

EUROPEAN CURRICULUM VITAE FORMAT



Part I - General Information

Surname and name **Palomba Marialetizia**
E-mail **marialetizia.palomba@unitus.it**

Part II - Education and Training

Date of achievement 18/05/2020 (A.Y. 2018/2019)
Title obtained **PhD in Ecology and Sustainable Management and Environmental Resources**
Thesis title An “omic” approach to investigate the interface between the host-parasite system: The case of *Anisakis* and their natural and accidental hosts
s.s.d. VET/06
Name and address of institution Tuscia University – Via S. Maria in Gradi, 4 – Viterbo

Date of achievement 23/02/2016 (A.Y. 2014/2015)
Title obtained **Master’s degree in Marine Biology and Ecology**
Grade obtained 110/110 *cum laude*
Thesis title Host-parasite interaction: study of molecular mechanisms involved in the migration process of *Anisakis pegreffii*
Graduation class LM-6
Name and address of institution Tuscia University – Via S. Maria in Gradi, 4 - Viterbo

Part III - Scientific and Professionalizing Activity

Period 30/05/2024 to date
Position **Researcher Tenure Track (RTT)**
s.s.d. MEDVET/06
Name and address of institution Tuscia University – Via S. Maria in Gradi, 4 - Viterbo
Department Ecological and Biological Sciences

Period 30/12/2021 to 30/05/2024
Position **Researcher (RTDA)**
s.s.d. VET/06
Name and address of institution Tuscia University – Via S. Maria in Gradi, 4 - Viterbo
Department Ecological and Biological Sciences

Period 01/10/2020 to 30/09/2021
Position **Research Fellow**
Activity Integrated taxonomy, molecular-genetic analysis, and phylogeny of parasites (nematodes, tapeworms and acanthocephali) of marine mammals, fish and invertebrates
Project title Host-parasite molecular interaction: the case of anisakid nematodes and their natural hosts
s.s.d. VET/06
Name and address of institution Stazione Zoologica Anton Dohrn – Villa Comunale, 1 – Naples
Department Integrative Marine Ecology

Period 01/06/2020 to 30/09/2020
Position **Scholarship**
Activity *De novo* transcriptome of *A. pegreffii* and characterization of extracellular vesicles (EVs) released by *A. pegreffii* *in vitro* cultures.
Project title What shapes the parasite *Anisakis* – human host interaction? Integrating genetic, molecular, and immunological approaches to investigate the zoonotic disease, anisakiasis
Name and address of institution Istituto Pasteur, Fondazione Cenci Bolognetti – Viale Regina Elena, 291
Department Public Health and Infectious Diseases (division Parasitology), Sapienza University

