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Kort præsentation

Mit primære forskningsområde er biokemi med fokus på at opnå en bedre forståelse af sammenhængen mellem protein funktionalitet og fødevarekvalitet. Dette inkluderer funktionaliteten, modificeringen og sammensætningen af proteinerne i råvaren og hvordan proteinerne bliver modificerede under fremstillingen, lagring eller modning under fødevareproduktionen.

Jeg har primært arbejde med kødkvalitet, hvor jeg har undersøgt hvordan kødkvaliteten påvirkes af protein sammensætningen og modificering med fokus på protein nedbrydning og oxidation. Jeg har undersøgt hvordan man kan opnå en bedre udnyttelse af biprodukter fra slagteriindustrien ved at omdanne biprodukterne til nye ingredienser der kan bruges i fødevareindustrien.

Jeg er ekspert i protein karakterisering ved hjælp af gel elektroforese og masse spektrometri.

Publikationer

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

Zhang, L., Li, Qian, Zhang, W., Bakalis, Serafim, Luo, Y. & Lametsch, Rene, 2024, I: Food Chemistry. 433, 12 s., 137315.

Proteomic evidence of protein degradation and oxidation in brined bighead carp fillets during long-term frozen storage

Gao, S., Zhuang, S., Zhang, L., Lametsch, Rene, Tan, Y., Li, B., Hong, H. & Luo, Y., 2024, I: Food Chemistry. 433, 11 s., 137312.

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, I: Critical Reviews in Food Science and Nutrition. 64, 6, s. 1572–1591

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

Xue, D., Jiang, S., Zhang, M., Shan, K., Lametsch, Rene & Li, C., 2024, I: Food Science and Human Wellness. 13, 2, s. 999-1010 12 s.

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

Gouseti, Ourania, Larsen, Mads Emil, Amin, Ashwitha, Bakalis, Serafim, Petersen, Iben Lykke, Lametsch, Rene & Jensen, Poul Erik, 2023, I: Foods. 12, 13, 22 s., 2518.

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

Heres, A., Li, Qian, Toldrá, F., Lametsch, Rene & Mora, L., 2023, I: Foods. 12, 14, 13 s., 2814.

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

Cao, Lichuang, Li, Qian & Lametsch, Rene, 2023, I: Food Chemistry. 405, 8 s., 134930.

Decolorization of porcine hemoglobin hydrolysates: The role of peptide characteristics and pH values

Li, Qian, Zhang, L., Li, Y. & Lametsch, Rene, 2023, I: Journal of Food Science. 88, 8

Elucidation of the Molecular Mechanism of Bovine Milk γ -Glutamyltransferase Catalyzed Formation of γ -Glutamyl-Valyl-Glycine

Cao, Lichuang, Hunt, C. J., Lin, S., Meyer, A. S., Li, Qian & Lametsch, Rene, 2023, I: Journal of Agricultural and Food Chemistry. 71, 5, s. 2455-2463 9 s.

Four novel *Curtobacterium* phages isolated from environmental samples

Alanin, K. W. S., Olsen, Nikoline S., Djurhuus, Amaru Miranda, Carstens, Alexander Byth, Nielsen, Tue Kjærgaard, Rothgardt, M. M., Russel, A. M., Wagner, N., Lametsch, Rene, Bak, Frederik, Hennessy, Rosanna Catherine, Nicolaisen, Mette Haubjerg, Hansen, Lars Hestbjerg & Kot, Witold, 2023, I: Archives of Virology. 168, 3

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, I: Meat Science. 206, 9 s., 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, I: Molecules. 28, 12, 16 s., 4657.

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

Wang, H., Wang, R., Zhang, L., Zhang, W., Bakalis, Serafim, Li, Y. & Lametsch, Rene, 2023, I: Food Research International. 163, 7 s., 112286.

Protein phosphorylation profile of Atlantic cod (*Gadus morhua*) in response to pre-slaughter pumping stress and postmortem time

Zhang, L., Li, Qian, Sørensen, J. S., Luo, Y. & Lametsch, Rene, 2023, I: Food Chemistry. 402, 11 s., 134234.

Shelf life extension of chilled blunt snout bream fillets using coating based on chia seed gum and *Oleum ocimi gratissimi*

Li, Y., Zhang, L., Zhuang, S., Li, D., Hong, H., Lametsch, Rene, Tan, Y. & Luo, Y., 2023, I: Food Bioscience. 54, 9 s., 102853.

Three novel *Erwinia billingiae* phages isolated from organic waste represent three new genera

Alanin, K. W. S., Olsen, Nikoline S., Djurhuus, Amaru Miranda, Carstens, Alexander Byth, Nielsen, Tue Kjærgaard, Wagner, N., Lametsch, Rene, Bak, Frederik, Hennessy, Rosanna Catherine, Nicolaisen, Mette Haubjerg, Kot, Witold & Hansen, Lars Hestbjerg, 2023, I: Archives of Virology. 168, 7 s., 71.

Cooking affects pork proteins *in vitro* rate of digestion due to different structural and chemical modifications

Mitra, B., Kristensen, L., Lametsch, Rene & Ruiz Carrascal, Jorge, 2022, I: Meat Science. 192, 7 s., 108924.

