



# CURRICULUM VITAE

## GIANFRANCO PICONE

### PERSONAL INFORMATION

Nationality

Italian

Birth Date

11/06/1977

Gender

Male

### EDUCATION AND TRAINING

May 2009

**European Ph.D. in Food Science, Technology and Biotechnology**, University of Bologna (Italy). Ph.D. thesis: "NMR, metabonomics and molecular profiles: applications to the quality assessment of food".

**Qualified to practice as "Food Technologist"**

April 2005

**Master's Degree in food and Science Technologies**, Faculty of Agriculture-Degree in Food Science and Technologies University of Bologna (Italy). Evaluation: 107/110. Final thesis in Inorganic Chemistry: "Cloning and expression of human protein from selected microorganisms. Folding and function of CLSP Calcium-binding protein".

December 2004

**High School Degree**: Scientific Institute "A. Righi" of Cesena (Italy).

July 1996

### FOREIGN RESEARCH EXPERIENCES

February-June 2008

**Research Fellow in Chemometrics and Metabolomics**

Research on NMR characterization of genetically modified grape (*Vitis Vinifera*-Thompson Seedless) and reared fish (*Sparus Aurata*-Gilthead Seabream). Department of Food Science, Faculty of Life Science, University of Copenhagen - Denmark.

September-December 2008

**Research Fellow in Food Quality**

Research on lipids profile of fish muscle of Bogue (*Boops Boops*). Departamento de Fisiologia, Facultad de Biologia, Universidad de Murcia.

### PROFESSIONAL EXPERIENCES

01/09/2019

**Lab Technician** for Labs of the University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY).

1/12/2018-31/08/2019

**Research Fellow in Food Digestion and Metabolomics** as part of the research project funded by the EC-27 *PATHWAY* [KBBE.2012.2.2-01]-GA n 311876 "Pivotal Assessment of the effects of bioactive on health and wellbeing. From human genome to food industry". University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY). Research on characterization and stability of bioactive enriched food (BEF) and analysis of biofluids' biomarker by using <sup>1</sup>H-NMR and metabolomics and application of metabolomics on *in vitro* digested foods.

1/12/2015-30/11/2018

**BIO-NMR Lab Technician** for the Food Biomarkers Alliance (*FOODBALL*). University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY). Research on identification and quantification of dietary

biomarkers from biofluids by using <sup>1</sup>H-NMR based metabolomics. Characterization by using <sup>1</sup>H-NMR of functional bakery products enriched by olive oil waste products (*EcoPROLIVE* project from Horizon 2020, grant agreement No 635597).

2014-2015

**Research Fellow in Food Digestion and Metabolomics** as part of the research project funded by the EC-27 *PATHWAY* [KBBE.2012.2.2-01]-GA n 311876 "Pivotal Assessment of the effects of bioactive on health and wellbeing. From human genome to food industry". University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY). Research on characterization and stability of bioactive enriched food (BEF) and analysis of biofluids' biomarker by using <sup>1</sup>H-NMR and metabolomics and application of metabolomics on *in vitro* digested foods.

03/09/2012-02/09/2014

**BIO-NMR Lab Technician** for the 7<sup>th</sup> FW PROGRAMME [KBBE.2012.2.2-01]-GA n 311876 *PATHWAY* "Pivotal Assessment of the effects of bioactive on health and wellbeing. From human genome to food industry". Research on the characterization of digested enriched dairy products and their *in vitro* digestion by using <sup>1</sup>H-NMR and identification and quantification of dietary biomarkers from biofluids by using <sup>1</sup>H-NMR based metabolomics.

2012-2013

**BIO-NMR Lab Technician** for 7<sup>th</sup> FW PROGRAMME [KBBE.2010.2.3-03]-GA n. 266331 *CHANCE* "Low cost technologies and traditional ingredients for the production of affordable, nutritionally correct foods improving health in population groups at risk of poverty". University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY). Research on the characterization of enriched dairy products by using <sup>1</sup>H-NMR.

2011-2012

**Research Fellow in Functional Food and Bioactive Compounds** Research for the Interdepartmental Centre for Industrial Agri-Food Research. CIRI - Cesena, Emilia Romagna (ITALY). Research on the characterization of bioactive compounds by using <sup>1</sup>H-NMR.

2005-2011

**Research fellow in Chemometrics and Metabonomics** University of Bologna - Department of Agricultural and Food Sciences DISTAL - Cesena, Emilia Romagna (ITALY). Research on for food and fish quality assessment by using <sup>1</sup>H-NMR.