Period 01/12/2019 to 31/05/2020

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Position	Scholarship
Activity	Molecular-genetic analysis of parasites of the genus <i>Anisakis</i> and their use as biological tags of fish stocks
Project title	TRANSBORAN: 'Transboundary population structure of sardine, European hake and blackspot seabream in the Alboran Sea and adjacent waters: a multidisciplinary approach' (FAO COPEMED II)
Name and address of institution	Sapienza, University of Rome – P.le Aldo Moro, 5 – Rome
Department	Public Health and Infectious Diseases (division Parasitology)
Period	01/08/2016 to 30/09/2016
Position	Scholarship
Activity	Gene expression of proteins in anisakid nematodes involved in adaptation and immune response of natural and accidental hosts
Project title	Expression of genes coding proteins involved in the immune response to <i>Anisakis</i>
Name and address of institution	Sapienza, University of Rome – P.le Aldo Moro, 5 – Rome
Department	Public Health and Infectious Diseases (division Parasitology)
Part IV – Educational activity	
Period	<i>Lecturer in Marine Parasitology – International Course in Marine Biology and Ecology</i> A.Y. 2024-2025, 2023-2024
CFU	6 (48h)
Name and address of institution	Tuscia University – Via S. Maria in Gradi, 4 - Viterbo
Department	Ecological and Biological Sciences
Period	<i>Lecturer in Marine Parasitology – National Course in Marine Biology and Ecology</i> A.Y. 2022-2023
CFU	6 (48h)
Name and address of institution	Tuscia University – Via S. Maria in Gradi, 4 - Viterbo
Department	Ecological and Biological Sciences
Period	<i>Subject Expert in Marine Parasitology</i> A.Y. 2020-2021
Name and address of institution	Tuscia University – Via S. Maria in Gradi, 4 - Viterbo
Department	Ecological and Biological Sciences
<i>Co-Supervisor of 3 PhD theses in Ecology and Sustainable Management of Environmental Resources</i>	-Spatial and temporal analysis of the genetic diversity of the species of <i>Contracaecum osculatum</i> s.l. complex (Nematoda: Anisakidae). 2021-2024 Dr. Beatrice Belli -Food-web transmitted endoparasites and their hosts: an integrative approach to investigate the biodiversity of the marine ecosystem from Mediterranean Sea waters. 2021-2024 Dr. Renato Aco-Alburquerque -A host-parasite predictive model for the monitoring of a coastal marine ecosystem. 2023-2026 Dr. Marta Favero
<i>Co-supervisor of 1 undergraduate thesis in Parasitology for the Bachelor's Degree in Biological Sciences</i>	<i>Anisakis</i> e Anisakiasis: a neglected zoonosis– Dr. Claudio Ambrogetti A.Y. 2020-2021
<i>Co-supervisor of 7 master's theses in Marine Parasitology for the Master's Degree in Marine Biology and Ecology</i>	-Biodiversity of Marine Anisakids in the Arctic: From Genetic Characterization to Ecological Aspects - Dr. Marta Le Noci, A.Y. 2022-2023 -Parasites as Environmental Indicators: The Case of Protists in a Sentinel Organism, <i>Mytilus galloprovincialis</i> , from the Tyrrhenian Coast - Dr. Roberta Andolfi, A.Y. 2019-2020 - <i>Anisakis typica</i> (s.l.) (Nematoda: Anisakidae), Parasite of Fish Species in the Indian

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	Ocean: Genetic-Molecular Study and Ecological Aspects - Dr. Pamela Bafundi, A.Y. 2019-2020 -Helminth Parasites of <i>Lepidopus caudatus</i> (Teleostei: Trichiuridae) from the Mediterranean: Epidemiological and Ecological Aspects - Dr. Eleonora Scanu, A.Y. 2018-2019 -Parasites of the Genus <i>Anisakis</i> as Biological Tags for Fish Stocks: The Case of the European Hake, <i>Merluccius merluccius</i>, in European Waters - Dr. Morena Gerace, A.Y. 2018-2019 -Gene Expression of <i>Anisakis pegreffii</i> (Nematoda: Anisakidae) Proteins Involved in Host-Parasite Interaction - Dr. Arianna Ruda, A.Y. 2018-2019 Marine Anisakid Parasites of Fish: Experimental Study on the Gene Expression of Proteins Involved in Host-Parasite Interaction - Dr. Francesca Pallucco, A.Y. 2017-2018
Period	<i>Activities of A.D.I. in Parasitology (C.I. Microbiology) in the Degree Course in Medicine and Surgery, Course C</i> A.Y. 2019-2020, 2020-2021
Name and address of institution	Sapienza, University of Rome – P.le Aldo Moro, 5 – Rome
Period	<i>Activities of A.D.E. in Parasitology in the Degree Course in Nursing, Course C</i> A.A. 2018-2019
Name and address of institution	Policlinico Umberto I of Rome, Viale del Policlinico, 155 – Rome
VI- Prizes and Awards	2020. Best thesis award in Parasitology, Italian Society of Parasitology (SoIPa)
Other	2017 to date. Member of the Italian Society of Parasitology (SoiPa) 2017 to 2021. Member of the board of directors of the Southern Environmental Education Center (CMEA)

VII - List of Research Products

Publications in peer-reviewed journals

Cipriani P., Giulietti L., Bao M., Palomba M., Mattucci S., Levsen A. (2024). Post-mortem tissue migration of *Anisakis simplex* (s.s.) larvae (Nematoda: Anisakidae) in three commercially harvested fish species from the Northeast Atlantic: The role of storage time and temperature. *Food Control* 157, 110162.