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

Li, Qian, Zhang, L. & Lametsch, Rene, 2022, I: Critical Reviews in Food Science and Nutrition. 62, 5, s. 1230-1241

Differences in physicochemical properties of high-moisture extrudates prepared from soy and pea protein isolates

Wang, H., van der Berg, Franciscus Winfried J, Zhang, W., Czaja, Tomasz Pawel, Zhang, L., Jespersen, Birthe P Møller & Lametsch, Rene, 2022, I: Food Hydrocolloids. 128, 10 s., 107540.

Effects of γ -Glutamylated Hydrolysates from Porcine Hemoglobin and Meat on Kokumi Enhancement and Oxidative Stability of Emulsion-Type Sausages

Li, Qian, Liu, J., Cao, Lichuang, Zhang, L., Bredie, Wender, Otte, Jeanette & Lametsch, Rene, 2022, I: Food and Bioprocess Technology. 15, 15 s.

Increase of Kokumi γ -Glutamyl Peptides in Porcine Hemoglobin Hydrolysate Using Bacterial γ -Glutamyltransferase

Li, Qian, Zhang, L. & Lametsch, Rene, 2022, I: Journal of Agricultural and Food Chemistry. 70, 50, s. 15894–15902 9 s.

Influence of growth medium and yeast species on the formation of γ -glutamyl peptides
Li, Qian, Zhang, L., Arneborg, Nils & Lametsch, Rene, 2022, I: LWT. 165, 8 s., 113716.

Morphological and Genetic Characterization of *Eggerthella lenta* Bacteriophage PMBT5
Sprotte, S., Rasmussen, Torben Sølbeck, Cho, G., Brinks, E., Lametsch, Rene, Neve, H., Vogensen, Finn Kvist, Nielsen, Dennis Sandris & Franz, C. M. A. P., 2022, I: Viruses. 14, 8, 1598.

Rendered-Protein Hydrolysates as a Low-Cost Nitrogen Source for the Fungal Biotransformation of 5-Hydroxymethylfurfural
Cosovanu, D., Millán Acosta, A., Cabañeros López, P., Gernaey, K. V., Li, Qian, Lametsch, Rene, Canela-Garayoa, R., Eras, J. & Villorbina, G., 2022, I: Catalysts. 12, 8, 22 s., 839.

Salmonella phage akira, infecting selected *Salmonella enterica* Enteritidis and Typhimurium strains, represents a new lineage of bacteriophages
Olsen, Nikoline S., Lametsch, Rene, Wagner, N., Hansen, Lars Hestbjerg & Kot, Witold, 2022, I: Archives of Virology. 167, s. 2049–2056

Structural characteristics of high-moisture extrudates with oil-in-water emulsions
Wang, H., Zhang, L., Czaja, Tomasz Pawel, Bakalis, Serafim, Zhang, W. & Lametsch, Rene, 2022, I: Food Research International. 158, 9 s., 111554.

X-ray contrast tomography and Raman spectroscopy methods show heat-induced changes in meat
Miklos, R., Berhe, D. T. & Lametsch, Rene, 2022, *New Aspects of Meat Quality: From Genes to Ethics*. Purslow, P. (red.). 2 udg. Elsevier, s. 461-472 12 s.

Applications in nutrition: Peptides as taste enhancers
Fu, Y., Amin, M. S., Li, Q., Bak, K. H. & Lametsch, Rene, 2021, *Biologically Active Peptides: From Basic Science to Applications for Human Health*. Tolrá, F. & Wu, J. (red.). Academic Press, s. 569-580

Effect of the addition of cheese powder and salt content on sensory profile, physicochemical properties and γ -glutamyl kokumi peptides content in dry fermented sausages
Araya-Morice, A., De Gobba, Cristian, Lametsch, Rene & Ruiz Carrascal, Jorge, 2021, I: European Food Research and Technology. 247, 8, s. 2027-2037 11 s.

Flavor characterization of animal hydrolysates and potential of glucosamine in flavor modulation
Bak, K. H., Waehrens, S. S., Fu, Y., Chow, Ching Yue, Petersen, Mikael Agerlin, Ruiz Carrascal, Jorge, Bredie, Wender & Lametsch, Rene, 2021, I: Foods. 10, 12, 12 s., 3008.

Glycation sites and bioactivity of lactose-glycated caseinate hydrolysate in lipopolysaccharide-injured IEC-6 cells
Shi, J., Fu, Y., Zhao, X. H. & Lametsch, Rene, 2021, I: Journal of Dairy Science. 104, 2, s. 1351-1363 13 s.

Identification and Activity Characterization of gamma-Glutamyltransferase from Bovine Milk
Cao, Lichuang, Li, Qian & Lametsch, Rene, 2021, I: Journal of Agricultural and Food Chemistry. 69, 50, s. 15325-15333

Proteolytic activity of selected commercial *Lactobacillus helveticus* strains on soy protein isolates
Shirotani, N., Hougaard, Anni Bygvrå, Lametsch, Rene, Petersen, Mikael Agerlin, Rattray, F. P. & Ipsen, Richard, 2021, I: Food Chemistry. 340, 10 s., 128152.

