

## Jan Johannes Enghild

Professor, Ph.D. (Protein Chemistry).

Date and place of birth: 5th April 1956, Brønderslev, Denmark.

Position: Professor, Department of Molecular Biology and Genetics, Aarhus University.

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### Academic Qualifications

1987 M. Sc. (Protein chemistry), University of Aarhus.

1991 Ph.D. (Protein chemistry), DUKE University, NC, USA and Aarhus University, Denmark.

### Academic Appointments

1987-1989: Postdoc, Department of Pathology, Duke University, N.C. USA.

1989-1991: Assistant Medical Research Prof., Department of Pathology, DUKE University, N. C. USA.

1991- 2000: Assistant Professor, Department of Pathology, Duke University Medical Center, N. C. USA.

2001-2007: Associate professor, Aarhus University, Department of Molecular Biology, Denmark.

2007 - 2013: Professor MSO, Aarhus University, Department of Molecular Biology, Denmark.

2014 - : Professor, Aarhus University, Department of Molecular Biology, Denmark.

### Professional Memberships

Human Proteome Organisation (HUPO), The American Society for Biochemistry and Molecular Biology ASBMB), The Association for Research in Vision and Ophthalmology (ARVO), International Society For Eye Research (ISER), American Society for Biochemistry and Molecular Biology; Biochemical Society (UK); The Oxygen Society (USA); American Society for Mass Spectrometry, International Mass Spectrometry Society; Association of Biomolecular Resource Facilities.

### Leadership

1991-2000: Head of Laboratory for Proteolytic Regulation, DUKE University, NC, USA.

1991-2000: Director, Duke Comprehensive Cancer Center Macromolecular Facility, NC, USA

2000 - : Head of Laboratory for Proteome Analysis and Protein Characterization, Department of Molecular Biology and Genetics, Aarhus University, Denmark

2005 - : Member of Management board and Head of Protein Group of Center for Insoluble Protein Structures (inSPIN), Danish National Research Foundation, Denmark.

2005- : Project leader on grant from The Danish Agency for Science, Technology and Innovation.

2006- : Member of the Danish Proteome Society (DAPSOC) steering committee, Denmark.

2008- : Member of the Danish National Science Academy, member committee.

2010- : Project leader in the scientific alliance Novenia (funded by The Danish Agency for Science, Technology and Innovation).

2012- : Elected co-chairman for the Human Proteome Organisation (HUPO) ocular proteomics initiative.

### Publication statistics

Published a total of 297 articles in peer-reviewed Journals (PubMed), 13 reviews and chapters in books. In addition, my publication list contains 7 international patents.

Sum of the times cited: 17040

Sum of times cites without self-citations: 16275

h-index: 59

Data above are from ISI WEB of Knowledge, October – 2019

See also Google Scholar:

<https://scholar.google.com/citations?user=AX7N3D8AAAAJ&hl=en>

## Publications

### **Young rat microbiota extracts strongly inhibit fibrillation of $\alpha$ -synuclein and protect neuroblastoma cells and zebrafish against $\alpha$ -synuclein toxicity**

Shiraz, M. G., Nielsen, J., Widmann, J., Chung, K. H. K., Davis, T. P., Rasmussen, C., Scavenius, C., Enghild, J. J., Martin-Gallausiaux, C., Singh, Y., Javed, I. & Otzen, D. E., 25 Nov 2024, (E-pub ahead of print) In: *Molecules and cells*. p. 100161

### **Periostin Is a Disulfide-Bonded Homodimer and Forms a Complex with Fibronectin in the Human Skin**

Rusbjerg-Weberskov, C. E., Scavenius, C., Enghild, J. J. & Nielsen, N. S., Oct 2024, In: *Biochemistry*. 63, 20, p. 2658-2669 12 p.

### **Mapping the Periostin splice isoforms in atopic dermatitis and an in vitro asthma model - A multi-platform analysis using mass spectrometry and RT-qPCR**

Rusbjerg-Weberskov, C. E., Hollensen, A. K., Damgaard, C. K., Løvendorf, M. B., Skov, L., Enghild, J. J. & Nielsen, N. S., 1 Sept 2024, In: *B B A - Proteins and Proteomics*. 1872, 5, p. 141031 141031.

### **Chemical modification of hyaluronan oligosaccharides differentially modulates hyaluronan-hyaladherin interactions**

Dodd, R. J., Blundell, C. D., Sattelle, B. M., Enghild, J. J., Milner, C. M. & Day, A. J., Sept 2024, In: *The Journal of Biological Chemistry*. 300, 9, 107668.

### **Proteolytic cleavage of the TGF $\beta$ co-receptor CD109 changes its conformation, resulting in protease inhibition via activation of its thiol ester, and dissociation from the cell membrane**

Jensen, K. T., Nielsen, N. S., Viana Almeida, A., Thøgersen, I. B., Enghild, J. J. & Harwood, S. L., Jul 2024, In: *FEBS journal*. 291, 14, p. 3169-3190 22 p.

### **Targeted Analysis of the Size Distribution of Heavy Chain-Modified Hyaluronan with Solid-State Nanopores**

Erxleben, D. A., Dodd, R. J., Day, A. J., Green, D. E., DeAngelis, P. L., Poddar, S., Enghild, J. J., Huebner, J. L., Kraus, V. B., Watkins, A. R., Reesink, H. L., Rahbar, E. & Hall, A. R., 30 Jan 2024, In: *Analytical Chemistry*. 96, 4, p. 1606-1613 8 p.

### **Development of a top-down MS assay for specific identification of human periostin isoforms**

Rusbjerg-Weberskov, C. E., Gant, M. S., Chamot-Rooke, J., Nielsen, N. S. & Enghild, J. J., 2024, In: *Frontiers in Molecular Biosciences*. 11, 12 p., 1399225.

### **Periostin C-Terminal Is Intrinsically Disordered and Interacts with 143 Proteins in an In Vitro Epidermal Model of Atopic Dermatitis**

Rusbjerg-Weberskov, C. E., Johansen, M. L., Nowak, J. S., Otzen, D., Pedersen, J. S., Enghild, J. J. & Nielsen, N. S., Sept 2023, In: *Biochemistry*. 62, 19, p. 2803-2815 13 p.

### **Citrullination of C1-inhibitor as a mechanism of impaired complement regulation in rheumatoid arthritis**

Martin, M., Nilsson, S. C., Eikrem, D., Fromell, K., Scavenius, C., Vogt, L. M., Bielecka, E., Potempa, J., Enghild, J. J., Nilsson, B., Ekdahl, K. N., Kapetanovic, M. C. & Blom, A. M., Jun 2023, In: *Frontiers in Immunology*. 14, 14 p., 1203506.

### **Structural remodelling of the carbon-phosphorus lyase machinery by a dual ABC ATPase**

Amstrup, S. K., Ong, S. C., Sofos, N., Karlsen, J. L., Skjerning, R. B., Boesen, T., Enghild, J. J., Hove-Jensen, B. & Brodersen, D. E., Feb 2023, In: *Nature Communications*. 14, 1001.

### **A unique network of attack, defence and competence on the outer membrane of the periodontitis pathogen *Tannerella forsythia***

Książek, M., Goulas, T., Mizgalska, D., Rodríguez-Banqueri, A., Eckhard, U., Veillard, F., Waligórska, I., Benedyk-Machaczka, M., Sochaj-Gregorczyk, A. M., Madej, M., Thøgersen, I. B., Enghild, J. J., Cuppari, A., Arolas, J. L., de Diego, I., López-Pelegrín, M., García-Ferrer, I., Guevara, T., Dive, V. & Zani, M. L. & 3 others, Moreau, T., Potempa, J. & Gomis-Rüth, F. X., Jan 2023, In: *Chemical Science*. 14, 4, p. 869-888

### **Characterization of a novel cold-adapted intracellular serine protease from the extremophile *Planococcus halocryophilus* Or1**

Rasmussen, C. B., Scavenius, C., Thøgersen, I. B., Harwood, S. L., Larsen, Ø., Bjerga, G. E. K., Stougaard, P., Enghild, J. J. & Thøgersen, M. S., 2023, In: *Frontiers in Microbiology*. 14, 15 p., 1121857.

**A top-down approach to uncover the hidden ligandome of low-density lipoprotein receptor-related protein 1 in cartilage**  
Yamamoto, K., Scavenius, C., Meschis, M. M., Gremida, A. M. E., Mogensen, E. H., Thøgersen, I. B., Bonelli, S., Scilabra, S. D., Jensen, A., Santamaria, S., Ahnström, J., Bou-Gharios, G., Enghild, J. J. & Nagase, H., Sept 2022, In: Matrix Biology. 112, p. 190-218 29 p.

**Differential RNA aptamer affinity profiling on plasma as a potential diagnostic tool for bladder cancer**  
Fjelstrup, S., Dupont, D. M., Bus, C., Enghild, J. J., Jensen, J. B., Birkenkamp-Demtröder, K., Dyrskjøt, L. & Kjems, J., Sept 2022, In: NAR cancer. 4, 3, zcac025.

**The conformational change of the protease inhibitor  $\alpha_2$ -macroglobulin is triggered by the retraction of the cleaved bait region from a central channel**  
Harwood, S. L., Diep, K., Nielsen, N. S., Jensen, K. T. & Enghild, J. J., Aug 2022, In: Journal of Biological Chemistry. 298, 8, 11 p., 102230.

**Human Occupation of the North American Colorado Plateau ~37,000 Years Ago**  
Rowe, T. B., Stafford, T. W., Fisher, D. C., Enghild, J. J., Quigg, J. M., Ketcham, R. A., Sagebiel, J. C., Hanna, R. & Colbert, M. W., Jul 2022, In: Frontiers in Ecology and Evolution. 10, 903795.

**The low-density lipoprotein receptor-related protein 1 (LRP1) interactome in the human cornea**  
Mogensen, E. H., Poulsen, E. T., Thøgersen, I. B., Yamamoto, K., Brüel, A. & Enghild, J. J., Jun 2022, In: Experimental Eye Research. 219, 109081.

**Cryo-EM structures of human A2ML1 elucidate the protease-inhibitory mechanism of the A2M family**  
Nielsen, N. S., Zarantonello, A., Harwood, S. L., Jensen, K. T., Kjøge, K., Thøgersen, I. B., Schausser, L., Karlsen, J. L., Andersen, G. R. & Enghild, J. J., May 2022, In: Nature Communications. 13, 1, 15 p., 3033.

**A Protein Corona Modulates Interactions of  $\alpha$ -Synuclein with Nanoparticles and Alters the Rates of the Microscopic Steps of Amyloid Formation**  
Mohammad-Beigi, H., Zanganeh, M., Scavenius, C., Eskandari, H., Farzadfard, A., Shojaosadati, S. A., Enghild, J. J., Otzen, D. E., Buell, A. K. & Sutherland, D. S., Jan 2022, In: ACS Nano. 16, 1, p. 1102-1118 17 p.

**Identification of polyphenol oxidases in potato tuber (*Solanum tuberosum*) and purification and characterization of the major polyphenol oxidases**  
Bøjer Rasmussen, C., Enghild, J. J. & Scavenius, C., Dec 2021, In: Food Chemistry. 365, 130454.

**The last meal of Tollund Man: New analyses of his gut content**  
Nielsen, N. H., Henriksen, P. S., Mortensen, M. F., Enevold, R., Mortensen, M. N., Scavenius, C. & Enghild, J. J., Oct 2021, In: Antiquity. 95, 383, p. 1195-1212 18 p.

**Development of selective protease inhibitors via engineering of the bait region of human  $\alpha_2$ -macroglobulin**  
Harwood, S. L., Nielsen, N. S., Diep, K., Jensen, K. T., Nielsen, P. K., Yamamoto, K. & Enghild, J. J., Jul 2021, In: The Journal of Biological Chemistry. 297, 1, 12 p., 100879.

**Mutation-induced dimerization of transforming growth factor- $\beta$ -induced protein may drive protein aggregation in granular corneal dystrophy**  
Nielsen, N. S., Gadeberg, T. A. F., Poulsen, E. T., Harwood, S. L., Weberskov, C. E., Pedersen, J. S., Andersen, G. R. & Enghild, J. J., Jul 2021, In: The Journal of Biological Chemistry. 297, 1, 14 p., 100858.

**An Integrative Structural Biology Analysis of Von Willebrand Factor Binding and Processing by ADAMTS-13 in Solution**  
Del Amo-Maestro, L., Sagar, A., Pompach, P., Goulas, T., Scavenius, C., Ferrero, D. S., Castrillo-Briceño, M., Taulés, M., Enghild, J. J., Bernadó, P. & Gomis-Rüth, F. X., 25 Jun 2021, In: Journal of Molecular Biology. 433, 13, 166954.

**Structural Investigations of Human A2M Identify a Hollow Native Conformation That Underlies Its Distinctive Protease-Trapping Mechanism**

Harwood, S. L., Lyngsø, J., Zarantonello, A., Kjøge, K., Nielsen, P. K., Andersen, G. R., Pedersen, J. S. & Enghild, J. J., May 2021, In: *Molecular and Cellular Proteomics*. 20, 17 p., 100090.

**PorZ, an Essential Component of the Type IX Secretion System of *Porphyromonas gingivalis*, Delivers Anionic Lipopolysaccharide to the PorU Sortase for Transpeptidase Processing of T9SS Cargo Proteins**

Madej, M., Nowakowska, Z., Ksiazek, M., Lasica, A. M., Mizgalska, D., Nowak, M., Jacula, A., Bzowska, M., Scavenius, C., Enghild, J. J., Aduse-Opoku, J., Curtis, M. A., Gomis-Rüth, F. X. & Potempa, J., 23 Feb 2021, In: *mBio*. 12, 1, 14 p., e02262-20.

**Superoxide dismutase 3 is expressed in bone tissue and required for normal bone homeostasis and mineralization**

Matthiesen, C. L., Hu, L., Torslev, A. S., Poulsen, E. T., Larsen, U. G., Kjaer-Sorensen, K., Thomsen, J. S., Brüel, A., Enghild, J. J., Oxvig, C. & Petersen, S. V., Feb 2021, In: *Free Radical Biology and Medicine*. 164, p. 399-409 11 p.

**ITIH4 acts as a protease inhibitor by a novel inhibitory mechanism**

Pihl, R., Jensen, R. K., Poulsen, E. C., Jensen, L., Hansen, A. G., Thøgersen, I. B., Dobó, J., Gál, P., Andersen, G. R., Enghild, J. J. & Thiel, S., Jan 2021, In: *Science Advances*. 7, 2, 17 p., 7381.

**Latency, thermal stability, and identification of an inhibitory compound of mirolysin, a secretory protease of the human periodontopathogen *Tannerella forsythia***

Zak, K. M., Bostock, M. J., Waligorska, I., Thøgersen, I. B., Enghild, J. J., Popowicz, G. M., Grudnik, P., Potempa, J. & Ksiazek, M., 2021, In: *Journal of Enzyme Inhibition and Medicinal Chemistry*. 36, 1, p. 1267-1281 15 p.

**$\alpha_2$ -macroglobulin-like protein 1 can conjugate and inhibit proteases through their hydroxyl groups, because of an enhanced reactivity of its thiol ester**

Harwood, S. L., Nielsen, N. S., Jensen, K. T., Nielsen, P. K., Thøgersen, I. B. & Enghild, J. J., 4 Dec 2020, In: *Journal of Biological Chemistry*. 295, 49, p. 16732-16742 11 p.

**FAM20C phosphorylation of the RGDSVYGLR motif in osteopontin inhibits interaction with the  $\alpha v\beta 3$  integrin**

Schytte, G. N., Christensen, B., Bregenov, I., Kjøge, K., Scavenius, C., Petersen, S. V., Enghild, J. J. & Sørensen, E. S., Dec 2020, In: *Journal of Cellular Biochemistry*. 121, 12, p. 4809-4818 10 p.

**SARS-CoV-2 evades immune detection in alveolar macrophages**

Dalskov, L., Møhlenberg, M., Thyrsted, J., Blay-Cadanet, J., Poulsen, E. T., Folkersen, B. H., Skaarup, S. H., Olganier, D., Reinert, L., Enghild, J. J., Hoffmann, H. J., Holm, C. K. & Hartmann, R., Dec 2020, In: *EMBO Reports*. 21, 12, e51252.

**Substituting the Thiol Ester of Human A2M or C3 with a Disulfide Produces Native Proteins with Altered Proteolysis-Induced Conformational Changes**

Harwood, S. L., Nielsen, N. S., Pedersen, H., Kjøge, K., Nielsen, P. K., Andersen, G. R. & Enghild, J. J., Dec 2020, In: *Biochemistry*. 59, 51, p. 4799-4809 11 p.

**Protein Analysis of the TGFBI<sup>R124H</sup> Mouse Model Gives Insight into Phenotype Development of Granular Corneal Dystrophy**

Lukassen, M. V., Poulsen, E. T., Donaghy, J., Mogensen, E. H., Christie, K. A., Roshanravan, H., DeDioniso, L., Nesbit, M. A., Moore, T. & Enghild, J. J., Nov 2020, In: *Proteomics - Clinical Applications*. 14, 6, 1900072.

**Modulation of Small RNA Signatures in Schwann-Cell-Derived Extracellular Vesicles by the p75 Neurotrophin Receptor and Sortilin**

Gonçalves, N. P., Yan, Y., Ulrichsen, M., Venø, M. T., Poulsen, E. T., Enghild, J. J., Kjems, J. & Vægter, C. B., Oct 2020, In: *Biomedicine*. 8, 11, p. 1-24 24 p., 450.

**Protein Composition of the Subretinal Fluid Suggests Selective Diffusion of Vitreous Proteins in Retinal Detachment**

Poulsen, E. T., Lumi, X., Hansen, A. K., Enghild, J. J. & Petrovski, G., Oct 2020, In: *Translational vision science & technology*. 9, 11, p. 16 13 p., 16.

