

## Daniel Otzen

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## CV

Født: 2. januar 1969 i Sønderborg  
Privatadresse: Minthøjvej 1, DK – 8210 Århus V  
Nuværende stilling: Professor i nanobioteknologi  
Arbejdsplads: iNANO, Molekylærbiologisk Institut, Aarhus Universitet, Gustav Wiedes Vej 10C, 8000 Aarhus C.  
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### Uddannelse

1992: Cand. Scient. (kemi-bioteknologi), Aarhus Universitet  
1995: Ph.D. (protein biofysik), Aarhus Universitet og Cambridge Universitet

### Ansættelser

1995-199: Kemiker, Novo Nordisk A/S  
1997-2000: Post-doc, Lunds Universitet  
2000-2004: Lektor, Institut for Bioteknologi, Aalborg Universitet  
2004-2007: Professor, Institut for Bioteknologi, Aalborg Universitet  
2007-nu : Professor, iNANO, Aarhus Universitet  
2006-2011: Adjungeret Professor, Farmaceutisk Fakultet, Københavns Universitet  
2007-2012: Adjungeret Professor, Det Teknik-, Sundheds- og Naturvidenskabelige Fakultet, Aalborg University

### Udmærkelser mv.

2011: Medlem, Danmarks Naturvidenskabelige Akademi (DNA)  
2010: Medlem, Det Kgl. Danske Videnskabernes Selskab  
2009: Alzheimer Foreningens forskningspris  
2006: Carlsberg Bioteknologipris  
2003: Sølvmedalje, Det Kgl. Danske Videnskabernes Selskab  
2003: EMBO Young Investigator

### Lederskab

2006-2011: Konsortieleder, Innovation Consortium CureND  
2002-2007: Leder af Ph.d. skolen i bioteknologi, Aalborg Universitet.

### Vejledning

Siden 2000 afsluttet vejledning af 15 PhD studerende og 30 M.Sc. studerende

### Videnskabelig produktion

>180 artikler i internationale peer-review tidsskrifter  
> 4000 citationer. H-index 35.

### Akademiske aktiviteter

2009-: Redaktør, Biochimica et Biophysica Acta  
2008-: Redaktør, Biophysical Chemistry  
Desuden reviewer for > 30 forskellige internationale tidsskrifter.

### Foredrag

> 35 foredrag ved konferencer og forskningsinstitutioner siden 2000

### Kompetencer og forskningsinteresser

Fibrillering og aggregering af proteiner

- Membranprotein foldning og stabilitet
- Protein-tensid vekselvirkninger

Disse måles med optisk spektroskopi, mekano-akustiske instrumenter, kalorimetri og imaging udstyr i kombination med apparatur til hurtig reaktionskinetik, protein engineering og mekanistiske data analyser.

## Publikationer 1993-

### Impact of hydrolysis method and lactase preparation on proteolysis and glycation in long-term stored lactose-hydrolysed UHT milk

Knudsen, L. J., Nielsen, S. D-H., Dekker, P., Otzen, D. E., Rauh, V. & Larsen, L. B., jul. 2024, I: International Dairy Journal. 154, 11 s., 105946.

### **Functional Amyloids: The Biomaterials of Tomorrow?**

Peña-Díaz, S., Olsen, W. P., Wang, H. & Otzen, D. E., 2 maj 2024, I: *Advanced Materials*. 36, 18, 2312823.

### **A Targetable N-Terminal Motif Orchestrates $\alpha$ -Synuclein Oligomer-to-Fibril Conversion**

Santos, J., Cuellar, J., Pallarès, I., Byrd, E. J., Lends, A., Moro, F., Abdul-Shukoor, M. B., Pujols, J., Velasco-Carneros, L., Sobott, F., Otzen, D. E., Calabrese, A. N., Muga, A., Pedersen, J. S., Loquet, A., Valpuesta, J. M., Radford, S. E. & Ventura, S., maj 2024, I: *Journal of the American Chemical Society*. 146, 18, s. 12702-12711 10 s.

### **The impact of hUC MSC-derived exosome-nanoliposome hybrids on $\alpha$ -synuclein fibrillation and neurotoxicity**

Aliakbari, F., Marzookian, K., Parsafar, S., Hourfar, H., Nayeri, Z., Fattahi, A., Raeiji, M., Boroujeni, N. N., Otzen, D. E. & Morshedi, D., 5 apr. 2024, I: *Science Advances*. 10, 14, s. eadl3406 eadl3406.

### **Antibodies and $\alpha$ -synuclein: What to target against Parkinson's Disease?**

Otzen, D. E., feb. 2024, I: *B B A - Proteins and Proteomics*. 1872, 2, 140943.

### **Extracellular G-quadruplexes and Z-DNA protect biofilms from DNase I, and G-quadruplexes form a DNAzyme with peroxidase activity**

Minero, G. A. S., Møllebjerg, A., Thiesen, C., Johansen, M. I., Jørgensen, N. P., Birkedal, V., Otzen, D. E. & Meyer, R. L., feb. 2024, I: *Nucleic Acids Research*. 52, 4, s. 1575-1590 16 s.

### **Two Receptor Binding Strategy of SARS-CoV-2 Is Mediated by Both the N-Terminal and Receptor-Binding Spike Domain**

Monti, M., Milanetti, E., Frans, M. T., Miotto, M., Di Rienzo, L., Baranov, M. V., Gosti, G., Somavarapu, A. K., Nagaraj, M., Golbek, T. W., Rossing, E., Moons, S. J., Boltje, T. J., van den Bogaart, G., Weidner, T., Otzen, D. E., Tartaglia, G. G., Ruocco, G. & Roeters, S. J., 18 jan. 2024, I: *The journal of physical chemistry. B*. 128, 2, s. 451-464 14 s.

### **Alzheimer's Progenitor Amyloid- $\beta$ Targets and Dissolves Microbial Amyloids and Impairs Biofilm Function**

Ali, S. A., Chung, K. H. K., Forgham, H., Olsen, W. P., Kakinen, A., Balaji, A., Otzen, D. E., Davis, T. P. & Javed, I., okt. 2023, I: *Advanced Science*. 10, 29, 16 s., e2301423.

### **Elevated concentrations cause upright alpha-synuclein conformation at lipid interfaces**

Roeters, S. J., Strunge, K., Pedersen, K. B., Golbek, T. W., Bregnhøj, M., Zhang, Y., Wang, Y., Dong, M., Nielsen, J., Otzen, D. E., Schiøtt, B. & Weidner, T., sep. 2023, I: *Nature Communications*. 14, 1, 12 s., 5731.

### **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., sep. 2023, I: *Biochemistry*. 62, 19, s. 2803-2815 13 s.

### **Tau Fibrillation Induced by Heparin or a Lysophospholipid Show Different Initial Oligomer Formation**

Rasmussen, H. Ø., Nielsen, J., de Poli, A., Otzen, D. E. & Pedersen, J. S., sep. 2023, I: *Journal of Molecular Biology*. 435, 17, 18 s., 168194.

### **4-Oxo-2-nonenal-Induced $\alpha$ -Synuclein Oligomers Interact with Membranes in the Cell, Leading to Mitochondrial Fragmentation**

Andersen, C. B., Lausdahl, A. K., Nielsen, J., Clausen, M. P., Mulder, F. A. A., Otzen, D. E. & Arnsparng, E. C., aug. 2023, I: *Biochemistry*. 62, 16, s. 2417-2425 9 s.

### **GFP fusions of Sec-routed extracellular proteins in *Staphylococcus aureus* reveal surface-associated coagulase in biofilms**

Evans, D. C. S., Khamas, A. B., Marcussen, L., Rasmussen, K. S., Klitgaard, J. K., Kallipolitis, B. H., Nielsen, J., Otzen, D. E., Leake, M. C. & Meyer, R. L., jul. 2023, I: *Microbial Cell*. 10, 7, s. 145-156 12 s.

### **Overexpression of human alpha-Synuclein leads to dysregulated microbiome/metabolites with ageing in a rat model of Parkinson disease**

Singh, Y., Trautwein, C., Romani, J., Salker, M. S., Neckel, P. H., Fraccaroli, I., Abeditashi, M., Woerner, N., Admard, J., Dhariwal, A., Dueholm, M. K. D., Schäfer, K. H., Lang, F., Otzen, D. E., Lashuel, H. A., Riess, O. & Casadei, N., jul. 2023,

I: Molecular Neurodegeneration. 18, 1, 44.

**Sequence-targeted Peptides Divert Functional Bacterial Amyloid Towards Destabilized Aggregates and Reduce Biofilm Formation**

Sønderby, T. V., Louros, N. N., Khodaparast, L., Khodaparast, L., Madsen, D. J., Olsen, W. P., Moonen, N., Nagaraj, M., Sereikaite, V., Strømgaard, K., Rousseau, F., Schymkowitz, J. & Otzen, D. E., 1 jun. 2023, I: Journal of Molecular Biology. 435, 11, s. 168039-168039.

**Drug repurposing screens identify compounds that inhibit  $\alpha$ -synuclein oligomers' membrane disruption and block antibody interactions**

Somavarapu, A. K., Kleijwegt, G., Nagaraj, M., Alam, P., Nielsen, J. & Otzen, D. E., mar. 2023, I: Chemical Science. 14, 11, s. 3030-3047-18 s.

**Inhibitory effects of fluorinated benzenesulfonamides on insulin fibrillation**

Alijanvand, S. H., Ladefoged, L. K., Zubrienè, A., Sakalauskas, A., Christiansen, G., Dudutiene, V., Schjøtt, B., Matulis, D., Smirnovas, V. & Otzen, D. E., feb. 2023, I: International Journal of Biological Macromolecules. 227, s. 590-600-11 s.

**The anti-platelet drug ticlopidine inhibits FapC fibrillation and biofilm production: Highlighting its antibiotic activity**

Pirhaghi, M., Najarzadeh, Z., Moosavi-Movahedi, F., Shafizadeh, M., Mamashli, F., Atarod, D., Ghasemi, A., Morshedi, D., Meratan, A. A., Otzen, D. E. & Saboury, A. A., feb. 2023, I: Biochimica et Biophysica Acta - Proteins and Proteomics. 1871, 2, 14 s., 140883.

**The impact of  $\alpha$ -synuclein aggregates on blood-brain barrier integrity in the presence of neurovascular unit cells**

Hourfar, H., Aliakbari, F., Aqdam, S. R., Nayeri, Z., Bardania, H., Otzen, D. E. & Morshedi, D., feb. 2023, I: International Journal of Biological Macromolecules. 229, s. 305-320-16 s.

**FapA is an Intrinsically Disordered Chaperone for *Pseudomonas* Functional Amyloid FapC**

Rasmussen, H. Ø., Kumar, A., Shin, B., Stylianou, F., Sewell, L., Xu, Y., Otzen, D. E., Pedersen, J. S. & Matthews, S. J., jan. 2023, I: Journal of Molecular Biology. 435, 2, 18 s., 167878.

**Anastellin impacts on the processing of extracellular matrix fibronectin and stimulates release of cytokines from coronary artery smooth muscle cells**

He, J., Steffen, J. H., Thulstrup, P. W., Pedersen, J. N., Sauerland, M. B., Otzen, D. E., Hawkins, C. L., Gourdon, P., Davies, M. J. & Häggglund, P., dec. 2022, I: Scientific Reports. 12, 1, 15 s., 22051.

**A penetratin-derived peptide reduces the membrane permeabilization and cell toxicity of  $\alpha$ -synuclein oligomers**

Pirhaghi, M., Frank, S. A., Alam, P., Nielsen, J., Sereikaite, V., Gupta, A., Strømgaard, K., Andreasen, M., Sharma, D., Saboury, A. A. & Otzen, D. E., dec. 2022, I: Journal of Biological Chemistry. 298, 12, 102688.

**A Semester-Long Learning Path Teaching Computational Skills via Molecular Graphics in PyMOL**

Kjærgaard, M., Rasmussen, L. S., Vinther, J. N., Andersen, K. R., Andersen, E. S., Lorentzen, E., Thirup, S. S., Otzen, D. & Brodersen, D. E., dec. 2022, I: The Biophysicist. 3, 2, s. 106-114-9 s.

**EGCG has Dual and Opposing Effects on the N-terminal Region of Self-associating  $\alpha$ -synuclein Oligomers**

Grønnemose, A. L., Østerlund, E. C., Otzen, D. E. & Jørgensen, T. J. D., dec. 2022, I: Journal of Molecular Biology. 434, 23, 167855.

**Functional amyloid in a lipid-like environment: a merry dance of many steps**

Otzen, D. E., dec. 2022, I: Essays in Biochemistry. 66, 7, s. 1035-1046-12 s.

**Molecular-level insights into the surface-induced assembly of Functional Bacterial Amyloid**

Sønderby, T. V., Zou, Y., Wang, P., Wang, C. & Otzen, D. E., sep. 2022, I: Biophysical Journal. 121, 18, s. 3422-3434-13 s.

### **Uncovering the universality of self-replication in protein aggregation and its link to disease**

Meisl, G., Xu, C. K., Taylor, J. D., Michaels, T. C. T., Levin, A., Otzen, D., Klenerman, D., Matthews, S., Linse, S., Andreasen, M. & Knowles, T. P. J., aug. 2022, I: *Science Advances*. 8, 32, eabn6831.

### **Structural Basis for Dityrosine-Mediated Inhibition of $\alpha$ -Synuclein Fibrillization**

Sahin, C., Østerlund, E. C., Österlund, N., Costeira-Paulo, J., Pedersen, J. N., Christiansen, G., Nielsen, J., Grønnemose, A. L., Amstrup, S. K., Tiwari, M. K., Rao, R. S. P., Bjerrum, M. J., Ilag, L. L., Davies, M. J., Marklund, E. G., Pedersen, J. S., Landreh, M., Møller, I. M., Jørgensen, T. J. D. & Otzen, D. E., jul. 2022, I: *Journal of the American Chemical Society*. 144, 27, s. 11949-11954 6 s.

### **Structural variations between small alarmone hydrolase dimers support different modes of regulation of the stringent response**

Bisiak, F., Chrenková, A., Zhang, S. D., Pedersen, J. N., Otzen, D. E., Zhang, Y. E. & Brodersen, D. E., jul. 2022, I: *Journal of Biological Chemistry*. 298, 7, 102142.

### **The optimal docking strength for reversibly tethered kinases**

Dyla, M., González Foutel, N. S., Otzen, D. E. & Kjaergaard, M., 21 jun. 2022, I: *Proceedings of the National Academy of Sciences*. 119, 25, e2203098119.

### **Glycation modulates alpha-synuclein fibrillization kinetics: a sweet spot for inhibition**

Farzadfard, A., König, A., Petersen, S. V., Nielsen, J., Vasili, E., Dominguez-Mejjide, A., Buell, A. K., Outeiro, T. F. & Otzen, D. E., maj 2022, I: *The Journal of Biological Chemistry*. 298, 5, 14 s., 101848.

### **The changing face of SDS denaturation: Complexes of *Thermomyces lanuginosus* lipase with SDS at pH 4.0, 6.0 and 8.0**

Rasmussen, H. Ø., Wollenberg, D. T. W., Wang, H., Andersen, K. K., Oliveira, C. L. P., Jørgensen, C. I., Jørgensen, T. J. D., Otzen, D. E. & Pedersen, J. S., maj 2022, I: *Journal of Colloid and Interface Science*. 614, s. 214-232 19 s.

