bioavailability, biomarkers and natural occurrence in *Mytilus galloprovincialis*.** Mezzelani M, Gorbi S, Da Ros Z, Fattorini D, d'Errico G, Milan M, Bargelloni L, Regoli F. *Marine Environmental Research* 121, pp. 31-39 (2016) 1e9. doi: 10.1016/j.marenvres.2016.03.005

**28- Transcriptomic profiling of *Chamelea gallina* from sites along the Abruzzo coast (Italy), subject to periodic localized mortality events.** Milan M, Palazzo F, Papetti C, Grotta L, Marchetti S, Patarnello T, Bargelloni L, Martino G. *Marine Biology* (2016) 163:196. DOI 10.1007/s00227-016-2971-2.

**29- Transcriptional and cellular effects of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in experimentally exposed mussels, *Mytilus galloprovincialis*.** Mezzelani M, Gorbi S, Fattorini D, d'Errico G., Benedetti M, Milan M., Bargelloni L, Regoli F. *Aquatic Toxicology* 180 (2016) 306–319. doi: 10.1016/j.aquatox.2016.10.006.

**30- Transcriptomic features of *Pecten maximus* oocyte quality and maturation.** Pauletto M, Milan M, Huvet A, Corporeau C, Suquet M, Planas JV, Moreira R,

Figueras A, Novoa B, Patarnello T, Bargelloni L. *Plos One*. March 2 2017: DOI:10.1371/journal.pone.0172805.

**31- Transcriptome analysis of the brain of the sea bream (*Sparus aurata*) after exposure to human pharmaceuticals at realistic environmental concentrations.** Hampel M, Blasco J, Babbucci M, Ferraresso S, Bargelloni L, Milan M. *Marine Environmental Research*. S0141-1136(17)30084-3. 10.1016/j.marenvres.2017.04.012.

**32- DNA methylation profiling reveals common signatures of tumorigenesis and defines epigenetic prognostic subtypes of canine Diffuse Large B-cell Lymphoma.** Ferraresso S, Aricò A, Sanavia T, Da Ros S, Milan M, Cascione L, Comazzi S, Martini V, Giantin M, Di Camillo B, Mazzariol S, Giannuzzi D, Marconato L, Aresu L. *Scientific Reports* 7, Article number: 11591(2017). doi:10.1038/s41598-017-11724-w. *Scientific Reports* 7, Article number: 11591(2017). doi:10.1038/s41598-017-11724-w.

**33- A microarray study of carpet-shell clam (*Ruditapes decussatus*) shows common and organ-specific growth-related gene expression differences in gills and digestive gland.** Saavedra C, Milan M, Leite RB, Cordero D, Patarnello T, Cancela L, Bargelloni L. *Frontiers in Physiology* | doi: 10.3389/fphys.2017.00943.

**34- Microbiota and environmental stress: how pollution affects microbial communities in Manila clams.** Milan M, Carraro L, Fariselli P, Martino ME, Cavalieri D, Vitali F, Boffo L, Patarnello T, Bargelloni L, Cardazzo B. *Aquatic Toxicology* 2018 Jan;194:195-207. doi: 10.1016/j.aquatox.2017.11.019.

**35- Genetic variability of the striped venus *Chamelea gallina* in the northern Adriatic Sea.** Papetti C, Schiavon L, Milan M, Lucassen M, Caccavo AJ, Paterno M, Boscari E, Marino IAM, Congiu L, Zane L. *Fisheries research* Volume 201, May 2018, Pages 68-78. <https://doi.org/10.1016/j.fishres.2018.01.006>

**36- Long-term exposure of *Mytilus galloprovincialis* to Diclofenac, Ibuprofen and Ketoprofen: insights into bioavailability, biomarkers and transcriptomic changes.** Mezzelani M, Gorbi S, Fattorini D, d'Errico G, Consolandi G, Milan M, Bargelloni L, Regoli F. *Chemosphere*. 2018 May;198:238-248. doi: 10.1016/j.chemosphere.2018.01.148

**37- Ecotoxicological effects of the herbicide glyphosate in non-target aquatic species: Transcriptional responses in the mussel *Mytilus galloprovincialis*.** Milan M, Dalla Rovere G, Smits M, Ferraresso S, Pastore P, Marin MG, Bogialli S, Patarnello T, Bargelloni L, Matozzo V. *Environmental Pollution* 2018 Mar 2;237:442-451. doi: 10.1016/j.envpol.2018.02.049.