### **Transport of a peptide from bovine $\alpha_{s1}$ -casein across models of the intestinal and blood–brain barriers**

Christensen, B., Toth, A. E., Nielsen, S. S. E., Scavenius, C., Petersen, S. V., Enghild, J. J., Rasmussen, J. T., Nielsen, M. S. & Sørensen, E. S., Oct 2020, In: *Nutrients*. 12, 10, 14 p., 3157.

### **Structural and functional insights into oligopeptide acquisition by the RagAB transporter from *Porphyromonas gingivalis***

Madej, M., White, J. B. R., Nowakowska, Z., Rawson, S., Scavenius, C., Enghild, J. J., Bereta, G. P., Pothula, K., Kleinekathoefer, U., Basle, A., Ranson, N. A., Potempa, J. & van den Berg, B., Aug 2020, In: *Nature Microbiology*. 5, 8, p. 1016-1025 10 p.

### **Tracing the In Vivo Fate of Nanoparticles with a "Non-Self" Biological Identity**

Mohammad-Beigi, H., Scavenius, C., Jensen, P. B., Kjaer-Sorensen, K., Oxvig, C., Boesen, T., Enghild, J. J., Sutherland, D. S. & Hayashi, Y., Aug 2020, In: *ACS Nano*. 14, 8, p. 10666-10679 14 p.

### **Kallikrein-Related Peptidase 14 Activates Zymogens of Membrane Type Matrix Metalloproteinases (MT-MMPs)-A CleavEx Based Analysis**

Falkowski, K., Bielecka, E., Thøgersen, I. B., Bocheńska, O., Płaza, K., Kalińska, M., Szaśiadek, L., Magoch, M., Pęczak, A., Wiśniewska, M., Gruba, N., Wysocka, M., Wojtysiak, A., Brzezińska-Bodal, M., Sychowska, K., Pejkovska, A., Rehders, M., Butler, G., Overall, C. M. & Brix, K. & 6 others, Dubin, G., Lesner, A., Kozik, A., Enghild, J. J., Potempa, J. & Kantyka, T., Jun 2020, In: *International Journal of Molecular Sciences*. 21, 12, p. 1-22 22 p., 4383.

### **Unfolding and partial refolding of a cellulase from the SDS-denatured state: From $\beta$ -sheet to $\alpha$ -helix and back**

Rasmussen, H. Ø., Enghild, J. J., Otzen, D. E. & Pedersen, J. S., Jan 2020, In: *B B A - General Subjects*. 1864, 1, p. 129434 1-12 12 p., 129434.

### **A novel approach for production of an active N-terminally truncated Ulp1 (SUMO protease 1) catalytic domain from *Escherichia coli* inclusion bodies**

Linova, M. Y., Risør, M. W., Jørgensen, S. E., Mansour, Z., Kaya, J., Sigurdarson, J. J., Enghild, J. J. & Karring, H., 2020, In: *Protein Expression and Purification*. 166, 8 p., 105507.

### **Apolipoprotein E Triggers Complement Activation in Joint Synovial Fluid of Rheumatoid Arthritis Patients by Binding C1q**

Vogt, L. M., Kwasniewicz, E., Talens, S., Scavenius, C., Bielecka, E., Ekdahl, K. N., Enghild, J. J., Mörgelin, M., Saxne, T., Potempa, J. & Blom, A. M., 2020, In: *Journal of Immunology*. 204, 10, p. 2779-2790 12 p.

### **FAM20C-Mediated Phosphorylation of MEPE and Its Acidic Serine- and Aspartate-Rich Motif**

Christensen, B., Schytte, G. N., Scavenius, C., Enghild, J. J., McKee, M. D. & Sørensen, E. S., 2020, In: *JBMR Plus*. 4, 8, 8 p., e10378.

### **Inter- $\alpha$ -inhibitor heavy chain-1 has an integrin-like 3D structure mediating immune regulatory activities and matrix stabilization during ovulation**

Briggs, D. C., Langford-Smith, A. W. W., Birchenough, H. L., Jowitt, T. A., Kielty, C. M., Enghild, J. J., Baldock, C., Milner, C. M. & Day, A. J., 2020, In: *The Journal of Biological Chemistry*. 295, 16, p. 5278-5291 14 p.

### **Mapping and identification of soft corona proteins at nanoparticles and their impact on cellular association**

Mohammad-Beigi, H., Hayashi, Y., Zeuthen, C. M., Eskandari, H., Scavenius, C., Juul-Madsen, K., Vorup-Jensen, T., Enghild, J. J. & Sutherland, D. S., 2020, In: *Nature Communications*. 11, 1, 16 p., 4535.

### **Plasmin inhibition by bacterial serpin: Implications in gum disease**

Sochaj-Gregorczyk, A., Książek, M., Waligorska, I., Straczek, A., Benedyk, M., Mizgalska, D., Thøgersen, I. B., Enghild, J. J. & Potempa, J., 2020, In: *FASEB journal : official publication of the Federation of American Societies for Experimental Biology*. 34, 1, p. 619-630 12 p.

### **STEEP mediates STING ER exit and activation of signaling**

Zhang, B. C., Nandakumar, R., Reinert, L. S., Huang, J., Laustsen, A., Gao, Z. L., Sun, C. L., Jensen, S. B., Troldborg, A., Assil, S., Berthelsen, M. F., Scavenius, C., Zhang, Y., Windross, S. J., Olganier, D., Prabakaran, T., Bodda, C., Narita, R., Cai, Y. & Zhang, C. G. & 11 others, Stenmark, H., Doucet, C. M., Noda, T., Guo, Z., Goldbach-Mansky, R., Hartmann, R., Chen, Z. J., Enghild, J. J., Bak, R. O., Thomsen, M. K. & Paludan, S. R., 2020, In: *Nature Immunology*. 21, 8, p. 868-879 12 p.

### **The interactome of stabilized $\alpha$ -synuclein oligomers and neuronal proteins**

van Diggelen, F., Frank, S. A., Somavarapu, A. K., Scavenius, C., Apetri, M. M., Nielsen, J., Tepper, A. W. J. W., Enghild, J. J. & Otzen, D. E., 2020, In: FEBS journal. 287, 10, p. 2037-2054 18 p.

### **Proteolytic processing and activation of gingipain zymogens secreted by T9SS of *Porphyromonas gingivalis***

Veillard, F., Sztukowska, M., Nowakowska, Z., Mizgalska, D., Thøgersen, I. B., Enghild, J. J., Bogoyo, M., Potempa, B., Nguyen, K.-A. & Potempa, J., Nov 2019, In: Biochimie. 166, p. 161-172 12 p.

### **Matrix-degrading protease ADAMTS-5 cleaves inter- $\alpha$ -inhibitor and releases active heavy chain 2 in synovial fluids from arthritic patients**

Scavenius, C., Poulsen, E. C., Thøgersen, I. B., Roebuck, M., Frostick, S., Bou-Gharios, G., Yamamoto, K., Deleuran, B. & Enghild, J. J., Oct 2019, In: Journal of Biological Chemistry. 294, 42, p. 15495-15504 10 p.

### **Sex dictates the constitutive expression of hepatic cytochrome P450 isoforms in Göttingen minipigs**

Rasmussen, M. K., Scavenius, C., Gerbal-Chaloin, S. & Enghild, J., Oct 2019, In: Toxicology Letters. 314, p. 181-186 6 p.

### **The serine protease HtrA1 cleaves misfolded transforming growth factor $\beta$ -induced protein (TGFB1p) and induces amyloid formation**

Poulsen, E. T., Nielsen, N. S., Scavenius, C., Mogensen, E. H., Risør, M. W., Runager, K., Lukassen, M. V., Rasmussen, C. B., Christiansen, G., Richner, M., Vorum, H. & Enghild, J. J., Aug 2019, In: Journal of Biological Chemistry. 294, 31, p. 11817-11828 12 p.

### **Sortilin gates neurotensin and BDNF signaling to control peripheral neuropathic pain**

Richner, M., Pallesen, L. T., Ulrichsen, M., Poulsen, E. T., Holm, T. H., Login, H., Castonguay, A., Lorenzo, L.-E., Gonçalves, N. P., Andersen, O. M., Lykke-Hartmann, K., Enghild, J. J., Rønn, L. C. B., Malik, I. J., De Koninck, Y., Bjerrum, O. J., Vægter, C. B. & Nykjær, A., 19 Jun 2019, In: Science Advances. 5, 6, 13 p., eaav9946.

### ***Staphylococcus saccharolyticus* Isolated From Blood Cultures and Prosthetic Joint Infections Exhibits Excessive Genome Decay**

Bruggemann, H., Poehlein, A., Brzuszkiewicz, E., Scavenius, C., Enghild, J. J., Al-Zeer, M. A., Brinkmann, V., Jensen, A. & Soderquist, B., 12 Mar 2019, In: Frontiers in Microbiology. 10, 14 p., 478.

### **Conservation of the Amyloid Interactome Across Diverse Fibrillar Structures**

Juhl, D. W., Risør, M. W., Scavenius, C., Rasmussen, C. B., Otzen, D., Nielsen, N. C. & Enghild, J. J., 7 Mar 2019, In: Scientific Reports. 9, 1, 14 p., 3863.

### **Imperfect repeats in the functional amyloid protein FapC reduce the tendency to fragment during fibrillation**

Rasmussen, C. B., Christiansen, G., Vad, B. S., Lynggaard, C., Enghild, J. J., Andreasen, M. & Otzen, D., 1 Mar 2019, In: Protein Science. 28, 3, p. 633-642 10 p.

### **Frequently used bioinformatics tools overestimate the damaging effect of allelic variants**

Andersen, L. L., Terczyńska-Dyła, E., Mørk, N., Scavenius, C., Enghild, J. J., Höning, K., Hornung, V., Christiansen, M., Mogensen, T. H. & Hartmann, R., Jan 2019, In: Genes and Immunity. 20, 1, p. 10-22 13 p.

### **Making silent bones speak: The analysis of orphaned osseous tools illustrated with Mesolithic stray finds**

Ivanovaite, L., Bjørnevad, M., Philippsen, B., Hoggard, C. S., Enghild, J. J., Scavenius, C., Vasiliauskaite, A., Dručkuvienė, G., Jensen, P., Maring, R., Dodd, J. A., Serwatka, K. & Riede, F., Dec 2018, In: Archaeologia Baltica. 25, p. 53-70 18 p.

### **A Screening Method for the Isolation of Bacteria Capable of Degrading Toxic Steroidal Glycoalkaloids Present in Potato**

Hennessy, R. C., Jørgensen, N. O. G., Scavenius, C., Enghild, J. J., Greve-Poulsen, M., Sørensen, O. B. & Stougaard, P., 5 Nov 2018, In: Frontiers in Microbiology. 9, 7 p., 2648.

### **APD-Containing Cyclolipodepsipeptides Target Mitochondrial Function in Hypoxic Cancer Cells**

Jacobsen, K. M., Villadsen, N. L., Tørring, T., Nielsen, C. B., Salomón, T., Nielsen, M. M., Tsakos, M., Sibbersen, C., Scavenius, C., Nielsen, R., Christensen, E. I., Guerra, P. F., Bross, P., Pedersen, J. S., Enghild, J. J., Johannsen, M.,

Frøkiær, J., Overgaard, J., Horsman, M. R. & Busk, M. & 1 others, Poulsen, T. B., Nov 2018, In: Cell Chemical Biology. 25, 11, p. 1337-1349.e12 13 p.

**Post-translational modifications of ApoE: Modulation of complement in synovial fluid of rheumatoid arthritis patients?**

Vogt, L., Kwasniewicz, E., Talens, S., Scavenius, C., Enghild, J., Saxne, T. & Blom, A., Oct 2018, In: Molecular Immunology. 102, p. 225-225 1 p.

**Small-Molecule Probes for Affinity-Guided Introduction of Biocompatible Handles on Metal-Binding Proteins**

Mortensen, M. R., Skovsgaard, M. B., Okholm, A. H., Scavenius, C., Dupont, D. M., Rosen, C. B., Enghild, J. J., Kjems, J. & Gothelf, K. V., 19 Sept 2018, In: Bioconjugate Chemistry. 29, 9, p. 3016–3025 10 p.

**Structural characterization of corneal dystrophy-related TGFBIp mutants**

Nielsen, N. S., Ammitzbøll, T. A., Thøgersen, I., Poulsen, E. T. & Enghild, J. J., Jul 2018, In: Investigative Ophthalmology & Visual Science. 59, 9, E-Abstract 2254.

**A Novel Biological Role for Peptidyl-Arginine Deiminases: Citrullination of Cathelicidin LL-37 Controls the Immunostimulatory Potential of Cell-Free DNA**

Wong, A., Bryzek, D., Dobosz, E., Scavenius, C., Svoboda, P., Rapala-Kozik, M., Lesner, A., Frydrych, I., Enghild, J., Mydel, P., Pohl, J., Thompson, P. R., Potempa, J. & Koziel, J., 1 Apr 2018, In: Journal of Immunology. 200, 7, p. 2327-2340 14 p.

**Proteomic profiling of TGFBI-null mouse corneas reveals only minor changes in matrix composition supportive of TGFBI knockdown as therapy against TGFBI-linked corneal dystrophies**

Poulsen, E. T., Runager, K., Nielsen, N. S., Lukassen, M. V., Thomsen, K., Snider, P., Simmons, O., Vorum, H., Conway, S. J. & Enghild, J. J., Jan 2018, In: FEBS journal. 285, 1, p. 101-114 14 p.

**$\alpha$ -synucleins from animal species show low fibrillation propensities and weak oligomer membrane disruption**

Sahin, C., Kjær, L., Christensen, M. S., Nedergaard Pedersen, J., Christiansen, G., Pérez, A.-M. W., Møller, I. M., Enghild, J., Pedersen, J. S., Larsen, K. & Otzen, D. E., 2018, In: Biochemistry. 57, 34, p. 5145-5158 14 p.

**Mutation-Induced Deamidation of Corneal Dystrophy-Related Transforming Growth Factor  $\beta$ -Induced Protein**

Nielsen, N. S., Juhl, D. W., Poulsen, E. T., Lukassen, M. V., Poulsen, E. C., Risør, M. W., Scavenius, C. & Enghild, J. J., 28 Nov 2017, In: Biochemistry. 56, 49, p. 6470–6480 11 p.

**Structural and Functional Implications of Human Transforming Growth Factor  $\beta$ -Induced Protein, TGFBIp, in Corneal Dystrophies**

García-Castellanos, R., Nielsen, N. S., Runager, K., Thøgersen, I. B., Lukassen, M. V., Poulsen, E. T., Goulas, T., Enghild, J. J. & Gomis-Rüth, F. X., Nov 2017, In: Structure. 25, 11, p. 1740-1750.e2 11 p.

**Correction to: How glycosaminoglycans promote fibrillation of salmon calcitonin**

Malmos, K. G., Bjerring, M., Jessen, C. M., Nielsen, E. H. T., Poulsen, E. T., Christiansen, G., Vosegaard, T., Skrydstrup, T., Enghild, J. J., Pedersen, J. S. & Otzen, D. E., 22 Sept 2017, In: Journal of Biological Chemistry. 292, 38, p. 15992

**Analysis of Factor D Isoforms in Malpuech-Michels-Mingarelli-Carnevale Patients Highlights the Role of MASP-3 as a Maturase in the Alternative Pathway of Complement**

Pihl, R., Jensen, L., Hansen, A. G., Thøgersen, I. B., Andres, S., Dagnæs-Hansen, F., Oexle, K., Enghild, J. J. & Thiel, S., 15 Sept 2017, In: Journal of Immunology. 199, 6, p. 2158-2170 13 p.

**Characterisation of protein families in spider digestive fluids and their role in extra-oral digestion**

Walter, A., Bechsgaard, J., Scavenius, C., Dyrland, T. S., Sanggaard, K. W., Enghild, J. J. & Bilde, T., 10 Aug 2017, In: BMC Genomics. 18, 13 p., 600.

**Critical Influence of Cosolutes and Surfaces on the Assembly of Serpin-Derived Amyloid Fibrils**

Risør, M. W., Juhl, D. W., Bjerring, M., Mathiesen, J., Enghild, J. J., Nielsen, N. C. & Otzen, D. E., 8 Aug 2017, In: Biophysical Journal. 113, 3, p. 580-596 17 p.

**Activation of Complement by Pigment Epithelium-Derived Factor in Rheumatoid Arthritis**

Vogt, L. M., Talens, S., Kwasniewicz, E., Scavenius, C., Struglics, A., Enghild, J. J., Saxne, T. & Blom, A. M., 1 Aug 2017, In: *Journal of Immunology*. 199, 3, p. 1113-1121 9 p.

**Transcriptome Analysis of the Response of Burmese Python to Digestion**

Duan, J., Sanggaard, K. W., Schauser, L., Lauridsen, S. E., Enghild, J. J., Schierup, M. H. & Wang, T., 13 Jul 2017, In: *GigaScience*. 6, 8, p. 1-51 51 p., gix057.

**Female *versus* male biological identities of nanoparticles determine the interaction with immune cells in fish**

Hayashi, Y., Miclaus, T., Murugadoss, S., Takamiya, M., Scavenius, C., Kjær-Sørensen, K., Enghild, J. J., Strähle, U., Oxvig, C., Weiss, C. & Sutherland, D., 3 Mar 2017, In: *Environmental Science: Nano*. 4, 4, p. 895-906 12 p.

**The Serum Amyloid P Component (SAP) Interactome in Human Plasma Containing Physiological Calcium Levels**

Poulsen, E. T., Pedersen, K. W., Marzeda, A. M. & Enghild, J. J., 14 Feb 2017, In: *Biochemistry*. 56, 6, p. 896-902 7 p.

**An Aberrant Phosphorylation of Amyloid Precursor Protein Tyrosine Regulates Its Trafficking and the Binding to the Clathrin Endocytic Complex in Neural Stem Cells of Alzheimer's Disease Patients**

Poulsen, E. T., Iannuzzi, F., Rasmussen, H. F., Maier, T. J., Enghild, J. J., Jørgensen, A. L. & Matrone, C., 2017, In: *Frontiers in Molecular Neuroscience*. 10, p. 59 59.