### **Low dose DMSO treatment induces oligomerization and accelerates aggregation of $\alpha$ -synuclein**

Reimer, L., Haikal, C., Gram, H., Theologidis, V., Kovacs, G., Ruesink, H., Baun, A., Nielsen, J., Otzen, D. E., Li, J-Y. & Jensen, P. H., mar. 2022, I: *Scientific Reports*. 12, 3737.

### **Bidirectional protein-protein interactions control liquid-liquid phase separation of PSD-95 and its interaction partners**

Christensen, N. R., Pedersen, C. P., Sereikaite, V., Pedersen, J. N., Vistrup-Parry, M., Sørensen, A. T., Otzen, D., Teilum, K., Madsen, K. L. & Strømgaard, K., feb. 2022, I: *iScience*. 25, 2, 26 s., 103808.

### **Induction, inhibition, and incorporation: Different roles for anionic and zwitterionic lysolipids in the fibrillation of the functional amyloid FapC**

Rasmussen, H. Ø., Otzen, D. E. & Pedersen, J. S., feb. 2022, I: *The Journal of Biological Chemistry*. 298, 2, 50 s., 101569.

### **The C-terminal tail of $\alpha$ -synuclein protects against aggregate replication but is critical for oligomerization**

Farzadfard, A., Pedersen, J. N., Meisl, G., Somavarapu, A. K., Alam, P., Goksøyr, L., Nielsen, M. A., Sander, A. F., Knowles, T. P. J., Pedersen, J. S. & Otzen, D. E., feb. 2022, I: *Communications Biology*. 5, 1, 10 s., 123.

### **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, I: *ACS Nano*. 16, 1, s. 1102-1118 17 s.

### **Chaperones mainly suppress primary nucleation during formation of functional amyloid required for bacterial biofilm formation**

Nagaraj, M., Najarzadeh, Z., Pansieri, J., Biverstål, H., Musteikyte, G., Smirnovas, V., Matthews, S., Emanuelsson, C., Johansson, J., Buxbaum, J. N., Morozova-Roche, L. & Otzen, D. E., jan. 2022, I: *Chemical Science*. 13, 2, s. 536-553 18 s.

**Folding steps in the fibrillation of functional amyloid: denaturant sensitivity reveals common features in nucleation and elongation**

Sønderby, T. V., Rasmussen, H. Ø., Frank, S. A., Skov Pedersen, J. & Otzen, D. E., jan. 2022, I: Journal of Molecular Biology. 434, 2, 18 s., 167337.

**Interaction of membrane vesicles with the *Pseudomonas* functional amyloid protein FapC facilitates amyloid formation.**

Najarzadeh, Z., Mohammad-Beigi, H., Pedersen, J. N., Christiansen, G., Pedersen, J. S., Nielsen, J. & Otzen, D. E., jan. 2022, I: BBA advances. 2, 100055.

**Characterization of exogenous  $\alpha$ SN response genes and their relation to Parkinson's disease using network analyses**

Nayeri, Z., Aliakbari, F., Afzali, F., Parsafar, S., Gharib, E., Otzen, D. E. & Morshedi, D., 2022, I: Frontiers in Pharmacology. 13, 14 s., 966760.

**Polarized  $\alpha$ -synuclein trafficking and transcytosis across brain endothelial cells via Rab7-decorated carriers**

Alam, P., Holst, M. R., Lauritsen, L., Nielsen, J., Nielsen, S. S. E., Jensen, P. H., Brewer, J. R., Otzen, D. E. & Nielsen, M. S., 2022, I: Fluids and Barriers of the CNS. 19, 1, 12 s., 37.

**A semi high-throughput method for real-time monitoring of curli producing *Salmonella* biofilms on air-solid interfaces**

Choong, F. X., Huzell, S., Rosenberg, M., Eckert, J. A., Nagaraj, M., Zhang, T., Melican, K., Otzen, D. E. & Richter-Dahlfors, A., dec. 2021, I: Biofilm. 3, 100060.

**Lipid Peroxidation Products HNE and ONE Promote and Stabilize Alpha-Synuclein Oligomers by Chemical Modifications**

Andersen, C., Grønnemose, A. L., Pedersen, J. N., Nowak, J. S., Christiansen, G., Nielsen, J., Mulder, F. A. A., Otzen, D. E. & Jørgensen, T. J. D., 30 nov. 2021, I: Biochemistry. 60, 47, s. 3644-3658 15 s.

**Adsorption of azo dyes by a novel bio-nanocomposite based on whey protein nanofibrils and nano-clay: Equilibrium isotherm and kinetic modeling**

Rahimi Aqdam, S., Otzen, D. E., Mahmoodi, N. M. & Morshedi, D., nov. 2021, I: Journal of Colloid and Interface Science. 602, s. 490-503

**Membrane Structure of Aquaporin Observed with Combined Experimental and Theoretical Sum Frequency Generation Spectroscopy**

Schmüser, L., Trefz, M., Roeters, S. J., Beckner, W., Pfaendtner, J., Otzen, D., Woutersen, S., Bonn, M., Schneider, D. & Weidner, T., nov. 2021, I: Langmuir : the ACS journal of surfaces and colloids. 37, 45, s. 13452-13459 8 s.

**The bacterial amyloids phenol soluble modulins from *staphylococcus aureus* catalyze alpha-synuclein aggregation**

Haikal, C., Pascual, L. O., Najarzadeh, Z., Bernfur, K., Svanbergsson, A., Otzen, D. E., Linse, S. & Li, J. Y., nov. 2021, I: International Journal of Molecular Sciences . 22, 21, 11594.

**Microfluidics and the quantification of biomolecular interactions**

Otzen, D. E., Buell, A. K. & Jensen, H., okt. 2021, I: Current Opinion in Structural Biology. 70, s. 8-15 8 s.

**Cys-labelling kinetics of membrane protein GlpG: a role for specific SDS binding and micelle changes?**

Otzen, D. E., Pedersen, J. N., Somavarapu, A. K., Clement, A., Ji, M., Petersen, E. H., Pedersen, J. S., Urban, S. & Schafer, N. P., sep. 2021, I: Biophysical Journal. 120, 18, s. 4115-4128

**Identification of amyloidogenic proteins in the microbiomes of a rat Parkinson's disease model and wild-type rats**

Christensen, L. F. B., Aljanvand, S. H., Burdukiewicz, M., Herbst, F.-A., Kjeldal, H., Dueholm, M. S. & Otzen, D. E., sep. 2021, I: Protein Science. 30, 9, s. 1854-1870

**Heparin promotes fibrillation of most phenol-soluble modulin virulence peptides from *Staphylococcus aureus***

Najarzadeh, Z., Zaman, M., Sereikaite, V., Strømgaard, K., Andreassen, M. & Otzen, D. E., aug. 2021, I: The Journal of Biological Chemistry. 297, 2, s. 100953 14 s., 100953.

### **Human Fibrinogen Inhibits Amyloid Assembly of Most Phenol-Soluble Modulins from *Staphylococcus aureus***

Najarzadeh, Z., Nielsen, J., Farzadfard, A., Sereikaite, V., Strømgaard, K., Meyer, R. L. & Otzen, D. E., aug. 2021, I: ACS Omega. 6, 34, s. 21960-21970 11 s.

### **Ubiquitin forms conventional decorated micelle structures with sodium dodecyl sulfate at saturation**

Mortensen, H. G., Otzen, D. E. & Pedersen, J. S., aug. 2021, I: Journal of Colloid and Interface Science. 596, s. 233-244 12 s.

### **Multiple system atrophy-associated oligodendroglial protein p25 $\alpha$ stimulates formation of novel $\alpha$ -synuclein strain with enhanced neurodegenerative potential**

Ferreira, N., Gram, H., Sorrentino, Z. A., Gregersen, E., Schmidt, S. I., Reimer, L., Betzer, C., Perez-Gozalbo, C., Beltoja, M., Nagaraj, M., Wang, J., Nowak, J. S., Dong, M., Willén, K., Cholak, E., Bjerregaard-Andersen, K., Mendez, N., Rabadia, P., Shahnawaz, M., Soto, C., & 5 flereOtzen, D. E., Meyer, M., Giasson, B. I., Romero-Ramos, M. & Jensen, P. H., jul. 2021, I: Acta Neuropathologica. 142, s. 87-115

### **Per-glycosylation of the Surface-Accessible Lysines: One-Pot Aqueous Route to Stabilized Proteins with Native Activity**

Walther, R., Monge, P., Pedersen, A., Benderoth, A., Pedersen, J., Farzadfard, A., Mandrup, O., Howard, K., Otzen, D. & Zelikin, A. N., jul. 2021, I: ChemBioChem. 22, 14, s. 2478-2485 8 s.

### **A multimethod approach for analyzing FapC fibrillation and determining mass per length**

Rasmussen, H. Ø., Otzen, D. E. & Pedersen, J. S., 1 jun. 2021, I: Biophysical Journal. 120, 11, s. 2262-2275 14 s.

### **In-Silico Evidence for a Two Receptor Based Strategy of SARS-CoV-2**

Milanetti, E., Miotto, M., Di Rienzo, L., Nagaraj, M., Monti, M., Golbek, T. W., Gosti, G., Roeters, S. J., Weidner, T., Otzen, D. E. & Ruocco, G., jun. 2021, I: Frontiers in Molecular Biosciences. 8, 11 s., 690655.

### **In situ Sub-Cellular Identification of Functional Amyloids in Bacteria and Archaea by Infrared Nanospectroscopy**

Otzen, D. E., Dueholm, M. S., Najarzadeh, Z., Knowles, T. P. J. & Ruggeri, F. S., jun. 2021, I: Small Methods. 5, 6, 10 s., 2001002.

### **C subunit of the ATP synthase is an amyloidogenic calcium dependent channel-forming peptide with possible implications in mitochondrial permeability transition**

Amodeo, G. F., Lee, B. Y., Krilyuk, N., Filice, C. T., Valyuk, D., Otzen, D. E., Noskov, S., Leonenko, Z. & Pavlov, E. V., apr. 2021, I: Scientific Reports. 11, 1, 10 s., 8744.

### **Multiple Protective Roles of Nanoliposome-Incorporated Baicalein against Alpha-Synuclein Aggregates**

Aliakbari, F., Mohammad-Beigi, H., Abbasi, S., Rezaei-Ghaleh, N., Lermyte, F., Parsafar, S., Becker, S., Tafreshi, A. P., O'Connor, P. B., Collingwood, J. F., Christiansen, G., Sutherland, D. S., Jensen, P. H., Morshedi, D. & Otzen, D. E., 10 feb. 2021, I: Advanced Functional Materials. 31, 7, 2007765.

### **A Triple Role for a Bilayer: Using Nanoliposomes to Cross and Protect Cellular Membranes**

Otzen, D. E., Morshedi, D., Mohammad-Beigi, H. & Aliakbari, F., feb. 2021, I: Journal of Membrane Biology. 254, 1, s. 29-39 11 s.

### **Breakdown of supersaturation barrier links protein folding to amyloid formation**

Noji, M., Samejima, T., Yamaguchi, K., So, M., Yuzu, K., Chatani, E., Akazawa-Ogawa, Y., Hagihara, Y., Kawata, Y., Ikenaka, K., Mochizuki, H., Kardos, J., Otzen, D. E., Bellotti, V., Buchner, J. & Goto, Y., jan. 2021, I: Communications Biology. 4, 1, 10 s., 120.

### **Molecular characteristics of porcine alpha-synuclein splicing variants**

Larsen, K., Bæk, R., Sahin, C., Kjær, L., Christiansen, G., Nielsen, J., Farajzadeh, L. & Otzen, D. E., jan. 2021, I: Biochimie. 180, s. 121-133 13 s.

### **Driving forces in amyloidosis: How does a light chain make a heavy heart?**

Otzen, D., 2021, I: The Journal of Biological Chemistry. 296, s. 100785 100785.

### **How epigallocatechin gallate binds and assembles oligomeric forms of human alpha-synuclein**

Andersen, C. B., Yoshimura, Y., Nielsen, J., Otzen, D. E. & Mulder, F. A. A., 2021, I: The Journal of Biological Chemistry. 296, 10 s., 100788.

### **Phenol-Soluble Modulins Modulate Persister Cell Formation in *Staphylococcus aureus***

Baldry, M., Bojer, M. S., Najarzadeh, Z., Vestergaard, M., Meyer, R. L., Otzen, D. E. & Ingmer, H., nov. 2020, I: Frontiers in Microbiology. 11, 573253.

### **Inhibitors of $\alpha$ -Synuclein fibrillation and oligomer toxicity in *Rosa damascena*: the all-pervading powers of flavonoids and phenolic glycosides**

Eskandari, H., Ghanadian, M., Noleto-Dias, C., Lomax, C., Tawfike, A., Christiansen, G., Sutherland, D. S., Ward, J. L., Mohammad-Beigi, H. & Otzen, D. E., okt. 2020, I: ACS Chemical Neuroscience. 11, 19, s. 3161–3173 13 s.

### **Quantitating denaturation by formic acid: Imperfect repeats are essential to the stability of the functional amyloid protein FapC**

Christensen, L. F. B., Nowak, J. S., Sønderby, T. V., Frank, S. A. & Otzen, D. E., 11 sep. 2020, I: Journal of Biological Chemistry. 295, 37, s. 13036-13041 6 s.

### **DIBMA nanodiscs keep $\alpha$ -synuclein folded**

Adão, R., Cruz, P. F., Vaz, D. C., Fonseca, F., Pedersen, J. N., Ferreira-da-Silva, F., Brito, R. M. M., Ramos, C. H. I., Otzen, D., Keller, S. & Bastos, M., sep. 2020, I: Biochimica et Biophysica Acta - Biomembranes. 1862, 9, 16 s., 183314.

### **Peak Force Infrared - Kelvin Probe Force Microscopy**

Jakob, D. S., Wang, H., Zeng, G., Otzen, D. E., Yan, Y. & Xu, X., sep. 2020, I: Angewandte Chemie International Edition. 59, 37, s. 16083-16090 8 s.

### **Peroxynitrous acid (ONOOH) modifies the structure of anastellin and influences its capacity to polymerize fibronectin**

He, J., Becares, E. R., Thulstrup, P. W., Gamon, L. F., Pedersen, J. N., Otzen, D., Gourdon, P., Davies, M. J. & Hägglund, P., sep. 2020, I: Redox Biology. 36, 101631.

### **SDS-induced multi-stage unfolding of a small globular protein through different denatured states revealed by single-molecule fluorescence**

Krainer, G., Hartmann, A., Bogaty, V., Nielsen, J., Schlierf, M. & Otzen, D. E., sep. 2020, I: Chemical Science. 11, 34, s. 9141-9153 13 s.

### **Multi-Step Unfolding and Rearrangement of $\alpha$ -Lactalbumin by SDS Revealed by Stopped-Flow SAXS**

Jensen, G. V., Pedersen, J. N., Otzen, D. E. & Pedersen, J. S., jul. 2020, I: Frontiers in Molecular Biosciences. 7, 125.

### **The status of the terminal regions of $\alpha$ -synuclein in different forms of aggregates during fibrillization**

Marvian, A. T., Aliakbari, F., Mohammad-Beigi, H., Ahmadi, Z. A., Mehrpouyan, S., Lermyte, F., Nasouti, M., Collingwood, J. F., Otzen, D. E. & Morshedi, D., jul. 2020, I: International Journal of Biological Macromolecules. 155, s. 543-550 8 s.

