

## ***Curriculum vitae of Fabrizio Lombardo***

Associate Professor

Parasitology Unit, Department of Public Health and Infectious Diseases

Sapienza University of Rome,

P.le Aldo Moro, 5 – 00185, Rome, Italy

Phone: +39 06 4969 4326; +39 338 120413; Fax: +39 06 4991 4653

Email: fabrizio.lombardo@uniroma1.it; f.lombardo73@gmail.com

Skype: fabrilombardo

### **EDUCATION**

**2004:** PhD in Genetics and Molecular Biology, Sapienza University of Rome. Thesis title: “Molecular studies of the salivary glands of the African malaria vector *Anopheles gambiae*: a tissue-specific promoter analysis”.

Supervisors: Dr. Bruno Arcà, Prof. Irene Bozzoni

**1997:** Degree in Biology *cum laude*, Sapienza University of Rome. Thesis title: “Molecular analysis of the promoter region of the murine gene Dri 27, whose expression is regulated during the development and the differentiation of the gut epithelium”. Supervisors: Dr. Giuditta Perozzi, Prof. Irene Bozzoni

### **APPOINTMENTS**

**December 2018 – present:** Associate Professor in Parasitology at Department of Public Health and Infectious Diseases, Sapienza University of Rome.

**December 2015 – December 2018:** Researcher (tenure-track position, RTD-b) at Department of Public Health and Infectious Diseases, Sapienza University of Rome.

**April 2010 – December 2015:** Post-doctoral Fellow (Assegnista di Ricerca) at Department of Public Health and Infectious Diseases, Sapienza University of Rome (“Ateneo” funded Research Fellow, cat. A, type II and cat. B, type II).

**2009 – 2010:** Research Fellow of Institut Pasteur – Fondazione Cenci-Bolognetti.

**2007 – 2009:** Research Associate at the Division of Cell and Molecular Biology, Department of Life Sciences, Imperial College, London (PIs: Prof. Fotis Kafatos and Prof. Giorgos Christophides).

**2004 – 2007:** Post-doctoral Fellow (Assegnista di Ricerca) at Department of Public Health and Infectious Diseases, Sapienza University of Rome (PI: Dr. Bruno Arcà).

**2004:** Research Fellow of Institut Pasteur – Fondazione Cenci-Bolognetti. (4 months).

**2000 – 2004:** PhD student at Department of Public Health and Infectious Diseases, Sapienza University of Rome; visitor at Imperial College, London (2 months) and EMBL, Heidelberg (3 months, TMR Fellow).

**1999 – 2000:** Research Fellow of Sapienza for studies abroad at the Institute of Molecular Biology and Biotechnology, FORTH, Heraklion, Crete (PIs: Prof. Kitsos Louis and Dr. Bruno Arcà).

**1997 – 1998:** Post-degree student at Institute of Parasitology, Sapienza University of Rome (PIs: Prof. Mario Coluzzi and Dr. Bruno Arcà).

**1995 – 1997:** Undergraduate student at the National Institute of Nutrition (INN-INRAN), Rome (PIs: Prof. Sancia Gaetani and Dr. Giuditta Perozzi).