**38- Bivalve transcriptomics reveal pathogen sequences and a powerful immune response of the Mediterranean mussel (*Mytilus galloprovincialis*).** Moreira R, Balseiro P, Forn-Cuni G, Milan M, Bargelloni L, Novoa B, Figueras A. *Marine Biology*, April 2018, 165:61. <https://doi.org/10.1007/s00227-018-3308-0>

**39- Revealing *Mytilus galloprovincialis* transcriptomic profiles during ontogeny.** Moreira R, Pereiro P, Balseiro P, Milan M, Pauletto M, Bargelloni L, Novoa B, Figueras A. *Developmental and Comparative Immunology* 2018 Feb 23;84:292-

**40- Understanding the mechanisms involved in the high sensitivity of *Pecten maximus* larvae to aeration.** Pauletto M, Di Camillo B, Miner P, Huvet A, Quillien V, Milan M, Ferraresso S, Pegolo S, Patarnello T, Bargelloni L. *Aquaculture* 497 (2018) 189–199. <https://doi.org/10.1016/j.aquaculture.2018.07.059>

**41- New molecular and therapeutic insights into canine diffuse large B cell lymphoma elucidates the role of the dog as a model for human disease.** Aresu L, Ferraresso S, Marconato L, Cascione, L, Napoli S, Gaudio E, Kwee I, TarantelliC, TestaA , Maniaci C, Ciulli M, Hillmann P, Bohnacker T, Matthias P. Wymann, Comazzi S, Milan M, Riondato F, Dalla Rovere G, Giantin M, Giannuzzi D, Bertoni F. *Haematologica* (2019); 04(6):e256-e259 doi: 10.3324/haematol.2018.207027.

**42- Conserved sex chromosomes and karyotype evolution in monitor lizards (*Varanidae*).** Iannucci A, Altmanova M, Ciofi C, Ferguson-Smith, Milan M, Pereira JC, Pether J, Reháková I, Rovatsos M, Stanyon R, Velenský P, Ráb P, Kratochvíl L, Pokorná MJ. *Heredity* (2019). <https://doi.org/10.1038/s41437-018-0179-6>

**43- Tracing seafood at high spatial resolution using NGS-generated data and machine learning: Comparing microbiome versus SNPs.** Milan M, Maroso F, Dalla Rovere G, Carraro L, Ferraresso S, Patarnello T, Bargelloni L, Cardazzo B, Fariselli P. *Food Chemistry* 286 (2019) 413–420. [varhttps://doi.org/10.1016/j.foodchem.2019.02.037](https://doi.org/10.1016/j.foodchem.2019.02.037)

**44- Genome of the Komodo dragon reveals adaptations in the cardiovascular and chemosensory systems of monitor lizards.** Abigail L. Lind et al.. *Nature Ecology & Evolution* (2019) vo 3, pages1241–1252.. <https://doi.org/10.1038/s41559-019-0945-8>

**45- Host-microbiota interactions shed light on mortality events in the striped venus clam *Chamelea gallina*.** Milan M, Smits M., Dalla Rovere G., Iori S., Zampieri A., Carraro L., Martino C, Papetti C., Ianni A, Ferri N, Iannaccone M, Patarnello T., Brunetta R. , Ciofi C., Grotta L., Arcangeli G., Bargelloni L., Cardazzo B., Martino G. *Molecular Ecology* (2019). <https://doi.org/10.1111/mec.15227>

**46- The effects of glyphosate and AMPA on the mediterranean mussel *Mytilus galloprovincialis* and its microbiota.** Iori S, Dalla Rovere G, Ezzat L, Smits M, Ferraresso S, Babbucci M, Marin MG, Masiero L, Fabrello J, Garro E, Carraro L, Cardazzo B, Patarnello T, Matozzo V, Bargelloni L, Milan M. *Environmental Research* 182 (2020) 182:108984. doi: 10.1016/j.envres.2019.108984.

**47- Depuration processes affect the *Vibrio* community in the microbiota of the Manila clam, *Ruditapes philippinarum*.** Zampieri A, Carraro L, Cardazzo B, Milan M, Babbucci M, Smits M, Boffo L, Fasolato L. *Environ Microbiol.* (2020) Oct;22(10):4456-4472. doi: 10.1111/1462-2920.15196.

**48- Environmental pharmaceuticals and climate change: The case study of carbamazepine in *M. galloprovincialis* under ocean acidification scenario.** Mezzelani M., Nardi A, Bernardini I, Milan M, Peruzza L, D'Errico G, Fattorini D, Gorbi S, Patarnello T, Regoli F. *Environment International.* (2021) Jan;146:106269.

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**49-The new PFAS C6O4 and its effects on marine invertebrates: first evidence of transcriptional and microbiota changes in the Manila clam *Ruditapes philippinarum*.** Bernardini I., Matozzo V., Valsecchi S., Peruzza L., Dalla Rovere, G., Polesello S., Iori S., Marin M.G., Fabrello J., Ciscato M., Masiero L., Bonato M., Santovito G., Boffo L., Bargelloni L., Massimo M. and Patarnello T.. Environment International 152 (2021) 106484. <https://doi.org/10.1016/j.envint.2021.106484>

**50- A bioenergetic model to address carbon sequestration potential of shellfish farming : example from *Ruditapes philippinarum* the Venice lagoon.** Bertolini, C. Bernardini, I., Brigolin, D., Milan, M., Matozzo, V., Pastres, R. Accepted in ICES Journal of Marine Science (April 2021). <https://doi.org/10.1093/icesjms/fsab099>

