



**UNIVERSITÀ DEGLI STUDI
DELL'INSUBRIA**

**DIPARTIMENTO DI
BIOTECNOLOGIE E SCIENZE
DELLA VITA - DBSV**
Prof. Gianluca Tettamanti

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http://www.uninsubria.eu/research/structfunct/cv_Tettamanti.htm

Date and Place of Birth

- October 20, 1972; Como, Italy

Education

- University of Milano, Italy, Degree in Biology -5 years-, 1997
- University of Insubria, Italy, PhD in Evolutionary Developmental Biology, 2003

Professional experience

- Research associate, Department of Biology, University of Milano, 1997-1998
- Visiting Scientist, Randall Institute, King's College London, UK, 1998
- PhD Student, DBSF, University of Insubria, 2000-2003
- Research Fellow, DBSF, University of Insubria, 2004
- Visiting Scientist, Randall Division of Cell and Molecular Biophysics, King's College London, UK, 2004
- Assistant Professor (Zoology), DBSM, University of Insubria, 2004-2011

Present position

- Associate Professor (Zoology), DBSV, University of Insubria, 2011-present

Teaching activity

- University of Insubria. Teaching assistant, Zoology, 2000-2005
- University of Insubria. Teacher, Biology I, 2000-2004/2006-2010
- University of Insubria. Teacher, Animal Biology, 2004-2010, 2015-2017
- University of Insubria. Teacher, Evolution, 2005-2017

- University of Insubria. Teacher, Developmental Biology, 2010-2014
- Tutor of twenty-four undergraduate students and supervisor of four PhD students
- University of Insubria. Member of the board of professors of the PhD program in "Cellular and Molecular Biology", 2009-present
- University of Insubria. Member of the board of professors of the PhD program in "Biotechnologies, Biosciences and Surgical Technologies", 2013-present

Research activity

- *Current research topics*

- 1) Cell death and regeneration mechanisms in insect development. The aim is of this part of the research is to increase the current knowledge on cell death processes in holometabolous insects, by revealing the underlying regulatory pathways and disclosing the complex relationships between apoptotic and autophagic cell death in different larval organs.
- 2) Insect biotechnology. Three separate topics are addressed: i) insect bioconversion of vegetable waste material to obtain protein for feed production; ii) identification of new genes and molecules with insecticide activity and a high level of selectivity; iii) generation of transgenic silkworms to improve qualitatively and quantitatively silk production.
- 3) Immune response. This part of the work aims at analyzing one of the fundamental mechanisms involved in the immune response of insects, i.e. melanization, in relation to amyloidogenesis.

- *Research funding*

1. Cariplo Foundation 2014 (protocol 2014-0550), "**Insect Bioconversion: from vegetable waste to Protein production for fish Feed (InBioProFeed)**" - € 498.000 total budget, 2015-2018 [Principal investigator]
2. FIR 2013 (protocol G48C13000410001), Italian Ministry of University and Research, "**New insights on *Bacillus thuringiensis* mode of action and resistance**"- € 437.353 total budget, 2014-2017 [Member of research unit]
3. Fondazione Cassa di Risparmio di Padova e Rovigo (protocol 1.07.02.20.00) - Progetti di Eccellenza 2011/2012 "**BioSilk Road: back to Italy. A new approach to sericulture: enhancing Lepidopteran natural strategies against pathogenic microorganisms**" - € 200.000 total budget, 2012-2015 [Head of research unit]
4. Regione Lombardia-MIUR-FESR Project (protocol R1.2011.0020478), "**SILKBioTECH-Biotechnological production of antimicrobial silk**" - € 1.084.000 total budget, 2012-2014 [Head of research unit]
5. Fellowship for the recruitment of an extra-european post-doc, University of Insubria, "**Analysis of cell death processes in an economically relevant insect model**" - € 20.000 total budget, 2013 [Principal investigator]

6. PRIN 2008 (protocol 2008SMCMCY), Italian Ministry of University and Research, "**Analysis of autophagic processes in *Bombyx mori* fat body**" - € 26.621 total budget, 2010-2012 [Principal investigator]
7. FAR 2008-2016, University of Insubria - € 2.000,00/year [Principal investigator]

