

Giamaica Conti

(14th August 1982, Fermo, FM)

CONTACT INFORMATIONS

Department of Neurosciences
Biomedicine and Movement,
University of Verona. Str. Le
Grazie, 8, 37134, Verona (VR)

Tel : +390458027680

Mobile: +393341626368

Fax: +390458027163

E-mail: giamaica.conti@univr.it

EDUCATION

University of Camerino

17/09/2004: First Level Degree in Nutrition Biology , course of Transformation and Conservation of Food ResourcesTechnologies, Cl 12.

110/110 cum laudae

6/11/2006: Second level Degree in Biomolecular and Biofunctional Sciences, course of Molecular Biology. Cl 6/S. Title: Cyclooxygenase-2 constitutive expression in stroma cells isolated from FVB/NeuT mammary tumors.

110/110 cum laudae

University of Verona

26/04/13 PhD degree in Nanotechnologies and Nanomaterials in Biomedical Applications

TRAINING

From **2/10/05** to **1/11/06** Clinical Application of Biology, University of Camerino.
Supervisor: Dr. Amici Augusto

From **01/01/09** to **31/12/12** University of Verona, PhD course in Nanotechnologies and Nanomaterials for Biomedical Application. Supervisor Prof. Pasquina Marzola

EMPLOYMENT

From **1/05/07** to **30/04/08** research fellow in: “MRI evaluation of pulmonary lesions induced by instillation of fMPL in mice”. Department of Neurological, Neuromorphological, Morphological and Movement Sciences, Anatomy and Histology Section, University of Verona.

From **1/05/08** to **30/04/09** research fellow in :”MRI evaluation of pulmonary lesions induced by instillation of fMPL in mice”. Department of Neurological, Neuromorphological, Morphological and Movement Sciences, Anatomy and Histology Section, University of Verona.

From **1/06/09** to **1/12/09** research fellow in “Nanoparticelle di ossido di ferro nello staging delle metastasi linfonodali”. Department of Neurological, Neuromorphological, Morphological and Movement Sciences, Anatomy and Histology Section, University of Verona.

From **1/1/10** to **31/12/12** PhD Student in Nanotechnologies and Nanomaterials for Biomedical Applications, department of Biotechnology, University of Verona.

From **1/1/13** to **31/12/13** Post-doctoral fellow in: In vivo and in vitro study of interaction pathways between nanoparticles and living systems. Department of Neurological, Neuromorphological, Morphological and Movement Sciences, Anatomy and Histology Section, University of Verona.

From 01/01/16 to 31/12/16 post-doctoral fellow in “ Development of innovative tools for the analysis of adipose tissue and its cellular compartment” Department of Neurosciences Biomedicine and Movement, University of Verona.

From 01/08/2017 : technician cat D1, technical and scientifica area Department of Neurosciences Biomedicine and Movement, University of Verona.

PROFESSIONAL SKILLS

In-depth knowledge of the nutritional constituents of food and nutritional characteristics of foods.

Study of the digestive system and planning of diets targeted to individuals with eating disorders, allergies, intolerances.

Genetic, genomic and molecular biology studies on foods for the presence of genetic mutation (OGM) and adulterations.

Analysis of gene expression applied to the study of transgenic mouse models developing different type of cancer.

Study and understanding of the mechanisms of pulmonary inflammation in mouse models developed in Verona University in cooperation with Chiesi Farmaceutici SPA of Parma.

Development of a mouse model of pulmonary inflammation by intratracheal injection of LPS (lipopolysaccharide) or by aerosolization of LPS solution.

Study of genetics and molecular biology and knowledge of evolving cancer mice models.

Advanced skills in the creation of transgenic mouse models.

Advanced skills in the production of histological sections for microscopic analysis of pathologies in different organs.

Production of a mouse model of rectal cancer achieved by intrarectal and subcutaneous injection of tumor cells.

Nanoparticles and living system interactions study through vitality and viability tests, PCR real time, western immunoblotting.

Genetic analysis on samples of digested tissues or on cell cultures using chip-on-chip techniques, microRNA analysis, sequencing programs.