### **Amyloid formation of $\alpha$ -synuclein based on the solubility- and supersaturation-dependent mechanism**

Sawada, M., Yamaguchi, K., Hirano, M., Noji, M., So, M., Otzen, D. E., Kawata, Y. & Goto, Y., maj 2020, I: Langmuir. 36, 17, s. 4671-4681 11 s.

### **Nanosilver Mitigates Biofilm Formation via FapC Amyloidosis Inhibition**

Huma, Z-E., Javed, I., Zhang, Z., Bilal, H., Sun, Y., Hussain, S. Z., Davis, T. P., Otzen, D. E., Landersdorfer, C. B., Ding, F., Hussain, I. & Ke, P. C., maj 2020, I: Small (Weinheim an der Bergstrasse, Germany). 16, 21, 10 s., 1906674.

### **The hydrophobic effect characterises the thermodynamic signature of amyloid fibril growth**

van Gils, J. H. M., van Dijk, E., Peduzzo, A., Hofmann, A., Vettore, N., Schützmann, M. P., Groth, G., Mouhib, H., Otzen, D. E., Buell, A. K. & Abeln, S., maj 2020, I: PLOS Computational Biology. 16, 5, e1007767.

#### **Novel noscapine derivatives stabilize the native state of insulin against fibrillation**

Alijanvand, S. H., Christensen, M. H., Christiansen, G., Harikandei, K. B., Salehi, P., Schiøtt, B., Moosavi-Movahedi, A. A. & Otzen, D. E., mar. 2020, I: International Journal of Biological Macromolecules. 147, s. 98-108 11 s.

#### **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, I: B B A - General Subjects. 1864, 1, s. 129434 1-12 12 s., 129434.

#### **Accelerated Amyloid Beta Pathogenesis by Bacterial Amyloid FapC**

Javed, I., Zhang, Z., Adamcik, J., Andrikopoulos, N., Li, Y., Otzen, D. E., Lin, S., Mezzenga, R., Davis, T. P., Ding, F. & Ke, P. C., 2020, I: Advanced Science. 7, 18, 15 s., 2001299.

#### **A complete picture of protein unfolding and refolding in surfactants**

Pedersen, J. N., Lyngsø, J., Zinn, T., Otzen, D. & Pedersen, J. S., 2020, I: Chemical Science. 11, 3, s. 699-712 14 s.

#### **Amyloid fibril inhibition, acceleration, or fragmentation: Are nano-based approaches advance in the right direction?**

Hajipour, M. J., Mohammad-Beigi, H., Nabipour, I., Mahmoudi, N., Azhdarzadeh, M., Derakhshankhah, H., El Dawud, D., Mohammadinejad, R. & Otzen, D., 2020, I: Nano Today. 35, December, 5 s., 100983.

#### **Predicted Loop Regions Promote Aggregation: A Study of Amyloidogenic Domains in the Functional Amyloid FapC**

Nagaraj, M., Ahmed, M., Lyngsø, J., Vad, B. S., Bøggild, A., Fillipsen, A., Pedersen, J. S., Otzen, D. E. & Akbey, Ü., 2020, I: Journal of Molecular Biology. 432, 7, s. 2232-2252 21 s.

#### **Size-Selective Phagocytic Clearance of Fibrillar $\alpha$ -Synuclein through Conformational Activation of Complement Receptor 4**

Juul-Madsen, K., Qvist, P., Bendtsen, K. L., Langkilde, A. E., Vestergaard, B., Howard, K., Dehesa-Etxebeste, M., Paludan, S. R., Andersen, G. R., Jensen, P. H., Otzen, D. E., Romero-Ramos, M. & Vorup-Jensen, T., 2020, I: Journal of Immunology. 204, 5, s. 1345-1361 17 s.

#### **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, I: FEBS journal. 287, 10, s. 2037-2054 18 s.

#### **Bacterial amphiphiles as amyloid inducers: Effect of Rhamnolipid and Lipopolysaccharide on FapC fibrillation**

Najarzadeh, Z., Pedersen, J. N., Christiansen, G., Shojaosadati, S. A., Pedersen, J. S. & Otzen, D. E., 1 nov. 2019, I: B B A - Proteins and Proteomics. 1867, 11, 140263.

#### **Plant polyphenols inhibit functional amyloid and biofilm formation in Pseudomonas strains by directing monomers to off-pathway oligomers**

Najarzadeh, Z., Mohammad-Beigi, H., Pedersen, J. N., Christiansen, G., Sønderby, T. V., Shojaosadati, S. A., Morshedi, D., Strømgaard, K., Meisl, G., Sutherland, D., Pedersen, J. S. & Otzen, D., 1 nov. 2019, I: Biomolecules. 9, 11, 659.

#### **Alterations in Blood Monocyte Functions in Parkinson's Disease**

Nissen, S. K., Shrivastava, K., Schulte, C., Otzen, D. E., Goldeck, D., Berg, D., Møller, H. J., Maetzler, W. & Romero-Ramos, M., nov. 2019, I: Movement Disorders. 34, 11, s. 1711-1721 11 s.

#### **Molecular dynamics study of ACBP denaturation in alkyl sulfates demonstrates possible pathways of unfolding through fused surfactant clusters**

Poghosyan, A. H., Schafer, N., Lyngsø, J., Shahinyan, A. A., Pedersen, J. S. & Otzen, D., apr. 2019, I: Protein Engineering, Design and Selection. 32, 4, s. 175-190 16 s., gzz037.

#### **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, I: Scientific Reports. 9, 1, 14 s., 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, I: *Protein Science*. 28, 3, s. 633-642 10 s.

**Two conformationally distinct  $\alpha$ -synuclein oligomers share common epitopes and the ability to impair long-term potentiation**

van Diggelen, F., Hrlle, D., Apetri, M., Christiansen, G., Rammes, G., Tepper, A. & Otzen, D. E., mar. 2019, I: *PLOS ONE*. 14, 3, 22 s., 0213663.

**Reducing the Amyloidogenicity of Functional Amyloid Protein FapC Increases Its Ability To Inhibit  $\alpha$ -Synuclein Fibrillation**

Christensen, L. F. B., Jensen, K. F., Nielsen, J., Vad, B. S., Christiansen, G. & Otzen, D. E., feb. 2019, I: *ACS Omega*. 4, 2, s. 4029-4039 11 s.

**Physical Determinants of Amyloid Assembly in Biofilm Formation**

Andreasen, M., Meisl, G., Taylor, J. D., Michaels, T. C. T., Levin, A., Otzen, D. E., Chapman, M. R., Dobson, C. M., Matthews, S. J. & Knowles, T. P. J., 8 jan. 2019, I: *mBio*. 10, 1, 12 s., e02279-18.

**A Possible Connection Between Plant Longevity and the Absence of Protein Fibrillation: Basis for Identifying Aggregation Inhibitors in Plants**

Mohammad-Beigi, H., Kjær, L., Eskandari, H., Aliakbari, F., Christiansen, G., Ruvo, G., L. Ward, J. & Otzen, D., 2019, I: *Frontiers in Plant Science*. 10, 148, 15 s., 148.

**Functional Amyloids**

Otzen, D. & Riek, R., 2019, I: *Cold Spring Harbor Perspectives in Biology*. 11, 12, 30 s., a033860.

**In vitro and in silico assessment of the developability of a designed monoclonal antibody library**

Wolf Pérez, A.-M., Sormanni, P., Andersen, J. S., Sakhnini, L. I., Rodriguez-Leon, I., Bjelke, J. R., Gajhede, A. J., De Maria, L., Otzen, D. E., Vendruscolo, M. & Lorenzen, N., 2019, I: *mAbs*. 11, 2, s. 388-400 13 s.

**Lysophospholipids induce fibrillation of the repeat domain of Pmel17 through intermediate core-shell structures**

Pedersen, J. N., Jiang, Z., Christiansen, G., Lee, J. C., Pedersen, J. S. & Otzen, D. E., 2019, I: *Biochimica et Biophysica Acta - Proteins and Proteomics*. 1867, 5, s. 519-528 10 s.

**Mechanistic Understanding of the Interactions between Nano-Objects with Different Surface Properties and  $\alpha$ -Synuclein**

Mohammad-Beigi, H., Hosseini, A., Adeli, M., Ejtehadi, M. R., Christiansen, G., Sahin, C., Tu, Z., Tavakol, M., Dilmaghani-Marand, A., Nabipour, I., Farzadfar, F., Otzen, D. E., Mahmoudi, M. & Hajipour, M. J., 2019, I: *ACS Nano*. 13, 3, s. 3243-3256 14 s.

**Oleuropein derivatives from olive fruit extracts reduce  $\alpha$ -synuclein fibrillation and oligomer toxicity**

Mohammad-Beigi, H., Aliakbari, F., Sahin, C., Lomax, C., Tawfike, A., P. Schafer, N., Amiri-Nowdijeh, A., Eskandari, H., Møller, I. M., Hosseini-Mazinani, M., Christiansen, G., Ward, J. L., Morshedi, D. & Otzen, D., 2019, I: *Journal of Biological Chemistry*. 294, 11, s. 4215-4232 18 s.

**Can a Charged Surfactant Unfold an Uncharged Protein?**

Højgaard, C., Sørensen, H. V., Pedersen, J. S., Winther, J. R. & Otzen, D. E., 4 dec. 2018, I: *Biophysical Journal*. 115, 11, s. 2081-2086 6 s.

**The Use of Surfactants to Solubilise a Glucagon Analogue**

Madsen, J. K., Giehm, L. & Otzen, D. E., dec. 2018, I: *Pharmaceutical Research*. 35, 12, 235.

**Potent  $\alpha$ -Synuclein Aggregation Inhibitors, Identified by High-Throughput Screening, Mainly Target the Monomeric State**

Kurnik, M., Sahin, C., Andersen, C. B., Lorenzen, N., Giehm, L., Mohammad-Beigi, H., Jessen, C. M., Pedersen, J. S., Christiansen, G., Petersen, S. V., Staal, R., Krishnamurthy, G., Pitts, K., Reinhart, P. H., Mulder, F. A. A., Mente, S., Hirst, W. D. & Otzen, D. E., 15 nov. 2018, I: *Cell Chemical Biology*. 25, 11, s. 1389-1402

**Protein Engineering Reveals Mechanisms of Functional Amyloid Formation in *Pseudomonas aeruginosa* Biofilms**

Bleem, A., Christiansen, G., Madsen, D. J., Maric, H., Strømgaard, K., Bryers, J. D., Daggett, V., Meyer, R. L. & Otzen, D. E., 12 okt. 2018, I: *Journal of Molecular Biology*. 430, 20, s. 3751-3763 13 s.

**Using Lipotides to Deliver Cholesterol to the Plasma Membrane**

Frislev, H. S., Nielsen, J., Nylandsted, J. & Otzen, D., aug. 2018, I: *Journal of Membrane Biology*. 25, 4, s. 581-592 12 s.

**Early events in copper-ion catalyzed oxidation of  $\alpha$ -synuclein**

Tiwari, M. K., Leinisch, F., Sahin, C., Møller, I. M., Otzen, D., Davies, M. J. & Bjerrum, M. J., jun. 2018, I: *Free Radical Biology & Medicine*. 121, s. 38-50 13 s.

**The potential of zwitterionic nanoliposomes against neurotoxic alpha-synuclein aggregates in Parkinson's Disease**

Aliakbari, F., Mohammad-Beigi, H., Rezaei-Ghaleh, N., Becker, S., Dehghani Esmatabad, F., Eslampanah Seyedi, H. A., Bardania, H., Tayaranian Marvian, A., Collingwood, J. F., Christiansen, G., Zweckstetter, M., Otzen, D. E. & Morshedi, D., 17 maj 2018, I: *Nanoscale*. 10, 19, s. 9174-9185 12 s.

**High-quality draft genome sequence of *Sphaerisorangium cinnabarinum* ATCC 31213**

Christensen, L. F. B., Otzen, D. & Dueholm, M. S., 1 maj 2018, I: *Genome Announcements*. 6, 21, 2 s., e00456-18.

***Pseudomonas aeruginosa* rhamnolipid induces fibrillation of human  $\alpha$ -synuclein and modulates its effect on biofilm formation**

Andersen, K. K., Vad, B. S., Kjaer, L., Tolker-Nielsen, T., Christiansen, G. & Otzen, D. E., maj 2018, I: *FEBS Letters*. 592, 9, s. 1484-1496 13 s.

**Corneal dystrophy mutations drive pathogenesis by targeting TGF $\beta$ 1 stability and solubility in a latent amyloid-forming domain**

Stenvang, M., Schafer, N. P., Malmos, K. G., Pérez, A-M. W., Niembro, O., Sormanni, P., Basaiawmoit, R. V., Christiansen, G., Andreasen, M. & Otzen, D. E., 13 apr. 2018, I: *Journal of Molecular Biology*. 430, 8, s. 1116-1140 25 s.

**Stabilizing vitamin D<sub>3</sub> using the molten globule state of  $\alpha$ -lactalbumin**

Pedersen, J. N., Sørensen, H. V. & Otzen, D. E., mar. 2018, I: *Journal of Dairy Science*. 101, 3, s. 1817-1826 10 s.

**Role of charge and hydrophobicity in lipotide formation: a molecular dynamics study with experimental constraints**

Nedergaard Pedersen, J., Wilhelmus Johannes Maria Frederix, P., Skov Pedersen, J., Marrink, S. J. & Otzen, D., 2 feb. 2018, I: *ChemBioChem*. 19, 3, s. 263-271 9 s.

**Lipotides assist in folding of outer membrane proteins**

Nedergaard Pedersen, J., Skov Pedersen, J. & Otzen, D. E., 1 feb. 2018, I: *Protein Science*. 27, 2, s. 451-462 12 s.

**Dynamic content exchange between lipotides**

Frislev, H. S., Jakobsen, S. C. L., Frank, S. A. & Otzen, D. E., feb. 2018, I: *Biophysical Chemistry*. 233, s. 13-18 6 s.

**Formulation and anti-neurotoxic activity of baicalein-incorporating neutral nanoliposome**

Aliakbari, F., Shabani, A. A., Bardania, H., Mohammad-Beigi, H., Tayaranian Marvian, A., Dehghani Esmatabad, F., Vafaei, A. A., Shojaosadati, S. A., Saboury, A. A., Christiansen, G., Otzen, D. E. & Morshedi, D., 1 jan. 2018, I: *Colloids and surfaces. B, Biointerfaces*. 161, s. 578-587 10 s.

**The Sheaths of *Methanospirillum* Are Made of a New Type of Amyloid Protein**

Christensen, L. F. B., Hansen, L. M., Finster, K., Christiansen, G., Nielsen, P. H., Otzen, D. E. & Dueholm, M. S., 2018, I: *Frontiers in Microbiology*. 9, NOV, 11 s., 2729.

**$\alpha$ -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, I: *Biochemistry*. 57, 34, s. 5145-5158 14 s.

**Myoglobin and  $\alpha$ -Lactalbumin Form Smaller Complexes with the Biosurfactant Rhamnolipid Than with SDS**

Mortensen, H. G., Madsen, J. K., Andersen, K. K., Vosegaard, T., Deen, G. R., Otzen, D. E. & Pedersen, J. S., 19 dec. 2017, I: *Biophysical Journal*. 113, 12, s. 2621-2633 13 s.

**Lipotides kill cancer cells by disrupting the plasma membrane**

Frislev, H. S., Boye, T. L., Nylandsted, J. & Otzen, D., 9 nov. 2017, I: *Scientific Reports*. 7, 1, 15129.