**"Ant-egg" cataract revisited**

Clemmensen, K., Enghild, J. J., Ivarsen, A., Riise, R., Vorum, H. & Heegaard, S., 2017, In: *Graefes Archive for Clinical and Experimental Ophthalmology*. 255, 1, p. 119-125 7 p.

**Human lysozyme peptidase resistance is perturbed by the anionic glycolipid biosurfactant rhamnolipid produced by the opportunistic pathogen *Pseudomonas aeruginosa***

Andersen, K. K., Vad, B. S., Scavenius, C., Enghild, J. J. & Otzen, D. E., 2017, In: *Biochemistry*. 56, 1, p. 260-270 11 p.

**Mirolysin, a LysargiNase from *Tannerella forsythia*, proteolytically inactivates the human cathelicidin, LL-37**

Koneru, L., Ksiazek, M., Waligorska, I., Straczek, A., Lukasik, M., Madej, M., Thøgersen, I. B., Enghild, J. J. & Potempa, J., 2017, In: *Biological Chemistry*. 398, 3, p. 395-409 15 p.

**The reactive center loop insertion in  $\alpha$ -1-antitrypsin captured by accelerated molecular dynamics simulation**

Andersen, O. J., Risør, M. W., Poulsen, E. C., Nielsen, N. C., Miao, Y., Enghild, J. J. & Schiøtt, B., 2017, In: *Biochemistry*. 56, 4, p. 634-646 13 p.

**Structural and functional probing of PorZ, an essential bacterial surface component of the type-IX secretion system of human oral-microbiomic *Porphyromonas gingivalis***

Lasica, A. M., Goulas, T., Mizgalska, D., Zhou, X., de Diego, I., Ksiazek, M., Madej, M., Guo, Y., Guevara, T., Nowak, M., Potempa, B., Goel, A., Sztukowska, M., Prabhakar, A. T., Bzowska, M., Widziolek, M., Thøgersen, I. B., Enghild, J. J., Simonian, M. & Kulczyk, A. W. & 3 others, Nguyen, K.-A., Potempa, J. & Gomis-Rüth, F. X., 24 Nov 2016, In: *Scientific Reports*. 6, 22 p., 37708.

**Activation of complement by pigment epithelium derived protein in synovial fluid of rheumatoid arthritis patients**

Vogt, L. M., Talens, S., Scavenius, C., Enghild, J. J., Saxne, T. & Blom, A. M., Oct 2016, In: *Immunobiology*. 221, 10, p. 1157-1157 1 p.

**The Disulfide Bond Pattern of Transforming Growth Factor Beta-Induced protein**

Lukassen, M. V., Scavenius, C., Thøgersen, I. B. & Enghild, J. J., 8 Sept 2016, In: *Biochemistry*. 55, 39, p. 5610-5621 12 p.

**The disulphide bond pattern of TGFBIp**

Lukassen, M., Scavenius, C., Thøgersen, I. & Enghild, J. J., Sept 2016, In: *Investigative Ophthalmology & Visual Science*. 57, 12, E-abstract 4911.

### **How Glycosaminoglycans Promote Fibrillation of Salmon Calcitonin**

Malmos, K. G., Bjerring, M., Jessen, C. M., Nielsen, E. H. T., Poulsen, E. T., Christiansen, G., Vosegaard, T., Skrydstrup, T., Enghild, J. J., Pedersen, J. S. & Otzen, D. E., 5 Aug 2016, In: *Journal of Biological Chemistry*. 291, 32, p. 16849-16862 31 p.

### **Extracellular superoxide dismutase is present in secretory vesicles of human neutrophils and released upon stimulation**

Iversen, M. B., Gottfredsen, R. H., Larsen, U. G., Enghild, J. J., Praetorius, J., Borregaard, N. & Petersen, S. V., Aug 2016, In: *Free Radical Biology & Medicine*. 97, p. 478-88 11 p.

### **SILAC-MS Based Characterization of LPS and Resveratrol Induced Changes in Adipocyte Proteomics - Resveratrol as Ameliorating Factor on LPS Induced Changes**

Nøhr, M. K., Kroager, T. P., Sanggaard, K. W., Knudsen, A. D., Stensballe, A., Enghild, J. J., Larsen, J. Ø., Richelsen, B. & Pedersen, S. B., Jul 2016, In: *PLOS ONE*. 11, 7, e0159747.

### **Antagonism between *Staphylococcus epidermidis* and *Propionibacterium acnes* and its genomic basis**

Christensen, G. J. M., Scholz, C. F. P., Enghild, J., Rohde, H., Kilian, M., Thürmer, A., Brzuszkiewicz, E., Lomholt, H. B. & Brüggemann, H., 29 Feb 2016, In: *BMC Genomics*. 17, 1, p. 1-14 14 p., 152.

### **The compact and biologically relevant structure of inter- $\alpha$ -inhibitor is maintained by the chondroitin sulfate chain and divalent cations**

Scavenius, C., Nikolajsen, C. L., Stenvang, M., Thøgersen, I., Wyrozemski, L., Wisniewski, H.-G., Otzen, D. E., Sanggaard, K. W. & Enghild, J. J., 26 Feb 2016, In: *Journal of Biological Chemistry*. 291, 9, p. 4658-4670 13 p.

### **Carbamylated LL-37 as a modulator of the immune response**

Koro, C., Hellvard, A., Delaleu, N., Binder, V., Scavenius, C., Bergum, B., Głowczyk, I., Roberts, H. M., Chapple, I. L., Grant, M. M., Rapala-Kozik, M., Kłaga, K., Enghild, J. J., Potempa, J. & Mydel, P., 15 Feb 2016, In: *Innate Immunity*. 22, 3, p. 218-229 12 p.

### **Detection of proteolytic signatures for Parkinson's disease**

Jordal, P. L., Dyrland, T. F., Winge, K., Larsen, M. R., Danielsen, E. H., Wells, J. A., Otzen, D. E. & Enghild, J. J., 1 Feb 2016, In: *Future Neurology*. 11, 1, p. 15-32 18 p.

### **Genomic and exoproteomic analyses of cold- and alkaline-adapted bacteria reveal an abundance of secreted subtilisin-like proteases**

Lylloff, J. E., Hansen, L. B. S., Jepsen, M., Sanggaard, K. W., Vester, J. K., Enghild, J. J., Sørensen, S. J., Stougaard, P. & Glaring, M. A., 1 Feb 2016, In: *Microbial Biotechnology*. 9, 2, p. 245-256 12 p.

### **The spider hemolymph clot proteome reveals high concentrations of hemocyanin and von Willebrand factor-like proteins**

Sanggaard, K. W., Dyrland, T. F., Bechsgaard, J. S., Scavenius, C., Wang, T., Bilde, T. & Enghild, J. J., Feb 2016, In: *BBA - Proteins and Proteomics*. 1864, 2, p. 233-241 9 p.

### **Transglutaminase 2-Catalyzed Intramolecular Cross-Linking of Osteopontin**

Christensen, B., Zachariae, E. D., Scavenius, C., Kløverpris, S., Oxvig, C., Petersen, S. V., Enghild, J. J. & Sørensen, E. S., 19 Jan 2016, In: *Biochemistry*. 55, 2, p. 294-303 10 p.

### **Keratin 12 missense mutation induces the unfolded protein response and apoptosis in Meesmann epithelial corneal dystrophy**

Allen, E. H. A., Courtney, D. G., Atkinson, S. D., Moore, J. E., Mairs, L., Toftgaard Poulsen, E., Schirotti, D., Maurizi, E., Cole, C., Hickerson, R. P., James, J., Murgatroyd, H., Smith, F. J. D., MacEwen, C., Enghild, J. J., Nesbit, M. A., Leslie Pedrioli, D. M., McLean, W. H. I. & Moore, C. B. T., 11 Jan 2016, In: *Human Molecular Genetics*. 25, 6, p. 1176-1191 16 p.

### **Enzymatic and structural characterization of the major endopeptidase in the Venus flytrap digestion fluid**

Risor, M. W., Thomsen, L. R., Sanggaard, K. W., Nielsen, T. A., Thøgersen, I. B., Lukassen, M. V., Rossen, L., Garcia-Ferrer, I., Guevara, T., Scavenius, C., Meinjohanns, E., Gomis-Ruth, F. X. & Enghild, J. J., 1 Jan 2016, In: *Journal of Biological Chemistry*. 291, 5, p. 2271-2287 17 p.

**Comparative genomic study of arachnid immune systems indicates loss of beta-1,3-glucanase-related proteins and the immune deficiency pathway**

Bechsgaard, J. S., Vanthournout, B., Funch, P., Vestbo, S., Gibbs, R. A., Richards, S., Sanggaard, K. W., Enghild, J. J. & Bilde, T., 2016, In: *Journal of Evolutionary Biology*. 29, 2, p. 277-291 15 p.

**Dynamic protein coronas revealed as a modulator of silver nanoparticle sulphidation in vitro**

Miclaus, T., Beer, C., Chevallier, J., Scavenius, C., Bochenkov, V. E., Enghild, J. J. & Sutherland, D. S., 2016, In: *Nature Communications*. 7, 11770.

**LASIK surgery of granular corneal dystrophy type 2 patients leads to accumulation and differential proteolytic processing of transforming growth factor beta-induced protein (TGFB1p)**

Poulsen, E. T., Nielsen, N. S., Jensen, M. M., Nielsen, E., Hjortdal, J. Ø., Kim, E. K. & Enghild, J. J., 2016, In: *Proteomics*. 16, 3, p. 539-543 5 p.

**Molecular imprinting of complex matrices at localized surface plasmon resonance biosensors for screening of global interactions of polyphenols and proteins**

Guerreiro, J. R., Bochenkov, V., Runager, K. S., Aslan, H., Dong, M., Enghild, J. J., De Freitas, V., Sales, M. G. F. & Sutherland, D., 2016, In: *ACS Sensors*. 1, 3, p. 258-264 7 p.

**Near-complete <sup>1</sup>H, <sup>13</sup>C, <sup>15</sup>N resonance assignments of dimethylsulfoxide-denatured TGFB1p FAS1-4 A546T**

Kulminskaya, N. V., Yoshimura, Y., Runager, K., Sørensen, C. S., Bjerring, M., Andreasen, M., Otzen, D. E., Enghild, J. J., Nielsen, N. C. & Mulder, F. A. A., 2016, In: *Biomolecular NMR Assignments*. 10, 1, p. 25-29 5 p.

**Processing of TGFB1p by HtrA1 in relation to corneal dystrophies**

Nielsen, N. S., Poulsen, E. T., Lukassen, M., Thøgersen, I., Risør, M. W., Scavenius, C., Runager, K. & Enghild, J. J., 2016, In: *Investigative Ophthalmology & Visual Science*. 57, 12, E-Abstract 4912.

**The outer-membrane export signal of Porphyromonas gingivalis type IX secretion system (T9SS) is a conserved C-terminal β-sandwich domain**

de Diego, I., Ksiazek, M., Mizgalska, D., Koneru, L., Golik, P., Szmigielski, B., Nowak, M., Nowakowska, Z., Potempa, B., Houston, J. A., Enghild, J. J., Thøgersen, I. B., Gao, J., Kwan, A. H., Trehwella, J., Dubin, G., Gomis-Rüth, F. X., Nguyen, K.-A. & Potempa, J., 2016, In: *Scientific Reports*. 6, p. 23123 23123.

**Combinatorial Biomolecular Nanopatterning for High-Throughput Screening of Stem-Cell Behavior**

Amin, Y. Y. I., Runager, K., Simoes, F., Celiz, A., Taresco, V., Rossi, R., Enghild, J. J., Abildtrup, L. A., Kraft, D. C. E., Sutherland, D. S., Alexander, M. R., Foss, M. & Ogaki, R., 9 Dec 2015, In: *Advanced Materials*.

**Hepatocytes respond differently to major dietary trans fatty acid isomers, elaidic acid and trans-vaccenic acid**

Krogager, T. P., Nielsen, L. V., Kahveci, D., Dyrlund, T. F., Scavenius, C., Sanggaard, K. W. & Enghild, J. J., 3 Dec 2015, In: *Proteome Science*. 13, 31, p. 1-14 15 p.

**Metal Ion-Dependent Heavy Chain Transfer Activity of TSG-6 Mediates Assembly of the Cumulus-Oocyte Matrix**

Briggs, D. C., Birchenough, H. L., Ali, T., Rugg, M. S., Waltho, J. P., Ievoli, E., Jowitt, T. A., Enghild, J. J., Richter, R. P., Salustri, A., Milner, C. M. & Day, A. J., 27 Nov 2015, In: *Journal of Biological Chemistry*. 290, p. 28708-28723 16 p.

**Calcium Regulates the Activity and Structural Stability of Tpr, a Bacterial Calpain-like Peptidase**

Staniec, D., Ksiazek, M., Thøgersen, I. B., Enghild, J. J., Sroka, A., Bryzek, D., Bogyo, M., Abrahamson, M. & Potempa, J., 6 Nov 2015, In: *Journal of Biological Chemistry*. 290, p. 27248-27260 13 p.

**Early Events in the Amyloid Formation of the A546T Mutant of Transforming Growth Factor Beta Induced Protein (TGFB1p) in Corneal Dystrophies Compared to the Non-Fibrillating R555W and R555Q Mutants**

Koldsø, H., Andersen, O. J., Nikolajsen, C. L., Scavenius, C., Sørensen, C. S., Underhaug, J., Runager, K., Nielsen, N. C., Enghild, J. J. & Schiøtt, B., 25 Aug 2015, In: *Biochemistry*. 54, 36, p. 55546-5556 11 p.

**The amido-pentadienoate-functionality of the rakicidins is a thiol reactive electrophile: development of a general synthetic strategy**

Clement, L. L., Tsakos, M., Schaffert, E. S., Scavenius, C., Enghild, J. J. & Poulsen, T. B., 21 Jul 2015, In: Chemical Communications. 51, 62, p. 12427-12430 4 p.

**Protein Composition of TGFBI-R124C- and TGFBI-R555W- Associated Aggregates Suggests Multiple Mechanisms Leading to Lattice and Granular Corneal Dystrophy**

Courtney, D. G., Toftgaard Poulsen, E., Kennedy, S., Moore, J. E., Atkinson, S. D., Maurizi, E., Nesbit, M. A., Moore, C. B. T. & Enghild, J. J., 1 Jul 2015, In: Investigative Ophthalmology & Visual Science. 56, 8, p. 4653-61 9 p.

**Characterization of the gila monster (*Heloderma suspectum suspectum*) venom proteome**

Sanggaard, K. W., Dyrland, T. F., Thomsen, L. R., Nielsen, T. A., Brøndum, L., Wang, T., Thøgersen, I. B. & Enghild, J. J., Jun 2015, In: Data in Brief. 3, p. 137-142 6 p.

**Optimized co-solute paramagnetic relaxation enhancement for the rapid NMR analysis of a highly fibrillogenic peptide**

Oktaviani, N. A., Risør, M. W., Lee, Y.-H., Megens, R. P., de Jong, D. H., Otten, R., Scheek, R. M., Enghild, J. J., Nielsen, N. C., Ikegami, T. & Mulder, F. A. A., Jun 2015, In: Journal of Biomolecular NMR. 62, 2, p. 129-142 14 p.

**Fibril core of transforming growth factor beta-induced protein (TGFBIp) facilitates aggregation of corneal TGFBIp**

Sørensen, C. S., Runager, K. S., Scavenius, C., Jensen, M. M., Nielsen, N. S., Christiansen, G., Petersen, S. V., Karring, H., Sanggaard, K. W. & Enghild, J. J., 19 May 2015, In: Biochemistry. 19, 54, p. 2943-2956 14 p.

**The effects of hypochlorous acid and neutrophil proteases on the structure and function of extracellular superoxide dismutase**

Morales, K., Olesen, M. N., Poulsen, E. T., Larsen, U. G., Enghild, J. J. & Petersen, S. V., Apr 2015, In: Free Radical Biology & Medicine. 81, p. 38-46 9 p.

**Characterization of the gila monster (*Heloderma suspectum suspectum*) venom proteome**

Sanggaard, K. W., Dyrland, T. F., Thomsen, L. R., Nielsen, T. A., Brøndum, L., Wang, T., Thøgersen, I. & Enghild, J. J., 18 Mar 2015, In: Journal of Proteomics. 117, p. 1-11 12 p.

**Characterization of the gila monster (*Heloderma suspectum suspectum*) venom proteome**

Sanggaard, K. W., Dyrland, T. F., Thomsen, L. R., Nielsen, T. A., Brøndum, L., Wang, T., Thøgersen, I. B. & Enghild, J. J., 8 Mar 2015, In: Journal of Proteomics. 117, p. 1-11 11 p.

**Mirolase, a novel subtilisin-like serine protease from the periodontopathogen *Tannerella forsythia***

Ksiazek, M., Karim, A. Y., Bryzek, D., Enghild, J. J., Thøgersen, I. B., Koziel, J. & Potempa, J., 1 Mar 2015, In: Biological Chemistry. 396, 3, p. 261-275 15 p.

**Miropin, a novel bacterial serpin from the periodontopathogen *Tannerella forsythia*, inhibits a broad range of proteases by using different peptide bonds within the reactive center loop**

Ksiazek, M., Mizgalska, D., Enghild, J. J., Scavenius, C., Thøgersen, I. B. & Potempa, J., Jan 2015, In: Journal of Biological Chemistry. 290, p. 658-670 13 p.

**ADAM10 controls collagen signaling and cell migration on collagen by shedding the ectodomain of discoidin domain receptor 1 (DDR1)**

Shitomi, Y., Thøgersen, I. B., Ito, N., Leitinger, B., Enghild, J. J. & Itoh, Y., 2015, In: Molecular Biology of the Cell. 26, 4, p. 659-673 15 p.

**KLICK proteases of *Tannerella forsythia*: putative virulence factors with a unique domain structure**

Ksiazek, M., Mizgalska, D., Eick, S., Thøgersen, I. B., Enghild, J. J. & Potempa, J., 2015, In: Frontiers in Microbiology. 6, 11 p., 312.

### **New Insights to Clathrin and Adaptor Protein 2 for the Design and Development of Therapeutic Strategies**

Poulsen, E. T., Larsen, A., Zollo, A., Jørgensen, A. L., Sanggaard, K. W., Enghild, J. J. & Matrone, C., 2015, In: International Journal of Molecular Sciences (Online).

### **Carbamylation of immunoglobulin abrogates activation of the classical complement pathway**

Koro, C., Bielecka, E., Dahl-Knudsen, A., Enghild, J. J., Scavenius, C., Brun, J. G., Binder, V., Hellvard, A., Bergum, B., Jonsson, R., Potempa, J., Blom, A. M. & Mydel, P., Nov 2014, In: European Journal of Immunology. 44, 11, p. 3403-3412 10 p.

### **Identification of transglutaminase reactive residues in human osteopontin and their role in polymerization**

Christensen, B., Zachariae, E. D., Scavenius, C., Thybo, M., Callesen, M. M., Kløverpris, S., Oxvig, C., Enghild, J. J. & Sørensen, E. S., Nov 2014, In: PLOS ONE. 9, 11, e113650.

### **Peptidyl arginine deiminase from Porphyromonas gingivalis abolishes C5a activity**

Bielecka, E., Scavenius, C., Kantyka, T., Jusko, M., Mizgalska, D., Szmigielski, B., Potempa, B., Enghild, J. J., Prossnitz, E., Blom, A. M. & Potempa, J., 16 Oct 2014, In: Journal of Biological Chemistry. 289, p. 32481-32487 7 p.

### **Incorporation of Pentraxin 3 into Hyaluronan Matrices is Tightly Regulated and Promotes Matrix Cross-Linking**

Baranova, N. S., Inforzato, A., Briggs, D. C., Tilakaratna, V., Enghild, J. J., Thakar, D., Milner, C. M., Day, A. J. & Richter, R. P., 4 Sept 2014, In: Journal of Biological Chemistry. 289, p. 30481-30498 13 p.

### **Template-directed covalent conjugation of DNA to native antibodies, transferrin and other metal-binding proteins**

Rosen, C. B., Kodal, A. L. B., Nielsen, J. S., Schaffert, D. H., Scavenius, C., Okholm, A. H., Voigt, N. V., Enghild, J. J., Kjems, J., Tørring, T. & Gothelf, K. V., Sept 2014, In: Nature Chemistry. 6, 9, p. 804-809 6 p.

### **Unconditioned commercial embryo culture media contain a large variety of non-declared proteins: a comprehensive proteomics analysis**

Dyrlund, T. F., Kirkegaard, K., Poulsen, E. T., Sanggaard, K. W., Hindkjær, J. J., Kjems, J., Enghild, J. J. & Ingerslev, H. J., 27 Aug 2014, In: Human Reproduction. 29, 1, p. 2421-2430 10 p.

### **A Common Polymorphism in EC-SOD Affects Cardiopulmonary Disease Risk by Altering Protein Distribution**

Hartney, J. M., Stidham, T., Goldstrohm, D. A., Oberley-Deegan, R. E., Weaver, M. R., Valnickova-Hansen, Z., Scavenius, C., Benninger, R. K. P., Leahy, K. F., Johnson, R., Gally, F., Kosmider, B., Zimmermann, A. K., Enghild, J. J., Nozik-Grayck, E. & Bowler, R. P., 1 Aug 2014, In: Circulation. Cardiovascular Genetics (Online). 7, 6, p. 659-666 8 p.

### **Preparation of Uniformly <sup>13</sup>C,<sup>15</sup>N-Labeled Recombinant Human Amylin for Solid-State NMR Investigation**

Kosicka, I., Kristensen, T., Bjerring, M., Thomsen, K., Scavenius, C., Enghild, J. J. & Nielsen, N. C., Jul 2014, In: Protein Expression and Purification. 99, p. 119-130 12 p.

### **Proteomics of Fuchs' Endothelial Corneal Dystrophy Support That the Extracellular Matrix of Descemet's Membrane is Disordered**

Poulsen, E. T., Dyrlund, T. F., Runager, K., Scavenius, C., Krogager, T. P., Højrup, P., Thøgersen, I. B., Sanggaard, K. W., Vorum, H., Hjortdal, J. & Enghild, J. J., 21 May 2014, In: Journal of Proteome Research. 13, 11, p. 4659-4667 9 p.

### **The autolysis of human HtrA1 is governed by the redox state of its N-terminal domain**

Risør, M. W., Poulsen, E. T., Thomsen, L. R., Dyrlund, T. F., Nielsen, T. A., Nielsen, N. C., Sanggaard, K. W. & Enghild, J. J., 20 May 2014, In: Biochemistry. 53, 23, p. 3851-3857 7 p.

### **Insight into the Protein Composition of Immunoglobulin Light Chain Deposits of Eyelid, Orbital and Conjunctival Amyloidosis**

Nielsen, N. S., Poulsen, E. T., Klintworth, G. K. & Enghild, J. J., 21 Apr 2014, In: Journal of Proteomics & Bioinformatics. S8, S8.

### **Comparison of two phenotypically distinct lattice corneal dystrophies caused by mutations in the transforming growth factor beta induced (TGFB1) gene**

Poulsen, E. T., Runager, K., Risør, M. W., Dyrlund, T. F., Scavenius, C., Karring, H., Praetorius, J., Vorum, H., Otzen, D. E., Klintworth, G. K. & Enghild, J. J., Apr 2014, In: Proteomics - Clinical Applications. 8, 3-4, p. 168-177 10 p.

**Clearance kinetics and matrix binding partners of the receptor for advanced glycation end products**

Milutinovic, P. S., Englert, J. M., Crum, L. T., Mason, N. S., Ramsgaard, L., Enghild, J. J., Sparvero, L. J., Lotze, M. T. & Oury, T. D., 18 Mar 2014, In: PLOS ONE. 9, 3, p. e88259 11 p.

**Coagulation Factor XIIIa Substrates in Human Plasma. Identification and Incorporation Into the Clot**

Nikolajsen, C. L., Dyrland, T. F., Toftgaard Poulsen, E., Enghild, J. J. & Scavenius, C., 7 Mar 2014, In: Journal of Biological Chemistry. 289, p. 6526-6534 9 p.

**The role of stable  $\alpha$ -synuclein oligomers in the molecular events underlying amyloid formation**

Lorenzen, N., Nielsen, S. B., Buell, A. K., Kaspersen, J. D., Arosio, P., Vad, B. S., Paslawski, W., Christiansen, G., Valnickova Hansen, Z., Andreasen, M., Enghild, J. J., Pedersen, J. S., Dobson, C. M., Knowles, T. P. J. & Otzen, D., 16 Feb 2014, In: Journal of the American Chemical Society. 136, 10, p. 3859-3868 10 p.

**Proteome reference maps of the *Lotus japonicus* nodule and root**

Dam, S., Dyrland, T. F., Ussatjuk, A., Jochimsen, B., Nielsen, K., Goffard, N., Ventosa, M. A. L., Lorentzen, A. M., Gupta, V., Andersen, S. U., Enghild, J. J., Ronson, C. W., Roepstorff, P. & Stougaard, J., Feb 2014, In: Proteomics. 14, 2-3, p. 230-240 11 p.

**Secreted major Venus flytrap chitinase enables digestion of Arthropod prey**

Paszota, P., Escalante-Perez, M., Thomsen, L. R., Risør, M. W., Dembski, A., Sanglas, L., Nielsen, T. A., Karring, H., Thøgersen, I. B., Hedrich, R., Enghild, J. J., Kreuzer, I. & Sanggaard, K. W., Feb 2014, In: BBA General Subjects. 1844, 2, p. 374-383

**Distal Renal Tubules Are Deficient in Aggresome Formation and Autophagy upon Aldosterone Administration**

Cheema, M. U., Damkier, H. H., Nielsen, J., Poulsen, E. T., Enghild, J. J., Fenton, R. A. & Praetorius, J., 2014, In: PLOS ONE. 9, 7, p. e101258

**Proteome Analysis of Human Sebaceous Follicle Infundibula Extracted from Healthy and Acne-Affected Skin**

Bek-Thomsen, M., Lomholt, H. B., Scavenius, C., Enghild, J. J. & Brüggemann, H., 2014, In: PLOS ONE. 9, 9, p. e107908

**Spider genomes provide insight into composition and evolution of venom and silk**

Sanggaard, K. W., Bechsgaard, J. S., Fang, X., Duan, J., Dyrland, T. F., Gupta, V., Jiang, X., Cheng, L., Fan, D., Feng, Y., Han, L., Huang, Z., Wu, Z., Liao, L., Settepani, V., Thøgersen, I. B., Vanthournout, B., Wang, T., Zhu, Y. & Funch, P. & 7 others, Enghild, J. J., Schausser, L., Andersen, S. U., Villesen, P., Schierup, M. H., Bilde, T. & Wang, J., 2014, In: Nature Communications. 5, 11 p., 3765.

**Species Differences Take Shape at Nanoparticles: Protein-Corona Made of the Native Repertoire Assists Cellular Interaction**

Hayashi, Y., Miclaus, T., Scavenius, C., Kwiatkowska, K., Sobota, A., Engelmann, P., Scott-Fordsmand, J. J., Enghild, J. J. & Sutherland, D. S., 18 Nov 2013, In: Environmental Science & Technology. 47, 24, p. 14367-14375 9 p.

**Mutation in transforming growth factor beta induced protein associated with granular corneal dystrophy type 1 reduces the proteolytic susceptibility through local structural stabilization**

Underhaug, J., Koldsø, H., Runager, K., Nielsen, J. T., Sørensen, C. S., Kristensen, T., Otzen, D., Karring, H., Malmendal, A., Schiøtt, B., Enghild, J. J. & Nielsen, N. C., 12 Oct 2013, In: BBA General Subjects. 1834, 12, p. 2812-2822 11 p.

**Inter- $\alpha$ -Inhibitor Impairs TSG-6-Induced Hyaluronan Cross-Linking**

Baranova, N. S., Foulcer, S. J., Briggs, D. C., Tilakaratna, V., Enghild, J. J., Milner, C. M., Day, A. J. & Richter, R. P., 11 Oct 2013, In: Journal of Biological Chemistry. 288, p. 29642-29653 12 p.

**Effects of Elaidic Acid on Lipid Metabolism in HepG2 Cells, Investigated by an Integrated Approach of Lipidomics, Transcriptomics and Proteomics**

Vendel Nielsen, L., Hansen, T. P. K., Young, C., Ferreri, C., Chatgililoglu, C., Jensen, O. N. & Enghild, J. J., 13 Sept 2013, In: PLOS ONE. 8, 9, 17 p., e74283.

**Aldosterone and angiotensin II induced protein aggregation in renal proximal tubules**

Cheema, M. U., Poulsen, E. T., Enghild, J. J., Hoorn, E., Fenton, R. A. & Praetorius, J., Sept 2013, In: *Physiological Reports*. 1, 4, p. e00064

**Investigations on Collectin Liver 1**

Axelgaard, E., Jensen, L., Dyrland, T. F., Nielsen, H. J., Enghild, J. J., Thiel, S. & Jensenius, J. C., 9 Aug 2013, In: *Journal of Biological Chemistry*. 288, 32, p. 23407-23420 14 p.

**Inhibition of gingipains by their profragments as the mechanism protecting *Porphyromonas gingivalis* against premature activation of secreted proteases**

Veillard, F., Sztukowska, M., Mizgalska, D., Ksiazek, M., Houston, J., Potempa, B., Enghild, J. J., Thøgersen, I. B., Gomis-Rüth, F. X., Nguyen, K.-A. & Potempa, J., Aug 2013, In: *BBA General Subjects*. 1830, 8, p. 4218-4228 11 p.

**The Human Eye Proteome Project: Perspectives on an emerging proteome**

Semba, R. D., Enghild, J. J., Venkatraman, V., Dyrland, T. F. & Van Eyk, J. E., 10 Jun 2013, In: *Proteomics*. 13, 16, p. 2500-2511 12 p.

**The insoluble TGFBIp fraction of the cornea is covalently linked via a disulfide bond to type XII collagen**

Runager, K., Klintworth, G. K., Karring, H. & Enghild, J. J., 23 Apr 2013, In: *Biochemistry*. 52, 16, p. 2821-2827 7 p.

**Serine protease HtrA1 accumulates in corneal transforming growth factor beta induced protein (TGFBIp) amyloid deposits**

Karring, H., Poulsen, E. T., Runager, K., Thøgersen, I. B., Klintworth, G. K., Højrup, P. & Enghild, J. J., 12 Apr 2013, In: *Molecular Vision*. 19, p. 861-876 16 p.

**Off-pathway aggregation can inhibit fibrillation at high protein concentrations**

Deva, T., Lorenzen, N., Vad, B. S., Petersen, S. V., Thøgersen, I., Enghild, J. J., Kristensen, T. & Otzen, D., Mar 2013, In: *BBA General Subjects*. 1834, 3, p. 677-687 11 p.

**Physicochemical characterization of fish protein adlayers with bacteria repelling properties**

Meyer, R. L., Arpanaei, A., Pillai, S., Bernbom, N., Enghild, J. J., Ng, Y. Y., Gram, L., Besenbacher, F. & Kingshott, P., 1 Feb 2013, In: *Colloids and Surfaces B: Biointerfaces*. 102, p. 504-510 7 p.

**Differential Regulation of Extracellular Tissue Inhibitor of Metalloproteinases-3 Levels by Cell Membrane-bound And Shed Low Density Lipoprotein Receptor-related Protein 1**

Scilabra, S. D., Troeberg, L., Yamamoto, K., Emonard, H., Thøgersen, I., Enghild, J. J., Strickland, D. K. & Nagase, H., 4 Jan 2013, In: *Journal of Biological Chemistry*. 288, p. 332-342 11 p.

**Inactivation of epidermal growth factor by *Porphyromonas gingivalis* as a potential mechanism for periodontal tissue damage**

Pyrk, K., Milewska, A., Kantyka, T., Sroka, A., Maresz, K., Koziel, J., Nguyen, K.-A., Enghild, J. J., Knudsen, A. D. & Potempa, J., Jan 2013, In: *Infection and Immunity*. 81, 1, p. 55-64 10 p.

**Hydrogen peroxide induce modifications of human extracellular superoxide dismutase that results in enzyme inhibition**

Gottfredsen, R. H., Larsen, U. G., Enghild, J. J. & Petersen, S. V., 2013, In: *Redox Biology*. 1, 1, p. 24-31 8 p.

**Murine Extracellular Superoxide Dismutase Is Converted into the Inactive Fold by the Ser195Cys Mutation.**

Scavenius, C., Petersen, J. S., Thomsen, L. R., Poulsen, E. T., Valnickova Hansen, Z., Bowler, R. D., Oury, T. D., Petersen, S. V. & Enghild, J. J., 2013, In: *Biochemistry*. 52, 19, p. 3369-3375 7 p.

**Unique structural features facilitate lizard tail autotomy**

Sanggaard, K. W., Danielsen, C. C., Wogensen, L., Vinding, M. S., Rydtoft, L. M., Mortensen, M. B., Karring, H., Nielsen, N. C., Wang, T., Thøgersen, I. B. & Enghild, J. J., 19 Dec 2012, In: *P L o S One*. 7, 12, p. e51803 8 p.

**Vesicular signalling and immune modulation as hedonic fingerprints: proteomic profiling in the chronic mild stress depression model**

Bisgaard, C. F., Bak, S., Christensen, T., Jensen, O. N., Enghild, J. J. & Wiborg, O., Dec 2012, In: Journal of Psychopharmacology. 26, 12, p. 1569-1583 15 p.

**The protein composition of the digestive fluid from the Venus flytrap sheds light on prey digestion mechanisms**

Schulze, W. X., Sanggaard, K. W., Kreuzer, I., Knudsen, A. D., Bemm, F., Thøgersen, I. B., Brautigam, A., Thomsen, L. R., Schliesky, S., Dyrland, T. F., Escalante-Perez, M., Becker, D., Schultz, J., Karring, H., Weber, A., Højrup, P., Hedrich, R. & Enghild, J. J., 1 Nov 2012, In: Molecular and Cellular Proteomics. 11, 11, p. 1306-1319 14 p.

**Polymorphic Fibrillation of the Destabilized Fourth Fasciclin-1 Domain Mutant A<sub>54</sub>6T of the Transforming Growth Factor-β-induced Protein (TGFB1p) Occurs through Multiple Pathways with Different Oligomeric Intermediates**

Andreasen, M., Nielsen, S. B., Runager, K., Christiansen, G., Nielsen, N. C., Enghild, J. J. & Otzen, D., 5 Oct 2012, In: Journal of Biological Chemistry. 287, 41, p. 34730-34742 12 p.

**The Neuroendocrine Protein 7B2 Is Intrinsically Disordered**

Dasgupta, I., Sanglas, L., Enghild, J. J. & Lindberg, I., 4 Sept 2012, In: Biochemistry. 51, 38, p. 7456-7464 9 p.

**Disruption of gingipain oligomerization into non-covalent cell-surface attached complexes**

Sztukowska, M., Veillard, F., Potempa, B., Bogyo, M., Enghild, J. J., Thøgersen, I. B., Nguyen, K.-A. & Potempa, J., Sept 2012, In: World Journal of Biological Chemistry. 393, 9, p. 971-977 7 p.

**MS Data Miner: A web-based software tool to analyze, compare and share mass spectrometry protein identifications**

Dyrland, T. F., Poulsen, E. T., Sonne-Schmidt, C. S., Sanggaard, K. W. & Enghild, J. J., Sept 2012, In: Proteomics. 12, 18, p. 2792-2796 5 p.

**Synthesis and evaluation of silanediols as highly selective uncompetitive inhibitors of human neutrophil elastase**

Madsen, J. L. H., Andersen, T. L., Santamaria, S., Nagase, H., Enghild, J. J. & Skrydstrup, T., 13 Aug 2012, In: Journal of Medicinal Chemistry. 55, 17, p. 7900-7908 9 p.

