

**EUROPEAN FORMAT
CURRICULUM VITAE**

PERSONAL INFORMATIONS

Name: Flavia
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Nationality: Italian
Date of birth: 26/03/1994

WORK EXPERIENCES

October 2018 – September 2019
Nutritional consultant at NaturHouse Faenza

November 2019 – October 2022
PhD Student in Agricultural, Environmental and Food Science and Technology (research topic: Food Science and Biotechnology) – University of Bologna – Campus of Cesena.

November 2022 – ongoing
Research fellow at the University of Bologna

EDUCATION AND TRAINING

March 2023
PhD in Agricultural, Environmental and Food Science and Technology. Thematic area: Food Science and Biotechnology, University of Bologna. Tutor: Prof. Andrea Gianotti. Thesis's title: "Gut microbiota perturbation induced by emerging dietary habits: an in vitro microbiomic and metabolomic approach".

October 2022
Doctoral final examination admission

March 2022 – June 2022
Exchange period at IATA-CSIC in Valencia (Spain) in the laboratory of lactic acid bacteria

July 2019
Winner of the call for a PhD position (with scholarship) in Agricultural, Environmental and Food Science and Technology, Thematic area: Food Science and Biotechnology, University of Bologna. Tutor: Prof. Andrea Gianotti. Research Project: "Effect of foods intended for specific categories of consumers on prebiotic functions".

October 2018

Master's Degree in Food Science and Technology, Cesena, University of Bologna. Thesis title: "Determination of diglycerides as a marker of lipolysis in low-sodium Parmigiano Reggiano". Supervisor: Professor Maria Caboni. Score: 110/110 cum laude.

November 2017

Qualification to the profession of Agricultural Technician and graduate

October 2016

Degree in Food Technologies, Cesena, University of Bologna. Title of thesis: "Study of the microbiological, technological and prebiotic quality of some cereal-based drinks most present on the market". Supervisor: Professor Andrea Gianotti. Score: 106/110.

July 2013

Secondary School Diploma at the "Raffaele Capriglione" Scientific High School in Santa Croce di Magliano (CB).

**LIST OF RESEARCH PRODUCTS
PUBLISHED IN INTERNATIONAL
MAGAZINES**

Nissen, L., Casciano, F., Di Nunzio, M., Galaverna, G., Bordoni, A., Gianotti, A. (2023). Effects of the replacement of nitrates/nitrites in salami by plant extracts on colon microbiota. *Food Bioscience*, 102568.

Nissen, L., Casciano, F., Babini, E., Gianotti, A. "Beneficial Metabolic Transformations and Prebiotic Potential of Hemp Bran and Its Alcalase Hydrolysate, after Colonic Fermentation in a Gut Model." *Scientific reports*. 13.1 (2023): n. pag. Web.

Nissen, L., Casciano, F., Babini, E., Gianotti, A.
Chapter 10 - Hemp seed products and by products: a mine of bioactive compounds to improve functionality of fermented foods, Editor(s): Iván Francisco García-Tejero, Víctor Hugo Durán-Zuazo, Current Applications, Approaches, and Potential Perspectives for Hemp, Academic Press, 2023, Pages 393-406, ISBN 9780323898676, <https://doi.org/10.1016/B978-0-323-89867-6.00009-3>.

Casciano, F., Nissen, L., Chiarello, E., Di Nunzio, M., Bordoni, A. and Gianotti, A. (2022), *In vitro* assessment of the effect of lactose-free milk on colon microbiota of lactose intolerant adults. *Int J Food Sci Technol*. Accepted Author Manuscript. <https://doi.org/10.1111/ijfs.16253>

Nissen, L., Aniballi, C., Casciano, F. *et al.* (2022). Maternal amoxicillin affects piglets colon microbiota: microbial ecology and metabolomics in a gut model. *Applied Microbiology and Biotechnology*. <https://doi.org/10.1007/s00253-022-12223-3>

Nissen, L., Cattivelli, A., Casciano, F., Gianotti, A., & Tagliazucchi, D. (2022). Roasting and frying modulate the phenolic profile of dark purple eggplant and differently change the colon microbiota and phenolic metabolites after in vitro digestion and fermentation in a gut model. *Food research international (Ottawa, Ont.)*, 160, 111702. <https://doi.org/10.1016/j.foodres.2022.111702>

Casciano, F., Mayr, H., Nissen, L., Putti, A., Zoli, F., Gianotti, A., Conterno, L. (2022). Red Beetroot Fermentation with Different

Microbial Consortia to Develop Foods with Improved Aromatic Features. *Foods*, 11, 3055, <https://doi.org/10.3390/foods11193055>.

Nissen, L., Casciano, F., Chiarello, E., Di Nunzio, M., Bordoni, A., & Gianotti, A. (2021). Colonic In Vitro Model Assessment of the Prebiotic Potential of Bread Fortified with Polyphenols Rich Olive Fiber. *Nutrients*, 13(3), 787. <https://doi.org/10.3390/nu13030787>

Nissen, L., Casciano, F., Gianotti, A. (2021). Volatilome changes during probiotic fermentation of combined soy and rice drinks. *Food & Function*. 10.1039/D0FO03337E.