2004

**Internship at Faculty of Food Science** - University of Bologna University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY). Research on proteomics analysis on SDS Page for the evaluation of  $\alpha$  e  $\beta$  casein in yeasts.

2003

**Internship at Faculty of Food Science** University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY). Research on statistical analysis on quality parameters of vegetable foods.

## TEACHING EXPERIENCES

2019-2021

**Adjunct Professor** of "Inorganic Chemistry" at University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY).

2017-2019

**Tutor teaching** of "Inorganic Chemistry" at University of Bologna-Department of Agricultural and Food Sciences DISTAL-

Cesena, Emilia Romagna (ITALY).

2010-TO DAY	<b>Support as Chemical Technicians</b> at University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY).
2010-2013	<b>Tutor teaching</b> of “Stoichiometry” at University of Bologna - Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY).
2006-2010	<b>Tutor teaching</b> of “Applied Biology” at University of Bologna - Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY).
2006	<b>Teacher</b> in “Food Science Quality” and “Food Legislation” at the IAL School of Cesenatico, Emilia Romagna (Italy)

## THESIS COORDINATOR

2019	Student: Antonella Pacillo. Master’s degree in Inorganic Chemistry. University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY): “Preliminary 1H NMR relaxation study of whey protein gels as model systems for protein digestion: the effect of concentration, temperature and pH”.
2018	Student: Maria Antonia Lodi. Master’s degree in Inorganic Chemistry. University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY): “NMR spectroscopy for evaluation of the effect of Aceto Balsamico di Modena on different in vitro digested foods”.
2016	Student: Eleonora Urbinati. Master’s degree in Inorganic Chemistry. University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY): “NMR spectroscopy for characterization of molecular profile hydrophilic carrot ( <i>daucus carota</i> cv. master): influence of territorial origin, methods of cultural and seasonal”.
2014	Student: Federico Olivi. Bachelor’s degree in Inorganic Chemistry. University of Bologna-Department of Agricultural and Food Sciences DISTAL-Cesena, Emilia Romagna (ITALY): “Evaluation of Biodynamic approach on grape cultivar by using <sup>1</sup> H-NMR and metabolomics”.
2013	Ph.D. Student: Dr.ssa Alessandra Ciampa. Final Ph.D. Thesis in: “Development of methodologies for fish freshness assessment using metabolomics applications”.
2012	Student: Matteo Tartagni. Bachelor’s degree in Organic Chemistry: “Foodomics approach for the evaluation of the technological transformation on meat products”.
2011	Student: Elena Marcolini. Master’s degree in molecular Structures of Biological Systems: “Evaluation of fish freshness by using a metabolomics approach”.
2009	Student: Lorenzo Siroli. Master’s degree in Microbial Diagnostic: “Evaluation of the effect of carvacrol on <i>E. Coli</i> activity by using <sup>1</sup> H-NMR”.
2008	Student: Jacopo Ianieri. Master’s degree in molecular Structures of Biological Systems: “Metabolomics: a new frontier for the evaluation of food quality”.
2008	Student: Eleonora Iaccheri. Bachelor’s degree in Inorganic Chemistry: “Characterization of the molecular profile of ready to use food by <sup>1</sup> H-NMR”.
2007	Student: Federico Baruzzi. Bachelor’s degree in applied biology: “Use of RT-PCR to control the gene expression of recombinant

2006

protein”.

Student: Jacopo Ianieri. Bachelor’s degree in Inorganic Chemistry: “Evaluation of the molecular profile of transgenic grape by <sup>1</sup>H-NMR”.

## KEY SKILLS AND COMPETENCE

Foreign Language

English: theoretical and practical knowledge, good written, good spoken.

Spanish: practical knowledge, good written and good spoken

Technical instrumentations applied to research

HF-NMR; HPLC; Recombinant DNA techniques; PCR and PCR Real Time; SDS-electrophoresis and Protein purification

Information Technology

Programming languages: R project (for statistical and graphical computing) good, Matlab (for the Chemometric analysis: PCA, PLS, PLS-DA, LDA, ECVA, iPLS, iECVA) good, Amix (for NMR signals assignment), excellent, Topspin (For <sup>1</sup>H-NMR spectrum processing), excellent and Chenomx (for Metabolites assignment and quantification), excellent.