Transglutaminase-Mediated Caseinate Oligochitosan Glycation Enhances the Effect of Caseinate Hydrolysate to Ameliorate the LPS-Induced Damage on the Intestinal Barrier Function in IEC-6 Cells
Shi, J., Zhao, X., Fu, Y. & Lametsch, Rene, 2021, I: Journal of Agricultural and Food Chemistry. 69, 31, s. 8787-8796

A Rare, Virulent *Clostridium perfringens* Bacteriophage Susfortuna Is the First Isolated Bacteriophage in a New Viral Genus
Pedersen, Julie Stenberg, Kot, Witold, Plöger, M., Lametsch, Rene, Neve, H., Franz, C. M. A. P. & Hansen, Lars Hestbjerg, 2020, I: PHAGE: Therapy, Applications, and Research. 1, 4, s. 230-236 7 s.

Bioactive proteins in bovine colostrum and effects of heating, drying and irradiation

Chatterton, Dereck Edward Winston, Aagaard, S., Hesselballe Hansen, T., Nguyen, Duc Ninh, De Gobba, Cristian, Lametsch, Rene & Sangild, Per Torp, 2020, I: Food & Function. 11, 3, s. 2309-2327 19 s.

Exopeptidase treatment combined with Maillard reaction modification of protein hydrolysates derived from porcine muscle and plasma: structure–taste relationship

Fu, Y., Liu, J., Zhang, W., Wæhrens, S. S., Tøstesen, M., Hansen, E. T., Bredie, Wender & Lametsch, Rene, 2020, I: Food Chemistry. 306, 9 s., 125613.

Plastein from hydrolysates of porcine hemoglobin and meat using Alcalase and papain

Li, Qian, Fu, Y., Zhang, L., Otte, Jeanette & Lametsch, Rene, 2020, I: Food Chemistry. 320, 9 s., 126654.

Production of Taste Enhancers from Protein Hydrolysates of Porcine Hemoglobin and Meat Using *Bacillus amyloliquefaciens* γ -Glutamyltranspeptidase

Li, Qian, Liu, J., De Gobba, Cristian, Zhang, L., Bredie, Wender & Lametsch, Rene, 2020, I: Journal of Agricultural and Food Chemistry. 68, 42, s. 11782-11789 8 s.

Quantitation of Protein Cysteine-Phenol Adducts in Minced Beef Containing 4-Methyl Catechol

Arsad, S. S., Zainudin, M. A. M., De Gobba, Cristian, Jongberg, S., Larsen, F. H., Lametsch, Rene, Andersen, Mogens Larsen & Lund, Marianne N., 2020, I: Journal of Agricultural and Food Chemistry. 68, 8, s. 2506-2515

Search for proteomic markers for stunning stress and stress-induced textural tenderization in silver carp (*Hypophthalmichthys molitrix*) fillets using label-free strategy

Zhang, L., Li, Qian, Hong, H., Luo, Y. & Lametsch, Rene, 2020, I: Food Research International. 137, 12 s., 109678.

Proteomics insights into the responses of *Saccharomyces cerevisiae* during mixed-culture alcoholic fermentation with *Lachancea thermotolerans*

Peng, C., Andersen, B., Arshid, S., Larsen, M. R., Albergaria, H., Lametsch, Rene & Arneborg, Nils, 1 sep. 2019, I: FEMS Microbiology Ecology. 95, 9, s. 1-16 fiz126.

Carprofen-induced depletion of proton motive force reverses TetK-mediated doxycycline resistance in methicillin-resistant *Staphylococcus pseudintermedius*

Magnowska, Z., Jana, B., Brochmann, R. P., Hesketh, A., Lametsch, Rene, De Gobba, Cristian & Guardabassi, Luca, 2019, I: Scientific Reports. 9, 14 s., 17834.

Exploration of collagen recovered from animal by-products as a precursor of bioactive peptides: successes and challenges

Fu, Y., Therkildsen, M., Aluko, R. E. & Lametsch, Rene, 2019, I: Critical Reviews in Food Science and Nutrition. 59, 13, s. 2011-2027 17 s.

Genomic and Ecogenomic Characterization of *Proteus mirabilis* Bacteriophages

Alves, D. R., Nzakizwanayo, J., Dedi, C., Olympiou, C., Hanin, A., Kot, Witold, Hansen, Lars Hestbjerg, Lametsch, Rene, Gahan, C. G. M., Schellenberger, P., Ogilvie, L. A. & Jones, B. V., 2019, I: Frontiers in Microbiology. 10, s. 1-14 1783.

Improved in vitro digestibility of rapeseed napin proteins in mixtures with bovine beta-lactoglobulin

Joehnke, M. S., Lametsch, Rene & Sørensen, J. C., 2019, I: Food Research International. 123, s. 346-354

Protein hydrolysates of porcine hemoglobin and blood: peptide characteristics in relation to taste attributes and formation of volatile compounds

Fu, Y., Bak, K. H., Liu, J., De Gobba, Cristian, Tøstesen, M., Hansen, E. T., Petersen, Mikael Agerlin, Ruiz Carrascal, Jorge, Bredie, Wender & Lametsch, Rene, 2019, I: Food Research International. 121, s. 28-38 11 s.