#### SCIENTIFIC ACTIVITIES

- Co-author of 42 scientific publications (40 articles in “peer-reviewed” journals, 2 book chapters) and around 60 abstracts presented in national and international conferences.
- Bibliometric indexes: (Scopus, Elsevier, 28/03/2022): H-index: 20; citations: 1386. Impact Factor (ISI-JCR, 2017) total: 119,26; Impact Factor/publication: 3,85.
- Professional practice examination (Biologist qualifying exam, November 2000).
- National Academic Qualification as Associate Professor in Parasitology (ASN, Abilitazione Scientifica Nazionale, 2012).
- Member of the Italian Expert Reviewer Register, Reprise, MIUR (2017-present).
- Reviewer of projects submitted to the “French National Research Agency (ANR)” (2018-present).
- “Peer Reviewer” for international journals as: Genome Research (Cold Spring Harbor Laboratory Press), BMC genomics, Parasite and Vectors, Malaria Journal (BioMed Central Ltd.), PLoS One, PLoS Neglected Tropical Diseases (Public Library of Science), Parasitology Research, Molecular Genetics and Genomics (Springer), Insect Molecular Biology (The Royal Entomological Society), Experimental Parasitology (Elsevier), BioMed Research International (Hindawi), Expert Reviews in Molecular Medicine (Cambridge University Press), etc. (2010-present).
- Member of the Review Editor Board for Parasite and Host Section in Frontiers in Cellular and Infection Microbiology (2020 – present).
- Member of the Editorial Board of the journal Genes, MDPI (2021 – present)
- Member of The Biochemical Society, UK (2009).
- Member of the Italian Society of Parasitology (SoiPa, 2000-2006, 2012-present).
- Member of the Organization and Scientific Committee of the XXVIII Congresso Nazionale SoiPa, (Società Italiana di Parassitologia), Rome, 24-27/06/2014.
- Member of the Organization and Scientific Committee of the Course entitled: “Corso di base sull’analisi di dati genetico-molecolari”, Department of Public Health and Infectious Diseases, Sapienza University of Rome, 23-24/06/2014.

## MAIN FUNDINGS

- PI of a project entitled: "Dissecting the molecular interplay between the tiger mosquito *Aedes albopictus* and the chikungunya arbovirus" funded by Sapienza, University of Rome (Progetto Medio, Ateneo 2021).
- PI of a project entitled: "Transcriptome profiling of the immune repertoire of the tiger mosquito *Aedes albopictus*, a competent vector for several human arboviruses" funded by Sapienza, University of Rome (Progetto Medio, Ateneo 2016).
- Coordinator of a project for Visiting Professor inviting Prof. Susan Pierce from NIH (Progetto Professori Visitatori, Ateneo 2016).
- Beneficiary of Basic Research Activities Funding from MIUR (Finanziamento delle Attività Base di Ricerca, FFABR-2017).
- PI of a project funded in the framework of the European network INFRAVEC (2011): "Defining the olfactory repertoire of the tiger mosquito *Aedes albopictus*" (Integrating Activity number: 228421).
- PI of a project funded in the framework of the European network INFRAVEC-2 (2019): "Identification of novel Plasmodium molecular markers to study malaria transmission in *An. coluzzii* mosquitoes" (Activity number: #5876).
- Participant and component of research groups in the framework of several grants, including: 1999-2001, WHO/TDR (Research and Training in Tropical Disease); 2000-04, EU, Research Training Network (HPRN-CT-2000-00080); 2004-09, EU, Network of Excellence (LSHP-CT-2004-503578) Biology and Pathology of Malaria Parasite (BioMalPar); 2012-15, PRIN - MIUR, (2010C2LKKJ\_004-SKINFLAM); 2012-15, Sapienza Research Project (C26A12SLP3); 2013-16, Sapienza Research Project (C26A13H2H7); 2014-17, Sapienza Research Project (C26A14AKKH); 2017-2020 PRIN - MIUR (2015JXC3JF\_002); 2018-21, Sapienza Research Project; 2019-22, Sapienza Research Project; 2020-23, Sapienza Research Project.

## TEACHING ACTIVITIES

- Lecturer in Molecular Parasitology (6 CFU) in the Master's Degree Course in Genetics and Molecular Biology, Faculty of Mathematical, Physical and Natural Sciences (from AA 2019-20).
- Lecturer in Molecular Parasitology (3 CFU) in the Master of Science in Medical Biotechnology, Faculty of Pharmacy and Medicine (from AA 2019-20).