Windows and Internet skills: excellent

## FURTHER EXPERIENCES

2020

Organizer of the 6<sup>th</sup> edition of the “International Conference on Food-Omics”, with the University of Bologna (Italy)

2018

Organizer of the 5<sup>th</sup> edition of the “International Conference on Food-Omics”, with the University of Bologna (Italy)

2015

Organisation of the 4<sup>th</sup> edition of the “International Conference on Food-Omics”, with the University of Bologna (Italy)

2014

Organizer of the XII edition of the “FoodMR International Conference”, with the University of Bologna (Italy)

2013

Organizer of the 3<sup>rd</sup> edition of the “International Conference on Food-Omics”, with the University of Bologna (Italy)

2012

Organizer of the “17<sup>th</sup> edition of the Workshop: Developments in the Italian Ph.D. Research on Food Science Technology and Biotechnology”, with the University of Bologna (Italy)

Organizer of the “1<sup>st</sup> edition of the International Conference on Food Digestion”, with the COST Action FA1005 INFOGEST

2011

Organizer of the 2<sup>nd</sup> edition of the “International Conference on Food-Omics”, with the University of Bologna (Italy)

2009

Organizer of the 1<sup>st</sup> edition of the “International Conference on Food-Omics”, with the University of Bologna (Italy)

## CONFERENCE ATTENDANCE

1. XIV International Conference on the Applications of Magnetic Resonance in Food Science”. Rennes, France, 17-21 September 2018
2. VI Workshop “Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti”. University of Roma “La Sapienza”, Roma, Italy, 26-27 May 2018
3. “5<sup>th</sup> International Conference on FoodOmics”. University of Bologna. Cesena, Italy, 10-12 January 2018
4. International Conference on Food Innovation FoodInnova 2017. Cesena, Italy, 31 January – 3 February 2017
5. XIII International Conference on the Applications of Magnetic Resonance in Food Science”. Karlsruhe, Germany, 07-10 June 2016
6. V Workshop “Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti”. University of Roma “La Sapienza”, Roma, Italy, 26-27 May 2016

7. "4<sup>th</sup> International Conference on FoodOmics". University of Bologna. Cesena, Italy, 8-9 October 2015
8. IV Workshop "Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti". University of Roma "La Sapienza", Roma, Italy, 19-20 June 2014
9. "XII International Conference on the Applications of Magnetic Resonance in Food Science: Defining Food by Magnetic Resonance". Cesena, Italy, 20-23 May 2014
10. "2013 EFFoST Annual Meeting: Bio-based Technologies in the Context of European Food Innovation Systems". Bologna, Italy, 12-15 November 2013
11. "3<sup>rd</sup> International Conference on FoodOmics". University of Bologna. Cesena, Italy, 22-24 May 2013
12. "17<sup>th</sup> Workshop on the Developments in the Italian PhD Research on Food Science Technology and Biotechnology", Cesena, Italy, 19-21 September 2012
13. "XLI National Congress on Magnetic Resonance", Pisa, Italy, 17-19 September 2012
14. "11<sup>th</sup> International Conference on the application of Magnetic Resonance in Food", Wageningen, Holland, 26-29 June 2012
15. III Workshop "Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti". University of Roma "La Sapienza", Roma, Italy, 28-29 May 2012
16. "1<sup>st</sup> International Conference on Food Digestion", Cesena, Italy, 19-21 March 2012
17. "2<sup>nd</sup> International Conference on FoodOmics". University of Bologna. Cesena, 22-24 June 2011
18. II Workshop "Applicazione della Risonanza Magnetica Nucleare nella Scienza degli Alimenti", University of Roma "La Sapienza", Roma, Italy, 27-28 May 2010
19. "XXXIX Congresso Nazionale di Risonanze Magnetiche". Palermo, Italy, 21-24 September 2009
20. "1<sup>st</sup> International Conference on FoodOmics". University of Bologna. Cesena, Italy, 28-29 May 2009
21. I Workshop "Applicazione della Risonanza Magnetica Nucleare nella Scienza degli Alimenti", University of Molise, Campobasso, Italy, 22-23 May 2008
22. Workshop "12<sup>th</sup> Workshop on the Developments in the Italian PhD Research on Food Science and Technology". Università of Reggio Calabria. Reggio Calabria, Italy, 12-14 September 2007
23. Workshop "11<sup>th</sup> Workshop on the Developments in the Italian PhD Research on Food Science and Technology". University of Teramo. Teramo, Italy, 27-29 September 2006

#### **PUBLICATIONS (H INDEX 17 – total citations 754)**

GOOGLE SCHOLAR CITATIONS LINK: <https://scholar.google.com/citations?hl=it&user=sV12azQAAAAJ>

