

Kasper Engholm-Keller

Postdoc

Ingredient and Dairy Technology

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## Kort præsentation

Jeg er proteinkemiker med 15 års erfaring indenfor massespektrometri-baseret protein-analyse og cellebiologi. Min forskning fokuserer på at etablere analytiske metoder til analyse af proteiner og deres modifikationer og at udnytte disse metoder til at studere, hvordan forskellige behandlinger af fødevarer påvirker modifikationerne og dermed proteinerne struktur og funktion.

## Kvalifikationer

Biokemi og molekylærbiologi, Ph.d., Inst. for Biokemi og Molekylærbiologi, Syddansk Universitet

1 mar. 2008 → 28 jun. 2011

Dimissionsdato: 15 sep. 2011

Biokemi og molekylærbiologi, M.Sc., Inst. for Biokemi og Molekylærbiologi, Syddansk Universitet

Dimissionsdato: 15 mar. 2008

Biokemi og molekylærbiologi, B.Sc., Inst. for Biokemi og Molekylærbiologi, Syddansk Universitet

Dimissionsdato: 30 aug. 2005

## Ansættelse

**Postdoc**

Ingredient and Dairy Technology

Københavns Universitet

Frederiksberg C

20 nov. 2017 → nu

**Postdoc**

Children's Medical Research Institute

Australien

1 jul. 2012 → 31 jul. 2017

**Postdoc**

Inst. for Biokemi og Molekylærbiologi, Syddansk Universitet

Odense, Danmark

1 jul. 2011 → 30 jun. 2012

## Publikationer

**A Gently Processed Skim Milk-Derived Whey Protein Concentrate for Infant Formula: Effects on Gut Development and Immunity in Preterm Pigs**

Aasmul-Olsen, Karoline, Akıllıoğlu, H. G., Christiansen, Line Iadsatian, Engholm-Keller, Kasper, Brunse, Anders, Stefanova, Denitsa Vladimirova, Bjørnshave, A., Bechshøft, M. R., Skovgaard, K., Thymann, Thomas, Sangild, Per Torp, Lund, Marianne N. & Bering, Stine Brandt, 2024, I: *Molecular Nutrition and Food Research*. 68, 6, 2300458.

**Reactivity and mechanism of the reactions of 4-methylbenzoquinone with amino acid residues in  $\beta$ -lactoglobulin: A kinetic and product investigation**

Liu, Jingyuan, Engholm-Keller, Kasper, Poojary, Mahesha Manjunatha, Bevilacqua, Marta, Andersen, Mogens Larsen & Lund, Marianne N., 2024, I: *Food Chemistry*. 434, 10 s., 137473.

**Resolving fluorescence spectra of Maillard reaction products formed on bovine serum albumin using parallel factor analysis**

Risum, Anne Bech, Bevilacqua, Marta, Li, C., Engholm-Keller, Kasper, Poojary, Mahesha Manjunatha, Rinnan, Åsmund & Lund, Marianne N., 2024, I: Food Research International. 178, 113950.

**The impact of lager brewing yeasts on flavor stability of pilot-scale beer during storage**

Murmann, A. N., Bevilacqua, Marta, Danielsen, Bente Pia, Jansson, T., Engholm-Keller, Kasper, Poojary, Mahesha Manjunatha, Arneborg, Nils & Lund, Marianne N., 2024, I: European Food Research and Technology. 250, s. 715-725

**Covalent bonding of 4-methylcatechol to  $\beta$ -lactoglobulin results in the release of cysteine-4-methylcatechol adducts after in vitro digestion**

Waqar, K., Engholm-Keller, Kasper, Joehnke, M. S., Chatterton, Dereck Edward Winston, Poojary, Mahesha Manjunatha & Lund, Marianne N., 2022, I: Food Chemistry. 397, 9 s., 133775.

**Cysteine residues are responsible for the sulfurous off-flavor formed in heated whey protein solutions**

Li, C., Paulsen, P. A., Akilloğlu, G., Nielsen, S. B., Engholm-Keller, Kasper & Lund, Marianne N., 2022, I: Food Chemistry: Molecular Sciences. 5, 9 s., 100120.

**Detection of protein oxidation products by fluorescence spectroscopy and trilinear data decomposition: Proof of concept**

Bevilacqua, Marta, Engholm-Keller, Kasper, Risum, Anne Bech, Rinnan, Åsmund & Lund, Marianne N., 2022, I: Food Chemistry. 396, 9 s., 133732.

