

## **CURRICULUM VITAE**

### 1. Personal information

#### **MARIANNA PAULETTO**

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Nationality: Italian

Date of birth: 21/02/1985

### 2. Education

**ITALIAN SCIENTIFIC HABILITATION (ASN)** to associate professor for section 07/H4 – Veterinary pharmacology and clinical medicine (10/06/2021 - 10/06/2030)

**DOCTORAL DEGREE** in Veterinary science at the Department of Comparative Biomedicine and Food Science, University of Padova (Italy). Date of dissertation defense: 08/04/2014

**MASTER DEGREE** in Food Biotechnology at the University of Padova (Italy)

Faculty of Agriculture, Medicine and Veterinary Medicine (15/09/2009)

**FIRST DEGREE** in Healthcare Biotechnology at the University of Padova (Italy)

Faculty of Medicine and Surgery, Pharmacy, Veterinary Medicine (12/07/2007)

**HIGH SCHOOL DEGREE** at the Liceo "F. Corradini", indirizzo classico, Thiene (Italy) (July, 2004)

### 3. Research activity and training

*01/06/2021 – present*

**Assistant Professor** (Italian RTDb position) at the Department of Comparative Biomedicine and Food Science, University of Padova (Italy). SSD VET/07

*11/06/2018 – 30/05/2021*

**Assistant Professor** (fixed term – Italian RTDa position) at the Department of Comparative Biomedicine and Food Science, University of Padova (Italy). SSD VET/07

*01/01/2018 – 31/05/2018*

**Research** fellow at the Department of Comparative Biomedicine and Food Science, University of Padova (Italy).

*01/01/2016 – 31/12/2017*

**Senior research** fellow at the Department of Comparative Biomedicine and Food Science, University of Padova (Italy).

*08/05/2017 – 12/05/2017*

**Workshop attendance:** “Introductory Population Genomics: From Data to Inference” (Berlin, Germany)

*01/01/2014 – present*

**Referee** for the following scientific journals: BMC genomics, Ecotoxicology and Environmental Safety, Fish and Shellfish Immunology, Food and Chemical Toxicology, Gene, Journal of Experimental Biology, Marine genomics, Molecular Ecology, Peer J. (<https://publons.com/researcher/1662866/marianna-pauletto/>)

01/01/2014 – 31/12/2015

**Junior research fellow** at the Department of Comparative Biomedicine and Food Science, University of Padova (Italy).

01/01/2011 – 31/01/2013

**PhD student** at the Department of Comparative Biomedicine and Food Science, University of Padova (Italy).

03/11/2012 – 13/05/2013

**Visiting student** at the IFREMER - Technopôle Brest-Iroise (Britanny, France).

06/06/2011 – 15/06/2011

**Visiting student** at the commercial bivalve hatchery SCALPRO AS (Norway)

11/04/2011 – 16/04/2011

**Visiting student** at IMARES (Institute for Marine Resources & Ecosystem Studies), part of Wageningen University (The Netherlands)

01/12/2009 – 31/12/2010

**Fellow** at the Istituto Zooprofilattico Sperimentale delle Venezie, Legnaro (Italy).

#### 4. Funded projects and awards

**Principal Investigator** of a peer-reviewed competitive project funded by the University of Padua (call STARS@UNIPD2021) with the following title “Assessing Toxicity Of An Emerging PFAS On Reproduction And Cognition: Behaviour And Molecular Mechanisms” (budget: 140.000 €).

**Best 2020 paper published (toxicology section)** by an under 40 member of the Italian Society of Veterinary Pharmacology and Toxicology (SIFTVet). May 2021.

**Research Unit Leader** of “Ricerca Corrente 2020” project funded by the Istituto Zooprofilattico Sperimentale delle Venezie with the following title “Using Next Generation Sequencing techniques to identify and characterize emergent and symbiont pathogens in *Apis mellifera* from different Italian regions” (project ID: IZS VE 09/20 RC) (budget: 11.000 €).

**Principal Investigator** of a project funded by the Department of Comparative Biomedicine and Food Science – UNIPD (call “Giovani Ricercatori - March 2020”) with the following title “Assessing the endocrine disruptor activity of a legacy PFAS (PFOA) and an emerging PFAS (GenX) on guppies (*Poecilia reticulata*): a reproductive behavioural and transcriptomic study” (budget: 10.000 €).

**Principal Investigator** of the EC-Funded AQUAEXCEL2020 “MeditGen” project (December 2017 - 8th call – proposal identification code: AE080035).