AUTHOR IDENTIFIER RESOURCES: SCOPUS ID: 36991106300; RESEARCHER ID: K-4715-2015; ORCID ID: 0000-0001-7932-6692

#### **Articles and reviews**

1. Tappi, S.; De Aguiar Saldanha Pinheiro, A.C.; Mercatante, D.; **Picone, G.**; Soglia, F.; Rodriguez Estrada, M.T.; Petracci, M.; Capozzi, F.; Rocculi, P. (2020). Quality changes during frozen storage of mechanical separated flesh obtained from an underutilized crustacean. *Foods*, 9, 1485.
2. Biagi, E.; Mengucci, C.; Barone, M.; **Picone, G.**; Lucchi, A.; Celi, P.; Litta, G.; Candela, M.; Manfreda, G.; Brigidi, P.; Capozzi, F.; De Cesare, A. (2020). Effects of Vitamin B2 Supplementation in Broilers Microbiota and Metabolome. *Microorganisms* 2020, 8, 1134.
3. Di Nunzio Mattia, **Picone Gianfranco**, Pasini Federica, Chiarello Elena, Caboni Maria Fiorenza, Capozzi Francesco, Gianotti Andrea and Bordoni Alessandra. (2020). Olive oil by-product as functional ingredient in bakery products. Influence of processing and evaluation of biological effects. *Food Research International*, 131, 108940. <https://doi.org/10.1016/j.foodres.2019.108940>
4. Diana Luise, **Gianfranco Picone**, Agnese Balzani, Francesco Capozzi, Micol Bertocchi, Chiara Salvarani, Paolo Bosi, Sandra Edwards and Paolo Trevisi (2020). Investigation of the Defatted Colostrum 1H-NMR Metabolomics Profile of Gilts and Multiparous Sows and Its Relationship with Litter Performance. *Animals*, 10(1), 154. <https://doi.org/10.3390/ani10010154>
5. Kathryn J. Burton, Ralf Krüger, Valentin Scherz, Linda H. Mürger, **Gianfranco Picone**, Nathalie Vionnet, Claire Bertelli, Gilbert Greub, Francesco Capozzi and Guy Vergères (2020). Trimethylamine-N-Oxide Postprandial Response in Plasma and Urine Is Lower After Fermented Compared to Non-Fermented Dairy Consumption in Healthy Adults. *Nutrients*, 12(1), 234. <https://doi.org/10.3390/nu12010234>.
6. Alessandra Ciampa, Maria Teresa Dell'Abate, Alessandro Florio, Luigi Tarricone, Domenico Di Gennaro, **Gianfranco Picone**, Alessia Trimigno, Francesco Capozzi, Anna Benedetti (2019). "Combined magnetic resonance imaging and high-resolution spectroscopy approaches to study the fertilization effects on metabolome, morphology and yeast

community of wine grape berries, cultivar Nero di Troia". Food Chemistry, 274, 831-839. <https://doi.org/10.1016/j.foodchem.2018.09.056>.