**51- Combining culture-dependent and culture-independent methods: new methodology insight on the *Vibrio* community of *Ruditapes philippinarum*.** Angela Zampieri, Massimiliano Babbucci, Lisa Carraro, Massimo Milan, Luca Fasolato, Barbara Cardazzo. Foods (2021), **10(6)**, 1271; <https://doi.org/10.3390/foods10061271>

**52- New compounds, old problems. The case of cC6O4 - a substitute of PFOA - and its effects to the clam *Ruditapes philippinarum*.** Jacopo Fabrello, Maria Ciscato; Luciano Masiero, Livio Finos, Sara Valsecchi, Stefano Polesello, Ilaria Bernardini, Giulia Dalla Rovere, Luca Bargelloni, Milan Massimo, Tomaso Patarnello, Maria Gabriella Marin, Valerio Matozzo. J Hazard Mater (2021) 18;420:126689. doi: 10.1016/j.jhazmat.2021.126689

**53- First evidence of in vitro effects of C6O4 - a substitute of PFOA - to the haemocytes of the clam *Ruditapes philippinarum*.** Jacopo Fabrello, Francesca Targhetta, Maria Ciscato, Davide Asnicar, Ilaria Bernardini, Massimo Milan, Tomaso Patarnello, Maria G Mari, Valerio Matozzo. Toxics 2021, 9(8), 191; <https://doi.org/10.3390/toxics9080191>

**54-Evaluation of per- and poly-fluorinated alkyl substances (PFAS) in livers of bottlenose dolphins (*Tursiops truncatus*) found stranded along the northern Adriatic Sea.** Sciancalepore G., Pietrolungo G., Centelleghes C., Milan M., Bonato M., Corazzola G., Mazzariol S. Environmental Pollution Volume 291, 15 December 2021, 118186. <https://doi.org/10.1016/j.envpol.2021.118186>

**55- Long-lasting effects of chronic exposure to chemical pollution on the hologenome of the Manila clam.** Iannello Mariangela\*, Mezzelani Marica\*, Dalla Rovere Giulia\*, Patarnello Tomaso, ..., Bargelloni Luca & Milan Massimo. Evolutionary applications (May 2021)

**56- Molecular monitoring of SARS-CoV-2 in different sewage plants in Venice and the implications for genetic surveillance.** I. Brian, ..., M. Milan & V. Panzarin. Environmental Science & Technology, 2022.is: <https://doi.org/10.1021/acsestwater.2c00013>

**57- Using a clustering algorithm to identify patterns of valve-gaping behaviour in mussels reared under different environmental conditions.** C. Bertolini, J.Capelle, E. Royer, M. Milan, Witbaardd. T.J. Boumade, R.Pastres. Ecological

**58-Effects of environmental concentrations of the fragrance amyl salicylate on the mediterranean mussel *Mytilus galloprovincialis*. I. Bernardini**, J. Fabrello, M. Vecchiato, ..., M. Milan. *Environmental Pollution*, 307, 2022. <https://doi.org/10.1016/j.envpol.2022.119502>

**59- Multi-tissue RNA-Seq analysis and long-read-based genome assembly reveal complex sex-specific gene regulation and molecular evolution in the Manila Clam.** Ran Xu, Jacopo Martelossi, Morgan Smits, Mariangela Iannello, Luca Peruzza, Massimiliano Babbucci, Massimo Milan, Joseph P. Dunham, Sophie Breton, Liliana Milani, Sergey Nuzhdin, Luca Bargelloni, Marco Passamonti, and Fabrizio Ghiselli. *Genome Biol. Evol.* 14(12) <https://doi.org/10.1093/gbe/evac171>

**60-Mixtures of environmental pharmaceuticals in marine organisms: Mechanistic evidence of carbamazepine and valsartan effects on *Mytilus galloprovincialis*.** Marica Mezzelani, Luca Peruzza, Giuseppe d'Errico, Massimo Milan, Stefania Gorbi, Francesco Regoli. *Science of Total Environment*, <http://dx.doi.org/10.1016/j.scitotenv.2022.160465>

**61- An innovative index to incorporate transcriptomic data into weight of evidence approaches for environmental risk assessment.** Martina Cecchetto , Luca Peruzza , Elisa Giubilato , Ilaria Bernardini , Giulia Dalla Rovere , Antonio Marcomini , Francesco Regoli , Luca Bargelloni , Tomaso Patarnello , Elena Semenzin , Massimo Milan. *Environmental Research Volume 227*, 15 June 2023, 115745. <https://doi.org/10.1016/j.envres.2023.115745>

**62-Multidisciplinary long-term survey of Manila clam grown in farming sites subjected to different environmental conditions.** Massimo Milan, Ilaria Bernardini, ..., Luca Bargelloni, Tomaso Patarnello. *Science of the Total Environment* 863 (2023) 160796. <http://dx.doi.org/10.1016/j.scitotenv.2022.160796>

**63-Transcriptional Profiling of Populations in the Clam *Ruditapes decussatus* Suggests Genetically Determined Differentiation in Gene Expression along Parallel Temperature Gradients and between Races of the Atlantic Ocean and West Mediterranean Sea.** Carlos Saavedra, Massimo Milan, Ricardo B. Leite, David Cordero, Tomaso Patarnello, M. Leonor Cancela and Luca Bargelloni. *Fishes* 2023, 8, 203. <https://doi.org/10.3390/fishes8040203>

**64-Impaired reproduction, energy reserves and dysbiosis: the overlooked consequences of heatwaves in a bivalve mollusk.** Peruzza Luca, Tucci Carmen, Frizzo Riccardo, Riello Tobia, ..., Patarnello Tomaso, Milan Massimo, Bargelloni Luca. *Marine Pollution Bulletin* 2023.

