



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Curriculum Vitae

LUCA LAGHI

Address: University of Bologna, Department of Agricultural and Food Sciences. P.za Goidanich 60, Cesena, 47521 (Italy) – Tel +39 0547338106 – Mobile: (+39) 3409100871 – Fax (+39) 0547382348

Date and Place of Birth: 6th February 1975, Forlì, Italy

Current position

- October 2020 - **Associated professor in Organic Chemistry**
Department of Agricultural and Food Sciences, University of Bologna, Cesena, 47521, Italy; Interdepartmental Centre for Industrial Agrofood Research
- 2005 – 2020 **Established researcher in Organic Chemistry**
Department of Agricultural and Food Sciences, University of Bologna, Cesena, 47521, Italy; Interdepartmental Centre for Industrial Agrofood Research

EDUCATION

- 2001 - 2003 **PhD in Food Science**
University of Bologna (Italy): Supervised by Dr. Mauro Andrea Cremonini (Italy). Thesis in Organic Chemistry, about the *evaluation of egg quality by means of Nuclear Magnetic Resonance*.
- 1995 - 2000 **Graduate cum laude in Food Science and Technology**
University of Bologna (Italy). Faculty of Agriculture. Dissertation in Organic Chemistry, about the *oxidation of phospholipidic mixtures observed by means of ³¹P-NMR*.
- 1992 **High School Diploma**

Liceo Scientifico Forlì (Italy). Grade: 46 out 60.

INSTITUTIONAL AND ORGANIZATIONAL SERVICE ACTIVITIES

- September 2021 **Member of Doctoral thesis tribunal**
University of Copenhagen (Denmark), for the “Human fecal ¹H NMR metabolomics – method development, metabolite library and first applications” of Mengni Cui
- July 2020 **Member of Doctoral thesis tribunal**
Universidad of Pais Vascos, Vitoria-Gasteiz (Spain), for the “Tesis Doctoral Internacional” of Jon Alberdi Cedeno
- 2018 - present **Departmental junta (elected office)**
University of Bologna (Italy). Department of Agro-Food Science and Technology, University of Bologna, Bologna. Member of the departmental junta.
- 2016 – present **Delegate for the internationalization**
for the courses of Food Technology and Food Science and Technology
- March 2018 **Member of grant tribunal**
University of Piemonte Orientale (Italy). Italian public competition for a grant for a post-doc position
- November 2016 **Member of Doctoral thesis tribunal**
Universitat Rovira i Virgili, Tarragona (Spain), for the PhD Tesis of Natalia Josep Gomez Alvarez
- February 2015 **Member of Doctoral thesis tribunal**
Universidad of Pais Vascos, Vitoria-Gasteiz (Spain), for the “Tesis Doctoral Internacional” of Natalia Prieto Vidal
- July 2014 **Member of grant tribunal**
University of Bologna (Italy). Italian public competition for a grant as a laboratory technician
- July 2013 **Member of tribunal**
Italian Project PRIN
- January 2013 **Member of the tribunal**
Italian Project FIRB
- June 2016 **Member of the tribunal**
Italian VQR 2011-2014 (Evaluation of the quality of research)
- 2003 **Visiting researcher**
Institute for Food Research (Norwich - UK), Molecular Dynamics group.
Supervisor: Brian P. Hills

2000

Visiting researcher

Icelandic Fisheries Laboratories (Reykjavík - Iceland). Supervisor: Gudrun Holafsdottir

TEACHING ACTIVITY IN HIGHER EDUCATION (UNIVERSITY OF BOLOGNA)

Year	Course	CdL	Credits	Hours	Satisf. %
2020-2021	Chimica (Mod 2)	VOTP + TPALL	3	30	97.6
	Fondamenti di Chimica Organica	TA + VE	6	60	
	Chimica Generale (Mod 2)	TA + VE	3	30	96.0
2019-2020	Chimica (Mod 2)	VOTP + TPALL	3	30	94.7
	Fondamenti di Chimica Organica	TA + VE	6	60	93.5
2018-2019	Chimica (Mod 2)	VOTP + TPALL	3	30	81.4
	Fondamenti di Chimica Organica	TA + VE	6	60	93.2
2017-2018	Chimica (Mod 2)	VOTP + TPALL	3	30	74.4
	Fondamenti di Chimica Organica	TA + VE	6	60	94.8
2016-2017	Chimica (Mod 2)	VOTP + TPALL	3	30	76.7
	Fondamenti di Chimica Organica	TA + VE	6	60	97.6
2015-2016	Chimica (Mod 2)	VOTP + TPALL	3	30	84
	Fondamenti di Chimica Organica	TA + VE	6	60	96.5
2014-2015	Chimica (Mod 2)	VOTP + TPALL	3	30	78.9
	Fondamenti di Chimica Organica	TA + VE	6	60	92.6
2013-2014	Chimica (Mod 2)	VOTP + TPALL	3	30	97.9
	Fondamenti di Chimica Organica	TA + VE	6	60	94.2
2012-2013	Chimica (Mod 2)	VOTP + TPALL	3	30	79.1
	Fond. di Chimica Organica (Mod 2)	TA + VE	6	60	
2011-2012	Chimica Fisica	TA	4	40	81.8
2010-2011	Chimica Organica	Tagr	3	30	100
	Chimica Organica	VOTP	3	30	87.9
	Chimica Organica	SCAR	6	60	100
2009-2010	Chimica Organica	VOTP	3	30	
	Chimica Organica	SCAR	6	60	
2008-2009	Chimica delle Sost. Org. Nat.	TA	4	40	
	Chimica Organica	VOTP	3	30	
	Chimica Organica	SCAR	6	60	
2007-2008	Chimica Organica	VOTP	4	40	
2006-2007	Chimica Organica	VOTP	4	40	
2005-2006	Chimica Organica	VOTP	4	40	

¹ TA= Tecnologie Alimentari; VE= Viticoltura ed Enologia; VOTP= Verde Ornamentale e Tutela del Paesaggio; TPALL= Tecniche della Prevenzione nell'Ambiente e nei Luoghi di Lavoro; Tagr=Tecnologie Agrarie; SCAR=Scienze dei Consumi Alimentari e della Ristorazione

SUPPLEMENTARY TEACHING ACTIVITY IN HIGHER EDUCATION

27 March 2021 **Lecturer** - University of Siena (Italy). Master course in "Genomics and functional proteomics", lecture about principles of metabolomics (3 hrs).

- 2020 – present **PhD Supervisor** - University of Bologna (Italy). PhD school of “Agriculture, Environment and Food Science and Technology”. Supervisor of Lan Qiuyu, about “Effect of stress conditions (mild physical treatments, natural antimicrobials, packing materials, starvation) on the physiological response and metabolism of food related microorganisms”.
- 2018 – 2020 **PhD Supervisor** - University of Bologna (Italy). PhD school of “Agriculture, Environment and Food Science and Technology”. Supervisor of Yan Li, about “Foodomics investigation of poultry meat production chain towards the minimization of meat abnormalities”.
- 2018 **Bachelor thesis supervisor** - University of Bologna (Italy). Dissertation of Claudia Battarra: Brewing Production investigated by ¹H-NMR Metabolomics on samples from Finnish American IPA and Sweet Stout Beers. Dissertation of Anna Ciancaglini: Valutazione dell’effetto di integratori contenenti Cucumis Sativus sull’inflammatione gastrointestinale del cane.
- Master thesis supervisor** - University of Bologna (Italy). Dissertation of Velia Mingione: Characterization of carotenoid pigments in Atlantic salmon using nuclear magnetic resonance spectroscopy. Dissertation of Yan Li: Effetto di alcuni probiotici sul metaboloma urinario di cavalla da trotto, osservato mediante ¹H-NMR.
- 2017 **Master thesis supervisor** - University of Bologna (Italy). Dissertation of Edoardo Capra. Analisi metabolomica di una dieta arricchita di probiotici e suoi effetti su pazienti con malattie gastrointestinali
- 2016 - 2019 **PhD Supervisor** - University of Bologna (Italy). PhD school of “Agriculture, Environment and Food Science and Technology”. Supervisor of Chenglin Zhu, about “¹H-NMR to investigate the connection between food characteristics and health”.
- 2014 **Bachelor thesis supervisor** -University of Bologna (Italy). Dissertation of Matteo Monti: La risonanza magnetica nucleare del fluido cerebrospinale: analisi e case study su suinetti.
- 2016 **Master thesis supervisor (Foreigner student)** - University of Gazantiep (Turkey). Dissertation of Rabia Yildiz. Quality of a product of fourth range based on pineapples, estimated by metabolomics investigation
- 2015 **Bachelor thesis supervisor** - University of Bologna (Italy). Dissertation of Edoardo Capra. Analysis by NMR metabolomics of variations of a low-calorie diet based on spelt, applied to a sample of pigs