7. Ana Cristina De Aguiar Saldanha Pinheiro, Eleonora Urbinati, Silvia Tappi, **Gianfranco Picone**, Francesca Patrignani, Rosalba Lanciotti, Santina Romani, Pietro Rocculi (2019). The impact of gas mixtures of Argon and Nitrous oxide (N<sub>2</sub>O) on quality parameters of sardine (*Sardina pilchardus*) fillets during refrigerated storage. Food Research International, 115, 268-275. <https://doi.org/10.1016/j.foodres.2018.12.030>.
8. Rocculi, P., Cevoli, C., Tappi, S., Genovese, J., Urbinati, E., **Picone, Gianfranco.**, ... & Dalla Rosa, M. (2019). Freshness assessment of European hake (*Merluccius merluccius*) through the evaluation of eye chromatic and morphological characteristics. Food Research International, 115, 234-240. <https://doi.org/10.1016/j.foodres.2018.08.091>.
9. **Picone, Gianfranco**<sup>†</sup>, De Noni<sup>†</sup>, I., Ferranti, P., Nicolai, M. A., Alamprese, C., Trimigno, A., ... & Capozzi, F. (2019). Monitoring molecular composition and digestibility of ripened bresaola through a combined foodomics approach. Food Research International, 115, 360-368. <https://doi.org/10.1016/j.foodres.2018.11.021> <sup>†</sup>Contributed equally
10. Ulaszewska, M. M., Weinert, C. H., Trimigno, A., Portmann, R., Andres Lacueva, C., Badertscher, R., **Picone, Gianfranco** ... & Cialì Rosso, M. (2019). "Nutrimetabolomics: An Integrative Action for Metabolomic Analyses in Human Nutritional Studies". Molecular nutrition & food research, 1800384. 10.1002/mnfr.201800384.
11. Di Nunzio, Mattia<sup>†</sup>, **Picone, Gianfranco**<sup>†</sup>, Pasini, Federica, Caboni, M. Fiorenza, Gianotti, Andrea, Bordoni, Alessandra, & Capozzi, Francesco (2018). "Olive oil industry by-products. Effects of a polyphenol-rich extract on the metabolome and response to inflammation in cultured intestinal cell". Food Research International, 113, 392-400. <https://doi.org/10.1016/j.foodres.2018.07.025> <sup>†</sup>Contributed equally
12. Alessia Trimigno, Linda Mùnger **Gianfranco Picone**, Carola Freiburghaus, Grégory Pimentel, Nathalie Vionnet, François Pralong, Francesco Capozzi, René Badertscher, and Guy Vergères (2018). "GC-MS Based Metabolomics and NMR Spectroscopy Investigation of Food Intake Biomarkers for Milk and Cheese in Serum of Healthy Humans". Metabolites, 2018, 8, 26; doi:10.3390/metabo8020026.
13. Jacques Vervoort, Hauke Smidt, Michael Muller, Benthe van der Lugt, Carolien Lute, Stefano Salvioli, Ellen Kampman, Wilma Steegenga, **Gianfranco Picone**, Claudio Franceschi, Luca Laghi, Feni Rusli, Dieuwertje Kok (2018). "Lifelong calorie restriction affects indicators of colonic health in aging C57Bl/6J mice". Journal of Nutritional Biochemistry, 56. 152–164. ISSN 0955-2863.
14. **Gianfranco Picone**<sup>†</sup>, Martina Zappaterra<sup>†</sup>, Diana Luise<sup>†</sup>, Alessia Trimigno, Francesco Capozzi, Vincenzo Motta, Roberta Davoli, Leonardo Nanni Costa, Paolo Bosi and Paolo Trevisi (2018). "Metabolomics characterization of colostrum in three sow breeds and its influences on piglets' survival and litter growth rates". Journal of Animal Science and Biotechnology, 9(1), 23. doi.org/10.1186/s40104-018-0237-1. <sup>†</sup>Contributed equally.
15. Linda H Mùnger, Alessia Trimigno, **Gianfranco Picone**, Carola Freiburghaus, Grégory Pimentel, Kathryn J Burton, François P. Pralong, Nathalie Vionnet, Francesco Capozzi, René Badertscher, and Guy Vergères (2017). "Identification of urinary food intake biomarkers for milk, cheese and soy-based drink by untargeted GC-MS and NMR in healthy humans". Journal of Proteome Research, 16(9), 3321-3335. DOI: 10.1021/acs.jproteome.7b00319.
16. Giovanni Barbara, Eleonora Scaioli, Maria Raffaella Barbaro, Elena Biagi, Luca Laghi, Cesare Cremon, Giovanni Marasco, Antonio Colecchia, **Gianfranco Picone**, Nunzio Salfi, Francesco Capozzi, Patrizia Brigidi and Davide Festi (2016). "Gut microbiota, metabolome and immune signatures in patients with uncomplicated diverticular disease". Gut 2016; 66 1175-1176. DOI:10.1136/gutjnl-2016-312377.
17. **Gianfranco Picone**, Alessia Trimigno, Paola Tessarin, Silvia Donnini, Adamo D. Rombolà & Francesco Capozzi (2016). "1H NMR foodomics reveals that the biodynamic and the organic cultivation managements produce different grape berries (*Vitis vinifera* L. cv. Sangiovese). Food Chemistry, 213, pp 187-195. DOI:10.1016/j.foodchem.2016.06.077.
18. **Gianfranco Picone**<sup>\*</sup>, Francesco Savorani<sup>\*</sup>, Alessia Trimigno, Bruno Mezzetti, Francesco Capozzi & Søren Balling Engelsen (2016). "Metabolic changes of genetically engineered grapes (*Vitis vinifera* L.) studied by 1H-NMR, metabolite heatmaps and iPLS". Metabolomics, 12: 150. DOI:10.1007/s11306-016-1095-5 [\*Both authors contributed equally to the research].
19. Natalia P. Vidal, **Gianfranco Picone**, Encarnacion Goicoechea, Luca Laghi, María J. Manzanos, Francesca Danesi, Alessandra Bordoni, Francesco Capozzi and María D. Guillén (2016). "Metabolite release and protein hydrolysis during the in vitro digestion of cooked sea bass fillets. A study by 1H NMR". In press in Food Research International. DOI 10.1016/j.foodres.2016.01.013.
20. Beatrice Vitali, Federica Cruciani, **Gianfranco Picone**, Carola Eleonora Parolin, Gilbert Donders and Luca Laghi (2015). "Vaginal microbiome and metabolome highlight specific signatures of bacterial vaginosis". European Journal of Clinical Microbiology & Infectious Diseases; 34(12), pp 2367-2376. DOI 10.1007/s10096-015-2490-y.
21. Alessia Trimigno, Flaminia Cesare Marincola, Nicolo Dellarosa, **Gianfranco Picone** and Luca Laghi (2015). "Definition of food quality by NMR-based Foodomics". Current Opinion in Food Science; 4, pp 99-140. DOI:10.1016/j.cofs.2015.06.008.
22. Elena Marcolini, Elena Babini, Alessandra Bordoni, Mattia Di Nunzio, Luca Laghi, Anita Maczó, **Gianfranco Picone**, Eموke Szerdahelyi, Veronica Valli, and Francesco Capozzi (2015). "Bioaccessibility of the bioactive peptide carnosine during in vitro digestion of cured beef meat". Journal of Agriculture and Food Chemistry; 63(20), pp