**65- Spatio-temporal variations of growth, chemical composition, and gene expression in Mediterranean mussels (*Mytilus galloprovincialis*): A two-year study in the Venice lagoon under anthropogenic and climate changing scenarios.** Francesco Bordignon, Camilla Bertolini, Ilaria Bernardini, ..., Luca Peruzza c, Luca Bargelloni c,g, Tomaso Patarnello, Massimo Milan\*, Angela Trocino. *Aquaculture* 578 (2024) 740111. <https://doi.org/10.1016/j.aquaculture.2023.740111>

**66- A Weight of Evidence approach to support the assessment of the quality of Manila clam farming sites in a coastal lagoon.** Cecchetto M, Giubilato E, ...,

Marcomini, Milan M\*, M., Semenzin. Marine Pollution Bulletin 2023.

**67- Contaminants from dredged sediments alter the transcriptome of Manila clam and induce shifts in microbiota composition.** Ilaria Bernardini <sup>1\*</sup>, Andrea Quagliariello <sup>1\*</sup>, ..., Massimo Milan\*, Tomaso Patarnello. BMC Biology.

**68-A Multibiomarker Approach in Clams (*Ruditapes philippinarum*) for a Toxicological Evaluation of Dredged Sediments.** Davide Asnicar, Jacopo Fabrello, Maria Ciscato, Luciano Masiero, Maria Gabriella Marin, Fabiana Corami, Massimo Milan, Ilaria Bernardini, Tomaso Patarnello, Martina Cecchetto, Elisa Giubilato, Cinzia Bettiol, Elena Semenzin, Valerio Matozzo. Environmental Pollution 342 (2024) 123095

**ABSTRACT ON  
INTERNATIONAL  
JOURNAL**

**Can post-thaw sperm quality affect progeny from European seabass?** Leite R, Martinez-Páramo S, Sarasquete C, Milan M, Bargelloni L, Cabrita E. *Cryobiology* Volume 65, Issue 3, December 2012, Pages 343.

**Ecotoxicological risk assessment for the herbicide glyphosate and its degradation product AMPA: analysis of host and microbiota response in the mussel *Mytilus galloprovincialis*.** Milan, Iori, Dalla Rovere, M Smits, S Ferraresso, M Babbucci, MG Marin, L Masiero, J Fabrello, L Carraro, B Cardazzo, T Patarnello, V Matozzo, L Bargelloni. Third International Symposium AMMR 2019. Advances in Marine Mussel Research, August, 26–28, 2019, Palazzo Grassi, Chioggia, Italy Invertebrate Survival journal, Vol16, N1, 2019. <https://doi.org/10.25431/1824-307X/isj.v0i0.189-208>

**CONTRIBUTIONS IN  
BOOKS**

**Fate and Impact of Microplastics in Marine Ecosystems. From the Coastline to the Open Sea.** Edited by: Juan Baztan, Bethany Jorgensen, Sabine Pahl, Richard C. Thompson and Jean-Paul Vanderlinden . ISBN: 978-0-12-812271-6

**TEACHING ACTIVITIES**

**December 2016 – December 2018 (Attività integrative nell’ambito dei corsi di studio a.a. 2016-2017) –** Phylogenetic analysis of food animals. Master Degree in Biotechnology applied to food security and nutrition. Department of Comparative Biomedicine and Food Science, University of Padova.

**From March 2018 – Fixed-term Professor (Affidamento di attività didattiche a.a. 2017-2018) –** Biotechnology applied to livestock breeding. Degree Course in Animal Science and Technology. Department of Agronomy, Food, Natural Resources, Animals and the Environment, University of Padova.

**March 2019 – September 2020. Professor–** Biotechnology applied to livestock breeding. Degree Course in Animal Science and Technology. Department of Agronomy, Food, Natural Resources, Animals and the Environment, University of Padova.

**From October 2019 - Professor–** Applied Ecology. Degree Course in Animal Care, University of Padova.

**ITALIAN NATIONAL  
SCIENTIFIC  
QUALIFICATION (ASN)**

**INSTITUTIONAL  
RESPONSIBILITIES**

**From October 2021 - Professor**–Animal Biology. Degree Course in “ Sicurezza igienico-sanitaria degli alimenti”. Department of Comparative Biomedicine and Food Science. University of Padova.

