

TWIN2PIPSA & Twin4Promis Twinned Training Schools

University of Cambridge, Cambridge, UK

15-18 January 2024

TWIN2PIPSA Training School



15 January 2024

14:00 – 14:15: Welcome and opening remarks (Michele Vendruscolo and Cláudio Gomes)

14:15 – 15:00: Pietro Sormanni (Antibody discovery using machine learning)

15:00 – 15:45: Faidon Brotzakis (AlphaFold prediction of structural ensembles of disordered proteins)

15:45 – 16:30: Zenon Toprakcioglu (Droplet microfluidics for the study of protein self-assembly)

16:30 – 17:30: Discussion

19:00: Dinner

16 January 2024

9:00 – 9:45: Rosana Collepardo Guevara (Computational studies of liquid-liquid phase separation of proteins)

9:45 – 10:30: Gonçalo Bernardes (Translational chemical biology)

10:30 – 11:00: Coffee break

11:00 – 11:45: Shengyu Zhang (Sequence-based drug design using transformers)

11:45 – 12:30: James Tomkins (Molecular basis of ageing using transcriptomics)

12:30 – 13:30: Lunch

13:30 – 14:15: Alexander Röntgen (Aggregation of alpha-synuclein isoforms)

14:15 – 15:00: Vaidehi Roy Chowdhury (Aggregation mechanism of melin)

15:00 – 15:30: Coffee break

15:30 – 16:15: Alessia Santambrogio (A brain-derived tau aggregation assay)

16:15 – 17:00: Jonathan Breiter (Imaging alpha-synuclein aggregates in the Parkinson's brain)

17 January 2024

9:00 – 9:45: Sophie Jackson (Design of knotted proteins)

9:45 – 10:30: Owen Morris (Phase separation of the A β peptide)

10:30 – 11:00: Coffee break

11:00 – 12:00: Round table: Opportunities offered by twinning of twinnings

12:00 – 12:30: Closing remarks (Michele Vendruscolo and Cláudio Gomes)

12:30 – 13:30: Lunch



Twin4Promis Training School



17 January 2024

14:00 – 14:15: Welcome and opening remarks (Michele Vendruscolo and Georgios Skretas)

14:15 – 15:00: Michele Vendruscolo (Targeting protein aggregation in neurodegenerative diseases)

15:00 – 15:30: Coffee break

15:30 – 16:15: Visit to the Centre of Misfolding Diseases

16:15 – 17:00: Visit to the Molecular Production and Characterization Centre

18 January 2024

9:00 – 9:45: Mateo Sanchez Lopez (Molecular tools for the mapping and manipulation of neuronal circuits)

9:45 – 10:30: Alicia Gonzalez-Diaz (iPSC-derived cell models of Alzheimer's disease)

10:30 – 11:00: Coffee break

11:00 – 11:45: Rahul Arora (Classification of brain diseases based on transcriptomics)

11:45 – 12:30: Samuel Dada (Phase separation of alpha-synuclein)

12:30 – 13:30: Lunch

13:30 – 14:15: Matthew Greenig (Protein design using diffusion models)

14:15 – 15:00: Oded Rimon (Targeted protein editing with an antibody-based system)

15:00 – 15:30: Coffee break

15:30 – 16:15: Aubin Ramon (Deep learning assessment of antibody nativeness)

16:15 – 17:00: Round table: Opportunities for collaborations

17:00 – 17:15: Closing remarks (Michele Vendruscolo)