



UNIVERSITY OF TURIN
DEPARTMENT OF VETERINARY SCIENCES
Largo Paolo Braccini 2 - 10095 Grugliasco (Torino)

Dr. LARA RASTELLO

PERSONAL INFORMATION

Born in 31/01/1997

Education:

- From November 2022 PhD Student in Veterinary Sciences for Animal Health and Food Safety at the Department of Veterinary Sciences of the University of Turin (Italy).

Project Title: Innovative feed ingredients in ruminant nutrition: digestibility, productive performance and animal-derived food products quality.

- In April 2022 Master's Degree in Animal Sciences curriculum Animal Nutrition and Feed Safety at the Department of Agricultural, Forest and Food Sciences of the University of Turin (Italy). Grade: 110/110 cum Laude.

- From 2021 to 2022 Quality control operator in Liriodendro Farm, Borgaro (TO), Italy. Carried out tasks: animal feed administration, zootechnical practices, pig and poultry meat production, *Hazard Analysis and Critical Control Points (HACCP)* plan checking.

- From 2020 to 2021 Trainee in Azienda Sanitaria Locale TO3, Piossasco (TO), Italy. Carried out tasks: help in administrative work of import/export of animals from other countries; assessment of goats' welfare in compliance with the AWIN (Animal Welfare Indicators) protocol.

- In 2019 Bachelor's Degree in Production and Management of Domestic and Wild animals at the Department of Veterinary Sciences of the University of Turin (Italy). Grade: 106/110.

Language:

Native speaker: Italian.

Languages	Listening	Reading	Speaking	Writing
English	C1	C1	B2	C1
Spanish	C1	C1	B2	C1
German	A1	A2	A1	A1

(basic/A1-A2, good/B1, very good/B2, excellent/C1, fluent/C2)

Research activity: mainly concerns feeding and nutrition of ruminant animals with innovative feed ingredients, with special focus on animal digestibility, productive performance, and animal-derived food products quality.

Publications:

Scientific articles

- Bellezza Oddon S., Rossi G., Bongiorno V., Gasco L., Ojha S., **Rastello L.**, Renna M., Rossi Riberiro L., Sandrock C., Schlüter O.K., Biasato I. (in press). Advancing insect utilization for food and feed: standardizing processing methods, enhancing techno-functional properties, and refining feeding trial protocols. Accepted for publication by the Journal of Insects as Food and Feed on 22nd April 2025 (proofs and DOI not available yet).
- Renna M., Coppa M., Lussiana C., Le Morvan A., Gasco L., **Rastello L.**, Claeys J., Maxin G. (in press). Low drying temperature has negligible impact but defatting increases in vitro rumen digestibility of insect meals, with minor changes on fatty acids biohydrogenation. Accepted for publication by the Journal of Animal Science and Biotechnology on 24th March 2025 (proofs and DOI not available yet).
- Robles-Jimenez L.E., Angeles S., Ramirez-Perez A.H., Fuente B., Velazquez-Ordoñez V., Cardoso-Gutierrez E., Renna M., **Rastello L.**, Capucchio M.T., Hassan T., Gasco L., Pino-Moreno J.M., Ghavipanje N., Dominguez-Vara I.A., Gonzalez-Ronquillo M. (2025). In vitro and in vivo investigations on the use of yellow mealworm (*Tenebrio molitor*) as a novel protein feed ingredient for fattening lambs. Animal Feed Science and Technology 320: 116224. <https://doi.org/10.1016/j.anifeedsci.2025.116224>.
- Renna M., **Rastello L.**, Veldkamp T., Toral P.G., Gonzalez-Ronquillo M., Jimenez L.E.R., Gasco, L. (2023). Are insects a solution for feeding ruminants? Legislation, scientific evidence, and future challenges. Animal Frontiers, 13(4): 102-111. <https://doi.org/10.1093/af/vfad026>.
- Renna M., **Rastello L.**, Gasco L. (2022). Can insects be used in the nutrition of ruminants? Journal of Insects as Food and Feed 8(10): 1041-1045. <https://doi.org/10.3920/JIFF2022.x006>.

