

# New Horizons in Protein Dynamics

SATURDAY 23<sup>RD</sup> AUGUST 2025

COPENHAGEN BIOCENTER, LUNDBECK AUDITORIUM, OLE MAALØES VEJ 5

8:30 – 9:00 Arrival and coffee

## SESSION 1 Chair: Emil Thomasen

9:00 – 9:10 Welcome w. **Birthe Kragelund** and historical intro **Jeff Hoch, UCON, US**

9:10 – 9:40 **Ad Bax, NIDDK, NIH, USA**

**Insights into the structures of metastable protein folding intermediates and A $\beta$  oligomers from pressure-jump NMR**

9:40 – 9:55 **Wouter Boomsma, Department of Computer Science, UCPH, DK**

**Protein variant effect prediction with uncertainties**

9:55 – 10:25 **Frauke Gräter- HITS/Max Planck Institute for Polymer Res, Germany**

**Learning how proteins move and act**

10:25 – 11:00 Coffee break

## SESSION 2 Chair: Andreas Prestel

11:00 – 11:30 **Sarah Shammass, Oxford University, UK**

**Roles for intrinsically disordered regions in target search**

11:30 – 11:45 **Elena Papaleo, Danish Cancer Institute/ DTU, Copenhagen, Denmark**

**A structure-based framework to investigate variant effects in cancer and other diseases**

11:45 – 12:00 **Magnus Kjaergaard, Aarhus University, Denmark**

**Intrinsic disorder in the age of protein design**

12:00 – 13:00 Lunch and networking

## SESSION 3 Chair: Ketty Tamburrini

13:00 – 13:30 **Mikael Akke, Lund University, Sweden**

**Resolving Protein–Ligand Binding Pathways by NMR relaxation: Conformational Selection vs Induced Fit**

13:30 – 13:45 **Mathilde H. Lerche, DTU, Denmark**

**Assessing Enzymatic Activity in Brain Metabolism Using Hyperpolarized <sup>13</sup>C MRI**

13:45 – 14:00 **Petur O. Heidarsson, Department of Biology, UCPH, Denmark**

**Integrating Single-Molecule FRET and NMR to study protein conformational dynamics**

14:00 – 14:15 **Kasper D. Rand, Department of Pharmacy, UCPH, Denmark**

**Studying the conformation and dynamics of proteins in solution – by mass spectrometry!**

14:15 – 14:45 Coffee break

## SESSION 4 Chair: Upasana Mallimadugula

14:45 – 15:00 **Yong Wang, Zhejiang University, China**

**Enhance Explorations of Protein Dynamics with Machine Learning**

15:00 – 15:15 **Kristine S. Jensen, Lund University, Sweden**

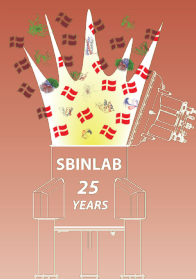
**Posttranslational modifications as trigger for conformational switching in amyloid formation**

15:15 – 15:45 **Harald Schwalbe, Goethe-University Frankfurt, Germany**

**Time-resolved NMR to study biomolecular folding**

15:45 – 16:00 Outro and the future

16:00 – 17:30 Drinks and networking



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