Curriculum Vitae

PERSONAL INFORMATION

Name/Surname Laura Bordoni

E-mail <u>laura.bordoni@unicam.it</u>

Date of birth 27/08/1988

Sex F | Nationality Italian

EDUCATION

PhD in "Life and Health Sciences" - Molecular Biology and cellular Biotechnology. School of Pharmacy and Health Products, University of Camerino. Thesis: "How gene-environment interactions can influence health: a nutrigenetic and nutrigenomic approach". [December 2014-November 2017]

Master Degree in Food Science and Human Nutrition (LM-61) - Faculty of Medicine,

University of Perugia. [December 2013]

Final grade: 110/110 cum Laude

Thesis: "Epigenetic role of polyunsaturated fatty acids in carcinogenesis".

Bachelor Degree in Biological Sciences, curriculum analytical biology (L-13) -

Faculty of Science, Polytechnic University of Marche. [March 2010]

Final grade: 110/110 cum Laude

Thesis: "Diet and CVD, a nutrigenetic approach"

High school diploma - Liceo Scientifico "Corridoni - Campana", Osimo. [June 2007]

Final grade: 100/100

OTHER POST-GRADUATE COURSES AND CERTIFICATIONS

- Post-graduate diploma in Systematic Revision and Meta-analysis for evidence-based guidelines production with Cochrane method. University of Verona [April-July 2016]
- Post-graduate master in Sociology and didactic methods for science teaching, Università Dante Alighieri [March 2020]
- Post-graduate master in Didactic of scientific disciplines, UniPegaso [June 2019]
- National habilitation as professional biologist (national exam) [June 2014]

NATIONAL SHORT COURSES

- Summer school on Scientific communication, Unicam, 2019
- Course on Europroject management (Europa Cube- Innovation Business School, Perugia. April-October 2013).

INTERNATIONAL SHORT COURSES

- Bioinformatics workshop: Introduction to NGS data analysis. (Barcelona, Josep Carreras Leukaemia Research Institute. March 2019) COST CM1406
- Short course on "Nutrigenetics, nutrigenomics and precision nutrition" (University of North Carolina at Chapel Hill, USA. May 2017)
- Second European summer school in Nutrigenomics (University of Camerino, September 2016)
- Chromatin, epigenome and drug discovery training school COST CM1406 (II University of Napoli, April 2016)
- European summer School in Nutrigenomics (University of Camerino, September 2014)

PRIZES AND AWARDS

2020 - Honorary fellow in Molecular Biology and in Nutrigenomics ("cultore della materia"), School of Pharmacy, University of Camerino.

2019 – *NuGo Exchange Grant*. Travel grant awarded by NuGo association after review of a proposed project by an international committee.

2018 – *Poster prize* at NuGo Conference 2018, Newcastle, UK, for the Poster "Mechanisms behind pyrethroid toxicity: involvement of epigenetic impairment in a progressive model of neurodegeneration induced by neonatal pesticide exposure". Bordoni L, Nasuti C, Galeazzi R, Laudadio E, Massaccesi Luca, López-Rodas G and Gabbianelli R.

2018 – SAS Award 2017, granted by University of Camerino to the best PhD students demonstrating outstanding research performance.

2017 - University of North Carolina, *Nutrition Research Unite Scholarship* for the course "Nutrigenetics, nutrigenomics and precision nutrition" attendance.

2016 - University of Camerino *Doctoral candidates research grants (DCR)* – Founded project "Nutrigenomic role of bioactive compound extracted from legumes: New Insights on Lignans" at the doctoral competition for research grant designed to support excellent doctoral candidates at the career stage at which they are starting their own independent research [peer review by external international referees]

2014 - 5x1000 Award for Master Thesis with significant attention to innovative disciplinary issue. University of Study of Perugia.

2014 - *University of Camerino Scholarship* for the attendance to the first "Summer School on Nutrigenomics".

Financed PROJECTS (scientific membership)

- FAR (2019) Anti-obesity effect of selected and new ginsenosides from roots of Panax ginseng. Founded by University of Camerino.
- "Nutrigenomic role of bioactive compound extracted from legumes: New Insights on Lignans" (2016) Founded by School of Advanced Study, University of Camerino.
- Participant to PRIN "Studio dei determinanti della resistenza secondaria e primaria di hiv-1 ai farmaci antiretrovirali per il controllo della trasmissione a livello di popolazione" (2014) (Protocol: 2012L783TW 007) Founded by MIUR.

