

**Curriculum Vitae
Europass**

**PERSONAL
INFORMATION**

Name / Surname **Valentina Malafoglia**
E-mail valentina.malafoglia@sanraffaele.it
Citizenship Italian

WORK EXPERIENCE

Date **May 2023- ongoing**

Business Post doc

Main activity and responsibility Pi of the project "Persistent pain in pharmacologically or surgically treated osteoarthritis: the role of the Mu-Lympho-Marker as a candidate innovative diagnostic tool." Aim of the project: pain biomarkers discovery.

Name and address of employer San Raffaele, Roma. Via di Val Cannuta 247, 00166

Type of activity Cell biology. Molecular biology. Biotechnology.

Date **June 2012– May 2023**

Business Post doc

Main activity and responsibility Acute and chronic pain pre-clinical and clinical research.
-Pre-clinical research: Danio rerio, Mice and Hydra vulgaris as animal models for the study of evolutionary pain pathway.
-Clinical research: pain biomarkers discovery.
Data analysis and scientific papers writing
ISAL Foundation National and international relationships management.
Teaching at ISAL Training School in Algological Sciences.

Name and address of employer Professor William Raffaelli, ISAL Foundation Research Institute, via San Salvador 204 47922 Torre Pedrera – Rimini. Collaboration with IRCCS San Raffaele of Rome and University of Roma3.

Type of activity Cell biology. Molecular biology. Biotechnology.

Date **October 2007- February 2009**

Business Research Fellow

Main activity and responsibility Study of the respiratory system flogosis after infections and immune system evaluation with regard to Tuberculosis.
Written translations, from English to Italian, of scientific papers for AJRCCM (American Journal of Respiratory and Critical Care Medicine) ITALIAN VERSION.

Name and address of employer	University of Perugia. Santa Maria Hospital of Terni, Professor Lucio Casali, Department of Health care, Lung diseases section.
EDUCATION AND TRAINING	
Date	March 2009-March 2012
Qualification	PhD in cellular and molecular oncopathology.
Principal subjects covered or skills acquired	Study of nociception in Zebrafish (<i>Danio rerio</i>) to validate the fish as a new animal model to study pain. Skills in molecular and cellular biology; management and husbandry of zebrafish facilities, working with embryos, larvae and adult fish. Ability to present scientific data in front of a scientific committee. Scientific papers writing.
Name and type of the institution	University of Palermo. I worked at Sbarro Institute-College of Science and Technology, at Temple University of Philadelphia (PA), during the 3 years of my doctorate.
Final score	Optimum
Date	2004-2007
Qualification	Master in medical Biotechnology.
Principal subjects covered or skills acquired	Final (<i>experimental and distinguished</i>) thesis in Cytogenetics (Blood Diseases and Medical Genetics, Department of Hematology): “ <i>NUP98 involvement in human Leukemia</i> ”. Aim of the thesis: NUP98 new partners genes identification, clinical and pathological associations, by using F.I.S.H. techniques (Fluorescent In Situ Hybridization) in interphase and metaphase cells.
Name and type of the institution	University of Perugia; Faculty of Medicine and Surgery; Department of Haematology, Blood diseases and Medical Genetics.
Final score	110/110 cum laude
Date	April-September 2006
Qualification	ERASMUS, European project.
Principal subjects covered or skills acquired	Activities of Molecular Cytogenetics, training in interphase and metaphase F.I.S.H. methods, for human leukemia studies, by working at the final thesis.
Name and type of the Institution	Katholieke Universiteit of Leuven: Centre for human genetics. Leuven, Belgium.
Date	2001-2004
Qualification	Doctor in Biotechnology. First level degree. Final (<i>experimental and distinguished</i>) dissertation in Pharmacology: “ <i>Study of caspases activation led by glucocorticoids in T-cells using western-blot techniques</i> ”
Principal subjects covered or skills acquired	Evaluation of caspases -3-8-9 activation led by dexamethasone in T-cells. Proteomics.
Name and type of the institution	University of Perugia, Faculty of Mathematics, Physics and Sciences, University of Perugia.

PERSONAL SKILLS

Mother tongue **Italian**

Other language(s) **English, France**

Job-related skills

Conventional and molecular cytogenetics

Interfase and metaphase F.I.S.H (Fluorescence in situ hybridization) techniques, probes preparations, cariotype analysis by using fluorescence microscope.

