

SCIENTIFIC AND PROFESSIONAL CV
Prof. GABRIELE BRECCHIA

Name and Surname: GABRIELA BRECCHIA

Place and date of birth: Perugia, July 26, 1968

Nationality: Italian

Position: Associate Professor VET/02, Department of Veterinary Medicine, University of Milan (UNIMI)

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EDUCATIONAL BACKGROUND

2024-current Full Professor of Veterinary Physiology - Disciplinary scientific sector VET / 02 at the Department of Veterinary Medicine and Animal Science of the University of Milano.

2019 Associate Professor of Veterinary Physiology - Disciplinary scientific sector VET / 02 at the Department of Veterinary Medicine of the University of Milano.

2005 University researcher of Veterinary Physiology - Disciplinary scientific sector VET / 02 at the Faculty of Veterinary Medicine of the University of Perugia.

2005 - 2019 Research fellow - Disciplinary scientific sector VET / 02 at the Department of Veterinary Medicine of the University of Perugia.

2004 Specialization Diploma in "Inspection of food of animal origin" University of Perugia.

1998-2001 PhD in "Hygiene, healthiness and quality of animal production" XIII cycle, achieved at the University of Perugia with a thesis entitled "Role of biomarkers in the evaluation of environmental pollution".

1996: Professional habilitation in Veterinary Medicine obtained at University of Perugia.

1996: Degree in Veterinary Medicine, at the UNIPG, thesis entitled "Luteal insufficiency in the cow".

1988: Scientific high school diploma.

PROFESSIONAL EXPERIENCE/EMPLOYMENT

2025 Teaching as part of the Blended Intensive Program (BIP) project entitled "The Rabbit Livestock Animal, Pet, and Experimental Model" for a total of 30 hours between online teaching activities and practical activities in the summer school held in Valencia. **2023** Teaching as Visiting professor at the School of Veterinary Medicine of Algiers from 11 to 18 June 2023 to carry out a theoretical and practical course on the physiology and ethology of the rabbit for a total of 37 hours.

2023 Teaching as Visiting professor at the University of Agronomic Sciences and Veterinary Medicine of Bucharest from 23 to 30 April 2023 to carry out theoretical and practical teaching activities entitled "Basic of health and care of the rabbit" for 8 hours at the Faculty of Engineering and Management of Animal Production and 16 hours at the Faculty of Veterinary Medicine (total 24 hs).

2022 Teaching as Visiting professor at the Agricultural University of Tirana from 01 to 05 November 2022 to carry out theoretical and practical teaching activities entitled "General physiology of the rabbit" for a total of 4 hours.

2022 Teaching within the Erasmus+ program at the University of Istanbul Cerrahpasa – (Türkiye) on the topic "Reproductive management in rabbit farm and basic biotechnology".

2021 Teaching as Visiting Professor at the Faculty of Veterinary Medicine of Istanbul University-Cerrahpaşa from 18 to 25 October 2021 to carry out theoretical-practical teaching activities entitled "General and special veterinary physiology in livestock" for a total of 15 hours. **2021** Member of the council of several post-graduate schools.

2021 Teaching as Visiting Professor at the Agricultural University of Tirana from 14 to 24 May 2021 to carry out theoretical and practical teaching activities entitled "General and special veterinary physiology in farm animals" for a total of 18 hours.

2021 Erasmus coordinator for Animal Science

2020 Member of the Erasmus commission of the Department of Veterinary Medicine of the University of Milano.

2020 Member of the PhD School of the University of Perugia Milano;

2019 Training activities at the University of Agriculture Sciences and Veterinary Medicine, Bucharest, (ROMANIA) coordinated by Dr. Bogdan Alexandru Vitalaru in the field of hemodialysis and peritoneal dialysis of small animals.

2019 Training activity at the Agricultural University of Tirana (Albania) - Faculty of Veterinary Medicine in the field of reproductive physiology in domestic animals, with particular reference to cattle and small ruminants coordinated by Prof. Egon Andoni.

2018 Training activities at the University of Agriculture Sciences and Veterinary Medicine, Bucharest, - ROMANIA, coordinated by Dr. Bogdan Alexandru Vitalaru in the field of haemodialysis and peritoneal dialysis of small animals.

2018 Training activity at the University of Florida, College of Veterinary Medicine, Emergency and Critical Care Hemodialysis Unit of Small Animal Hospital, Gainesville, USA coordinated by Dr. Leo Londono in the field of haemodialysis and plasmapheresis of small animals.