Advisory and Review Panels

- Slovak Research and Development Agency, SK, 2007
- University of Milano, Project proposals for PostDoc fellowships, IT, 2011
- Italian Ministry of Education, University and Research, PRIN 2009 projects, IT, 2011
- Italian Ministry of Education, University and Research, FIR 2013 projects, IT, 2013
- Research Foundation Flanders - FWO, BE, 2013
- Czech Academy of Sciences, CZ, 2015
- Provincia Autonoma di Bolzano - Progetti FESR 2016, IT, 2016
- Italian Ministry of Education, University and Research, VQR 2011-2014, IT, 2016
- German Federal Ministry of Education and Research (BMBF) - "National Research Strategy BioEconomy 2030" framework programme (DE, 2016)
- University of Firenze, Project proposals for the call "Giovani ricercatori protagonisti" 2016, IT, 2017
- Member of the Board of Examiners for PhD theses (Bharathidasan University, India), 2013-2017
- Member of the Board of Examiners for PhD theses (University of Padova, Italy), 2014
- Member of the Board of Examiners for PhD theses (University of Insubria, Italy), 2015
- Member of the Board of Examiners for PhD theses (University of Napoli Federico II, Italy)

Membership in professional Societies

- British Society for Developmental Biology (BSDB), 2007-present
- Italian Society of Entomology (2016-)
- The Black, Caspian Seas and Central Asia Silk Association (BACSA) (2013-)
- Italian Society of Zoology (UZI), 2001-2017

Awards and Honors

- Research in Bioscience Award (Regio Insubrica, CH), 1999
- Research in Bioscience Award (Regio Insubrica, CH), 2003
- "P. Pasquini" Award for Developmental Biology (Unione Zoologica Italiana, I), 2005

Participation in congresses

- Ninety-three oral communications or poster presentations in national and international congresses

Editorial activity

- Member, Editorial Board, **Scientific Reports**, 2017-present
- Member, Editorial Board, **Invertebrate Survival Journal**, 2011-present
- Member, Editorial Board, **Psyche: a journal of entomology**, 2012-present
- Member, Editorial Board, **Journal of Radiation Research and Applied Sciences**, 2015-present
- Member, Editorial Board, **Advances in Life Sciences**, 2011-present
- Member, Editorial Board, **Online Journal of Biological Sciences**, 2015-present
- Member, Editorial Board, **ISRN Developmental Biology/International Scholarly Research Notices (Developmental Biology)**, 2016-present
- Member, Editorial Board, **The Open Pharmacology Journal**, 2008-2010
- Member, Editorial Board, **Research and Reviews in Biosciences**, 2007-2013
- Peer-review activity for the following international journals: Acta Zoologica, Advances in Life Sciences, African Journal of Biotechnology, American Journal of Medicine and Medical Sciences, Annals of the Entomological Society of America, Apoptosis, Archives of Insect Biochemistry and Physiology, Arthropod Structure and Development, Autophagy, Biologia, Biomedical and Environmental Sciences, BMC Biology, BMC Genomics, BMC Microbiology, Bulletin of Insectology, Canadian Journal of Zoology, Cell and Tissue Research, Cell Biology International, Cellular and Molecular Life Sciences, Comparative Biochemistry and Physiology, Current Medicinal Chemistry, Current Pharmaceutical Design, Developmental & Comparative Immunology, Expert Review of Anti-Infective Therapy, Frontiers in Food Science and Technology, Gene, Insect Biochemistry and Molecular Biology, Insect Molecular Biology, Insect Science, International Journal of Biological Sciences, International Journal of Biomedical Science, International Journal of Diabetes Research, International Journal of Molecular Sciences, International Journal of Radiation Biology, International Wound Journal, Invertebrate Survival Journal, ISRN Developmental Biology, Jacobs Journal of Entomology and Zoological Studies, Journal of Insect Physiology, Journal of Integrative Agriculture, Journal of Radiation Research and Applied Sciences, Methods in Enzymology, Micron, Microscopy and Microanalysis, Molecular Biology Reports, Mutation Research, Physiological Entomology, PLOS ONE, Proteome Science, Psyche: a journal of entomology, Science of the Total Environment, Scientific Reports, The Anatomical Record, The Open Pharmacology Journal, Toxins, Turkish Journal of Entomology, Zoological Science, 2005-present

