

Curriculum vitae of Alberto Pallavicini

Main areas of research

Alberto Pallavicini is Associate Professor in Genetics (SSD BIO/18) at the University of Trieste since 2006.

Professor Alberto Pallavicini holds a M.S. degree in Biology from the University of Padua. He had his research training at Dept. of Biology University of Padua with a thesis entitled “Cloning of globin mRNAs expressed in *L. zanandreae* before and after metamorphosis.” Post-lauream training, Ph.D in Genetics and post-doc at CRIBI Biotechnology Center (University of Padua) in the Functional Genomics Unit (headed by Prof. Gerolamo Lanfranchi) and in the Genomics and Bioinformatics Units (headed by Prof. Giorgio Valle).

Prof. Pallavicini has more than 20 years of research and managerial experience in the academic environment with emphasis on molecular biology, population genetics, transcriptomics and bioinformatics analysis, comparative and functional genomics. His work in the years 1993-2000 has contributed to elucidate the role of newly discovered proteins of the Z-band of the human skeletal muscle. His research interest in the last decade focused on the genomics of non-model organisms, first of all, the marine invertebrate *Mytilus galloprovincialis* biomarker of water pollution and a model for comparative immunology studies. Among his main contribution to this field, there is the definition of the mussel transcriptome and whole-genome expression analysis of mussels challenged with biotic and abiotic stressors. Significant achievements of these studies have been: a) the identification of an antimicrobial peptide with high sequence variability in the population of *M. galloprovincialis*, b) the identification of C1q domain-containing proteins in mussel and the expansion of this protein family in the bivalve genomes, c) the discovery of several secreted short peptides with antimicrobial or other activities. Besides the research activities on mussel, he was part of the scientific team publishing the genome sequence of the first model plant (*A. thaliana*), the living fossil *Latimeria chalumnae*, the Coffee plant (*C. canephora*), and finally the Mediterranean mussel (*M. galloprovincialis*). I can mention here other scientific interest such as: crayfish genomic analysis and metagenomics/metabarcoding analysis in the marine environment (bacteria, zooplankton, fish gut content).

Moreover, Prof. Pallavicini is an associated scientist at National Institute of Oceanography and Applied geophysics (OGS, Trieste), at Zoological Station Anton Dohrn (SZN, Napoli) e he is member of the National Interuniversity Consortium for Marine Science (CONISMA, Roma).

Professor Pallavicini published more than 150 papers in international scientific journals, 5 book chapters, and he is also the author of one patent. He is the referee for numerous international journals and grant applications of national and international agencies. He is a member of the Italian Genetics Society, of the Italian Society of Developmental and Comparative Immunology and the Molluscan Applied Research Italian Society.

Citation Report

I am the author of more than 150 ISI-listed published papers and five book chapters; I am the editor of 1 book; H-Index = 36, Average Citations per Article: 28.12 (Scopus as of May 2021); ResearcherID, J-4158-2012; ORCID, <http://orcid.org/0000-0001-7174-4603>

Ten most cited articles published since 2016:

- Biscotti, M.A., Gerdol, M., Canapa, A., Forconi, M., Olmo, E., Pallavicini, A., Barucca, M., Schartl, M. The lungfish transcriptome: A glimpse into molecular evolution events at the transition from water to land (2016) *Scientific Reports*, 6, art. no. 21571, . Cited 41 times.
- Carniel, F.C., Gerdol, M., Montagner, A., Banchi, E., De Moro, G., Manfrin, C., Muggia, L., Pallavicini, A., Tretiach, M. New features of desiccation tolerance in the lichen photobiont *Trebouxia gelatinosa* are revealed by a transcriptomic approach (2016) *Plant Molecular Biology*, 91 (3), pp. 319-339. Cited 37 times.
- Stefanni, S., Stanković, D., Borme, D., de Olazabal, A., Juretić, T., Pallavicini, A., Tirelli, V. Multi-marker metabarcoding approach to study mesozooplankton at basin scale (2018) *Scientific Reports*, 8 (1), art. no. 12085, . Cited 36 times.
- Giglio, A., Ammendola, A., Battistella, S., Naccarato, A., Pallavicini, A., Simeon, E., Tagarelli, A., Giulianini, P.G. *Apis mellifera ligustica*, Spinola 1806 as bioindicator for detecting environmental contamination: a preliminary study of heavy metal pollution in Trieste, Italy (2017) *Environmental Science and Pollution Research*, 24 (1), pp. 659-665. Cited 34 times.
- Leoni, G., De Poli, A., Mardirossian, M., Gambato, S., Florian, F., Venier, P., Wilson, D.N., Tossi, A., Pallavicini, A., Gerdol, M. Myticalins: A novel multigenic family of linear, cationic antimicrobial peptides from marine mussels (*Mytilus* spp.) (2017) *Marine Drugs*, 15 (8), art. no. 261, . Cited 29 times.
- Auguste, M., Lasa, A., Pallavicini, A., Gualdi, S., Vezzulli, L., Canesi, L. Exposure to TiO₂ nanoparticles induces shifts in the microbiota composition of *Mytilus galloprovincialis* hemolymph (2019) *Science of the Total Environment*, 670, pp. 129-137. Cited 26 times.
- Banchi, E., Ametrano, C.G., Stanković, D., Verardo, P., Moretti, O., Gabrielli, F., Lazzarin, S., Borney, M.F., Tassan, F., Tretiach, M., Pallavicini, A., Muggia, L. DNA metabarcoding uncovers fungal diversity of mixed airborne samples in Italy (2018) *PLoS ONE*, 13 (3), art. no. e0194489, . Cited 24 times.
- Gerdol, M., Venier, P., Edomi, P., Pallavicini, A. Diversity and evolution of TIR-domain-containing proteins in bivalves and Metazoa: New insights from comparative genomics (2017) *Developmental and Comparative Immunology*, 70, pp. 145-164. Cited 24 times.
- Gerdol, M., Fujii, Y., Hasan, I., Koike, T., Shimojo, S., Spazzali, F., Yamamoto, K., Ozeki, Y., Pallavicini, A., Fujita, H. The purplish bifurcate mussel *Mytilisepta virgata* gene expression atlas reveals a remarkable tissue functional specialization (2017) *BMC Genomics*, 18 (1), art. no. 590, . Cited 22 times.
- Buonocore, F., Stocchi, V., Nunez-Ortiz, N., Randelli, E., Gerdol, M., Pallavicini, A., Facchiano, A., Bernini, C., Guerra, L., Scapigliati, G., Picchietti, S. Immunoglobulin T from sea bass (*Dicentrarchus labrax* L.): Molecular characterization, tissue localization and expression after nodavirus infection (2017) *BMC Molecular Biology*, 18 (1), art. no. 8, . Cited 19 times.