VISITING SCIENTIST

October 2019: <u>Visiting scientist</u> at Human Nutrition Research Center, Newcastle University. Training on mtDNA isolation and NGS technology.

June – July 2016 – <u>Visiting scientist</u> at Chromatin Laboratory, Faculty of Medicine, University of Valencia, Spain. Training on Chromatin Immunoprecipitation for histone modifications assessment.

May 2015 – <u>Visiting scientist</u> at University of Palermo, Genetics and molecular biology department (Training on MeSAP-PCR for DNA methylation assessment)

WORK AND TRAINING EXPERIENCES

October 2018 – up to date: <u>Post-doctoral Research Fellow</u> (assegnista di ricerca) at Unit of Molecular Biology, School of Pharmacy and Health Products, University of Camerino

April 2018 – Up to date: <u>Untenured Adjunct Professor</u> for the Epigenetics Course (Biological science master degree) and the Applied Nutrition Course (Fitness and Health products science bachelor degree) at University of Camerino.

June 2018– September 2018: <u>Volunteer attendee</u> at Unit of Molecular Biology, School of Pharmacy and Health Products, University of Camerino

March 2018 – June 2018: <u>Research fellow</u> (borsista) at Unit of Molecular Biology, School of Pharmacy and Health Products, University of Camerino

December 2017 – February 2018: <u>Volunteer attendee</u> at Biochemistry and Molecular Biology department, School of Pharmacy and Health Products, University of Camerino.

December 2014 – November 2017: <u>PhD candidate</u> in "Life and Health Sciences" at University of Camerino. Research topic: "How genome-environment interactions can influence health status: focus on nutrigenetics and nutrigenomics".

June 2014 – November 2014. <u>Research fellow</u> (assegnista di ricerca) at Department of Biomedical Sciences and Public Health, Faculty of Medicine, Polytechnic University of Marche. Molecular study of determinants of HIV resistance to anti-retrovirals, developing plasmid vectors for HIV genome cloning. PRIN project: "Study of determinants of secondary and primary resistance to antiretrovirals to support control strategies of hiv-1 transmission".

Aprile - Maggio 2014. <u>Volunteer attendee</u> at molecular biology and genetics of Advanced technologies for ageing, INRCA-IRCCS Ancona. Study of miRNA and mobile elements (Alu, LINE) in hypoxic tumoral cells through RT-PCR.

LANGUAGES

Native language: italian.

Other languages

UNDERSTANDING

SPEAKING

WRITING

Listening

Reading

Spoken interaction Spoken production

Enalish

(<u>TOEFLIBT</u> certified C1 ADVANCED C1 ADVAN

French

(DELF certified)

B1 BEGINNER B1 BEGINNER B1 BEGINNER B1 BEGINNER

SCIENTIFIC PRODUCTION Summary:

First author/corresponding author 21 out of 24 publications; Scopus H-Index=8, Scopus Total Citations 161 by 114 docs, Google Scholar H-Index=9, i10-Index=9, Google Scholar Total Citations 214.

Scopus Author Identifier: 57192102997

Book chapters. N=1 (+2 in press).

Conference abstract/presentation, N=27.

Contributes in scientific journals:

- Mitochondrial DNA copy number and trimethylamine levels in the blood: n insights on cardiovascular disease biomarkers. Bordoni L, Petracci I, Pelika Malecka I, Radulska A, Piangerelli M, Galeazzi R, Samulak JJ, Sawicka Lewicki L, Kalinowski L, Olek RA. Preprint available in MedRxive. Submitted FASEB J.
- Trimethylamine N-oxide and the reverse cholesterol transport in cardiovascular disease: a cross-sectional study. **Bordoni L**, Samulak JJ, Sawicka AK, Pelikant-Malecka I, Radulska A, Lewicki L, Kalinowski L, Gabbianelli R, Olek RA. Sci Rep. 2020;10(1):18675. doi: 10.1038/s41598-020-75633-1.
- NURR1 Alterations in Perinatal Stress: A First Step towards Late-Onset Diseases? A Narrative Review. Bordoni L, Petracci I, Calleja-Agius J,. Lalor Joan G and Gabbianelli R. Biomedicines 2020, 8(12), 584; https://doi.org/10.3390/biomedicines8120584
- The neglected nutrigenomics of milk: what is the role of inter-species transfer of small non-coding RNAs? **Bordoni L**, Gabbianelli R. Food Bioscience 2020 (in press) https://doi.org/10.1016/j.fbio.2020.100796