- Executive Editor of the issue "Current perspectives on muscle regeneration and diseases", 2010 (Current Pharmaceutical Design, 2010 - Vol 16, issue 8) - Editorial pag. 904-905

Publications

Articles in peer-reviewed journals (*corresponding author) (mean IF: 3,037; total IF: 237,668; h index: 21; G index: 57; total citations: 4681)

1. de Eguileor M., Grimaldi A., Lanzavecchia G., Tettamanti G. and Valvassori R., 1998. Dimensional and numerical growth of helical fibers in leeches: an unusual pattern. *The Journal of Experimental Zoology*, 281:171-187
2. de Eguileor M., Grimaldi A., Boselli A., Tettamanti G., Lurati S., Valvassori R. and Lanzavecchia G., 1999. Possible roles of extracellular matrix and cytoskeleton in leech body wall muscle. *Journal of Microscopy*, 196: 6-18
3. de Eguileor M., Tettamanti G., Grimaldi A., Boselli A., Scari G., Valvassori R., Cooper E.L. and Lanzavecchia G., 1999. Histopathological changes after induced injury in leeches. *Journal of Invertebrate Pathology*, 74: 14-28
4. de Eguileor M., Grimaldi A., Tettamanti G., Valvassori R., Cooper E.L. and Lanzavecchia G., 2000. Different types of response against foreign antigens by leech leukocytes. *Tissue & Cell*, 32: 40-48
5. de Eguileor M., Giordana B., Leonardi M.G., Grimaldi A., Tettamanti G., Fiandra L., Valvassori R. and Lanzavecchia G., 2000. Integumental amino acid uptake in a carnivorous predator mollusc (*Sepia officinalis*, Cephalopoda). *Tissue & Cell*, 32: 389-399
6. de Eguileor M., Grimaldi A., Tettamanti G., Boselli A., Valvassori R., Cooper E.L. and Lanzavecchia G., 2000. Lipopolysaccharide-dependent induction of leech leukocytes that cross-react with vertebrate cellular differentiation markers. *Tissue & Cell*, 32: 437-445
7. de Eguileor M., Grimaldi A., Tettamanti G., Congiu T., Protasoni M., Reguzzoni M., Valvassori R. and Lanzavecchia G., 2001. Ultrastructure and functional versatility of hirudinean botryoidal tissue. *Tissue & Cell*, 33: 332-341
8. de Eguileor M., Grimaldi A., Tettamanti G., Valvassori R., Leonardi M.G., Giordana B., Tremblay E., Digilio M.C. and Pennacchio F., 2001. Larval anatomy and structure of absorbing epithelia in the aphid parasitoid *Aphidius ervi* Haliday (Hymenoptera, Braconidae). *Arthropod Structure & Development*, 30: 27-37
9. de Eguileor M., Grimaldi A., Tettamanti G., Ferrarese R., Congiu T., Protasoni M., Perletti G., Valvassori R. and Lanzavecchia G., 2001. *Hirudo medicinalis*: a new model system for testing activators and inhibitors of angiogenesis. *Angiogenesis*, 4: 299-312
10. de Eguileor M., Tettamanti G., Grimaldi A., Congiu T., Ferrarese R., Perletti G., Valvassori R., Cooper E.L. and Lanzavecchia G., 2003. Leeches: immune response, angiogenesis and biomedical applications. *Current Pharmaceutical Design*, 9: 133-147