Quantitative phosphoproteomic analysis of ovine muscle with different postmortem glycolytic rates

Chen, L., Li, Z., Everaert, N., Lametsch, Rene & Zhang, D., 2019, I: Food Chemistry. 280, s. 203-209 7 s.

Storage and thermal stability of novel heme-based pigments prepared from porcine hemoglobin

Chhem Kieth, S., Lametsch, Rene, Hansen, E. T. & Ruiz Carrascal, Jorge, 2019, I: Journal of Food Process Engineering. 42, 3, s. 1-8 e12994.

Valorisation of protein hydrolysates from animal by-products: perspectives on bitter taste and debittering methods: a review

Fu, Y., Chen, J., Bak, K. H. & Lametsch, Rene, 2019, I: International Journal of Food Science and Technology. 54, 4, s. 978-986

Quantitative Proteomics and Phosphoproteomics Analysis Revealed Different Regulatory Mechanisms of Halothane and Rendement Napole Genes in Porcine Muscle Metabolism

Huang, H., Scheffler, T. L., Gerrard, D. E., Larsen, M. R. & Lametsch, Rene, 3 aug. 2018, I: Journal of Proteome Research. 17, 8, s. 2834-2849 16 s.

Pork proteins oxidative modifications under the influence of varied time-temperature thermal treatments: A chemical and redox proteomics assessment

Mitra, B., Lametsch, Rene, Akcan, T. & Ruiz Carrascal, Jorge, jun. 2018, I: Meat Science. 140, s. 134-144 11 s.

Development of Volatile Compounds during Hydrolysis of Porcine Hemoglobin with Papain

Bak, K. H., Petersen, Mikael Agerlin, Lametsch, Rene, Hansen, E. T. & Ruiz Carrascal, Jorge, 8 feb. 2018, I: Molecules. 23, 2, 9 s., 357.

Advanced glycation end products, protein crosslinks and post translational modifications in pork subjected to different heat treatments

Mitra, B., Lametsch, Rene, Greco, I. & Ruiz Carrascal, Jorge, 2018, I: Meat Science. 145, s. 415-424 10 s.

Investigation of nitrite alternatives for the color stabilization of heme-iron hydrolysates

Chhem-Kieth, S., Skou, P. B., Lametsch, Rene, Hansen, E. T. & Ruiz Carrascal, Jorge, 2018, I: Journal of Food Science and Technology. 55, 10, s. 4287-4296

Proteomic profiling of oxidized cysteine and methionine residues by hydroxyl radicals in myosin of pork

Lu, H., Luo, Y. & Lametsch, Rene, 2018, I: Food Chemistry. 243, s. 277-284 8 s.

Rheological and sensory properties and aroma compounds formed during ripening of soft brined cheese made from camel milk

Alemu, Y. H., Hansen, E. B., Seifu, E., Petersen, Mikael Agerlin, Lametsch, Rene, Rattray, F. P. & Ipsen, Richard, 2018, I: International Dairy Journal. 81, s. 122-130 9 s.

Structural characteristics of low bitter and high umami protein hydrolysates prepared from bovine muscle and porcine plasma

Fu, Y., Liu, J., Hansen, E. T., Bredie, Wender & Lametsch, Rene, 2018, I: Food Chemistry. 257, s. 163-171 9 s.

The effect of protein-to-alginate ratio on in vitro gastric digestion of nanoparticulated whey protein

Koutina, G., Ray, C. A., Lametsch, Rene & Ipsen, Richard, 2018, I: International Dairy Journal. 77, s. 10-18 9 s.

Novel Variants of *Streptococcus thermophilus* Bacteriophages Are Indicative of Genetic Recombination among Phages from Different Bacterial Species

Szymczak, P., Janzen, T., Neves, A. R., Kot, W., Hansen, L. H., Lametsch, Rene, Neve, H., Franz, C. M. A. P. & Vogensen, Finn Kvist, 2017, I: Applied and Environmental Microbiology. 85, 5, 16 s., e02748-16.

The first characterized phage against a member of the ecologically important sphingomonads reveals high dissimilarity against all other known phages

Nielsen, Tue Kjærgaard, Carstens, A. B., Browne, P., Lametsch, Rene, Neve, H., Kot, Witold & Hansen, Lars Hestbjerg, 2017, I: Scientific Reports. 7, 10 s., 13566.

Angiotensin I-converting enzyme-inhibitory peptides from bovine collagen: insights into inhibitory mechanism and transepithelial transport

Fu, Y., Young, J. F., Rasmussen, M. K., Dalsgaard, T. K., Lametsch, Rene, Aluko, R. E. & Therkildsen, M., 2016, I: Food Research International. 89, 1, s. 373-381 9 s.

Characterisation of a novel enterobacteria phage, CAjan, isolated from rat faeces

Carstens, A. B., Kot, W., Lametsch, Rene, Neve, H. & Hansen, L. H., 2016, I: Archives of Virology. 161, 8, s. 2219-2226 8 s.