#### 5. Publications

*Peer reviewed publications (33)*

1. Cantiello M, Carletti M, Giantin M, Gardini G, Capolongo F, Cascio P, **PAULETTO M**, Girolami F, Dacasto M, Nebbia C. Induction by Phenobarbital of Phase I and II Xenobiotic-

Metabolizing Enzymes in Bovine Liver: An Overall Catalytic and Immunochemical Characterization. *Int J Mol Sci.* 2022 Mar 24;23(7):3564. doi: 10.3390/ijms23073564.

2. **PAULETTO M**, Giantin M, Tolosi R, Bassan I, Barbarossa A, Zaghini A, Dacasto M. Discovering the Protective Effects of Resveratrol on Aflatoxin B1-Induced Toxicity: A Whole Transcriptomic Study in a Bovine Hepatocyte Cell Line. *Antioxidants (Basel).* 2021 Jul 29;10(8):1225. doi: 10.3390/antiox10081225.
3. **PAULETTO M**, Giantin M, Tolosi R, Bassan I, Barbarossa A, Zaghini A, Dacasto M. Curcumin Mitigates Afb1-Induced Hepatic Toxicity By Triggering Cattle Antioxidant and Anti-Inflammatory Pathways: A Whole Transcriptomic In Vitro Study. *Antioxidants* 2020, 9, 1059; doi:10.3390/antiox9111059.
4. Nassi A, Quintieri L, Merlanti R, Pezzato F, Capolongo F, **PAULETTO M**, Dacasto M, Giantin M. Midazolam oxidation in cattle liver microsomes: The role of cytochrome P450 3A. *J Vet Pharmacol Ther.* 2020 Sep 7. doi: 10.1111/jvp.12906.
5. **PAULETTO M**, Tolosi R, Dacasto M, Giantin M. Missense single nucleotide variants affecting CYP3A catalytic activity are present in Limousine cattle. *Ital. J. Anim. Sci.* 2020 19:1, 880-886. doi: 10.1080/1828051X.2020.1808100.
6. Delisle L, **PAULETTO M**, Vidal-Dupiol J, Petton B, Bargelloni L, Montagnani C, Pernet F, Corporeau C, Fleury E. High temperature induces transcriptomic changes in *Crassostrea gigas* that hinders progress of Ostreid herpesvirus (OsHV-1) and promotes survival. *J Exp Biol.* 2020 Aug 17. jeb.226233 doi: 10.1242/jeb.226233.
7. **PAULETTO M**, Tolosi R, Giantin M, Guerra G, Barbarossa A, Zaghini A, Dacasto M. Insights into Aflatoxin B1 Toxicity in Cattle: An In Vitro Whole-Transcriptomic Approach. *Toxins* 2020, 12, 429. doi:10.3390/toxins12070429.
8. Pascual A, **PAULETTO M**, Giantin M, Radaelli G, Ballarin C, Birolo M, Zomeño C, Dacasto M, Bortoletti M, Vascellari M, Xiccato G, Trocino A. Effect of dietary supplementation with yeast cell wall extracts on performance and gut response in broiler chickens. *J Anim Sci Biotechnol.* 2020 May 1;11:40. doi: 10.1186/s40104-020-00448-z.
9. **PAULETTO M**, Elgendy R, Ianni A, Marone E, Giantin M, Grotta L, Ramazzotti S, Bennato F, Dacasto M, Martino G. Nutrigenomic Effects of Long-Term Grape Pomace Supplementation in Dairy Cows. *Animals* 2020, 10, 714. doi: 10.3390/ani10040714.
10. **PAULETTO M**, Cattelan S, Pilastro A, Babbucci M, Bargelloni L, Gasparini C. Molecular insights into post-mating immune response in a fish with internal fertilization [published online ahead of print, 2020 Mar 9]. *J Evol Biol.* 2020;10.1111/jeb.13614.
11. Giantin M, Rahnasto-Rilla M, Tolosi R, Lucatello L, **PAULETTO M**, Guerra G, Pezzato F, Lopparelli RM, Merlanti R, Carnier P, Capolongo F, Honkakoski P, Dacasto M. Functional impact of cytochrome P450 3A (CYP3A) missense variants in cattle. *Sci Rep.* 2019 Dec 23;9(1):19672. doi: 10.1038/s41598-019-56271-8.
12. Bargelloni L, Babbucci M, Ferraresso S, Papetti C, Vitulo N, Carraro R, **PAULETTO M**, Santovito G, Lucassen M, Mark FC, Zane L, Patarnello T. Draft genome assembly and transcriptome data of the icefish *Chionodraco myersi* reveal the key role of mitochondria for a life without hemoglobin at subzero temperatures. *Commun Biol.* 2019 Nov 29;2:443. doi: 10.1038/s42003-019-0685-y.
13. **PAULETTO M**, Lopparelli RM, Pegolo S, Armani M, Zorzan E, Giantin M, Bertotto D, Gallochio F, Zancanella V, Capolongo F, Binato G, Mutinelli F, Dacasto M. Significance of the goby *Zosterisessor ophiocephalus* as a sentinel species for Venice Lagoon contamination:

Combining biomarker responses and bioaccumulation. *Sci Total Environ* 2019 Jan 4; 660: 959-973. doi: 10.1016/j.scitotenv.2019.01.033.