**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 sep. 2017, I: *Journal of Biological Chemistry*. 292, 38, s. 15992

**The Changing Face of Aging: Highly Sulfated Glycosaminoglycans Induce Amyloid Formation in a Lattice Corneal Dystrophy Model Protein**

Malmos, K. G., Stenvang, M., Sahin, C., Christiansen, G. & Otzen, D. E., 1 sep. 2017, I: *Journal of Molecular Biology*. 429, 18, s. 2755-2764 10 s.

**Glycolipid Biosurfactants Activate, Dimerize, and Stabilize *Thermomyces lanuginosus* Lipase in a pH-Dependent Fashion**

Madsen, J. K., Kaspersen, J. D., Andersen, C. B., Nedergaard Pedersen, J., Andersen, K. K., Pedersen, J. S. & Otzen, D. E., 15 aug. 2017, I: *Biochemistry*. 56, 32, s. 4256-4268 13 s.

**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, I: *Biophysical Journal*. 113, 3, s. 580-596 17 s.

**$\alpha$ -Synuclein Oligomers: A Study in Diversity**

van Diggelen, F., Tepper, A., Petri, M. & Otzen, D., jul. 2017, I: *Israel Journal of Chemistry*. 57, 7-8, s. 699-723 25 s.

**Tailoring thermal treatment to form lipotide complexes between oleic acid and different proteins**

Sørensen, H. V., Pedersen, J. N., Pedersen, J. S. & Otzen, D. E., jun. 2017, I: *BBA Proteins and Proteomics*. 1865, 6, s. 682-693 12 s.

**Refolding of SDS-Unfolded Proteins by Nonionic Surfactants**

Kaspersen, J. D., Søndergaard, A., Madsen, D. J., Otzen, D. E. & Pedersen, J. S., 25 apr. 2017, I: *Biophysical Journal*. 112, 8, s. 1609-1620 12 s.

**Biosurfactants and surfactants interacting with membranes and proteins: Same but different?**

Otzen, D., apr. 2017, I: *BBA Biomembranes*. 1859, 4, s. 639-649 11 s.

**ThT 101: a primer on the use of thioflavin T to investigate amyloid formation**

Malmos, K., Blancas-Mejia, L. M., Weber, B., Buchner, J., Ramirez-Alvarado, M., Naiki, H. & Otzen, D., apr. 2017, I: *Amyloid: the Journal of Protein Folding Disorders*. 24, 1, s. 1-16 16 s.

**The random co-polymer glatiramer acetate rapidly kills primary human leukocytes through sialic-acid-dependent cell membrane damage**

Christiansen, S. H., Zhang, X., Juul-Madsen, K., Hvam, M. L., Vad, B. S., Behrens, M. A., Thygesen, I. L., Jalilian, B., Pedersen, J. S., Howard, K., Otzen, D. E. & Vorup-Jensen, T., mar. 2017, I: *BBA - Biomembranes*. 1859, 3, s. 425-437 13 s.

**Antibodies against the C-terminus of  $\alpha$ -synuclein modulate its fibrillation**

Sahin, C., Lorenzen, N., Lemminger, L., Christiansen, G., Møller, I. M., Vesterager, L. B., Pedersen, L. Ø., Fog, K., Kallunki, P. & Otzen, D. E., jan. 2017, I: *Biophysical Chemistry*. 220, s. 34-41 8 s.

**A new class of hybrid secretion system is employed in *Pseudomonas amyloid* biogenesis**

Rouse, S. L., Hawthorne, W. J., Berry, J.-L., Chorev, D. S., Ionescu, S. A., Lambert, S., Stylianou, F., Ewert, W., Mackie, U., Morgan, R. M. L., Otzen, D., Herbst, F.-A., Nielsen, P. H., Dueholm, M., Bayley, H., Robinson, C. V., Hare, S. & Matthews, S., 2017, I: *Nature Communications*. 8, 1, 263.

**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, I: *Biochemistry*. 56, 1, s. 260–270 11 s.

**Epigallocatechin Gallate Remodels overexpressed Functional Amyloids in *Pseudomonas aeruginosa* and Increases Biofilm Susceptibility to Antibiotic Treatment**

Stenvang, M., Dueholm, M. S., Vad, B. S., Seviour, T. W., Zeng, G., Geifman-Shochat, S., Søndergaard, M. T., Christiansen, G., Meyer, R. L., Kjelleberg, S., Otzen, D. E. & Nielsen, P. H., 16 dec. 2016, I: *Journal of Biological Chemistry*. 291, 51, s. 26540-26553 14 s.

**Alpha-synuclein and familial variants affect the chain order and the thermotropic phase behavior of anionic lipid vesicles**

Pantusa, M., Vad, B., Lillelund, O., Kjær, L., Otzen, D. & Bartucci, R., sep. 2016, I: *B B A - Proteins and Proteomics*. 1864, 9, s. 1206-1214 9 s.

**Using protein-fatty acid complexes to improve vitamin D stability**

Pedersen, J. N., Frislev, H. K. S., Pedersen, J. S. & Otzen, D. E., sep. 2016, I: *Journal of Dairy Science*. 99, 10, s. 7755–7767 13 s.

**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, I: *Journal of Biological Chemistry*. 291, 32, s. 16849-16862 31 s.

**The neural chaperone proSAAS blocks  $\alpha$ -synuclein fibrillation and neurotoxicity**

Jarvela, T. S., Lam, H. A., Helwig, M., Lorenzen, N., Otzen, D. E., McLean, P. J., Maidment, N. T. & Lindberg, I., 25 jul. 2016, I: *Proceedings of the National Academy of Sciences*. 113, 32, s. E4708-E4715

**A Complex Dance: The Importance of Glycosaminoglycans and Zinc in the Aggregation of Human Prolactin**

Christensen, L. F. B., Malmos, K. G., Christiansen, G. & Otzen, D. E., 22 jun. 2016, I: *Biochemistry*. 55, 26, s. 3674–3684 11 s.

**Incorporation of  $\beta$ -Silicon- $\beta$ 3-Amino Acids in the Antimicrobial Peptide Alamethicin Provides a 20-Fold Increase in Membrane Permeabilization**

Madsen, J. L. H., Hjørringgaard, C. U., Vad, B. S., Otzen, D. & Skrydstrup, T., 6 jun. 2016, I: *Chemistry: A European Journal*. 22, 24, s. 8358-8367 10 s.

**$\alpha$ -Synuclein vaccination modulates regulatory T cell activation and microglia in the absence of brain pathology**

Christiansen, J. R., Olesen, M. N., Otzen, D. E., Romero-Ramos, M. & Sanchez-Guajardo, V., 9 apr. 2016, I: *Journal of Neuroinflammation*. 13, 1, 74.

**Epigallocatechin gallate remodels fibrils of Lattice Corneal Dystrophy protein, facilitating proteolytic degradation and preventing formation of membrane-permeabilizing species**

Stenvang, M., Christiansen, G. & Otzen, D. E., 4 apr. 2016, I: *Biochemistry*. 55, 16, s. 2344-2357 14 s.

**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, I: *Journal of Biological Chemistry*. 291, 9, s. 4658-4670 13 s.

### **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, I: *Future Neurology*. 11, 1, s. 15-32 18 s.

### **A Monte Carlo Study of the Early Steps of Functional Amyloid Formation**

Tian, P., Lindorff-Larsen, K., Boomsma, W., Jensen, M. H. & Otzen, D. E., 8 jan. 2016, I: *PLOS ONE*. 11, 1, e0146096.

### **Concatemers of Outer Membrane Protein A Take Detours in the Folding Landscape**

Andersen, K. K., Vad, B., Omer, S. & Otzen, D. E., 2016, I: *Biochemistry*. 55, 51, s. 7123–7140 7 s.

### **Detection of pathogenic biofilms with bacterial amyloid targeting fluorescent probe, CDy11**

Kim, J-Y., Sahu, S., Yau, Y-H., Wang, X., Shochat, S. G., Nielsen, P. H., Dueholm, M. S., Otzen, D. E., Lee, J., Delos Santos, M. M. S., Yam, J. K. H., Kang, N-Y., Park, S-J., Kwon, H., Seviour, T. W., Yang, L., Givskov, M. & Chang, Y-T., 2016, I: *Journal of the American Chemical Society*. 138, 1, s. 402-407 6 s.

### **Formation and Characterization of $\alpha$ -Synuclein Oligomers**

Paslawski, W., Lorenzen, N. & Otzen, D. E., 2016, I: *Methods in molecular biology (Clifton, N.J.)*. 1345, s. 133-150 18 s.

### **Gallic acid loaded onto polyethylenimine-coated human serum albumin nanoparticles (PEI-HSA-GA NPs) stabilizes $\alpha$ -synuclein in the unfolded conformation and inhibits aggregation**

Mohammad-Beigi, H., Morshedi, D., Shojaosadati, S. A., Pedersen, J. N., Marvian, A. T., Aliakbari, F., Christiansen, G., Pedersen, J. S. & Otzen, D. E., 2016, I: *RSC Advances*. 6, 88, s. 85312-85323 12 s.

### **Lipotides made of $\alpha$ -lactalbumin and *cis* fatty acids form core-shell and multi-layer structures with a common membrane-targeting mechanism**

Frislev, H. K. S., Jessen, C. M., Oliveira, C. L. P., Pedersen, J. S. & Otzen, D. E., 2016, I: *BBA - Proteins and Proteomics*. 1864, 7, s. 847-859 13 s.

### **Near-complete $^1\text{H}$ , $^{13}\text{C}$ , $^{15}\text{N}$ resonance assignments of dimethylsulfoxide-denatured TGFBIp 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, I: *Biomolecular NMR Assignments*. 10, 1, s. 25-29 5 s.

### **Structure, Aggregation, and Activity of a Covalent Insulin Dimer Formed During Storage of Neutral Formulation of Human Insulin**

Hjorth, C. F., Norrman, M., Wahlund, P-O., Benie, A. J., Petersen, B. O., Jessen, C. M., Pedersen, T. Å., Vestergaard, K., Steensgaard, D. B., Pedersen, J. S., Naver, H., Hubálek, F., Poulsen, C. & Otzen, D., 2016, I: *Journal of Pharmaceutical Sciences*. 105, 4, s. 1376-1386 11 s.

### **The transcriptional regulator GalR self-assembles to form highly regular tubular structures**

Agerschou, E. D., Christiansen, G., Schafer, N. P., Madsen, D. J., Brodersen, D. E., Semsey, S. & Otzen, D. E., 2016, I: *Scientific Reports*. 6, 27672.

### **Topological constraints and modular structure in the folding and functional motions of GlpG, an intramembrane protease**

Schafer, N., Truong, H. H., Otzen, D., Lindorff-Larsen, K. & Wolynes, P. G., 2016, I: *Proceedings of the National Academy of Sciences*. 113, 8, s. 2098-2103 6 s.

### **Weak and Saturable Protein-Surfactant Interactions in the Denaturation of Apo- $\alpha$ -Lactalbumin by Acidic and Lactonic Sphorolipid**

Andersen, K. K., Vad, B. S., Roelants, S., van Bogaert, I. N. A. & Otzen, D. E., 2016, I: *Frontiers in Microbiology*. 7, NOV, 1711.

### **Promoting protein self-association in non-glycosylated *Thermomyces lanuginosus* lipase based on crystal lattice contacts**

Madsen, J., Sørensen, T. R., Kaspersen, J. D., Silow, M. B., Vind, J., Pedersen, J. S., Svendsen, A. & Otzen, D. E., dec. 2015, I: *BBA Proteins and Proteomics*. 154, 12, s. 1914-1921 8 s.

**Scaffolded multimers of hIAPP20-29 peptide fragments fibrillate faster and lead to different fibrils compared to the free hIAPP20-29 peptide fragment**

Christoffersen, H. F., Andreasen, M., Zhang, S., Nielsen, E. H., Christiansen, G., Dong, M., Skrydstrup, T. & Otzen, D. E., dec. 2015, I: *BBA - Proteins and Proteomics*. 1854, 12, s. 1890-1897 8 s.

**Strong interactions with polyethylenimine-coated human serum albumin nanoparticles (PEI-HSA NPs) alter  $\alpha$ -synuclein conformation and aggregation kinetics**

Mohammad-Beigi, H., Shojaosadati, S. A., Marvian, A. T., Pedersen, J. N., Klausen, L. H., Christiansen, G., Pedersen, J. S., Dong, M., Morshedi, D. & Otzen, D. E., 9 nov. 2015, I: *Nanoscale*. 7, s. 19627-19640 14 s.

**Sucrose prevents protein fibrillation through compaction of the tertiary structure but hardly affects the secondary structure**

Estrela, N., Franquelim, H. G., Lopes, C., Tavares, E., Macedo, J. A., Christiansen, G., Otzen, D. E. & Melo, E. P., nov. 2015, I: *Proteins: Structure, Function, and Bioinformatics*. 83, 11, s. 2039-2051 14 s.

**The length distribution of frangible biofilaments**

Michaels, T. C. T., Yde, P., Willis, J. C. W., Jensen, M. H., Otzen, D., Dobson, C. M., Buell, A. K. & Knowles, T. P. J., 28 okt. 2015, I: *Journal of Chemical Physics*. 143, 16, s. 1-15 15 s., 164901.

**Functional bacterial amyloid increases *Pseudomonas* biofilm hydrophobicity and stiffness**

Zeng, G., Vad, B. S., Dueholm, M. S., Christiansen, G., Nilsson, M., Tolker-Nielsen, T., Nielsen, P. H., Meyer, R. L. & Otzen, D. E., 7 okt. 2015, I: *Frontiers in Microbiology*. 6, s. 1099

**Interactions between misfolded protein oligomers and membranes: A central topic in neurodegenerative diseases?**

Andreasen, M., Lorenzen, N. & Otzen, D., sep. 2015, I: *BBA - Molecular and Cell Biology of Lipids*. 1848, 9, s. 1897-1907

**The natural, peptaibolic peptide SPF-5506-A4 adopts a  $\beta$ -bend spiral structure, shows low hemolytic activity and targets membranes through formation of large pores**

Frahm, H., Hansen, S. K., Vad, B. S., Nielsen, E. H., Nielsen, J. T., Vosegaard, T., Skrydstrup, T. & Otzen, D. E., aug. 2015, I: *BBA - Proteins and Proteomics*. 1854, 8, s. 882-889 8 s.

**The Use of Lipotides To Stabilize and Transport Hydrophobic Molecules**

Pedersen, J. N., Pedersen, J. S. & Otzen, D. E., 28 jul. 2015, I: *Biochemistry*. 54, 31, s. 4815-4823 9 s.

**The Tubular Sheaths Encasing *Methanosaeta thermophila* Filaments are Functional Amyloids**

Dueholm, M. S., Larsen, P., Finster, K., Stenvang, M. R., Christiansen, G., Vad, B. S., Bøggild, A., Otzen, D. E. & Halkjær Nielsen, P., 24 jun. 2015, I: *Journal of Biological Chemistry*. 290, s. 20590-26600 11 s.

**Proteins in a brave new surfactant world**

Otzen, D. E., 1 jun. 2015, I: *Current Opinion in Colloid & Interface Science*. 20, 3, s. 161-169 9 s.

**Phospholipid Ether Linkages Significantly Modulate the Membrane Affinity of the Antimicrobial Peptide Novicidin**

Vad, B. S., Balakrishnan, V. S., Nielsen, S. B. & Otzen, D., jun. 2015, I: *Journal of Membrane Biology*. s. 487-496 10 s.