- 2014 **Bachelor thesis supervisor** -University of Bologna (Italy). Dissertation of Giulia Corzani. Observation of the salivary metabolome in omnivorous, lacto-ovo vegetarians and vegan individuals using nuclear magnetic resonance. Dissertation of Stefano Patanè. Proton nuclear magnetic resonance to identify the effects of vegetarian, vegan and omnivorous diets on the human metabolome. Dissertation of Mattia Santoni. Effects of cutting and plasma treatments on fruit fourth-range products observed by ¹H-NMR metabolomics investigation
- 2011 **Bachelor thesis supervisor** - University of Bologna (Italy). Dissertation of Matteo Tartagni. Food-omic approach to evaluate the effects of processing technologies on meat food digestibility
- 2003 **Master thesis co-supervisor** - University of Bologna (Italy). Dissertation of Lorenzo Dimonte. NMR study of the interactions between water and proteins in albumen during egg ageing
- 2002 **Master thesis co-supervisor** - University of Bologna (Italy). Dissertation of Carlo Scigliano. Physical-chemical analysis in the evaluation of the vibrational effects of egg quality

COORDINATION OF RESEARCH GROUPS AND SCIENTIFIC RESEARCH ACTIVITY

At present I direct a research team that includes **one foreign PhD students** enrolled in the PhD school of “Agricultural, Environmental and Food Science and Technology”. Most of the activities of the team revolve around **metabolomics** and the **interaction between water and biopolymers in food** matrices. The team faces these issues by nuclear magnetic resonance (NMR), respectively in its variants high resolution on proton (¹H-NMR) and time domain (TD-NMR). The team actively interacts with national and international research groups. Some of them are:

Group	Outcome
The China Conservation and Research Center for the Giant Panda, Dujiangyan, Sichuan, 611800, China	Zhu <i>et al.</i> (2020) First Steps toward the Giant Panda Metabolome Database: Untargeted Metabolomics of Feces, Urine, Serum, and Saliva by ¹ H NMR. <i>Journal of Proteome Research</i> , 19:1052-1059
Ann Romney Center for Neurologic Diseases, Partners Multiple Sclerosis Center, Brigham and Women's Hospital, Department of Neurology, Harvard Medical School, Boston, Massachusetts 02115, USA	Tankou <i>et al.</i> (2018) A probiotic modulates the microbiome and immunity in multiple sclerosis. <i>Annals of neurology</i> , 83:1147-1161
Science & technologie du lait & de l'oeuf, UMR 1253, INRA, Agrocampus Ouest, Rennes, France	Dupont, Deglaire (2018) A first step towards a consensus static in vitro model for simulating full-term infant digestion. <i>Food Chemistry</i> , 240:338-345
Neonatology and Neonatal Intensive Care Unit, Department of Biomedical Science and Human Oncology, Aldo Moro University of Bari, 70100 Bari, Italy	Baldassarre <i>et al.</i> (2018) Effectiveness and Safety of a Probiotic-Mixture for the Treatment of Infantile Colic: A Double-Blind, Randomized, Placebo-Controlled Clinical Trial with Fecal Real-Time PCR and NMR-Based Metabolomics Analysis. <i>Nutrients</i> , 10:195
Department of Agricultural Sciences, Division of	De Filippis <i>et al.</i> (2016) Unusual sub-genus

Microbiology, University of Naples Federico II, Via Università 100, Portici, Italy	associations of faecal Prevotella and Bacteroides with specific dietary patterns. <i>Microbiome</i> , 4:57.
Departamento de Química Agrícola y Bromatología, Facultad de Ciencias, Universidad Autónoma de Madrid, 28049 Madrid, Spain	S. Lopez-Rayó <i>et al.</i> (2011). Demetalation of Fe, Mn, and Cu Chelates and Complexes: Application to the NMR Analysis of Micronutrient Fertilizers. <i>Journal of Agricultural and Food Chemistry</i> , 59:13110-13116

The research activities can be grouped as follows:

How technological treatments affect food microstructure and water bioavailability.

With TD-NMR we observe the water location inside food microstructure, as well as its interactions with biopolymers, the latter by registering relaxation and diffusion signals. These skills are the base for works mainly with food technologists and animal production experts, who want to observe the consequences of innovative technological treatments on foods, by going beyond the concept of water activity. Examples can be found in Cropotova 2016, Dellarosa 2016, Mauro 2016, Balestra 2015, Iaccheri 2015

How technological treatments influence food biology and, from that, its shelf life and its appreciation by the consumers.

I face these issues by studying food water extracts metabolome, which is the ensemble of little organic molecules, by means of high-resolution nuclear magnetic resonance ($^1\text{H-NMR}$). I currently have direct experience on probiotic mixtures, wine, meat and fruit extracts. Examples can be found in Bianchi 2020, Bordoni 2011, Ercolini 2011

How diseases and diet influence human and animal metabolome.

I face these issues by studying bio-fluids metabolome, which is the ensemble of little organic molecules, by means of high-resolution nuclear magnetic resonance ($^1\text{H-NMR}$). Examples can be found in De Filippis 2015, Vitali 2015, Barone 2020, Laghi 2014

EDITORIAL BOARDS MEMBERSHIP

From 2017 – Editorial board member of the “Journal of Food and Drug Research” (editor Pulsus)

From May 2020 – Editorial board member of “Foods” (editor MDPI)

PUBLICATIONS

Journal Articles

2021

- 1) G. Baldi, F. Soglia, **L. Laghi**, A. Meluzzi, M. Petracci (2021) The role of histidine dipeptides on postmortem acidification of broiler muscles with different energy metabolism. *Poultry Science*, 100:1299-1307. IF 2.659 (2019)
- 2) J. Cropotova, S. Tappi, J. Genovese, P. Rocculi, **L. Laghi**, M. Dalla Rosa, T. Rustad (2021) Study of the influence of pulsed electric field pre-treatment on quality parameters of sea bass during brine salting. *Innovative Food Science & Emerging Technologies*, 70:102706. IF 4.477 (2019)
- 3) **L. Laghi**, S. Zagonari, G. Patuelli, C. Zhu, C. Foschi, S. Morselli, M.F. Pedna, V. Sambri, A. Marangoni (2021) Vaginal metabolic profiles during pregnancy: changes between first and second trimester. *PLoS One*, 16:e0249925. IF 2.740 (2019)
- 4) A. Marangoni, **L. Laghi**, S. Zagonari, G. Patuelli, C. Zhu, C. Foschi, S. Morselli, M.F. Pedna, V. Sambri (2021) New insights into vaginal environment during pregnancy. *Frontiers in Molecular Biosciences*, 8:656844. IF 4.188 (2019)
- 5) F. Soglia, M. Zampiga, G. Baldi, Y. Malila, K.V. Thanatsang, Y. Srimarut, N. Tatiyaborworntham, O. Unger, A. Klamchuen, **L. Laghi**, M. Petracci, F. Sirri (2021) Lysine depletion during different feeding phases: effects on growth performances and meat quality of broiler chickens. *Animals*, 11:1499. IF 2.323 (2019)
- 6) J. U-Chupaj, Y. Malila, L. Canonico, G. Gozzi, L. Vannini, N. Dellarosa, **L. Laghi**, M. Petracci, S. Benjakul, W. Visessanguan (2021) Influence of non-phosphate and low-sodium salt marination in combination with tumbling process on properties of chicken breast meat affected by white striping abnormality. *Journal of Food Science*, 86:319-326. IF 2.479 (2019)
- 7) M. Zampiga, **L. Laghi**, C. Zhu, A. Cartoni Mancinelli, S. Mattioli, F. Sirri (2021) Breast muscle and plasma metabolomics profile of broiler chickens exposed to chronic heat stress conditions. *Animal*, 15:100275. (2019)