Molecular biology

Cloning: culture broth, plates, solutions, competent cells preparation; DNA and RNA extraction; sequences analysis by using data bases and specific software; PCR, qPCR, plasmids preparations, enzymatic digestions, agarose gels, gel cleaning.

In situ hybridization of zebrafish embryos and larvae: preparation of specific mRNA probes, solutions and analysis of the results through fluorescence microscopy.

Cellular biology

Cell culture and flow cytometry.

Animal husbandry

Zebrafish husbandry: feeding, breeding, eggs collection, microscope analysis.

Hydra vulgaris husbandry

Proteomics

Western blot, immunohistochemistry

Computer skills

Highly confident with:

- Windows 3x, 9x, ME, XP
- Office: Excel, Power Point, Word
- Adobe Acrobat Reader; Photo shop
- Internet: Pubmed, NCBI, Ensemble, Prime3, T-coffee, Kegg Genome, Oligo analyzer, Metazone
- Smartcapture digital image analysis system (fluorescence microscope, Olympus-Provis)
- Software Metasystem (Althusheim, Germany)
- DNA strider
- Serial Cloner
- Diva software Acquisition and analysis (LSR Fortessa X-20 flow cytometer-Becton Dickinson)
- GraphPad Prism

SCIENTIFIC PUBLICATIONS

1. Garofalo C, Cristiani CM, Ilari S, Passacatini LC, Malafoglia V, Viglietto G, Maiuolo J, Oppedisano F, Palma E, Tomino C, Raffaeli W, Mollace V, Muscoli C. FIBROMYALGIA AND IRRITABLE BOWEL SYNDROME INTERACTION: A POSSIBLE ROLE FOR GUT MICROBIOTA AND GUT-BRAIN AXIS. *Biomedicines*. 2023 Jun 13;11(6):1701. doi: 10.3390/biomedicines11061701. PMID: 37371796; PMCID: PMC10296515.
2. Malafoglia V, Ilari S, Gioia C, Vitiello L, Tenti M, Iannuccelli C, Cristiani CM,