Fruscione, S., Barrale, M., Zarcone, M., Alba, D., Ravazzolo, B.; Belluzzo, M.; Onida, R.; Cammilleri, G.; Costa, A.; Ferrantelli, V.; Mattiucci et al. Screening of *Anisakis*-Related Allergies and Associated Factors in a Mediterranean Community Characterized by High Seafood Consumption. *Foods* 2024, 13, 2821.

Cipriani P., Palomba M., Giulietti L., Aco-Alburquerque, Andolfi R., Doeschate M.T., Brownlow A., Davison N., Mattiucci S. (2024). Anisakid parasite diversity in a pygmy sperm whale, *Kogia breviceps* (Cetacea: Kogiidae) stranded at the edge of its distribution range in the Northeast Atlantic Ocean. *Parasite*, 31, 43.

Timi J.T., Buratti, C., Braicovich P., Irigoitia M., Lanfranchi, A.L., Palomba M., Parietti M., Mattiucci S. (2024). Parasite assemblages of lanternfishes (Myctophidae) in deep subantarctic waters: Potential indicators for ecosystem monitoring. *Deep-Sea Research Part I: Oceanographic Research Papers* 204, 104232.

Virgili R., Fasciglione P., Tiralongo F., Pannone R., Palomba M., Santoro M., De Luca P., Crocetta F. Interdisciplinary approaches at early invasion stages maximise the evidence on human-induced and climate-driven fish dispersal. *Hydrobiologia*

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Lopez-Verdejo A., Palomba M., Crocetta F., Santoro M. (2024). Integrative taxonomy of metazoan parasites of the bluntnose sixgill shark *Hexanchus griseus* (Bonnaterre, 1788) in the Mediterranean Sea, with the resurrection of *Grillotia acanthoscolex* Rees, 1944 (Cestoda: Trypanorhyncha). *Journal of Fish Biology*,

Palomba M., Marchiori E., Tedesco P., Fioravanti M., Marcer F., Gustinelli A., Aco-Alburquerque R., Belli B., Canestrelli D., Santoro M., Cipriani P., Mattiucci S. (2023). An update and ecological perspective on certain sentinel helminth endoparasites within the Mediterranean Sea. *Parasitology* 1-19.

Palomba M., Libro P., Di Martino J., Roca-Geronès X., Macali A., Castrignanò T., Canestrelli D., Mattiucci S. (2023). De novo transcriptome assembly of an Antarctic nematode for the study of thermal adaptation in marine parasites. *Scientific Data* 10, 720.

Palomba M., Rughetti A., Mignogna G., Castrignanò T., Rahimi H., Masuelli L., Napoletano C., Pinna V., Giorgi A., Santoro M., Schininà M. E., Maras B. (2023). Proteomic characterization of extracellular vesicles released by third stage larvae of the zoonotic parasite *Anisakis pegreffii* (Nematoda: Anisakidae). *Frontiers in Cellular and Infection Microbiology* 13, 1079991.

Brusca I., Barrale M., Zarcone M., Fruscione S., Onida R., De Bella D. D., Alba D., Belluzzo M., Uasuf C. G., Cammilleri G., Costa A., Ferrantelli V., Savatteri A., Cannizzaro E., Calamusa G., Lacca G., Maida C. M., Pipitone S., D'Atria A., Palomba M., Costantino C., Mattiucci S., Mazzucco W. (2023). Basophil activation test in the diagnosis of *Anisakis* allergy: An observational study from an area of high seafood consumption in Italy. *Pathogens* 12, 777.

Ganucci Cancellieri U., Amicone G., Cicero L., Milani A., Mosca O., Palomba M., Mattiucci S., Bonaiuto M. (2023). Can food safety practices and knowledge of raw fish promote perception of infection risk and safe consumption behavior intentions related to the zoonotic parasite *Anisakis*? *Sustainability* 15, 7383.

Pegoraro de Macedo, M. R., Palomba M., Santoro M. (2023). The current state of knowledge on parasitic copepods (Siphonostomatoida: Pandaridae) of Elasmobranchs. *Veterinary Clinics of North America – Exotic Animal Practice* 26, 475 – 509.