2020

- 1) G. Aboagye, M. Zappaterra, **L. Laghi**, S. Dall'Olio, M. Petracci, L. Nannicosta (2020) Water status in meat from pig breeds strongly differing in growth performances. *Food chemistry*, 305:125445. IF 5.399 (2018).
- 2) F. Barbieri, **L. Laghi**, F. Gardini, C. Montanari, G. Tabanelli (2020) Metabolism of *Lactobacillus sakei* Chr82 in the Presence of Different Amounts of Fermentable Sugars. *Foods*, 9:720. IF 3.011 (2018)
- 3) M. Bazzano, **L. Laghi**, C. Zhu, G.E. Magi, B. Tesei, F. Laus (2020) Respiratory metabolites in bronchoalveolar lavage fluid (BALF) and exhaled breath condensate (EBC) can differentiate horses

- affected by severe equine asthma from healthy horses. *Journal of Breath Research*, 16:233. IF 3.000 (2018)
- 4) M. Bazzano, **L. Laghi**, C. Zhu, E. Lotito, S. Sgariglia, B. Tesei, F. Laus (2020) Exercise induced changes in salivary and serum metabolomic in trained standardbred. *Metabolites*, 10:298. IF 3.303 (2018)
- 5) L. Bianchi, **L. Laghi**, V. Correani, E. Schifano, C. Landi, D. Uccelletti, B. Mattei (2020) A Combined Proteomics, Metabolomics and In Vivo Analysis Approach for the Characterization of Probiotics in Large-Scale Production. *Biomolecules*, 10:157. IF 4.694 (2018)
- 6) G. Brugaletta, D. Luise, A. De Cesare, M. Zampiga, **L. Laghi**, P. Trevisi, G. Manfreda, F. Sirri (2020) Insights into the mode of action of tannin-based feed additives in broiler chickens: looking for connections with the plasma metabolome and caecal microbiota. *Italian Journal of Animal Science*, 19:1349-1362. IF 1.805 (2019)
- 7) G. Brugaletta, A. De Cesare, M. Zampiga, **L. Laghi**, C. Oliveri, C. Zhu, G. Manfreda, B. Syed, I. Valenzuela, F. Sirri (2020) Effects of Alternative Administration Programs of a Synbiotic Supplement on Broiler Performance, Foot Pad Dermatitis, Caecal Microbiota, and Blood Metabolites. *Animals*, 10:522. IF 1.832 (2018)
- 8) G.P. Innocenti, L. Santinelli, **L. Laghi**, C. Borrazzo, C. Pinacchio, M. Fratino, L. Celani, E.N. Cavallari, C. Scagnolari, F. Frasca, G. Antonelli, C.M. Mastroianni, G. d'Ettore, G. Ceccarelli (2020) Modulation of Phenylalanine and Tyrosine Metabolism beneficially affects Cognitive Performance of HIV Infected Subjects: results from a clinical trial. *Metabolites*, 10:274. IF 3.303 (2018)
- 9) J.C. Oliver, **L. Laghi**, C. Parolin, C. Foschi, A. Marangoni, A. Liberatore, A.L. Tranches Dias, M. Cricca, B. Vitali (2020) Metabolic profiling of Candida clinical isolates of different species and infection sources. *Scientific Reports*, 10:16716. IF 3.998 (2019)
- 10) A. Zannoni, M. Pietra, A. Gasparido, P.A. Accorsi, M. Barone, S. Turrone, **L. Laghi**, C. Zhu, P. Brigidi, M. Forni (2020) Non-invasive assessment of fecal stress biomarkers in hunting dogs during exercise and at rest. *Frontiers in Veterinary Science*, 7:126. IF 2.029 (2018)
- 11) C. Zhu, S. Fasoli, G. Isani, **L. Laghi** (2020) First Insights into the Urinary Metabolome of Captive Giraffes by Proton Nuclear Magnetic Resonance Spectroscopy. *Metabolites*. 10:157. IF 3.303 (2018)
- 12) C. Zhu, **L. Laghi**, Z. Zhang, Y. He, D. Wu, H. Zhang, Y. Huang, C. Li, L. Zou (2020) First Steps toward the Giant Panda Metabolome Database: Untargeted Metabolomics of Feces, Urine, Serum, and Saliva by ¹H NMR. *Journal of Proteome Research*, 19:1052-1059. IF 3.780 (2018)
- 13) C. Zhu, M. Petracci, C. Li, E. Fiore, L. Laghi (2020) An untargeted metabolomics investigation of Jiulong Yak (*Bos grunniens*) meat by ¹H-NMR. *Foods*, 9:481. IF 3.011 (2018)

2019

- 1) G. Baldi, F. Soglia, **L. Laghi**, S. Tappi, P. Rocculi, S. Tavaniello, D. Prioriello, R. Mucci, G. Maiorano, M. Petracci (2019) Comparison of quality traits among breast meat affected by current muscle abnormalities. *Food Research International*, 115:369-376. IF 3.579 (2018)
- 2) F. Barone, **L. Laghi**, A. Gianotti, D. Ventrella, D.L. Taneyo Saa, A. Bordoni, M. Forni, P. Brigidi, M.L. Bacci, S. Turrone (2019) In Vivo Effects of Einkorn Wheat (*Triticum monococcum*) Bread on the Intestinal Microbiota, Metabolome, and on the Glycemic and Insulinemic Response in the Pig Model. *Nutrients*, 11:16. IF 4.171 (2018)
- 3) C. Ceccarani, A. Marangoni, M. Severgnini, T. Camboni, **L. Laghi**, V. Gaspari, A. D'Antuono, C. Foschi, M.C. Del Re, C. Consolandi (2019). Rectal microbiota associated with *Chlamydia trachomatis* and *Neisseria gonorrhoeae* infections in men having sex with other men. *Frontiers in cellular and infection microbiology*, 9:358. IF 3518 (2018)
- 4) C. Ceccarani, C. Foschi, C. Parolin, A. D'Antuono, V. Gaspari, C. Consolandi, **L. Laghi**, T. Camboni, B. Vitali, M. Severgnini, A. Marangoni (2019). Diversity of vaginal microbiome and metabolome during genital infections. *Scientific reports*, 9:1-12. IF 4.011 (2018)
- 5) A. Elmi, D. Ventrella, **L. Laghi**, G. Carnevali, C. Zhu, G. Pertile, F. Barone, F. Benfenati, M.L. Bacci (2019). ¹H-NMR Spectroscopy Characterization of Porcine Vitreous Humor in Physiological and Photoreceptor Degeneration Conditions. *Investigative Ophthalmology & Visual Science*, 60:741-747. IF 3.812 (2018)
- 6) V. Fuoichi, M.A. Coniglio, **L. Laghi**, A. Rescifina, M. Caruso, A. Stivala, P.M. Furneri (2019). Metabolic characterization of supernatants produced by *Lactobacillus* spp with in vitro anti-*Legionella* activity. *Frontiers in Microbiology*, 10:1403. IF 4.259 (2018)
- 7) M. Nowacka, **L. Laghi**, K. Rybak, M. Dalla Rosa, D. Witrowa-Rajchert, U. Tylewicz (2019). Water state and sugars in cranberry fruits subjected to combined treatments: Cutting, blanching and sonication. *Food chemistry*, 299:125122. IF 5.399 (2018)
- 8) R.A.Ñ. Palomino, C. Vanpouille, **L. Laghi**, C. Parolin, K. Melikov, P. Backlund, B. Vitali, L. Margolis (2019). Extracellular vesicles from symbiotic vaginal lactobacilli inhibit HIV-1 infection of human tissues. *Nature Communications*, 10:1-14. IF 11.878 (2018)
- 9) F. Soglia, A.K. Silva, L.M. Lião, **L. Laghi**, M. Petracci (2019). Effect of broiler breast abnormality and freezing on meat quality and metabolites assessed by ¹H-NMR spectroscopy. *Poultry science*, 98:7139-7150. IF 2.027 (2018)
- 10) F. Soglia, A.K. Silva, S. Tappi, L.M. Lião, P. Rocculi, **L. Laghi**, M. Petracci (2019). Gaping of pectoralis minor muscles: magnitude and characterization of an emerging quality issue in broilers. *Poultry science*, 98:6194-6204. IF 2.027 (2018)
- 11) S. Tappi, **L. Laghi**, A. Dettori, L. Piana, L. Ragni, P. Rocculi (2019). Investigation of water state during induced crystallization of honey. *Food chemistry*, 294:260-266. IF 5.399 (2018)