4973-4978. DOI: 10.1021/acs.jafc.5b01157.

23. Luca Laghi, **Gianfranco Picone**, Francesco Capozzi (2014). "Nuclear magnetic resonance for foodomics beyond food analysis". *Trends in Analytical Chemistry*, 59, pp 93–102. DOI: 10.1016/j.trac.2014.04.009.
24. Luca Laghi, **Gianfranco Picone**, Federica Cruciani, Patrizia Brigidi, Fiorella Calanni, Gilbert Donders, Francesco Capozzi and Beatrice Vitali (2014). "Rifaximin modulates the vaginal microbiome and metabolome in women affected by bacterial vaginosis". *Antimicrobial Agents and Chemotherapy*; 58(6), pp 3411-3420 DOI: 10.1128/AAC.02469-14.
25. Alessandra Bordoni, Luca Laghi, Elena Babini, Mattia Di Nunzio, **Gianfranco Picone**, Alessandra Ciampa, Veronica Valli, Francesca Danesi and Francesco Capozzi (2014). "The foodomics approach for the evaluation of protein bio-accessibility in processed meat upon *in vitro* digestion". *Electrophoresis*; 35(11), pp 1607-1614. DOI: 10.1002/elps.201300579.
26. **Gianfranco Picone**, Luca Laghi, Fausto Gardini, Rosalba Lanciotti, Lorenzo Siroli and Francesco Capozzi (2013). "Evaluation of the effect of carvacrol on the *Escherichia coli* 555 metabolome by using  $^1\text{H}$ -NMR spectroscopy". *Food Chemistry*; 141(4), pp 4367-4374. DOI: 10.1016/j.foodchem.2013.07.004.
27. Alessandra Ciampa, **Gianfranco Picone**, Luca Laghi, Homa Nikzad and Francesco Capozzi (2012). "Changes in the Amino Acid Composition of Bogue (*Boops boops*) Fish during Storage at Different Temperatures by  $^1\text{H}$ -NMR Spectroscopy". *Nutrients*; 4, pp 542-553. DOI: 10.3390/nu4060542.
28. Alessandra Bordoni, **Gianfranco Picone**, Elena Babini, Massimiliano Vignali, Francesca Danesi, Veronica Valli, Mattia Di Nunzio, Luca Laghi and Francesco Capozzi (2011). "NMR comparison of *in vitro* digestion of Parmigiano Reggiano cheese aged 15 and 30 months". *Magnetic Resonance Chemistry*; 49, pp S61-S70. DOI: 10.1002/mrc.2847.
29. **Gianfranco Picone**, Bruno Mezzetti, Elena Babini, Franco Capocasa, Giuseppe Placucci, and Francesco Capozzi (2011). "Unsupervised Principal Component Analysis of NMR Metabolic Profiles for the Assessment of Substantial Equivalence of Transgenic Grapes (*Vitis vinifera*)". *Journal of Agriculture and Food Chemistry*; 59 (17), pp 9271-9279. DOI: 10.1021/jf2020717.
30. **Gianfranco Picone**, Søren Balling Engelsen, Francesco Savorani, Silvia Testi, Anna Badiani and Francesco Capozzi (2011). "Metabolomics as a Powerful Tool for Molecular Quality Assessment of the Fish *Sparus aurata*". *Nutrients*; 3(2), pp 212-227. DOI: 10.3390/nu3020212.
31. Francesco Savorani\*, **Gianfranco Picone\***, Anna Badiani, Paolo Fagioli, Francesco Capozzi, Søren Balling Engelsen (2010). "A metabolic profiling and aquaculture differentiation of Gilthead Sea bream by  $^1\text{H}$  NMR Metabonomics". *Food Chemistry*; 120, pp 907-914. DOI: 10.1016/j.foodchem.2009.10.071. [\*Both authors contributed equally to the research].