**Purification and Identification of High Molecular Weight Products Formed During Storage of Neutral Formulation of Human Insulin**

Hjorth, C. F., Hubálek, F., Andersson, J., Poulsen, C., Otzen, D. & Naver, H., jun. 2015, I: *Pharmaceutical Research*. 32, 6, s. 2072-2085 14 s.

**The anionic biosurfactant rhamnolipid does not denature industrial enzymes**

Madsen, J., Pihl, R., Møller, A. H., Tranberg Madsen, A., Otzen, D. & Andersen, K. K., 17 apr. 2015, I: *Frontiers in Microbiology*. 6, 13 s., 292.

### **A monomer-trimer model supports intermittent glucagon fibril growth**

Košmrlj, A., Cordsen, P., Kyrsting, A., Otzen, D., Oddershede, L. B. & Jensen, M. H., 11 mar. 2015, I: Scientific Reports. 5, s. 1-6 6 s., 9005.

### **Protein aggregation: Close encounters of the greasy kind**

Otzen, D., 17 feb. 2015, I: Nature Chemical Biology. 11, 3, s. 176-177 2 s.

### **Cooperative folding of a polytopic $\alpha$ -helical membrane protein involves a compact N-terminal nucleus and nonnative loops**

Paslawski, W., Lillelund, O. K., Kristensen, J. V., Schafer, N. P., Baker, R. P., Urban, S. & Otzen, D. E., 10 feb. 2015, I: Proceedings of the National Academy of Sciences. 112, 6, s. 7978-7983 6 s.

### **Functional Amyloids Keep Quorum Sensing Molecules in Check**

Seviour, T., Hansen, S. H., Yang, L., Yau, Y. H., Wang, V. B., Stenvang, M. R., Christiansen, G., Marsili, E., Givskov, M., Chen, Y., Otzen, D., Nielsen, P. H., Shochat, S. G., Kjelleberg, S. & Dueholm, M. S., 13 jan. 2015, I: Journal of Biological Chemistry. 290, s. 6457-6469 13 s.

### **Structure of a Functional Amyloid Protein Subunit Computed Using Sequence Variation**

Tian, P., Boomsma, W., Wang, Y., Otzen, D., Jensen, M. H. & Lindorff-Larsen, K., 2015, I: Journal of the American Chemical Society. 137, 1, s. 22-25 4 s.

### **Folding energetics and oligomerization of polytopic $\alpha$ -helical transmembrane proteins**

Neumann, J., Klein, N., Otzen, D. & Schneider, D., 15 dec. 2014, I: Archives of Biochemistry and Biophysics. 564, s. 281-296 16 s.

### **Membrane protein folding and stability**

Otzen, D., 15 dec. 2014, I: Archives of Biochemistry and Biophysics. 564, s. 262-264 3 s.

### **Denaturation of $\alpha$ -lactalbumin and myoglobin by the anionic biosurfactant rhamnolipid**

Andersen, K. K. & Otzen, D., dec. 2014, I: BBA - Bioenergetics. 1844, 12, s. 2338-2345 8 s.

### **Generic Structures of Cytotoxic Lipotides: Nano-Sized Complexes with Oleic Acid Cores and Shells of Disordered Proteins**

Kaspersen, J. D., Pedersen, J. N., Hansted, J. G., Nielsen, S. B., Sakthivel, S., Wilhelm, K., Nemashkalova, E. L., Permyakov, S. E., Permyakov, E. A., Pinto Oliveira, C. L., Morozova-Roche, L. A., Otzen, D. & Pedersen, J. S., dec. 2014, I: ChemBioChem. 10, 18, s. 2693-2702 10 s.

### **The Antimicrobial Mechanism of Action of Epsilon-Poly-L-Lysine**

Hyldgaard, M., Mygind, T., Vad, B. S., Stenvang, M., Otzen, D. & Meyer, R. L., dec. 2014, I: Applied and Environmental Microbiology. 80, 24, s. 7758-7770 12 s.

### **The Importance of Being Capped: Terminal Capping of an Amyloidogenic Peptide Affects Fibrillation Propensity and Fibril Morphology**

Andreasen, M., Skeby, K. K., Zhang, S., Nielsen, E. H., Klausen, L. H., Frahm, H., Christiansen, G., Skrydstrup, T., Dong, M., Schiøtt, B. & Otzen, D., 21 okt. 2014, I: Biochemistry. 53, 44, s. 6968-6980 13 s.

### **High stability and cooperative unfolding of cytotoxic $\alpha$ -synuclein oligomers**

Paslawski, W., Andreasen, M., Nielsen, S. B., Lorenzen, N., Thomsen, K., Kaspersen, J. D., Pedersen, J. S. & Otzen, D., 12 sep. 2014, I: Biochemistry. 53, 39, s. 6252-6263 12 s.

### **Low-Resolution Structures of OmpA-DDM Protein-Detergent Complexes**

Kaspersen, J., Moestrup Jessen, C., Stougaard Vad, B., Skipper Sørensen, E., Kleiner Andersen, K., Glasius, M., Pinto Oliveira, C. L., Otzen, D. & Pedersen, J. S., 19 aug. 2014, I: ChemBioChem. 15, 14, s. 2113-2124 12 s.

### **Oligomers of $\alpha$ -synuclein: picking the culprit in the line-up**

Lorenzen, N. & Otzen, D., 18 aug. 2014, I: Essays in Biochemistry. 56, 1, s. 137-148 12 s.

**How epigallocatechin gallate can inhibit  $\alpha$ -synuclein oligomer toxicity in vitro**

Lorenzen, N., Nielsen, S. B., Yoshimura, Y., Vad, B. S., Andersen, C. B., Betzer, C., Kaspersen, J. D., Christiansen, G., Pedersen, J. S., Jensen, P. H., Mulder, F. A. A. & Otzen, D. E., 1 aug. 2014, I: Journal of Biological Chemistry. 289, 31, s. 21299-21310 12 s.

**Co-existence of Two Different  $\alpha$ -Synuclein Oligomers with Different Core Structures Determined by Hydrogen/Deuterium Exchange Mass Spectrometry**

Paslowski, W., Mysling, S., Thomsen, K., Jørgensen, T. J. D. & Otzen, D., 14 jul. 2014, I: Angewandte Chemie International Edition. 53, 29, s. 7560-7563 4 s.

**Bacterial RTX Toxins Allow Acute ATP Release from Human Erythrocytes Directly through the Toxin Pore**

Skals, M., Bjaelde, R. G., Reinholdt, J., Poulsen, K., Vad, B. S., Otzen, D., Leipziger, J. & Praetorius, H. A., 4 jul. 2014, I: Journal of Biological Chemistry. 289, s. 19098-19109 11 s.

**Condenser: A statistical aggregation tool for multi-sample quantitative proteomic data from Matrix Science Mascot Distiller™**

Knudsen, A. D., Bennike, T., Kjeldal, H., Birkelund, S., Otzen, D. & Stensballe, A., 30 maj 2014, I: Journal of Proteomics. 103, s. 261-266 6 s.

**Folding of outer membrane protein A in the anionic biosurfactant rhamnolipid**

Andersen, K. K. & Otzen, D., 21 maj 2014, I: FEBS Letters. 588, 10, s. 1955-1960 6 s.

**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., Dyrland, T. F., Scavenius, C., Karring, H., Praetorius, J., Vorum, H., Otzen, D. E., Klintworth, G. K. & Enghild, J. J., apr. 2014, I: Proteomics - Clinical Applications. 8, 3-4, s. 168-177 10 s.

**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., Paslowski, 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, I: Journal of the American Chemical Society. 136, 10, s. 3859-3868 10 s.

**Sequential pH-driven dimerization and stabilization of the N-terminal domain enables rapid spider silk formation**

Kronqvist, N., Otikovs, M., Chmyrov, V., Chen, G., Andersson, M., Nordling, K., Landreh, M., Sarr, M., Jörnvall, H., Wennmalm, S., Widengren, J., Meng, Q., Rising, A., Otzen, D., Knight, S. D., Jaudzems, K. & Johansson, J., 10 feb. 2014, I: Nature Communications. 5, 11 s., 3254.

**The N-terminus of  $\alpha$ -synuclein is essential for both monomeric and oligomeric interactions with membranes**

Lorenzen, N., Lemminger, L., Pedersen, J. N., Nielsen, S. B. & Otzen, D., 31 jan. 2014, I: FEBS Letters. 588, 3, s. 497-502 6 s.

**Electrochemical Analysis of the Fibrillation of Parkinson's Disease  $\alpha$ -synuclein**

Lopes, P., Dyrnesli, H., Lorenzen, N., Otzen, D. & Ferapontova, E., 2014, I: Analyst. 139, 4, s. 749-756 8 s.

**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 okt. 2013, I: BBA General Subjects. 1834, 12, s. 2812-2822 11 s.

**Evolutionary Insight into the Functional Amyloids of the Pseudomonads**

Dueholm, M. S., Otzen, D. & Nielsen, P. H., 7 okt. 2013, I: PLOS ONE. 8, 10, s. 1-9 9 s., e76630.



#### **Formation of dynamic soluble surfactant-induced amyloid $\beta$ peptide aggregation intermediates**

Abelein, A., Kaspersen, J. D., Nielsen, S. B., Jensen, G. V., Christiansen, G., Pedersen, J. S., Danielsson, J. A., Otzen, D. & Gräslund, A., 9 aug. 2013, I: *Journal of Biological Chemistry*. 288, s. 23518-23528 11 s.

#### **Expression of Fap amyloids in *Pseudomonas aeruginosa*, *P. fluorescens*, and *P. putida* results in aggregation and increased biofilm formation**

Dueholm, M. S., Søndergaard, M., Nilsson, M., Christiansen, G., Stensballe, A., Overgaard, M. T., Givskov, M. C., Tolker-Nielsen, T., Otzen, D. & Nielsen, P. H., jun. 2013, I: *MicrobiologyOpen*. 2, 3, s. 365-382 13 s.

#### **Proliferation of amyloid- $\beta$ 42 aggregates occurs through a secondary nucleation mechanism**

Cohen, S. I. A., Linse, S., Luheshi, L. M., Hellstrand, E., White, D. A., Rajah, L., Otzen, D., Vendruscolo, M., Dobson, C. M. & Knowles, T. P. J., 23 maj 2013, I: *Proceedings of the National Academy of Sciences*. 110, 24, s. 9758-9763 6 s.

#### **Quality control system response to stochastic growth of amyloid fibrils**

Pigolotti, S., Lizana, L., Otzen, D. & Sneppen, K., 2 maj 2013, I: *FEBS Letters*. 587, 9, s. 1405-1410 6 s.

#### **Novicidin's membrane permeabilizing activity is driven by membrane partitioning but not by helicity: A biophysical study of the impact of lipid charge and cholesterol**

Balakrishnan, V. S., Vad, B. S. & Otzen, D., 2 apr. 2013, I: *BBA General Subjects*. 1834, 6, s. 996-1002 7 s.

#### **Protein:fatty acid complexes: Biochemistry, biophysics and function**

Brinkmann, C. R., Thiel, S. & Otzen, D., apr. 2013, I: *FEBS journal*. 280, 8, s. 1733-1749

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

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

#### **Variant of the *Thermomyces lanuginosus* lipase with improved kinetic stability: a candidate for enzyme replacement therapy**

Wang, H., Hagedorn, J., Svendsen, A., Borch, K. & Otzen, D., feb. 2013, I: *Biophysical Chemistry*. 172, s. 43-52 10 s.

#### **The neuroendocrine protein 7B2 suppresses the aggregation of neurodegenerative disease-related proteins**

Helwig, M., Hoshino, A., Berridge, C., Lee, S-N., Lorenzen, N., Otzen, D., Eriksen, J. & Lindberg, I., 11 jan. 2013, I: *Journal of Biological Chemistry*. 288, 2, s. 1114 1124 s.

#### **pH regulation of the kinetic stability of the lipase from *Thermomyces lanuginosus***

Wang, H., Andersen, K. K., Sehgal, P., Hagedorn, J., Westh, P., Borch, K. & Otzen, D. E., 8 jan. 2013, I: *Biochemistry*. 52, 1, s. 264-276 13 s.

#### **OmpA can form folded and unfolded oligomers**

Wang, H., Andersen, K. K., Vad, B. S. & Otzen, D. E., 1 jan. 2013, I: *BBA - Proteins and Proteomics*. 1834, 1, s. 127-136 10 s.

#### **Coexistence of ribbon and helical fibrils originating from hIAPP20-29 revealed by quantitative nanomechanical atomic force microscopy**

Zhang, S., Andreasen, M., Nielsen, J. T., Liu, L., Nielsen, E. H., Song, J., Ji, G., Sun, F., Skrydstrup, T., Besenbacher, F., Nielsen, N. C., Otzen, D. E. & Dong, M., 2013, I: *Proceedings of the National Academy of Sciences*. 110, 8, s. 2798-2803 6 s.

#### **Folding of outer membrane proteins**

Otzen, D. & Andersen, K. K., 2013, I: *Archives of Biochemistry and Biophysics*. 531, 1-2, s. 34-43 10 s.

#### **Wildtype and A30P Mutant Alpha-Synuclein Form Different Fibril Structures**

Nielsen, S. B., Macchi, F., Raccosta, S., Langkilde, A. E., Giehm, L., Kyrsting, A., Svane, A. S. P., Manno, M., Christiansen, G., Nielsen, N. C., Oddershede, L., Vestergaard, B. & Otzen, D., 2013, I: *PLoS One*. 8, 7, e67713.

**Curli functional amyloid systems are phylogenetically widespread and display large diversity in operon and protein structure**

Dueholm, M. S., Albertsen, M., Otzen, D. & Nielsen, P. H., 12 dec. 2012, I: P L o S One. 7, 12, s. e51274 18 s.

**Eurocin, a new fungal defensin: structure, lipid binding and its mode of action**

Oeemig, J. S., Lynggaard, C., Knudsen, D., Hansen, F. T., Noergaard, K. D., Schneider, T., Vad, B. S., Sandvang, D., Nielsen, L., Neve, S., Kristensen, H-H., Sahl, H-G., Otzen, D. & Wimmer, R., 7 dec. 2012, I: Journal of Biological Chemistry. 7, s. 42361-42372 11 s.

**Polymorphic Fibrillation of the Destabilized Fourth Fasciclin-1 Domain Mutant A<sub>54</sub>6T of the Transforming Growth Factor-β-induced Protein (TGFβI<sub>p</sub>) 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 okt. 2012, I: Journal of Biological Chemistry. 287, 41, s. 34730-34742 12 s.

**A Kinetic Analysis of the Folding and Unfolding of OmpA in Urea and Guanidinium Chloride: Single and Parallel Pathways**

Andersen, K. K., Wang, H. & Otzen, D., 12 sep. 2012, I: Biochemistry. 51, 42, s. 8371-8383 12 s.

**Cyclodextrin-Scaffolded Alamethicin with Remarkably Efficient Membrane Permeabilizing Properties and Membrane Current Conductance**

Hjørringgaard, C. U., Vad, B. S., Matchkov, V., Nielsen, S. B., Vosegaard, T., Nielsen, N. C., Otzen, D. & Skrydstrup, T., 5 jul. 2012, I: Journal of Physical Chemistry Part B: Condensed Matter, Materials, Surfaces, Interfaces & Biophysical. 116, 26, s. 7652-7659 8 s.