- 12) S. Venosi, G. Ceccarelli, M. de Angelis, **L. Laghi**, L. Bianchi, O. Martinelli, D. Maruca, E.N. Cavallari, F. Toscanella, P. Vassalini, V. Trinchieri, A. Oliva, G. d'Ettore (2019). Infected chronic ischemic wound topically treated with a multi-strain probiotic formulation: a novel tailored treatment strategy. *Journal of translational medicine*, 17:364. IF 4.098 (2018)
- 13) C. Zhu, B. Vitali, G. Donders, C. Parolin, Y. Li, **L. Laghi** (2019) Univariate Statistical Analysis as a Guide to 1H-NMR Spectra Signal Assignment by Visual Inspection. *Metabolites*, 9:15. IF 3.303 (2018)
- 14) C. Zhu, C. Li, Y. Wang, **L. Laghi** (2019). Characterization of Yak Common Biofluids Metabolome by Means of Proton Nuclear Magnetic Resonance Spectroscopy. *Metabolites*, 9:41. IF 3.303 (2018)

2018

- 1) M.E. Baldassarre, A. Di Mauro, S. Tafuri, V. Rizzo, M.S. Gallone, P. Mastromarino, D. Capobianco, **L. Laghi**, C. Zhu, M. Capozza, N. Laforgia (2018) Effectiveness and Safety of a Probiotic-Mixture for the Treatment of Infantile Colic: A Double-Blind, Randomized, Placebo-Controlled Clinical Trial with Fecal Real-Time PCR and NMR-Based Metabolomics Analysis. *Nutrients*, 10:195. IF 4.171
- 2) G. Baldi, F. Soglia, M. Mazzoni, F. Sirri, L. Canonico, E. Babini, **L. Laghi**, C. Cavani, M. Petracci (2018) Implications of white striping and spaghetti meat abnormalities on meat quality and histological features in broilers. *Animal*, 12:164-173. IF 2.026
- 3) M. Bazzano, **L. Laghi**, C. Zhu, G.E. Magi, E. Serri, A. Spaterna, B. Tesei, F. Laus (2018) Metabolomics of tracheal wash samples and exhaled breath condensates in healthy horses and horses affected by equine asthma. *Journal of breath research*, 12:046015. IF 3.000
- 4) N. Dellarosa, L. Laghi, L. Ragni, M. Dalla Rosa, A. Galante, B. Ranieri, T.M. Florio, M. Alecci (2018) Pulsed electric fields processing of apple tissue: Spatial distribution of electroporation by means of magnetic resonance imaging and computer vision system. *Innovative Food Science & Emerging Technologies*, 47:120-126. IF 4.085
- 5) C. Foschi, **L. Laghi**, A. D'Antuono, V. Gaspari, C. Zhu, N. Dellarosa, M. Salvo, A. Marangoni (2018) Urine metabolome in women with Chlamydia trachomatis infection. *PloS one*, 12:e0172483. IF 2.776
- 6) C. Foschi, M. Salvo, **L. Laghi**, C. Zhu, S. Ambretti, A. Marangoni, M.C. Re (2018) Impact of meropenem on Klebsiella pneumoniae metabolism. *PlosOne*, 13:e0207478. IF 2.776
- 7) D.E. Kok, F. Rusli, B. van der Lugt, C. Lute, **L. Laghi**, S. Salvioli, G. Picone, C. Franceschi, H. Smidt, J. Vervoorts, E. Kampman, M. Müller, W.T. Steegenga (2018) Lifelong calorie restriction affects indicators of colonic health in aging C57Bl/6J mice. *Journal of Nutritional Biochemistry*, 56:152–164. IF 4.490

- 8) **L. Laghi**, C. Zhu, G. Campagna, G. Rossi, M. Bazzano, F. Laus (2018) Probiotic supplementation in trained trotter horses: effect on blood clinical pathology data and urine metabolomic assessed in field. *Journal of Applied Physiology*, 125:654-660. IF 3.140
- 9) **L. Laghi**, P. Mastromarino, W. Elisei, D. Capobianco, C.L. Zhu, M. Picchio, G. Giorgetti, G. Bradimarte, A. Tursi (2018) Impact of treatments on fecal microbiota and fecal metabolome in symptomatic uncomplicated diverticular disease of the colon: a pilot study. *Journal of biological regulators and homeostatic agents*, 32:1421-1432. IF 1.558
- 10) O. Ménard, C. Bourlieu, S.C., De Oliveira, N. Dellarosa, **L. Laghi**, F. Carrière, F. Capozzi, D. Dupont, A. Deglaire (2018) A first step towards a consensus static in vitro model for simulating full-term infant digestion. *Food Chemistry*, 240:338-345. IF 5.399
- 11) C. Parolin, C. Foschi, **L. Laghi**, C. Zhu, N. Banzola, V. Gaspari, A. D'Antuono, B. Giordani, M. Severgnini, C. Consolandi, M. Salvo, R. Cevenini, B. Vitali, A. Marangoni (2018) Insights Into Vaginal Bacterial Communities and Metabolic Profiles of Chlamydia trachomatis Infection: Positioning Between Eubiosis and Dysbiosis. *Frontiers in Microbiology*, 9:600. IF 4.259
- 12) F. Soglia, G. Baldi, **L. Laghi**, S. Mudalal, C. Cavani, M. Petracci (2018) Effect of white striping on turkey breast meat quality. *Animal*, 12:164-173. IF 2.026
- 13) S. K. Tankou, K. Regev, B.C. Healy, E. Tjon, **L. Laghi**, L.M. Cox, S. Cook, P. Kivisäkk, I.V. Pierre, L. Hishikesh, R. Gandhi, S. Cook, B. Glanz, J. Stankiewicz, H.L. Weiner MD. (2018) A probiotic modulates the microbiome and immunity in multiple sclerosis. *Annals of neurology*, 83:1147-1161. IF 9.496
- 14) M. Zampiga, **L. Laghi**, M. Petracci, C. Zhu, A. Meluzzi, S. Dridi, F. Sirri (2018) Effect of dietary arginine to lysine ratios on productive performance, meat quality, plasma and muscle metabolomics profile in fast-growing broiler chickens. *Journal of Animal Science and Biotechnology*, 9:79. IF 3.441
- 15) C. Zhu, V. Faillace, F. Laus, M. Bazzano, **L. Laghi** (2018) Characterization of trotter horses urine metabolome by means of proton nuclear magnetic resonance spectroscopy. *Metabolomics*, 14:106. IF 3.167

