



● **WORK EXPERIENCE**

01/11/2023 – CURRENT Camerino (MC), Italy

RESEARCH FELLOWSHIP: MED/46 "RUOLO DEL SISTEMA CANNABINOIDE NELLA MODULAZIONE DELLA CRESCITA DEL GLIOMA E LA SUA INTERAZIONE CON LA MICROGLIA E MACROFAGI INFILTRANTI" UNIVERSITY OF CAMERINO

30/09/2019 – 29/09/2020 Camerino, Italy

UNIVERSITY RESEARCH ACTIVITY WITH SCHOLARSHIP "ONCOLOGIA" UNIVERSITY OF CAMERINO

Research activity in molecular biology and cellular biotechnology
Cell culture, cytotoxic assay, cytofluorimetric analysis, RT-PCR, western blot, wound-healing assay

● **EDUCATION AND TRAINING**

01/11/2020 – 07/06/2024 Camerino, Italy

DOCTORAL IN MOLECULAR BIOLOGY AND CELLULAR BIOTECHNOLOGY University of Camerino

25/11/2019 Camerino, Italy

QUALIFICATION TO PHARMACIST PROFESSION WITH 313/350 University of Camerino

02/2019 – 08/2019 Camerino, Italy

FORMATIVE COURSE 24 CFU University of Camerino

30/09/2014 – 11/07/2019 Camerino, Italy

MASTER DEGREE IN CHEMISTRY AND PHARMACEUTICAL TECHNOLOGIES University of Camerino

Experimental thesis in General Pathology with title "Evaluation of Cannabigerol activity in human pancreatic ductal adenocarcinomas cell lines"

Final grade 110 cum laude/110

13/09/2009 – 04/07/2014 Camerino, Italy

HIGH SCHOOL DIPLOMA Liceo Scientifico (P.N.I.) - Istituto di Istruzione Superiore Costanza Varano

Final grade 88/100

● **LANGUAGE SKILLS**

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● **DIGITAL SKILLS**

Microsoft Word | Microsoft Excel | Google Drive | Social Media | Microsoft Powerpoint | word | Cyflogic | Compusyn

● **JOB-RELATED SKILLS**

Biological skills

- Cell culture (normal cell lines, cancer cell lines)
- 3D cell culture (cancer cell lines)
- Viability assays (MTT assay, SRB assay)
- Cytofluorimetric analysis (Cell cycle analysis, Annexin/PI assay, Proliferation assay, BrdU assay)
- RNA extraction, cDNA synthesis, RT-PCR, Comet Assay, western blot, ELISA
- Migration and Invasion assay
- Milliplex Multiplex Assay
- Evaluation of pharmacological synergism

Pharmaceutical skills

- Quantitative and qualitative medicinal analysis
- Fundamentals of pharmaceutical synthesis
- Galenic preparations

Chemical skills

- Spectrophotometer
- Column chromatography
- Rotavapor
- Melting point

● **CONFERENCES AND SEMINARS**

29/05/2024 – 31/05/2024 Dubrovnik

Speaker at the congress "8th Cancer World Congress"

"*In vitro* and *in vivo* effects of melatonin-containing combination in human pancreatic ductal adenocarcinoma"

06/2023 Turin

Poster presenter at European Association for Cancer Research (EACR) 2023 Congress - Innovative Cancer Science

"Effect of Cannabidiol, Melatonin and Oxygen/Ozone combination in preclinical models of human Pancreatic Ductal Adenocarcinoma"

11/2022 Naples

Speaker at the Congress ETS AMOR "Cancro e dolore: ossigeno ozono, cannabis e terapie integrate"

"Ossigeno ozono terapia e terapie integrate in modelli preclinici di tumore al pancreas"

10/2022 Basel

Poster presenter at Cannabinoid Conference

"Anti-cancer effects of Cannabidiol and Oxygen-ozone combination in Human Pancreatic Ductal Adenocarcinoma cell lines"

06/2022 Seville

Poster presenter at European Association for Cancer Research (EACR) 2022 Congress - Innovative Cancer Science: Translating Biology to Medicine

"TRPV channels activation induces cell death in human Pancreatic Ductal Adenocarcinoma cell lines"

05/2022

Speaker at the 2nd Global virtual summit on Cancer & Cancer Research.

"Improving chemotherapeutic effect in human Pancreatic Ductal Adenocarcinoma cell lines with Evening Primrose Oil"

07/2021 University of Camerino

Speaker at the conference "Alimenti e nutraceutici: salute e prevenzione attraverso il cibo"

"Evening Primrose oil effects in human Pancreatic Ductal Adenocarcinoma cell lines"

● **PROJECTS**

2022 – CURRENT

PRIN 2022 PNRR "Environmental modulation of the gut-brain communication in the context of brain tumors: role of the vagus nerve and the endocannabinoid system.