**From 2021. Teaching activity. Master “Salvaguardia della fauna selvatica: per una conservazione integrate”.** Ecologia, biodiversità e genetica di popolazione  
Molecular approaches in ecotoxicology to investigate the effects of anthropogenic impact in natural populations.

**From 2021. Teaching activity. Master in “Conservation Medicine of aquatic animals”.** Analytical and diagnostic procedures in veterinary medicine and biology.  
Molecular approaches in ecotoxicology and species conservation.

**From October 2022- Professor –** Marine ecotoxicology. Degree Course in “Marine Biology”. Department of Biology, University of Padova

**From October 2022 - Professor**–Animal Biology. Degree Course in “Animal Science and Technology”. Department of Agronomy, Food, Natural Resources, Animals and the Environment. University of Padova

**March 2017: Abilitazione Scientifica Nazionale – Sector: 05/B1 Zoology and anthropology** as Associate Professor (Seconda fascia).

**April 2017: Abilitazione Scientifica Nazionale - Sector: 05/C1 Ecology** as Associate Professor (Seconda fascia).

**From 2019 - Member of the Management Board of “ECCE AQUA”** project (Department of Excellence MIUR) at the Department of Comparative Biomedicine and Food Science

**From 2019 to 2021 - Member of the Committee for resources management (Commissione budget)** at the Department of Comparative Biomedicine and Food Science

**From 2020 - Member of the Directive and Vice-coordinator of the PhD Course in Veterinary Science** (from May 2021).

**From 2019 – Member of council for the Degree Course in Animal Science and Technology.**

**From 2019 - Member of the council for the Degree Course in Animal Care.**

**From 2021 - Member of the council for the Degree Course in “Sicurezza Igienico-Sanitaria degli Alimenti”.**

**From 2023 - Member of the Management Board of “SENTINEL”** project (Department of Excellence MIUR) at the Department of Comparative Biomedicine and Food Science

## THIRD MISSION AND INTERNAZIONALIZATION

**Verso una molluschicoltura sostenibile: prospettive per la Laguna di Venezia.**  
Held in Chioggia on November 11 2023. Event organization. Organization

**Partecipazione to PNRR Orienta, I.I.S. EUGANEO-ESTE (January 2024)**

**Partecipazione to MICROCO2SME - Les microplastiques dans un océan riche en CO2 : mise en place de mésocosmes pour évaluer les impacts sur un écosystème tempéré** (<https://www.iuem.univ-brest.fr/lemar/projets-scientifiques/microco2sme/>) funded by Region Bretagne (France)

**Commissioned Research Contract with the Company Ecotapes Zeeland B.V to provide an overview of the genetic status and management of the broodstock to assess the feasibility of a selective breeding program in Manila clam *Ruditapes philippinarum*. 6.400,00 euro**

**Co-creation training lab (CCTLAB) Un laboratorio di formazione per imparare a fare scienza con la società. Third mission projet 2022 (University of Padova). Role: Coordinator.**

**International Research Project (IRP), CNRS (France).** International emerging action. CLIMCLAM international research. How aquatic organisms will respond to future CLIMate change, the case of the Manila CLAM?

**November 2019: Visit to Beijing University, Nanjing University and Tongji University.** Presentation of Comparative Biomedicine and food Science Department research activities. Proposal of rearch activities for the the ecosustainable and eco-friendly Chongming Island.

**April 2021.** Organization of the final meeting for the project the Regional Project POR-FESR 2014-2020 “Sostenibile, sicuro, di alta qualità: un progetto integrato di ricerca industriale per l’innovazione della filiera molluschiola del Veneto”

**4-5-6 February 2020:** organization of University for kids at the Department of Comparative Biomedicine and Food Science.

**24 February 2023:** organization of “Le Mappedel Delta”, new ways to establish collaborations between University and stakeholder. Museo Regionale della Bonifica di Ca Vendramin Taglio di Po.

2008-2009: **Collaboration** with “Comparative and Molecular Endocrinology Group, CCMAR, Universidade do Algarve” (Prof. Power DM) for the study of skin and scale regeneration in *Sparus auratus* using a DNA microarray approach.

2008-present: **Collaboration** with IFREMER, "Physiologie et Ecophysiologie des Mollusques Marins", Technopole Brest Iroise “ and LEMAR (Dr. Pierre Boudry, Dr. Arnaud Huvet, Drs. Charlotte Corporeau, Christine Paillard, Aurelie Chambonnet). Molecular analyses of genes and proteins involved in *Crassostrea gigas* reproductive cycle. Collaboration for oocytes and larval stages analyses in *Pecten maximus* and *Ruditapes decussatus*.

## MAIN COLLABORATIONS

2009-present : **Collaboration** with “CSIC – Instituto de Investigaciones Marinas de Vigo - Patología, Inmunología, Moluscos, Genómica (Full-Professor Antonio Figueras) for the DNA microarray analyses of immunitary responses in *R. philippinarum*. Collaboration for larval stages and immunitary responses analyses in bivalve species.

