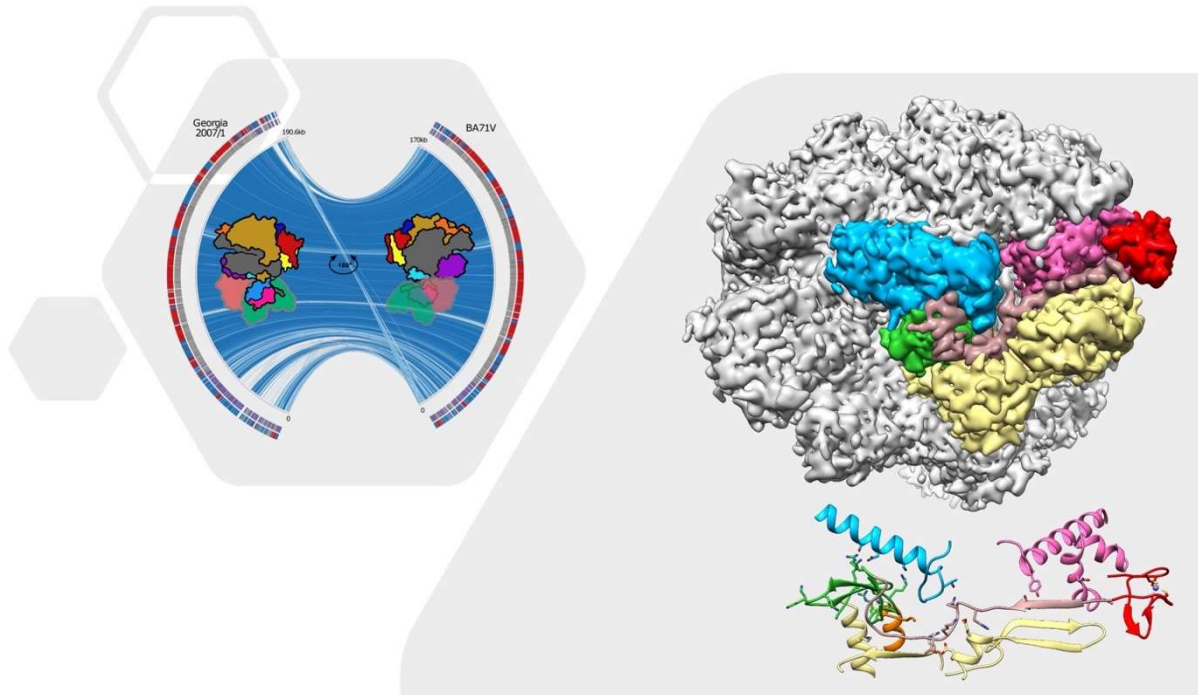


The ISMB Retreat on 22nd and 23rd of July, 2021



Day 1, Thursday, 22nd of July 2021, 0930-1830 hrs

Session-1 0930-1200 hrs (150 minutes)
chairs John Christodoulou and Finn Werner

0930 hrs Welcome by Finn Werner

- 0930 hrs **Keynote lecture Buzz Baum**, LMB, Cambridge: 'Cell division: from archaea to eukaryotes'
- 1000 hrs **Tom Foran** 'The investigation of the microtubule binding mechanism of doublecortin-like kinase by cryo-EM'
- 1015 hrs **Gorjan Stojanovski** 'Chemoenzymatic cascades towards unnatural aminoglycoside derivatives'
- 1030 hrs **Shyam Mousumi** 'Can be Mycobactin Biosynthesis Inhibitors a New Hope in Efflux Pump Inhibition?'

Coffee break 1045-1100 hrs

- 1100 hrs **Gwenny Cackett** 'African Swine Fever Virus Transcription - from functional genomics to molecular function'

- 1115 hrs **Gabi Heller** *'Probing the pathogenicity and drugability of intrinsically disordered proteins using integrative methods'*
- 1130 hrs **Maria Bawn** *'Engineering enzymes to degrade plastic'*
- 1145 hrs **Jim Monistrol** *'Disaggregation of alpha-synuclein amyloid fibres by the Hsc70 system'*

Lunch break 1200-1250 hrs

Session-2 1300-1415 hrs (75 minutes)

chair Lisa Cabrita

- 1300-1330 hrs **Keynote lecture Michael Jewett**, NorthWestern University, US, *'Reconceptualizing the way complex biological systems are engineered for compelling applications in medicine, materials, and energy'*
- 1330 hrs **Kamila Kamuda** *'Molecular basis for alpha-1-antitrypsin aggregation studied by in situ structural biology methods'*
- 1345 hrs **Ivana Bukvin** *'How do ribosomes orient the nascent polypeptide during biosynthesis?'*
- 1400 hrs **Peter Szijj** *'Investigation of Chemically Constructed Bispecific Antibodies and their Conjugates for the Treatment of Type 1 Diabetes and Cancer'*

Coffee break 1415-1430 hrs

Session-3 1430-1530 hrs (85 minutes)

chair Adrian Shepherd

- 1430 hrs **Keynote lecture Debora Marks**, Harvard Medical School, US *'Machine learning to accelerate biology'*
- 1500 hrs **Sammy Chan** *'The ribosome regulates nascent protein folding by promoting structured intermediates outside the exit tunnel'*
- 1515 hrs **James Irving** *'Development of, and mechanistic insights from, a small molecule corrector of alpha-1-antitrypsin aggregation with in vivo efficacy'*
- 1530 hrs **Valentina Spiteri** *'Two human IgG antibodies with very different hinges – how do they compare?'*

Social Session, 1545-1715 hrs (90 minutes)

Chair: Outback Team Building

'Virtual Escape Room Jewel Heist' (see separate MS Teams link)

Closure 1715 hrs

Day 2, Friday, 23rd of July 2021, 1000-1530 hrs

Session-5 1000-1145 hrs (105 minutes)

chairs Stefan Howorka and Rachael Dickman

- 1000 hrs **Keynote lecture Adam Nelson**, University of Leeds, UK
'How Best to Explore Chemical Space for Bioactive Molecular Discovery'
- 1030 hrs **Luyao Yang** *'Development of Recombinant Oral dsRNA Vaccines and Fish Growth Hormones Using Transgenic Microalgae'*
- 1045 hrs **Sioned Jones** *'Hydrophobic Interactions between DNA Duplexes and Synthetic and Biological Membranes'*

Coffee break 1100-1145 hrs

- 1115 hrs **Giancarlo Abis** *'Characterisation of a new small molecule to target the RNA binding protein IMP1'*
- 1130 hrs **Hannah Britt** *'Structural mass spectrometry insights into dynamic glycoprotein complexes and conformations'*

Lunch break 1145-1230 hrs

Session-6 Training session

Chair Phil Robinson

- 1230-1400 hrs **Simon Cain** from Westbourne Training and Consulting, UK,
'Pitching & presenting: how to present more effectively in front of funding panels and wider audiences'

Coffee break 1400-1415 hrs

Session-7 1415-1530 hrs (75 minutes)

chair Jerome Gouge

- 1415-1445 hrs **Keynote lecture Richard H Ebright**, Rutgers University, USA
'Structural basis of transcription-translation coupling'
- 1445 hrs **Simona Pilotto** *'Structural basis of RNA polymerase inhibition in the virus-host arms race'*
- 1500 hrs **Stephanie Webb** *'Dissecting the molecular mechanism of kinesin-2 regulation'*

Closing remarks 1520 hrs Finn Werner