**Structural insights into triple-helical collagen cleavage by matrix metalloproteinase 1**

Manka, S. W., Carafoli, F., Visse, R., Bihan, D., Raynal, N., Farndale, R. W., Murphy, G., Enghild, J. J., Hohenester, E. & Nagase, H., 31 Jul 2012, In: Proceedings of the National Academy of Sciences (PNAS). 109, 31, p. 12461-12466 6 p.

**Human cornea proteome: Identification and quantitation of the proteins of the three main layers including epithelium, stroma and endothelium**

Dyrland, T. F., Poulsen, E. T., Sonne-Schmidt, C. S., Nikolajsen, C. L., Thøgersen, I. B., Vorum, H. & Enghild, J. J., 10 Jul 2012, In: Journal of Proteome Research. 11, 8, p. 4231-4239 9 p.

**Human complement C3 is a Substrate for Transglutaminases. A Functional Link between Non-Protease-Based Members of the Coagulation and Complement Cascades**

Nikolajsen, C. L., Scavenius, C. & Enghild, J. J., 25 May 2012, In: Biochemistry. 51, 23, p. 4735-4742 8 p.

**Identification of a potential biomarker panel for the intake of the common dietary trans fat elaidic acid (transΔ9-C18:1)**

Kroager, T. P., Nielsen, L. V., Bak, S., Young, C., Ferreri, C., Jensen, O. N., Højrup, P., Thoma, V., Thøgersen, I. B. & Enghild, J. J., 17 May 2012, In: Journal of Proteomics. 75, 9, p. 2685-2696 12 p.

**The C-terminal proteolytic processing of extracellular superoxide dismutase is redox regulated**

Gottfredsen, R. H., Tran, S.M.-H., Larsen, U. G., Madsen, P., Nielsen, M. S., Enghild, J. J. & Petersen, S. V., 1 Jan 2012, In: Free Radical Biology & Medicine. 52, 1, p. 191-197 7 p.

**Lack of the receptor for advanced glycation end-products attenuates E. coli pneumonia in mice**

Ramsgaard, L., Englert, J. M., Manni, M. L., Milutinovic, P. S., Geffer, J., Tobolewski, J., Crum, L., Coudriet, G. M., Piganelli, J., Zamora, R., Vodovotz, Y., Enghild, J. J. & Oury, T. D., 23 May 2011, In: PLoS One. 6, 5, p. e20132 13 p.

**Hydrogen exchange mass spectrometry as an analytical tool for the analysis of amyloid fibrillogenesis**  
Scavenius, C., Ghodke, S., Otzen, D. E. & Enghild, J. J., 30 Apr 2011, In: International Journal of Mass Spectrometry. 302, 1-3, p. 167-173 7 p.

**Human Phenotypically Distinct TGFBI Corneal Dystrophies Are Linked to the Stability of the Fourth FAS1 Domain of TGFBIp**  
Runager, K., Basaiawmoit, R. V., Deva, T., Andreasen, M., Valnickova, Z., Sørensen, C. S., Karring, H., Thøgersen, I. B., Christiansen, G., Underhaug, J., Kristensen, T., Nielsen, N. C., Klintworth, G. K., Otzen, D. E. & Enghild, J. J., 18 Feb 2011, In: Journal of Biological Chemistry. 286, 7, p. 4951-8 8 p.

**Composition and proteolytic processing of corneal deposits associated with mutations in the TGFBI gene**  
Karring, H., Runager, K., Thøgersen, I. B., Klintworth, G. K., Højrup, P. & Enghild, J. J., 2011, In: Experimental Eye Research.

**Diagnostic evaluation of a nanobody with picomolar affinity toward the protease RgpB from Porphyromonas gingivalis**  
Skottrup, P. D., Leonard, P., Kaczmarek, J. Z., Veillard, F., Enghild, J. J., O'Kennedy, R., Sroka, A., Clausen, R. P., Potempa, J. & Riise, E. S., 2011, In: Analytical Biochemistry. 415, 2, p. 158-67 10 p.

**Human inter- $\alpha$ -inhibitor is a substrate for factor XIIIa and tissue transglutaminase**  
Sonne-Schmidt, C. S., Sanggaard, K. W., Nikolajsen, C. L., Bak, S., Valnickova, Z., Thøgersen, I. B., Jensen, O. N., Højrup, P. & Enghild, J. J., 2011, In: BBA General Subjects. 1814, 12, p. 1624-30 7 p.

**Inhibition of Staphylococcus aureus cysteine proteases by human serpin potentially limits staphylococcal virulence**  
Kantyka, T., Plaza, K., Koziel, J., Florczyk, D., Stennicke, H. R., Thøgersen, I., Enghild, J. J., Silverman, G. A., Pak, S. C. & Potempa, J., 2011, In: Journal of Applied Biological Chemistry. 392, 5, p. 483-9 7 p.

**SAXS models of TGFBIp reveal a trimeric structure and show that the overall shape is not affected by the Arg124His mutation**  
Basaiawmoit, R. V., Oliveira, C. L. P., Runager, K., Sørensen, C. S., Behrens, M. A., Jonsson, B.-H., Kristensen, T., Klintworth, G. K., Enghild, J. J., Pedersen, J. S. & Otzen, D. E., 2011, In: Journal of Molecular Biology. 408, 3, p. 503-513 11 p.

**The role of higher-order protein structure in supporting binding by heteroclitic monoclonal antibodies: the monoclonal antibody KIM185 to CD18 also binds C4-binding protein**  
Gjelstrup, L. C., Andersen, S. H., Petersen, S. V., Enghild, J. J., Blom, A. M., Vorup-Jensen, T. & Thiel, S., 2011, In: Molecular Immunology. 49, 1-2, p. 38-47 10 p.

**Human phenotypically distinct TGFBI corneal dystrophies are linked to the stability of the fourth Fas1 domain of TGFBIp**  
Otzen, D. & Enghild, J. J., 6 Dec 2010, In: Journal of Biological Chemistry.

**NMR reveals two-step association of Congo Red to amyloid  $\beta$  in low-molecular-weight aggregates**  
Pedersen, M. Ø., Mikkelsen, K., Behrens, M. A., Pedersen, J. S., Enghild, J. J., Skrydstrup, T., Malmendal, A. & Nielsen, N. C., Nov 2010, In: Journal of Physical Chemistry Part B: Condensed Matter, Materials, Surfaces, Interfaces & Biophysical. 114, 48, p. 16003-16010 8 p.

**The diversity of FtsY-lipid interactions**  
Reinau, M. E., Thøgersen, I. B., Enghild, J. J., Nielsen, K. L. & Otzen, D. E., 1 Jul 2010, In: Biopolymers. 93, 7, p. 595-606 12 p.

**The role of the receptor for advanced glycation end-products in a murine model of silicosis**  
Ramsgaard, L., Englert, J. M., Tobolewski, J., Tomai, L., Fattman, C. L., Leme, A. S., Kaynar, A. M., Shapiro, S. D., Enghild, J. J. & Oury, T. D., 19 Mar 2010, In: P L o S One. 5, 3, p. e9604

**Differential expression and processing of transforming growth factor beta induced protein (TGFB1p) in the normal human cornea during postnatal development and aging**

Karring, H., Runager, K., Valnickova, Z., Thøgersen, I., Møller-Pedersen, T., Klintworth, G. K. & Enghild, J. J., 2010, In: *Experimental Eye Research*. 90, 1, p. 57-62 5 p.

**Divorcing folding from function: how acylation affects the membrane-perturbing properties of an antimicrobial peptide**

Vad, B. S., Thomsen, L. A. H., Bertelsen, K., Franzmann, M., Pedersen, J. M., Nielsen, S. B., Vosegaard, T., Valnickova, Z., Skrydstrup, T., Enghild, J. J., Wimmer, R., Nielsen, N. C. & Otzen, D., 2010, In: *BBA - Proteins and Proteomics*. 1804, 4, p. 806-20 15 p.

**Evolutionary conservation of heavy chain protein transfer between glycosaminoglycans**

Sanggaard, K. W., Hansen, L., Scavenius, C., Wisniewski, H.-G., Kristensen, T., Thøgersen, I. & Enghild, J. J., 2010, In: *BBA General Subjects*.

**Flexibility of the thrombin-activatable fibrinolysis inhibitor pro-domain enables productive binding of protein substrates**

Valnickova, Z., Sanglas, L., Arolas, J. L., Petersen, S. V., Schar, C., Otzen, D., Aviles, F. X., Gomis-Ruth, F. X. & Enghild, J. J., 2010, In: *Journal of Biological Chemistry*.

**Functional amyloid in *Pseudomonas***

Dueholm, M. S., Petersen, S. V., Sønderkær, M., Larsen, P., Christiansen, G., Hein, K. L., Enghild, J. J., Nielsen, J. L., Nielsen, K. L., Nielsen, P. H. & Otzen, D. E., 2010, In: *Molecular Microbiology*.

**Glucagon fibril polymorphism reflects differences in protofilament backbone structure**

Andersen, C. B., Hicks, M. R., Vetri, V., Vandahl, B., Rahbek-Nielsen, H., Thøgersen, H., Thøgersen, I., Enghild, J. J., Serpell, L. C., Rischel, C. & Otzen, D. E., 2010, In: *Journal of Molecular Biology*. 397, 4, p. 932-46 14 p.

**Insights into the molecular inactivation mechanism of human activated thrombin-activatable fibrinolysis inhibitor**

Sanglas, L., Arolas, J. L., Valnickova, Z., Aviles, F. X., Enghild, J. J. & Gomis-Ruth, F. X., 2010, In: *Journal of Thrombosis and Haemostasis*. 8, 5, p. 1056-65 9 p.

**Reactive-site mutants of N-TIMP-3 that selectively inhibit ADAMTS-4 and ADAMTS-5: biological and structural implications**

Lim, N. H., Kashiwagi, M., Visse, R., Jones, J., Enghild, J. J., Brew, K. & Nagase, H., 2010, In: *Biochemical Journal*. 431, 1, p. 113-22 9 p.

**The concentration of extracellular superoxide dismutase in plasma is maintained by LRP-mediated endocytosis**

Petersen, S. V., Thøgersen, I., Valnickova, Z., Nielsen, M. S., Petersen, J. S., Poulsen, E. T., Jacobsen, C., Oury, T. D., Moestrup, S. K., Crapo, J. D., Nielsen, N. C., Kristensen, T. & Enghild, J. J., 2010, In: *Free Radical Biology & Medicine*. 49, 5, p. 894-9 5 p.

**The TSG-6/HC2-mediated transfer is a dynamic process shuffling heavy chains between glycosaminoglycans**

Sanggaard, K. W., Scavenius, C., Rasmussen, A. J., Wisniewski, H.-G., Thøgersen, I. & Enghild, J. J., 2010, In: *Journal of Biological Chemistry*. 285, 29, p. 21988-93 5 p.

**Transfer of inter-alpha-inhibitor heavy chains to hyaluronan by surface-linked hyaluronan-TSG-6 complexes**

Colón, E., Shytuhina, A., Cowman, M. K., Band, P. A., Sanggaard, K. W., Enghild, J. J. & Wisniewski, H.-G., 23 Jan 2009, In: *Journal of Biological Chemistry*. 284, 4, p. 2320-2231 12 p.

**A new pathway of staphylococcal pathogenesis: Apoptosis-like death induced by staphopain B in human neutrophils and monocytes**

Smagur, J., Guzik, K., Magiera, L., Bzowska, M., Gruca, M., Thøgersen, I. B., Enghild, J. J. & Potempa, J., 1 Jan 2009, In: *Journal of Innate Immunity*. 1, 2, p. 98-108 11 p.

**A novel matrix metalloprotease-like enzyme (karilysin) of the periodontal pathogen *Tannerella forsythia* ATCC 43037**

Karim, A. Y., Kulczykcka, M., Kantyka, T., Dubin, G., Jabaiah, A., Daugherty, P. S., Thøgersen, I. B., Enghild, J. J., Nguyen, K.-A. & Potempa, J., 2009, In: *Biological Chemistry*.

**Biochemical characterization of bovine plasma thrombin-activatable fibrinolysis inhibitor (TAFI)**

Valnickova, Z., Thaysen-Andersen, M., Højrup, P., Christensen, T., Sanggaard, K. W., Kristensen, T. & Enghild, J. J., 2009, In: *B M C Biochemistry*. 10, p. 13

**Integrative analysis of epigenetic modulation in melanoma cell response to decitabine: clinical implications**

Halaban, R., Krauthammer, M., Pelizzola, M., Cheng, E., Kovacs, D., Sznol, M., Ariyan, S., Narayan, D., Bacchiocchi, A., Molinaro, A., Kluger, Y., Deng, M., Tran, N., Zhang, W., Picardo, M. & Enghild, J. J., 2009, In: *P L o S One*. 4, 2, p. e4563

**Potential Clinical Importance of the Activation Peptide of Prostate-specific Antigen**

Voeghtly, L. M., Thøgersen, I., Valnickova, Z., Sanggaard, K. W., Chu, C. T., Oury, T. D. & Enghild, J. J., 2009, In: *International Journal of Clinical and Experimental Pathology*. 2, 6, p. 588-98 10 p.

**Purification, crystallization and preliminary X-ray diffraction of wild-type and mutant recombinant human transforming growth factor beta-induced protein (TGFB1p)**

Runager, K., García-Castellanos, R., Valnickova, Z., Kristensen, T., Nielsen, N. C., Klintworth, G. K., Gomis-Rüth, F. X. & Enghild, J. J., 2009, In: *Acta Crystallographica. Section F: Structural Biology and Crystallization Communications Online*. 65, Pt 3, p. 299-303 4 p.

**Purification, crystallization and preliminary X-ray diffraction of wild-type and mutant recombinant human transforming growth factor *b*-induced protein (TGFB1p)**

Runager, K., Garcia-Castellanos, R., Valnickova, Z., Kristensen, T., Nielsen, N. C., Klintworth, G. K., Gomis-Ruth, F. X. & Enghild, J. J., 2009, In: *Acta Crystallographica. Section F: Structural Biology and Crystallization Communications Online*. 65, p. 299-303

**Stable intermediates determine proteins' primary unfolding sites in the presence of surfactants**

Hansen, J. H., Petersen, S. V., Andersen, K. K., Enghild, J. J., Damhus, T. & Otzen, D., 2009, In: *Biopolymers*. 91, 3, p. 221-31 10 p.

**Structural and functional characterization of SplA, an exclusively specific protease of *Staphylococcus aureus***

Stec-Niemczyk, J., Pustelny, K., Kisielowska, M., Bista, M., Boulware, K., Stennicke, H., Thøgersen, I., Daugherty, P., Enghild, J., Popowicz, G., Dubin, A., Potempa, J. & Dubin, G., 2009, In: *Biochemical Journal*.

**The C-terminal domains of ADAMTS-4 and ADAMTS-5 promote association with N-TIMP-3**

Troeberg, L., Fushimi, K., Scilabra, S. D., Nakamura, H., Dive, V., Thøgersen, I. B., Enghild, J. J. & Nagase, H., 2009, In: *Matrix Biology*. 28, 8, p. 463-9 6 p.

**The proteome of seed development in the model legume *Lotus japonicus***

Dam, S., Laursen, B. S., Ornfelt, J. H., Jochimsen, B., Stærfeldt, H. H., Friis, C., Nielsen, K., Goffard, N., Besenbacher, S., Krusell, L., Sato, S., Tabata, S., Thøgersen, I., Enghild, J. J. & Stougaard, J., 2009, In: *Plant Physiology*.

**Widespread abundance of functional bacterial amyloid in mycolata and other gram-positive bacteria**

Jordal, P. B., Dueholm, M. S., Larsen, P., Petersen, S. V., Enghild, J. J., Christiansen, G., Højrup, P., Nielsen, P. H. & Otzen, D. E., 2009, In: *Applied and Environmental Microbiology*. 75, 12, p. 4101-10 9 p.

**Widespread abundance of Functional Bacterial Amyloid in Mycolata and other Gram positive Bacteria**

Jensen, P. L., Dueholm, M. S., Larsen, P., Petersen, S. V., Enghild, J. J., Christiansen, G., Højrup, P., Nielsen, P. H. & Otzen, D., 2009, In: *Applied and Environmental Microbiology*. 75, p. 4101-4110

**TSG-6 transfers proteins between glycosaminoglycans via a Ser28-mediated covalent catalytic mechanism**

Sanggaard, K. W., Sonne-Schmidt, C. S., Hansen, T. P. K., Kristensen, T., Wisniewski, H.-G., Thøgersen, I. B. & Enghild, J. J., 5 Dec 2008, In: *Journal of Biological Chemistry*. 283, 49, p. 33919-26 8 p.

**The transfer of heavy chains from bikunin proteins to hyaluronan requires both TSG-6 and HC2**

Sanggaard, K. W., Sonne-Schmidt, C. S., Hansen, T. P. K., Lorentzen, K. A., Wisniewski, H.-G., Thøgersen, I. B. & Enghild, J. J., 4 Jul 2008, In: *Journal of Biological Chemistry*. 283, 27, p. 18530-18537 8 p.

**A New Autocatalytic Activation Mechanism for Cysteine Proteases Revealed by *Prevotella intermedia* Interpain A**  
Mallorquí-Fernández, N., Manandhar, S., Mallorquí-Fernández, G., Usón, I., Wawrzonek, K., Kantyka, T., Solà, M., Thøgersen, I., Enghild, J. J., Potempa, J. & Gomis-Rüth, F., 2008, In: Journal of Biological Chemistry.

**Atypical asymmetric lattice corneal dystrophy associated with a novel homozygous mutation (Val624Met) in the TGFBI gene**

Afshari, N., Bahadur, R., Eifrig Jr, D., Thøgersen, I., Enghild, J. J. & Klintworth, G., 2008, In: Molecular Vision. 14, 12

**Bacteria repellent properties of adsorbed fish proteins**

Arpanaei, A., Pillai, S., Meyer, R. L., Besenbacher, F., Bernbom, N., Jensen, R. L., Gram, L., Enghild, J. J., Petersen, S. V. & Kingshott, P., 2008.