2022 – CURRENT

FAR 2022 PNRR "An innovative platform against SARS-CoV-2 and other emerging viruses grounded on copper-based materials"

2022

"Valutazioni di formulazioni di Cannabis terapeutica nella malattia di Crohn" financed by ASUR e Regione Marche

2021

PRIN 2020 "Modulating synaptic neurotransmission to reactivate the immune reaction against brain tumors" financed by MUR

2019

PSR 2019 "BIOCANAPA Valutazione di biopesticidi ottenuti da prodotti di scarto della canapa e valutazione della tossicità per l'operatore " financed by Regione Marche

2019 – 2023

"Medical cannabis in multiple myeloma" financed by Entourage Biosciences

2019 – 2021

"Cannabinoids and endometrial cancer" financed by ENECTA srl

2019

"Ozonotherapy, cannabis and pancreatic cancer" financed by Fondazione AMOR Onlus

● **PATENTS**

"Use of phytocannabinoids for treating Multiple Myeloma" PCT/CA2021/050801

"Use of phytocannabinoids for treating Endometrial cancer and Endometriosis" PCT/US22/36758

"Methods and compounds of cannabidiol, melatonin and AKBA for treating Pancreatic cancer" PCT/US22/23244

● **PUBLICATIONS**

2024

Morelli MB, Caviglia M, Santini C, Del Gobbo J, Zeppa L, Del Bello F, Giorgioni G, Piergentili A, Quaglia W, Battocchio C, Bertelà F, Amatori S, Meneghini C, Iucci G, Venditti I, Dolmella A, Di Palma M, Pellei M. Copper-Based Complexes with Adamantane Ring-Conjugated bis(3,5-Dimethyl-pyrazol-1-yl)acetate Ligand as Promising Agents for the Treatment of Glioblastoma. *J Med Chem.* 2024 Jun 3. doi: 10.1021/acs.jmedchem.4c00821. Epub ahead of print. PMID: 38831692.

2024

Aguzzi C, Zeppa L, Morelli MB, Marinelli O, Giangrossi M, Amantini C, Santoni G, Sazzad H, Nabissi M. Anticancer effect of minor phytocannabinoids in preclinical models of multiple myeloma. *Biofactors.* 2024 May 17. doi: 10.1002/biof.2078. Epub ahead of print. PMID: 38760945.

2024

Zeppa L, Aguzzi C, Morelli MB, Marinelli O, Giangrossi M, Luongo M, Amantini C, Santoni G, Nabissi M. Cannabigerol Induces Autophagic Cell Death by Inhibiting EGFR-RAS Pathways in Human Pancreatic Ductal Adenocarcinoma Cell Lines. *Int J Mol Sci.* 2024 Feb 7;25(4):2001. doi: 10.3390/ijms25042001. PMID: 38396679; PMCID: PMC10888274.

2023

Aguzzi C, Perinelli DR, Cespi M, Zeppa L, Mazzara E, Maggi F, Petrelli R, Bonacucina G, Nabissi M. Encapsulation of Hemp (*Cannabis sativa* L.) Essential Oils into Nanoemulsions for Potential Therapeutic Applications: Assessment of Cytotoxicological Profiles. *Molecules.* 2023 Sep 7;28(18):6479. doi: 10.3390/molecules28186479.

2023

Antonini M, Aguzzi C, Fanelli A, Frassinetti A, Zeppa L, Morelli MB, Pastore G, Nabissi M, Luongo M. The Effects of a Combination of Medical Cannabis, Melatonin, and Oxygen-Ozone Therapy on Glioblastoma Multiforme: A Case Report. *Reports.* 2023; 6(2):22. <https://doi.org/10.3390/reports6020022>

2023

Spinozzi E, Ferrati M, Baldassarri C, Maggi F, Pavela R, Benelli G, Aguzzi C, Zeppa L, Cappellacci L, Palmieri A, Petrelli R. Synthesis of Carlina Oxide Analogues and Evaluation of Their Insecticidal Efficacy and Cytotoxicity. *J Nat Prod.* 2023 May 26;86(5):1307-1316. doi: 10.1021/acs.jnatprod.3c00137. Epub 2023 May 12. PMID: 37172063; PMCID: PMC10226105.

2023

Maggi F, Morelli MB, Aguzzi C, Zeppa L, Nabissi M, Polidori C, Santoni G, Amantini C. Calcium influx, oxidative stress, and apoptosis induced by TRPV1 in chronic myeloid leukemia cells: Synergistic effects with imatinib. *Front Mol Biosci.* 2023 Feb 15;10:1129202. doi: 10.3389/fmolb.2023.1129202. PMID: 36876044; PMCID: PMC9975599.