- Mitochondrial DNA and Neurodegeneration: Any Role for Dietary Antioxidants? Bordoni L, Gabbianelli R. Antioxidants 2020, 9(8), 764; https://doi.org/10.3390/antiox9080764.
- Nutrigenetics—personalized nutrition in obesity and cardiovascular diseases.
 Barrea L*, Annunziata G*, Bordoni L*, Muscogiuri G, Colao A, Savastano S & on behalf of OPERA Group. Int J Obes Supp. 2020, 10, 1–13. *equal contribution
- Gender-related differences in trimethylamine and oxidative blood biomarkers in cardiovascular disease patients. Bordoni L, Fedeli D, Piangerelli M, Pelikant-Malecka I, Radulska A, Samulak J, Sawicka A, Lewicki L, Kalinowski L, Olek RA, Gabbianelli R. Biomedicines. 2020, 8, 238.
- Nutri-epigenetics and gut microbiota: how birth care, bonding and breastfeeding can influence and be influenced? Gabbianelli R, Bordoni L, Morano S, Calleja-Agius J, Lalor JG*. Int. J. Mol. Sci. 2020, 21, 5032.
- The Role of Nutri(epi)genomics in Achieving the Body's Full Potential in Physical Activity. Petracci I, Gabbianelli R, Bordoni L. Antioxidants, 2020. DOI: 10.3390/antiox9060498
- A Pilot Study on the Effects of I-Carnitine and Trimethylamine-N-Oxide on Platelet Mitochondrial DNA Methylation and CVD Biomarkers in Aged Women.
 Bordoni L, Sawicka AK, Szarmach A, Winklewski PJ, Olek RA, Gabbianelli R. Int J Mol Sci. 2020 doi: 10.3390/ijms21031047.
- Mitochondrial DNA methylation and copy number predict body composition in a young female population. Bordoni L., Smerilli V., Nasuti C., Gabbianelli R. J Transl Med. 2019;17(1):399. doi: 10.1186/s12967-019-02150-9.
- Extra Virgin Olive Oil and Nigella sativa Oil Produced in Central Italy: A
 Comparison of the Nutrigenomic Effects of Two Mediterranean Oils in a LowGrade Inflammation Model. Bordoni L, Fedeli D, Fiorini D, Gabbianelli R.
 Antioxidants (Basel). 2019 Dec 24;9(1). pii: E20. doi: 10.3390/antiox9010020
- Positive effect of an electrolyzed hydrogen rich reduced water on gut permeability, fecal microbiota and liver in an animal model of Parkinson's disease. Bordoni L, Gabbianelli R, Fedeli D, Fiorini D, Bergheim I, Nasuti C. Plos One, 14(10):e0223238. doi: 10.1371/journal.pone.0223238.
- Anti-Inflammatory, Anti-Arthritic and Anti-Nociceptive Activities of Nigella sativa Oil in a Rat Model of Arthritis. Nasuti C, Fedeli D, Bordoni L, Piangerelli M, Servili M, Selvaggini R and Gabbianelli R. Antioxidants 2019, 8(9), 342; https://doi.org/10.3390/antiox8090342
- Early impairment of epigenetic pattern in neurodegeneration: additional mechanisms behind pyrethroid toxicity. Bordoni L, Nasuti C, Fedeli D, Galeazzi R, Laudadio E, Massaccesi L, López-Rodas G, GabbianelliR. Exp Gerontol. 2019;124:110629. doi: 10.1016/j.exger.2019.06.002.
- HTR2C gene variant and salivary cortisol levels after endurance physical activity: a pilot study. Bordoni L, Fedeli D, Piangerelli M, Gabbianelli R. Lifestyle Genom. 5:1-5. doi: 10.1159/000499842.
- Primers on nutrigenetics and nutri(epi)genomics: origins and development of precision nutrition. Bordoni L, Gabbianelli G. 2019 Biochimie 160, 156-171https://doi.org/10.1016/j.biochi.2019.03.006
- Epigenetic memory of early-life parental perturbation: dopamine decrease and DNA methylation changes in offspring. Bordoni L, Nasuti C, Di Stefano A, Marinelli L and Gabbianelli R. Oxidative Medicine and Cellular Longevity 2019. https://doi.org/10.1155/2019/1472623
- Antioxidant and Anti-Inflammatory Properties of Nigella sativa Oil in Human Pre-Adipocytes. Bordoni L, Fedeli D, Nasuti C, Maggi F, Papa F, Wabitsch M, De Caterina R and Gabbianelli G. Antioxidants 2019, 8, 51; doi:10.3390/antiox8020051
- Zic1 mRNA is transiently upregulated in subcutaneous fat of acutely coldexposed mice. Perugini J*, Bordoni L*, Venema W, Acciarini S, Cinti S,

