

BENZON SYMPOSIUM No. 63
New Paradigms of Protein Engineering - Applications in Modern Medicine

Copenhagen, August 21-24, 2017

Organizing committee:

Kristian Strømgaard, Christian Adam Olsen, Stephan Alexander Pless, Morten Meldal, Sven Frøkjær
and
Finn Cilius Nielsen

Venue: Hotel Skt Petri, Krystalgade 22, 1172 Copenhagen, Denmark

Poster presentations

NAME	AFFILIATION	TITLE	Session	No.
Chatterjee, Abhishek	<i>USA</i>	Development and applications of universal platforms for genetic code expansion	ORAL & Monday	I-01
Brown, Nathaniel	<i>Germany</i>	Chemoselective labeling and immobilization of phosphopeptides with phosphorimidazolide reagents	ORAL & Monday	I-02
Madsen, Andreas S.	<i>Denmark</i>	HDAC inhibitors with picomolar affinities based on macrocyclic natural products	ORAL & Monday	I-03
Mortensen, Michael Rosholm	<i>Denmark</i>	Controlling the Site-Selectivity of Metal-Mediated Antibody Labeling	Monday	I-04
Bartling, Christian	<i>Denmark</i>	Probing the protein-protein Interaction between Mint-2 and amyloid precursor protein as putative treatment for Alzheimer's disease	Monday	I-05
Munch, Henrik K.	<i>Denmark</i>	Construction of insulin 18-mer nano-assemblies driven by coordination to Fe ²⁺ and Zn ²⁺ at distinct sites	Monday	I-06
Østergaard, Mads <i>Presenting author</i>	<i>Denmark</i>	Construction of insulin 18-mer nano-assemblies driven by coordination to Fe ²⁺ and Zn ²⁺ at distinct sites	Monday	I-06
Stein, Amelie	<i>Denmark</i>	Methods for predicting and rescuing protein stability as tools in disease diagnostics and treatment	Monday	I-07
Studer, Sabine	<i>Switzerland</i>	Directed evolution of a designer metalloprotein to an efficient intermolecular Diels-Alderase	Monday	I-08
Giehm, Lise	<i>Denmark</i>	Improved Chemical and Physical Stability of Peptides in Liquid Formulations – How to design stable peptide analogues	Monday	I-09
Diness, Frederik	<i>Denmark</i>	Chemoselective arylation of amino acids, peptides and proteins	Monday	I-10
Bunzel, Adrian	<i>Switzerland</i>	Engineering novel enzymes by directed evolution of computational designs and promiscuous activities	Monday	I-11
Høeg-Jensen, Thomas	<i>Denmark</i>	Semi-recombinant synthesis of mouse/rat insulin 1 and insulin 2	Monday	I-12

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NAME	AFFILIATION	TITLE	Session	No.
Schulenburg, Cindy	<i>Germany</i>	Extensive protein engineering of a bacterial 4-Hydroxyphenylpyruvate dioxygenase boosts soy tolerance to advanced herbicide chemistries	Monday	I-13
Thorslund, Tina	<i>Denmark</i>	The Novo Nordisk Foundation - Funding opportunities for excellent research within health sciences and biotechnology	Monday	I-14
Westberg, Michael	<i>Denmark</i>	Rational Design of a Selective Singlet Oxygen Photosensitizing Protein	Monday	I-15
Qvortrup, Katrine	<i>Denmark</i>	Advanced linker technologies for antibody-drug conjugates	Monday	I-16
Hedegaard, Sofie <i>Presenting author</i>	<i>Denmark</i>	Membrane interactions and delivery efficiency of lipidated cell-penetrating peptides depend on lipidation site and degree	Monday	I-17
Nielsen, Hanne Mørck	<i>Denmark</i>	Membrane interactions and delivery efficiency of lipidated cell-penetrating peptides depend on lipidation site and degree	Monday	I-17
Albertsen, Louise	<i>Denmark</i>	Suppression of melanoma and glioblastoma by targeting syntenin with a high affinity peptide inhibitor	Monday	I-18
Jensen, Thomas	<i>Denmark</i>	Probing the interaction between MINT2 and APP using expressed protein ligation	Monday	I-19
Rannes, Julie Bille	<i>Denmark</i>	Engineering of diisopropyl fluorophosphatases towards an improved decontamination systems for organophosphorus nerve agents	Monday	I-20
Braun, Nina	<i>Denmark</i>	Using high-throughput patch-clamp to assess incorporation of unnatural amino acids into ASIC1a	Monday	I-21
Moreno Yruela, Carlos	<i>Denmark</i>	Peptide arrays bearing zinc-binding groups for the investigation of human histone deacetylases	Monday	I-22
Poulsen, Mette Homann	<i>Denmark</i>	Probing the channel gating of glutamate receptor with photoactive unnatural amino acids	Monday	I-23
Rajabi, Nima	<i>Denmark</i>	Structure-activity relationship (SAR) of acyl-lysine mimicking sirtuin inhibitors	Monday	I-24