2017

- 1) G. Barbara, E. Scaioli, M.R. Barbaro, E. Biagi, **L. Laghi**, C. Cremon, G. Marasco, A. Colecchia, G. Picone, N. Salfi, F. Capozzi, P. Brigidi, D. Festi (2017) Gut microbiota, metabolome and immune signatures in patients with uncomplicated diverticular disease. *Gut*, 66:1252-1261. IF 17.016
- 2) E. Betoret, C. Mannozi, N. Dellarosa, **L. Laghi**, P. Rocculi, M. Dalla Rosa (2017) Metabolomic studies after high pressure homogenization processed low pulp mandarin juice with trehalose addition. Functional and technological properties. *Journal of Food Engineering*, 200:22-28. IF 3.197

- 3) M. Biagioli, **L. Laghi**, A. Carino, S. Cipriani, E. Distrutti, S. Marchianò, C. Parolin, P. Scarpelli, B. Vitali, S. Fiorucci (2017) Metabolic variability of a multispecies probiotic preparation impacts on the anti-inflammatory activity. *Frontiers in pharmacology*, 8:505. IF 3.831
- 4) M.A. Bryszewska, **L. Laghi**, A. Zannoni, A. Gianotti, F. Barone, D.L. Taneyo Saa, M.L. Bacci, D. Ventrella, M. Forni (2017) Bioavailability of Microencapsulated Iron from Fortified Bread Assessed Using Piglet Model. *Nutrients*, 9:272. IF 4.196
- 5) G. Corano Scheri, S.N. Fard, I. Schietroma, A. Mastrangelo, C. Pinacchio, N. Giustini, S. Serafino, G. De Girolamo, E.N. Cavallari, M. Statzu, **L. Laghi**, A. Vullo, G. Ceccarelli, V. Vullo, G. D'Ettore (2017) Modulation of Tryptophan/Serotonin Pathway by Probiotic Supplementation in Human Immunodeficiency Virus–Positive Patients: Preliminary Results of a New Study Approach. *International Journal of Tryptophan Research*, 10. No IF
- 6) N. Dellarosa, D. Frontuto, **L. Laghi**, M. Dalla Rosa, J.G. Lyng (2017) The impact of pulsed electric fields and ultrasound on water distribution and loss in mushrooms stalks. *Food Chemistry*, 236:94-100. IF 4.946
- 7) C. Foschi, **L. Laghi**, C. Parolin, B. Giordani, M. Compri, R. Cevenini, A. Marangoni, B. Vitali (2017) Novel approaches for the taxonomic and metabolic characterization of lactobacilli: Integration of 16S rRNA gene sequencing with MALDI-TOF MS and 1H-NMR. *PLoS One*, 12:e0172483. IF 2.766
- 8) E. Janiszewska-Turak, N. Dellarosa, U. Tylewicz, **L. Laghi**, S. Romani, M. Dalla Rosa, D. Witrowa-Rajchert (2017) The influence of carrier material on some physical and structural properties of carrot juice microcapsules. *Food Chemistry*, 236:134-141. IF 4.946
- 9) **L. Laghi**, L. Venturi, N. Dellarosa, M. Petracci (2017). Water diffusion to assess meat microstructure. *Food Chemistry*, 236:15-20. IF 4.946
- 10) M.V. Traffano-Schiffo, **L. Laghi**, M. Castro-Giraldez, U. Tylewicz, P. Rocculi, L. Ragni, M. Dalla Rosa, P.J. Fito (2017) Osmotic dehydration of organic kiwifruit pre-treated by pulsed electric fields and monitored by nmr. *Food Chemistry*, 236:87-93. IF 4.946
- 11) M.V. Traffano-Schiffo, **L. Laghi**, M. Castro-Giraldez, U. Tylewicz, S. Romani, L. Ragni, M. Dalla Rosa, P.J. Fito (2017) Osmotic dehydration of organic kiwifruit pre-treated by pulsed electric fields: Internal transport and transformations analyzed by NMR. *Innovative Food Science & Emerging Technologies*, 41:259-266. IF 3.116
- 12) V. Trinchieri, **L. Laghi**, B. Vitali, C. Parolin, I. Giusti, D. Capobianco, P. Mastromarino, C. De Simone (2017) Efficacy and Safety of a Multistrain Probiotic Formulation Depends from Manufacturing. *Frontiers in immunology*, 8:1474. IF 5.511
- 13) U. Tylewicz, S. Tappi, C. Mannozi, S. Romani, N. Dellarosa, **L. Laghi**, L. Ragni, P. Rocculi, M. Dalla Rosa (2017) Effect of pulsed electric field (PEF) pre-treatment coupled with osmotic

dehydration on physico-chemical characteristics of organic strawberries. *Journal of Food Engineering*, 213:2-9. IF 3.197

2016

- 1) J. Crobotova, U. Tylewicz, N. Dellarosa, **L. Laghi**, S. Romani, M. Dalla Rosa (2016) Effect of freezing on microstructure and degree of syneresis in differently formulated fruit fillings. *Food Chemistry*, 195:71-78. IF 4.529 (2016)
- 2) F. De Filippis, N. Pellegrini, **L. Laghi**, M. Gobbetti, D. Ercolini (2016). Unusual sub-genus associations of faecal Prevotella and Bacteroides with specific dietary patterns. *Microbiome*, 4:57. IF 8.496 (2016)
- 3) F. De Filippis, N. Pellegrini, L. Vannini, I.B. Jeffery, A. La Storia, **L. Laghi**, D.I. Serrazanetti, R. Di Cagno, I. Ferrocino, C. Lazzi, S. Turrone, L. Coccolin, P. Brigidi, E. Neviani, M. Gobbetti, P.W. O'Toole, D. Ercolini (2016). High-level adherence to a Mediterranean diet beneficially impacts the gut microbiota and associated metabolome. *Gut*, 65:1812-1821. IF 14.921 (2016)
- 4) N. Dellarosa, L. Ragni, **L. Laghi**, U. Tylewicz, P. Rocculi, M. Dalla Rosa (2016) Time domain nuclear magnetic resonance to monitor mass transfer mechanisms in apple tissue promoted by osmotic dehydration combined with pulsed electric fields. *Innovative Food Science & Emerging Technologies*, 37:345-351. IF 2.573 (2016)
- 5) N. Dellarosa, S. Tappi, L. Ragni, **L. Laghi**, P. Rocculi, M. Dalla Rosa (2016). Metabolic response of fresh-cut apples induced by pulsed electric fields. *Innovative Food Science & Emerging Technologies*, 38B:356-364. IF 2.573 (2016)
- 6) N. Dellarosa, L. Ragni, **L. Laghi**, U. Tylewicz, P. Rocculi, M. Dalla Rosa (2016) Effect of Pulsed Electric Fields on Water Distribution in Apple Tissue as Monitored by NMR Relaxometry. *IFMBE Proceedings*, 53:355-358. IF 0.22 (2016)
- 7) M.A. Mauro, N. Dellarosa, U. Tylewicz, S. Tappi, **L. Laghi**, P. Rocculi, M. Dalla Rosa (2016) Calcium and ascorbic acid affect cellular structure and water mobility in apple tissue during osmotic dehydration in sucrose solutions. *Food Chemistry*, 195:19-28. IF 4.529 (2016)
- 8) P. P Nardini, R.A. Ñahui Palomino, C. Parolin, **L. Laghi**, C. Foschi, R. Cevenini, B. Vitali and A. Marangoni (2016) Lactobacillus crispatus inhibits the infectivity of Chlamydia trachomatis elementary bodies, in vitro study. *Scientific Reports*, 29:29024. IF 4.259 (2016)
- 9) F. Soglia, **L. Laghi**, L. Canonico, C. Cavani, M. Petracci (2016). Functional property issues in broiler breast meat related to emerging muscle abnormalities. *Food Research International*, 89: 1071-1076. IF 3.086 (2016)
- 10) D. Ventrella, **L. Laghi**, F. Barone, A. Elmi, N. Romagnoli, M.L. Bacci (2016). Age-Related ¹H-NMR Characterization of Cerebrospinal Fluid in Newborn and Young Healthy Piglets. *PloS One*, 11:e0157623. IF 2.806 (2016)