- Gabbianelli R, Giordano A. J Cell Physiol. 2018;1–6. DOI: 10.1002/jcp.27301. *equal contribution
- Permethrin pesticide induces NURR1 up-regulation in dopaminergic cell line: Is the pro-oxidant effect involved in toxicant-neuronal damage? Bordoni L, Fedeli D, Nasuti C, Capitani M, Fiorini D, Gabbianelli R. Comp Biochem Physiol C Toxicol Pharmacol. 2017;201:51-57. doi: 10.1016/j.cbpc.2017.09.006.
- Angiotensin-Converting Enzyme (ACE) Ins/Del polymorphism and body composition: the intermediary role of hydration status. Bordoni L, Napolioni V, Marchegiani F, Amadio E and Gabbianelli R. J Nutrigenet Nutrigenomics. 2017 Mar 18;10(1-2):1-8. doi: 10.1159/000458154.
- Nutritional Epigenetics: A New Level of Complexity About Impact of Diet on Health. Bordoni L. EC Nutrition 7.5 (2017): 185-186.
- Obesity-related genetic polymorphisms and adiposity indices in a young Italian population. Bordoni L, Marchegiani F, Piangerelli M, Napolioni V, Gabbianelli R. IUBMB Life. 2017 Jan 16. doi: 10.1002/iub.1596.
- In Vivo and in Silico Studies to Identify Mechanisms Associated with Nurr1 Modulation Following Early Life Exposure to Permethrin in Rats. Fedeli D, Montani M, Bordoni L, Laudadio E, Galeazzi R, Gabbianelli R. Neuroscience. 2017;340:411-423. doi: 10.1016/i.neuroscience.2016.10.071
- Intergenerational Effect of Early Life Exposure to Permethrin: Changes in Global DNA Methylation and in Nurr1 Gene Expression. Bordoni L, Nasuti C, Mirto M, Caradonna F, Gabbianelli R. Toxics 2015, 3: 451-461; doi: 10.3390/toxics3040451

Communications at congresses published in scientific journals:

- Cibo e nutraceutici: parola chiave "caratterizzazione". Camerino, 2019. Platelet mitochondrial DNA methylation and micronutrient supplementation for CVD prevention. Bordoni, Laura; Olek, Robert; Sawicka, Angelika; Szarmach, Arkadiusz; Winklewski, Pawel; Gabbianelli, Rosita. ISBN: 9788867680405.
- 11th Congress of the International Society of Nutrigenetics/Nutrigenomics (ISNN): Abstracts. [No authors listed] J Nutrigenetic Nutrigenomics. 2017;10(3-4):93-125. doi: 10.1159/000480052.
- 2nd European Summer School on Nutrigenomics. September 5-9, 2016, Camerino, Italy: Abstracts. J Nutrigenet Nutrigenomics. 2016;9(2-4):127-149. doi: 10.1159/000448866
- 10th Congress of the International Society of Nutrigenetics/Nutrigenomics (ISNN). Abstracts. J Nutrigenet Nutrigenomics. 2016;9(2-4):151-210. doi:10.1159/000448491
- Effect of Nigella sativa oil in a rat model of adjuvant-induced arthritis Nasuti, Cinzia Carla; Bordoni, Laura; Fedeli, Donatella; Gabbianelli, Rosita. Proceedings. 11,1,16. 2019
- Improved intestinal permeability and increased fecal butyrate content in an animal model of Parkinson's disease treated with an electrolyzed-reducing water. Cibo e nutraceutici: direzione salute. 3° Convegno a cura delle Piattaforme Tematiche di Ateneo su "Alimenti e Nutrizione" e "Salute Umana e Animale". Camerino, 2018. 2, 51-52. ISBN: 978-88-6768-034-4.