- Lecturer in Diagnostic Parasitology and Anthroponosis (1 CFU) and Elective Teaching Activity in Molecular Parasitology (ADE, 1 CFU) in the "F" Degree Course in Biomedical Laboratory Techniques, Faculty of Medicine and Dentistry, Sabina Universitas, Rieti (2015 / 16 - present).
- Professor of Elective Didactic Activity in Molecular Parasitology (ADE, 2 CFU) in the Degree Course "E" of Biomedical Laboratory Techniques, Faculty of Medicine and Dentistry, Pozzilli, Neuromed Molise Region (2018/19 - present).
- Teacher as expert (Cultore della Materia) in Parasitology (degree course "D") at the Faculty of Medicine and Surgery (2005-2007; 2009-2011, 2012-2019).
- Professor of Molecular Parasitology in seminar classes in the following degree courses at Sapienza, University of Rome: Medical Biotechnology, Medicine and Surgery course "D" and course "A", Medicine and Surgery course "F" and Biomedical Laboratory Techniques course "B", C. Forlanini Hospital (2010 - present).
- Graduate Thesis Supervisor (Bachelor Degree in Biomedical Laboratory Techniques, Degree Course in Interfaculty Biotechnology, Sapienza University of Rome), Master's Degree Thesis Supervisor (Degree Course in Genetics and Molecular Biology in Basic and Biomedical Research and Course degree in Genomic, Industrial and Environmental Biotechnology, Faculty of Mathematical, Physical and Natural Sciences, Sapienza University of Rome, Master's Degree in Biology for Molecular, Cellular and Pathophysiological Research, Department of Sciences, University of Rome III) and "Final Year Undergraduate Student", Faculty of Life Sciences, Imperial College, London (2006 - present).

#### INVITED SPEAKER

- 15 March 2018: Conference: "The" One Health "perspective in infectious diseases", III Edition, ECM Course of the Bambino Gesù Pediatric Hospital. Seminar entitled: "Molecular interactions of the tiger mosquito Aedes Albopictus with pathogens and hosts".
- 13 October 2017: II level Master in Allergology and Advanced Pediatric Immunology, Tor Vergata Polyclinic and Pediatric School, Bambino Gesù Pediatric Hospital. Seminar entitled: "Molecular interactions of tiger mosquito with pathogens and hosts".
- 18 November 2016: Conference: "The" One Health "perspective in infectious diseases", ECM Course of the Bambino Gesù Pediatric Hospital. Seminar entitled: "Molecular interactions of the tiger mosquito Aedes Albopictus with pathogens and hosts".
- April 16, 2015: Conference: "Parasitology in times of globalization", ECM Course of Bambino Gesù Pediatric Hospital. Seminar entitled: "Next Generation Sequencing and Real Time PCR in research and parasitological diagnosis".

## MAIN COLLABORATIONS

- 2010 - present: Dr. Bruno Arcà, Sapienza University of Rome: studies on the salivary glands of vectors of public health interest.
- 2008 - present: Prof. George K. Christophides, Imperial College London, UK: studies on innate immunity of mosquitoes.
- 2003 - present: Prof. José M. Ribeiro, NIAID, National Institute of Health, NIH, USA: salivary transcriptomes of vectors and functional analysis of salivary proteins.
- 2015 - present: Dr. Tony Nolan, Liverpool School of Tropical Medicine, UK: genetic manipulation of mosquitoes.
- 1998 - present: Prof. Kitsos Louis, IMBB, FORTH, Greece: molecular and genomic studies on vector mosquitoes, *An. gambiae* and *Ae. albopictus*.
- 2008 - present: Dr. Marco Salvemini, Federico II University of Naples: transcriptomics of vectors and parasites of medical interest.
- 2010 - present: Prof. David Modiano, Sapienza University of Rome: studies on saliva exposure markers; studies on molecular diagnostic methods for *Plasmodium falciparum*.
- 2013 - present: Prof. Marco Oliverio, Sapienza University of Rome: studies on invertebrate hematophagous organisms.
- 2015 - present: Prof. Stefano D'Amelio, Sapienza University of Rome: molecular studies on anisakid nematodes.
- 2000 - 2005: Dr. Gareth J. Lycett, Liverpool School of Tropical Medicine, LSTM, UK: studies on salivary promoters of mosquitoes.

## MAIN SCIENTIFIC INTERESTS

Studies on blood-sucking vectors of parasites, arboviruses and other human pathogens, and in particular, molecular characterization of the interaction between mosquitoes and the malarial parasite and between the mosquitoes and the human host.

- Studies on vector biology using genomic, transcriptomic and proteomic approaches.
- Studies on innate immunity of the malarial vector *An. gambiae* and of the arbovirus vector *Ae. albopictus*.
- Studies on the salivary glands of *An. gambiae* and other hematophagous arthropods.
- Studies on the olfactory and sensory properties of vector mosquitoes.
- Molecular studies on *Plasmodium falciparum*, a causative agent of malaria and other parasites of health interest.

