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Short presentation

My primary research area is protein biochemistry with focus on obtaining a better understanding of the influence of protein functionality on food quality. This includes the functionality, modification and composition of the proteins in the raw material and how the proteins are modified during processing, storage or maturation during food production. I have mainly been working within the field of meat science investigating the influence of the protein changes and modification on meat quality with focus on protein degradation, phosphorylation and oxidation. My research also includes processing of side-streams from the meat industry into novel ingredients. I am an expert in the use of proteomics for protein characterization and have experience with different types of gel electrophoresis and mass spectrometry.

Publications

Different source of commercial soy protein isolates: Structural, compositional, and physicochemical characteristics in relation to protein functionalities

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Recent advances on characterization of protein oxidation in aquatic products: A comprehensive review

Zhang, L., Li, Qian, Bao, Y., Tan, Y., Lametsch, Rene, Hong, H. & Luo, Y., 2024, In: Critical Reviews in Food Science and Nutrition. 64, 6, p. 1572–1591

The efficiency and safety evaluation of hemoglobin hydrolysate as a non-heme iron fortifier

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Applications of Enzyme Technology to Enhance Transition to Plant Proteins: A Review

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Comparative Quantitation of Kokumi γ -Glutamyl Peptides in Spanish Dry-Cured Ham under Salt-Reduced Production

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Comparative analysis of substrate affinity and catalytic efficiency of γ -glutamyltransferase from bovine milk and *Bacillus amyloliquefaciens*

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Four novel *Curtobacterium* phages isolated from environmental samples

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Generation of kokumi γ -glutamyl short peptides in Spanish dry-cured ham during its processing

Heres, A., Li, Qian, Toldrá, F., Lametsch, Rene & Mora, L., 2023, In: Meat Science. 206, 9 p., 109323.

New Insight into the Substrate Selectivity of Bovine Milk γ -glutamyl Transferase via Structural and Molecular Dynamics Predictions

Cao, Lichuang, Hunt, C. J., Meyer, A. S. & Lametsch, Rene, 2023, In: Molecules. 28, 12, 16 p., 4657.

Physicochemical properties, texture, and *in vitro* protein digestibility in high-moisture extrudate with different oil/water ratio

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Current progress in kokumi-active peptides, evaluation and preparation methods: a review

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Salmonella phage akira, infecting selected *Salmonella enterica* Enteritidis and Typhimurium strains, represents a new lineage of bacteriophages
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