14. **PAULETTO M**, Manousaki T, Ferraresso S, Babbucci M, Tsakogiannis A, Louro B, Vitulo N, Quoc VH, Carraro R, Bertotto D, Franch R, Maroso F, Aslam ML, Sonesson, AK, Simionati B, Malacrida G, Cestaro A, Caberlotto S, Sarropoulou E, Mylonas CC, Power DM, Patarnello T, Canario AVM, Tsigenopoulos C, Bargelloni L. Genomic analysis of *Sparus aurata* reveals the evolutionary dynamics of sex-biased genes in a sequential hermaphrodite fish. *Commun Biol*. 2018 Aug 17;1:119. doi: 10.1038/s42003-018-0122-7.
15. **PAULETTO M**, Di Camillo B, Miner P, Huvet A, Quillien V, Milan M, Ferraresso S, Pegolo S, Patarnello T, Bargelloni L. Understanding the mechanisms involved in the high sensitivity of *Pecten maximus* larvae to aeration. *Aquaculture* 2018 Dec 1; 497: 189-199. doi: 10.1016/j.aquaculture.2018.07.059.
16. Moreira R, Pereiro P, Balsiero P, Milan M, **PAULETTO M**, Bargelloni L, Novoa B, Figueras A. Revealing *Mytilus galloprovincialis* transcriptomic profiles during ontogeny. *Dev Comp Immunol*. 2018. doi:10.1016/j.dci.2018.01.016.
17. Delisle L, Fuhrmann M, Quéré C, **PAULETTO M**, Pichereau V, Pernet F, Corporeau C. The Voltage-Dependent Anion Channel (VDAC) of Pacific Oysters *Crassostrea gigas* Is Upaccumulated During Infection by the Ostreid Herpesvirus-1 (OsHV-1): an Indicator of the Warburg Effect. *Mar Biotechnol*. 2018. <https://doi.org/10.1007/s10126-017-9789-x>
18. Lafont M, Petton B, Vergnes A, **PAULETTO M**, Segarra A, Gourbal B, Montagnani C. Long-lasting antiviral innate immune priming in the Lophotrochozoan Pacific oyster, *Crassostrea gigas*. *Sci Rep*. 2017 Oct 13;7(1):13143. doi: 10.1038/s41598-017-13564-0.
19. **PAULETTO M**, Segarra A, Montagnani C, Quillien V, Faury N, Le Grand J, Miner P, Petton B, Labreuche Y, Fleury E, Fabioux C, Bargelloni L, Renault T, Huvet A. Long dsRNAs promote an anti-viral response in Pacific oyster hampering ostreid herpesvirus 1 replication. *J Exp Biol*. 2017 Aug 10. pii: jeb.156299. doi: 10.1242/jeb.156299.
20. Basso A, Babbucci M, **PAULETTO M**, Riginella E, Patarnello T, Negrisol E. The highly rearranged mitochondrial genomes of the crabs *Maja crispata* and *Maja squinado* (Majidae) and gene order evolution in Brachyura. *Sci Rep*. 2017 Jun 22;7(1):4096. doi: 10.1038/s41598-017-04168-9.
21. **PAULETTO M**, Milan M, Huvet A, Corporeau C, Suquet M, Planas JV, Moreira R, Figueras A, Novoa B, Patarnello T, Bargelloni L. Transcriptomic features of *Pecten maximus* oocyte quality and maturation. *PLoS One*. 2017 Mar 2;12(3):e0172805. doi: 10.1371/journal.pone.0172805.
22. Boonmee A, Heude Berthelin C, Kingtong S, **PAULETTO M**, Bernay B, Adeline B, Suquet M, Sourdain P, Kellner P. Differential protein expression during sperm maturation and capacitation in an hermaphroditic bivalve, *Pecten maximus* (Linnaeus, 1758). *J Molluscan Stud* 2016; 82 (4): 575-584. doi: 10.1093/mollus/eyw028
23. Pegolo S, Cecchinato A, Mach N, Babbucci M, **PAULETTO M**, Bargelloni L, Schiavon S, Bittante G. Transcriptomic Changes in Liver of Young Bulls Caused by Diets Low in Mineral and Protein Contents and Supplemented with n-3 Fatty Acids and Conjugated Linoleic Acid. *PLoS One*. 2016 Dec 8;11(12):e0167747. doi:10.1371/journal.pone.0167747.
24. Babbucci M, Ferraresso S, **PAULETTO M**, Franch R, Papetti C, Patarnello T, Carnier P, Bargelloni L. An integrated genomic approach for the study of mandibular prognathism in the European seabass (*Dicentrarchus labrax*). *Sci Rep*. 2016 Dec 8;6:38673. doi: 10.1038/srep38673.