#### Book chapters

1. Sobolev, Anatoly Petrovich; Mannina, Luisa; Aru, Violetta; [...] **Picone, Gianfranco**; Proietti, Noemi; Randazzo, Antonio; [...]; Capitani, Donatella (2017). NMR applications in food analysis: Part A. In: *Analytical Chemistry: Developments, Applications and Challenges in Food Analysis*/Sobolev, Anatoly Petrovich. Nova Science Publishers, Inc., pp. 157-253. ISBN 9781536122824.
2. Capitani, Donatella; Aru, Violetta; Bellomaria, Alessia; [...] **Picone, Gianfranco**; Randazzo, Antonio; [...] Tullio, Valeria Di (2017). NMR applications in food analysis: Part B. In: *Analytical Chemistry: Developments, Applications and Challenges in Food Analysis*/Proietti, Noemi. Nova Science Publishers, Inc., pp. 255-296. ISBN 9781536122824.
3. Alessia Trimigno, **Gianfranco Picone**, Francesco Capozzi (2015). "A  $^1\text{H}$  NMR-based metabolomic approach on dietary biomarker research in human urine". In "Magnetic Resonance in Food Science Defining Food by Magnetic Resonance". Francesco Capozzi, Luca Laghi and Peter S Belton Editors, RSC Publishing, pp 141-153. ISBN: 978-1-78262-031-0. DOI: 10.1039/9781782622741.
4. Luca Laghi, Elena Babini, Alessandra Bordoni, Alessandra Ciampa, Francesca Danesi, Mattia Di Nunzio, **Gianfranco Picone**, Veronica Valli and Francesco Capozzi (2013). "Time Domain Measurements and High-Resolution Spectroscopy are Powerful Nuclear Magnetic Resonance Approaches Suitable to Evaluate the *In Vitro* Digestion of Protein-rich Food Products". In "Magnetic Resonance in Food Science: Food for Thought". John van Duynhoven, Peter S Belton, G A Webb and Henk van As Editors, RSC Publishing, pp 201-212. ISBN: 978-1-84973-753-1. DOI:10.1039/9781849737531-00201.
5. Francesco Capozzi, Alessandra Ciampa, **Gianfranco Picone**, Giuseppe Placucci, and Francesco Savorani (2011). "Normalization is a Necessary Step in NMR Data Processing: Finding the Right Scaling Factors". In "Magnetic Resonance in Food Science: An Exciting Future". J.-P. Renou, Peter S. Belton and G. A. Webb, Editors, RSC Publishing pp 147-160. ISBN: 978-1-84973-299-4. DOI:10.1039/9781849732994-00147.

#### INTERNATIONAL CONFERENCE COMMUNICATIONS

1. **Gianfranco Picone**, Ivano De Noni, Pasquale Ferranti, Alessia Trimigno, Cristina Alamprese, Andre Brodkorb, Reto