Grating-based X-ray tomography of 3D food structures

Miklos, R., Nielsen, M. S., Einarsdottir, H. & Lametsch, Rene, 2016, *ESAFORM 2016: proceedings of the 19th International ESAFORM conference on material forming*. American Institute of Physics, Bind 1769. 180001-1

Prediction of total fatty acid parameters and individual fatty acids in pork backfat using Raman spectroscopy and chemometrics: understanding the *cage of covariance* between highly correlated fat parameters

Berhe, D. T., Eskildsen, C. E. A., Lametsch, Rene, Hviid, M. S., van der Berg, Franciscus Winfried J & Engelsen, Søren Balling, 2016, I: Meat Science. 111, s. 18-26 9 s.

Revalorisation of bovine collagen as a potential precursor of angiotensin I-converting enzyme (ACE) inhibitory peptides based on *in silico* and *in vitro* protein digestions

Fu, Y., Feveile Young, J., Løkke, M. M., Lametsch, Rene, Aluko, R. E. & Therkildsen, M., 2016, I: Journal of Functional Foods. 24, s. 196-206 11 s.

Accurate determination of endpoint temperature of cooked meat after storage by Raman spectroscopy and chemometrics

Berhe, D. T., Lawaetz, A. J., Engelsen, Søren Balling, Hviid, M. S. & Lametsch, Rene, 2015, I: Food Control. 52, s. 119-125 7 s.

Antioxidant capacity of hydrolyzed animal by-products and relation to amino acid composition and peptide size distribution

Damgaard, T. D., Lametsch, Rene & Otte, Jeanette, 2015, I: Journal of Food Science and Technology. 52, 10, s. 6511-6519 9 s.

Novel X-ray phase-contrast tomography method for quantitative studies of heat induced structural changes in meat

Miklos, R., Nielsen, M. S., Einarsdottir, H., Feidenhans'l, Robert Krarup & Lametsch, Rene, 2015, I: Meat Science. 100, s. 217-221 5 s.

Phosphoproteome analysis of sarcoplasmic and myofibrillar proteins in bovine *longissimus* muscle in response to postmortem electrical stimulation

Li, C., Zhou, G., Xu, X., Lundström, K., Karlsson, A. H. & Lametsch, Rene, 2015, I: Food Chemistry. 175, s. 197-202 6 s.

The effects of eating marine- or vegetable-fed farmed trout on the human plasma proteome profiles of healthy men

Rentsch, M. L., Lametsch, Rene, Bügel, Susanne Gjedsted, Jessen, F. & Lauritzen, Lotte, 2015, I: British Journal of Nutrition. 113, 4, s. 699-707 9 s.

Water and fat mobility in myofibrillar protein gels explored by low-field NMR

Miklos, R., Cheong, L., Xu, X., Lametsch, Rene & Larsen, F. H., 2015, I: Food Biophysics. 10, 3, s. 316-323 8 s.

Analysis of micro-structure in raw and heat treated meat emulsions from multimodal X-ray microtomography

Einarsdóttir, H., Nielsen, M. S., Miklos, R., Lametsch, Rene, Feidenhans'l, Robert Krarup, Larsen, Rasmus Stenbak & Ersbøll, B. K., 1 aug. 2014, I: Innovative Food Science and Emerging Technologies. 24, s. 88-96 9 s.

Influence of lipid type on water and fat mobility in fermented sausages studied by low-field NMR

Miklos, R., Mora-Gallego, H., Larsen, F. H., Serra, X., Cheong, L., Xu, X., Arnau, J. & Lametsch, Rene, jan. 2014, I: Meat Science. 96, 1, s. 617-622 6 s.

Antioxidant capacity of hydrolyzed porcine tissues

Damgaard, T. D., Otte, Jeanette, Meinert, L., Jensen, K. & Lametsch, Rene, 2014, I: Food Science & Nutrition. 2, 3, s. 282-288 7 s.

Effect of dietary fat level on the gross fatty acid profile of pork backfat: Raman spectroscopic study

Berhe, D. T., Hviid, M. S., Engelsen, Søren Balling & Lametsch, Rene, 2014, *Farm animal imaging: Kaposvár 2013*. Maltin, C., Craigie, C. & Bünger, L. (red.). Quality Meat Scotland, s. 49-52 4 s.

Increased protein-thiol solubilization in sweet wort by addition of proteases during mashing

Lund, Marianne N., Lametsch, Rene & Sørensen, M. B., 2014, I: Institute of Brewing & Distilling. Brewing & Distilling Directory. 120, 4, s. 467-473 7 s.

Quantitative phosphoproteomic analysis of porcine muscle within 24 h postmortem

Huang, H., Larsen, M. R., Palmisano, G., Dai, J. & Lametsch, Rene, 2014, I: Journal of Proteomics. 106, s. 125-139 15 s.

Raman spectroscopic study of effect of the cooking temperature and time on meat proteins

Berhe, D. T., Engelsen, Søren Balling, Hviid, M. S. & Lametsch, Rene, 2014, I: Food Research International. 66, s. 123-131 9 s.

Application of X-ray phase-contrast tomography in quantitative studies of heat induced structural changes in meat

Miklos, R., Nielsen, M. S., Einarsdottir, H. & Lametsch, Rene, 2013, 59th *International Congress of Meat Science and Technology: ICoMST 2013*. 4 s.