## PUBLICATIONS

1. Bevvino, G.; Arcà, B.; Lombardo, F. (2021) Effects of Local and Systemic Immune Challenges on the Expression of Selected Salivary Genes in the Malaria Mosquito *Anopheles coluzzii*. *Pathogens*, 10, 1300. <https://doi.org/10.3390/pathogens10101300>.
2. Cavallero S., Lombardo F. and D'Amelio S. (2021) Novel omics studies on anisakid nematodes. *Genes* 2021, 12, 1250. <https://doi.org/10.3390/genes12081250>.
3. D'Amelio S., Lombardo F., Pizzarelli A., Bellini I. and Cavallero S. (2020) Advances in omic studies drive discoveries in the biology of anisakid nematodes. *Genes*, 2020, 11(7), pp. 1-18, 801.
4. Cavallero S., Lombardo F., Salvemini M., Cantacessi C. and D'Amelio, S. (2020) Comparative transcriptomics reveals clues for differences in pathogenicity between *hysterothylacium aduncum*, *anisakis simplex sensu stricto* and *anisakis pegreffii*. *Genes*, 2020, 11(3), 321.
5. Buezo Montero S., Gabrieli P., Severini F., Picci L., Di Luca M., Forneris F., Facchinelli L., Ponzi M., Lombardo F. and Arcà B. (2019) Analysis in a murine model points to IgG responses against the 34k2 salivary proteins from *Aedes albopictus* and *Aedes aegypti* as novel promising candidate markers of host exposure to *Aedes* mosquitoes. *PLoS Negl Trop Dis.* 2019 Oct 16;13(10):e0007806. doi: 10.1371/journal.pntd.0007806.
6. Arcà B., Colantoni A., Fiorillo C., Severini F., Benes V., Di Luca M., Calogero R.A. and Lombardo F. (2019) MicroRNAs from saliva of anopheline mosquitoes mimic human endogenous miRNAs and may contribute to vector-host-pathogen interactions. *Scientific Reports*, Feb 27;9(1):2955. doi: 10.1038/s41598-019-39880-1.
7. Cavallero S., Lombardo F., Su X., Salvemini M., Cantacessi C., D'Amelio S. (2018) Tissue-specific transcriptomes of *Anisakis simplex* (*sensu stricto*) and *Anisakis pegreffii* reveal potential molecular mechanisms involved in pathogenicity. *Parasites and Vectors*. Jan 10;11(1):31. doi: 10.1186/s13071-017-2585-7.
8. Waterhouse R.M., IWAA Participants, Chen X., Bonizzoni M. and Gasperi G. (2017) The third International Workshop on *Aedes albopictus*: building scientific alliances in the fight against the globally invasive Asian tiger mosquito. *Pathogens and Global Health*, 111:4, 161-165, DOI: 10.1080/20477724.2017.1333560
9. Santolamazza F., Avellino P., Siciliano G., Yao F.A., Lombardo F., Ouédraogo J.B., Modiano D., Alano P., Mangano V.D. (2017) Detection of *Plasmodium falciparum* male and female gametocytes and determination of parasite sex ratio in human endemic populations by novel, cheap and robust RTqPCR assays. *Malaria Journal*, Nov 17;16(1):468. doi: 10.1186/s12936-017-2118-z.
10. Lombardo F., Salvemini M., Fiorillo C., Nolan T., Zwiebel L.J., Ribeiro J.M., Arcà B. (2017) Deciphering the olfactory repertoire of the tiger mosquito *Aedes albopictus*. *BMC Genomics*, Oct 11;18(1):770. doi: 10.1186/s12864-017-4144-1.
11. Pirone L., Ripoll-Rozada J., Leone M., Ronca R., Lombardo F., Fiorentino G., Andersen J.F., Pereira P.J.B., Arcà B., Pedone E. (2017) Functional analyses yield detailed insight into the mechanism of thrombin inhibition by the antihemostatic salivary protein cE5 from *Anopheles gambiae*. *Journal of Biological Chemistry*, Jul 28;292(30):12632-12642. doi: 10.1074/jbc.M117.788042.