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Rosen, Christian	<i>Denmark</i>	Synthetic and Semisynthetic Substrates for Enzyme Assessment	Monday	I-25
Gautier, Arnaud	<i>France</i>	Hybrid fluorescent reporters for imaging cellular proteins on demand	ORAL & Tuesday	II-01
Gothelf, Kurt Vesterager	<i>Denmark</i>	DNA-Templated Conjugation of DNA to Proteins	ORAL & Tuesday	II-02
Niquille, David	<i>Switzerland</i>	Engineering nonribosomal peptide synthetases for β -amino acids	ORAL & Tuesday	II-03
Jensen, Knud J.	<i>Denmark</i>	Peptide-oligonucleotide conjugates as nanoscale building blocks for assembly of an artificial three-helix protein mimic	ORAL & Tuesday	II-04
Rogers, Joseph	<i>Japan</i>	The contribution of unnatural amino acids to the binding of cyclic and linear peptides	ORAL & Tuesday	II-05
Borg, Christian Bernsen	<i>Denmark</i>	Stoichiometry of toxin binding to acid-sensing ion channels	Tuesday	II-06
Sereikaite, Vita	<i>Denmark</i>	Modulating the protein-protein interactions between the GABAB receptor and the KCTD proteins by peptide inhibitors	Tuesday	II-07
Fernandes, Eduardo	<i>Denmark</i>	A novel peptide radioligand targeting the MAGUK family of proteins	Tuesday	II-08
Skovsgaard, Mikkel Bach	<i>Denmark</i>	Improving the efficiency of antibody conjugates by a small-molecule labeling approach	Tuesday	II-09
Serfling, Robert	<i>Germany</i>	Engineered tRNA variants for enhanced incorporation of pyrrolysine derivatives into proteins in mammalian cells	Tuesday	II-10
Madsen, Maria Vistrup	<i>Denmark</i>	Exploring the effect of phosphorylations on protein-protein interactions of PSD-95 using genetically encoded unnatural amino acids	Tuesday	II-11
Kodra, Janos	<i>Denmark</i>	Design and biological activity of a lipidated analogue of the calcitonin gene-related peptide	Tuesday	II-12
Johansson, Kristoffer E.	<i>Denmark</i>	Computational Protein Design of Flexible Proteins	Tuesday	II-13

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Gless, Bengt	<i>Denmark</i>	Design and Synthesis of Peptides for the Generation of Antibodies against Severe Malaria	Tuesday	II-14
Willemoës, Martin	<i>Denmark</i>	An Escherichia coli based selection system for studying substrate specificity and drug resistance of HIV protease	Tuesday	II-15
Clausen, Mads Hartvig	<i>Denmark</i>	Development of Anthelmintic Plant Proteins for Application in Veterinary Medicine	Tuesday	II-16
Troelsen, Kathrin Rentzius	<i>Denmark</i>	Synthesis of new reagents for modification of lysine residues in proteins	Tuesday	II-17
Huang, Yichao	<i>Japan</i>	Precise control of the topology of thioether/disulfide pairs through use of cysteine protecting groups in cell-free translated peptides	Tuesday	II-18
Bæk, Michael	<i>Denmark</i>	Affinity-Based Probes to Investigate Post-Translational Modifications	Tuesday	II-19
Teilum, Kaare	<i>Denmark</i>	High-throughput generation of stabilized protein variants	ORAL & Wednesday	III-01
Butterfield, Gabe	<i>USA</i>	Evolution of a Designed Protein Assembly Encapsulating its Own RNA genome	ORAL & Wednesday	III-02
Giese, Christoph	<i>Switzerland</i>	Accelerating the association of the most stable protein-ligand complex by two orders of magnitude	ORAL & Wednesday	III-03
Tornøe, Christian	<i>Denmark</i>	Divergent Protein Synthesis of Bowman-Birk Protease Inhibitors, their hydrodynamic behaviour and co-crystallization with α -Chymotrypsin	ORAL & Wednesday	III-04
Winther, Jakob	<i>Denmark</i>	Improving the stability of computationally designed proteins using a new in cell folding selection	ORAL & Wednesday	III-05
Hatzakis, Nikos	<i>Denmark</i>	Form Conformational sampling to biomolecular recognition and diseased phenotypes: a single molecule perspective	ORAL & Wednesday	III-06
Lindorff-Larsen, Kresten	<i>Denmark</i>	Speeding up slow motions to see them in the computer	ORAL & Wednesday	III-07

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Ishøy, Mette	<i>USA</i>	Peptide-based PROTACs revisited: Towards Optimal Linker Design	ORAL & Wednesday	III-08
Zorzi, Alessandro	<i>Switzerland</i>	Development of an albumin-binding ligand for prolonging the plasma half-life of peptide therapeutics	ORAL & Wednesday	III-09
Colaco, Ana	<i>Denmark</i>	Insights into the structure of sirtuin 7: A Comparative Modeling Approach	Wednesday	III-10
Nguyen, Huy	<i>Denmark</i>	Development of dual-binding subclass-selective histone deacetylase (HDAC) for disruption of protein-protein interactions	Wednesday	III-11
Kristensen, Mie	<i>Denmark</i>	The cell-penetrating peptide Tat facilitates delivery of a conjugated peptide drug across the blood-brain barrier	Wednesday	III-12
Galleano, Iacopo	<i>Denmark</i>	Scalable and Purification-free Synthesis of a Myristoylated Fluorogenic Sirtuin Substrate	Wednesday	III-13
Kandemir, Jiyan Mandrup	<i>Denmark</i>	Development of dual-binding subclass-selective histone deacetylase (HDAC) inhibitors for disruption of protein-protein interactions	Wednesday	III-14
Pott, Moritz	<i>Switzerland</i>	Evolution of Myoglobin with a Non-canonical Heme Ligand Leads to the Creation of Efficient Peroxidases in a Globin Fold	Wednesday	III-15
Rasmussen, Jakob Ewald	<i>Denmark</i>	Synthesis of the acidic $\alpha 3$ region of coagulation Factor VIII	Wednesday	III-16
Schoffelen, Sanne	<i>Denmark</i>	Selective N-terminal acylation of peptides and proteins with an optimized His-sequence	Wednesday	III-17
Wellhöfer, Isabelle	<i>Denmark</i>	Biomimetic Foldamers with Novel Three-Dimensional Structures	Wednesday	III-18
Wilbs, Jonas	<i>Switzerland</i>	A peptide macrocycle FXII inhibitor for safe anticoagulation therapy	Wednesday	III-19