Nissen, L., Casciano, F., & Gianotti, A. (2021). Plant Volatiles of Lettuce and Chicory Cultivated in Aquaponics Are Associated to Their Microbial Community. *Microorganisms*, 9(3), 580. <https://doi.org/10.3390/microorganisms9030580>

Nissen, L., Casciano, F., Babini, E., Gianotti, A. (2021). Prebiotic potential and bioactive volatiles of hemp byproduct fermented by lactobacilli. *LWT*, 151, 112201, ISSN 0023-6438, <https://doi.org/10.1016/j.lwt.2021.112201>.

Casciano, F., Nissen, L., & Gianotti, A. (2021). Effect of formulations and fermentation processes on volatile organic compounds and prebiotic potential of gluten-free bread fortified by spirulina (*Arthrospira platensis*). *Food & function*, 12(20), 10226–10238. <https://doi.org/10.1039/d1fo01239h>

Nissen, L., Valerii, M. C., Spisni, E., Casciano, F., & Gianotti, A. (2021). Multiunit In Vitro Colon Model for the Evaluation of Prebiotic Potential of a Fiber Plus D-Limonene Food Supplement. *Foods (Basel, Switzerland)*, 10(10), 2371. <https://doi.org/10.3390/foods10102371>

Nissen, L., Casciano, F., Babini, E., & Gianotti, A. (2021). The Exploitation of a Hempseed Byproduct to Produce Flavorings and Healthy Food Ingredients by a Fermentation Process. *Microorganisms*, 9(12), 2418. <https://doi.org/10.3390/microorganisms9122418>

Lorenzo Nissen, Flavia Casciano, Elena Babini, Andrea Gianotti, Chapter 10 - Industrial hemp foods and beverages and product properties, Editor(s): Milica Pojić, Brijesh K. Tiwari, Industrial Hemp, Academic Press, 2022, Pages 219-246, ISBN 9780323909105, <https://doi.org/10.1016/B978-0-323-90910-5.00001-4>.

Nissen, L., Casciano, F., & Gianotti, A. (2020). Intestinal fermentation in vitro models to study food-induced gut microbiota shift: an updated review. *FEMS microbiology letters*, 367(12), fnaa097. <https://doi.org/10.1093/femsle/fnaa097>

PARTICIPATION IN SCIENTIFIC SOCIETIES

**LIST OF RESEARCH PRODUCTS
PRESENTED AT CONGRESSES**

Nissen, L., Casciano, F., Di Nunzio, M., Bordoni, A., Gianotti, A. *Protein enrichment of gluten free bakery products by *Arthrospira platensis* (spirulina): in vitro study of the effect of formulation and sourdough process on colon microbiota through MICODE gut model.* 27th International ICFMH Conference, 28-31 August, 2022.

Casciano, F., Nissen, L., Gianotti, A. *In vitro colonic fermentation model for assessing the impact of functional foods and supplements on the intestinal microbiota.* XLI SINU National Congress 2021, 9-10, 16-17 April, 2021.

Casciano, F., Nissen, L., Gianotti, A. *In vitro intestinal model to study the prebiotic potential of food supplements.* Virtual International Conference on Food Digestion (#VICFD2021), 6-7 May, 2021.

Casciano, F., Nissen, L., Gianotti, A. *Multiunit In vitro Colon Model (MICODE) to study the effect on gut microbiota of foods for specific categories of consumers.* 1st telematic Workshop on the Developments in the Italian PhD Research on Food Science Technology and Biotechnology, University of Palermo, 14-15 September, 2021

Casciano, F., Nissen, L., Chiarello, E., Di Nunzio, M., Bordoni, A.I, and GIANOTTI Andrea. *Effect of lactose-free milk on in vitro MICODE model simulating the colon of lactose intolerant subjects.* 12 INTERNATIONAL SYMPOSIUM ON GUT MICROBIOLOGY from 13 to 15 October 2021

Gianotti, A., Nissen, L. Casciano, F. *Microbiological safety of salad grown in an aquaponic system.* 6th edition International conference on Foodomics, Cesena, 14-16 October, 2020.

Casciano, F., Nissen, L., Chiarello, E., Di Nunzio, M., Bordoni, A. Gianotti, A.. *Colonic in vitro model assessment of the impact on host microbiota of lactose free milk.* 6th edition International conference on Foodomics, Cesena, Italy, 14-16 October, 2020.

Nissen, L., Casciano, F., Chiarello, E., Di Nunzio, M., Bordoni, A., Gianotti, A. *Colonic in vitro model assessment of the impact on host microbiota of breads enriched with polyphenol rich olive fiber.* 6th edition International conference on Foodomics, Cesena, Italy, 14-16 October, 2020.