Proceedings

- Diaz Vicuna E. *, Fiorilla E., Srikanthithasan K., Zambotto V., Tabasso S., Renna M., **Rastello L.**, Giorgino A., Ozella L., Forte, C. (2024). Hazelnut skin as sustainable feed ingredient in livestock diets: preliminary results. Proceedings of the 4th International Conference of RETASTE: Rethink Food Resources, Losses, and Waste, 25th-27th September 2024, Archanes, Crete, Greece; pp. 1-2.
- **Rastello L.**, Gasco L., Lussiana C., Gerbelle M., Coppa M., Vernetti-Prot L., Galli A., Guidou C., Trespeuch C., Torsiello B, Renna M. (2024). Insect oil (*Hermetia illucens*) in dairy cow nutrition: effects on milk fatty acid profile. Proceeding of the Congress of the European Society of veterinary & Comparative Nutrition (ESVCN), 11th to 13th September 2024, Belfast (Northern Ireland); p. 141.
- Toral P.G., **Rastello L.**, Hervás G., Gasco L., Gerbelle M., Coppa M., Lussiana C., Galli A., Guidou C., Trespeuch C., Frutos P., Renna M. (2024). Black soldier fly oil in dairy cow diet: effects on fatty acids of rumen digesta. Proceeding of the 75th Annual Meeting of the European Federation of Animal Science (EAAP), 1st to 5th September 2024, Florence, Italy; p. 1023.
- Pauciullo A., Gaspa G., Genuardo V., Rossetti C., Perucatti A., **Rastello L.**, Gerbelle M., Galli A., Guidou C., Trespeuch C., Gasco L., Renna M. (2024). Effect of dietary *Hermetia illucens* oil on bovine genome stability: a sister chromatid exchange (SCE) study. Proceeding of the 25th International Colloquium on Animal Cytogenetics and Genomics (ICACG), 26th to 29th June 2024, Naples, Italy; p. 28.
- **Rastello L.**, Gasco L., Coppa M., Gerbelle M., Vernetti-Prot L., Galli A., Guidou C., Trespeuch C., Torsiello B., Malfatto V., Renna M. (2024). *Hermetia illucens* oil in the diet of dairy cows: does it affect feed intake, milk yield and milk main constituents? Proceeding of the 5th Congress of Insects to Feed the World (IFW), 19th to 22nd June 2024, Singapore; p. 153.

- **Rastello L.**, Renna M., Schettino-Bermúdez B., Gutiérrez-Tolentino R., Castelán Ortega O.A., Robles-Jimenez L.E., González Ronquillo M. (2023). Composición química en leche y queso de ovejas suplementadas con insectos (Notonectidae spp.). Proceedings of the Primer Congreso UAM: Calidad e Inocuidad de los alimentos, 9th-10th November 2023, Mexico City, Mexico; pp. 66-67.
- Renna M., Coppa M., Lussiana C., Le Morvan A., Gasco L., **Rastello L.**, Maxin G. (2023). In vitro rumen fermentation characteristics of defatted insect meals as compared to conventional plant-based meals. Proceeding of the 27th Congress of the European Society of Veterinary and Comparative Nutrition (ESVCN), 7th-9th September 2023, Vila Real, Portugal; p. 173.
- Renna M., Coppa M., Lussiana C., Le Morvan A., Gasco L., **Rastello L.**, Clayes J., Maxin G. (2023). Processing temperature of full-fat insect meals has limited effects on in vitro rumen fermentation characteristics. Proceeding of the 27th Congress of the European Society of Veterinary and Comparative Nutrition (ESVCN), 7th-9th September 2023, Vila Real, Portugal; p. 192.
- Renna M., Coppa M., Lussiana C., Le Morvan A., Gasco L., **Rastello L.**, Maxin G. (2023). Defatted insect meals: impact on *in vitro* ruminal fermentation and lipid biohydrogenation. Proceedings of the 74th Annual Meeting of the European Federation of Animal Science (EAAP), 26th of August-1st September 2023, Lyon, France; p. 221.
- Battaglini L.M., Miretti I., Giammarino M., **Rastello L.**, Audisio A., Renna M. (2023). Effect of the feeding system on the growth performance of Holstein Friesian calves in the pre-weaning period. Proceedings of the 25th Congress of the Animal Science and Production Association (ASPA), 13th-16th June 2023, Monopoli (BA), Italia; p. 202.

- Renna M., Coppa M., Lussiana C., Le Morvan A., **Rastello L.**, Gasco L., Maxin G. (2023). Rumen lipid biohydrogenation of insect meals: results of an *in vitro* study. Proceedings of the 25th Congress of the Animal Science and Production Association (ASPA), 13th-16th June 2023, Monopoli (BA), Italia; p. 121.

Third Mission:

Co-author of 3 blogs in the Animal Science and Production Association (ASPA) website, titled:

Renna M., **Rastello L.**, Gasco L. (2022). Use of insects in ruminant nutrition: characteristics of the *in vitro* rumen fermentation and lipid biohydrogenation. In the Animal Science and Production Association blog; <https://www.assaspa.org/post/insetti-alimentazione-ruminanti-caratteristiche>.

Renna M., **Rastello L.**, Gasco L. (2022). Pig manure for protein production. In the Animal Science and Production Association blog; <https://www.assaspa.org/post/allevamenti-sostenibili-liquame-suino>.

Renna M., **Rastello L.**, Gasco L. (2022). Protein biomass from fungi. In the Animal Science and Production Association blog; <https://www.assaspa.org/post/amido-patate-mangime-innovativo>.

Co-author of 1 blog in Ruminantia website, titled:

Renna M., **Rastello L.**, Gasco L. (2023). Insect meal, evaluation of use in ruminant feed. In: Ruminantia. <https://www.ruminantia.it/farine-a-base-di-insetto-valutazione-dellutilizzo-nellalimentazione-dei-ruminanti/>.

Co-author of 1 article for Unitogether (www.unitogether.unito.it/), titled:

Renna M., **Rastello L.**, Gasco L. (2022). Is the use of insects in ruminant feeding possible?. Unitogether (under evaluation).

Signature:

