

University Academic Curriculum Vitae

Personal information Alessandra Gasparini
Nationality: Italian
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Education since leaving school

- 2010-2013, Bachelor degree in Chemistry (108/110), University of Trieste, Trieste, Italy. Thesis title: "Design, synthesis and characterization of gold nanoparticles protected by pegylated ligands"
- 2013-2015, Master degree in Chemistry- Organic-Biomolecular curriculum (110/110 cum laude), University of Trieste, Trieste, Italy. Thesis title: "Synthesis of cafestol and 16-O-methylcafestol derivatives for the quality control of coffee".
- June 2016, National Board certification in Chemistry, University of Trieste, Trieste, Italy.
- 2016-2019, PhD in Food Science, Food and Drug Department, University of Parma, Parma, Italy. Thesis title: "Effects of processing and storage conditions on milk and whey products: a detailed molecular investigation of the induced modifications on whey proteins". PhD obtained with the Doctor Europeus certification and discussed the 15th of May 2020.

Professional experience

From / to	Job title	Name of academic Institution	Academic level	responsibilities
09-2016/10-2016	Fellowship	TestVeritas srl, Area Science Park, Trieste, Italy	no	Study of Mycotoxins in Food Matrices
03-2019/08-2019	Visiting PhD student	CIAL institute (CSIC-UAM, Madrid, Spain)	PhD student	Study of the effects of processing on whey proteins isolates gastrointestinal digestibility, intestinal absorption and allergenicity
11-2019/09-2020	PostDoc fellowship	Food and Drug Department, University of Parma, Parma,	PostDoc	Production of modified peptide mixtures from

		Italy		legume protein extracts within the PROLIFIC EU granted Project
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Experience in academic teaching

- Organic chemistry seminars, pre-courses for the Natural Organic Substances course of the master degree in Food Science and technology at the Food and Drug department, University of Parma (2017).
- Laboratory bench assistant for the course on Organic chemistry for the Bachelor degree in Food Sciences and Technology at the Food Sciences Department, University of Parma (2016-2017).
- Supervision of 4 students for their MSc thesis in the Master degree Course in Food Science and technology. Main topics: Chemical modifications induced by technological treatments on major milk allergens; effects of technological treatments on major proteins in bovine milk and vegetable drinks; effects of process induced modifications on bovine whey proteins digestibility; production of protein extracts from legume and peptide mixtures functionalization

Research and scholarships

- Fellowship for the study of Mycotoxins in Food matrices at the TestVeritas srl, awarded by the Area Science Park, Trieste, Italy. (2016)
- 3rd APP-MS School, Best Poster presentation. (2017)
- Travel grant for the participation at the 7th EuCheMS Chemistry Congress in Liverpool, awarded by the Italian Chemistry Society-Organic Chemistry Division. (2018)
- Fellowship for the production of protein extracts from vegetable food waste within the EU granted PROLIFIC project, awarded by the University of Parma, Parma, Italy. (2019)

Publications

Journal Articles:

- *Giroto G, Pirastu P, Gasparini A, d'Adamo P, Gasparini P.* "Frequency of hearing loss in a series of rural communities of five developing countries located along the Silk Road", *Audiological Medicine*, 2011, **9**(4): 135–140. DOI: 10.3109/1651386X.2011.616282
- **Finotello C, Forzato C, Gasparini A, Mammi S, Navarini L, Schievano E.* " NMR quantification of 16-O-methylcafestol and kahweol in *Coffea canephora* var. robusta beans from different geographical origins", *Food Control*, 2017, **75**, 62-69. DOI: 10.1016/j.foodcont.2016.12.019
- **Buhler S, Solari F, Gasparini A, Montanari R, Sforza S, Tedeschi T.* "UV Irradiation as a comparable method to thermal treatment for producing high quality stabilized milk whey", *LWT-Food Science and technology*, 2019, **105**, 127-134. DOI: 10.1016/j.lwt.2019.01.051
- **Berti F, Navarini L, Guercia E, Oreski A, Gasparini A, Scoltock J, Forzato C,* "Interaction of the coffee diterpenes

cafestol and 16-O-methylcafestol palmitates with serum albumins", *International Journal of Molecular Sciences*, 2020, **21**, 1823. DOI: 10.3390/ijms21051823

- *Gasparini A, Buhler S, Faccini A, Sforza S, Tedeschi T, Thermally-induced lactosylation of whey proteins: identification and synthesis of lactosylated β -lactoglobulin epitopes, *Molecules*, 2020, **25**(6), 1294. DOI: 10.3390/molecules25061294
- *Gasparini A, van Gool MP, Bultsma M, Cutroneo S, Sforza S, Tedeschi T, "Modifications induced by controlled storage conditions on whey protein concentrate: effects on whey proteins lactosylation and solubility", *International Dairy Journal*, 2020, **109**, 104765. DOI: 10.1016/j.idairyj.2020.104765

Further data

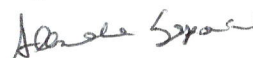
- Gasparini A, Buhler S, Dossena A, Sforza S, Tedeschi T, "Major Allergens in Cow Milk's whey: Study of the Effects of the Technological Treatments through the Identification and Synthesis of the Lactosylated Epitopes"; oral presentation at the "Advanced school: Food Proteins" organized by SIB-Protein Group. 2-4 May 2018, Bergamo:
- Gasparini A, Buhler S, Dossena A, Sforza S, Tedeschi T. "Major Allergens in Cow Milk's whey: Study of the Effects of the Technological Treatments through the Identification and Synthesis of the Lactosylated Epitopes"; "7th EuCheMS Chemistry Congress" 26-30 August 2018, Liverpool, UK (oral presentation)
- Gasparini, Cutroneo S, Miralles B, Recio I, Sforza S, Tedeschi T. "Cow milk's whey protein: influence of the technological treatments on their digestibility and allergenicity". "Giornata scientifica della Società Italiana Peptidi dedicate ai Soci Giovani-Premio scientifico Vittorio Erspamer" 21 September 2019, Florence, Italy (oral presentation).
- Gasparini A, Cutroneo S, Benedè S, Miralles B, Recio I, Sforza S, Tedeschi T. "Technological treatments of cow milk proteins: effects of lactosylation on whey proteins' allergenicity and digestibility". 2^o edition of "La chimica degli alimenti e I giovani ricercatori: nuovi approcci in tema di qualità, sicurezza e aspetti funzionali di ingredient alimentari" 24 September 2019, Milan, Italy (Oral presentation).
- Gasparini A, Cutroneo S, van Gool MP, Bultsma M, Sforza S, Tedeschi. "Effect of storage conditions on the main proteins present in bovine milk whey concentrate". 9th International Symposium on Recent Advances in Food Analysis (RAFA), 5-8 November 2019, Prague, Czech Republic (poster presentation)
- Gasparini A, Miralles B, Recio I, Sforza S, Tedeschi T. "Processing induced lactosylation on milk whey proteins: synthesis of lactosylated epitopes for the evaluation of the effects on allergenicity and intestinal absorption". 3rd Workshop: I chimici per le biotecnologie, 13-14 February 2020, Naples, Italy (oral presentation).

Statement of interest As a researcher, I combine my chemistry background with my passion for food and sustainability. I'm a strongly motivated in widening my knowledge and technical skills. Indeed, during the PhD I acquired good knowledge on the principal analytical techniques (i.e. NMR, circular dichroism, UV, IR, Fluorescence, ESI-MS, LTQ-Orbitrap, MALDI, UHPLC) for qualitative and quantitative analysis. I learned the principal techniques for food analysis and widened my knowledge with digestibility and allergenicity studies (Western Blot, ELISA). Moreover, I acquired expertise in cell cultivation and Caco2 transport studies for the investigation of peptide's intestinal absorption while I was a visiting PhD student at CIAL institute (Madrid, Spain). One of my most interesting topics is the investigation of possible valorisation of food waste and by-products. Indeed, I did a postdoc on the valorisation of vegetable food waste, studying protein extracts from legumes and their functionalization with fatty acids for future cosmetics applications. I believe I might significantly contribute to the activities planned at University of Bolzano on the valorisation of apple's seed as by-products combining my experience in food science and chemistry with my motivation to grow as a researcher.

Language competence Italian: mother language
English: Speaking B2, Writing B2, Understanding B2
Spanish: Speaking A2, Writing A2, Understanding A2

Date
15/04/2021

Signature



I authorize the processing of my personal data present in the CV pursuant to art. 13 of the Legislative Decree 30 June 2003, n. 196 "Codice in materia di protezione dei dati personali" and art. 13 of the GDPR (EU Regulation 2016/679).