11. Perletti G., Marras E., Dondi D., Grimaldi A., Tettamanti G., Valvassori R. and de Eguileor M., 2003. Assessment of the biological activity of an improved naked-DNA vector for angiogenesis gene therapy on a non-mammalian model. *International Journal of Molecular Medicine*, 11: 691-696
12. Tettamanti G., Grimaldi A., Ferrarese R., Palazzi M., Perletti G., Valvassori R., Cooper E.L., Lanzavecchia G. and de Eguileor M., 2003. Leech responses to tissue transplantation. *Tissue & Cell*, 35: 199-212
13. Tettamanti G.*, Grimaldi A., Valvassori R., Rinaldi L. and de Eguileor M., 2003. Vascular Endothelial Growth Factor is involved in neoangiogenesis in *Hirudo medicinalis* (Annelida, Hirudinea). *Cytokine*, 22: 168-179
14. Grimaldi A., Tettamanti G., Rinaldi L., Brivio M.F., Castellani D. and de Eguileor M., 2004. Muscle differentiation in tentacle of *Sepia officinalis* (Mollusca) is regulated by muscle regulatory factors (MRFs) related proteins. *Development Growth & Differentiation*, 46: 83-96
15. Perletti G., Osti D., Marras E., Tettamanti G. and de Eguileor M., 2004. Generation of VSV-G pseudotyped lentiviral particles in 293T cells. *Journal of Cellular and Molecular Medicine*, 8: 142-143
16. Grimaldi A., Tettamanti G., Brivio M.F., Valvassori R. and de Eguileor M., 2004. Differentiation of slow and fast fibers in tentacles of *Sepia officinalis* (Mollusca). *Development Growth & Differentiation*, 46: 181-193
17. de Eguileor M., Tettamanti G., Grimaldi A., Perletti G., Congiu T., Rinaldi L. and Valvassori R., 2004. *Hirudo medicinalis*: avascular tissues for clear-cut angiogenesis studies? *Current Pharmaceutical Design*, 10: 1979-1988
18. Grimaldi A.[§], Tettamanti G.[§], Martin B.L., Gaffield W., Pownall M.E. and Hughes S.M., 2004. Hedgehog regulation of superficial slow muscles fibres in *Xenopus* and the evolution of tetrapod trunk myogenesis. *Development*, 131: 3249-3262 ([§]*equal contribution*)
19. Grimaldi A., Tettamanti G., Rinaldi L., Valvassori R. and de Eguileor M., 2004. Role of cathepsin B in leech wound healing. *Invertebrate Survival Journal*, 1: 36-48
20. Tettamanti G.*, Grimaldi A., Rinaldi L., Arnaboldi F., Congiu T., Valvassori R. and de Eguileor M., 2004. The multifunctional role of fibroblasts during wound healing in *Hirudo medicinalis* (Annelida, Hirudinea). *Biology of the Cell*, 96: 443-455
21. Tettamanti G., Grimaldi A., Ferrarese R., Rinaldi L., Bortolotto A., Di Guardo G. and de Eguileor M., 2004. A comparative study of *sporta perimedullaris muscolosa* in the reniculus of six species of cetaceans. *The Italian Journal of Zoology*, 71: 115-121 (Errata 71: 271-273)
22. Ferrarese R., Brivio M., Congiu T., Falabella P., Grimaldi A., Mastore M., Perletti G., Pennacchio F., Sciacca L., Tettamanti G., Valvassori R. and de Eguileor M., 2005. Early suppression of immune response in *Heliothis virescens* larvae by the endoparasitoid *Toxoneuron nigriceps*. *Invertebrate Survival Journal*, 2: 60-68

