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