Book Chapters (upon invitation):

- "Trimethylamine-N-oxide (TMAO) as a biomarker: features and applications". Bordoni L. Biomarkers in Disease: Methods, Discoveries and Applications. Springer Nature. Edited by Preedy V. Publication Date: to be defined.
- "Mitochondrion at the Crossroads Between Nutrients and Epigenome". Bordoni L. Molecular Nutrition and Mitochondria. Elsevier. ISBN: 604976. Edited by Ostojic, S. Publication Date: 31-Jul-22
- "Nutrigenomics and food pesticides". Bordoni L. and Gabbianelli R. Nutrigenetics and Nutrigenomics. Elsevier. 2019. Edited by: De Caterina R., Martinez J.A., and Kohlmeier M. Elsevier S&T. ISBN-10: 0128045728

Oral communications (upon invitation):

- NugoWeek 2019. Bern 9-13/09/2019. Platelet mitochondrial DNA methylation and CVD risk: what is the role of trimethylamine-N-oxide and carnitine supplementation during physical activity?
- Oral presentation at the Congress "CIBO E NUTRACEUTICI: PAROLA CHIAVE "CARATTERIZZAZIONE", University of Camerino, 9/7/2019. "Platelet mitochondrial DNA methylation and micronutrient supplementation for CVD prevention".
- Oral presentation at "III European Summer School on Nutrigenomics", University of Camerino 2018. "Permethrin exposure and neurodegeneration: which mechanism behind the damage?"
- Oral presentation at Foodomics 2018, Cesena, University of Bologna, January 2018.
 "Nutriepigenomics and epigenetic inheritance: insights on food pesticides and neurodegeneration".
- Oral presentation at the "II European Summer School on Nutrigenomics", University of Camerino, september 2016. "A systematic review on the Paleo diet and its effects on metabolic health: Keyson for an applied evidence based nutrition".

Communications at congresses (posters):

- NIH Precision Nutrition Workshop, January 2021. Trimethylamine N-oxide and cardiovascular disease: can genetic differences in the reverse cholesterol transport mediate this association? Bordoni L, Samulak J; Sawicka AK; Pelikant-Malecka A; Radulska A; Lewicki L; Kalinowski L; Gabbianelli R; Olek R.
- Platelet mitochondrial DNA methylation in L-carnitine supplemented aged women.
 Lisboa, NutRedOx Cost Action CA16112 Congress, October 2020. Bordoni, L.;
 Sawicka, A. K.; Szarmach, A.; Winklewski, P. J.; Olek, R. A.; Gabbianelli, R.
- ISNN congress 2019, Cambridge (UK). Lignans phytocomplexes extracted from legumes act as anti-inflammatory agents in a model of adipocytes metaflammation: antioxidant properties and nutriepigenomic effects. Gabbianelli R, Sagratini G, Merelli E, Wabitsch M, Piangerelli M, Giusti F, Bordoni L.
- Nugo week 2018, Newcastle, UK: Mechanisms behind pyrethroid toxicity: involvement
 of epigenetic impairment in a progressive model of neurodegeneration induced by
 neonatal pesticide exposure. Bordoni L, Nasuti C, Galeazzi R, Laudadio E, Massaccesi
 Luca, López-Rodas G and Gabbianelli R.
- Summer school on Nutrigenomics 2018, Jesi, Italy. Can Nigella sativa Oil Control Inflammation in Human Pre-Adipocytes? Bordoni L, Fedeli D, Maggi F, Papa F, Sawicka A, Olek R, De Caterina R, Wabitsch M, Gabbianelli R
- Congresso Alimenti e Nutraceutici: qualità e salute del consumatore. Università di Camerino, 2018. Improvement of intestinal permeability and fecal butyrate content in an animal model of Parkinson's disease treated with an electrolyzed-reduced water. Bordoni L, Nasuti C, Fedeli D, Fiorini D, Gabbianelli R.
- Congress "The many faces of epigenetics", Oxford, 2017. New insights on molecular and epigenetic mechanisms of adipose browning in early cold exposure: focus on Zic1 expression regulation. Bordoni L*,Perugini J*, Acciarini S, Giordano A, Gabbianelli R and Cinti S.
- Congresso Alimenti e Nutraceutici, Camerino, Italy: qualità e salute del consumatore.
 Università di Camerino, 2017. Epigenetics of pesticide-induced neurodegeneration.
 Gabbianelli R, Bordoni L., Fedeli D., Nasuti C.
- Cibo e nutraceutici: direzione salute, Camerino, 2018. Nutrigenomica come strategia di prevenzione nella neurodegenerazione. Bordoni, Laura; Fedeli, Donatella; Fiorini, Dennis; Gabbianelli, Rosita; Nasuti, Cinzia Carla. Cibo e nutraceutici: direzione salute, 2,51-52.
- Antioxidants protect overexpression of Nurr1 in stressed dopaminergic cells. Bordoni, Laura; Fedeli, Donatella; Nasuti, Cinzia Carla; Gabbianelli, Rosita. Redox control of major age-related diseases, Gdansk University of Technology- Cost Action CA16112, 54, 26, 2018.