2018-2019 Departmental coordinator of the framework agreements between the Department of Veterinary Medicine of the University of Perugia and non-European Universities: Universidade Federal de Minas Gerais - Escola de Veterinária - Belo Horizonte - MG, Brazil and l'Universidad Tecnológica de Pereira - Pereira, Colombia.

2016 Member of the Board of the Veterinary Medicine Department of the University of Perugia.

2015-2019 Coordinator of the International Doctorate with thesis in Co-tutela between the Department of Veterinary Medicine of the University of Perugia and the University of Agriculture Sciences and Veterinary Medicine of Bucharest – Romania.

2014-2019 Member of the University Erasmus + Commission of the University of Perugia.

2014-2019 Coordinator of the Erasmus + Commission of the Department of Veterinary Medicine of the University of Perugia.

2012-2019 member of the PhD School of the University of Perugia.

2008-2019 Departmental coordinator of Erasmus agreements between the Department of Veterinary Medicine of the University of Perugia and several European universities (Portugal, Belgium, Turkey, Poland, Hungary, Bulgaria, Greece and Romania).

2005-currently Veterinarian in charge for rabbits and poultry experimental farm of the Department of Agricultural, Environmental and Food Sciences of the University of Perugia.

2003-2004 Research fellowship on the project "Effects of stress induced by fasting on the reproductive performance of rabbits" at the University of Perugia.

2001-2002 Research fellowship on the project "Effects of environmental pollution on the regulation of nitric oxide synthesis in rabbit spermatozoa" at the University of Perugia.

1999-2001 Member and Medical Director of two Veterinary clinics located in the municipality of Perugia.

1999-2001 External veterinarian of USL n° 1 operating in the district of Gubbio for the National Prophylaxis for the monitoring of tuberculosis, leukosis and brucellosis of bovine and ovine brucellosis.

1999-today Experimental and research activity on animal models (rabbit, mouse, rat) at the Centralized Healthcare Center of the University of Perugia.

1997 External veterinary surgeon, at Anglesey Lodge Veterinary Hospital in Kildare (IRE) and at the Arizona Equine Medical and Surgical Center (Arizona, U.S.A.) for a total period of 4 months.

He has also been supervisor of 10 master degrees, and 4 PhD students of which one international.

TEACHING ACTIVITY

Lecturer of various courses within the Degree Course in Veterinary Medicine and the Interfaculty Degree Course in Animal Production and Hygiene and Quality of Animal Production at the University of Perugia. Lecturer of various courses in the Degree Course in Veterinary Medicine, Animal Production, Science and Technology of Animal Production and Veterinary Biotechnology Sciences of the Department of Veterinary Medicine and Animal Sciences of the University of Milan. Contract lecturer at the School of Biosciences and Veterinary Medicine of the University of Camerino for the academic year 2022-2023, 2023-2024. 2024-2025. The teaching evaluations by the students are satisfactory with grades (extracts of the evaluations made available by the University). He also collaborates in the various teaching activities established by the Department and, in particular, in the integrative teaching activities of the relevant scientific area, carrying out theoretical-practical exercises, green weeks - advanced course, tutoring of students. He is a member of the profit exam commissions (VET/02) and of the degree exam commissions. He has been the supervisor of various experimental degree theses. He has been a member of evaluation commissions for the assignment of research grants. Prof. Brecchia has been a lecturer in second level masters and specialisation schools both nationally and internationally (Algeria and Albania). He has lectured in various European Universities within the Erasmus + program. He is visiting professor at University of Tirana and University of Istanbul. He was tutor of several Bachelor, Master thesis and PhD Thesis.

RESEARCH AREA

His research focuses on the physiology of reproduction especially in rabbits, buffalo and dogs in the following areas.

- Mechanisms regulating the different phases of the development of the corpus luteum and luteolysis, both spontaneous and induced by PGF₂ α , at cellular, molecular and gene level;
- Relationships between reproduction and nutrition in rabbits;

- Relationships between reproduction and inflammation in rabbits through the creation of experimentally induced inflammation / infection model (LPS);
- Effects of environmental pollutants (endocrine disruptors) on the reproductive functions of the rabbit;
- Hormonal protocols and bio-stimulation techniques that allow to increase the fertility of the rabbit;
- Haemodynamic modifications of the uterus and ovaries in cyclical and pregnant rabbits and bitches;
- Effects of probiotics and nutraceuticals, such as colostrum and Goji berry, on the prevention and treatment of infectious diseases of the digestive and reproductive system in mice, rabbits and dogs;
- Pregnancy associated glycoprotein during the pregnancy of buffalo;
- Experimental activity on dairy camel to improve the milk production, the welfare and the quality of milk and the adaptation of the animals to the milking machine.