2010-present: **Collaboration** with “Instituto de Acuicultura de Torre de la Sal - Consejo Superior de Investigaciones Científicas” (Dr. Carlos Saavedra). DNA microarray analyses of populations of *Ruditapes decussatus* collected in Mediterranean sea and Atlantic ocean.

2013-present: **Collaboration** with Dipartimento di Biochimica, Biologia e Genetica-Sez. Biologia e Genetica, Università Politecnica delle Marche (Prof. Francesco Regoli). Risk assessment of microplastics and NSAIDs exposures in *Mytilus galloprovincialis*. Environmental risk assessment of Venice lagoon areas through a multidisciplinary approach.

## PRIZES

Winner of a European mobility grant within the EU project Aquagenome – **Genomics in fish and shellfish: From research to aquaculture** spent in Centre IFREMER (Institut Francais de Recherche pour l'Exploitation de la Mer) in Brest. Main supervisors: Drs. Charlotte Corporeau, Arnaud Huet, Pierre Boudry (November 2008 – December 2008).

Winner of the best poster award at GIA 2009, Bodo (Norway), 5-7 July 2009: **NPY signaling for reproduction in the Pacific oyster : not so far from human!** Milan M, Fleury E, Huet A, Guévelou E, Boudry P, Moal J, Corporeau C.

Winner of the best poster award at SIRAM (Società Italiana Ricerca Applicata Molluschicoltura) - IV Convegno Naz. Soc. It. di Ricerca Applicata alla Molluschicoltura – Chioggia (Italy), 6 novembre 2015: **Impiego della trascrittomiche nella valutazione del rischio ambientale.** Milan M, Pauletto M, Boffo L, Carrer C, Sorrentino F, Ferrari G, Pavan L, Patarnello T, Bargelloni L

## FUNDING

2023-2025: Coordinator and Responsible of funding for University of Padova for the research project **Priming and Microbiota mAnipulation to mitigate shellfish vulNerability: toward a sustainable aquacuLture mAnagement in a changlng ocean (MANILA) funded within PRIN 2022. Funding for University of Padova: €113,000.00.**

2022-2026: Coordinator and Responsible of funding for University of Padova for the research project “**Improving green innovation for the blue revolution: new tools and opportunities for a more sustainable animal farming (IGNITION)**” funded within the Call HORIZON-CL6-2022-FARM2FORK-01-06 — Biosecurity, hygiene, disease prevention and animal welfare in aquaculture. Funding for University of Padova: **€300,000.00.**

2022-2025: Responsible of funding for University of Padova for the **PNRR SPOKE 2 Line 1. Zero Pollution Zero pollution strategy for biodiversity protection.** Funding: **€200,000.00**

October 2020-October 2022: Principal Investigator and responsible of funding for

**PARTECIPATION TO  
EUROPEAN AND  
NATIONAL PROJECT**

the research project **“Study for the determination of SARS-CoV-2 in wastewater treatments plants delivering to the Venice lagoon and possible bioaccumulation in bivalve molluscs”** funded by Provveditorato alle Opere Pubbliche per il Veneto, il Trentino-Alto Adige e il Friuli-Venezia Giulia. Role: **Principal Investigator**; Funding: **€148,000.00**.

January 2018-December 2021: Principal investigator and responsible of funding assigned by the Italian Ministry of Education, University and Research (MIUR) to the Department of Compararative Biomedicine and Food Science” (**€559,150.00**) for the research project **“Venezia 2021 - Programma di ricerca scientifica per una laguna regolata”**. Manager and coordinator of the WP “Evaluation of the impacts of the MOSE commissioning on bivalve species inhabiting the Venice lagoon”. Responsible and coordinator of BCA-UNIPD research unit of the WP *i*) Characterization of the effects in bivalve species of emerging contaminants detected in the Venice lagoon; *ii*) Evaluation of sediment quality for management purposes related to their handling.

Winner of “Bando Giovani Studiosi 2013” (**€24,000.00**). TITLE OF RESEARCH PROJECT: **Environmental risk assessment in the Venice lagoon: new horizons from genomics tools**. Role: **Principal Investigator**

Participation to the European project **“SHORE- EmpOweR Students as the agents of cHange”** funded within the call “HORIZON-MISS-2022-OCEAN-01”

Participation to the European project **“ONE BLUE- Integrated approach to assess the levels and impact of cONtaminants of Emerging concern on BLUE health and biodiversity modulated by climate change drivers”** funded within the call HORIZON-CL6-2023-ZEROPOLLUTION-01.

Participation to **MICROCO2SME** in collaboration with LEMAR. Microplastic in a CO<sub>2</sub>-rich ocean: using micro-mesocosms to assess impacts on a temperate ecosystem funded by Oceanolab, Fondation Rvaltain and Region Bretagne

Participation to CARIPARO PROJECT **“Priming Manila CLams Against Multiple Stressors – PRIMECLAMS”**. **Principal Investigator**: Luca Bargelloni. **Role**: Coordinator of WP1 Thermal priming.

Participation to the regional project POR-FESR 2014-2020 **“L’agricoltura del futuro e gli alimenti funzionali: una sfida per la ricerca e il rilancio del territorio veneto (F.A&A.F.)”**. **Principal Investigator**: Luca Bargelloni

Participation to the Regional Project POR-FESR 2014-2020 **“Sostenibile, sicuro, di alta qualità: un progetto integrato di ricerca industriale per l’innovazione della filiera molluschicola del Veneto”**. **Principal Investigator**: Luca Bargelloni

Co-investigator within the project **“Integración de Herramientas Ómicas para la evaluación del Riesgo Ambiental de Contaminantes emergentes en especies marinas de Interés cOmercial”** funded within the EXCELENCIA y Proyectos RETOS Dirección General de Investigación Científica y Técnica Subdirección General de Proyectos de Investigación (€115,000.00). **Principal investigators**: Pablo Antonio Lara Martín, Miriam Hampel. Role: **Co-investigator**.

Participation to the FP7 Project (European Commission) **“REsearch to improve**

## SUPERVISION OF STUDENTS

**PROduction of SEED of established and emerging bivalve species in European hatcheries (REPROSEED)**". FP7-KBBE. From April 2010 to March 2014. Project ID: 245119.

Partecipation to the FP7 Project (European Commission) "**Fish Population Structure and Traceability (FishPopTrace)**". FP7-KBBE. Scholarship from January 2011 to February 2011. Project ID: 212399.

Partecipation to the PNRA project "**Risposta allo stress termico nei nototenioidi antartici: un approccio molecolare integrato per studiare l'effetto dell'aumento di temperatura in *Trematomus bernacchii* e *Chionodraco hamatus***" funding by "Programma Nazionale di Ricerche in Antartide Bando 2013 (PNRA)".

**2022 Master student:** Beatrice Terraciano. First degree animal Care. A stereo-BRUVs investigation: seasonality, habitat use and demography of the recently described Human's whaler shark *Carcharhinus humani* in the Kwa-Zulu Natal coast (South Africa). Role: Supervisor/tutor

**2022 Master student:** Sara Zera. First degree animal Care. Role: Supervisor/tutor

**2021 Master student:** Michelle Pierotti. First degree animal Care. Effects of aquaculture systems on local wildlife. Role: Supervisor/tutor

**2021 Master student:** Alice Vedovelli. First degree animal Care. Effects of aquaculture systems on local wildlife. Role: Supervisor/tutor

**2020 Master student:** Matteo Caccin. First degree animal Care. Effects of aquaculture systems on local wildlife. Role: Supervisor/tutor

**2020 Master student:** Rachele Orlandi. First degree animal Care. Effects of aquaculture systems on local wildlife. Role: Supervisor/tutor

**2020 Master student:** Maria Ciscato. Second Degree in Marine Biology. Parametri immunologici e biochimici e analisi del microbiota in *Ruditapes philippinarum* esposti a composti perfluoroalchilici (C6O4 e PFOA). **Role:** Assistant supervisor (correlatore).

**2019 Master Student:** Enrico Garro. Second Degree in Biotechnology applied to Food security and nutrition. Department of Comparative Biomedicine and Food Science, University of Padova. **Role:** Assistant supervisor

**2018 Master Student:** Elena Paggiaro. First Degree in Animal Science and Technology. Department of Agronomy, Food, Natural resources, Animals and Environment. Title of dissertation: Approcci innovativi per la tracciabilità dei prodotti ittici. **Role:** Supervisor

**2017 Master Student:** Marco Scarso. First Degree in Biology. Department of Biology, University of Padova. Title of dissertation: Analisi trascrittomiche della ghiandola digestiva di *Mytilus galloprovincialis* in seguito ad esposizione a glifosato. **Role:** Assistant supervisor (correlatore).

**2017 Master Student:** Nicolas Pasqualetto. Second Degree in Biotechnology

applied to Food security and nutrition. Department of Comparative Biomedicine and Food Science, University of Padova. Title of dissertation: Analisi del trascrittoma e del microbioma in campioni di vongola filippina (*Ruditapes philippinarum*) trapiantati da un'area inquinata ad un sito di controllo. **Role:** Assistant supervisor (correlatore).

**2016 PhD Student:** Marica Mazzelani. PhD School in Science - Curriculum Marine Biology and Ecology. Department of Life and Environmental Sciences of Marche Polytechnic University. Title of the PhD thesis: Ecotoxicological potential of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in marine organisms: bioavailability, biomarkers and natural occurrence in *Mytilus galloprovincialis*. **Role:** External supervisor.

**-2016 Master Student:** Sara Zennaro. Second Degree in Land and environment Science and Technology. Department of Agronomy, Food, Natural resources, Animals and Environment and Department of Comparative Biomedicine and Food Science. Title of dissertation: Analisi del trascrittoma e del microbioma di vongola verace filippina (*R. philippinarum*) della Laguna di Venezia per la valutazione del rischio ambientale. **Role:** Assistant supervisor (correlatore).