- Towards a Redox Healthy Aging. Preventive strategies to counterbalance food pesticide effect on epigenome and gut microbiota. Gabbianelli, Rosita; Bordoni, Laura; Fedeli, Donatella; Nasuti, Cinzia Carla. The NutRedOx COST Action CA16112 WGs Meeting. 2018, Palma de Maillorca. 1,33.
- Congress of the International society of Nutrigenetics and Nutrigenomics, Los Angeles, 2017. Early-life exposure to permethrin food contaminant inducing neurodegeneration: is it matter of epigenetics? Bordoni L. Nasuti C. Fedeli D. and Gabbianelli R.
- Congress of the International society of Nutrigenetics and Nutrigenomics, Los Angeles, 2017. Chemical stress induces up-regulation of Nurr1: role of antioxidants. Bordoni L, Fedeli D, Nasuti C, Fiorini D, Quassinti L, Bramucci M and Gabbianelli R
- Congress of the International society of Nutrigenetics and Nutrigenomics, Tel Aviv, 2016. Angiotensin-Converting Enzyme (ACE) I/D polymorphism influences body composition through the hydration status in a young Italian population. Bordoni L, Marchegiani F, Napolioni V, Gabbianelli R.
- Congress of the International society of Nutrigenetics and Nutrigenomics, Tel Aviv, 2016. Impact of Food Pesticides on the Gut Microbiota. Gabbianelli R, Fedeli D, Bordoni L, Fiorini, Ivan Dus D, Nasuti C.
- Chromatin and the environment, Spetse, Greece (EMBO course) 2016. Can Early Life Exposure to Permethrin lead to intergenerational effects? Gabbianelli R, Bordoni L, Nasuti C, Mirto M, Cruciata I, Caradonna F.
- 2° International congress of food science and technologies, Valencia, 2016.
 Tocotrienol's protective effect on neuronal damage induced by permethrin in PC12 cells. Bordoni L, Capitani M, Nasuti C, Manfredini S, Gabbianelli R. Poster Presentation
- Congresso alimenti funzionali e nutraceutici per la salute, Camerino, 2016.
 Neuroprotection of electrolyzed reduced water: in vitro study on PC12 cell line. Fedeli D, Nasuti C, Bordoni L, Montani M, Dus I, Gabbianelli R.
- 2nd European Summer School on Nutrigenomics. Effect of Electrolyzed Reduced Water in an Animal Model of Parkinson-Like Disease. Nasuti, Cinzia; Fedeli, Donatella; Bordoni, Laura; Montani, Maura; Dus, Ivan; Gabbianelli, Rosita. Journal of nutrigenetics and nutrigenomics 2016, 9,1,16.
- Congress of the International society of Nutrigenetics and Nutrigenomics, Chapel Hill 2015. Protective effect of glutathione on damage induced by permethrin in a neuronal model of PC12 cells. Bordoni L, Capitani M, Nasuti C, Gabbianelli R.

DIDACTIC ACTIVITY

- Untenured adjunct professor for the course "Applied Nutrition Module" (3 CFU), University of Camerino, a.a.2017/2018, 2018/2019, 2019/2020.
- Untenured adjunct professor for the course "Epigenetics" (2 CFU), University of Camerino, a.a.2017/2018, 2018/2019 and 2019/2020.
- Untenured adjunct professor for the course "Epigenetics" (2 CFU) at the School of Advanced Study a.a. 2019/2020.
- Co-tutor for doctoral thesis of the PhD student Irene Petracci (2020-2023)
- Tutor for experimental Master degree thesis: Rucci Chiara (2020), Smerilli Vanessa (2019), Quadrini Elena (2019), Vitello Stefania (2016).
- Tutor for experimental Bachelor degree thesis: Caperna Fabio (2017), Ionescu Daniela (2015).