**Proteolytic activation of proteose peptone component 3 by release of a C-terminal peptide with antibacterial properties**

Pedersen, L. R. L., Hansted, J. G., Nielsen, S. B., Petersen, T. E., Sørensen, U. S., Otzen, D. & Sørensen, E. S., 1 jun. 2012, I: Journal of Dairy Science. 95, 6, s. 2819-2829 11 s.

**Role of elongation and secondary pathways in S6 amyloid fibril growth**

Lorenzen, N., Cohen, S. I. A., Nielsen, S. B., Herling, T. W., Christiansen, G., Dobson, C. M., T. P. Knowles, T. & Otzen, D., 2 maj 2012, I: Biophysical Journal. 102, 9, s. 2167-2175 9 s.

**Lactadherin binds to phosphatidylserine-containing vesicles in a two-step mechanism sensitive to vesicle size and composition**

Otzen, D., Blans, K., Wang, H., Gilbert, G. E. & Rasmussen, J. T., apr. 2012, I: BBA General Subjects. 1818, 4, s. 1019-1027 9 s.

**The effect of osmolytes on protein fibrillation**

Macchi, F., Eisenkolb, M., Kiefer, H. & Otzen, D., 21 mar. 2012, I: International Journal of Molecular Sciences (Online). 13, 3, s. 3801-3819 19 s.

**Mapping out the multistage fibrillation of glucagon**

Ghodke, S., Nielsen, S. B., Christiansen, G., Hjulær, H. A., Flink, J., Otzen, D. & Nielsen, S. B., mar. 2012, I: FEBS journal. 279, 5, s. 752-765 13 s.

**A Ser residue influences the structure and stability of a Pro-kinked transmembrane helix dimer**

Weber, M., Tome, L., Otzen, D. & Schneider, D., 2012, I: BBA General Subjects. 1818, 9, s. 2103-7 5 s.

**Mapping of unfolding states of integral helical membrane proteins by GPS-NMR and scattering techniques: TFE-induced unfolding of KcsA in DDM surfactant**

Calcutta, A., Jessen, C. M., Behrens, M. A., Oliveira, C. L. P., Renart, M. L., González-Ros, J. M., Otzen, D., Pedersen, J. S., Malmendal, A. & Nielsen, N. C., 2012, I: B B A - Biomembranes. 1818, 9, s. 2290-301 12 s.

### **Modulation of fibrillation of hIAPP core fragments by chemical modification of the peptide backbone**

Andreasen, M., Nielsen, S. B., Mittag, T., Bjerring, M., Nielsen, J. T., Zhang, S., Nielsen, E. H., Jeppesen, M., Christiansen, G., Besenbacher, F., Dong, M., Nielsen, N. C., Skrydstrup, T. & Otzen, D. E., 2012, I: *BBA - Proteins and Proteomics*. 1824, 2, s. 274-85 12 s.

### **Multiple Roles of Heparin in the Aggregation of p25 $\alpha$**

Nielsen, S. B., Yde, P., Giehm, L., Sundbye, S., Christiansen, G., Matthiesen, J., Jensen, M. H., Jensen, P. H. & Otzen, D. E., 2012, I: *Journal of Molecular Biology*.

### **N for AsN - O for StrOcuture? A strand-loop-strand motif for prokaryotic O-glycosylation**

Otzen, D., 2012, I: *Molecular Oral Microbiology*.

### **PP3 forms stable tetrameric structures through hydrophobic interactions via the C-terminal amphipathic helix and undergoes reversible thermal dissociation and denaturation**

Pedersen, L. R. L., Nielsen, S. B., Hansted, J. G., Petersen, T. E., Otzen, D. E. & Sørensen, E. S., 2012, I: *FEBS journal*. 279, 2, s. 336-47 12 s.

### **Scanning tunneling microscopy reveals single-molecule insights into the self-assembly of amyloid fibrils**

Kalashnyk, N., Nielsen, J. T., Nielsen, E. H., Skrydstrup, T., Otzen, D., Lægsgaard, E., Wang, C., Besenbacher, F., Nielsen, N. C. & Linderoth, T. R., 2012, I: *ACS Nano*. 6, 8, s. 6882-6889 8 s.

### **A $\beta$ <sub>1-16</sub> Can Aggregate and induce the Production of Reactive Oxygen Species, Nitric Oxide, and Inflammatory Cytokines**

Du, X., Wang, L., Wang, Y., Andreasen, M., Zhan, D., Feng, Y., Li, M., Zhao, M., Otzen, D., Xue, D., Yang, Y. & Liu, R., nov. 2011, I: *Journal of Alzheimer's Disease*. 27, 2, s. 401-413 12 s.

### **Assembling good amyloid some structures at last**

Otzen, D. E., 7 sep. 2011, I: *Structure*. 19, 9, s. 1207-1209 3 s.

### **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, I: *International Journal of Mass Spectrometry*. 302, 1-3, s. 167-173 7 s.

### **Low-resolution structure of a vesicle disrupting $\alpha$ -synuclein oligomer that accumulates during fibrillation**

Giehm, L., Svergun, D. I., Otzen, D. E. & Vestergaard, B., 22 feb. 2011, I: *Proceedings of the National Academy of Sciences*. 108, 8, s. 3246-3251 6 s.

### **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, I: *Journal of Biological Chemistry*. 286, 7, s. 4951-8 8 s.

### **Mapping the folding pathway of the transmembrane protein DsbB by protein engineering**

Otzen, D. E., 1 jan. 2011, I: *Protein Engineering Design and Selection (Print)*. 24, 1-2, s. 139-149 11 s.

### **The role of membrane properties in Mistic folding and dimerisation**

Debnath, D. K., Basaiawmoit, R. V., Nielsen, K. L. & Otzen, D. E., 1 jan. 2011, I: *Protein Engineering Design and Selection (Print)*. 24, 1-2, s. 89-97 9 s.

### **Assays for alpha-synuclein aggregation**

Giehm, L., Lorenzen, N. & Otzen, D., 2011, I: *Methods*. 53, 3, s. 295-305 11 s.

### **Effect of protein-surfactant interactions on aggregation of $\beta$ -lactoglobulin**

Hansted, J. G., Wejse, P. L., Bertelsen, H. & Otzen, D. E., 2011, I: *BBA General Subjects*. 1814, 5, s. 713-723 11 s.

**Fibrillation of the major curli subunit CsgA under a wide range of conditions implies a robust design of aggregation**

Dueholm, M. S., Nielsen, S. B., Hein, K. L., Nissen, P., Chapman, M., Christiansen, G., Nielsen, P. H. & Otzen, D. E., 2011, I: *Biochemistry*. 50, 39, s. 8281-90 10 s.

**Long-term-stable ether-lipid vs conventional ester-lipid bicelles in oriented solid-state NMR: altered structural information in studies of antimicrobial peptides**

Bertelsen, K., Vad, B., Nielsen, E. H. T., Hansen, S. K., Skrydstrup, T., Otzen, D., Vosegaard, T. & Nielsen, N. C., 2011, I: *Journal of Physical Chemistry Part B: Condensed Matter, Materials, Surfaces, Interfaces & Biophysical*. 115, 8, s. 1767-1774 8 s.

**Mechanical stress affects glucagon fibrillation kinetics and fibril structure**

Macchi, F., Hoffmann, S. V., Carlsen, M., Vad, B. S., Imperato, A., Rischel, C. & Otzen, D., 2011, I: *Langmuir*. 27, 20, s. 12539-12549

**Protein-surfactant interactions a tale of many states**

Otzen, D., 2011, I: *BBA General Subjects*. 1814, 5, s. 562-91 30 s.

**SAXS models of TGFBIp reveal a trimeric structure and show that the overall shape is not affected by the Arg124His mutation**

Basaiaiwmoit, 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, I: *Journal of Molecular Biology*. 408, 3, s. 503-513 11 s.

**SDS-facilitated in vitro formation of a transmembrane B-type cytochrome is mediated by changes in local pH**

Weber, M., Schneider, D., Prodöhl, A., Dreher, C., Becker, C., Underhaug, J., Svane, A. S. P., Malmendal, A., Nielsen, N. C. & Otzen, D., 2011, I: *Journal of Molecular Biology*. 407, 4, s. 594-606 13 s.

**Soft Interactions at Nanoparticles Alter Protein Function and Conformation in a Size Dependent Manner**

Wang, J., Jensen, U. B., Jensen, G. V., Shipovskov, S., Balakrishnan, V. S., Otzen, D., Pedersen, J. S., Besenbacher, F. & Sutherland, D. S., 2011, I: *Nano Letters*. 11, 11, s. 4985-4991 6 s.

**Assays for  $\alpha$ -synuclein aggregation**

Giehm, L., Lorenzen, N. & Otzen, D. E., 14 dec. 2010, I: *Methods*.

**Human phenotypically distinct TGF1 corneal dystrophies are linked to the stability of the fourth Fas1 domain of TGFBIp**

Otzen, D. & Enghild, J. J., 6 dec. 2010, I: *Journal of Biological Chemistry*.

**Strategies to increase the reproducibility of  $\alpha$ -synuclein fibrillation in plate reader assays**

Giehm, L. & Otzen, D., 15 nov. 2010, I: *Analytical Biochemistry*. 406, 2, s. 270-281 12 s.

**Cell-free synthesis and folding of transmembrane OmpA reveals higher order structures and premature truncations**

Debnath, D. K. & Otzen, D. E., 1 nov. 2010, I: *Advances in Biophysical Chemistry*. 152, 1-3, s. 80-89 9 s.

**Amyloid structure—one but not the same: the many levels of fibrillar polymorphism**

Pedersen, J. S., Andersen, C. B. & Otzen, D., nov. 2010, I: *FEBS journal*. 277, 22, s. 4591-4601 11 s.

**An A $\beta$  concatemer with altered aggregation propensities**

Giehm, L., Dal Degan, F., Fraser, P., Klysner, S. & Otzen, D. E., 1 okt. 2010, I: *BBA General Subjects*. 1804, 10, s. 2025-35 11 s.

**Functional amyloid: turning swords into plowshares**

Otzen, D., 1 okt. 2010, I: *Prion*. 4, 4, s. 256-64 9 s.

**Cyclodextrin scaffolded alamethicin with highly efficient channel-forming properties**

Hjørringgaard, C. U., Vad, B., Nielsen, S. B., Matchkov, V., Vosegaard, T., Nielsen, N. C., Otzen, D. & Skrydstrup, T., sep. 2010, I: Journal of Peptide Science. 16, s. 148 1 s.

**Amyloid formation in surfactants and alcohols: membrane mimetics or structural switchers?**

Otzen, D. E., 1 aug. 2010, I: Current protein & peptide science. 11, 5, s. 355-71 17 s.

**beta-Sheet aggregation of kisspeptin-10 is stimulated by heparin but inhibited by amphiphiles**

Nielsen, S. B., Franzmann, M., Basaiawmoit, R. V., Wimmer, R., Mikkelsen, J. D. & Otzen, D. E., 1 aug. 2010, I: Biopolymers. 93, 8, s. 678-89 12 s.

**Stop-and-go kinetics in amyloid fibrillation**

Ferkinghoff-Borg, J., Fonslet, J., Andersen, C. B., Krishna, S., Pigolotti, S., Yagi, H., Goto, Y., Otzen, D. & Jensen, M. H., 1 jul. 2010, I: Physical Review E. Statistical, Nonlinear, and Soft Matter Physics. 82, 1 Pt 1, s. 010901

**The diversity of FtsY-lipid interactions**

Reinau, M. E., Thøgersen, I. B., Enghild, J. J., Nielsen, K. L. & Otzen, D. E., 1 jul. 2010, I: Biopolymers. 93, 7, s. 595-606 12 s.

**Occupancy of nonannular lipid binding sites on KcsA greatly increases the stability of the tetrameric protein**

Triano, I., Barrera, F. N., Renart, M. L., Molina, M. L., Fernández-Ballester, G., Poveda, J. A., Fernández, A. M., Encinar, J. A., Ferrer-Montiel, A. V., Otzen, D. & González-Ros, J. M., 29 jun. 2010, I: Biochemistry. 49, 25, s. 5397-5404 8 s.

**A thermodynamic analysis of fibrillar polymorphism**

Jeppesen, M. D., Hein, K., Nissen, P., Westh, P. & Otzen, D. E., 1 jun. 2010, I: Advances in Biophysical Chemistry. 149, 1-2, s. 40-6 7 s.

**Strategies to increase the reproducibility of protein fibrillization in plate reader assays**

Giehm, L. & Otzen, D. E., 15 maj 2010, I: Analytical Biochemistry. 400, 2, s. 270-81 12 s.

**In vitro association of fragments of a beta-sheet membrane protein**

Debnath, D., Nielsen, K. L. & Otzen, D. E., 1 maj 2010, I: Advances in Biophysical Chemistry. 148, 1-3, s. 112-20 9 s.

**Fast mapping of global protein folding states by multivariate NMR: a GPS for proteins**

Malmendal, A., Underhaug, J., Otzen, D. E. & Nielsen, N. C., 21 apr. 2010, I: P L o S One. 5, 4, s. e10262 6 s.

**The role of protonation in protein fibrillation**

Jeppesen, M. D., Westh, P. & Otzen, D. E., 19 feb. 2010, I: FEBS Letters. 584, 4, s. 780-4 5 s.

**Pardaxin permeabilizes vesicles more efficiently by pore formation than by disruption**

Vad, B. S., Bertelsen, K., Johansen, C. H., Pedersen, J. M., Skrydstrup, T., Nielsen, N. C. & Otzen, D. E., 17 feb. 2010, I: Biophysical Journal. 98, 4, s. 576-85 10 s.

**Impact of the antimicrobial peptide Novicidin on membrane structure and integrity**

Nielsen, S. B. & Otzen, D. E., 28 jan. 2010, I: Journal of Colloid and Interface Science. 345, 2, s. 248-256 9 s.

**Crystallographic analysis reveals a unique lidocaine binding site on human serum albumin**

Hein, K. L., Kragh-Hansen, U., Morth, J. P., Jeppesen, M., Otzen, D., Møller, J. V. & Nissen, P., 2010, I: Journal of Structural Biology. 171, s. 353-360

**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, I: B B A - Proteins and Proteomics. 1804,

4, s. 806-20 15 s.

**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, I: 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, I: Molecular Microbiology.

**Functional bacterial amyloids in biofilms**

Otzen, D., 2010, I: Annual Biofilm Highlights.

**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, I: Journal of Molecular Biology. 397, 4, s. 932-46 14 s.

**Institutional nonconformism: the many levels of glucagon polymorphism**

Otzen, D., 2010, I: FEBS journal.

**Membrane Interactions of Novicidin, a Novel Antimicrobial Peptide: Phosphatidylglycerol Promotes Bilayer Insertion**

Dorosz, J., Gofman, Y., Kolusheva, S., Otzen, D., Ben-Tal, N., Nielsen, N. C. & Jelinek, R., 2010, I: Journal of Physical Chemistry Part B: Condensed Matter, Materials, Surfaces, Interfaces & Biophysical. 114, 34, s. 11053-60 8 s.

**Occupancy of non-annular lipid binding sites on KcsA greatly increases the stability of the tetrameric protein**

Otzen, D., 2010, I: Biochemistry.

**SDS-Induced Fibrillation of  $\alpha$ -Synuclein: An Alternative Fibrillation Pathway**

Giehm, L., Oliveira, C. L. P. D., Christiansen, G., Pedersen, J. S. & Otzen, D., 2010, I: Journal of Molecular Biology. 401, s. 115-133

**Surfactants and alcohols as inducers of protein amyloid: aggregation chaperones or membrane simulators?**

Otzen, D., 2010, I: Lipids and membranes in amyloid diseases.