Application of proteomics for analysis of protein modifications in postmortem meat

Huang, H. & Lametsch, Rene, 2013, *Proteomics in foods: principles and applications*. Toldrá, F. & Nollet, L. M. L. (red.). Springer, s. 111-125 15 s. (Food Microbiology and Food Safety, Bind 2).

Challenges and applications of proteomics for analysis of changes in early postmortem meat

Huang, H. & Lametsch, Rene, 2013, *Proteomics in foods: principles and applications*. Toldrá, F. & Nollet, L. M. L. (red.). Springer, s. 103-109 7 s. (Food Microbiology and Food Safety, Bind 2).

Effect of fat type and heat treatment on the microstructure of meat emulsions

Miklos, R., Lametsch, Rene, Nielsen, M. S., Lauridsen, T. & Einarsdottir, H., 2013. 6 s.

Effect of the type of fat on the physicochemical, instrumental and sensory characteristics of reduced fat non-acid fermented sausages

Mora-Gallego, H., Serra, X., Guàrdia, M. D., Miklos, R., Lametsch, Rene & Arnau, J., 2013, I: Meat Science. 93, 3, s. 668-674 7 s.

Physicochemical properties of lard-based diacylglycerols in blends with lard

Miklos, R., Zhang, H., Lametsch, Rene & Xu, X., 2013, I: Food Chemistry. 138, 1, s. 608-614 7 s.

Acid stress response and protein induction in *Campylobacter jejuni* isolates with different acid tolerance

Birk, T., Takamiya, M. K. W., Lametsch, Rene & Knoechel, Susanne, 2012, I: B M C Microbiology. 12, 174, 26 s.

Changes in phosphorylation of myofibrillar proteins during *postmortem* development of porcine muscle

Huang, H., Larsen, M. R. & Lametsch, Rene, 2012, I: Food Chemistry. 134, 4, s. 1999-2006 8 s.

Effect of pasteurization on the protein composition and oxidative stability of beer during storage

Lund, Marianne N., Hoff, S., Berner, T. S., Lametsch, Rene & Andersen, Mogens Larsen, 2012, I: Journal of Agricultural and Food Chemistry. 60, 50, s. 12362-12370 9 s.

Electrical stimulation affects metabolic enzyme phosphorylation, protease activation and meat tenderization in beef
Li, C. B., Li, J., Zhou, G. H., Lametsch, Rene, Ertbjerg, P., Brüggemann, D. A., Huang, H., Karlsson, A. H., Hviid, M. & Lundström, K., 2012, I: Journal of Animal Science. 90, 5, s. 1638-1649 12 s.

Phosphoproteomics analysis of postmortem porcine muscle with pH decline rate and time difference
Huang, H., Larsen, M. R., Karlsson, A. H. & Lametsch, Rene, 2012, I: International Congress on Meat Science and Technology. Proceedings.

Use of Raman spectroscopy to study effect of cooking temperature and time on meat proteins
Berhe, D. T., Lametsch, Rene, Hviid, M. S. & Engelsen, Søren Balling, 2012. 1 s.

Analysis of acid-soluble glucogenin pork extracts of two *PRKAG3* genotypes by ¹H liquid-state NMR spectroscopy and biochemical methods
Larsen, F. H., Essén-Gustavsson, B., Jensen-Waern, M., Lametsch, Rene, Karlsson, A. H. & Lindahl, G. K., 2011, I: Journal of Agricultural and Food Chemistry. 59, 22, s. 11895-11902 8 s.

Application of pork fat diacylglycerols in meat emulsions
Miklos, R., Xu, X. & Lametsch, Rene, 2011, I: Meat Science. 87, 3, s. 202-205 4 s.

Gel-based phosphoproteomics analysis of sarcoplasmic proteins in postmortem porcine muscle with pH decline rate and time differences
Huang, H., Larsen, M. R., Karlsson, A. H., Pomponio, L., Costa, L. N. & Lametsch, Rene, 2011, I: Proteomics - Practical Proteomics. 11, 20, s. 4063-4076 14 s.

Investigation on *CAST*, *CAPN1* and *CAPN3* porcine gene polymorphisms and expression in relation to post-mortem calpain activity in muscle and meat quality
Gandolfi, G., Pomponio, L., Ertbjerg, P., Karlsson, A. H., Costa, L. N., Lametsch, Rene, Russo, V. & Davoli, R., 2011, I: Meat Science. 88, 4, s. 694-700 7 s.

Mechanical stimuli on C2C12 myoblasts affect myoblast differentiation, focal adhesion kinase phosphorylation and galectin-1 expression: a proteomic approach
Grossi, A. B., Lametsch, Rene, Karlsson, A. H. & Lawson, M. A., 2011, I: Cell Biology International. 35, s. 579-586 8 s.

Phenotypic, proteomic, and genomic characterization of a putative ABC-transporter permease involved in *Listeria monocytogenes* biofilm formation
Zhu, X., Liu, W., Lametsch, Rene, Aarestrup, F. M., Shi, C., She, Q., Shi, X. & Knoechel, Susanne, 2011, I: Foodborne Pathogens and Disease. 8, 4, s. 495-501 7 s.