25. Milan M, Matozzo V, **PAULETTO M**, Di Camillo B, Giacomazzo M, Boffo L, Binato G, Marin MG, Patarnello T, Bargelloni L. Can ecological history influence response to pollutants? Transcriptomic analysis of Manila clam collected in different Venice lagoon areas and exposed to heavy metal. *Aquat Toxicol.* 2016 May; 174:123-33. doi: 10.1016/j.aquatox.2016.02.024.
26. Extending RAD tag analysis to microbial ecology: a comparison between MultiLocus Sequence Typing and 2b-RAD to investigate *Listeria monocytogenes* genetic structure. *Mol Ecol Resour.* 2016;16(3):823-835. doi:10.1111/1755-0998.12495.
27. de Sousa JT, Milan M, **PAULETTO M**, Bargelloni L, Joaquim S, Matias D, Matias AM, Quillien V, Leitão A, Huvet A. A microarray-based analysis of oocyte quality in the European clam *Ruditapes decussatus*. *Aquaculture* 2015 September; 446:17-24. doi: 10.1016/j.aquaculture.2015.04.018.
28. Avio CG, Gorbi S, Milan M, Benedetti M, Fattorini D, d'Errico G, **PAULETTO M**, Bargelloni L, Regoli F. Pollutants bioavailability and toxicological risk from microplastics to marine mussels. *Environ Pollut.* 2015 Mar;198:211-22. doi: 10.1016/j.envpol.2014.12.021.
29. Milan M, **PAULETTO M**, Boffo L, Carrer C, Sorrentino F, Ferrari G, Pavan L, Patarnello T, Bargelloni L. Transcriptomic resources for environmental risk assessment: a case study in the Venice lagoon. *Environ Pollut.* 2015 Feb;197:90-8. doi: 10.1016/j.envpol.2014.12.005.
30. **PAULETTO M**, Milan M, de Sousa JT, Huvet A, Joaquim S, Matias D, Leitão A, Patarnello T, Bargelloni L. Insights into molecular features of *Venerupis decussata* oocytes: a microarray-based study. *PLoS One.* 2014 Dec 3;9(12):e113925.
31. de Sousa JT, Milan M, Bargelloni L, **PAULETTO M**, Matias D, Joaquim S, Matias AM, Quillien V, Leitão A, Huvet A. A Microarray-Based Analysis of Gametogenesis in Two Portuguese Populations of the European Clam *Ruditapes decussatus*. *PLoS One.* 2014 Mar 18;9(3):e92202.
32. **PAULETTO M**, Milan M, Moreira R, Novoa B, Figueras A, Babbucci M, Patarnello T, Bargelloni L. Deep transcriptome sequencing of *Pecten maximus* hemocytes: A genomic resource for bivalve immunology. *Fish Shellfish Immunol.* 2014 Mar;37(1):154-65. doi: 10.1016/j.fsi.2014.01.017. Epub 2014 Jan 31.
33. Milan M, **PAULETTO M**, Patarnello T, Bargelloni L, Marin MG, Matozzo V. Gene transcription and biomarker responses in the clam *Ruditapes philippinarum* after exposure to ibuprofen. *Aquatic Toxicology* 2013, 15;126:17-29.

#### *Abstracts on international journal (2)*

1. **PAULETTO M**, Milan M, Babbucci M, Figueras A, Novoa B, Balseiro P, Jacobsen A, Magnesen T, Huvet A, Patarnello T, Bargelloni L. Transcriptomic analysis of *Pecten maximus* hemocytes. In: *FISH & SHELLFISH IMMUNOLOGY* Volume 34, Issue 6, Pages 1671, JUN 2013.
2. Lopparelli RM, Pegolo S, Armani S, Bertotto D, Giantin M, **PAULETTO M**, Zancanella V, Zorzan E, Capolongo F, Binato G, Mutinelli F, Dacasto M. Molecular and biochemical biomarkers in environmental monitoring: a study with a benthic fish living in the Venice Lagoon. In: 12th International Congress of the European Association for Veterinary Pharmacology and Toxicology, *JOURNAL OF VETERINARY PHARMACOLOGY AND THERAPEUTICS*, vol. 35 (Spl.3), p. 64-65, ISSN: 0140-7783, Noordwijkerhout, NL, July 8-12, 2012.

