

GIANLUCA TETTAMANTI, Department of Biotechnology and Life Sciences, University of Insubria

EDUCATION

- PhD in Evolutionary Developmental Biology (University of Insubria), 2003
- Degree in Biology (University of Milano), 1997

PRESENT POSITION

- Full Professor (BIO/05-Zoology) at the University Insubria, Department of Biotechnology and Life Sciences, 2020-ongoing

PROFESSIONAL EXPERIENCE

- Associate Professor (University of Insubria), 2011-2020
- Assistant Professor (Zoology) (University of Insubria), 2004-2011
- Research Assistant (King's College London, UK), 2004
- Research fellow (University of Insubria), 2003-2004
- PhD Student (University of Insubria), 2000-2002
- Research Assistant (King's College London, UK), 1998
- Research associate (University of Milano), 1997-1998

RESEARCH ACTIVITY

The research activity is focused on different aspects of insect development and physiology:

- Insect biotechnology. Two main topics are addressed: i) insect bioconversion of organic wastes to obtain protein for feed production and ii) identification of molecules and target genes useful to develop bio-inspired strategies for the control of pest insects
- Cell death and regeneration in insect development. This part of the research aims at increasing 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.
- Immune response. This part of the work aims at analyzing molecular mechanisms underpinning cellular and humoral response in insects.

PUBLICATIONS

- Bibliometric indicators: 117 papers in peer-reviewed journals; mean IF: 3,576 ; total IF: 418,475 ; h index: 29 ; total citations: 10452 (SCOPUS, October 2021)
- Author of 117 papers in qualified peer-reviewed journals as Applied and Environmental Microbiology, Applied Microbiology and Biotechnology, Arthropod Structure and Development, Autophagy, Apoptosis, Biology of the Cell, Biotechnology Advances, Cell and Tissue Research, Current Pharmaceutical Design, Development, Developmental Biology, Cytokine, Frontiers in Physiology, Insect Biochemistry and Molecular Biology, International Journal of Molecular Sciences, Pest Management Science, Proceedings of the National Academy of Sciences USA, Scientific Reports, Waste Management
- Author of 12 book chapters
- More than 130 oral communications or poster presentations in national and international congresses

FUNDED PROJECTS (2010-2020)

- Cariplo Foundation 2020, "Turning Rubbish Into biobased materials: a sustainable CHain for the full valorization of organic waste (RICH)", 2021-2024 [Principal investigator]
- MAECI - Israel-Italy Joint Innovation Program for Industrial, Scientific and Technological Cooperation in R&D, "nEw chitiNase-baseD Products for the cONtrol of INsect pesTs (ENDPOINT)", 2020-2022 [Head of research unit]
- MAECI - Israel-Italy Joint Innovation Program for Industrial, Scientific and Technological Cooperation in R&D, "Production of novel metagenomics-sourced chitinases as biocontrol agents for integrated pest management (CHITOBIOCONTROL), 2016-2018 [Task leader]

- Cariplo Foundation 2014, "Insect Bioconversion: from vegetable waste to Protein production for fish Feed (InBioProFeed)", 2015-2018 [Principal investigator]
- Fondazione Cassa di Risparmio di Padova e Rovigo - Progetti di Eccellenza 2011/2012 "BioSilk Road: back to Italy. A new approach to sericulture: enhancing Lepidopteran natural strategies against pathogenic microorganisms, 2012-2015 [Head of research unit]
- Regione Lombardia-MIUR-FESR Project, "Biotechnological production of antimicrobial silk (SILKBioTECH)", 2012-2014 [Head of research unit]
- PRIN 2008, Italian Ministry of University and Research, "Analysis of autophagic processes in *Bombyx mori* fat body", 2010-2012 [Principal investigator]

RESEARCH CENTERS AND CONSORTIA

- Inter-university research center "Center for studies on Bioinspired Agro-environmental Technology (BAT center)"; Scientific coordinator of the University of Insubria unit; 2020-ongoing
- Consorzio Interuniversitario per le Biotecnologie (CIB); Coordinator of the Insect biotechnology unit (University of Insubria); 2020-ongoing

EDITORIAL ACTIVITY

- Member of the Editorial Board of Scientific Reports, Frontiers in Physiology, Animals, PeerJ, Invertebrate Survival Journal, Psyche
- Executive editor of the issue "Current perspectives on muscle regeneration and diseases" (Current Pharmaceutical Design, 2010 - Vol 16, issue 8)
- Editor of the book "Immunity in insects", Springer Protocols Handbooks, Eds. Sandrelli F. and Tettamanti G., Humana Press, 2020, New York-USA
- Peer-review activity (170 manuscripts) for more than 80 international journals as Apoptosis, Autophagy, BMC Biology, BMC Genomics, BMC Microbiology, Cell and Tissue Research, Cell Death & Disease, Cell Research, Cellular and Molecular Life Sciences, Developmental & Comparative Immunology, Gene, Insect Biochemistry and Molecular Biology, Journal of Insect Physiology, Pest Management Science, Scientific Reports

ADVISORY AND REVIEW PANELS

- National Science Center, PL - 2021
- Czech Science Foundation, CZ - 2021
- Austrian Science Fund (FWF), AT - 2021
- United States-Israel Binational Science Foundation, IL - 2020
- Czech Academy of Sciences, CZ - 2015, 2020
- University of Innsbruck, AT - 2019
- German Federal Ministry of Education and Research (BMBF), DE - 2016-2020
- University of Firenze, IT - 2016
- Provincia Autonoma di Bolzano, IT - 2016
- Italian Ministry of Education, University and Research (MIUR), IT - 2009, 2013, 2016
- Research Foundation Flanders (FWO), BE - 2013
- University of Milano, IT - 2011
- Slovak Research and Development Agency, SK, 2007
- Member of the Board of Examiners for PhD theses: Leopold- Franzens-Universität Innsbruck, Austria (2021); University of Milano, Italy (2018); Bharathidasan University, India (2013-2017); University of Padova, Italy (2014, 2017); University of Napoli Federico II, Italy (2017); University of Insubria, Italy (2015)

TEACHING ACTIVITY

- "Developmental biology", "Biodiversity and evolution", "Zoology" (Bachelor and Master degree in Biology and Biotechnology, University of Insubria)
- Tutor of 31 first cycle degree students and 7 master degree students
- Supervisor of 6 PhD students

BOARD OF PhD PROGRAMS

- Member of the board of professors of the PhD program in: “Life Sciences and Biotechnology” (2017-ongoing); “Biotechnology, Biosciences and Surgical Technologies” (2013-2017); “Cellular and Molecular Biology” (2009-2013) [University of Insubria]