

Curriculum Vitae

Personal information

Name Maggi Federica
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Phone 0737403312

Education

2008 - 2013 I.T.T. E. Divini High School, San Severino Marche, mark 98/100

2013 - 2016 Bachelor Degree in Scientific Information on Medicine and Fitness Sciences and Health Products (L-29), at University of Camerino, experimental thesis titled "Effect of permethrin and ionized water on the expression of Nurr1 on PC12." Professor Gabbianelli Rosita and Dott. Fedeli Donatella, mark 110/110 cum laude with a mention on career.

2016 - 2018 Master degree in Biological Sciences (LM-6), at University of Camerino, experimental thesis titled "Visceral adipose tissue and liver dysfunction in obesity: properties of prunus cerasus L. fruit." Professor Amantini Consuelo and Professor Tomassoni Daniele, mark 110/110 cum laude.

2018 - 2021 Ph.D student in Innovation in Immunomediated and Hematological Disorders, Dept. Molecular Medicine, University of Rome Sapienza.

June 2012 Cambridge B1 preliminary exam, at I.T.T. E. Divini High School San Severino Marche

June 2019 State exams for professional certification Biologist Cat. A, at University of Camerino

October 2021 Cultore della materia MED\04 "Patologia Generale", at University of Camerino with the approval by the council of the Biosciences and Veterinary Medicine school on October, 6th 2021.

Memberships

2018 - now European Association for Cancer Research, Membership number **EACR26702**

2018 - now Italian Society for Immunology, Clinical Immunology and Allergology (SIICA),

2021 - now AICC (Italian Association for Cell Culture)

Technical skills and competences

Ability to plan and complete a project. Ability to autonomously organize work, setting priorities and taking responsibilities. Familiarity with laboratory procedures, equipment, and protocols.

- Cell culture (normal cell lines, cancer cell lines, circulating tumor cells)
- Cytotoxicity assay (MTT, SRB)
- Cytofluorimetric analysis (Cell cycle analysis, Annexin/PI assay, BrdU incorporation, Autophagy, Oxidative stress, Mitochondrial depolarization)
- Immunohistochemistry, immunofluorescence, confocal analysis, western blot
- DNA/RNA extraction, cDNA synthesis, RT-PCR, cell transfection and gene silencing
- Migration and invasion assay
- Excellent knowledge of data analysis programs and statistical analysis tools (Cyflogic, GraphPad)
- Excellent knowledge of Windows operating systems, Office suite. And biological databases (cBioPortal, Stemformatics, Cell Atlas, BloodSpot, TGCA Database) and bioinformatics tools (Graphpad Prism software, R studio).

EQDL Start, Skills Card n° IT QST001328 (2013)

ECDL, Skills Card n° IT 1125968 (2008)

Foreign languages

English (Cambridge B1)

Publications

2019

Faloppi L, Nabissi M, Santoni M, **Maggi F**, Galizia E, Miccini F, Bianconi M, Puzzone M, Astara G, Battelli N, Santoni G, Scartozzi M (2019). RISE-HEP project part 1: Treatment sequences evaluation in hepatocellular carcinoma cell lines. JOURNAL OF CLINICAL ONCOLOGY, ISSN:0732-183X, doi:10.1200/JCO.2019.37.15_suppl.e15663.

Maggi F, Amantini C, Nabissi M, Marinelli O, Santoni G and Morelli MB. Typical and Atypical Circulating Tumour Cells in Bladder Cancer. Why Improve our Knowledge? Clin Oncol. 2019; 2(2): 1008.

Amantini C, Morelli MB, Nabissi M, Piva F, Marinelli O, **Maggi F**, Bianchi F, Bittoni A,

Berardi R, Giampieri R and Santoni G. 2019. Expression Profiling of Circulating Tumor Cells in Pancreatic Ductal Adenocarcinoma Patients: Biomarkers Predicting Overall Survival. *Front. Oncol.* 9:874. doi: 10.3389/fonc.2019.00874 IF (2019) 4.848

Marinelli O, Annibali D, Aguzzi C, Tuyaerts S, Amant F, Morelli MB, Santoni G, Amantini A, **Maggi F**, Nabissi M. The Controversial Role of PD-1 and Its Ligands in Gynecological Malignancies. *Front Oncol.* 2019;9:1073. doi:10.3389/fonc.2019.01073 IF (2019) 4.848

Santoni G, **Maggi F**, Morelli MB, Santoni M, Marinelli O. Transient Receptor Potential Cation Channels in Cancer Therapy. *Med. Sci.* 2019, 7, 108. doi:10.3390/medsci7120108 IF. 2.333

2020

Santoni G, Amantini C, **Maggi F**, Marinelli O, Santoni M, Nabissi M, Morelli MB. The TRPV2 cation channels: from urothelial cancer invasiveness to glioblastoma multiforme interactome signature. *Lab Invest.* 2020;100(2):186–198. doi:10.1038/s41374-019-0333-7. IF. 5.391