23. Tettamanti G., Grimaldi A., Congiu T., Perletti G., Raspanti M., Valvassori R. and de Eguileor M. , 2005. Collagen reorganization in leech wound healing. *Biology of the Cell*, 97: 557-568
24. Rinaldi L., Basso P., Tettamanti G., Grimaldi A., Terova G., Saroglia M. and de Eguileor M., 2005. Oxygen availability causes morphological changes and a different VEGF/Flk-1/HIF-2 expression pattern in sea bass (*Dicentrarchus labrax*) gills. *The Italian Journal of Zoology*, 72: 103-111
25. Grimaldi A., Moriondo A., Sciacca L., Guidali M.L., Tettamanti G. and Negrini D., 2006. Functional arrangement of diaphragmatic initial lymphatic network. *American Journal of Physiology - Heart and Circulatory Physiology*, 291: H876-885
26. Tettamanti G., Malagoli. D., Marchesini E., Congiu T., de Eguileor M. and Ottaviani E., 2006. Oligomycin A induces autophagy in the IPLB-LdFB insect cell line. *Cell and Tissue Research*, 326: 179-186
27. Grimaldi A., Caccia S., Congiu T., Ferrarese R., Tettamanti G., Rivas-Pena M., Perletti G., Valvassori R., Valvassori R., Giordana B., Falabella P., Pennacchio F. and de Eguileor M., 2006. Structure and function of the extraembryonic membrane persisting around the larvae of the parasitoid *Toxoneuron nigriceps*. *Journal of Insect Physiology*, 52: 870-880
28. Grimaldi A., Tettamanti G., Perletti G., Valvassori R. and de Eguileor M., 2006. Hematopoietic cell formation in leech wound healing. *Current Pharmaceutical Design*, 12: 3033-3041
29. Tettamanti G., Malagoli D., Benelli R., Albini A., Grimaldi A., Perletti G., Noonan D.M., de Eguileor M. and Ottaviani E., 2006. Growth factors and chemokines: a comparative functional approach between invertebrates and vertebrates. *Current Medicinal Chemistry*, 13: 2737-2750
30. Grimaldi A., Tettamanti G., Guidali M.L., Brivio M.F., Valvassori R. and de Eguileor M., 2007. A hedgehog-like signal is involved in slow muscle differentiation in *Sepia officinalis* (Mollusca). *Invertebrate Survival Journal*, 4: 1-9
31. Hammond C.L., Hinitz Y., Osborn D.P.S., Minchin J., Tettamanti G. and Hughes S.M., 2007. Signals and myogenic regulatory factors restrict pax3/7 expression to dermomyotome-like tissue in zebrafish. *Developmental Biology*, 302: 504-521
32. Tettamanti G.*, Grimaldi A., Casartelli M., Ambrosetti E., Ponti B., Congiu T., Ferrarese R., Rivas-Pena M.L., Pennacchio F. and de Eguileor M., 2007. Programmed cell death and stem cell differentiation are responsible for midgut replacement in *Heliothis virescens* during prepupal instar. *Cell and Tissue Research*, 330: 345-359
33. Tettamanti G.*, Grimaldi A., Pennacchio F. and de Eguileor M., 2007. Lepidopteran larval midgut during prepupal instar: digestion or self-digestion? *Autophagy*, 3: 630-631
34. Klionsky D.J.,....., Tettamanti G.,.....and Deter R.L., 2008. Guidelines for the use and interpretation of assays for monitoring autophagy in higher Eukaryotes. *Autophagy*, 4: 151-175

35. Tettamanti G.*, Saló E., Gonzáles-Estévez C., Felix D.A., Grimaldi A. and de Eguileor M., 2008. Autophagy in invertebrates: insights into development, regeneration and body remodeling. *Current Pharmaceutical Design*, 14: 116-125
36. Tettamanti G., Malagoli. D., Ottaviani E. and de Eguileor M, 2008. Oligomycin A and the IPLB-LdFB insect cell line: actin and mitochondrial responses. *Cell Biology International*, 32: 287-292
37. Grimaldi A., Tettamanti G., Acquati F., Bossi E., Guidali M.L., Banfi S., Monti L., Valvassori R. and de Eguileor M., 2008. A *hedgehog* homolog is involved in muscle formation and organization of *Sepia officinalis* (Mollusca) mantle. *Developmental Dynamics*, 237: 659-671
38. Tettamanti G.*, Grimaldi A., Pennacchio F. and de Eguileor M., 2008. *Toxoneuron nigriceps* parasitization delays midgut replacement in fifth instar *Heliothis virescens* larvae. *Cell and Tissue Research*, 332: 371-379
39. Grimaldi A., Bianchi C., Greco G., Tettamanti G., Noonan D.M., Valvassori R. and de Eguileor M., 2008. In vivo isolation and characterization of stem cells with diverse phenotypes using growth factor impregnated biomatrices. *Plos ONE*, 3: e1910
40. Tettamanti G.* and Malagoli D., 2008. In vitro methods to monitor autophagy in Lepidoptera. *Methods in Enzymology*, 451: 685-709
41. Grimaldi A., Banfi S., Gerosa L., Tettamanti G., Noonan D.M., Valvassori R. and de Eguileor M., 2009. Identification, isolation and expansion of stem cells involved in leech muscle regeneration. *Plos ONE*, 4: e7652
42. Brevini T., Pennarossa G., Antonini S., Paffoni A., Tettamanti G., Montemurro T., Radaelli E., Lazzari L., Rebulli P., Scanziani E., de Eguileor M., Benvenisty N., Ragni G. and Gandolfi F., 2009. Cell lines derived from human parthenogenetic embryos can display aberrant centriole distribution and altered expression levels of mitotic spindle check-point transcripts. *Stem Cell Reviews and Reports*, 5: 340-352
43. Tettamanti G., Cattaneo A.G., Gornati R., de Eguileor M., Bernardini G. and Binelli G., 2010. Phylogenesis of brain-derived neurotrophic factor (BDNF) in vertebrates. *Gene*, 450: 85-93
44. Tettamanti G.* and Grimaldi A., 2010. Current perspectives on muscle regeneration and diseases. *Current Pharmaceutical Design*, 16: 904-905
45. Grimaldi A., Banfi S., Bianchi C., Greco G., Tettamanti G., Noonan D.M., Valvassori R. and de Eguileor M., 2010. The leech: a novel invertebrate model for studying muscle regeneration and diseases. *Current Pharmaceutical Design*, 16: 968-977
46. Malagoli D., Abdalla F.C., Cao Y., Feng Q., Fujisaki K., Gregorc A., Matsuo T., Nezis I.P., Papassideri I.S., Silva-Zacarin E.C.M., Tettamanti G. and Umemiya-Shirafuji R., 2010. Autophagy and its physiological relevance in arthropods: current knowledge and perspectives. *Autophagy*, 6: 575-588
47. Li Q., Deng X., Yang W., Huang Z., Tettamanti G., Cao Y. and Feng Q., 2010. Autophagy, apoptosis and ecdysis-related gene expression in the silk gland of the