- Garofalo C, Passacatini LC, Viglietto G, Scavalli AS, Tomino C, Mollace V, Raffaeli W, Di Franco M, Muscoli C. AN OBSERVATIONAL STUDY ON CHRONIC PAIN BIOMARKERS IN FIBROMYALGIA AND OSTEOARTHRITIS PATIENTS: WHICH ROLE FOR MU OPIOID RECEPTOR'S EXPRESSION ON NK CELLS? *Biomedicines*. 2023; 11(3):931. <https://doi.org/10.3390/biomedicines11030931>
3. Ilari S, Passacatini LC, Malafoglia V, Oppedisano F, Maiuolo J, Gliozzi M, Palma E, Tomino C, Fini M, Raffaeli W, Mollace V, Muscoli C. TANTALI FIBROMYALGIC SUPPLICIUM: IS THERE ANY RELIEF WITH THE ANTIDEPRESSANT EMPLOYMENT? A SYSTEMATIC REVIEW. *Pharmacol Res*. 2022 Nov 4;186:106547. doi: 10.1016/j.phrs.2022.106547. Epub ahead of print. PMID: 36336218.
 4. Tenti M, Raffaeli W, Malafoglia V, Paroli M, Ilari S, Muscoli C, Fraccaroli E, Bongiovanni S, Gioia C, Iannuccelli C, Di Franco M, Gremigni P. COMMON-SENSE MODEL OF SELF-REGULATION TO CLUSTER FIBROMYALGIA PATIENTS: RESULTS FROM A CROSS-SECTIONAL STUDY IN ITALY. *Clin Exp Rheumatol*. 2022 Jun;40(6):1175-1182. doi: 10.55563/clinexprheumatol/cd7fa1. Epub 2022 Jun 8. PMID: 35699086.
 5. Ilari S, Lauro F, Giancotti LA, Malafoglia V, Dagostino C, Gliozzi M, Condemi A, Maiuolo J, Oppedisano F, Palma E, Tomino C, Salvemini D, Mollace V, Muscoli C. THE PROTECTIVE EFFECT OF BERGAMOT POLYPHENOLIC FRACTION (BPF) ON CHEMOTHERAPY-INDUCED NEUROPATHIC PAIN. *PHARMACEUTICALS (BASEL)*. 2021 Sep 25;14(10):975. doi: 10.3390/ph14100975. PMID: 34681199; PMCID: PMC8540578.
 6. Balzani E, Fanelli A, Malafoglia V, Tenti M, Ilari S, Corrado A, Muscoli C, Raffaeli W. A REVIEW OF THE CLINICAL AND THERAPEUTIC IMPLICATIONS OF NEUROPATHIC PAIN. *Biomedicines*. 2021 Sep 16;9(9):1239. doi: 10.3390/biomedicines9091239. PMID: 34572423; PMCID: PMC8465811.
 7. Malafoglia V, Ilari S, Vitiello L, Tenti M, Balzani E, Muscoli C, Raffaeli W, Bonci A. THE INTERPLAY BETWEEN CHRONIC PAIN, OPIOIDS, AND THE IMMUNE SYSTEM. *Neuroscientist*. 2021 Jul 16:10738584211030493. doi: 10.1177/10738584211030493. Epub ahead of print. PMID: 34269117.
 8. Ilari S, Proietti S, Russo P, Malafoglia V, Gliozzi M, Maiuolo J, Oppedisano F, Palma E, Tomino C, Fini M, Raffaeli W, Mollace V, Bonassi S, Muscoli C. A SYSTEMATIC REVIEW AND META-ANALYSIS ON THE ROLE OF NUTRACEUTICALS IN THE MANAGEMENT OF NEUROPATHIC PAIN IN IN VIVO STUDIES. *Antioxidants (Basel)*. 2022 Nov 28;11(12):2361. doi: 10.3390/antiox11122361. PMID: 36552569; PMCID: PMC9774415.
 9. Tomino C, Ilari S, Solfrizzi V, Malafoglia V, Zilio G, Russo P, Proietti S, Marcolongo F, Scapagnini G, Muscoli C, Rossini PM. MILD COGNITIVE IMPAIRMENT AND MILD DEMENTIA: THE ROLE OF GINKGO BILOBA (EGB 761®). *Pharmaceuticals (Basel)*. 2021 Apr 1;14(4):305. doi: 10.3390/ph14040305. PMID: 33915701; PMCID: PMC8065464.
 10. Raffaeli W, Tenti M, Corrado A, Malafoglia V, Ilari S, Balzani E, Bonci A. CHRONIC PAIN: WHAT DOES IT MEAN? A REVIEW ON THE USE OF THE TERM CHRONIC PAIN IN CLINICAL PRACTICE. *J Pain Res*. 2021 Mar 29;14:827-835. doi: 10.2147/JPR.S303186. PMID: 33833560; PMCID: PMC8019660.
 11. Malafoglia V, Tenti M, Ilari S, Balzani E, Fanelli A, Muscoli C, Raffaeli W, Bonci A. OPPORTUNITIES AND CHALLENGES FOR NONADDICTIVE INTERVENTIONS

IN CHRONIC PAIN. *Curr Opin Pharmacol*. 2021 Apr;57:184-191. doi: 10.1016/j.coph.2021.02.007. Epub 2021 Mar 30. PMID: 33799001.