RESEARCH PROJECTS AND FUNDING

Participates as a manager or as an operational unit in several projects, both national and international.

- AICS (Italian Agency for Development Cooperation) Project 2023 Initiatives promoted by Local Authorities and Civil Society Organizations entitled RES4CLIMA – Strengthening the Resilience of the Agri-Food Sector to Climate Change in Urban, Peri-Urban, and Rural Areas – Tanzania, issued by the Lombardy Region, LOT 1 Area C. SUSTAINABLE URBAN/TERRITORIAL DEVELOPMENT and URBAN FOOD POLICIES (Funded for approximately €2,000,000 to UNIMI €90,000).

- Call for joint R&I actions Italy-Algeria, project title "CAMEL MILK: A Functional FOOD FOR HUMAN HEALTH (CAMFORHealth)" (under evaluation, University of Milano unit coordinator)

- PRIMA Project Thematic Area 3 - Food value chain in the Nexus: Topic 2.3.1 (RIA) Leveraging urban and local food systems for sustainable food systems transformation "Fostering a sustainable Camel Milk Value Chain by Implementing Innovative Solutions and Strengthening the Resilience of smallholders in the Mediterranean region – CAMEL4MED" (Funded for €1,111,000.00, €175,500.00 to the DIVAS Department, coordinator of the Italian Teams).

- ERASMUS+ KA 171 2023-2024 - INTERNATIONAL MOBILITY - Esa-Mateur, Institute des Regions Aridè (IRA), Tunisia and Department of Veterinary Medicine and Animal Science of the University of Milan (Funded).- RESEARCH SUPPORT PLAN 2023 - Research funds of the Department of Veterinary Medicine - Call Line 2 Action A "Mapping of the neural network and β -NGF receptors in the rabbit reproductive system: influence of age and fertilization method" (Funded).

- ERASMUS+ KA 171 2023-2024 - INTERNATIONAL MOBILITY - Esa-Mateur, Institute des region aridè (IRA) Tunisia and Departement of Veterinary Medicine and Animal Science of the University of Milano (Funded).

- ERASMUS+ - KA220-ADU - Cooperation partnerships in adult education in collaboration with Lietuvos Svetimo Ir Mokslo Profesine Sajunga (E10169508 - LT), Universitatea De Stiinte Agronomice Si Medicina Veterinara Din Bucuresti (E10208956 - RO) and Sveuciliste U zagrebu (E10209270 - HR), Not funded7

- RESEARCH SUPPORT PLAN 2022 - Research funds of the Department of Veterinary Medicine - Call Line 2 Action A "Effect of diet integration with cricket flour on productive and reproductive performance, and the quality of rabbit meat" (Funded).

- RESEARCH SUPPORT PLAN 2021 - Research funds of the Department of Veterinary Medicine - Call Line 2 Action A "Effect of bovine colostrum on productive and reproductive performance, disease resistance and meat quality of rabbits: Follow up" Member, (Funded).

- RESEARCH PROJECTS OF RELEVANT NATIONAL INTEREST (PRIN) – 2022: Goji berry for rabbits: feed, food and animal welfare benefits – gorabbit, coordinator of the research unit (Funded)

- Capacity building ERASMUS-EDU-2022-CBHE-STRAND 2 - Development of a Post-graduate Education programme in Veterinary pUblc heaLth and fOod Safety in Western Balkan area (PEVULOS) in collaboration with the University of Porto (Portugal), Tirana and Korca (Albania), Sarajevo and Zenica (Bosnia and Herzegovina) (Funded with 718,564.50 euros).

- PRIN 2022: PI of the research unit of UNIMI in the Project entitled "Goji berry for rabbits: feed, food and animal welfare benefits – GORABBIT" funded with 204,745 euros.