12. Arcà B., Lombardo F., Struchiner C.J., Ribeiro J.M.C. (2017) Anopheline salivary protein genes and gene families: An evolutionary overview after the whole genome sequence of sixteen *Anopheles* species. *BMC Genomics*, 18 (1), 153. DOI: 10.1186/s12864-017-3579-8.
13. Lombardo F. and Christophides G.K. (2016) Regulators of *Anopheles gambiae* hemocyte immune response to *Plasmodium berghei* infection. *Parasites and Vectors*. Feb 9;9(78). doi: 10.1186/s13071-016-1359-y.
14. Dritsou V., Topalis P., Windbichler N., Simoni A., Hall A., Lawson D., Hinsley M., Hughes D., Napolioni V., Crucianelli F., Deligianni E., Gasperi G., Gomulski L.M., Savini G., Manni M., Scolari F., Malacrida A.R., Arcà B., Ribeiro J.M., Lombardo F., Saccone G., Salvemini M., Moretti R., Aprea G., Calvitti M., Picciolini M., Papathanos P.A., Spaccapelo R., Favia G., Crisanti A. and Louis C. (2015) A draft genome sequence of an invasive mosquito: an Italian *Aedes albopictus*. *Pathogens and Global Health*, Jul 109(5):207-20. doi: 10.1179/2047773215Y.0000000031.
15. Modica M.V., Lombardo F., Franchini P., Oliverio M. (2015) The venomous cocktail of the vampire snail *Colubraria reticulata* (Mollusca, Gastropoda). *BMC Genomics*, Jun 9;16:441. DOI: 10.1186/s12864-015-1648-4.
16. Marie A., Ronca R., Poinsignon A., Lombardo F., Drame P.M., Cornelie S., Besnard P., Le Mire J., Fiorentino G., Fortes F., Carnevale P., Remoue F., Arcà B. (2015) The *Anopheles gambiae* cE5 salivary protein: a sensitive biomarker to evaluate the efficacy of insecticide-treated nets in malaria vector control. *Microbes and Infection*, Jan 28. pii: S1286-4579(15)00015-5. DOI: 10.1016/j.micinf.2015.01.002.
17. Rizzo C., Lombardo F., Ronca R., Mangano V., Sirima S., Nèbiè I., Fiorentino G., Modiano D., Arcà B. (2014) Differential antibody response to the *Anopheles gambiae* gSG6 and cE5 salivary proteins in individuals naturally exposed to bites of malaria vectors. *Parasites and Vectors*, Nov 28;7(1):549.
18. Rizzo C., Ronca R., Lombardo F., Mangano V., Sirima S.B., Nèbiè I., Fiorentino G., Troye-Blomberg M., Modiano D., Arcà B. (2014) IgG1 and IgG4 antibody responses to the *Anopheles gambiae* salivary protein gSG6 in the sympatric ethnic groups Mossi and Fulani in a malaria hyperendemic area of Burkina Faso. *PLoS One*, Apr 23;9(4):e96130. DOI: 10.1371/journal.pone.0096130.
19. Arcà B., Struchiner C.J., Pham V.M., Sferra G., Lombardo F., Pombi M., Ribeiro J.M. (2014) Positive selection drives accelerated evolution of mosquito salivary genes associated with blood-feeding. *Insect Molecular Biology*, Feb;23(1):122-31. doi: 10.1111/imb.12068.
20. Midega J., Blight J., Lombardo F., Povelones M., Kafatos F.C., Christophides G.K. (2013) Discovery and characterization of two Nimrod superfamily members in *Anopheles gambiae*. *Pathogens and Global Health*, Dec;107(8):463-74. DOI: 10.1179/204777213X13867543472674.
21. Lombardo F., Ghani Y., Kafatos F.C. and Christophides G.K. (2013) Comprehensive genetic dissection of the hemocyte immune response in the malaria mosquito *Anopheles gambiae*. *PLoS Pathogens*, 9 (1), e1003145, PMID: 23382679. DOI: 10.1371/journal.ppat.1003145.
22. Ronca R.\*., Kotsyfakis M.\*., Lombardo F.,\* Rizzo C., Currà C., Ponzi M., Fiorentino G., Ribeiro J.M. and Arcà B. (2012) The *Anopheles gambiae* cE5, a tight- and fast-binding thrombin inhibitor with post-transcriptionally regulated salivary-restricted expression. *Insect Biochemistry and Molecular Biology*, 42 (9), 610-20, PMID: 22617725. DOI: 10.1016/j.ibmb.2012.04.008. \*: equal contribution authorship.
23. Modiano D., Lombardo F. and Petrarca V. (2011) Parassitologia (Cap. 70). In: *Principi di Microbiologia Medica*, Seconda edizione, Antonelli G., Clementi M., Pozzi G., Rossolini G.M., Casa Editrice Ambrosiana, Milano. ISBN 978-8808-18073-5.