11) N.P. Vidal, G. Picone, E. Goicoechea, **L. Laghi**, M.J. Manzanos, F. Danesi, A. Bordoni, F. Capozzi, M.D. Guillén (2016) Metabolite release and protein hydrolysis during the in vitro digestion of cooked sea bass fillets. A study by ¹H NMR. *Food Research International*, 88:293–301. IF 3.086 (2016)

2015

1) F. Balestra, **L. Laghi**, D. Taneyo Saa, A. Gianotti, P. Rocculi, G.G. Pinnavaia (2015) Physico-chemical and metabolomic characterization of Kamut® Khorasan and durum wheat fermented dough. *Food Chemistry*, 187:451-459. IF 4.052 (2015)

2) N. Dellarosa, **L. Laghi**, E. Martinsdóttir, R. Jónsdóttir, K. Sveinsdóttir (2015) Enrichment of convenience seafood with omega-3 and seaweed extracts: Effect on lipid oxidation. *LWT- Food Science and Technology*, 62:746-752. IF 2.711 (2015)

3) E. Iaccheri, **L. Laghi**, C. Cevoli, A. Berardinelli, L. Ragni, S. Romani, P. Rocculi (2015) Different analytical approaches for the study of water features in green and roasted coffee beans. *Journal of Food Engineering*, 146:28-35. IF 3.199 (2015)

4) E. Marcolini, E. Babini, A. Bordoni, M. Di Nunzio, **L. Laghi**, A. Maczó, G. Picone, E. Szerdahelyi, V. Valli, and F. Capozzi (2015) Bioaccessibility of the bioactive peptide carnosine during in vitro digestion of cured beef meat. *Journal of Agricultural and Food Chemistry*, 63:4973–4978. IF 2.857 (2015)

5) C. Parolin, A. Marangoni, **L. Laghi**, C. Foschi, R.A.Ñ. Palomino, N. Calonghi, R. Cevenini, B. Vitali (2015) Isolation of Vaginal Lactobacilli and Characterization of Anti-Candida Activity. *PlosOne*, 10:e0131220. IF 3.057 (2015)

6) A. Trimigno, F.C. Marincola, N. Dellarosa, G. Picone and **L. Laghi** (2015) Definition of food quality by NMR-based foodomics. *Current Opinion in Food Science*, 4:99–104.

7) B. Vitali, F. Cruciani, G. Picone, C. Parolin, G. Donders, **L. Laghi** (2015) Vaginal microbiome and metabolome highlight specific signatures of bacterial vaginosis. *European Journal of Clinical Microbiology & Infectious Diseases*, 34:2367-2376. IF 2.857 (2015)

2014

1) A. Bordoni, **L. Laghi**, E. Babini, M. Di Nunzio, G. Picone, A. Ciampa, V. Valli, F. Danesi, F. Capozzi (2014) The foodomics approach for the evaluation of protein bio-accessibility in processed meat upon in vitro digestion. *Electrophoresis*, 35:1607-1614. IF 3.028 (2014)

2) A. Carnevali, A. Gianotti, S. Benedetti, M.C. Tagliamonte, M. Primiterra, **L. Laghi**, F. Danesi, V. Valli, M. Ndaghijimana, F. Capozzi, F. Canestrari, A. Bordoni (2014) Role of Kamut® brand khorasan wheat in the counteraction of non-celiac wheat sensitivity and oxidative damage. *Food Research International*, 63:218-226. IF 2.818 (2014)

- 3) F. De Filippis, L. Vannini, A. La Stora, **L. Laghi**, P. Piombino, G. Stellato, D.I. Serrazanetti, G. Gozzi, S. Turrone, I Ferrocino, C. Lazzi, R. Di Cagno, M. Gobbetti, D. Ercolini (2014) The same microbiota and a potentially discriminant metabolome in the saliva of omnivore, ovo-lacto vegetarian and vegan individuals. *PLoS One*, 9:e112373. IF 3.234 (2014)
- 4) **L. Laghi**, A. Versari, E. Marcolini, G.P. Parpinello (2014) Metabonomic Investigation by ¹H-NMR to Discriminate between Red Wines from Organic and Biodynamic Grapes. *Food and Nutrition Sciences*, 5:52-59.
- 5) **L. Laghi**, G. Picone, F. Capozzi (2014) Nuclear magnetic resonance for foodomics beyond food analysis. *Trends in Analytical Chemistry*, 59:93-102. IF 6.472 (2014)
- 6) **L. Laghi**, G. Picone, F. Cruciani, P. Brigidi, F. Calani, G. Donders, F. Capozzi, B. Vitali (2014) Rifaximin modulates microbiome and metabolome in women affected by bacterial vaginosis. *Antimicrobial Agents and Chemotherapy*, 58:3411-3420. IF 4.476 (2014)
- 7) M. Nowacka, U. Tylewicz, **L. Laghi**, M. Dalla Rosa, D. Witrowa-Rajchert (2014) Effect of ultrasound treatment on the water state in kiwifruit during osmotic dehydration. *Food Chemistry*, 144:18-25. IF 3.391 (2014)
- 8) M. Petracci, **L. Laghi**, S. Rimini, P. Rocculi, F. Capozzi, C. Cavani (2014) Chicken Breast Meat Marinated with Increasing Levels of Sodium Bicarbonate. *Journal of Poultry Science*, 51:206-212. IF 0.802 (2014)
- 9) G. Sacchetti, L. Neri, **L. Laghi**, F. Capozzi, D. Mastrocola, P. Pittia (2014) Multidisciplinary approach to study the effect of water status and mobility on the activity of peroxidase in solutions. *Food chemistry*, 144:36-43. IF 3.391 (2015)
- 10) A. Versari, V. Felipe Laurie, A. Ricci, **L. Laghi**, G.P. Parpinello (2014) Progress in Authentication, Typification and Traceability of Grapes and Wines by Chemometric approaches. *Food Research International*, 60:2-18. IF 2.818 (2014)

2013

- 1) G. Picone, **L. Laghi**, F. Gardini, R. Lanciotti, L. Siroli, F. Capozzi (2013) Evaluation of the effect of carvacrol on the Escherichia coli 555 metabolome by using ¹H-NMR spectroscopy. *Food Chemistry*, 141:4367-4374. IF 3.259 (2013)
- 2) P. Santagapita, **L. Laghi**, V. Panarese, U. Tylewicz, P. Rocculi, M. Dalla Rosa (2013) Modification of transverse NMR relaxation times and water diffusion coefficients of kiwifruit pericarp tissue subjected to osmotic dehydration. *Food and Bioprocess Technology*, 6:1434-1443. IF 3.126 (2013)

2012

- 1) R. Francavilla, M. Calasso, L. Calace, S. Siragusa, M. Ndagijimana, P. Vernocchi, L. Brunetti, G. Mancino, G. Tedeschi, E. Guerzoni, F. Indrio, **L. Laghi**, V.L. Miniello, M. Gobbetti, M. De

Angelis (2012) Effect of lactose on gut microbiota and metabolome of infants with cow's milk allergy. *Pediatric Allergy and Immunology*, 23:420-427. IF 3.376 (2012)

2) A. Ciampa, G. Picone, **L. Laghi**, H. Nikzad, F. Capozzi (2012) Changes in the Amino Acid Composition of Bogue (Boops boops) Fish during Storage at Different Temperatures by ¹H-NMR Spectroscopy. *Nutrients*, 4:542-553. IF 2.072 (2012)

3) M. Petracci, **L. Laghi**, P. Rocculi, S. Rimini, V. Panarese, M.A. Cremonini, C. Cavani (2012) The use of sodium bicarbonate for marination of broiler breast meat. *Poultry Science*, 91:526-534. IF 1.516 (2012)