Influence of early pH decline on calpain activity in porcine muscle
Pomponio, L., Ertbjerg, P., Karlsson, A. H., Costa, L. N. & Lametsch, Rene, 2010, I: Meat Science. 85, 1, s. 110-114 5 s.

Postmortem Changes in Phosphorylation of Metabolic Enzymes in Relation to the RN-genotype
Lametsch, Rene, Essen-Gustavsson, B., Jensen-Waern, M., Lundström, K. & Lindahl, G., 2010. 3 s.

Compensatory growth response as a strategy to enhance tenderness in entire male and female pork *M. longissimus thoracis*
Nielsen, S. S., Therkildsen, M., Oksbjerg, N., Lazarotti, R., Ertbjerg, P., Lametsch, Rene & Byrne, D. V., 2009, I: Meat Science. 81, 1, s. 163-170 8 s.

Injection of marinade with actinidin increases tenderness of porcine *M. biceps femoris* and affects myofibrils and connective tissue
Christensen, M., Tørngren, M. A., Gunvig, A., Rozlosnik, N., Lametsch, Rene, Karlsson, A. H. & Ertbjerg, P., 2009, I: Journal of the Science of Food and Agriculture. 89, 9, s. 1607-1614 8 s.

Meatomics

Lametsch, Rene, 2009. 3 s.

Protein Oxidation and Regulation of μ -Calpain: Implications for Meat Quality

Lonergan, S., Huff-Lonergan, E., Kim, Y. & Lametsch, Rene, 2009. 5 s.

Protein oxidation in meat during chill storage in high-oxygen atmosphere

Lund, Marianne N., Lametsch, Rene, Miklos, R., Hviid, M. S. & Skibsted, Leif Horsfelt, 2009. 4 s.

Proteome analysis of *Aspergillus niger*: lactate added in starch-containing medium can increase production of the mycotoxin fumonisin B2 by modifying acetyl-CoA metabolism

Sørensen, L. M., Lametsch, Rene, Andersen, M. R., Nielsen, P. V. & Frisvad, J. C., 2009, I: BMC Microbiology. 9, 255, 20 s.

Analytical methods for authentication of fresh vs. thawed meat - a review

Ballin, N. Z. & Lametsch, Rene, 2008, I: Meat Science. 80, 2, s. 151-158 8 s.

Determination of changes in protein conformation caused by pH and temperature

Gratacós-Cubarsí, M. & Lametsch, Rene, 2008, I: Meat Science. 80, 2, s. 545-549 5 s.

Disulfide bond within μ -calpain active site inhibits activity and autolysis

Lametsch, Rene, Lonergan, S. & Huff-Lonergan, E., 2008, I: BBA General Subjects. 1784, 9, s. 1215-1221 7 s.

Effect of enzymes on meat quality

Lametsch, Rene, 2008. 1 s.

Effects of tetracycline administration on the proteomic profile of pig muscle samples (*L. dorsi*)

Gratacós-Cubarsí, M., Castellari, M., Hortós, M., Garcíá-Regueiro, J. A., Lametsch, Rene & Jessen, F., 2008, I: Journal of Agricultural and Food Chemistry. 56, 19, s. 9312-9316 5 s.

Evidence for post-mortem m -calpain autolysis in porcine muscle

Pomponio, L., Lametsch, Rene, Karlsson, A. H., Costa, L. N., Grossi, A. & Ertbjerg, P., 2008, I: Meat Science. 80, 3, s. 761-764 4 s.

Genetic disruption of calpain correlates with loss of membrane blebbing and differential expression of RhoGDI-1, cofilin and tropomyosin

Larsen, A. K., Lametsch, Rene, Elce, J. S., Larsen, J. K., Thomsen, B., Larsen, M. R., Lawson, M. A., Greer, P. A. & Ertbjerg, P., 2008, I: Biochemical Journal. 411, s. 657-666 10 s.

Oxidation results in formation of an intramolecular disulfide bond in μ -calpain

Lametsch, Rene, Huff-Lonergan, E. & Lonergan, S. M., 2008. 1 s.

Post harvest processes that influence myofibrillar protein degradation and meat quality

Lund, Marianne N., Lametsch, Rene, Hviid, M. S. & Skibsted, Leif Horsfelt, 2008. 1 s.

Acute effects of trout on cardiovascular risk markers and plasma proteome

Rentsch, M., Jessen, F., Lametsch, Rene, Bügel, Susanne Gjedsted & Lauritzen, Lotte, 2007. 1 s.

Determination of changes in protein conformation caused by pH

Lametsch, Rene & Gratacós-Cubarsí, M., 2007. 2 s.

Effect of modified atmosphere packaging on breaking strength of single muscle fibres from beef and pork
Lund, Marianne N., Christensen, M., Lametsch, Rene, Fregil, L., Hviid, M. S. & Skibsted, Leif Horsfelt, 2007.

Healthy, nutritious and tasty fish for the future
Nielsen, H. H., Rentsch, M., Jessen, F., Hyldig, G., Jakobsen, C., Eymard, S., Hallund, J., Lauritzen, Lotte, Bügel, Susanne Gjedsted, Lametsch, Rene & Holm, J., 2007. 2 s.