**Oxidation of Whey Proteins during Thermal Treatment Characterized by a Site-Specific LC-MS/MS-Based Proteomic Approach**

Li, C., Nielsen, S. B., Engholm-Keller, Kasper & Lund, Marianne N., 2022, I: Journal of Agricultural and Food Chemistry. 70, 14, s. 4391-4406

**Site-Specific Characterization of Heat-Induced Disulfide Rearrangement in Beta-Lactoglobulin by Liquid Chromatography-Mass Spectrometry**

Li, C., Engholm-Keller, Kasper & Lund, Marianne N., 2022, I: Journal of Agricultural and Food Chemistry. 70, 3, s. 847-856

**UHT treatment and storage of liquid infant formula affects protein digestion and release of bioactive peptides**

Ye, Y., Engholm-Keller, Kasper, Fang, Y., Nielsen, C. F., Jorda, A., Lund, Marianne N. & Chatterton, Dereck Edward Winston, 2022, I: Food & Function. 13, 1, s. 344-355

**TWIST1 and chromatin regulatory proteins interact to guide neural crest cell differentiation**

Fan, X., Pragathi Masamsetti, V., Sun, J. Q. J., Engholm-Keller, Kasper, Osteil, P., Studdert, J., Graham, M. E., Fossat, Nicolas Julien & Tam, P. P. L., 2021, I: eLife. 10, 33 s., e62873.

**Generation of Aggregates of  $\alpha$ -Lactalbumin by UV-B Light Exposure**

Zhao, Z., Engholm-Keller, Kasper, Poojary, Mahesha Manjunatha, Boelt, S. G., Rogowska-Wrzesinska, A., Skibsted, Leif Horsfelt, Davies, Michael J. & Lund, Marianne N., 2020, I: Journal of Agricultural and Food Chemistry. 68, 24, s. 6701-6714 14 s.

**SNAP-25 phosphorylation at Ser187 is not involved in  $Ca^{2+}$  or phorbol ester-dependent potentiation of synaptic release**

Ruiter, M., Houy, S., Engholm-Keller, Kasper, Graham, M. E. & Sørensen, Jakob Balslev, 2020, I: Molecular and Cellular Neuroscience. 102, 103452.

**A systems-level Characterization of the Differentiation of Human Embryonic Stem Cells into Mesenchymal Stem Cells**

Billing, A. M., Dib, S. S., Bhagwat, A. M., da Silva, I. T., Drummond, R. D., Hayat, S., Al-Mismar, R., Ben-Hamidane, H., Goswami, N., Engholm-Keller, Kasper, Larsen, M. R., Suhre, K., Rafii, A. & Graumann, J., 2019, I: Molecular & Cellular Proteomics. 18, 10, s. 1950-1966 17 s.

**The interaction of assembly protein AP180 and clathrin is inhibited by multi-site phospho-mimetics**

Moshkanbaryans, L., Chan, L., Engholm-Keller, Kasper, Wark, J. R., Robinson, P. J. & Graham, M. E., 2019, I: *Neurochemistry International*. 129, 5 s., 104474.

**The temporal profile of activity-dependent presynaptic phospho-signalling reveals long-lasting patterns of poststimulus regulation**

Engholm-Keller, Kasper, Waardenberg, A. J., Müller, J. A., Wark, J. R., Fernando, R. N., Arthur, J. W., Robinson, P. J., Dietrich, D., Schoch, S. & Graham, M. E., 2019, I: *PLOS Biology*. 17, 3, 46 s., e3000170.

**Affinity proteomics for interactome and phosphoproteome screening in synaptosomes**

Engholm-Keller, Kasper, Bache, N., Rao, S. R., Wark, J. R., Larsen, M. R., Robinson, P. J. & Graham, M. E., 2018, *Synaptosomes*. Murphy, K. M. (red.). Springer, s. 165–191 (Neuromethods, Bind 141).

**Improving the Phosphoproteome Coverage for Limited Sample Amounts Using TiO<sub>2</sub>-SIMAC-HILIC (TiSH) Phosphopeptide Enrichment and Fractionation**

Engholm-Keller, Kasper & Larsen, M. R., 2016, *Phospho-Proteomics: Methods and Protocols*. von Stechow, L. (red.). 2. udg. Humana Press, s. 161–177 (Methods in Molecular Biology, Bind 1355).