4) A. Versari, G.P. Parpinello, **L. Laghi** (2012) Application of infrared spectroscopy for the prediction of color components of red wines. *Spectroscopy*, 27:36-47. IF 0.417 (2012)

5) V. Panarese, **L. Laghi**, A. Pisi, U. Tylewicz, M.D. Rosa, P. Rocculi (2012) Effect of osmotic dehydration on Actinidia deliciosa kiwifruit: A combined NMR and ultrastructural study. *Food chemistry*, 132:1706-1712. IF 3.334 (2012)

2011

1) A. Versari, **L. Laghi**, J.H. Thorngate, R.B. Boulton (2011). Prediction of colloidal stability in white wines using infrared spectroscopy. *Journal of Food Engineering*, 104:239-245. IF 2.414 (2011)

2) A. Bordoni, G. Picone, E. Babini, M. Vignali, F. Danesi, V. Valli, M. Di Nunzio, **L. Laghi**, F. Capozzi (2011). NMR comparison of in vitro digestion of Parmigiano Reggiano cheese aged 15 and 30 months. *Magnetic Resonance in Chemistry*, 49:S61-S70. IF 1.437 (2011)

3) U. Tylewicz, V. Panarese, **L. Laghi**, P. Rocculi, M. Nowacka, G. Placucci, M. Dalla Rosa (2011). NMR and DSC Water Study During Osmotic Dehydration of Actinidia deliciosa and Actinidia chinensis Kiwifruit. *Food Biophysics*, 6:327-333. IF 2.187 (2011)

4) D. Ercolini, I. Ferrocino, A. Nasi, M. Ndagijimana, P. Vernocchi, A. La Storia, **L. Laghi**, G. Mauriello, M. E. Guerzoni, F. Villani (2011). Monitoring of Microbial Metabolites and Bacterial Diversity in Beef Stored under Different Packaging Conditions. *Applied and Environmental Microbiology*, 77:7372-7381. IF 3.829 (2011)

5) **L. Laghi**, A. Versari., G.P. Parpinello, Y.D. Nakaji, R.B. Boulton (2011). FT-IR spectroscopy and direct orthogonal signal correction preprocessing applied to selected phenolic compounds in red wines. *Food Analytical Methods*, 4:619-625. IF 1.943 (2011)

6) R. Di Cagno, M. De Angelis, I. De Pasquale, M. Ndagijimana, P. Vernocchi, P. Ricciuti , F. Gagliardi, **L. Laghi**, C. Crecchio, M. E Guerzoni, M. Gobbetti, R. Francavilla (2011). Duodenal and faecal microbiota of celiac children: molecular, phenotype and metabolome characterization. *BMC Microbiology*, 11:219. IF 3.044 (2011)

7) S. Lopez-Rayó, J. J. Lucena, **L. Laghi**, M. A. Cremonini (2011). Demetalation of Fe, Mn, and Cu Chelates and Complexes: Application to the NMR Analysis of Micronutrient Fertilizers. *Journal of Agricultural and Food Chemistry*, 59:13110-13116. IF 2.823 (2011)

2010

1) S. Maccaferri, B. Vitali, A. Klinder, S. Kolida, M. Ndagijimana, **L. Laghi**, F. Calanni, P. Brigidi, G. R. Gibson, A. Costabile (2010). Rifaximin modulates the colonic microbiota of patients with Crohn's disease: an in vitro approach using a continuous culture colonic model system. *Journal of Antimicrobial Chemotherapy*, 65:2556-2565. IF 4.659 (2010)

2) **L. Laghi**, G.P. Parpinello, D. Del Rio, L. Calani, A.U. Matioli, A. Versari (2010). Fingerprint of enological tannins by multiple techniques approach. *Food Chemistry*, 121:783-788. IF 3.458 (2010)

2009

1) M. Ndagijimana, **L. Laghi**, B. Vitali, G. Placucci, P. Brigidi, M.E. Guerzoni (2009) Effect of a synbiotic food consumption on human gut metabolic profiles evaluated by ¹H Nuclear Magnetic Resonance spectroscopy. *International journal of food microbiology*, 134:147-153. IF 3.011 (2009)

2) **L. Laghi**, S. Alcaniz, M. Cerdan, M. Gomez-Gallego, M. A. Sierra, G. Placucci, M.A. Cremonini (2009). Facile Deferration of Commercial Fertilizers Containing Iron Chelates for Their NMR Analysis. *Journal of Agricultural and Food Chemistry*, 57:5143-5147. IF 2.469 (2009)

2007

1) S. Lena, M.A. Cremonini, F. Federiconi, G. Gottarelli, C. Graziano, **L. Laghi**, P. Mariani, S. Masiero, S. Pieraccini, G.P. Spada (2007) The Supramolecular Helical Architecture of 8-Oxoinosine and 8-Oxoguanosine Derivatives. *Chemistry - A European Journal*, 13:3441-3449. IF 5.330 (2007)

2005

1) **L. Laghi**, M.A. Cremonini, G. Placucci, S. Sykora, K. Wright, B. Hills. (2005) A proton NMR relaxation study of hen egg quality. *Magnetic Resonance Imaging*, 23:501-510. IF 1.361 (2005)

2004

1) M.A. Cremonini, **L. Laghi**, G. Placucci. (2004) Investigation of commercial lecithin by ³¹P NMR in a ternary CUBO solvent. *Journal of the Science of Food and Agriculture*, 84:786-790. IF 0.871 (2004)

2) M. Bianchi, F. Capozzi, M.A. Cremonini, **L. Laghi**, M. Petracchi, G. Placucci, C. Cavani (2004) Influence of the season on the relationships between NMR transverse relaxation data and water-holding capacity of turkey breast meat. *Journal of the Science of Food and Agriculture*, 84:1535-1540. IF 0.871 (2004)

2003

A. Berardinelli, M.A. Cremonini, A. Franchini, A. Giunchi, A. Guarnieri, **L. Laghi**, G. Placucci, L. Ragni (2003) Effetto delle sollecitazioni meccaniche dovute al trasporto sulla qualità dell'uovo. *Rivista di Avicoltura*, 6:35

2002

M.A. Cremonini, **L. Laghi** (2002) Misura del coefficiente di autodiffusione senza probe a gradienti: l'arte di arrangiarsi! (Prima parte). *La Chimica e l'Industria*, 84 (Gennaio/Febbraio), 90

M.A. Cremonini, **L. Laghi** (2002) Misura del coefficiente di autodiffusione senza probe a gradienti: l'arte di arrangiarsi! (Seconda parte). *La Chimica e l'Industria*, 84 (Marzo), 91

M.A. Cremonini, **L. Laghi** (2002) Misura del coefficiente di autodiffusione senza probe a gradienti: l'arte di arrangiarsi! (Terza parte). *La Chimica e l'Industria*, 84 (Aprile), 91

2001

L. Laghi (2001) Hands on, ovvero mettiamoci le mani (terza parte). *La Chimica e l'Industria*, 83 (Aprile), 100

M.A. Cremonini, **L. Laghi** (2001) Hands on, ovvero mettiamoci le mani (quarta parte). *La Chimica e l'Industria*, 83 (Maggio), 79

Book chapters

2017

L. Mannina, A.P. Sobolev, V. Aru, A. Bellomaria, F. Bertocchi, B. Botta, L.R. Cagliani, A. Caligiani, F. Capozzi, D. Çela, F.C. Marincola, A. Ciampa, L.D. Coco, R. Consonni, C. Corsaro, M. Delfini, V.D. Tullio, F.P. Fanizzi, V. Gallo, F. Ghirga, R., Gianferri, C.R. Girelli, C. Ingallina, **L. Laghi**, M. Latronico, F. Longobardi, C. Luchinat, D. Mallamace, S. Mammi, W. Mandaliti, F. Marini, P. Mastrorilli, P. Mazzei, A. Miccheli, A. Micozzi, S. Milone, A. Mucci, R. Nepravishta, M. Paci, A. Palisi, A. Piccolo, G. Picone, N. Proietti, A. Randazzo, V. Righi, A. Rotondo, A. Salvo, P. Scano, P. Scano, F. Sciubba, A. Trimigno, L. Tenori, F. Schievano, P. Turano, S. Vasi, D. Capitani NMR methodologies in food analysis. Pp 103-156. In: *Analytical Chemistry: Developments, Applications and Challenges in Food Analysis*.