**The interaction of equine lysozyme:oleic acid complexes with lipid membranes suggests a cargo off-loading mechanism**

Nielsen, S. B., Wilhelm, K., Vad, B., Schleucher, J., Morozova-Roche, L. A. & Otzen, D., 2010, I: Journal of Molecular Biology. 398, 2, s. 351-61 11 s.

**Synthesis of a Ketomethylene Isostere of the Fibrillating Peptide SNNFGAILSS**

Mittag, T., Nielsen, N. C., Otzen, D. & Skrydstrup, T., 9 sep. 2009, I: Journal of Organic Chemistry. 74, s. 7955-7957

**A Versatile Approach to  $\beta$ -Amyloid Fibril-Binding Compounds Exploiting the Shirakawa/Hayashi Protocol for *trans*-Alkene Synthesis**

Huynh, T. H. V., Mantel, M., Mikkelsen, K., Lindhardt, A. T., Nielsen, N. C., Otzen, D. & Skrydstrup, T., 22 jan. 2009, I: Organic Letters. 11, s. 999-1002

**Branching in amyloid fibril growth**

Beyschau Andersen, C., Yagi, H., Manno, M., Martorana, V., Ban, T., Christiansen, G., Otzen, D., Goto, Y. & Rischel, C., 2009, I: Biophysical Journal. 96, 4, s. 1529-36 7 s.

**How chain length and charge affect surfactant denaturation of ACBP**

Andersen, K. & Otzen, D., 2009, I: Journal of Physical Chemistry Part B: Condensed Matter, Materials, Surfaces, Interfaces & Biophysical. 113, s. 13942-13952

**Influence of tunable external stimuli on the self-assembly of guanosine supramolecular nanostructures studied by atomic force microscope**

Li, Y., Dong, M., Otzen, D., Yao, Y., Liu, B., Besenbacher, F. & Mamdouh, W., 2009, I: Langmuir. 25

**Interaction and stability of mixed micelle and monolayer of nonionic and cationic surfactant mixtures**

Sehgal, P., Kosaka, O., Doe, H. & Otzen, D., 2009, I: Journal of Dispersion Science and Technology. 30, s. 1050-1058

**Interaction of a potyviral VPg with anionic phospholipid vesicles**

Rantalainen, K., Christensen, P. A., Hafrén, A., Otzen, D., Kalkkinen, N. & Mäkinen, K., 2009, I: Virology. 395, s. 114-120

**Interactions and Influence of  $\alpha$ -Cyclodextrin on the Aggregation and Interfacial Properties of Mixtures of Nonionic and Zwitterionic Surfactants**

Sehgal, P., Mizuki, T., Doe, H., Wimmer, R., Larsen, K. L. & Otzen, D., 2009, I: Colloid and Polymer Science. 287, s. 1243-1252

**Kinetic partitioning between aggregation and vesicle permeabilization by modified ADan**

Nesgaard, L. W., Vad, B., Christiansen, G. & Otzen, D., 2009, I: B B A - Molecular Cell Research. 1794, s. 84-93

**Proteasome-Fibrillation Antagonism in a Dynamic Model for Parkinson's Disease**

Sneppen, K., Lizana, G. L., Jensen, M. H., Pigolotti, S. & Otzen, D., 2009, I: Physical Biology. 6, s. 36005

**Proteomic changes in response to chromium(VI) toxicity in *Pseudomonas aeruginosa***

Kilic, N., Stensballe, A., Otzen, D. & Dönmez, G., 2009, I: Bioresource Technology. 101, s. 2134-2140

**Quantitative use of paramagnetic relaxation enhancements for determining orientation and insertion depth of peptides in micelles**

Franzmann, M., Otzen, D. & Wimmer, R., 2009, I: ChemBioChem. 10, s. 2339-2347

**SAXS Study of Glucagon Fibrillation: From Monomers to Fibers**

Oliveira, C. L. P. D., Behrens, M. A., Pedersen, J. S., Erlacher, K., Otzen, D. & Pedersen, J. S., 2009, I: Journal of Molecular Biology. 387, s. 147-161

**Stability and structure of the membrane protein transporter Ffh is modulated by substrates and lipids**

Reinau, M. E. & Otzen, D., 2009, I: Archives of Biochemistry and Biophysics. 492, s. 48-53

**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, I: Biopolymers. 91, 3, s. 221-31 10 s.

**Surfactant protein SP-B strongly modifies surface collapse of phospholipid vesicles: Insights from a quartz crystal microbalance with dissipation**

Cabré, E., Malmström, J., Sutherland, D., Perez-Gil, J. & Otzen, D., 2009, I: Biophysical Journal. 97, 3, s. 768-76 8 s.

**The influence of vesicle composition and size on  $\alpha$ -synuclein structure and stability**

Kjær, L., Giehm, L., Heimburg, T. R. & Otzen, D., 2009, I: Biophysical Journal. 96, 2857 s.

**The role of decorated SDS micelles in sub-cmc protein denaturation and association**

Andersen, K., Oliveira, C. L. P. D., Larsen, K. L., Poulsen, F., Callisen, T., Westh, P., Pedersen, J. S. & Otzen, D., 2009, I: Journal of Molecular Biology. 391, s. 207-226

**Unique identification of supramolecular structures in amyloid fibrils by solid-state NMR spectroscopy**

Nielsen, J. T., Bjerring, M., Jeppesen, M., Pedersen, R. O., Pedersen, J. M., Hein, K. L., Vosegaard, T., Skrydstrup, T., Otzen, D. & Nielsen, N. C., 2009, I: Angewandte Chemie International Edition. 48, s. 2118-2121 4 s.

**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, I: Applied and Environmental Microbiology. 75, s. 4101-4110

**$\alpha$ -lactalbumin is unfolded by all classes of detergents but with different mechanisms**

Otzen, D., Sehgal, P. & Westh, P., 2009, I: Journal of Colloid and Interface Science. 329, s. 273-283

**AFM-based force spectroscopy measurements of mature amyloid fibrils of the peptide glucagon**

Dong, M., Hovgaard, M. B., Mamdouh, W., Xu, S., Otzen, D. & Besenbacher, F., 2008, I: Nanotechnology. 19, s. 384013  
7 s.

**AFM-based force spectroscopy measurements of mature amyloid fibrils of the peptide glucagon: Nanotechnology**

Dong, M. D., Hovgaard, M. B., Mamdouh, W., Xu, S. L., Otzen, D. E. & Besenbacher, F., 2008, I: Nanotechnology. 19, 38

**Aggregation of S6 in a quasi-native state by monomeric SDS**

Otzen, D., Nesgaard, L., Andersen, K. K., Hansen, J. H., Christiansen, G., Doe, H. & Sehgal, P., 2008, I: B B A - Biomembranes. 1784, s. 400-414

**A global study of myoglobin-surfactant interactions**

Andersen, K. K., Westh, P. & Otzen, D., 2008, I: Langmuir. 15, s. 399-407

**Amyloid - a state in many guises: survival of the fittest fibril fold**

Pedersen, J. S. & Otzen, D., 2008, I: Protein Science. 17, s. 1-9

**Amyloid-like adhesins in floc-forming and filamentous bacteria in activated sludge**

Larsen, P., Nielsen, J. L. & Otzen, D., 2008, I: Applied and Environmental Microbiology. 74, s. 1517-1526

**An unusual intrinsically disordered protein from the model legume Lotus japonicus stabilizes proteins in vitro**

Haaning, S., Radutoiu, S., Hoffmann, S. V., Dittmer, J., Giehm, L., Otzen, D. & Stougaard, J., 2008, I: Journal of Biological Chemistry. 283, 45, s. 31142-52 10 s.

**Characterization of Dry Globular Proteins and Protein Fibrils by Synchrotron Radiation Vacuum UV Circular Dichroism**

Nesgaard, L. W., Hoffmann, S. V., Andersen, C. B., Malmendal, A. & Otzen, D., 2008, I: Biopolymers. 89, 9, s. 779-795

**Dendrimers destabilize proteins in a generation-dependent manner involving electrostatic interactions**

Giehm, L., Christensen, C., Boas, U., Heegaard, P. M. H. & Otzen, D., 2008, I: Biopolymers. 89, s. 522-529

**Differential adsorption of variants of the thermomyces lanuginosus lipase on a hydrophobic surface suggests a role for local flexibility**

Otzen, D., 2008, I: Colloids and Surfaces B: Biointerfaces. 64, s. 223-228

**Early Stages of Amyloid Fibril Formation Studied by Liquid-State NMR: The Peptide Hormone Glucagon**

Svane, A. S. P., Jahn, K., Deva, T., Malmendal, A., Otzen, D., Dittmer, J. & Nielsen, N. C., 2008, I: Biophysical Journal. 95, 1, s. 366 – 377 11 s.

**Effect of glycosylation on biophysical and flocculative properties of the extracellular domain of Ag43**

Knudsen, S. K., Westergaard, U. B., Frantzmam, M., Stensballe, A. & Otzen, D., 2008, I: Biochemical Journal. 412, s. 563-577

**Influence of beta-Cyclodextrin on the Mixed Micellization Process of Sodium Dodecyl Sulfate and Sodium Lauroyl Sarcosine and Formation of Inclusion Complexes**

Sehgal, P., Sharma, D., Larsen, K. L., Wimmer, R., Otzen, D. & Doe, H., 2008, I: Journal of Dispersion Science and Technology. 29, s. 128-133



**Interactions of  $\gamma$ -Cyclodextrin with the Mixed Micelles of Anionic Surfactants and Their Inclusion Complexes Formation**  
Sehgal, P., Sharma, M., Larsen, K. L., Wimmer, R., Doe, H. & Otzen, D., 2008, I: Journal of Dispersion Science and Technology. 29, s. 885-890

Interactions of  $\gamma$ -Cyclodextrin with the Mixed Micelles of Anionic Surfactants and Their Inclusion Complexes Formation  
Sehgal, P., Sharma, M., Larsen, K. L., Wimmer, R., Doe, H. & Otzen, D., 2008, I: Journal of Dispersion Science and Technology. 29, s. 885-890

**Spectroscopic Evidence for the Existence of an Obligate Pre-Fibrillar Oligomer during Glucagon Fibrillation**  
Christensen, P. A., Pedersen, J. S., Christiansen, G. & Otzen, D., 2008, I: FEBS Letters. 582, s. 1341-1345

**Thermodynamics and mechanism of cutinase stabilization by trehalose**  
Baptista, R. P., Pedersen, S. H., Cabrita, G. J. M., Otzen, D., Cabral, J. M. & Melo, E. P., 2008, I: Biopolymers. 89, s. 538-547

**We find them here, we find them there: Functional bacterial amyloid**  
Otzen, D. & Nielsen, P. H., 2008, I: Cellular and Molecular Life Sciences. 65, s. 910-927

**p25 $\alpha$  relocates in oligodendroglia from myelin to cytoplasmic inclusions in multiple system atrophy**  
Song, Y. J. C., Lundvig, D. M. S., Huang, Y., Wei, P. G., Blumbergs, P. C., Højrup, P., Otzen, D., Halliday, G. M. & Jensen, P. H., okt. 2007, I: American Journal of Pathology. 171, 4, s. 1291-1303 13 s.

**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, I: Journal of Biological Chemistry. 282, 9, s. 6661-6667 7 s.

**Alternative membrane protein conformations in alcohol**  
Otzen, D., Sehgal, P. & Nesgaard, L., 2007, I: Biochemistry. 46, s. 4348-4359

**Amyloid adhesins are abundant in natural biofilms**  
Larsen, P., Dueholm, M. S., Christiansen, G., Nielsen, J. L., Otzen, D. & Nielsen, P. H., 2007, I: Env. Microbiol.. 9, s. 3077-3090

**Changes in structures of milk proteins upon photo-oxidation**  
Dalsgaard, T. K., Otzen, D., Nielsen, J. H. & Larsen, L. B., 2007, I: J. Agr. Food Chem.. 55, s. 10968-10976

**Dendrimer effects on peptide and protein fibrillation**  
Heegaard, P. M. P., Boas, U. & Otzen, D., 2007, I: Macromolecular Bioscience. 7, s. 1047-1059

**Heparin binding induces a conformational change of pigment epithelium-derived factor (PEDF).**  
Valnickova, Z., Petersen, S. V., Nielsen, S. B., Otzen, D. & Enghild, J. J., 2007, I: Journal of Biological Chemistry.

**Modulation of cutinase structure and stability by phospholipid detergents**  
Sehgal, P., Bang Nielsen, S., Pedersen, S., Wimmer, R. & Otzen, D., 2007, I: Biochim. Biophys. Acta.. 1774, s. 1544-1554

**p25 $\alpha$  Relocalizes in Oligodendroglia from Myelin to Cytoplasmic Inclusions in Multiple System Atrophy**  
Song, Y. J. C., Lundvig, D. M. S., Huang, Y., Gai, W. P., Blumbergs, P. C., Højrup, P., Otzen, D., Halliday, G. M. & Jensen, P. H., 2007, I: Am. J. Pathol.. 171, s. 1291-1303

**Quartz crystal microbalance studies of multilayer glucagon fibrillation at the solid-liquid interface**  
Hovgaard, M. B., Dong, M., Otzen, D. E. & Besenbacher, F., 2007, I: Biophysical Journal. 93, 6, s. 2162-9 7 s.

**Quartz crystal microbalance studies of multilayer glucagons fibrillation at the solid-liquid interface**

Hovgaard, M. B., Dong, M., Otzen, D. & Besenbacher, F., 2007, I: *Biophysical Journal*. 93, 6, s. 2162

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

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

**Unfolding of  $\beta$ -sheet proteins in SDS**

Nielsen, M. M., Andersen, K. K., Westh, P. & Otzen, D., 2007, I: *Biophysical Journal*. 92, s. 3674-3685

**We find them here, we find them there: Functional bacterial amyloid**

Otzen, D. & Nielsen, P. H., 2007, I: *Cell. Mol. Life Sci.*.

Interactions between anionic mixed micelles and  $\alpha$ -cyclodextrin and their inclusion complexes: conductivity, NMR and fluorescence study

Sehgal, P., Sharma, M., Wimmer, R., Larsen, K. L. & Otzen, D., 2006, I: *Colloid and Polymer Science*. 284, 8, s. 916-926

N- and C-Terminal Hydrophobic Patches Are Involved in Fibrillation of Glucagon

Pedersen, J. S., Dikov, D. & Otzen, D., 2006, I: *Biochemistry*. 45, 48, s. 14503-14512 10 s.

Sulfates Dramatically Stabilize a Salt-Dependent Type of Glucagon Fibrils

Pedersen, J. S., Flink, J. M., Dikov, D. & Otzen, D., 2006, I: *Biophysical Journal*. 90, 11, s. 4181-4194

Thermodynamics of unfolding of an integral membrane protein in mixed micelles

Sehgal, P. & Otzen, D., 2006, I: *Protein Science*. 15, s. 890-899

**Antagonism, non-native interactions and non-two-state folding in S6 revealed by double-mutant cycle analysis**

Otzen, D., 1 nov. 2005, I: *Protein Engineering, Design and Selection*. 18, 11, s. 547-557 11 s.

