



Leonardo Bruni

ABOUT MYSELF

Il sottoscritto Leonardo Bruni, consapevole delle responsabilità penali cui può andare incontro, in caso di dichiarazioni mendaci, ai sensi e per gli effetti di cui all'art. 76 del D.P.R. 445/2000 e consapevole che, ai sensi dell'art. 13, del Regolamento UE 2016/679 (GDPR), la presente dichiarazione sarà pubblicata sul sito web dell'amministrazione in apposita sezione di Amministrazione Trasparente, sotto la propria responsabilità dichiara, ai sensi degli artt. 46 e 47 del DPR 445/2000:

Postdoctoral fellow with background in agronomy and strong interdisciplinary spin. My expertise is in recirculating aquaculture with a focus on microbiome, fish performance and food product quality. Strongly interested in applied research, I am committed to sustainable, responsible farming through a holistic approach. Awarded by the European Commission with the Seal of Excellence for the Marie Skłodowska-Curie Actions Postdoctoral Fellowship 2024.

Scopus (ID 57201154539) bibliometric indices on 15.04.2025: Documents by the author: 17; Total citations: 663 by 462 documents (excluding self-citations: 634 citations); h-index: 10.

EDUCATION AND TRAINING

Course in Advanced Statistical Analysis for Zootechnical Sciences

Animal Science and Production Association ASPA, in association with the University of Pisa [17/02/2025 – 21/02/2025]

City: Pisa | Country: Italy | Field(s) of study: Statistics

Course in Omics tools in aquaculture

Institute of Marine Research IIM-CSIC [21/10/2024 – 25/10/2024]

City: Vigo | Country: Spain

Course in Project Management for Scientists

EMBO Solutions GmbH [25/09/2024 – 27/09/2024]

City: online

Project Goals and Planning, Self-management, Motivation, Assertiveness, Quality Management, Risk Management, Stakeholder Analysis & Management, Project Marketing and Controlling, Managing Conflict.

Laboratory Aquatic Animal Science CAL-AQUA

Interdisciplinary Centre of Marine and Environmental Research CIIMAR [08/05/2023 – 12/05/2023]

City: Porto | Country: Portugal | Website: <https://calaquaciimar.up.pt/> | Final grade: Passed | Type of credits: ECTS | Number of credits: 6

Certified by Direção Geral de Alimentação e Veterinária and by the University of Porto (Portugal). The programme of the course follows the guidelines of DGAV and FELASA (Federation for Laboratory Animal Sciences Associations) in the education and training of persons working with laboratory animals, Functions a), c) and d)

Certifications on the Italian National Legislation and Ethics, and on the Biology and Management of Laboratory Animals

Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna [2022 – 2022]

City: online

PhD

University of Florence [01/10/2016 – 31/10/2019]

City: Firenze | **Country:** Italy | **Field(s) of study:** Agriculture, forestry, fisheries and veterinary | **Thesis:** Innovative protein sources in feed for salmonids: Effects on lipid metabolism, gut microbiota and fillet quality

Thanks to the PhD's work, I authored key publications that advanced the understanding of the salmonid microbiome in response to innovative diets (Bruni et al., 2018, 2022; Li et al., 2021). In recognition of my contributions, my PhD thesis and two conference posters linked to it received awards. These studies contributed to industry advances, as they were conducted at a pivotal time in aquafeed research – following the EU's approval of certain insect species for use in aquafeeds.

I extensively co-supervised undergraduate and master's students.

Course in Comunicazione e Public Management per l'Università

IUSSAF - University of Florence [14/06/2018]

City: Firenze | **Country:** Italy

- Communication of research and public engagement: from university to large public
- Communication processes and media system - Communication tools
- Hands-on activity: Writing a short popular science article; Writing a social media post.

M.Sc. defence in Agricultural and Sciences, specialisation Animal production

University of Florence [30/03/2016]

City: Firenze | **Country:** Italy | **Final grade:** 110 cum laude | **Thesis:** Molecular ecological analysis of the changes in the rainbow trout (*Oncorhynchus mykiss*) intestinal microbial community induced by partial replacement of dietary fishmeal with *Hermetia illucens* meal

B.Sc. defence in Agricultural Sciences

University of Florence [23/04/2013]

City: Firenze | **Country:** Italy | **Thesis:** Evaluation of innovative substrates for biogas production

WORK EXPERIENCE

 **Institute of Marine Research IIM-CSIC** – Vigo, Spain

City: Vigo | **Country:** Spain | **Website:** <https://iim.csic.es/en/about-iim/staff/leonardo-bruni>

Postdoctoral fellow Juan de la Cierva Formación

[01/01/2023 – 31/12/2024]

Theme: Ecosystem approach to IMTA-RAS applying the holobiont concept.

I have contributed to the improvement of sustainability of aquaculture by advancing integrated multitrophic recirculating systems (IMRAS) and biocontrol strategies, prioritising ecosystem balance and animal welfare (Bruni et al., 2024, presented at the 8th International Congress of the International Society of Applied Phycology). In the framework of the Galician Marine Sciences Complementary Programme (regional contribution of the ThinkInAzul Spanish initiative), I led growth trials with flat fish, macroalgae and beneficial bacteria inoculation. I was responsible for refining experimental design, coordinating activities across four teams, planning and directing samplings and analyses, and overseeing data management and writing across six institutions. This research demonstrated the feasibility of pilot-scale IMRAS to diversify production, reduce environmental impacts and promote healthier practices using biocontrol methods (unpublished data).

 **University of Florence** – Firenze, Italy

City: Firenze | **Country:** Italy

Postdoctoral fellow “Giovani ricercatori protagonisti”

[01/03/2021 – 31/12/2022]

Theme: Aquaponics as food production technology for Mediterranean cities.

Planning a small-scale experimental aquaponics system.

Investigations on the microbial communities of aquaponic systems

Investigations on the nutrient content of *Lactuca sativa* cultured in hydroponic and aquaponic-like systems with or without the addition of bacterial inocula
Completion of a Short Term Scientific Mission of the COST Action “Circular Cities” at the Zurich University of Applied Sciences (Switzerland) and, among others, management of the hydroponics compartment of decoupled aquaponics systems.

 **Norwegian University of Life Sciences NMBU** – Oslo, Norway

City: Oslo | Country: Norway

Research technician

[01/08/2016 – 31/10/2016]

Theme: Fish nutrition and health

Planning, preparation and performing on-farm samplings: morphometric measurements, blood tests, organ sampling

Lab analyses: preparation for histological evaluation of intestine and gill samples, digestive enzyme activities, bile acid concentrations, plasma osmolality. Statistical elaborations and reports

LANGUAGE SKILLS

Mother tongue(s): Italian

Other language(s):

English

LISTENING C2 READING C2 WRITING C2

SPOKEN PRODUCTION C2 SPOKEN INTERACTION C2

Norwegian

LISTENING B2 READING C1 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

French

LISTENING B1 READING B2 WRITING B1

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Swiss German

LISTENING A2 READING A2 WRITING A1

SPOKEN PRODUCTION A1 SPOKEN INTERACTION A1

Spanish

LISTENING C1 READING C2 WRITING B2

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

German

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B1 SPOKEN INTERACTION B1

Portuguese

LISTENING B1 READING B2 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user