A.P. Sobolev, L. Mannina, V. Aru, A. Bellomaria, F. Bertocchi, B. Botta, L.R. Cagliani, A. Caligiani, F. Capozzi, D. Çela, F.C. Marincola, A. Ciampa, L. Del Coco, R. Consonni, C. Corsaro, M. Delfini, V. Di Tullio, F.P. Fanizzi, V. Gallo, F. Ghirga, R. Gianferri, C.R. Girelli, C. Ingallina, **L. Laghi**, M. Latronico, F. Longobardi, C. Luchinat, D. Mallamace, S. Mammi, W. Mandaliti, F. Marini, P. Mastrorilli, P. Mazzei, A. Miccheli, A. Micozzi, S. Milone, A. Mucci, R. Nepravishta, M. Paci, A. Palisi, A. Piccolo, G. Picone, N. Proietti, A. Randazzo, V. Righi, A. Rotondo, A. Salvo,

F. Savorani, P. Scano, E. Schievano, F. Sciubba, L. Tenori, A. Trimigno, P. Turano, S. Vasi, D. Capitani NMR methodologies in food analysis: part A. Pp 157-253. In: Analytical Chemistry: Developments, Applications and Challenges in Food Analysis.

N. Proietti, D. Capitani, V. Aru, A. Bellomaria, F. Bertocchi, B. Botta, L.R. Cagliani, A. Caligiani, F. Capozzi, D. Çela, F.C. Marincola, A. Ciampa, L.D. Coco, R. Consonni, C. Corsaro, M. Delfini, F.P. Fanizzi, V. Gallo, F. Ghirga, R. Gianferri, C.R. Girello, C. Ingallina, **L. Laghi**, M. Latronico, F. Longobardi, C. Luchinat, D. Mallamace, S. Mammi, W. Mandaliti, L. Mannina, F. Marini, P. Mastroianni, P. Mazzei, A. Miccheli, A. Micozzi, S. Milone, A. Mucci, R. Nepravishita, M. Paci, A. Palisi, A.P. Sobolev, A. Piccolo, G. Picone, A. Randazzo, V. Righi, A. Rotondo, A. Salvo, F. Savorani, P. Scano, E. Schievano, F. Sciubba, L. Tenori, A. Trimigno, P. Turano, S. Vasi, V.D. Tullio NMR methodologies in food analysis: part B. Pp 255-296. In: Analytical Chemistry: Developments, Applications and Challenges in Food Analysis.

2014

A. Ricci, G. P. Parpinello, **L. Laghi**, M. Lambri, A. Versari (2014) The application of infrared spectroscopy to grape and wine analysis. In: Infrared spectroscopy, theory, development and applications, ed: D. Cozzolino, Nova Pub.

2013

L. Laghi, E. Babini, A. Bordoni, A. Ciampa, F. Danesi, M. Di Nunzio, G. Picone, V. Valli, F. 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. Ed. by J. van Duynhoven, P.S. Belton, G.A. Webb and H. van As. Published by RSC, London.

BIBLIOMETRIC PARAMETERS (SCOPUS 08.05.2020)

Documents 101; H-index: 29; Total citations: 2617

CONGRESSES COMMUNICATIONS

2019 – Invited speaker at the 2nd meeting “Il microbiota intestinale come bersaglio terapeutico” (Perugia, Italy - April 5). “Microbiota e metabolismo del triptofano”

2018 – Poster presenter at the 10th international conference on water in food (Prague, Czech Republic – September 19-21). “Investigation of water state during induced crystallization of honey”

2018 – Poster presenter at the 10th international conference on water in food (Prague, Czech Republic – September 19-21). “Water state in cranberry fruits subjected to combined: traditional and ultrasound treatment”

2018 – Poster presenter at the 10th international conference on water in food (Prague, Czech Republic – September 19-21). “Water status in meat pig breeds strongly differing for growth performance”

2016 – Speaker at the 9th International Conference on Water in Food (Leuven, Belgium - May 22-24). “water diffusion to probe meat microstructure”

2015 – Invited speaker at the SMASH NMR conference (Baveno, Italy - September 20-23). “Linear models to survive between 64K points and my food science colleagues”

2014 – Invited lecturer at the summer school “NMR and Food” (Porto Conte Ricerche Institute, Alghero, Italy – June 2-3)

2012 – Speaker at the XI International Conference on the Applications of Magnetic Resonance in Food Science (Wageningen, The Netherlands – June 26-29). “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”.

MEMBER OF ORGANIZING COMMITTEES OF CONGRESSES

2014 - XII International Conference on the Applications of Magnetic Resonance in Food Science (Cesena, Italy – May 20-23)

BOOKS EDITOR

Magnetic Resonance in Food Science (Defining Food by Magnetic Resonance) – Editors: Francesco Capozzi, Luca Laghi and Peter S. Belton. Publisher: Royal Society of Chemistry. ISBN: 978-1-78262-031-0

FUNDING PROVIDED BY PUBLIC ENTITIES APPLYING NATIONAL AND INTERNATIONAL PEER-REVIEW CRITERIA FOR THE EVALUATION OF PROJECTS

Italian PRIN 2013-2014 (Diet4MicroGut Project) - Microorganisms in foods and in humans: study of the microbiota and the related metabolome as affected by omnivore, vegetarian or vegan diets

7FP-SME-2013-1 (Bake4Fun) – Innovative biotechnological solutions for the production of new bakery functional foods.

Italian SPINNER 2013 (ProDige) – Identification of indexes of digestibility of functional components for foods with high nutritional value

Italian FIRB 2011 – Innovative approach for the study of IV kind vegetable and fruit based products: qualitative, metabolic and functional aspects.

7FP- KBBE 2011 (Chance) – Low cost technologies and traditional ingredients for the production of affordable, nutritionally correct foods Improving Health in Population groups at risk of poverty

CONTRACTS WITH PRIVATE ENTITIES

2012 – Contract with Alfa Wassermann S.p.A. for a research project entitled: “Impact of rifaximin vaginal ecosystem of women with bacterial vaginosis”.

2010 – Contract with BeC s.r.l, Forlì (Italy) for a research entitled: “Application of NMR for the evaluation of the composition of new cosmetic products”

Reviewer for international journals

Food Biophysics; Food Chemistry; Food Control; Italian Journal of Food Science; Metabolomics; Journal of Agricultural and Food Chemistry

Cesena, 12/05/2020

Luca Laghi

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE

(ART. 46 D.P.R. 28 DICEMBRE 2000, N. 445)

Il sottoscritto Laghi Luca nato a Forlì (FC) il 06/02/1975, residente a Forlì (FC) in via Luigi Silvagni n. 30

consapevole delle sanzioni penali richiamate dall'art. 76 del D.P.R. 28/12/2000 n. 445, in caso di dichiarazioni mendaci e di formazione o uso di atti falsi

DICHIARA

Di essere in possesso di tutti i titoli riportati nel curriculum allegato

Il sottoscritto dichiara inoltre ai sensi dell'art. 13 del D. Lgs. n. 196 del 30 giugno 2003, di essere informato che i dati personali contenuti nella presente dichiarazione saranno trattati, anche con strumenti informatici, esclusivamente nell'ambito del procedimento per il quale la presente dichiarazione viene resa.

Cesena, 12/05/2020

Il dichiarante

Luca Laghi

La presente dichiarazione non necessita dell'autenticazione della firma e può essere inviata anche con le modalità indicate nell'art. 38 del D.P.R. n. 445/2000.