Santoni G, **Maggi F**, Amantini C, Marinelli O, Nabissi M, Morelli MB. Pathophysiological Role of Transient Receptor Potential Mucolipin Channel 1 in Calcium-mediated Stress-Induced Neurodegenerative Disease. *Front. Physiol.* 2020 Mar 24; 11:251. doi: 10.3389/fphys.2020.00251. eCollection 2020. IF. 3.367

Santoni G, Santoni M, **Maggi F**, Marinelli O and Morelli MB (2020). Emerging Role of Mucolipins TRPML Channels in Cancer. *Front. Oncol.* 10:659. doi:10.3389/fonc.2020.00659 IF. 4.848

Martinelli, I.; Micioni Di Bonaventura, M.V.; Moruzzi, M.; Amantini, C.; **Maggi, F.**; Gabrielli, M.G.; Fruganti, A.; Marchegiani, A.; Dini, F.; Marini, C.; Polidori, C.; Lupidi, G.; Amenta, F.; Tayebati, S.K.; Cifani, C.; Tomassoni, D. Effects of Prunus cerasus L. Seeds and Juice on Liver Steatosis in an Animal Model of Diet-Induced Obesity. *Nutrients* 2020, 12, 1308. IF. 5.717

Santoni G, Morelli MB, Nabissi M, **Maggi F**, Marinelli O, Santoni M, Amantini C. Cross-talk between microRNAs, long non-coding RNAs and p21Cip1 in glioma: diagnostic, prognostic and therapeutic roles. *J Cancer Metastasis Treat* 2020; 6:22. <http://dx.doi.org/10.20517/2394-4722.2020.49>. IF. 2.0

Marinelli O, Morelli MB, Annibali D, Aguzzi C, Zeppa L, Tuyaerts S, Amantini C, Amant F, Ferretti B, **Maggi F**, Santoni G, Nabissi M. The Effects of Cannabidiol and Prognostic Role of TRPV2 in Human Endometrial Cancer. *Int. J. Mol. Sci.* 2020, 21, 5409. IF. 4.556

Marinelli O, Annibali D, Morelli MB, Zeppa L, Tuyaerts S, Aguzzi C, Amantini C, **Maggi F**, Ferretti B, Santoni G, Amant F, Nabissi M. Biological Function of PD-L2 and Correlation With Overall Survival in Type II Endometrial Cancer. *Front Oncol.* 2020 Oct 28;10:538064. doi: 10.3389/fonc.2020.538064. IF. 4.848

Marinelli O, Romagnoli E, **Maggi F**, Nabissi M, Amantini C, Morelli MB, Santoni M,

Battelli N, Santoni G. Exploring treatment with Ribociclib alone or in sequence/combo with Everolimus in ER+HER2-Rb wildtype and knock-down in breast cancer cell lines. BMC Cancer. 2020 Nov 19;20(1):1119. doi: 10.1186/s12885-020-07619-1. IF 4.4

2021

Santoni G, Amantini C, Nabissi M, **Maggi F**, Arcella A, Marinelli O, Eleuteri AM, Santoni M and Morelli MB. Knock-Down of Mucolipin 1 Channel Promotes Tumor Progression and Invasion in Human Glioblastoma Cell Lines. Front. Oncol. 2021; 11:578928. doi: 10.3389/fonc.2021.578928 IF 6.244

Cocci P, Moruzzi M, Martinelli I, **Maggi F**, Micioni Di Bonaventura MV, Cifani C, Mosconi G, Tayebati SK, Damiano S, Lupidi G, Amantini C, Tomassoni D, Palermo FA. Tart cherry (*Prunus cerasus* L.) dietary supplement modulates visceral adipose tissue CB1 mRNA levels along with other adipogenesis-related genes in rat models of diet-induced obesity. Eur J Nutr. 2021; 60(5):2695-2707. doi: 10.1007/s00394-020-02459-y. IF 5.614

Maggi F, Morelli MB, Nabissi M, Marinelli O, Zeppa L, Aguzzi C, Santoni G, Amantini C. Transient Receptor Potential (TRP) Channels in Haematological Malignancies: An Update. Biomolecules. 2021; 11(5):765. <https://doi.org/10.3390/biom11050765> IF 4.879

Santoni G, Amantini C, Santoni M, **Maggi F**, Morelli MB and Santoni A (2021) Mechanosensation and Mechanotransduction in Natural Killer Cells. Front. Immunol. 12:688918. doi: 10.3389/fimmu.2021.688918 IF 6.429

Santoni G, Nabissi M, Amantini C, Santoni M, Ricci-Vitiani L, Pallini R, **Maggi F**, Morelli MB. ERK Phosphorylation Regulates the Aml1/Runx1 Splice Variants and the TRP Channels Expression during the Differentiation of Glioma Stem Cell Lines. Cells. 2021 Aug 10;10(8):2052. doi: 10.3390/cells10082052. IF 4.829

Maggi F, Morelli MB, Nabissi M, Marinelli O, Zeppa L, Aguzzi C, Santoni G, Amantini C. The effects of cannabidiol via TRPV2 channel in chronic myeloid leukemia cells and its combination with Imatinib. (**Submitted to Cancer Science journal**).