#### 6. Conferences

##### *Oral presentations at national or international conferences (6)*

1. PAULETTO M, Giantin M, Bassan I, Dacasto M. Effects of natural antioxidants on aflatoxin B1 hepatotoxicity in cattle: targeted in vitro post-transcriptional studies. In: 74° Convegno SISVET, 23-26 June 2021.
2. PAULETTO M, Tolosi R, Schoeniger A, Giantin M, Dacasto M. Protective role of natural antioxidants against Aflatoxin B1: transcriptional effects in a cattle fetal liver cell line (BFH12). In: 73° Convegno SISVET, 19-22 June 2019.
3. PAULETTO M. Il genoma dell'orata: una risorsa per l'acquacoltura moderna (The gold sea bream genome: a resource for modern aquaculture). Invited speaker at AQUAFARM (3rd edition), Pordenone, Italy, 13-14 February 2019.
4. PAULETTO M, Di Camillo B, Miner P, Huvet A, Milan M, Ferraresso S, Pegolo S, Patarnello T, Bargelloni L. Understanding the mechanisms involved in high sensitivity to aeration in *Pecten maximus* early larval stages. In: Physiomar 17. Cambridge, UK, 18-21 September 2017.
5. PAULETTO M, Milan M, Babbucci M, Figueras A, Novoa B, Balseiro P, Jacobsen A, Magnesen T, Huvet A, Patarnello T, Bargelloni L. Transcriptomic analysis of *Pecten maximus* hemocytes. In: 1st Conference of Fish and Shellfish Immunology. Vigo, Spain, 25-28 June 2013.
6. PAULETTO M, Milan M, Figueras A, Novoa B, Leitao A, Huvet A, Patarnello T, Bargelloni L. Transcriptomic analysis of *Ruditapes decussatus* oocytes. In: Physiomar 12. Santiago de Compostela, Spain, 4-8 September 2012.

*Chapter in a book (1)*

1. Milan M, Avio CG, Gorbi S, PAULETTO M, Benedetti M, d'Errico G, Fattorini D, Patarnello T, Regoli L, Bargelloni L. Exploring the Effects of Microplastics on the Hepatopancreas Transcriptome of *Mytilus galloprovincialis*. In: *Fate and Impact of Microplastics in Marine Ecosystems (1<sup>st</sup> Edition)*. Editors: Baaztan J, Jorgensen B, Pahl S, Thompson R, Vanderlinden J. January 2017. DOI:10.1016/B978-0-12-812271-6.00058-2

*Poster presentations (5)*

1. Pascual A, PAULETTO M, Giantin M, Dacasto M, Birolo M, Xiccato G, Trocino A Dietary supplementation with yeast cell walls affects feed conversion and gut transcriptome of broiler chickens. In: 23<sup>rd</sup> Congress of the ESVCN - Torino 18-20 Sep. 2019
2. Milan M, PAULETTO M, Boffo L, Carrer C, Sorrentino F, Ferrari G, Pavan L, Patarnello T, Bargelloni L. Impiego della trascrittomico nella valutazione del rischio ambientale. In: SIRAM (Società Italiana Ricerca Applicata Molluschicoltura) Chioggia (Italy), 06 November 2015.
3. Milan M, PAULETTO M, Dalla Rovere G, Ferraresso S, Boffo L, Patarnello T, Bargelloni L. Identificazione di marcatori genetici nella vongola filippina *R. philippinarum*. In: SIRAM (Società Italiana Ricerca Applicata Molluschicoltura) Chioggia (Italy), 06 November 2015.
4. Bargelloni L, PAULETTO M, Milan M, Babbucci M, Balseiro P, Blanco A, Huvet A, Jacobsen A, Kamermans P, King J, Leitao A, Magnesen T, Moreira R, Novoa B, Figueras A. Nuove risorse genomiche per specie bivalvi: il progetto Europeo ReProSEED. In: SIRAM (Società Italiana Ricerca Applicata Molluschicoltura) Teramo (Italy), 10 November 2012.
5. PAULETTO M, Milan M, Figueras A, Novoa B, Leitao A, Huvet A, Patarnello T, Bargelloni L. Analisi del trascrittoma di oociti in *R. decussatus*. In: SIRAM (Società Italiana Ricerca Applicata Molluschicoltura) Teramo (Italy), 10 November 2012.