Caballero-Huertas, M., Palomba M., Frigola-Tepe X., Munoz, M., Mattiucci S., Vinas J. (2023). Ascaridoid parasites in European sardine throughout the annual cycle: Variability in parasitic load according to host stock features. *International Journal for Parasitology: Parasites and Wildlife* 20, 1-11.

Roca-Geronès X., Roser F., Montoliu I., Casadevall M., Tobella C., Bas J., Palomba M., Mattiucci S. (2023). Genetic diversity of *Contracaecum rudolphii* sp. A (Nematoda: Anisakidae) parasitizing the European Shag *Phalacrocorax aristotelis desmarestii* from the Spanish Mediterranean coast. *Frontiers in Veterinary Science* 10, 1122291.

Duflot M., Cresson P., Maéva J., Chartier L., Bourgau O., Palomba M., Mattiucci S., Midelet G., Gay M. (2023). Black spot diseases in seven commercial fish species from the English Channel and the North Sea: infestation levels, identification and population genetics of *Cryptocotyle* spp. *Parasite* 30, 28.

Cipriani P., Palomba M., Giulietti L., Marcer F., Mazzariol S., Santoro M., Aco Alburquerque R., Covelo P., Lopez A., Begona S., Pierce G.J., Brownlow A., Davinson N.J., McGovern B., Frantzis A., Alexiadou P., Højgaard D.P., Mikkelsen B., Paoletti M., Nascetti G., Levsen A., Mattiucci S. (2022). Distribution and genetic diversity of *Anisakis* spp. in cetaceans from the Northeast Atlantic Ocean and the Mediterranean Sea. *Scientific Reports* 12, 13664.

Bao M., Cipriani P., Giulietti L., Alam M.A., Palomba M., Mattiucci S., Levsen A. (2022). Ascaridoid nematodes infecting commercially important marine fish and squid species from Bangladesh waters in the Bay of Bengal. *Food and Waterborne Parasitology* 27, e00157.

Santoro M., Palomba M., Aco Alburquerque R., Mattiucci S. (2022). Integrative taxonomy reveals *Molicola uncinatus* and *Gymnorhynchus gigas* (Cestoda: Trypanorhyncha) coinfection in the Atlantic pomfret *Brama brama* from the Mediterranean Sea, with notes on the phylogenetic position of *G. gigas* within the family *Gymnorhynchidae*. *Frontiers Veterinary Sciences* 17, 909163.

Santoro M., Bellisario B., Fernandez-Alvarez F.A., Crocetta F., Palomba M. (2023). Parasites and prey of the nursehound shark *Scyliorhinus stellaris* (Linnaeus, 1758): Insights into hidden trophic web interactions in the Mediterranean Sea. *Journal of Fish Biology*

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102, 271-280.

Santoro M., Bellisario B., Tanduo V., Crocetta F., Palomba M. (2022). Drivers of parasite communities in three sympatric benthic sharks in the Gulf of Naples (central Mediterranean Sea). *Scientific Reports* 12, 9969.

Cipriani P., Giuliotti L., Shayo S.D., Storesund J.E., Bao M., Palomba M., Mattiucci S., Levsen, A. (2022). Anisakid nematodes in *Trichiurus lepturus* and *Saurida undosquamis* (Teleostea) from the South-West Indian Ocean: Genetic evidence for the existence of sister species within *Anisakis typica* (s.l.), and food-safety considerations. *Food and Waterborne Parasitology* 28, e00177.

Levsen A., Cipriani P., Palomba M., Giuliotti L., Storesund J. E., Bao M. (2022). Anisakid parasites (Nematoda: Anisakidae) in 3 commercially important gadid fish species from the southern Barents Sea, with emphasis on key infection drivers and spatial distribution within the hosts. *Parasitology* 149, 1942-1957.

Palomba M., Libro P., Di Martino J., Rughetti A., Santoro M., Mattiucci S., Castrignanò T. (2022). De novo transcriptome assembly and annotation of the zoonotic parasite *Anisakis pegreffii*. *BMC Research Notes* 15, 223.