Cappelli A, Amantini C, **Maggi F**, Favia G, Ricci I. Formulation and Safety Tests of a *Wickerhamomyces anomalus*-Based Product: Potential Use of Killer Toxins of a Mosquito Symbiotic Yeast to Limit Malaria Transmission. Toxins 2021, 13, 676. <https://doi.org/10.3390/toxins13100676> IF 4.546

Roy P, Martinelli I, Moruzzi M, **Maggi F**, Amantini C, Micioni Di Bonaventura M V, Cifani C, Amenta F, Tayebati S K, Tomassoni D. Ions Channels Alteration in the Forebrain of High-Fat Diet Fed Rats. (**Submitted**).

2019 Martinelli I, Moruzzi M, **Maggi F**, Amantini C, Palermo F A, Cocci P, Micioni Di Bonaventura M V, Gabrielli G, Fruganti A, Marchegiani A, Kloeting N, Lupidi G, Cifani C, Seyed K T, Tomassoni D (2019). Prunus Cerasus L. modulates adipogenesis and inflammation of visceral adipose tissue in rats fed a high-fat diet. In: CIBO E NUTRACEUTICI: PAROLA CHIAVE "CARATTERIZZAZIONE". vol. 1, ISBN: 9788867680405, Camerino, 9 Luglio 2019.

Workshop and Congress

2019 **Corso di formazione in materia di utilizzo gas tossici e criogenici**, 15 february 2019, University of Camerino, Relatore Dott. Carradorini Gianluca.

English for Academic Purposes – Scientific Writing Communication skills – Written Communication, 21, 22, 26 february 2019, University of Camerino, Prof. Michael Zebrak.

Disaster Risk Management and Recovery: Theory and Japan’s Experience, 19 february 2019, University of Camerino, Unicam-Toyo collaborative study program.

Fair Data A to Z, 20 february 2019, University of Camerino, Prof. Elena Giglia.

Introduction to Turnitin: a tool for academic integrity in Unicam, 27 february 2019, University of Camerino, Prof.ssa Anna Maria Giuliadori e Prof.ssa Stefania Pucciarelli.

Unconventional Translation Strategies that Diversify the Bacterial Proteasome, 1 march 2019, University of Camerino, Prof. Alexander Markin.

Biology and Management of Laboratory Animals – A practical guide for animal research, 28 marche, 04, 11, 18 april 2019, University of Camerino, Dott. Elena De Felice.

Network medicine (Workshop), 11 april 2019, University of Rome, La Sapienza.

Biophysical Spectroscopic Methods in the study of protein function. 14 may 2019, University of Camerino, Prof. Milagros Medina.

The human apoptosis inducing factor: redox and ligand dependent conformational ensembles regulate its pro-life and cell death functions and are determinant in neurodegenerative disorders. 15 may 2019, University of Camerino, Prof. Milagros Medina.

Biophysical Techniques in the Structural Analysis and Determination of Proteins. 17 may 2019, University of Camerino, Prof. Milagros Medina.

Innate Immune Receptors: From Insects to Humans, 11 september 2019, University of Camerino, Prof. Jules Alphonse Nicolas Hoffman.

English for Intellectual Property Rights, 3 october 2019 University of Camerino, Prof. Patrizia Giampieri

The microbiome in neurodegenerative diseases, 17 december 2019, University of Camerino, Dr. Annamaria Cattaneo, Dr. Laura Bonfili, Dr. Valeria D'argenio.

2020

SIICA School of Immunology 2.0: Viral Immunology & Vaccinology (Webinar), 14 april - 4 may 2020, The SIICA Junior Faculty.

Every cell has its place: In situ sequencing of tissue samples at single-cell resolution (Webinar). 22 april AAAS Science.

EACR Conference Bioinformatics (Virtual Event), 03 june 2020, European Association of Cancer Research. Topics to be covered: Cancer Drivers, Exploring Cancer Genomics Data, Mutational Signatures in Cancer, Cancer Pharmacogenomics.

EACR 2020 Virtual Conference, 18-19 june 2020, European Association of Cancer Research.