24. Rizzo C., Ronca R., Fiorentino G., Verra F., Mangano V., Poinsignon A., Sirima S.B., Nèbiè I., Lombardo F., Remoue F., Coluzzi M., Petrarca V., Modiano D. and Arcà B. (2011) Humoral Response to the *Anopheles gambiae* Salivary Protein gSG6: a Serological Indicator of Exposure to Afrotropical Malaria Vectors. *Plos One*, 6 (3), e17980. PMID: 21437289. DOI: 10.1371/journal.pone.0017980.
25. Salvemini M., Mauro U., Lombardo F., Milano A., Zazzaro V., Arcà B., Polito L.C. and Saccone G. (2011) Genomic organization and splicing evolution of the doublesex gene, a *Drosophila* regulator of sexual differentiation, in the dengue and yellow fever mosquito *Aedes aegypti*. *BMC Evolutionary Biology*, Feb 10; 11(1):41, PMID: 21310052. DOI: 10.1186/1471-2148-11-41.
26. Pinto S.B., Lombardo F., Koutsos A.C., Waterhouse R.M., McKay K., An C., Ramakrishnan C., Kafatos F.C. and Michel K. (2009) Discovery of *Plasmodium* modulators by genome-wide analysis of circulating hemocytes in *Anopheles gambiae*. *Proceedings of the National Academy of Sciences USA*, 106 (50), 21270-21275, PMID: 19940242. DOI: 10.1073/pnas.0909463106.
27. Lombardo F., Ronca R., Rizzo C., Mestres-Simòn M., Lanfrancotti A., Currà C., Fiorentino G., Bourgouin C., Ribeiro J.M., Petrarca V., Ponzi M., Coluzzi M. and Arcà B. (2009) The *Anopheles gambiae* salivary protein gSG6: an anopheline-specific protein with a blood-feeding role. *Insect Biochemistry and Molecular Biology*, 39 (7), 457-466, PMID: 19442731. DOI: 10.1016/j.ibmb.2009.04.006.
28. Lombardo F., Lycett G.J., Lanfrancotti A., Coluzzi M. and Arcà B. (2009) Analysis of apyrase 5' upstream region validates improved *Anopheles gambiae* transformation technique. *BMC Research Notes* 2: 24, PMID: 19284522. DOI: 10.1186/1756-0500-2-24.
29. Paglino A., Lombardo F., Arcà B., Rizzi M. and Rossi F. (2008) Purification and biochemical characterization of a recombinant *Anopheles gambiae* tryptophan 2,3-dioxygenase expressed in *Escherichia coli*. *Insect Biochemistry and Molecular Biology*, 38 (9), 871-6, PMID: 18687401. DOI: 10.1016/j.ibmb.2008.05.011.
30. Arcà B., Lombardo F., Francischetti I.M., Pham V.M., Mestres-Simòn M, Andersen J.F. and Ribeiro J.M. (2007) An insight into the sialome of the adult female mosquito *Aedes albopictus*. *Insect Biochemistry and Molecular Biology*, 37, 107-127, PMID: 17244540. DOI: 10.1016/j.ibmb.2006.10.007.
31. Ribeiro J.M., Arcà B., Lombardo F., Calvo E., Pham V.M., Chandra P.K. and Wikle S.K. (2007) An annotated catalogue of salivary gland transcripts in the adult female mosquito, *Aedes aegypti*. *BMC Genomics*, 8: 6, PMID: 17204158. DOI: 10.1186/1471-2164-8-6.
32. Lombardo F., Lanfrancotti A., Mestres-Simòn M., Rizzo C., Coluzzi M. and Arcà B. (2006) At the interface between parasite and host: the salivary glands of the African malaria vector *Anopheles gambiae*. *Parassitologia*, 48 (4), 573-80, PMID: 17688179. Review.
33. Calvo E., Pham V.M., Lombardo F., Arcà B., Ribeiro J.M. (2006) The sialotranscriptome of adult male *Anopheles gambiae* mosquitoes. *Insect Biochemistry and Molecular Biology*, 36, 570–575, PMID: 16835022. DOI: 10.1016/j.ibmb.2006.04.005.
34. Rossi F., Lombardo F., Paglino A., Cassani C., Miglio G., Arcà B. and Rizzi M. (2005) Identification and biochemical characterization of the *Anopheles gambiae* 3-hydroxykynurenine transaminase. *FEBS Journal*, 272, 5653–5662, PMID: 16262702. DOI: 10.1111/j.1742-4658.2005.04961.x.
35. Arcà B., Lombardo F., Valenzuela J.G., Francischetti I.M., Marinotti O., Coluzzi M. and Ribeiro J.M. (2005) An updated catalogue of salivary gland transcripts in the adult female mosquito, *Anopheles gambiae*. *The Journal of Experimental Biology*, 208, 3971-3986, PMID: 16215223. DOI: 10.1242/jcb.01849.
36. Lombardo F., Nolan T., Lycett G., Lanfrancotti A., Stich N., Catteruccia F., Louis C., Coluzzi M. and Arcà