- University project "One Health Action Hub: University task force for the resilience of territorial ecosystems" developed within the framework of Line 6-Grandi Sfide di Ateneo n. 3, was approved with a score of 93/100.
- Call for University Research projects 2020 edition - University of Perugia "Immune system and pregnancy: maternal-fetal signals for the recognition of pregnancy in cattle", member of the research unit, (funded 17,000.00 euros).
- RESEARCH SUPPORT PLAN 2020 - Research funds of the Department of Veterinary Medicine - Call Line 2 Action A "Effect of bovine colostrum on productive and reproductive performance, on disease resistance and the quality of rabbit meat" Coordinator, (funded for 9,400 euros).
- PRIMA 2020 Project - Section 2 – Call: Multi Topic 2020 – Topic: 2.3.1 RIA New optimized models of Agri-food supply chain systems offering fair price for consumers and reasonable profit share for producers – Type of action: Research and Innovation Activities (RIA) – Title: Omega rabbit: food for health Benefit. Coordinator and PI of the project - (financed with 1,739,636.99 euros).
- Rural development program for Umbria 2007-2013 – Axis 1- Measure 1.2.4. D.D. n. 3054 of 18/04/2014 with the project entitled “Valorizzazione della Coltivazione del Lycium barbarum in Umbria” with acronym Goji univirgola 618, member of the Unipg operational unit. Funded
- Fondazione Cassa di Risparmio di Perugia (2014): project entitled “The rabbit as an experimental model to study the effects of the local inflammatory state induced by lipopolysaccharide (LPS) on reproduction” code 2014.0167.021 Head of “Scientific and Technological Research” lasting 18 months. Funded

AWARDS

- AWARD – for the best oral presentation in the Nutrition session of the 13th WRC: Fehri N.E., Belabbas R., Agradi S., Quattrone A., Vigo D., Brecchia G., Menchetti L., Barbato O., Angelucci E., Failla S., Faustini M., Abdel Kafy S., Jemmali B., Ben Salem I., Savietto D., Colin M., Guillevic M., Ozuni E., Or E., Castrica M., Curone G. Impact of dietary enrichment with omega-3 polyunsaturated fatty acids from extruded linseed and algae on the growth performance of rabbits. 13th World Rabbit Congress – October 2-4 2024 – Tarragona, Spain.
- AWARD – for the best oral presentation in the Nutrition and feeding session of the 13th World Rabbit Congress: Agradi S., Fehri, N.E., Quattrone, A., Vigo, D., Brecchia, G., Menchetti, L., Barbato, O., Dal Bosco, A., Failla, S., Contò, M., Abdel-Kafy, E.S.M., Jemmali, B., Ben Salem, I., Savietto, D., Colin, M., Guillevic, M., Andoni, E., Balzaretto, C.M., Castrica, M., Curone, G. Effect of extruded linseed and algae padina pavonica's dietary supplementation on meat fatty acid profile in fattening rabbits. 13th World Rabbit Congress – October 2-4 2024 – Tarragona, Spain.
- AWARD – for the best project presented at the European Biotechnology Congress: Omega Rabbit: food for health benefit. European Biotechnology Congress, 4-6 October 2023, Lubjana, Slovenia.
- AWARD - for the best poster in the SOFIVET session “Susanna Draghi, Federica Riva, Gabriele Brecchia, Daniele Vigo, Stella Agradi, Caterina Piantoni, Lorenzo De Giovanni, Duygu Tarhan, Bengü Bilgiç, Banu Dokuzeylül, Alev Meltem Ercan, Mehmet Erman Or, Giulio Curone. Monitoring of the presence of trace elements in pastures through the use of roe deer hair, of the 75th SISVET Congress 15-18 June 2022, Lodi (LO).
- AWARD – for the best poster in the SOFIVET session “Giulio Curone, Egon Andoni, Stella Agradi, Olimpia Barbato, Laura Menchetti, Daniele Vigo, Alessandro Necci and Gabriele Brecchia. Effect of goji berry (Lycium barbarum) supplementation on hormonal profile and reproductive performance of rabbit does” of the 74th SISVET Congress, Parma 23-26 June 2021, Virtual Edition
- AWARD - For the best paper on scientific session of REPRODUCTION of the 9th World Rabbit Congress: Brecchia G., Cardinali R., Dal Bosco A., Boiti C., Castellini C. (2008) Effect of a reproductive rhythm based on doe body condition on fertility and hormones. Proceedings of the 9th World Rabbit Congress. Verona, 10-13 June 2008, p. 309-314.

PATENT

Patent inventor together with colleagues Bernard Fioretti and Tommaso Beccari entitled "Use of a formulation based on Lycium barbarum in improving female fertility". Application number 102016000098988, classification A23K.