**Catalytic Properties of ADAM12 and Its Domain Deletion Mutants**

Jacobsen, J., Visse, R., Sørensen, H., Enghild, J. J., Brew, K., Wewer, U. & Nagase, H., 2008, In: Biochemistry.

**Enzymatic activity of the *Staphylococcus aureus* SplB serine protease is induced by substrates containing the sequence Trp-Glu-Leu-Gln**

Dubin, G., Stec-Niemczyk, J., Kisielevska, M., Pustelny, K., Popowicz, G., Bista, M., Kantyka, T., Boulware, K., Stennicke, H., Czarna, A., Phopaisarn, M., Daugherty, P., Thøgersen, I., Enghild, J. J., Thornberry, N., Dubin, A. & Potempa, J., 2008, In: Journal of Molecular Biology. 379, 30

**Extracellular superoxide dismutase protects against matrix degradation of heparan sulfate in the lung**

Kliment, C., Tobolewski, J., Manni, M., Tan, R., Enghild, J. J. & Oury, T., 2008, In: Antioxidants & Redox Signaling.

**Fish Protein Adsorption to Different Surfaces and Anti-cell Adhesive Properties of Adsorbed Layers.**

Arpanaei, A., Pillai, S., Meyer, R. L., Besenbacher, F., Bernbom, N., Jensen, R. L., Gram, L., Enghild, J. J., Petersen, S. V. & Kingshott, P., 2008.

**Focus on molecules: Transforming growth factor beta induced protein (TGFBIp)**

Runager, K., Enghild, J. J. & Klintworth, G., 2008, In: Experimental Eye Research.

**Human skin keratins are the major proteins in exhaled breath condensate**

Hoffmann, H., Tabaksblat, L., Enghild, J. J. & Dahl, R., 2008, In: European Respiratory Journal.

**Human skin keratins are the major proteins in exhaled breath condensate**

Hoffmann, H. J., Tabaksblat, L. M., Enghild, J. J. & Dahl, R., 2008, In: European Respiratory Journal. 31, 2, p. 380-4 4 p.

**Investigating the biomarker potential of glycoproteins using comparative glycoprofiling - application to tissue inhibitor of metalloproteinases-1**

Thaysen-Andersen, M., Thøgersen, I., Lademann, U., Offenbergh, H., Enghild, J. J., Nielsen, H., Giessing, A., Brüner, N. & Højrup, P., 2008, In: BBA General Subjects. 3, 1784

**Large scale isolation and purification of soluble RAGE from lung tissue**

Englert, J. M., Ramsgaard, L., Valnickova, Z., Enghild, J. J. & Oury, T. D., 2008, In: Protein Expression and Purification. 61, 1, p. 99-101 2 p.

**Structure of activated thrombin-activatable fibrinolysis inhibitor, a molecular link between coagulation and fibrinolysis**

Sanglas, L., Valnickova, Z., Arolas, J. L., Pallarés, I., Guevara, T., Solà, M., Kristensen, T., Enghild, J. J., Aviles, F. X. & Gomis-Rüth, F. X., 2008, In: Molecular Cell. 31, 4, p. 598-606 8 p.

**The crystal structure of TAFI provides the structural basis for its intrinsic activity and the short half-life of TAFI**

Anand, K., Pallares, I., Valnickova, Z., Christensen, T., Vendrell, J., Wendt, K. U., Schreuder, H. A., Enghild, J. J. & Avilés, F. X., 2008, In: Journal of Biological Chemistry.

**The folding of human active and inactive extracellular superoxide dismutase is an intracellular event**

Petersen, S. V., Kristensen, T., Petersen, J. S., Ramsgaard, L., Oury, T., Crapo, J., Nielsen, N. C. & Enghild, J. J., 2008, In: Journal of Biological Chemistry. 283, 22, p. 15031-15036 p.

**The folding of human aEC-sod and iEC-sod is an intracellular event**

Petersen, S. V., Kristensen, T., Petersen, J. S., Ramsgaard, L., Oury, T. D., Crapo, J. D., Nielsen, N. C. & Enghild, J. J., 2008, In: Journal of Biological Chemistry.

**The subunit composition of human extracellular superoxide dismutase (EC-SOD) regulate enzymatic activity**

Petersen, S. V., Valnickova, Z., Oury, T. D., Crapo, J. D., Chr, N. & Enghild, J. J., 7 Dec 2007, In: BMC Biochemistry. 8, 19.

**Proteolytic activities of human ADAMTS-5: Comparative studies with ADAMTS-4**

Gendron, C., Kashiwagi, M., Ngee, H. L., Enghild, J. J., Thøgersen, I. B., Hughes, C., Caterson, B. & Nagase, H., 22 Jun 2007, In: Journal of Biological Chemistry. 282, 25, p. 18294-18306 13 p.

**Rapid and individual-specific glycoprofiling of the low abundance N-glycosylated protein tissue inhibitor of metalloproteinases-1**

Thaysen-Andersen, M., Thøgersen, I. B., Nielsen, H. J., Lademann, U., Brünner, N., Enghild, J. J. & Højrup, P., 1 Apr 2007, In: Molecular and Cellular Proteomics. 6, 4, p. 638-647 10 p.

**Heparin binding induces a conformational change in pigment epithelium-derived factor**

Valnickova, Z., Petersen, S. V., Nielsen, S. B., Otzen, D. E. & Enghild, J. J., 2 Mar 2007, In: Journal of Biological Chemistry. 282, 9, p. 6661-6667 7 p.

**A unique loop extension in the serine protease domain of haptoglobin is essential for CD163 recognition of the haptoglobin-hemoglobin complex**

Nielsen, M. J., Petersen, S. V., Jacobsen, C., Thirup, S. S., Enghild, J. J., Graversen, J. H. & Moestrup, S. K., 2007, In: Journal of Biological Chemistry. 282, 2, p. 1072-1079 8 p.

**Developmental expression of the receptor for advanced glycation end-products (RAGE) and its response to hyperoxia in the neonatal rat lung.**

Lizotte, P., Hanford, L., Enghild, J. J., Nozik-Grayck, E., Giles, B. & Oury, T., 2007, In: B M C Developmental Biology. 7, 15

**Evidence against a blood derived origin for transforming growth factor beta induced protein in corneal disorders caused by mutations in the TGFBI gene**

Karring, H., Valnickova, Z., Thøgersen, I. B., Hedegaard, C. J., Møller-Pedersen, T., Kristensen, T., Klintworth, G. K. & Enghild, J. J., 2007, In: Molecular Vision. 13, p. 997-1004 8 p.

**Evidence against a blood derived origin for transforming growth factor beta induced protein in corneal disorders caused by mutations in the TGFBI gene.**

Karring, H., Valnickova, Z., Thøgersen, I., Hedegaard, C., Møller-Pedersen, T., Kristensen, T., Klintworth, G. & Enghild, J. J., 2007, In: Molecular Vision.

**Heparin binding induces a conformational change of pigment epithelium-derived factor (PEDF).**

Valnickova, Z., Petersen, S. V., Nielsen, S., Otzen, D. & Enghild, J. J., 2007, In: Journal of Biological Chemistry.

**Investigating the biomarker potential of glycoproteins using comparative glycoprofiling - application to tissue inhibitor of metalloproteinases-1.**

Thaysen-Andersen M, M., Thøgersen, I., Lademann, U., Offenber, H., Giessing, A., Enghild, J. J., Nielsen, H., Brünner, N. & Højrup P., P., 2007, In: Biochim. Biophys. Acta..

**Optimal control based NCO and NCA experiments for spectral assignment in biological solid-state NMR spectroscopy**  
Kehlet, C., Bjerring, M., Sivertsen, A. C., Kristensen, T., Enghild, J. J., Glaser, S. J., Khaneja, N. & Nielsen, N. C., 2007, In: Journal of Magnetic Resonance. 188, 2, p. 216-230 15 p.

**Proteolytic activities of human ADAMTS-5: Comparative studies with human ADAMTS-4.**

Gendron, C., Kashiwagi, M., Lim, N. H., Enghild, J. J., Thøgersen, I., Hughes, C., Catherson, B. & Nagase, H., 2007, In: Journal of Biological Chemistry.

**Proteomic investigation of the ventral rat hippocampus links DRP-2 to escitalopram treatment resistance and SNAP to stress resilience in the chronic mild stress model of depression.**

Bisgaard, C., Jayatissa, M. N., Enghild, J. J., Sánchez, C., Artemychyn, R. & Wiborg, O., 2007, In: Journal of Molecular Neuroscience. 32, 2, p. 132-44 12 p.

**Rapid and individual-specific glycoprofiling of a low- abundant N-glycosylated protein tissue inhibitor of metalloproteinases-1.**

Thaysen-Andersen, M., Thøgersen, I., Nielsen, H., Lademann, U., Brunner, N., Enghild, J. J. & Højrup, P., 2007, In: Mol. Cell. Proteomics.

**The intrinsic enzymatic activity of procarboxypeptidase U (TAFI) does not significantly influence the fibrinolytic rate: reply to a rebuttal.**

Valnickova, Z., Thøgersen, I., Potempa, J. & Enghild, J. J., 2007, In: J Thromb Haemost. 2007.

**The Major Allergen from Birch Tree Pollen, Bet v 1, Binds and Permeabilizes Membranes.**

Morgensen, J., Ferreras, M., Wimmer, R., Petersen, S. V., Enghild, J. J. & Otzen, D., 2007, In: Biochemistry.

**The Subunit Composition of Human Extracellular Superoxide Dismutase (EC-SOD) Regulate Enzymatic Activity**

Petersen, S. V., Valnickova, Z., Oury, T. D., Crapo, J. D., Nielsen, N. C. & Enghild, J. J., 2007, In: B M C Biochemistry. 8, p. 19

**Thrombin-activable fibrinolysis inhibitor (TAFI) zymogen is an active carboxypeptidase.**

Valnickova, Z., Thøgersen, I., Potempa, J. & Enghild, J. J., 2007, In: Journal of Biological Chemistry. 282, 2, p. 1072-9

**Evidence for a two-step mechanism involved in the formation of covalent HC-TSG-6 complexes**

Sanggaard, K. W., Sonne-Schmidt, C. S., Jacobsen, C., Thøgersen, I. B., Valnickova, Z., Wisniewski, H. G. & Enghild, J. J., 20 Jun 2006, In: Biochemistry. 45, 24, p. 7661-7668 8 p.

**Extracellular superoxide dismutase exists as an octamer**

Due, A., Petersen, S. V., Valnickova, Z., Ostergaard, L., Oury, T., Crapo, J. D. & Enghild, J. J., 2006, In: FEBS Letters. 580, 5, p. 1485-1489 5 p.

**Post-translational modifications of human thrombin-activatable fibrinolysis inhibitor (TAFI): evidence for a large shift in the isoelectric point and reduced solubility upon activation.**

Valnickova, Z., Thøgersen, I., Skottrup, P., Christensen, T., Højrup, P. & Enghild, J. J., 2006, In: Biochemistry. 45, 5, p. 1525-35

**The human cornea proteome: bioinformatic analyses indicate import of plasma proteins into the cornea.**

Karring, H., Thøgersen, I., Klintworth, G., Møller-Pedersen, T. & Enghild, J. J., 2006, In: Molecular Vision. 12, p. 451-60

**The high concentration of Arg213 → Gly extracellular superoxide dismutase (EC-SOD) in plasma is caused by a reduction of both heparin and collagen affinities**

Petersen, S. V., Olsen, D. A., Kenney, J. M., Oury, T. D., Valnickova, Z., Thøgersen, I. B., Crapos, J. D. & Enghild, J. J., 15 Jan 2005, In: Biochemical Journal. 385, 2, p. 427-432 6 p.

**A dataset of human cornea proteins identified by Peptide mass fingerprinting and tandem mass spectrometry**

Karring, H., Thøgersen, I., Møller-Pedersen, T., Enghild, J. J. & Klintworth, G. K., 2005, In: Mol. Cell. Proteomics. 4, p. 1406-1408

**Desmosome signaling. Inhibition of p38MAPK prevents pemphigus vulgaris IgG-induced cytoskeleton reorganization**  
Enghild, J. J., Berkowitz, P., Hu, P., Liu, L., Diaz, L. A., Chua, M. P. & Rubenstein, D. S., 2005, In: Journal of Biological Chemistry. 280, p. 23778-23784

**The high concentration of Arg213→Gly extracellular superoxide dismutase (EC-SOD) in plasma is caused by a reduction of both heparin and collagen affinities**

Petersen, S. V., Olsen, D. A., Kenney, J. M., Valnickova, Z., Thøgersen, I., Enghild, J. J., Oury, T. D. & Crapo, J. D., 2005, In: Biochem. J.. 385, p. 427-432

**The TSG-6 and I alpha I interaction promotes a transesterification cleaving the protein-glycosaminoglycan-protein (PGP) cross-link**

Sanggaard, K., Karring, H., Valnickova, Z., Thøgersen, I. & Enghild, J. J., 2005, In: Journal of Biological Chemistry. 280, p. 11936-11942

**The TSG-6 and IαI Interaction Promotes a Transesterification Cleaving the Protein-Glycosaminoglycan-Protein (PGP) Cross-link**

Sanggaard, K. W., Karring, H., Valnickova, Z., Thøgersen, I. B. & Enghild, J. J., 2005, In: Journal of Biological Chemistry. 280, p. 11936-11942 7 p.

**Altered proteolytic activities of ADAMTS-4 expressed by C-terminal processing**

Kashiwagi, M., Enghild, J. J., Gendron, C., Hughes, C., Caterson, B., Itoh, Y. & Nagase, H., 2004, In: Journal of Biological Chemistry. 279, 11, p. 10109-10119 11 p.

**Extracellular superoxide dismutase (EC-SOD) binds to type I collagen and protects against oxidative fragmentation**

Petersen, S. V., Oury, T. D., Ostergaard, L., Valnickova, Z., Wegrzyn, J., Thøgersen, I. K. B., Jacobsen, C., Bowler, R. P., Fattman, C. L., Crapo, J. D. & Enghild, J. J., 2004, In: Journal of Biological Chemistry. 279, p. 13705-13710 6 p.

**Extracellular superoxide dismutase (EC-SOD) binds to type I collagen and protects against oxidative fragmentation**

Petersen, S. V., Oury, T. D., Østergaard, L., Valnickova, Z., Wegrzyn, J., Thøgersen, I. B., Jacobsen, C., Bowler, R. P., Fattman, C. L., Crapo, J. D. & Enghild, J. J., 2004, In: Journal of Biological Chemistry. 279(14), p. 13705-13710 6 p.

**Proteomic analysis of pulmonary edema fluid and plasma in patients with acute lung injury**

Bowler, R. P., Duda, B., Chan, E. D., Enghild, J. J., Ware, L. B., Matthay, M. A. & Duncan, M. W., 2004, In: Am. J. Physiol. Lung Cell. Mol. Physiol.. 286(6), p. 1095-1104 10 p.

**Proteomic analysis of the soluble fraction from human corneal fibroblasts with reference to ocular transparency**

Karring, H., Thøgersen, I. B., Klintworth, G. K., Enghild, J. J. & Møller-Pedersen, T., 2004, In: Mol. Cell. Proteomics. 3(7), p. 660-674 15 p.

**Purification and characterization of mouse soluble receptor for advanced glycation end products (sRAGE)**

Hanford, L. E., Enghild, J. J., Valnickova, Z., Petersen, S. V., Schaefer, L. M., Schaefer, T. M., Reinhart, T. A. & Oury, T. D., 2004, In: Journal of Biological Chemistry. 279(48), p. 50019-50024 6 p.

**Purification and structural characterization of transforming growth factor beta induced protein (TGFβI<sub>p</sub>) from porcine and human corneas**

Andersen, R. B., Karring, H., Møller-Pedersen, T., Valnickova, Z., Thøgersen, I. B., Hedegaard, C. J., Kristensen, T., Klintworth, G. K. & Enghild, J. J., 2004, In: Biochemistry. 43(51), p. 16374-16384 11 p.

**Regulation of insulin-like growth factor (IGF)-I action by matrix metalloproteinase-3 involves selective disruption of IGF-I/IGF-binding protein-3 complexes**

Fowlkes, J. L., Serra, D. M., Bunn, R. C., Thrailkill, K. M., Enghild, J. J. & Nagase, H., 2004, In: Endokrinologiya. 145(2), p. 620-626 7 p.

**The intracellular proteolytic processing of extracellular superoxide dismutase (EC-SOD) is a two-step event**

Olsen, D. A., Petersen, S. V., Oury, T. D., Valnickova, Z., Thøgersen, I. B., Kristensen, T., Bowler, R. P., Crapo, J. D. & Enghild, J. J., 2004, In: Journal of Biological Chemistry. 279, p. 22151-22157 7 p.

**The structure of rabbit extracellular superoxide dismutase differs from the human protein**

Petersen, S. V., Due, A. V., Valnickova, Z., Oury, T. D., Crapo, J. D. & Enghild, J. J., 2004, In: Biochemistry. 43(44), p. 14275-14281 7 p.

**Altered proteolytic activities of ADAMTS-4 expressed by C-terminal processing**

Kashiwagi, M., Enghild, J. J., Gendron, C., Hughes, C., Caterson, B., Itoh, Y. & Nagase, H., 2003, In: Journal of Biological Chemistry. p. -

**Biochemical importance of glycosylation of plasminogen activator inhibitor-1**

Gils, A., Pedersen, K. E., Skottrup, P., Christensen, A., Naessens, D., Deinum, J., Enghild, J. J., Declerck, P. J. & Andreasen, P. A., 2003, In: Thromb. Haemost.. 90, p. 206-217 12 p.

**Pigment-epithelium-derived factor (PEDF) occurs at a physiologically relevant concentration in human blood: purification and characterization**

Petersen, S. V., Valnickova, Z. & Enghild, J. J., 2003, In: Biochem. J.. 374, p. 199-206 8 p.