Realization and analysis of MR images of animal models characterized by the development of different pathologies in liver, pancreas, colon, skin, adipose tissue.

In-depth knowledge about primary cell cultures, isolation of different type of cells (adult cells and stem cells) from many sources (adipose tissue, tumors, lungs, liver).

Study of paramagnetic, hyperthermic properties of nanoparticles extracted from bacterial cell cultures or nanoparticles chemically synthesized to verify their capability in cancer cell apoptosis induction.

Study of upconversion, cell growth influence and nanoparticles-cells interactions, using rare earth doped nanoparticles by two-photon microscopy.

Surgical procedures for organs excision from rats and mice.

Perfusion techniques for small laboratory animals using para formaldehyde and glutaraldehyde for electron microscopy samples preparation.

Study of adipose tissue, adult adipose stem cells, regenerative medicine.

Study of fat graft and lipofilling technique basing on the study of mesenchymal stem cells isolated from adipose tissue.

Translation of biological study on adipose tissue to clinical practice, specifically to regenerative plastic surgery.

INFORMATIC SKILLS

Operating System: Windows (word, excel, power point)

Corel draw

Amide for MR images analysis

ITK-SNAP for MR images analysis

Images ProPlus 7.0 for optical microscopy

LANGUAGES

Italian (native)

English (fluent)

PARTECIPATION IN CONFERENCES AND COURSES

- **14/11/07-17/11/07** ESMRMB Lectures on magnetic resonance: “Molecular MR imaging in experimental neuroscience”. Cologne. DE.
- **1/10/09- 3/10/09** 26th ESMRMB Annual Congress Antalya, TR
- **2010** Participation in “Corso di formazione del Personale C.I.R.S.A.L.” organized by dr. Giampaolo Morbioli in University of Verona.
- **03/02/2011** Participation in poster session during PhD Day in University of Verona for the PhD students of Engineering and Medicine Graduate School.
- **22/02/2012** Participation in poster session during PhD Day organized by University of Verona for the students of Engineering and Medicine Graduate School
- **13/10/14** 63rd Congress of SICPRE . Italian Faculty Member
- **12/5/2017** Italian faculty member in the 38th Italian Society of Aesthetic Medicine (SIME), with the oral presentation entitled: “Cellulite and Movement”.
- **18/5/2018** Italian faculty member in the 38th Italian Society of Aesthetic Medicine (SIME), with the oral presentation entitled: Cellulite Inside

AWARDS

1-3/10/09 Second Prize at the Young Investigators Awards 26th ESMRMB Annual Congress. Antalya, TR.

13/10/14 63rd Congress of SICPRE. Italian Faculty Member with the presentation entitled: “New acquisitions about adipose tissue biology.”

Conti G., Tambalo S., Villetti G., Catinella S., Carnini C., Bassani F., Sonato N., Sbarbati A., Marzola P. "Evaluation of lung inflammation induced by intratracheal administration of LPS in mice: comparison between 1H-MRI and histology" *Magn Reson Mater Phy* (2010) 23:93–101.

Farace P, **Conti G**, Merigo F, Tambalo S, Marzola P, Sbarbati A, Quarta C, D'Ambrosio D, Chondrogiannis S, Nanni C, Rubello D. *Potential role of combined FDG PET/CT & contrast enhancement MRI in a rectal carcinoma model with nodal metastases characterized by a poor FDG-avidity.* *Eur J Radiol* (2011) 81(4):658-62.

Minicozzi A, **Conti G**, Merigo F, Marzola P, Boschi F, Calderan L, Pacca R, Sbarbati A, Cordiano C, *A new model of rectal cancer with regional lymph node metastasis allowing in vivo evaluation by imaging biomarkers.* *Biomedicine&Pharmacotherapy.* (2011) 65(6):401-6.

Farace P., Tambalo S., Fiorini S., Merigo F, Daducci A, Nicolato E, **Conti G**, Degrassi A, Sbarbati A, and Marzola P.: *Early Versus Late GD-DTPA MRI Enhancement in Experimental Glioblastomas.* *J Magn Res Imag* (2011) 33(3):550-6 .