Palomba M., Insacco G., Zava B., Santoro M. (2022). Occurrence and molecular characterization of some parasitic copepods (Siphonostomatoida: Pandaridae) of pelagic Mediterranean sharks. *Frontiers in Marine Science* 8, 778034.

Santoro M., Bellisario B., Crocetta F., degli Uberti B., Palomba M. 2021. A molecular and ecological study of *Grillotia* (Cestoda: Trypanorhyncha) larval infection in small to mid-sized benthonic sharks in the Gulf of Naples, Mediterranean Sea. *Ecology and Evolution* 11, 13744.

Santoro M., Palomba M., Modica MV. 2021. Larvae of *Sulcascaris sulcata* (Nematoda: Anisakidae) a parasite of sea turtles, infect the edible purple dye murex *Bolinus brandaris* in the Tyrrhenian Sea. *Food Control* 137, 108547.

Gabrielli S., Palomba M., Furzi F., Brianti E., Gaglio G., Napoli E., Rinaldi L., Aco Alburquerque R., Mattiucci S. 2021. Molecular subtyping of *Blastocystis* sp. isolated from farmed animals in Southern Italy. *Microorganisms* 9, 1656.

Santoro M., Crocetta F., Palomba M. 2021. Morphological updates, host-specificity, molecular data, and phylogenetic analysis of *Acanthobothrium coronatum* (Cestoda: Onchoproteocephalidea), a neglected parasite of the nursehound *Scyliorhinus stellaris*. *Infection Genetics and Evolution* 95, 105023.

Santoro M., Palomba M., Gili C., Marcer F., Marchiori E., Mattiucci S. 2021. Molecular and morphological characterization of *Bolbosoma balaenae* (Acanthocephala: Polymorphidae), a neglected intestinal parasite of the fin whale *Balaenoptera physalus*. *Parasitology* 148, 1-30.

Irigoitia M.*, Palomba M.*, Braicovich P.E., Lanfranchi A.L., Denuncio P., Gana J.C.M., Mattiucci S., Timi J.T. 2021. Genetic identification of *Anisakis* spp. (Nematoda: Anisakidae) from cetaceans of the Southwestern Atlantic Ocean: ecological and zoogeographical implications. *Parasitology Research* 120, 1-13.

*Equal contribution

Bello E.*, Palomba M.*, Webb S.C., Paoletti M., Cipriani P., Nascetti G., Mattiucci S. 2021. Investigating the genetic structure of the parasites *Anisakis pegreffii* and *A. berlandi* (Nematoda: Anisakidae) in a sympatric area of the southern Pacific Ocean waters using a multilocus genotyping approach: First evidence of their interspecific hybridization. *Infection, Genetics and Evolution* 92, 104887.

*Equal contribution

Palomba M., Santoro M., Alburquerque R., Cipriani P., Mattiucci S. 2021. First molecular detection of the parasites *Molicola uncinatus* and *Hepatoxylon trichiuri* (Cestoda: Trypanorhyncha) infecting the silver scabbardfish *Lepidopus caudatus* from the Central Mediterranean Sea: Implications for the seafood quality and safety. *Food Control* 122, 1077807.

Palomba M., Mattiucci S., Crocetta F., Osca D., Santoro M. 2021 Insights into the role of deep-sea squids of the genus *Histioteuthis* (Histioteuthidae) in the life cycle of ascaridoid parasites in the Central Mediterranean Sea waters. *Scientific Reports* 11, 7135.

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Sayyaf Dezfuli B., Simoni E., Bosi G., Palomba M., Mattiucci S., Giulietti L., Bao M., Levsen A., Cipriani P. 2021. Immunohistopathological response against anisakid nematode larvae and a coccidian in *Micromesistius poutassou* from NE Atlantic waters. *Journal of Helminthology* 95, e14.

Cipriani P., Palomba M., Giulietti L., Bao M., Mattiucci S., Levsen, A. 2021. *Anisakis simplex* (s.s.) larvae (Nematoda: Anisakidae) hidden in the mantle of European flying squid *Todarodes sagittatus* (Cephalopoda: Ommastrephidae) in NE Atlantic Ocean: Food safety implications. *International Journal of Food Microbiology* 339, 109021.