High oxygen atmosphere packaging affects meat tenderness and protein oxidation
Lund, M. N., Christensen, M., Lametsch, Rene, Fregil, L., Hviid, M. S. & Skibsted, Leif Horsfelt, 2007. 1 s.

High-oxygen packaging atmosphere influences protein oxidation and tenderness of porcine *longissimus dorsi* during chill storage
Lund, Marianne N., Lametsch, Rene, Hviid, M. S., Jensen, O. N. & Skibsted, Leif Horsfelt, 2007, I: Meat Science. 77, 3, s. 295-303 9 s.

IS m-CALPAIN ACTIVE POST-MORTEM IN PORK?
Pomponio, L., Ertbjerg, P., Lametsch, Rene, Grossi, A., Nanni Costa, L. & Karlsson, A. H., 2007.

Is m-Calpain active post-mortem in pork?
Pomponio, L., Ertbjerg, P., Lametsch, Rene, Grossi, A., Costa, L. N. & Karlsson, A. H., 2007. 2 s.

Novel method for determination of myofibril fragmentation post-mortem
Lametsch, Rene, Knudsen, J. C., Ertbjerg, P., Oksbjerg, N. & Therkildsen, M., 2007, I: Meat Science. 75, 4, s. 719-724 6 s.

Changes in the muscle proteome after compensatory growth in pigs
Lametsch, Rene, Kristensen, L., Larsen, M. R., Therkildsen, M., Oksbjerg, N. & Ertbjerg, P., 2006, I: Journal of Animal Science. 84, 4, s. 918-924 7 s.

A novel role of Calpain in membrane ruffling involves deregulation of Cofilin 1, Tropomyosin 1 and RhoGDI-1
Larsen, A. K., Lametsch, Rene, Farre, T. B., Elce, J. S., Larsen, M., Thomsen, B., Ertbjerg, P. & Lawson, M. A., 2005, *Ikke angivet*. The American Society for Cell Biology, s. 298a 1 s.

A novel role of Calpain in membrane ruffling involves deregulation of cofilin 1, tropomyosin 1 and RhoGDI-1
Larsen, A. K., Lametsch, Rene, Elce, J. S., Larsen, M. R., Thomsen, B., Farré, T. B., Ertbjerg, P. & Lawson, M. A., 2005. 1 s.

Application of proteomics in meat research
Lametsch, Rene, 2005. 2 s.

Investigation of the influence of calpain on membrane ruffling
Lametsch, Rene, Larsen, A. K., Lawson, M. A., Ertbjerg, P. & Larsen, M., 2005. 1 s.

Identification of myofibrillar substrates for u-calpain
Lametsch, Rene, Roepstorff, P., Møller, H. S. & Bendixen, E., 2004, I: Meat Science. 68, s. 515-521 7 s.

UDP-glucose pyrophosphorylase is upregulated in carriers of the porcine RN-mutation in the AMP-activated protein kinase
Hedegaard, J., Horn, P., Lametsch, Rene, Møller, H. S., Roepstorff, P., Bendixen, C. & Bendixen, E., 2004, I: Proteomics. 4, s. 2448-2454 7 s.

Postmortem proteome changes of porcine muscle related to tenderness
Lametsch, Rene, Karlsson, A., Rosenvold, K., Andersen, H. J., Roepstorff, P. & Bendixen, E., 2003, I: Journal of Agricultural and Food Chemistry. s. 6992-6997 6 s.

Postmortem proteome changes of porcine muscle related to tenderness.

Lametsch, Rene, Karlsson, A., Rosenvold, K., Andersen, H. J., Roepstorff, P. & Bendixen, E., 2003, I: Journal of Agricultural and Food Chemistry. 51, 24, s. 6992-6997

Extracting information from two-dimensional electrophoresis gels by partial least squares regression

Jessen, F., Lametsch, Rene, Bendixen, E., V. H. Kjærsgård, I. & M. Jørgensen, B., 2002, I: Proteomics. 2, s. 32-35 4 s.

Identification of protein degradation during post-mortem storage of pig meat

Lametsch, Rene, Roepstorff, P. & Bendixen, E., 2002, I: Journal of Agricultural and Food Chemistry. 50, 20, s. 5508-5512

Identification of protein degradation during post-mortem storage of pig meat

Lametsch, Rene, Roepstorff, P. & Bendixen, E., 2002, I: Journal of Agricultural and Food Chemistry. s. 5508-5512 5 s.

Proteome analysis applied to meat sciences: characterizing *Post mortem* changes in porcine muscle

Lametsch, Rene & Bendixen, E., 2001, I: Journal of Agricultural and Food Chemistry. 49, 10, s. 4531-4537 7 s.

Structural Characterization of the fibroblast growth factor-binding protein purified from bovine prepartum mammary gland secretion.

Lametsch, Rene, T. Rasmussen, J., B. Johnson, L., Purup, S., Sejrsen, K., E. Petersen, T. & W. Heegaard, C., 2000, I: The journal of biological and molecular biology. 275, 26, s. 19469-19474