12. Ilari Sand Dagostino C, Malafoglia V, Lauro F, Giacotti LA, Spila A, Proietti S, Ventrice D, Rizzo M, Gliozzi M, Palma E, Guadagni F, Salvemini D, Mollace V, Muscoli C. PROTECTIVE EFFECT OF ANTIOXIDANTS IN NITRIC OXIDE/COX-2 INTERACTION DURING INFLAMMATORY PAIN: THE ROLE OF NITRATION. *Antioxidants (Basel)*. 2020 Dec 16;9(12):1284. doi: 10.3390/antiox9121284. PMID: 33339104; PMCID: PMC7765556.
13. Ilari S, Giacotti LA, Lauro F, Gliozzi M, Malafoglia V, Palma E, Tafani M, Russo MA, Tomino C, Fini M, Salvemini D, Mollace V, Muscoli C. NATURAL ANTIOXIDANT CONTROL OF NEUROPATHIC PAIN-EXPLORING THE ROLE OF MITOCHONDRIAL SIRT3 PATHWAY. *Antioxidants (Basel)*. 2020 Nov 9;9(11):1103. doi: 10.3390/antiox9111103. PMID: 33182469; PMCID: PMC7698145.
14. Ilari S, Giacotti LA, Lauro F, Dagostino C, Gliozzi M, Malafoglia V, Sansone L, Palma E, Tafani M, Russo MA, Tomino C, Fini M, Salvemini D, Mollace V, Muscoli C. ANTIOXIDANT MODULATION OF SIRTUIN 3 DURING ACUTE INFLAMMATORY PAIN: THE ROS CONTROL. *Pharmacol Res*. 2020 Jul;157:104851. doi: 10.1016/j.phrs.2020.104851. Epub 2020 May 11. PMID: 32423865.
15. Raffaelli W, Malafoglia V, Bonci A, Tenti M, Ilari S, Gremigni P, Iannuccelli C, Gioia C, Di Franco M, Mollace V, Vitiello L, Tomino C, Muscoli C. IDENTIFICATION OF MOR-POSITIVE B CELL AS POSSIBLE INNOVATIVE BIOMARKER (MU LYMPHO-MARKER) FOR CHRONIC PAIN DIAGNOSIS IN PATIENTS WITH FIBROMYALGIA AND OSTEOARTHRITIS DISEASES. *Int J Mol Sci*. 2020 Feb 22;21(4):1499. doi: 10.3390/ijms21041499. PMID: 32098316; PMCID: PMC7073128.
16. Malafoglia V, Celi M, Muscoli C, Ilari S, Lauro F, Giacotti LA, Morabito C, Feola M, Tarantino U and Raffaelli W. LYMPHOCYTE OPIOID RECEPTORS AS INNOVATIVE BIOMARKERS OF OSTEOARTHRITIC PAIN, FOR THE ASSESSMENT AND RISK MANAGEMENT OF OPIOID TAILORED THERAPY, BEFORE HIP SURGERY, TO PREVENT CHRONIC PAIN AND OPIOID TOLERANCE/ ADDICTION DEVELOPMENT: OPMARKART (OPIOIDS-MARKERS-ARTHROPROSTHESIS) STUDY PROTOCOL FOR A RANDOMIZED CONTROLLED TRIAL. *Trials* 2017;18:605. DOI 10.1186/s13063-017-2363-z
17. Scalici M, Traversetti L, Spani F, Malafoglia V, Colamartino M, Persichini T, Cappello S, Mancini G, Guerriero G, Colasanti M. SHELL FLUCTUATING ASYMMETRY IN THE SEA-DWELLING BENTHIC BIVALVE MYTILUS GALLOPROVINCIALIS (LAMARCK, 1819) AS MORPHOLOGICAL MARKERS TO DETECT ENVIRONMENTAL CHEMICAL CONTAMINATION. *Ecotoxicology*. 2017 Apr;26(3):396-404
18. Traversetti L, Del Grosso F, Malafoglia V, Colasanti M, Ceschin S, Larsen S, Scalici M. THE HYDRA REGENERATION ASSAY REVEALS ECOLOGICAL RISKS IN RUNNING WATERS: A NEW PROPOSAL TO DETECT ENVIRONMENTAL TERATOGENIC THREATS. *Ecotoxicology*. 2017 Mar;26(2):184-195.
19. Lauro F, Ilari S, Giacotti LA, Ventura CA, Morabito C, Gliozzi M, Malafoglia V, Palma E, Paolino D, Mollace V, Muscoli C. PHARMACOLOGICAL EFFECT OF A NEW IDEBENONE FORMULATION IN A MODEL OF CARRAGEENAN-INDUCED INFLAMMATORY PAIN. *Pharmacol Res*. 2016 Sep;111:767-73.
20. Lauro F, Giacotti LA, Ilari S, Dagostino C, Gliozzi M, Morabito C, Malafoglia V,

Raffaelli W, Muraca M, Goffredo BM, Mollace V, Muscoli C. INHIBITION OF SPINAL OXIDATIVE STRESS BY BERGAMOT POLYPHENOLIC FRACTION ATTENUATES THE DEVELOPMENT OF MORPHINE INDUCED TOLERANCE AND HYPERALGESIA IN MICE. *PLoS One*. 2016 May 26;11(5):e0156039.