- Portmann, Anne Pihlanto, Sedef Nehir El and Francesco Capozzi (2018). Monitoring the influence of meat-ripening through a combined proteomics and metabolomics study. "14th International Conference on the Applications of Magnetic Resonance in Food Science". Rennes, France, 17-21 September 2018;
2. **Gianfranco Picone**, Massimo Sacco, Alessia Trimigno and Francesco Capozzi (2016). Classification of Italian Vinegar by -foodomics Approach. "XIII International Conference on the Applications of Magnetic Resonance in Food Science". Karlsruhe, Germany, 07-10 June 2016;
  3. **Gianfranco Picone**, Massimo Sacco, Luca Laghi, Alessandra Bordoni and Francesco Capozzi (2015). Classification of Italian Vinegar by -foodomics Approach. "4th International Conference on Foodomics", Cesena (FC) Italy 08-09 October 2015. ISBN 978-88-902152-7-8;
  4. **Gianfranco Picone**, Luca Laghi, Federico Olivi, Adamo Domenico Rombolà and Francesco Capozzi (2013). A foodomics approach through the HR  $^1\text{H-NMR}$  to evaluate differences between organic and biodynamic grape berry. "3rd International Conference on Foodomics", Cesena (FC) Italy 22-24 May 2013. ISBN 978-88-902152-3-0;
  5. **Gianfranco Picone**, Alessandra Ciampa, Luca Laghi and Francesco Capozzi (2012).  $^1\text{H-NMR}$  spectroscopy as method to assess freshness quality in different species of fish. "XLI National Congress on Magnetic Resonance", Pisa 17-19 September 2012;
  6. **Gianfranco Picone**, Alessandra Ciampa, Luca Laghi, Elena Marcolini, Homa Nikzad and Francesco Capozzi (2012). A foodomics approach to evaluate the freshness of selected fish species in different aquacultured system. "11th International Conference on the application of Magnetic Resonance in Food", Wageningen, Holland, 26-29 June 2012;
  7. **Gianfranco Picone**, Elena Babini, Alessandra Bordoni, Francesco Capozzi, Alessandra Ciampa, Francesca Danesi, Mattia Di Nunzio, Luca Laghi, Elena Marcolini, V. Valli (2012). La Risonanza Magnetica Nucleare ad alta risoluzione ( $^1\text{H-NMR}$ ) per la valutazione della digestione *in vitro* di alimenti ricchi in proteine. III Workshop "Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti", Sapienza Università di Roma, 28-29 maggio 2012;
  8. Alessandra Bordoni, **Gianfranco Picone**, Elena Babini, Massimiliano Vignali, Francesca Danesi, Veronica Valli, Mattia Di Nunzio, Luca Laghi, Francesco Capozzi (2011). NMR omics approach to assess the *in vitro* digestion of Parmigiano Reggiano cheese. 2nd International Conference on Foodomics, Cesena (FC) Italy 22-24 June 2011. ISBN 978-88-902152-2-3;
  9. **Gianfranco Picone**, Francesco Savorani, Søren Balling Engelsen e Francesco Capozzi (2010). La spettroscopia  $^1\text{H-NMR}$  di estratti acquosi per la comparazione del profilo metabolico del pesce allevato in differenti sistemi di acquacoltura. Atti del Workshop "Applicazioni della Risonanza Magnetica nella Scienza degli Alimenti". Dipartimento di Chimica e Tecnologie del Farmaco, Facoltà di Farmacia. Sapienza Università di Roma, 27-28 Maggio 2010;
  10. **Gianfranco Picone** (2009). Metabolic Profiling Using  $^1\text{H NMR}$  and Chemometrics: a New Powerful Tool for Differentiating Aquaculture Systems for Gilthead Sea Breams (*Sparus Aurata*). XXXIX National Congress on Magnetic Resonance, Palermo 21-24 September 2009. **Oral Communication**;
  11. **Gianfranco Picone**, Bruno Mezzetti, Elena Babini, Franco Capocasa, Giuseppe Placucci and Francesco Capozzi (2009). NMR metabolic profiles for the evaluation of grape auxin synthesis-encoding transgenes. 1st International Conference on Foodomics, Cesena (FC) Italy 28-29 May 2009;
  12. Francesco Savorani, **Gianfranco Picone**, Francesco Capozzi, Anna Badiani, Paolo Fagioli and Søren Balling Engelsen (2009). Molecular profiling using  $^1\text{H NMR}$  and chemometrics: a new powerful tool for differentiating aquaculture systems for Gilthead sea breams. 1st International Conference on Foodomics, Cesena (FC) Italy 28-29 May 2009;
  13. **Gianfranco Picone**, Francesco Capozzi, Anna Badiani e Silvia Testi (2008). Effetto delle condizioni di allevamento dell'orata (*Sparus aurata*) sul profilo metabolico del muscolo caudale valutato mediante la spettroscopia  $^1\text{H NMR}$ . Atti del Workshop: "Applicazione della Risonanza Magnetica Nucleare nella Scienza degli Alimenti", Università degli Studi del Molise, Campobasso, 22-23 maggio, 2008;
  14. **Gianfranco Picone**, Elena Babini, Bruno Mezzetti and Francesco Capozzi (2008). La risonanza magnetica nucleare  $^1\text{H NMR}$  nell'analisi di alimenti geneticamente modificati. Atti del Workshop: "Applicazione della Risonanza Magnetica Nucleare nella Scienza degli Alimenti", Università degli Studi del Molise, Campobasso, 22-23 maggio, 2008;

"I consent to the use of my personal data in accordance with the provisions of Decree 196/2003"

*Gianfranco Picone*