Bone marrow as a key organ in the cardiovascular complications of diabetes mellitus (Webinar), 24 june 2020, The international PhD Program in "Innovation in immuno-mediated and hematological disorders", Sapienza Università di Roma. Dott.ssa Spinetti Gaia PhD, Cardiovascular Research Unit, IRCCS Multimedica, Milan, Italy

Scientific communication course, 13 july 2020, Doctoral School in Biology and Molecular Medicine, Sapienza University of Rome. Professor Dr.ssa Silvia Bencivelli.

Canonical and non canonical roles of the complement system (Webinar), 15 july 2020, The international PhD Program in "Innovation in immuno-mediated and hematological disorders", Sapienza Università di Roma. Dr.ssa Roberta Bulla PhD, Department of Life Sciences, University of Trieste.

Fundamentals in Enzyme Kinetics, 10-25 september 2020, The international PhD Program in "Biochemistry", Sapienza Università di Roma. Prof. Francesco Malatesta, Prof Serena Rinaldo, Prof Roberto Contestabile, Department of Biochemical Sciences "Alessandro Rossi Fanelli".

Approaches for the study of the human genome and metagenomics (Webinar). 7, 8, 13, 14 october 2020. Professor: Caputo Viviana, Fulci Valerio, Carissimi Claudia, Sapienza University of Rome

2021

"Regulatory T cells and immunometabolic signals in tumors " - 14 January 2021 Silvia Piconese, Associate Professor of Technical Sciences of Laboratory Medicine, Sapienza University of Rome

“A Pragmatic Approach to Testing – Or how to make lemonade” – 16 March 2021
Lucio Miele, Cancer Crusaders Professor and Chair, Department of Genetics, Assistant Dean for Translational Science, Louisiana State University Health Science Center New Orleans

“Dissecting the role of neutrophils and unconventional T cells in cancer” – 24 March 2021
Sebastien Jaillon, Research Laboratory in Immunology and Inflammation Humanitas Clinical and Research Center

Scientific communication course, 22nd march and 7th april 2020, University of Camerino, Dott. Mattia Crivellini.

“Vaccines and global health: runs and reruns” – 15 March 2021; The international PhD Program in "Innovation in immuno-mediated and hematological disorders"
Angela Santoni, Full professor Sapienza University of Rome

1st ICI-CIVIS Summer School 2021 in Immuno-Oncologie – 5-9th july 2021; Institut Cancer et Immunologie Aix Marseille Université

Microscopy course for PhD students. 8th april- 20th may 2021; Prof. Michele Bellesi and Dott. Luisa De Vivo, University of Camerino.

Biostatistic course for PhD students. 6th may- 21st may 2021; Prof. Mauro Angeletti, University of Camerino.

Statistics for Biologists for PhD students (BEMM). 29, 30th september 2021; Dott. Licursi Valerio e Dott. Fordellone Mario, University of Rome, Sapienza.

Oral presentation

2021

Cannabidiol: Promising role as anti-cancer drug in chronic myeloid leukemia cells; 5th Global Summit on Cancer Science and Oncology 2021; Webinar, February 26th (Speaker)

Cannabidiol-Induced Autophagic Pathway in Chronic Myeloid Leukemia Cells; 3rd International Conference on PharmScience Research & Development (Pharma R&D-2021); Virtual, February 22-24, 2021 (Speaker)

Cannabidiol extracted from Cannabis sativa induces cell cycle arrest, mitophagy and cell differentiation in chronic myeloid leukemia cells; 5° Convegno PTA, ALIMENTI E NUTRACEUTICI: SALUTE E PREVENZIONE ATTRAVERSO IL CIBO; Virtual, July 13th 2021 (Speaker)

Grant

2020 “Avvio alla ricerca” grant promoted by Sapienza University with the project entitled **“Transient receptor potential channels (TRP) and autophagy in cancer immunity: possible new targets in chronic myeloid leukaemia (CML) treatment”**. D.R. n. 992/2020 Prot. n. 25415 del 27.03.2020 Deliberaton S.A. 215/2020 del 13/10/2020
Project duration: 12 months. Founding allocated: 1.000 €

Academic role

2019/2020 Tutor in Laboratory II (Biosciences and Biotechnology, University of Camerino)

2020/2021 Seminar activities in Stress Pathology Course (Scienze del Fitness e dei Prodotti della Salute, University of Camerino)

Co-tutor for Bachelor and Master degree in Biosciences and Biotechnology

Awards and acknowledgments

- Scholarship winner years 2008/2009, 2009/2010, 2010/2011, 2011/2012, 2012/2013 grant Borsa di Studio Territoriale della Banca Popolare di Ancona presso ITT E. Divini;
- Scholarship winner years 2013-2014-2015-2016 grant Borsa di Eccellenza dell’Università degli Studi di Camerino.
- Scholarship winner years 2016-2017 grant Borsa di Eccellenza dell’Università degli Studi di Camerino for Master Degree Course.