Panettiere P. Accorsi D., Marchetti L., Minicozzi A.M., Orsini G., Bernardi P., Benati D., **Conti G.**, Andrea S. *The trochanteric fat pad.* *Eur J Histochem* (2011) 55e16: 85-89.

Dong NN, Pedroni M, Piccinelli F, **Conti G**, Sbarbati A, Ramírez-Hernández JE, Maestro LM, Iglesias-de la Cruz MC, Sanz-Rodriguez F, Juarranz A, Chen F, Vetrone F, Capobianco JA, Solé JG, Bettinelli M, Jaque D, Speghini A. *NIR-to-NIR two-photon excited CaF₂:Tm³⁺,Yb³⁺ nanoparticles: multifunctional nanoprobes for highly penetrating fluorescence bio-imaging.* *ACS Nano.* (2011) 22;5(11):8665-71.

Conti G., Minicozzi A., Merigo F., Marzola P., Osculati F., Cordiano C., Sbarbati A. *Morphogenetic events in the perinodal connective tissue in a metastatic cancer model.* *BIOMEDECINE & PHARMACOTHERAPY*(2012).

Passuello T., Pedroni M., Piccinelli F., Polizzi S., Marzola P., Tambalo S., **Conti G.**, Benati D., Vetrone F., Bettinelli M., and Speghini A., (2012): *PEG-capped, lanthanide doped GdF₃ nanoparticles: luminescent and T2 contrast agents for optical and MRI multimodal imaging.* *Nanoscale.* 21;4(24):7682-9

Minicozzi A, Mosconi E, Cordiano C, Rubello D, Marzola P, Ferretti A, Maffione AM, Sboarina A, Bencivenga M, Boschi F, **Conti G**, Sbarbati A. (2013) : *Proton magnetic resonance spectroscopy: ex vivo study to investigate its prognostic role in colorectal cancer.* *Biomed Pharmacother.* 67(7):593-7.

Cantarelli, I. X.; Pedroni, M.; Piccinelli, F.; Marzola, P.; Boschi, F.; **Conti, G.**; Sbarbati, A.; Bernardi, P.; Mosconi, E.; Perbellini, L.; Marongiu, L.; Donini, M.; Dusi, S.; Sorace, L.; Innocenti, C.; Fantechi, E.; Sangregorio, C.; Speghini, A. *Multifunctional Nanoprobes Based on Upconverting Lanthanide Doped CaF₂: Towards Biocompatible Materials for Biomedical Imaging.* *Biomater. Sci.* 2014, 2, 1158–1171.

Mannucci S, Ghin L, **Conti G**, Tambalo S, Lascialfari A, Orlando T, Benati D, Bernardi P, Betterle N, Bassi R, Marzola P, Sbarbati A. (2014). *Magnetic nanoparticles from Magnetospirillum gryphiswaldense increase the efficacy of thermotherapy in a model of colon carcinoma.* *PlosOne.* 7;9(10):e108959.

Conti G., Benati D., Bernardi P., Jurga M., Rigotti G., Sbarbati A. *The post-adipocytic phase of the adipose cell cycle.* *Tissue and Cells.* DOI: 10.1016/j.tice.2014.09.005

Paolo Arosio, Francesco Orsini, Anna M. Piras, Stefania Sandreschi, Federica Chiellini, Maurizio Corti, Marc Masa, Marta Mućkov, Ludmila Schmidov ,Costanza Ravagli, Giovanni Baldi, Elena Nicolato, **Giamaiqa Conti**, Pasquina Marzola and Alessandro Lascialfari. *MR imaging and targeting of human breast cancer cells with folate decorated nanoparticles.* *RSC Advances.* 2015.

PUBLICATIONS

Conti G, Jurga M, Benati D, Bernardi P, Mosconi E, Rigotti G, Buvé M, Van Wemmel K, Sbarbati A. *Cryopreserved subcutaneous adipose tissue for fat graft*. Aesthetic Plastic Surgery 2015.