- silkworm (*Bombyx mori*) during metamorphosis. *Canadian Journal of Zoology*, 88: 1169-1178
48. Brevini T., Pennarossa G., de Eguileor M., Tettamanti G., Ragni G., Paffoni A. and Gandolfi F., 2011. Parthenogenetic cell lines: an unstable equilibrium between pluripotency and malignant transformation. *Current Pharmaceutical Biotechnology*, 12: 206-212
 49. Cappelozza S., Saviane A., Tettamanti G., Squadrin M., Vendramin E., Paolucci P., Franzetti E. and Squartini A., 2011. Identification of *Enterococcus mundtii* as a pathogenic agent involved in the “flacherie” disease in *Bombyx mori* L. larvae reared on artificial diet. *Journal of Invertebrate Pathology*, 106: 386-393
 50. Tettamanti G.*, Cao Y., Feng Q., Grimaldi A. and de Eguileor M., 2011. Autophagy in Lepidoptera: more than old wine in new bottle. *Invertebrate Survival Journal*, 8: 5-14
 51. Grimaldi A., Banfi S., Vizioli J., Tettamanti G., Noonan D.M. and de Eguileor M., 2011. Cytokine loaded biopolymers as a novel strategy to study stem cells during wound-healing processes. *Macromolecular Bioscience*, 11: 1008-1019
 52. Li Q., Zheng S., Liu L., Tettamanti G., Cao Y. and Feng Q., 2011. Expression of autophagy-related genes in the anterior silk gland of *Bombyx mori* during metamorphosis. *Canadian Journal of Zoology*, 89: 1019-1026
 53. Franzetti E., Huang Z., Shi Y., Deng X., Li J., Li Q., Yang W., Zeng W., Casartelli M., Deng H., Cappelozza S., Grimaldi A., Xia Q., Feng Q., Cao Y. and Tettamanti G.*, 2012. Autophagy precedes apoptosis during the remodeling of silkworm larval midgut. *Apoptosis*, 17: 305-324
 54. Falabella P., Riviello L., Pascale M., Di Lelio I., Tettamanti G., Grimaldi A., Iannone C., Monti M., Pucci P., Tamburro A.M., de Eguileor M., Gigliotti S. and Pennacchio F., 2012. Functional amyloids in insect immune response. *Insect Biochemistry and Molecular Biology*, 42: 203-211
 55. Banfi S., Monti L., Acquati F., Tettamanti G., de Eguileor M. and Grimaldi A., 2012. Muscle development and differentiation in the urodele *Ambystoma mexicanum*. *Development Growth & Differentiation*, 54: 489-502
 56. Brevini T.A., Pennarossa G., Maffei S., Tettamanti G., Vanelli A., Isaac S., Eden A., Ledda S., de Eguileor M. and Gandolfi F. 2012. Centrosome amplification and chromosomal instability in human and animal parthenogenetic cell lines. *Stem Cell Reviews and Reports*, 8: 1076-1087
 57. Grimaldi A., Girardello R., Malagoli D., Falabella P., Tettamanti G., Valvassori R., Ottaviani E. and de Eguileor M., 2012. Amyloid/Melanin distinctive mark in invertebrate immunity. *Invertebrate Survival Journal*, 9: 153-162
 58. Klionsky D.J.,....., Tettamanti G.,.....and Zuckerbraun B., 2012. Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy*, 8: 445-544
 59. Casati B., Terova G., Cattaneo A.G., Rimoldi S., Franzetti E., de Eguileor M. and Tettamanti G.*, 2012. Molecular cloning and expression analysis of *ATG1* in the silkworm, *Bombyx mori*. *Gene*, 511: 326-337