21. Malafoglia V, Traversetti L, Del Grosso F, Scalici M, Lauro F, Russo V, Persichini T, Salvemini D, Mollace V, Massimo Fini, Raffaelli W, Muscoli C, and Marco Colasanti M. TRANSIENT RECEPTOR POTENTIAL MELASTATIN-3 (TRPM3) MEDIATES NOCICEPTIVE-LIKE RESPONSES IN HYDRA VULGARIS. *PLoS One*. 2016; 11(3): e0151386.
22. Scalici M, Traversetti L, Spani F, Bravi R, Malafoglia V, Tiziana Persichini T and Colasanti M. USING 3D VIRTUAL SURFACES TO INVESTIGATE MOLLUSCAN SHELL SHAPE. 2016. *Aquat. Living Resour.* 29, 207.
23. Lauro F, Ilari S, Giancotti LA, Chiara Morabito, Malafoglia V, Gliozzi M, Palma E, Salvemini D, Muscoli C. THE PROTECTIVE ROLE OF BERGAMOT POLYPHENOLIC FRACTION ON SEVERAL ANIMAL MODELS OF PAIN. *Pharma Nutrition*. Volume 4, Supplement. 2016. S35-S40. ISSN 2213-4344. <https://doi.org/10.1016/j.phanu.2016.04.001>.
24. Scalici M, Traversetti L, Malafoglia V, Colamartino M, Persichini T, Colasanti M. CONCEPTS AND TOOLS FOR EXPLOITING SESSILE BIO-FILTERS AS EARLY WARNING ELEMENTS: INTRODUCTORY APPLICATIONS FOR MARINE ECOSYSTEM PRESERVATION. 2015. *ISJ* 12:278-286. *Visions and Perspectives*.
25. Gigliuto C, De Gregori M, Malafoglia V, Raffaelli W, Compagnone C, Visai L, Petrini P, Avanzini MA, Muscoli C, Viganò J, Calabrese F, Dominioni T, Allegri M, Cobianchi L. PAIN ASSESSMENT IN ANIMAL MODELS: DO WE NEED FURTHER STUDIES? 2014. *Journal of pain research*. 8;7:227-36.
26. Malafoglia V, Colasanti M, Raffaelli W, Balciunas D, Giordano A, Bellipanni G. EXTREME THERMAL NOXIOUS STIMULI INDUCE PAIN RESPONSES IN ZEBRAFISH LARVAE. 2014. *J Cell Physiol*. Mar;229(3):300-8.
27. Malafoglia V, Bryant B, Raffaelli W, Giordano A, Bellipanni G. THE ZEBRAFISH AS A MODEL FOR NOCICEPTION STUDIES. 2013. *J Cell Physiol*. 228(10): 1956-66.
28. Di Domenico M, Scumaci D, Grasso S, Gaspari M, Curcio A, Oliva A, Ausania F, Di Nunzio C, Ricciardi C, Santini AC, Rizzo FA, Romano Carratelli C, Lamberti M, Conti D, La Montagna R, Tomei V, Malafoglia V, Pascali VL, Ricci P, Indolfi C, Costanzo F, Cuda G. BIOMARKER DISCOVERY BY PLASMA PROTEOMICS IN FAMILIAL BRUGADA SYNDROME. 2013. *Front Biosci*. 18:564-71.
29. Marfe G, Massaro-Giordano M, Ranalli M, Cozzoli E, Di Stefano C, Malafoglia V, Polettini M, Gambacurta A. BLOOD DERIVED STEM CELLS: AN AMELIORATIVE THERAPY IN VETERINARY OPHTHALMOLOGY. 2012. *J Cell Physiol*. 227(3):1250-6
30. Casali L, Malafoglia V, Puxeddu E. EARLY BRONCHIAL ALTERATIONS IN COPD AND THEIR LONG TERM CONSEQUENCES. 2009. Editorial, *Multidisciplinary Respiratory Medicine*. 4(3): 172-174
31. Casali L, Malafoglia V. CLINICAL IMPLICATIONS OF PHARMACOLOGIC EVIDENCE: MANAGEMENT APPROACH TO INFECTION. 2009. *Multidisciplinary Respiratory Medicine* 4 (1) PP. 64 – 66.