Participates in the drafting of the standard "Textiles - Disciplinary for the production, preparation, marketing and traceability of Angora rabbit fiber", developed under the competence of the UNI Technical Commission "Textile and clothing. The law was ratified by the President of UNI and became a national part of the regulatory body on February 21, 2019.

OFFICIAL ROLES HELD

Actively participates in the activities of the Department by holding roles in the field of internationalization, PhD, Research and internal Commissions.

- Elected member representing Full Professors on the Board (Executive Committee) of the Department of Veterinary Medicine at the University of Perugia.
- Contact person for the Department of Veterinary Medicine and Animal Sciences of the double degree program between the University of Milan and the University of Agronomic Sciences and Veterinary Medicine of Bucharest.
- Contact person for the Department of Veterinary Medicine and Animal Sciences of the University of Milan for International cooperation.
- Coordinator for the Blended Intensive Programme (BIP) project with the course "The Rabbit: Livestock animal, Pet, and Experimental Model" carried out in collaboration with the University of Agronomic Sciences and Veterinary Medicine (USAMV) – Faculty of Engineering and Management of Animal Production of Bucharest, Romania, the CERRAHPASA University of Istanbul (IUC), Istanbul, Turkey and the Polytechnic University of (UPV) - Valencia, Spain.
- Departmental contact of the agreement between the Department of Veterinary Medicine of the University of Perugia and the Fundación Universitaria Juan de Castellanos (UJDC), Tunja, Colombia.
- Departmental coordinator of the Erasmus+ agreement between the Department of Veterinary Medicine of the University of Milan and the Faculty of Veterinary Medicine of the University of Agriculture Sciences and Veterinary Medicine -Bucharest – Romania, Faculty of Veterinary Medicine of the University of Cordoba, Faculty of Veterinary Medicine of the Cerrahpasa University of Istanbul, Faculty of Veterinary Medicine of Las Palmas, with Ares University, Polytechnic University of Valencia, Polytechnic University of Madrid, Polytechnic Institute of Viseu, Polytechnic Institute of Portalegre (2021-2022).
- Erasmus coordinator of the degree course in Animal production and Science and technology of animal production – DIMEVET – University of Milan (April 2021).
- Member of the board of several specialization schools: Technology and pathology of poultry, rabbit and game species, Applied ethology and well-being of Medicine and clinic of companion animals, Medicine and surgery of the horse of the University of Milan.
- Member of the teaching staff of the current PhD course in "Veterinary and breeding sciences" of the Department of Veterinary Medicine of the University of Milan (May 2020).
- Member of the Internationalization Commission of the Department of Veterinary Medicine of the University of Milan (2020).
- Elective member of the Board of the Department of Veterinary Medicine of the University of Perugia (2016-2019).
- Coordinator of the Department of Veterinary Medicine of the University of Perugia with delegation of the Director, for the Erasmus+ program (31/03/2014).
- President of the Erasmus+ Commission of the Department of Veterinary Medicine of the University of Perugia (31/03/2014).
- Member of the Erasmus+ Commission of the University of Perugia (2014-2019).
- Coordinator of the International Doctorate with a thesis in Co-supervision between the Department of Veterinary Medicine of the University of Perugia with the University of Agriculture Sciences and Veterinary Medicine of Bucharest – Romania (26/05/2015).
- Member of the Teaching Board of the current PhD course in "Health and experimental veterinary sciences" of the Department of Veterinary Medicine of the University of Perugia (12/05/2014 to 01/10/2019).
- Veterinarian in charge of the Experimental Farm Avi-Cunicola of the Department of Agricultural, Environmental and Food Sciences of the University of Perugia (07/07/2005 to date).
- Veterinarian in charge of the Livestock Farm of the Department of Veterinary Medicine of the University of Perugia (CESAV).
- Elected representative of researchers within the Faculty Council and currently a member of the Council of the Department of Veterinary Medicine of the University of Perugia.
- Coordinator of the agreements with 18 European and extra-European Universities.

PUBLICATIONS

The scientific activity is documented by 227 publications of which 132 articles and 17 abstracts published in international journals indexed in the main bibliographic databases, 51 proceedings in international conferences, 22 proceedings of national conferences, 1 contribution to a volume and 4 popular articles (PubMed 108 papers and Scopus: h-index=30, 136 documents and 2481 citations <https://www.scopus.com/authid/detail.uri?authorId=7801424716>).

Prof. Gabriele Brecchia