Poletti A, Fracasso G, **Conti G**, Pilot R, Amendola V. *Laser generated gold nanocorals with broadband plasmon absorption for photothermal applications*. Nanoscale 2015.

T Orlando · S Mannucci · E Fantechi · **G Conti** · S Tambalo · A Busato · C Innocenti · L Ghin · R Bassi · P Arosio · F Orsini · C Sangregorio · M Corti · M F Casula · P Marzola · A Lascialfari · A Sbarbati. Characterization of magnetic nanoparticles from *Magnetospirillum Gryphiswaldense* as potential theranostics tools. Contrast Media and Molecular Imaging 2015. · DOI: 10.1002/cmmi.1673.

Falvo, Elisabetta; Tremante, Elisa; Arcovito, Alessandro; Papi, Massimiliano; Elad, Nadav; Boffi, Alberto; Morea, Veronica; **Conti, Giamaica**; Toffoli, Giuseppe; Fracasso, Giulio; Giacomini, Patrizio; Ceci, Pierpaolo. Improved doxorubicin encapsulation and pharmacokinetics of ferritin-fusion protein nanocarriers bearing PAS elements. Biomacromolecules 2016; Feb 8;17(2):514-22 .

Bertossi D., **Conti G.**, Bernardi P., Benati D., Nocini PF., Sbarbati A. Ultrastructural analysis of facial fat compartments. Aesthetic Medicine. Vol 1:3.

Fracasso G, Falvo E, Colotti G, Fazi F, Ingegnere T, Amalfitano A, Doglietto GB, Alfieri S, Boffi A, Morea V, **Conti G**, Tremante E, Giacomini P, Arcovito A, Ceci P. Selective delivery of doxorubicin by novel stimuli-sensitive nano-ferritins overcomes tumor refractoriness. J Control Release. 2016 Aug 12;239:10-18.

Falvo E., Tremante E., Arcovito A., Papi M., Nadav E., Boffi A., Morea V., **Conti G.**, Toffoli G., Fracasso G., Giacomini P., Ceci P. Improved Doxorubicin encapsulation and pharmacokinetics of ferritin fusion protein nanocarriers bearing proline, serine and alanine elements. (2016). BIOMACROMOLECULES. Vol17, p514-522.

Dai Prè E., **Conti G.**, Sbarbati A. Hyaluronic Acid (HA) Scaffolds and Multipotent Stromal Cells (MSCs) in Regenerative Medicine. (2016) STEM CELL REVIEWERS, Vol 12, p664-681.

Ringhieri P., Mannucci S., Conti G., Nicolato E., Fracasso G., Marzola P., Morelli G., Accardo A., Liposomes derivatized with multimeric copies of KCCYSL peptide as targeting agent for HER-2-overexpressing tumor cells. ITERNATION JOURNAL OF NANOMEICINE. (2017). Vol 12, P.501-514.

Conti G. L'arte del Benessere e della Nutrizione. PM edizioni. (2017). p. 9-120

Juzgado, A., Soldà, A., Ostric, A., Criado, A., Valenti, G., Rapino, S., **Conti G**, Fracasso G, Paolucci, F., Prato, M. (2017). Highly sensitive electrochemiluminescence detection of a prostate cancer biomarker. JOURNAL OF MATERIALS CHEMISTRY. B, vol. 5, p. 6681-6687, ISSN: 2050-750X, doi: 10.1039/C7TB01557G

Meneghetti, Moreno, Bertorelle, Fabrizio, Pinto, Marcella, Zappon, Roberta, Pilot, Roberto, Litti, Lucio, Fiameni Stefania, **Conti Giamaica**, Gobbo, Marina, Toffoli Giusseppe, Colombatti Marco, Fracasso Giulio (2018). Safe Core-Satellite Magneto-Plasmonic Nanostructures for Efficient Targeting and Photothermal Treatment of Tumor Cells. NANOSCALE, vol. 10, p. 976-984, ISSN: 2040-3364, doi: 10.1039/C7NR07844G