Synergistic behavior of sodiumdodecylsulfate and 1,2-diheptanoyl-sn-glycero-3-phosphocholine in an aqueous medium: Interfacial and bulk behavior

Sehgal, P., Doe, H., Sharma, M. & Otzen, D. E., 1 aug. 2005, I: *Colloid and Polymer Science*. 283, 11, s. 1219-1225 7 s.

**Interactions between folding factors and bacterial outer membrane proteins**

Mogensen, J. E. & Otzen, D. E., 1 jul. 2005, I: *Molecular Microbiology*. 57, 2, s. 326-346 21 s.

**Conformational detours during folding of a collapsed state**

Otzen, D. E., 30 jun. 2005, I: *Biochimica et Biophysica Acta - Proteins and Proteomics*. 1750, 2, s. 146-153 8 s.

Activation, Inhibition, and Destabilization of *Thermomyces lanuginosus* Lipase by Detergents

Mogensen, J. E., Sehgal, P. & Otzen, D., 2005, I: *Biochemistry*. 44, 5, s. 1719-1730

Barriers to Folding of the Transmembrane Domain of the *Escherichia coli* Autotransporter Adhesin Involved in Diffuse Adherence

Mogensen, J. E., Tapadar, D., Schmidt, M. A. & Otzen, D., 2005, I: *Biochemistry*. 44, s. 4533-4545

Misfolding of a bacterial autotransporter

Mogensen, J. E., Kleinschmidt, J. H., Schmidt, M. A. & Otzen, D., 2005, I: *Protein Science*. 14, s. 2814-2827

Protein drug stability: a formulation challenge

Frøkjær, S. & Otzen, D., 2005, I: *Nature Reviews. Drug Discovery*. 4, s. 298-306

**Stabilization of the Ribosomal Protein S6 by Trehalose is Counterbalanced by the Formation of a Putative Off-pathway Species**

Chen, L., Cabrita, G. J. M., Otzen, D. & Melo, E. P., 2005, I: Journal of Molecular Biology. 351, s. 402-416

**Using micellar mole fractions to assess membrane protein stability in mixed micelles**

Sehgal, P., Mogensen, J. E. & Otzen, D., 2005, I: BBA - Biomembranes. 1761, s. 59-68 10 s.

**Correspondence between anomalous  $m$ - and  $\Delta C_p$ -values in protein folding**

Otzen, D. E. & Oliveberg, M., 1 dec. 2004, I: Protein Science. 13, 12, s. 3253-3263 11 s.

**Investigating porcine pancreatic phospholipase A<sub>2</sub> action on vesicles and supported planar bilayers using a quartz crystal microbalance with dissipation**

Justesen, P. H., Kristensen, T., Ebdrup, T. & Otzen, D., 15 nov. 2004, I: Journal of Colloid and Interface Science. 279, 2, s. 399-409 11 s.

**Transient aggregation and stable dimerization induced by introducing an Alzheimer sequence into a water-soluble protein**

Otzen, D. E., Miron, S., Akke, M. & Oliveberg, M., 19 okt. 2004, I: Biochemistry. 43, 41, s. 12964-12978 15 s.

**Modulation of S6 fibrillation by unfolding rates and gatekeeper residues**

Pedersen, J. S., Christensen, G. & Otzen, D. E., 6 aug. 2004, I: Journal of Molecular Biology. 341, 2, s. 575-588 14 s.

**Interaction between phospholipid vesicular structures with long chain zwitterionic surfactants**

Sehgal, P., Doe, H., Sharma, M. & Otzen, D. E., 1 maj 2004, I: Colloid and Polymer Science. 282, 7, s. 677-683 7 s.

**Transient formation of nano-crystalline structures during fibrillation of an A $\beta$ -like peptide**

Otzen, D. E. & Oliveberg, M., 1 maj 2004, I: Protein Science. 13, 5, s. 1417-1421 5 s.

**Elimination of A Misfolded Folding Intermediate by A Single Point Mutation**

Mogensen, J. E., Ipsen, H., Holm, J. & Otzen, D. E., 30 mar. 2004, I: Biochemistry. 43, 12, s. 3357-3367 11 s.

**Structural background of cyclodextrin-protein interactions**

Aachmann, F. L., Otzen, D. E., Larsen, K. L. & Wimmer, R., 1 dec. 2003, I: Protein Engineering. 16, 12, s. 905-912 8 s.

**Trehalose favors a cutinase compact intermediate off-folding pathway**

Melo, E. P., Chen, L. Y., Cabral, J. M. S., Fojan, P., Petersen, S. B. & Otzen, D. E., 24 jun. 2003, I: Biochemistry. 42, 24, s. 7611-7617 7 s.

**Adsorption of a small protein to a methyl-terminated hydrophobic surfaces: Effect of protein-folding thermodynamics and kinetics**

Otzen, D. E., Oliveberg, M. & Höök, F., 15 maj 2003, I: Colloids and Surfaces B: Biointerfaces. 29, 1, s. 67-73 7 s.

**Folding of DsbB in mixed micelles: a kinetic analysis of the stability of a bacterial membrane protein.**

Otzen, D. E., 1 jan. 2003, I: Journal of Molecular Biology. 330, 4, s. 641-649 9 s.

**Protein unfolding in detergents: Effect of micelle structure, ionic strength, pH, and temperature**

Otzen, D. E., 1 okt. 2002, I: Biophysical Journal. 83, 4, s. 2219-2230 12 s.

**Structural basis for cyclodextrins' suppression of human growth hormone aggregation**

Otzen, D. E., Knudsen, B. R., Aachmann, F., Larsen, K. L. & Wimmer, R., 2 jul. 2002, I: Protein Science. 11, 7, s. 1779-1787 9 s.

**The major birch allergen, Bet v 1, shows affinity for a broad spectrum of physiological ligands**

Mogensen, J. E., Wimmer, R., Larsen, J. N., Spangfort, M. D. & Otzen, D. E., 28 jun. 2002, I: Journal of Biological Chemistry. 277, 26, s. 23684-23692 9 s.

**Burst-phase expansion of native protein prior to global unfolding in SDS**

Otzen, D. E. & Oliveberg, M., 1 jan. 2002, I: Journal of Molecular Biology. 315, 5, s. 1231-1240 10 s.

**Conformational plasticity in folding of the split  $\beta$ - $\alpha$ - $\beta$  protein S6: Evidence for burst-phase disruption of the native state**

Otzen, D. E. & Oliveberg, M., 1 jan. 2002, I: Journal of Molecular Biology. 317, 4, s. 613-627 15 s.

**Folding of circular permutants with decreased contact order: General trend balanced by protein stability**

Lindberg, M. O., Tångrot, J., Otzen, D. E., Dolgikh, D. A., Finkelstein, A. V. & Oliveberg, M., 7 dec. 2001, I: Journal of Molecular Biology. 314, 4, s. 891-900 10 s.

**A simple way to measure protein refolding rates in water**

Otzen, D. E. & Oliveberg, M., 26 okt. 2001, I: Journal of Molecular Biology. 313, 3, s. 479-483 5 s.

**Stability and Folding of Endoglucanase I (CEL7B) from Humicola Insolens**

Otzen, D. & Schülein, M., 1 jan. 2001, I: Biocatalysis and Biotransformation. 19, 42130, s. 469-487 19 s.

**Designed protein tetramer zipped together with a hydrophobic Alzheimer homology: A structural clue to amyloid assembly**

Otzen, D. E., Kristensen, O. & Oliveberg, M., 29 aug. 2000, I: Proceedings of the National Academy of Sciences. 97, 18, s. 9907-9912 6 s.

**Model process for separation based on unfolding and refolding of chymotrypsin inhibitor 2 in thermoseparating polymer two-phase systems**

Umakoshi, H., Persson, J., Kroon, M., Johansson, H. O., Otzen, D. E., Kuboi, R. & Tjerneld, F., 23 jun. 2000, I: Journal of Chromatography B: Biomedical Sciences and Applications. 743, 1-2, s. 13-19 7 s.

**The spectral and thermodynamic properties of staphylococcal enterotoxin A, E, and variants suggest that structural modifications are important to control their function**

Cavallin, A., Arozenius, H., Kristensson, K., Antonsson, P., Otzen, D. E., Björk, P. & Forsberg, G., 21 jan. 2000, I: Journal of Biological Chemistry. 275, 3, s. 1665-1672 8 s.

**Salt-induced detour through compact regions of the protein folding landscape**

Otzen, D. E. & Oliveberg, M., 12 okt. 1999, I: Proceedings of the National Academy of Sciences. 96, 21, s. 11746-11751 6 s.

**Electrostatics in the active site of an  $\alpha$ -amylase**

Nielsen, J. E., Beier, L., Otzen, D., Borchert, T. V., Frantzen, H. B., Andersen, K. V. & Svendsen, A., 15 sep. 1999, I: European Journal of Biochemistry. 264, 3, s. 816-824 9 s.

**Structural changes in the transition state of protein folding: Alternative interpretations of curved chevron plots**

Otzen, D. E., Kristensen, O., Proctor, M. & Oliveberg, M., 18 maj 1999, I: Biochemistry. 38, 20, s. 6499-6511 13 s.

**Analysis of protein-protein interactions by mutagenesis: Direct versus indirect effects**

Otzen, D. E. & Fersht, A. R., 2 feb. 1999, I: Protein Engineering. 12, 1, s. 41-45 5 s.

**A comparative study of the unfolding of the endoglucanase Ce145 from Humicola insolens in denaturant and surfactant**

Otzen, D. E., Christiansen, L. & Schülein, M., 1 jan. 1999, I: Protein Science. 8, 9, s. 1878-1887 10 s.

**Properties of PEG-modified microbial proteases. Activity and stability studies**

Fatum, T. M., Olsen, A. A., Fuglsang, C. C. & Otzen, D., 1 dec. 1998, I: Progress in Biotechnology. 15, C, s. 147-150 4 s.

**Folding of circular and permuted chymotrypsin inhibitor 2: Retention of the folding nucleus**

Otzen, D. E. & Fersht, A. R., 2 jun. 1998, I: *Biochemistry*. 37, 22, s. 8139-8146 8 s.

**Enzymatic characterisation of novamyl®, a thermostable  $\alpha$ -amylase**

Christophersen, C., Otzen, D. E., Norman, B. E., Christensen, S. & Schäfer, T., 1 jan. 1998, I: *Starch/Staerke*. 50, 1, s. 39-45 7 s.

**Hydrogen exchange in chymotrypsin inhibitor 2 probed by mutagenesis**

Neira, J. L., Itzhaki, L. S., Otzen, D. E., Davis, B. & Fersht, A. R., 4 jul. 1997, I: *Journal of Molecular Biology*. 270, 1, s. 99-110 12 s.

**Rate of isomerisation of peptidyl-proline bonds as a probe for interactions in the physiological denatured state of chymotrypsin inhibitor 2**

Tan, Y. J., Oliveberg, M., Otzen, D. E. & Fersht, A. R., 20 jun. 1997, I: *Journal of Molecular Biology*. 269, 4, s. 611-622 12 s.

**Structure of the transition state for folding of a protein derived from experiment and simulation**

Daggett, V., Li, A., Itzhaki, L. S., Otzen, D. E. & Fersht, A. R., 29 mar. 1996, I: *Journal of Molecular Biology*. 257, 2, s. 430-440 11 s.

**Conformational pathway of the polypeptide chain of chymotrypsin inhibitor-2 growing from its N terminus in vitro. Parallels with the protein folding pathway**

De Prat Gay, G., Ruiz-Sanz, J., Neira, J. L., Corrales, F. J., Otzen, D. E., Ladurner, A. G. & Fersht, A. R., 15 dec. 1995, I: *Journal of Molecular Biology*. 254, 5, s. 968-979 12 s.

**The structure of the transition state for folding of chymotrypsin inhibitor 2 analysed by protein engineering methods: Evidence for a nucleation-condensation mechanism for protein folding**

Itzhaki, L. S., Otzen, D. E. & Fersht, A. R., 24 nov. 1995, I: *Journal of Molecular Biology*. 254, 2, s. 260-288 29 s.

**Side-Chain Determinants of  $\beta$ -Sheet Stability**

Otzen, D. E. & Fersht, A. R., 1 maj 1995, I: *Biochemistry*. 34, 17, s. 5718-5724 7 s.

**Movement of the Position of the Transition State in Protein Folding**

Matouschek, A., Otzen, D. E., Itzhaki, L. S., Jackson, S. E. & Fersht, A. R., 1 jan. 1995, I: *Biochemistry*. 34, 41, s. 13656-13662 7 s.

**Nature and Consequences of GroEL-Protein Interactions**

Itzhaki, L. S., Otzen, D. E. & Fersht, A. R., 1 jan. 1995, I: *Biochemistry*. 34, 44, s. 14581-14587 7 s.

**Protein Fragments as Models for Events in Protein Folding Pathways: Protein Engineering Analysis of the Association of Two Complementary Fragments of the Barley Chymotrypsin Inhibitor 2 (CI-2)**

Ruiz-Sanz, J., de Prat Gay, G., Otzen, D. E. & Fersht, A. R., 1 jan. 1995, I: *Biochemistry*. 34, 5, s. 1695-1701 7 s.

**Structural Factors Contributing to the Hydrophobic Effect: The Partly Exposed Hydrophobic Minicore in Chymotrypsin Inhibitor**

Otzen, D. E., Rheinhecker, M. & Fersht, A. R., 1 jan. 1995, I: *Biochemistry*. 34, 40, s. 13051-13058 8 s.

**Single versus parallel pathways of protein folding and fractional formation of structure in the transition state**

Fersht, A. R., Itzhaki, L. S., Elmasry, N. F., Matthews, J. M. & Otzen, D. E., 25 okt. 1994, I: *Proceedings of the National Academy of Sciences*. 91, 22, s. 10426-10429 4 s.

**Structure of the transition state for the folding/unfolding of the barley chymotrypsin inhibitor 2 and its implications for mechanisms of protein folding**

Otzen, D. E., Itzhaki, L. S., Elmasry, N. F., Jackson, S. E. & Fersht, A. R., 25 okt. 1994, I: Proceedings of the National Academy of Sciences. 91, 22, s. 10422-10425 4 s.

**Dual hydrolytic role for Pb(II) ions**

Otzen, D. E., Barciszewski, J. & Clark, B. F. C., 1 jan. 1994, I: Biochimie. 76, 1, s. 15-21 7 s.

**Altered lead(II)-cleavage pattern of free Phe-tRNA(Phe) and Phe-tRNA(Phe) in ternary complex with EF-Tu:GTP**

Otzen, D. E., Barciszewski, J. & Clark, B. F. C., 1 jan. 1993, I: Biochemistry and Molecular Biology International. 31, 1, s. 95-103 9 s.

**Reduction in the amount of 8-hydroxy-2'-deoxyguanosine in the DNA of SV40-transformed human fibroblasts as compared with normal cells in culture.**

Barciszewski, J., Rattan, S., Siboska, G., Otzen, D. & Clark, B. F. C., 1993, I: FEBS Letters. 318, s. 186-188

**Specific incorporation of kinetin into eukaryotic and prokaryotic transfer ribonucleic acid molecules**

Barciszewski, J., Otzen, D., Rattan, S. I. S. & Clark, B. F. C., 1 dec. 1992, I: Biochemistry international. 28, 5, s. 805-811 7 s.

**Specific incorporation of kinetin into eukaryotic and prokaryotic transfer ribonucleic acid molecules.**

Barciszewski, J., Rattan, S., Otzen, D. & Clark, B. F. C., 1992, I: Biochemistry international. 28, s. 805-811