ADDITIONAL
INFORMATION

BOOK'S CHAPTERS

Puca A, Malafoglia V, Giordano A. CANCER STEM CELLS: TARGETS FOR FUTURE CANCER THERAPIES. 2011. Stem Cells: From Mechanisms to Technologies

Scientific Meetings, congresses and conferences:

- 2023. Pain in Europe XIII: the 13th Congress of the European Pain Federation EFIC, Budapest. Poster presentation.
- 2022. 4th European Congress on Clinical Trial in Pain, Vienna, Austria. Poster presentation.
- 2021. 40th congress SIF. Poster presentation.
- 2019. 11th congress of the European Pain Federation EFIC. Poster presentation.
- 2017. Neuropathic Pain Congress. NeuPSIG 2017. IASP. Gothenburg, Sweden. Poster presentation.
- 2014. EFNA (European Federation of Neurological Associations), Mind and Pain Workshop 2014. I was member of the general assembly.
- 2014. World medicine park, Minorca, Spain.
- 2014. 6th SIMPAR MEETING - SIMPAR 2014 Study in Multidisciplinary Pain. Poster presentation.
- 2014. PAE (Pain Alliance Europe) meeting in Bruxelles. I was member of the general assembly at the European Parliament.
- 2013. PAE (Pain Alliance Europe) meeting in Bruxelles. I was member of the general assembly.
- 2013. xSample Portugal 2013, Lisbon.
- 2013. EFIC international pain Congress, Florence.
- 2013. International pain Congress Simpar, Pavia.
- 2012. 14th World Congress on pain, IASP International association for the study of pain.
- 2011. Mid-Atlantic SDB Meeting, University of Pennsylvania, Philadelphia, PA.

Scientific meetings as a speaker:

- 2021. Congress Federdolore-Sicd 2021, Bologna. "Biomarkers nella terapia del dolore"
- 2019. Congress Federdolore-Sicd 2019, Rome. "Markers biologici nel dolore cronico: quali traguardi?"
- 2017. Congress Monotematico SIF 2017. "The pharmacological basis of novel pain therapeutics".
- 2016. National Congress 19° Seminario SIF Dottorandi, Assegnisti di Ricerca, Rimini. "Nociceptive-like responses mediated by Transient Receptor Potential Melastatin-3 (TRPM3) in *Hydra vulgaris*".
- 2015. National congress FederDolore-Sicd 2015, Rome. "Il sistema antinocicettivo nell'evoluzione".
- 2014. National Congress, San Michele all'Adige: La terapia del dolore: uno sguardo verso il futuro. "Ricerca di base applicata alla clinica :utopia?"
- 2014. National Congress FederDolore-Sicd 2014, Milan. "Evoluzione del sistema antinocicettivo".
- 2013. National congress FederDolore-Sicd 2013, Rome. "Il modello animale nella ricerca sul dolore".

Scientific activity

- Scientific translation (English to Italian) for AJRCCM.
- Activity of scientific paper reviewer for the Journal of Cellular Physiology, Biomedicine & Biotechnology journal and Journal of Neurochemistry, International journal of molecular science, Diagnostics

- Guest editor for the Journal of Personalized Medicine and Diagnostics.
- Teaching at ISAL Training School in Algological Sciences.

Membership

- Member of the Scientific committee at ISAL Foundation school
- Member of Noldus Zebrafish Research Panel
- Member of Italian Society of Pharmacology
- Member of the Editorial Board of our New Journal Fighting Pain.

AWARDS

- 2022 (current): Winner, as a Pi, of Bando ricerca Finalizzata “Giovani ricercatori” GR-2021-12375174. Title of the project: “Persistant pain in pharmacologically or surgically treated osteoarthritis: the role of the MuLympho-Marker as a candidate innovative diagnostic tool.”
- 2017: “In memoria di Giorgio Mariot”. Award and fellowship for pain medicine research
- 2014: YOUNG AGAINST PAIN; Title of the project: “the zebrafish: a new animal model for acute pain studies.”