60. Grimaldi A., Tettamanti G., Congiu T., Girardello R., Malagoli D., Falabella P., Valvassori R., Ottaviani E. and de Eguileor M., 2012. The main actors involved in parasitization of *Heliothis virescens* larva. *Cell and Tissue Research*, 350: 491-502
61. Grimaldi A., Ferrarese R., Tettamanti G., Valvassori R., and de Eguileor M., 2013. Ras activation in *Hirudo medicinalis* angiogenic process. *Invertebrate Survival Journal*, 10: 7-14
62. Orlandi V., Caruso E., Tettamanti G., Banfi S. and Barbieri P., 2013. Photoinduced antibacterial activity of two dicationic 5,15-diarylporphyrins. *Journal of Photochemistry and Photobiology B: Biology*, 127: 123-132
63. Liu H., Jia Q., Tettamanti G. and Li S., 2013. Balancing crosstalk between 20-hydroxyecdysone-induced autophagy and caspase activity in the fat body during *Drosophila* larval-prepupal transition. *Insect Biochemistry and Molecular Biology*, 43: 1068-1078
64. Wöltje M., Böbel M., Rheinnecker M., Tettamanti G., Franzetti E., Saviane A. and Cappellozza S., 2014. Transgenic protein production in silkworm silk glands requires cathepsin and chitinase of *Autographa californica* multicapsid nucleopolyhedrovirus. *Applied Microbiology and Biotechnology*, 98: 4571-4580
65. Romanelli D., Casati B., Franzetti E. and Tettamanti G.*, 2014. A molecular view of autophagy in Lepidoptera. *Biomed Research International*, 2014: 902315
66. Pascale M., Laurino S., Vogel H., Grimaldi A., Monné M., Riviello L., Tettamanti G. and Falabella P., 2014. The lepidopteran endoribonuclease-U domain protein p102 displays dramatically reduced enzymatic activity and forms functional amyloids. *Developmental & Comparative Immunology*, 47: 129-139
67. Brevini T., Pennarossa G., Rahman M.M., Paffoni A., Antonini S., Ragni G., de Eguileor M., Tettamanti G., and Gandolfi F., 2014. Morphological and molecular changes of human granulosa cells exposed to 5-azacytidine and addressed towards muscular differentiation. *Stem Cell Reviews and Reports*, 10: 633-642
68. Grimaldi A., Tettamanti G., Girardello R., Pulze L., Valvassori R., Malagoli D., Ottaviani E. and de Eguileor M., 2014. Functional amyloid formation in LPS activated cells from invertebrates to vertebrates. *Invertebrate Survival Journal*, 11: 286-297
69. Schorn T., Drago F., Tettamanti G., Valvassori R., de Eguileor M., Vizioli J. and Grimaldi A., 2015. The homolog of Allograft inflammatory factor-1 induces macrophages migration during innate immune response in leech. *Cell and Tissue Research*, 359: 853-864
70. Pennarossa G., Maffei S., Tettamanti G., Congiu T., de Eguileor M., Gandolfi F. and Brevini T., 2015. Intercellular bridges are essential for human parthenogenetic cell survival. *Mechanisms of Development*, 136: 30-39
71. Franzetti E., Romanelli D., Caccia S., Cappellozza S., Congiu T., Rajagopalan M., Grimaldi A., de Eguileor M., Casartelli M. and Tettamanti G.*, 2015. The midgut of the silkworm *Bombyx mori* is able to recycle molecules derived from degeneration of the larval midgut epithelium. *Cell and Tissue Research*, 361: 509-528

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