Aco Alburquerque R.*, Palomba M.*, Santoro M., Mattiucci S. 2020. Molecular identification of zoonotic parasites of the genus *Anisakis* (Nematoda: Anisakidae) from fish of the Southeastern Pacific Ocean (Off Peru coast). *Pathogens* 9, 910.

Santoro M., Palomba M., Mattiucci S., Osca D., Crocetta F. 2020. New parasite records for the sunfish *Mola mola* in the Mediterranean Sea and their potential use as biological tags for long-distance host migration. *Frontiers in Veterinary Science* 7, 579728.

Palomba M., Paoletti M., Webb S., Nascetti G., Mattiucci S. 2020. A novel nuclear marker and development of ARMS-PCR assay, targeting the metalloproteinase 10 (nas 10) locus to identify the species of the *Anisakis simplex* (s.l.) complex (Nematoda: Anisakidae). *Parasite* 27, 39.

Palomba M., Cipriani P., Giulietti L., Levsen A., Nascetti G., Mattiucci S. 2020. Differences in gene expression profiles of seven target proteins in third-stage larvae of *Anisakis simplex* (sensu stricto) by sites of infection in blue whiting (*Micromesistius poutassou*). *Genes* 11, 559.

Bao M., Cipriani P., Giulietti L., Roiha I., Paoletti M., Palomba M., Levsen A. 2020. Air-dried stockfish of Northeast Arctic cod do not carry viable anisakid nematodes. *Food control* 116, 107322.

Mattiucci S., Sbaraglia G.*, Palomba M.*, Filippi S., Paoletti M., Cipriani P., Nascetti G. 2020. Genetic identification and insights into the ecology of the two species *Contracaecum rudolphii* A and C. *rudolphii* B (Nematoda: Anisakidae), from aquatic ecosystems of Central Italy. *Parasitology Research* 119, 1-15.

*Equal contribution

Santoro M., Marchiori E., Palomba M., degli Uberti B., Marcer F., Mattiucci S. The Mediterranean mussel (*Mytilus galloprovincialis*) as intermediate host for the anisakid *Sulcascaris sulcata* (Nematoda), a pathogen parasite of the Mediterranean loggerhead turtle (*Caretta caretta*). *Pathogens* 9, 118.

Palomba M., Paoletti M., Colantoni A., Ruggetti A., Nascetti G., Mattiucci S. 2019. Gene expression profiles of antigenic proteins of third stage larvae of the zoonotic nematode *Anisakis pegreffii* in response to temperature conditions. *Parasite* 26, 52.

Cipriani P., Giulietti L., Palomba M., Mattiucci S., Bao M., Levsen A. 2019. Occurrence of larval ascaridoid nematodes in the Argentinean short-finned squid *Illex argentinus* from the Southwest Atlantic Ocean (off Falkland Islands). *International Journal of Food Microbiology* 297, 27-31.

Cipriani P., Sbaraglia G.L., Paoletti M., Giulietti L., Bellisario B., Palomba M., Buselic I., Mladineo I., Nascetti G., Mattiucci S. 2018. The Mediterranean European hake, *Merluccius merluccius*: detecting drivers influencing the *Anisakis* spp. larvae distribution. *Fisheries Research* 202, 79-89.

Cipriani P., Sbaraglia G.L., Palomba M., Giulietti L., Bellisario B., Buselic I., Mladineo I., Chelieschi R., Nascetti G., Mattiucci S. 2018. *Anisakis pegreffii* (Nematoda: Anisakidae) in European anchovy *Engraulis encrasicolus* from the Mediterranean Sea: Fishing ground as a predictor of parasite distribution. *Fisheries Research* 202, 59-68.

Book chapter:

Mattiucci S., **Palomba M.**, Cavallero S., D'Amelio S. 2022. *Anisakiasis*. In: *Helminth Infections and their impact on global public health*. Springer Link.

Mattiucci S., **Palomba M.**, Nascetti G. 2021. *Anisakis*. In: *Encyclopedia Infection and Immunity*, Elsevier pp. 1-16.