**Regulation of receptor for advanced glycation end products during bleomycin-induced lung injury**

Hanford, L., Fattman, C., Shaefer, L., Enghild, J. J., Valnickova, Z. & Oury, T., 2003, In: Am J Respir Cell Mol Biol..

**The dual nature of human extracellular superoxide dismutase: one sequence and two structures**

Petersen, S. V., Oury, T. D., Valnickova, Z., Thøgersen, I. B., Højrup, P., Crapo, J. D. & Enghild, J. J., 2003, In: Proceedings of the National Academy of Sciences (PNAS). 100, p. 13875-13880 6 p.

**Transforming growth factor beta induced protein accumulation in granular corneal dystrophy type III (Reis-Bücklers dystrophy). Identification by mass spectrometry in 15 year old two-dimensional protein gels**

Hedegaard, C. J., Thøgersen, I. B., Enghild, J. J., Klintworth, G. K. & Møller-Pedersen, T., 2003, In: Molecular Vision. 9, p. 355-359 5 p.

**New member of the trefoil factor family of proteins is an  $\alpha$ -macroglobulin protease inhibitor**

Thøgersen, I. B., Hammes, S. R., Rubenstein, D. S., Pizzo, S. V., Valnickova, Z. & Enghild, J. J., 29 Jul 2002, In: Biochimica et Biophysica Acta - Protein Structure and Molecular Enzymology. 1598, 1-2, p. 131-139 9 p.

**A catalytic antioxidant (AEOL 10150) attenuates expression of inflammatory genes in stroke**

Bowler, R., Sheng, H., Enghild, J. J., Pearlstein, R., Warner, D. & Crapo, J., 2002, In: Free Radical Biology & Medicine. 33, 8, p. 1141-1152 12 p.

**Calbindin D28k exhibits properties characteristic of a Ca<sup>2+</sup> sensor**

Berggard, T., Miron, S., Onnerfjord, P., Thulin, E., Akerfeldt, K. S., Enghild, J. J., Akke, M. & Linse, S., 2002, In: Journal of Biological Chemistry. 277, p. 16662-16672 11 p.

**Calbindin D28k exhibits properties characteristic of a Ca<sup>2+</sup> sensor.**

Enghild, J. J., Berggard, T., Miron, S., Onnerfjord, P., Thulin, E., Akerfeldt, K., Enghild, J. J., Akke, M. & Linse, S., 2002, In: Journal of Biological Chemistry. 277, 19, p. 16662-72

**Effects of metalloporphyrin catalytic antioxidants in experimental brain ischemia**

Sheng, H., Enghild, J. J., Bowler, R., Patel, M., Calvi, C. L., Day, B. J., Pearlstein, R. D., Crapo, J. D. & Warner, D. S., 2002, In: Free Radic. Biol. Med.. 33, p. 947-961 15 p.

**Effects of metalloporphyrin catalytic antioxidants in experimental brain ischemia.**

Sheng, H., Enghild, J. J., Bowler, R., Patel, M., Batinic-Haberle, I., Calvi, C., Day, B., Pearlstein, R., Crapo, J. & Warner, D., 2002, In: Free Radic. Biol. Med.. 33, 7

**Furin proteolytically processes the heparin-binding region of extracellular superoxide dismutase**

Bowler, R. P., Nicks, M., Olsen, D. A., Thøgersen, I., Valnickova, Z., Højrup, P., Franzusoff, A., Crapo, J. D. & Enghild, J. J., 2002, In: Journal of Biological Chemistry. 277, p. 16505-16511 7 p.

**New member of the trefoil factor family of proteins is an alpha-macroglobulin protease inhibitor**

Thøgersen, I., S.R., H., D.S., R., S.V., P., Z., V. & Enghild, J. J., 2002, In: Biochim. Biophys. Acta.. 1598, 1-2, p. 131-139 9 p.

**New member of the trefoil factor family of proteins is an alpha-macroglobulin protease inhibitor**

Thøgersen, I., Hammes, S., Rubenstein, D., Pizzo, S., Valnickova, Z. & Enghild, J. J., 2002, In: Biochim. Biophys. Acta.. 1-2, 1598, p. 131-9

**Silver staining of proteins on electroblotting membranes and intensification of silver staining of proteins separated by polyacrylamide gel electrophoresis**

Sørensen, B. K., Højrup, P., Østergaard, E., Jørgensen, C. S., Enghild, J., Ryder, L. R. & Houen, G., 2002, In: Anal. Biochem.. 304, p. 33-41 9 p.

**Structural and functional characterization of tissue factor pathway inhibitor following degradation by matrix metalloproteinase-8**

Cunningham, A. C., K.A., H., Enghild, J. J. & Mast, A. E., 2002, In: Biochem. J.. 367, p. 451-458 8 p.

**Substrate specificity of the metalloproteinase PAPP-A assessed by mutagenesis and analysis of synthetic peptides. Substrate residues distant from the scissile bond are critical for proteolysis**

Laursen, L. S., Overgaard, M. T., Nielsen, C. G., Boldt, H. B., Hopman, K. H., Enghild, J. J., Conover, C. A., Sottrup-Jensen, L., Giudice, L. C. & Oxvig, C., 2002, In: Biochem. J.. 367, p. 31-40 10 p.

**Covalent complexes of antigen and  $\alpha_2$ -macroglobulin: Evidence for dramatically-increased immunogenicity**

Cianciolo, G. J., Enghild, J. J. & Pizzo, S. V., 12 Nov 2001, In: Vaccine. 20, 3-4, p. 554-562 9 p.

**Altered expression of extracellular superoxide dismutase in mouse lung after bleomycin treatment**

Fattman, C. L., Chu, C. T., Kulich, S. M., Enghild, J. J. & Oury, T. D., 2001, In: Free Radic. Biol. Med.. 31, p. 1198-1207 10 p.

**Cdc2 phosphorylation of nucleolin demarcates mitotic stages and Alzheimer's disease pathology**

Dranovsky, A., Vincent, I., Gregori, L., Schwarzman, A., Colflesh, D., Enghild, J., Strittmatter, W., Davies, P. & Goldgaber, D., 2001, In: Neurobiology of Aging. 22, p. 517-528 12 p.

**Covalent complexes of antigen and alpha(2)-macroglobulin: evidence for dramatically-increased immunogenicity**

Cianciolo, G. J., Enghild, J. J. & Pizzo, S. V., 2001, In: Vaccine. 20, p. 554-562 9 p.

**Purification and characterization of extracellular superoxide dismutase in mouse lung**

Fattman, C. L., Enghild, J. J., Crapo, J. D., Schaefer, L. M., Valnickova, Z. & Oury, T. D., 28 Aug 2000, In: Biochemical and Biophysical Research Communications. 275, 2, p. 542-548 7 p.

**Purification and immunolocalization of extracellular superoxide dismutase in mouse lung**

Fattman, C. L., Enghild, J. J., Crapo, J. D., Schaefer, L. M., Valnickova, Z. & Oury, T. D., 2000, In: Biochem. Biophys. Res. Commun.. 274, p. 542-548 7 p.

**Secretion of extracellular superoxide dismutase in neonatal lungs**

Nozik-Grayck, E., Dieterle, C. S., Piantadosi, C. A., Enghild, J. J. & Oury, T. D., 2000, In: Am. J. Physiol. Lung Cell. Mol. Physiol.. 279, p. 977-984 8 p.

**Alpha1-microglobulin chromophores are located to three lysine residues semiburied in the lipocalin pocket and associated with a novel lipophilic compound**

Berggård, T., Cohen, A., Persson, P., Lindqvist, A., Cedervall, T., Silow, M., Thøgersen, I. B., Jönsson, J. A., Enghild, J. J. & Akerström, B., 1999, In: *Protein Science*. 8, 12, p. 2611-20 9 p.

**Angiostatin binds ATP synthase on the surface of human endothelial cells**

Moser, T. L., Stack, M. S., Asplin, I., Enghild, J. J., Højrup, P., Everitt, L., Hubchak, S., Schnaper, H. W. & Pizzo, S. V., 1999, In: *Proceedings of the National Academy of Sciences (PNAS)*. 96, 6, p. 2811-6 5 p.

**Angiostatin inhibits endothelial and melanoma cellular invasion by blocking matrix-enhanced plasminogen activation**

Stack, M. S., Gately, S., Bafetti, L. M., Enghild, J. J. & Soff, G. A., 1999, In: *Biochemical Journal*. 340 ( Pt 1), p. 77-84 7 p.

**Autocrine regulation of growth stimulation in human epithelial ovarian carcinoma by serine-proteinase-catalysed release of the urinary-type-plasminogen-activator N-terminal fragment**

Fishman, D. A., Kearns, A., Larsh, S., Enghild, J. J. & Stack, M. S., 1999, In: *Biochemical Journal*. 341 ( Pt 3), p. 765-9 4 p.

**Histologic distribution and biochemical properties of alpha 1-microglobulin in human placenta**

Berggård, T., Enghild, J. J., Badve, S., Salafia, C. M., Lögdberg, L. & Akerström, B., 1999, In: *American Journal of Reproductive Immunology*. 41, 1, p. 52-60 8 p.

**Organization of the inter-alpha-inhibitor heavy chains on the chondroitin sulfate originating from Ser(10) of bikunin: posttranslational modification of lalphan-derived bikunin**

Enghild, J. J., Thøgersen, I. B., Cheng, F., Fransson, L. A., Roepstorff, P. & Rahbek-Nielsen, H., 1999, In: *Biochemistry*. 38, 36, p. 11804-13 9 p.

**The heparin-binding domain of extracellular superoxide dismutase is proteolytically processed intracellularly during biosynthesis**

Enghild, J. J., Thøgersen, I., Oury, T. D., Valnickova, Z., Højrup, P. & Crapo, J. D., 1999, In: *Journal of Biological Chemistry*. 274, 21, p. 14818-22 4 p.

**Accumulation of beta ig-h3 gene product in corneas with granular dystrophy**

Klintworth, G. K., Valnickova, Z. & Enghild, J. J., 1998, In: *American Journal of Pathology*. 152, 3, p. 743-8 5 p.

**Alpha1-microglobulin is found both in blood and in most tissues**

Berggård, T., Oury, T. D., Thøgersen, I., Akerström, B. & Enghild, J. J., 1998, In: *Journal of Histochemistry and Cytochemistry*. 46, 8, p. 887-94 7 p.

**Comparative properties of two cysteine proteinases (gingipains R), the products of two related but individual genes of *Porphyromonas gingivalis***

Potempa, J., Mikolajczyk-Pawlinska, J., Brassell, D., Nelson, D., Thøgersen, I. B., Enghild, J. J. & Travis, J., 1998, In: *Journal of Biological Chemistry*. 273, 34, p. 21648-57 9 p.

**Expression of a copper-containing amine oxidase by human ciliary body**

Howell, D. N., Valnickova, Z., Oury, T. D., Miller, S. E., Sanfilippo, F. P. & Enghild, J. J., 1998, In: *Molecular Vision*. 4, p. 15

**Human procarboxypeptidase U, or thrombin-activable fibrinolysis inhibitor, is a substrate for transglutaminases. Evidence for transglutaminase-catalyzed cross-linking to fibrin**

Valnickova, Z. & Enghild, J. J., 1998, In: *Journal of Biological Chemistry*. 273, 42, p. 27220-4 4 p.

**Posttranslational modifications of human inter-alpha-inhibitor: identification of glycans and disulfide bridges in heavy chains 1 and 2**

Olsen, E. H., Rahbek-Nielsen, H., Thøgersen, I., Roepstorff, P. & Enghild, J. J., 1998, In: *Biochemistry*. 37, 1, p. 408-16 8 p.

**Preparation and electron paramagnetic resonance characterization of spin labeled monoderivatives of horse cytochrome c**  
Turyna, B., Osyczka, A., Kostrzewa, A., Blicharski, W., Enghild, J. J. & Froncisz, W., 1998, In: BBA General Subjects. 1386, 1, p. 50-8 8 p.

**Isolation of an angiotensin receptor from the membranes of human umbilical vein endothelial cells**  
Moser, T. L., Pizzo, S. V., Enghild, J. J., Hubchak, S. & Sharon Stack, M., 1 Dec 1997, In: Fibrinolysis and Proteolysis. 11, SUPPL. 3, 1 p.

**Assignment of a single disulphide bridge in human alpha2-antiplasmin: implications for the structural and functional properties**  
Christensen, S., Valnickova, Z., Thøgersen, I., Olsen, E. H. & Enghild, J. J., 1997, In: Biochemical Journal. 323 ( Pt 3), p. 847-52 5 p.

**Evidence for a novel O-linked sialylated trisaccharide on Ser-248 of human plasminogen 2**  
Pirie-Shepherd, S. R., Stevens, R. D., Andon, N. L., Enghild, J. J. & Pizzo, S. V., 1997, In: Journal of Biological Chemistry. 272, 11, p. 7408-11 3 p.

**Familial subepithelial corneal amyloidosis- a lactoferrin-related amyloidosis**  
Klintworth, G. K., Valnickova, Z., Kielar, R. A., Baratz, K. H., Campbell, R. J. & Enghild, J. J., 1997, In: Investigative Ophthalmology & Visual Science. 38, 13, p. 2756-63 7 p.

**Mouse extracellular superoxide dismutase: primary structure, tissue-specific gene expression, chromosomal localization, and lung in situ hybridization**  
Folz, R. J., Guan, J., Seldin, M. F., Oury, T. D., Enghild, J. J. & Crapo, J. D., 1997, In: American Journal of Respiratory Cell and Molecular Biology. 17, 4, p. 393-403 10 p.

**Prothrombin, albumin and immunoglobulin A form covalent complexes with alpha1-microglobulin in human plasma**  
Berggård, T., Thelin, N., Falkenberg, C., Enghild, J. J. & Akerström, B., 1997, In: FEBS journal. 245, 3, p. 676-83 7 p.

**The mechanism of cancer-mediated conversion of plasminogen to the angiogenesis inhibitor angiotensin**  
Gately, S., Twardowski, P., Stack, M. S., Cundiff, D. L., Grella, D., Castellino, F. J., Enghild, J., Kwaan, H. C., Lee, F., Kramer, R. A., Volpert, O., Bouck, N. & Soff, G. A., 1997, In: Proceedings of the National Academy of Sciences (PNAS). 94, 20, p. 10868-72 4 p.

**The paradigm that all oxygen-respiring eukaryotes have cytosolic CuZn-superoxide dismutase and that Mn-superoxide dismutase is localized to the mitochondria does not apply to a large group of marine arthropods**  
Brouwer, M., Brouwer, T. H., Grater, W., Enghild, J. J. & Thøgersen, I., 1997, In: Biochemistry. 36, 43, p. 13381-8 7 p.

**The potential role of alpha 2-macroglobulin in the control of cysteine proteinases (gingipains) from Porphyromonas gingivalis**  
Grøn, H., Pike, R., Potempa, J., Travis, J., Thøgersen, I. B., Enghild, J. J. & Pizzo, S. V., 1997, In: Journal of Periodontal Research. 32, 1 Pt 1, p. 61-8 7 p.

**Activated human plasma carboxypeptidase B is retained in the blood by binding to alpha2-macroglobulin and pregnancy zone protein**  
Valnickova, Z., Thøgersen, I., Christensen, S., Chu, C. T., Pizzo, S. V. & Enghild, J. J., 1996, In: Journal of Biological Chemistry. 271, 22, p. 12937-43 6 p.

**Degradation of interleukin 1beta by matrix metalloproteinases**  
Ito, A., Mukaiyama, A., Itoh, Y., Nagase, H., Thøgersen, I., Enghild, J. J., Sasaguri, Y. & Mori, Y., 1996, In: Journal of Biological Chemistry. 271, 25, p. 14657-60 3 p.

**Hamster antithrombin III: purification, characterization and acute phase response**  
Mak, P., Enghild, J. J. & Dubin, A., 1996, In: Comparative Biochemistry and Physiology - Part B: Biochemistry & Molecular Biology. 115, 1, p. 135-41 6 p.

**Human extracellular superoxide dismutase is a tetramer composed of two disulphide-linked dimers: a simplified, high-yield purification of extracellular superoxide dismutase**

Oury, T. D., Crapo, J. D., Valnickova, Z. & Enghild, J. J., 1996, In: *Biochemical Journal*. 317 ( Pt 1), p. 51-7 6 p.

**Human prostate carcinoma cells express enzymatic activity that converts human plasminogen to the angiogenesis inhibitor, angiostatin**

Gately, S., Twardowski, P., Stack, M. S., Patrick, M., Boggio, L., Cundiff, D. L., Schnaper, H. W., Madison, L., Volpert, O., Bouck, N., Enghild, J., Kwaan, H. C. & Soff, G. A., 1996, In: *Cancer Research*. 56, 21, p. 4887-90 3 p.

**Huntingtin and DRPLA proteins selectively interact with the enzyme GAPDH**

Burke, J. R., Enghild, J. J., Martin, M. E., Jou, Y. S., Myers, R. M., Roses, A. D., Vance, J. M. & Strittmatter, W. J., 1996, In: *Nature Medicine*. 2, 3, p. 347-50 3 p.

**Structural and functional analysis of the spontaneous re-formation of the thiol ester bond in human alpha 2-macroglobulin, rat alpha 1-inhibitor-3 and chemically modified derivatives**

Grøn, H., Thøgersen, I. B., Enghild, J. J. & Pizzo, S. V., 1996, In: *Biochemical Journal*. 318 ( Pt 2), p. 539-45 6 p.

**alpha 1-Microglobulin destroys the proteinase inhibitory activity of alpha 1-inhibitor-3 by complex formation**

Falkenberg, C., Allhorn, M., Thøgersen, I. B., Valnickova, Z., Pizzo, S. V., Salvesen, G., Akerström, B. & Enghild, J. J., 1995, In: *Journal of Biological Chemistry*. 270, 9, p. 4478-83 5 p.

**Biosynthesis of bikunin proteins in the human carcinoma cell line HepG2 and in primary human hepatocytes. Polypeptide assembly by glycosaminoglycan**

Thøgersen, I. B. & Enghild, J. J., 1995, In: *Journal of Biological Chemistry*. 270, 31, p. 18700-9 9 p.

