

## Linderstrøm-Lang Symposium 2023 Frontiers in Protein Science

Friday November 17, 2023

## Linderstrøm-Lang Centre for Protein Science

Department of Biology, University of Copenhagen Lundbeck Foundation Auditorium, Copenhagen Biocenter, Ole Maaløes Vej 5, 2200 Copenhagen N

## PROGRAM

- 08:30 09:00 Breakfast snack and poster set-up
- 09:00 09:05 Jakob Winther (Linderstrøm-Lang Centre) Welcome
- 09:05 09:10 Kaare Teilum (Linderstrøm-Lang Centre, DANEMO) Opportunities at EMBL and EMBO
- SESSION 1 Chair: Kresten Lindorff-Larsen (Linderstrøm-Lang Centre)
- 09:10 09:50 Gabriel Rocklin (Northwestern University, Chicago) High-throughput approaches to protein stability and dynamics
- 09:50 10:15 Poster presentation: Jacob Aunstrup Larsen (Technical University of Denmark)

Amyloid  $\Phi$ -value analysis, illuminating the transition state

- 10:15 10:20 Poster presentation: **Maciej Gielnik** (Aarhus University) De novo design of intrinsically disordered desiccation chaperones
- 10:20 10:40 COFFEE BREAK + POSTER SET-UP
- **SESSION 2** Chair: Martin Willemoës (Linderstrøm-Lang Centre)
- 10:40 11:20 Marie Sofie Møller (Technical University of Denmark) Exploring protein-surface interactions: Tuning affinity as a handle in enzyme engineering



- 11:20 11:35 Poster presentation: **Francesco Pesce** (Linderstrøm-Lang Centre) Design of intrinsically disordered protein variants with diverse structural properties
- 11:35 11:50 Poster presentation: **Zongxin Guo** (University of Copenhagen) Diverse roles of the metal binding domains and transport mechanism of copper transporting P-type ATPases

## 11:50 - 13:00 LUNCH AND POSTER SESSION

- **SESSION 3** Chair: Birthe B. Kragelund (Linderstrøm-Lang Centre)
- 13:00 13:40 Bruno Correia (EPFL, Lausanne)

*Computational design of protein structure and function using deep learning* 

- 13:40 15:00 POSTER VIEWING AND COFFEE
- SESSION 4 Chair: Kaare Teilum (Linderstrøm-Lang Centre)
- 15:00 15:40 **Simon Olsson** (Chalmers University of Technology, Gothenburg) Machine learning for molecular dynamics
- 15:40 16:20 **Birthe B. Kragelund** (Linderstrøm-Lang Centre) Disordered Protein Complexes – what's the purpose?
- 16:20 16:25 Jakob Winther (Linderstrøm-Lang Centre)

Closing remarks

16:30 – 18:00 End of day - Beer, Snacks & Posters

The Danish scientist Kaj Ulrik Linderstrøm-Lang (1896-1959) was one of the most influential pioneers in the area of protein structure and function from the 1940's until his death in 1959. Among his lasting contributions to protein chemistry are the terms primary, secondary and tertiary structure. The Linderstrøm-Lang Centre for Protein Science at the University of Copenhagen seeks follow in the footsteps of the research pioneered by Linderstrøm-Lang investigating protein structure, function and dynamics on a number of levels.