Casciano, F., Nissen, L., Babini, E., Gianotti, A. *Spirulina for protein fortification of gluten free bakery products.* Workshop Giovani AISAM 2019, Firenze, 28 Ottobre 2019.

<p>PARTICIPATIONS IN COMPETITIVE RESEARCH PROJECTS ON NATIONAL AND INTERNATIONAL CALLS</p>	<p>GourMed: Governance of food supply chain to equilibrate price and profits of high quality and safe mediterranean foods.</p> <p>Mime4Health: Emilia Romagna regional research project (Coordinator Prof. Alessandra Bordoni)</p> <p>FutureEUAqua: Future growth in sustainable, resilient and climate friendly organic and conventional European aquaculture. Call: H2020-BG-2018-2020 (SEP-210482810). 1st Nov 2018- 31 Oct. 2022.</p>
<p>SUPPORT TO TEACHING</p>	<p><i>Academic year 2022/2023</i> Tutor on the teaching of Food Microbiology (Degree's course Food Technology)</p> <p><i>November 2022</i> Seminar for students in the "Functional Components" course at Marche Polytechnic University on applications of the <i>in vitro</i> intestinal model MICODE</p> <p>Classroom tutor on the teaching of "Food microbiology" for the degree course in "Food technology" for the academic year 2022/2023</p> <p><i>May 2021</i> Seminar for students of the degree course in Food Technology on case studies of application of the <i>in vitro</i> intestinal model MICODE</p> <p><i>April 2020</i> Seminar for students of the degree course in Food Technology entitled "Intestinal gut models"</p> <p><i>2019-today</i> Correlator of nine theses</p> <p>Three-year thesis in Food Technologies. Title: "Study of the microbial ecology of an aquaponic system for the cultivation of <i>Lactuca sativa</i> Var. <i>Salanova</i>".</p> <p>Three-year thesis in Food Technologies. Title: "Microbiological safety of catalonian chicory deriving from an aquaponic cultivation system".</p> <p>Master's thesis in Food Science and Technology. Title: "Study of the prebiotic activity of lactose-free dairy products".</p> <p>Three-year thesis in Food Technologies. Title: "Use of different microbial starters for the development of a fermentation process of a vegetable preserve based on red beet".</p>

Master's thesis in Food Science and Technology. Title: " Effects on the intestinal microbiota of the replacement of nitrites with natural antioxidants in experimental salami"

Master's thesis in Food Science and Technology. Title: "Shelf-life study of lightly salted seabass fillets pre-treated with pulsed electric fields".

Master's thesis in Food Science and Technology. Title: Study of the functional capabilities of gluten-free bakery products enriched with cricket (*Acheta domesticus*) flour using an in vitro intestinal model.

Three-year thesis in Food Technologies. Title: "Functional properties of carob and its products".

Three-year thesis in Food Technologies. Title: "In vitro study of the effect of lactose-free whey on colonic microbiota of lactose intolerant donors".

PARTICIPATION IN TRAINING COURSES

November 2019 - Today

Data visualization and storytelling

Protection of personal data

Bibliographic services to support research

Philosophy of science and research methodology

Setting up a research protocol

Writing a scientific paper in biological and physico-chemical sciences

How to present a paper in a scientific conference - technical/biological sciences

Research financing and project design in agricultural sciences

Research evaluation

Introduction to statistical tools

R for statistical data processing

Statistical methods in agriculture and data analysis

Academic writing

CURRICULAR INTERNSHIPS

2017 – 2018

125-hour curricular internship at the Laboratory of Chemical Modifications and Food Analysis of the Food Science Campus of Cesena, University of Bologna. Tutor: Maria Caboni.

January 2016 - February 2016

	100-hour curricular internship at the Microbiology Laboratory of the Food Science Campus of Cesena, University of Bologna. Tutor: Andrea Gianotti.
NATIVE LANGUAGE	Italian
OTHER LANGUAGES	English Reading skills: Good Writing skills: Good Speaking skills: Good
RELATIONAL SKILLS AND COMPETENCES	Ability to work both independently and in groups. Availability towards collaborators and work colleagues. Problem solving skills
TECHNICAL SKILLS AND COMPETENCES	<i>In vitro</i> colonic fermentation system DNA extraction PCR Real-time PCR SPME / GC-MS Soxhlet Statistical analysis of data Microbiological analysis Microbial counts Microbial sampling Preparation of growth media Bibliographic research in national and international literature and production of publications in journals

The undersigned Flavia Casciano,

aware that false declarations involve the application of the criminal sanctions provided for by art. 76 of the Presidential Decree 445/2000, declares that the information contained in the following curriculum vitae, drawn up in European format, corresponds to the truth and that the declarations made in the curriculum are issued pursuant to articles 46 and 47 of the D.P.R. 445/2000. I authorize the processing of personal data contained in my curriculum vitae on the basis of art. 13 of Legislative Decree 196/2003 and art. 13 of EU Regulation 2016/679 concerning the protection of individuals with regard to the processing of personal data.

14/10/2022

Flavia Casciano

Flavia Casciano