**Formation of the alpha 1-microglobulin chromophore in mammalian and insect cells: a novel post-translational mechanism?**

Akerström, B., Bratt, T. & Enghild, J. J., 1995, In: *FEBS Letters*. 362, 1, p. 50-4 4 p.

**Primary structure and tissue-specific expression of blue crab (*Callinectes sapidus*) metallothionein isoforms**

Brouwer, M., Enghild, J., Hoexum-Brouwer, T., Thøgersen, I. & Truncali, A., 1995, In: *Biochemical Journal*. 311 ( Pt 2), p. 617-22 5 p.

**Sodium dodecyl sulfate-stable complexes between serpins and active or inactive proteinases contain the region COOH-terminal to the reactive site loop**

Christensen, S., Valnickova, Z., Thøgersen, I. B., Pizzo, S. V., Nielsen, H. R., Roepstorff, P. & Enghild, J. J., 1995, In: *Journal of Biological Chemistry*. 270, 25, p. 14859-62 3 p.

**Specific binding of urinary-type plasminogen activator (u-PA) to vitronectin and its role in mediating u-PA-dependent adhesion of U937 cells**

Moser, T. L., Enghild, J. J., Pizzo, S. V. & Stack, M. S., 1995, In: *Biochemical Journal*. 307 ( Pt 3), p. 867-73 6 p.

**The effect of residue 1106 on the thioester-mediated covalent binding reaction of human complement protein C4 and the monomeric rat alpha-macroglobulin alpha 1 I3**

Ren, X. D., Dodds, A. W., Enghild, J. J., Chu, C. T. & Law, S. K., 1995, In: *FEBS Letters*. 368, 1, p. 87-91 4 p.

**The primary elastase inhibitor (elastasin) and trypsin inhibitor (contrapsin) in the goat are serpins related to human alpha 1-anti-chymotrypsin**

Potempa, J., Enghild, J. J. & Travis, J., 1995, In: *Biochemical Journal*. 306 ( Pt 1), p. 191-7 6 p.

**Transthyretin sequesters amyloid beta protein and prevents amyloid formation**

Schwarzman, A. L., Gregori, L., Vitek, M. P., Lyubski, S., Strittmatter, W. J., Enghild, J. J., Bhasin, R., Silverman, J., Weisgraber, K. H. & Coyle, P. K., 30 Aug 1994, In: *Proceedings of the National Academy of Sciences (PNAS)*. 91, 18, p. 8368-8372 5 p.

**Adjuvant-free in vivo targeting. Antigen delivery by alpha 2-macroglobulin enhances antibody formation**

Chu, C. T., Oury, T. D., Enghild, J. J. & Pizzo, S. V., 1994, In: Journal of Immunology. 152, 4, p. 1538-45 7 p.

**Complexes between serpins and inactive proteinases are not thermodynamically stable but are recognized by serpin receptors**

Enghild, J. J., Valnickova, Z., Thøgersen, I. B. & Pizzo, S. V., 1994, In: Journal of Biological Chemistry. 269, 31, p. 20159-66 7 p.

**Isolation and characterization of fibronectin-alpha 1-microglobulin complex in rat plasma**

Falkenberg, C., Enghild, J. J., Thøgersen, I. B., Salvesen, G. & Akerström, B., 1994, In: Biochemical Journal. 301 ( Pt 3), p. 745-51 6 p.

**Matrix metalloproteinases degrade insulin-like growth factor-binding protein-3 in dermal fibroblast cultures**

Fowlkes, J. L., Enghild, J. J., Suzuki, K. & Nagase, H., 1994, In: Journal of Biological Chemistry. 269, 41, p. 25742-6 4 p.

**Protein structure of fetal antigen 1 (FA1). A novel circulating human epidermal-growth-factor-like protein expressed in neuroendocrine tumors and its relation to the gene products of dlk and pG2**

Jensen, C. H., Krogh, T. N., Højrup, P., Clausen, P. P., Skjødt, K., Larsson, L. I., Enghild, J. J. & Teisner, B., 1994, In: FEBS journal. 225, 1, p. 83-92 9 p.

**Establishment of two distinct protein domains in blue crab *Callinectes sapidus* metallothionein-I through heteronuclear ( $^{113}\text{Cd}$ ) and homonuclear ( $^1\text{H}$ ) correlation NMR experiments**

Narula, S. S., Armitage, I. M., Brouwer, M. & Enghild, J. J., 1 Jan 1993, In: Magnetic Resonance in Chemistry. 31, 13, p. S96-S103

**Protein-glycosaminoglycan-protein Covalent Cross-link in Heavy Chain 2-Bikunin**

Enghild, J. J., Salvesen, G., Theagerson, L., Valanickova, Z., Pizzo, S. V. & Hefta, S. A., 1 Jan 1993, In: Trends in Glycoscience and Glycotechnology. 5, 25, p. 401-404 4 p.

**alpha-Macroglobulins: detection and characterization**

Salvesen, G. & Enghild, J. J., 1993, In: Methods in Enzymology. 223, p. 121-41 20 p.

**An examination of the inhibitory mechanism of serpins by analysing the interaction of trypsin and chymotrypsin with alpha 2-antiplasmin**

Enghild, J. J., Valnickova, Z., Thøgersen, I. B., Pizzo, S. V. & Salvesen, G., 1993, In: Biochemical Journal. 291 ( Pt 3), p. 933-8 5 p.

**Apolipoprotein E: high-avidity binding to beta-amyloid and increased frequency of type 4 allele in late-onset familial Alzheimer disease**

Strittmatter, W. J., Saunders, A. M., Schmechel, D., Pericak-Vance, M., Enghild, J., Salvesen, G. S. & Roses, A. D., 1993, In: Proceedings of the National Academy of Sciences (PNAS). 90, 5, p. 1977-81 4 p.

**Factor XIIIa-derived peptides inhibit transglutaminase activity. Localization of substrate recognition sites**

Achyuthan, K. E., Slaughter, T. F., Santiago, M. A., Enghild, J. J. & Greenberg, C. S., 1993, In: Journal of Biological Chemistry. 268, 28, p. 21284-92 8 p.

**Identification of monomeric alpha-macroglobulin proteinase inhibitors in birds, reptiles, amphibians and mammals, and purification and characterization of a monomeric alpha-macroglobulin proteinase inhibitor from the American bullfrog *Rana catesbeiana***

Rubenstein, D. S., Thøgersen, I. B., Pizzo, S. V. & Enghild, J. J., 1993, In: Biochemical Journal. 290 ( Pt 1), p. 85-95 10 p.

**Presence of the protein-glycosaminoglycan-protein covalent cross-link in the inter-alpha-inhibitor-related proteinase inhibitor heavy chain 2/bikunin**

Enghild, J. J., Salvesen, G., Thøgersen, I. B., Valnickova, Z., Pizzo, S. V. & Hefta, S. A., 1993, In: Journal of Biological Chemistry. 268, 12, p. 8711-6 5 p.

**Streptokinase and human fibronectin share a common epitope: implications for regulation of fibrinolysis and rheumatoid arthritis**

Gonzalez-Gronow, M., Enghild, J. J. & Pizzo, S. V., 1993, In: BBA General Subjects. 1180, 3, p. 283-8 5 p.

**The extracellular matrix proteins laminin and fibronectin contain binding domains for human plasminogen and tissue plasminogen activator**

Moser, T. L., Enghild, J. J., Pizzo, S. V. & Stack, M. S., 1993, In: Journal of Biological Chemistry. 268, 25, p. 18917-23 6 p.

**Activation mechanisms of the precursors of matrix metalloproteinases 1, 2 and 3**

Nagase, H., Suzuki, K., Morodomi, T., Enghild, J. J. & Salvesen, G., 1992, In: Matrix (Stuttgart, Germany). Supplement. 1, p. 237-44 7 p.

**Conformation of the reactive site loop of alpha 1-proteinase inhibitor probed by limited proteolysis**

Mast, A. E., Enghild, J. J. & Salvesen, G., 1992, In: Biochemistry. 31, 10, p. 2720-8 8 p.

**Equine leukocyte elastase inhibitor. Primary structure and identification as a thymosin-binding protein**

Dubin, A., Travis, J., Enghild, J. J. & Potempa, J., 1992, In: Journal of Biological Chemistry. 267, 10, p. 6576-83 7 p.

**Expression of a functional alpha-macroglobulin receptor binding domain in Escherichia coli**

Salvesen, G., Quan, L. T., Enghild, J. J., Snipas, S., Fey, G. H. & Pizzo, S. V., 1992, In: FEBS Letters. 313, 2, p. 198-202 4 p.

**Matrix metalloproteinase 3 (stromelysin) activates the precursor for the human matrix metalloproteinase 9**

Ogata, Y., Enghild, J. J. & Nagase, H., 1992, In: Journal of Biological Chemistry. 267, 6, p. 3581-4 3 p.

**Molecular cloning and nucleotide sequence of cDNA encoding human muscle glycogen debranching enzyme**

Yang, B. Z., Ding, J. H., Enghild, J. J., Bao, Y. & Chen, Y. T., 1992, In: Journal of Biological Chemistry. 267, 13, p. 9294-9 5 p.

**Purification and characterization of an alpha-macroglobulin proteinase inhibitor from the mollusc Octopus vulgaris**

Thøgersen, I. B., Salvesen, G., Brucato, F. H., Pizzo, S. V. & Enghild, J. J., 1992, In: Biochemical Journal. 285 ( Pt 2), p. 521-7 6 p.

**Analysis of the plasma elimination kinetics and conformational stabilities of native, proteinase-complexed, and reactive site cleaved serpins: comparison of alpha 1-proteinase inhibitor, alpha 1-antichymotrypsin, antithrombin III, alpha 2-antiplasmin, angiotensinogen, and ovalbumin**

Mast, A. E., Enghild, J. J., Pizzo, S. V. & Salvesen, G., 1991, In: Biochemistry. 30, 6, p. 1723-30 7 p.

**Bovine corneal protein 54K (BCP54) is a homologue of the tumor-associated (class 3) rat aldehyde dehydrogenase (RATALD)**

Cooper, D. L., Baptist, E. W., Enghild, J. J., Isola, N. R. & Klintworth, G. K., 1991, In: Gene. 98, 2, p. 201-7 6 p.

**Chondroitin 4-sulfate covalently cross-links the chains of the human blood protein pre-alpha-inhibitor**

Enghild, J. J., Salvesen, G., Hefta, S. A., Thøgersen, I. B., Rutherford, S. & Pizzo, S. V., 1991, In: Journal of Biological Chemistry. 266, 2, p. 747-51 4 p.

**Kinetics and physiologic relevance of the inactivation of alpha 1-proteinase inhibitor, alpha 1-antichymotrypsin, and antithrombin III by matrix metalloproteinases-1 (tissue collagenase), -2 (72-kDa gelatinase/type IV collagenase), and -3 (stromelysin)**

Mast, A. E., Enghild, J. J., Nagase, H., Suzuki, K., Pizzo, S. V. & Salvesen, G., 1991, In: Journal of Biological Chemistry. 266, 24, p. 15810-6 6 p.

**Limited proteolysis of the alpha-macroglobulin rat alpha 1-inhibitor-3. Implications for a domain structure**

Rubenstein, D. S., Enghild, J. J. & Pizzo, S. V., 1991, In: Journal of Biological Chemistry. 266, 17, p. 11252-61 9 p.

**Mechanism of insulin incorporation into alpha 2-macroglobulin: implications for the study of peptide and growth factor binding**

Chu, C. T., Rubenstein, D. S., Enghild, J. J. & Pizzo, S. V., 1991, In: Biochemistry. 30, 6, p. 1551-60 9 p.

**Stepwise activation mechanisms of the precursors of matrix metalloproteinases 1 (tissue collagenase) and 3 (stromelysin)**

Nagase, H., Suzuki, K., Enghild, J. J. & Salvesen, G., 1991, In: Biomedica Biochimica Acta. 50, 4-6, p. 749-54 5 p.

**Substrate specificities and activation mechanisms of matrix metalloproteinases**

Nagase, H., Ogata, Y., Suzuki, K., Enghild, J. J. & Salvesen, G., 1991, In: Biochemical Society. Transactions. 19, 3, p. 715-8 3 p.

**Zymogen activation specificity and genomic structures of human neutrophil elastase and cathepsin G reveal a new branch of the chymotrypsinogen superfamily of serine proteinases**

Salvesen, G. & Enghild, J. J., 1991, In: Biomedica Biochimica Acta. 50, 4-6, p. 665-71 6 p.

**Alpha-macroglobulin from Limulus polyphemus exhibits proteinase inhibitory activity and participates in a hemolytic system**

Enghild, J. J., Thøgersen, I. B., Salvesen, G., Fey, G. H., Figler, N. L., Gonias, S. L. & Pizzo, S. V., 1990, In: Biochemistry. 29, 43, p. 10070-80 10 p.

**An unusual specificity in the activation of neutrophil serine proteinase zymogens**

Salvesen, G. & Enghild, J. J., 1990, In: Biochemistry. 29, 22, p. 5304-8 4 p.

**Matrix metalloproteinase 2 from human rheumatoid synovial fibroblasts. Purification and activation of the precursor and enzymic properties**

Okada, Y., Morodomi, T., Enghild, J. J., Suzuki, K., Yasui, A., Nakanishi, I., Salvesen, G. & Nagase, H., 1990, In: FEBS journal. 194, 3, p. 721-30 9 p.

**Mechanisms of activation of tissue procollagenase by matrix metalloproteinase 3 (stromelysin)**

Suzuki, K., Enghild, J. J., Morodomi, T., Salvesen, G. & Nagase, H., 1990, In: Biochemistry. 29, 44, p. 10261-70 9 p.

**Neonatal plasminogen displays altered cell surface binding and activation kinetics. Correlation with increased glycosylation of the protein**

Edelberg, J. M., Enghild, J. J., Pizzo, S. V. & Gonzalez-Gronow, M., 1990, In: Journal of Clinical Investigation. 86, 1, p. 107-12 5 p.

**Partial amino acid sequence determination of bovine corneal protein 54 K (BCP 54)**

Cooper, D. L., Baptist, E. W., Enghild, J., Lee, H., Isola, N. & Klintworth, G. K., 1990, In: Current Eye Research. 9, 8, p. 781-6 5 p.

**Stepwise activation mechanisms of the precursor of matrix metalloproteinase 3 (stromelysin) by proteinases and (4-aminophenyl)mercuric acetate**

Nagase, H., Enghild, J. J., Suzuki, K. & Salvesen, G., 1990, In: Biochemistry. 29, 24, p. 5783-9 6 p.

**Structure of inter-alpha-inhibitor (inter-alpha-trypsin inhibitor) and pre-alpha-inhibitor: current state and proposition of a new terminology**

Gebhard, W., Hochstrasser, K., Fritz, H., Enghild, J. J., Pizzo, S. V. & Salvesen, G., 1990, In: Biological chemistry Hoppe-Seyler. 371 Suppl, p. 13-22 9 p.

**The role of matrix metalloproteinase 3 in the stepwise activation of human rheumatoid synovial procollagenase**

Suzuki, K., Nagase, H., Ito, A., Enghild, J. J. & Salvesen, G., 1990, In: Biological chemistry Hoppe-Seyler. 371 Suppl, p. 305-10 5 p.

**A conserved region in alpha-macroglobulins participates in binding to the mammalian alpha-macroglobulin receptor**  
Enghild, J. J., Thøgersen, I. B., Roche, P. A. & Pizzo, S. V., 1989, In: *Biochemistry*. 28, 3, p. 1406-12 6 p.

**Analysis of inter-alpha-trypsin inhibitor and a novel trypsin inhibitor, pre-alpha-trypsin inhibitor, from human plasma. Polypeptide chain stoichiometry and assembly by glycan**  
Enghild, J. J., Thøgersen, I. B., Pizzo, S. V. & Salvesen, G., 1989, In: *Journal of Biological Chemistry*. 264, 27, p. 15975-81 6 p.

**Characterization of a translation inhibitory protein from *Luffa aegyptiaca***  
Ramakrishnan, S., Enghild, J. J., Bryant, H. L. & Xu, F. J., 1989, In: *Biochemical and Biophysical Research Communications*. 160, 2, p. 509-16 7 p.

**Interaction of human rheumatoid synovial collagenase (matrix metalloproteinase 1) and stromelysin (matrix metalloproteinase 3) with human alpha 2-macroglobulin and chicken ovostatin. Binding kinetics and identification of matrix metalloproteinase cleavage sites**  
Enghild, J. J., Salvesen, G., Brew, K. & Nagase, H., 1989, In: *Journal of Biological Chemistry*. 264, 15, p. 8779-85 6 p.

**NH2-terminal amino acid sequence of rabbit hepatopietin A, a heparin-binding polypeptide growth factor for hepatocytes**  
Zarnegar, R., Muga, S., Enghild, J. & Michalopoulos, G., 1989, In: *Biochemical and Biophysical Research Communications*. 163, 3, p. 1370-6 6 p.

**Proteinase binding and inhibition by the monomeric alpha-macroglobulin rat alpha 1-inhibitor-3**  
Enghild, J. J., Salvesen, G., Thøgersen, I. B. & Pizzo, S. V., 1989, In: *Journal of Biological Chemistry*. 264, 19, p. 11428-35 7 p.

**Evidence that the platinum-reactive methionyl residue of the alpha 2-macroglobulin receptor recognition site is not in the carboxyl-terminal receptor binding domain**  
Roche, P. A., Strickland, D. K., Enghild, J. J. & Pizzo, S. V., 1988, In: *Journal of Biological Chemistry*. 263, 14, p. 6715-21 6 p.

**Isolation of a fibrin-binding fragment from blood coagulation factor XIII capable of cross-linking fibrin(ogen)**  
Greenberg, C. S., Enghild, J. J., Mary, A., Dobson, J. V. & Achyuthan, K. E., 1988, In: *Biochemical Journal*. 256, 3, p. 1013-9 6 p.