2022

Badalamenti N, Bruno M, Pavela R, Maggi F, Marinelli O, Zeppa L, Benelli G, Canale A. Acaricidal Activity of Bufadienolides Isolated from *Drimys panchratium* against *Tetranychus urticae*, and Structural Elucidation of Arenobufagin-3-O- α -L-rhamnopyranoside. *Plants (Basel).* 2022 Jun 21;11(13):1629. doi: 10.3390/plants11131629. PMID: 35807580; PMCID: PMC9268777.

2022

Morelli MB, Marinelli O, Aguzzi C, Zeppa L, Nabissi M, Amantini C, Tomassoni D, Maggi F, Santoni M, Santoni G. Unveiling the Molecular Mechanisms Driving the Capsaicin-Induced Immunomodulatory Effects on PD-L1 Expression in Bladder and Renal Cancer Cell Lines. *Cancers (Basel).* 2022 May 26;14(11):2644. doi: 10.3390/cancers14112644. PMID: 35681623; PMCID: PMC9179445.

2022

Zeppa L, Aguzzi C, Versari G, Luongo M, Morelli MB, Maggi F, Amantini C, Santoni G, Marinelli O, Nabissi M. Evening Primrose Oil Improves Chemotherapeutic Effects in Human Pancreatic Ductal Adenocarcinoma Cell Lines-A Preclinical Study. *Pharmaceuticals (Basel)*. 2022 Apr 12;15(4):466. doi: 10.3390/ph15040466. PMID: 35455464; PMCID: PMC9024477.

2022

Sánchez-Gómez, S., Pagán, R., Pavela, R., Mazzara, E., Spinozzi, E., Marinelli, O., Zeppa, L., Morshedloo, M. R., Maggi, F., Canale, A., Benelli, G. (2022). Lethal and sublethal effects of essential oil-loaded zein nanocapsules on a zoonotic disease vector mosquito, and their non-target impact. *Industrial Crops and Products*. 176. 10.1016/j.indcrop.2021.114413

2021

Maggi F, Morelli MB, Tomassoni D, Marinelli O, Aguzzi C, Zeppa L, Nabissi M, Santoni G, Amantini C. The effects of cannabidiol via TRPV2 channel in chronic myeloid leukemia cells and its combination with imatinib. *Cancer Sci*. 2021 Dec 31. doi: 10.1111/cas.15257

2021

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 May 20;11(5):765. doi: 10.3390/biom11050765

2021

Pavela, R., Pavoni, L., Bonacucina, G., Cespi, M., Cappellacci, L., Petrelli, R., Spinozzi, E., Aguzzi, C., Zeppa, L., Ubaldi, M., Desneux, N., Canale, A., Maggi, F., Benelli, G. Encapsulation of *Carlina acaulis* essential oil and carlina oxide to develop long-lasting mosquito larvicides: microemulsions versus nanoemulsions. *J Pest Sci* 94, 899–915 (2021). <https://doi.org/10.1007/s10340-020-01327-2>

2020

Aguzzi C, Marinelli O, Zeppa L, Santoni G, Maggi F, Nabissi M. Evaluation of anti-inflammatory and immunoregulatory activities of Stimunex® and Stimunex D3® in human monocytes/macrophages stimulated with LPS or IL-4/IL-13. *Biomed Pharmacother*. 2020 Dec;132:110845. doi: 10.1016/j.biopha.2020.110845

2020

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

2020

Luongo M, Marinelli O, Zeppa L, Aguzzi C, Morelli MB, Amantini C, Frassinetti A, di Costanzo M, Fanelli A, Santoni G, Nabissi M. Cannabidiol and Oxygen-Ozone Combination Induce Cytotoxicity in Human Pancreatic Ductal Adenocarcinoma Cell Lines. *Cancers (Basel)*. 2020 Sep 27;12(10):2774. doi: 10.3390/cancers12102774

2020

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 Jul 29;21(15):5409. doi: 10.3390/ijms21155409

2020

Benelli G, Pavela R, Cianfaglione K, Sender J, Danuta U, Maślanko W, Canale A, Barboni L, Petrelli R, Zeppa L, Aguzzi C, Maggi F. Ascaridole-rich essential oil from marsh rosemary (*Ledum palustre*) growing in Poland exerts insecticidal activity on mosquitoes, moths and flies without serious effects on non-target organisms and human cells. *Food Chem Toxicol.* 2020 Apr;138:111184. doi: 10.1016/j.fct.2020.111184

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali".

Camerino , 10/06/2024