ADDITIONAL ACADEMIC ROLES (Editorial board, reviewer board, scientific committee)

- Member of Editorial Board for "Frontiers in Nutrition" and "Frontiers in Genetics", (from August 2020), "EC Nutrition" (from October 2016)
- Invited Guest editor for Antioxidant, Special Issue: "Nutrigenomics and Antioxidant Components of Diet" (April 2020)
- Member of the Reviewer Board of "Nutrients" (from 2020)
- Invited reviewer for international scientific journals: Clinical Epigenetics (BMC); International Union of Biochemistry and Molecular Biology (IUBMB Life), Molecular Biology Reports (MOLE), BMJ Open Diabetes Research & Care, Molecular Genetics and Metabolism Reports (Elsevier); Molecular Genetics and

Metabolism Reports (Elsevier); Journal of the America College of Nutrition (Tandf Online); Applied physiology, nutrition and metabolism (Nrc researchpress);

- Member of the local organizing committee of the "II Summer School on Nutrigenomics" (University of Camerino, September 2016), "III Summer School on Nutrigenomics" (University of Camerino, June 2018)
- Member of the scientific committee of the "IV Summer School on Nutrigenomics" (University of Camerino, June 2020, postponed to 2021 due to COVID-19)

NATIONAL AND INTERNATIONAL SCIENTIFIC COLLABORATIONS

- Human Nutrition and Dietetics Institute, Molecular Metabolism Laboratory, Poznan University.
- Gdansk University of Physical Education and Sport, Poland.
- Biochemistry and molecular biology department, Chromatin laboratory, Faculty of Medicine, University of Valencia, Spain.
- Experimental and clinical medicine department, Center of Obesity, Polytechnic University of Marche, Ancona, Italy.
- Biochemistry and pharmaceutical science and technologies department (STEBICEF, Cellular Biology Unit), University of Palermo, Italy. of Palermo, Italia.
- Advanced Technology Center for Aging Research, Scientific Technological Area, INRCA-IRCCS, Ancona, Italy.

SEMINARS

(upon invitation)

Hold seminars:

- Platelet mitochondrial DNA methylation and CVD risk: which role for trimethylamine-Noxide and carnitine supplementation? Human nutrition research center; Newcastle University. 28/10/2019 (upon invitation)
- Nutrigenetics from theory to practice: strengths and pitfalls.19/4/2017. Course "Alimentazione del fitness". School of Pharmacy and Health products, University of Camerino.
- Nutrition and scientific literature: how to recognize good scientific evidences. 20/4/2017 Course "Alimentazione del fitness". School of Pharmacy and Health products, University of Camerino.
- Epigenetics and environment: focus on diet. 1/06/2017 Course "Epigenetics". School of bioscience and veterinary medicine, University of Camerino.
- DNA methylation profiling. 6/6/2017 Course "Epigenetics". School of bioscience and veterinary medicine, University of Camerino.
- Chromatin remodelling and histone modification profiling. 8/06/2017 Course "Epigenetics". School of bioscience and veterinary medicine, University of Camerino.

SCIENTIFIC MEMBERSHIP

- SIB (Società Italiana di Biochimica e Biologia Molecolare) 2021
- ESPEN society 2020

JOB-RELATED SKILLS

Good command of the main molecular biology techniques: Bisulfite-pyrosequencing, PCR, RT-PCR, Chromatin immunoprecipitation, MS-HRM, ELISA immunoassay, Taqman genotyping, electrophoresis in agarose or acrylamide, enzymatic digestions, plasmid vector construction, cloning, sequencing, western blot, *in vitro* cell cultures Good skills on dietetics and human nutrition, acquired during the academic education and post graduate courses attended.

Basic knowledge of softwares for data analysis (SPSS, R, Gpower, Arlequin); Good knowledge of RevMan software for systematic review and meta-analysis productions.

COMMUNICATION AND ORGANIZATIONAL SKILLS

Good communication skills, planning and problem solving ability gained through academic education. Strong determination to reach prefixed objectives, integrity and preciseness, acquired in particular during more than 10 years of agonistic sport practice (volleyball, B2 national championship).