**-2015 Master Student:** Valentina Paolini. Second Degree in Biotechnology applied to Food security and nutrition. Department of Comparative Biomedicine and Food Science, University of Padova. Title of dissertation: Valutazione del microbioma in *Ruditapes philippinarum* provenienti da aree della Laguna di Venezia soggette a diverso impatto antropico. **Role:** Assistant supervisor (correlatore).

**-2014 Master Student:** Nicola Rizzardo. Second Degree in Biotechnology applied to Food security and nutrition. Department of Comparative Biomedicine and Food Science, University of Padova. Title of dissertation: Utilizzo della trascrittomica per la classificazione di aree della Laguna di Venezia. **Role:** Assistant supervisor (correlatore).

**-2012 Master Student:** Matteo Giacomazzo. Second Degree in Marine Biology. Department of Biology and Department of Comparative Biomedicine and Food Science, University of Padova. Title of dissertation: Biomarker e trascrizione genica in *Ruditapes philippinarum* dopo esposizione a rame: confronto tra molluschi raccolti in due aree differenti della Laguna di Venezia. **Role:** Assistant supervisor (correlatore).

**-2011 Master Student:** Cristina Lazzarin. First Degree in Biotechnology. Department of Comparative Biomedicine and Food Science, University of Padova. Title of dissertation: Analisi genomica mediante DNA microarray della risposta biologica all'esposizione ad inquinanti chimici persistenti in popolazioni di *Ruditapes philippinarum* nella Laguna di Venezia. **Role:** Assistant supervisor (correlatore).

**-2011 Master Student:** Sammartino Maria Antonella. Second Degree in Biotechnology applied to Food security and nutrition. Department of Comparative Biomedicine and Food Science, University of Padova. Title of dissertation: Identificazione di biomarcatori di inquinamento nella vongola (*Ruditapes philippinarum*) mediante l'uso di DNA microarray. **Role:** Assistant supervisor (correlatore).

**-2010 Master Student:** Fabio Bertan. First Degree in Biotechnology. Department of Comparative Biomedicine and Food Science, University of Padova. Title of

**PhD, POST-DOC and  
RESEARCH FELLOW  
SUPERVISOR**

dissertation: Analisi genomica della risposta biologica all'esposizione ad inquinanti chimici persistenti in popolazioni di vongola verace *Ruditapes philippinarum* nella laguna di Venezia mediante DNA microarray. **Role:** Assistant supervisor (correlatore).

**01/02/2024** Supervisor of Giovanna Monticelli: Postdoc fellowship

**From 2023** Co-Directeur di Morgane Le Noc, Ecole Doctorale Science de la Mer et du Littoral, Université de Bretagne Occidentale

**01/01/2023 – 31/12/2023** Supervisor of Elisa Scrima. Fellowship.

**01/01/2023 – 31/12/2023** Supervisor of Ouafa El Idrissi. Post-Doc fellowship funded by University of Corse.

**01/01/22 – 21/12/23** Supervisor of Ilaria Bernardini. Post-doc fellowship. PNRR-Spoke 2 activity 1.2. Solutions to reverse marine biodiversity loss and manage marine resources sustainably

**04/03/2022 – 30/09/2022** Supervisor of Irene Brian (research fellowship). Title of research project: Detection of SARS-COV-2 in wastewater treatment plants delivering to the Venice lagoon and possible bioaccumulation in bivalve molluscs.

**01/01/2022-31/12/2024** Supervisor of Carmen Federica Tucci (PhD). Title of research project: Strategies to mitigate climate change and anthropogenic impacts in bivalve species of commercial interest.

**1/12/2020 – 28/02/2022** Supervisor of Alice Manuzzi (Post-doc). Title of research project: Detection of SARS-COV-2 in wastewater treatment plants delivering to the Venice lagoon and possible bioaccumulation in bivalve molluscs.

**01/10/2019-31/09/2022** Supervisor of Ilaria Bernardini (PhD). Title of research project: Responses and adaptation of marine species of commercial interest to anthropogenic impact and environmental stress.

**1/03/2021 - 14/04/2021** Supervisor of Giulia Dalla Rovere (Post-doc). Title of research project: Host-microbiota characterization in bivalve species exposed to environmental stress.

**1/03/2019 - 28/02/2021; 15/04/2023 - 28/04/2024** Supervisor of Giulia Dalla Rovere (Post-doc).

**11/05/2020 – 10/05/2021** Supervisor of Morgan Smits (Research Fellowship). Title of research project: Genetic analysis of *Ruditapes philippinarum* to identify traits of interest in aquaculture”

Associate Editor for *Frontiers in Marine Science*. Ad-hoc reviewer for the following journals: *Scientific reports*, *Molecular Ecology Resources*, *BMC Genomics*, *Aquatic Toxicology*, *Biomed Research International*, *BMC Research Note*, *Comparative Biochemistry and Physiology*, *Ecology and Evolution*, *Ecotoxicology and*

**PEER REVIEW  
ACTIVITIES**

Environmental Safety, Environmental pollution, Environmental Science and Pollution Research (ESPR), Marine Biology, Marine Biotechnology, Marine Environmental Research, Marine Genomics, PlosOne, Polar Biology.