- B. (2005) An *Anopheles gambiae* salivary gland promoter analysis in *Drosophila melanogaster* and *Anopheles stephensi*. Insect Molecular Biology, 14 (2), 207–216, PMID: 15796754. DOI: 10.1111/j.1365-2583.2004.00549.x.
37. Lanfrancotti A., Lombardo F., Santolamazza F., Veneri M., Castrignanò T., Coluzzi M., Arcà B. (2002) Novel cDNAs encoding salivary proteins from the malaria vector *Anopheles gambiae*. FEBS Letters, 517, (1-3), 67-71, PMID: 12062411. DOI: 10.1016/S0014-5793(02)02578-4.
38. Arcà B., Lombardo F., Lanfrancotti A., Spanos L., Veneri M., Louis C., Coluzzi M. (2002) A cluster of four D7-related genes is expressed in the salivary glands of the African malaria vector *Anopheles gambiae*. Insect Molecular Biology, 11 (1), 47-55, PMID: 11841502. DOI: 10.1046/j.0962-1075.2001.00309.x.
39. Lombardo F., Di Cristina M., Spanos L., Louis C., Coluzzi M., Arcà B. (2000) Promoter sequences of the putative *Anopheles gambiae* apyrase confer salivary gland expression in *Drosophila melanogaster*. The Journal of Biological Chemistry, 275 (31), 23861-8, PMID: 10801886. DOI: 10.1074/jbc.M909547199.
40. Arcà B., Lombardo F., Capurro M., della Torre A., Spanos L., Dimopoulos G., Louis C., James A.A., Coluzzi M. (1999) Salivary gland-specific gene expression in the malaria vector *Anopheles gambiae*. Parassitologia, 41 (1-3), 483-7, PMID: 10697906. Review.
41. Arcà B., Lombardo F., Capurro M., della Torre A., Dimopoulos G., James A.A. and Coluzzi M. (1999) Trapping cDNAs encoding secreted proteins from the salivary glands of the malaria vector *Anopheles gambiae*. Proceedings of the National Academy of Sciences USA, 96, 1516-1521, PMID: 9990055. DOI: 10.1073/pnas.96.4.1516.
42. Perozzi G., Murgia C., Barilà D., Cerase J., Felicioli F., Lombardo F. (1997) Molecular analysis of novel genes differentially expressed during gut development. In: The gut as a model in cell and molecular biology (Editors: Halter, F., Winton, D., Wright, N.A.), Falk Symposium. Vol. 94, cap. 10, pp. 99-109. Kluwer Academic Publ., Lancaster, U.K.