

60th Anniversary Meeting of the British Biophysical Society

Monday 14 Sep

Chair: Claire Friel (U. Nottingham)

- 2:00 pm Olwyn Byron (U. Glasgow)
Welcome and introduction
- 2:05 pm KEYNOTE: David Brockwell (U. Leeds)
Structure in unstructured proteins – the role of flanking regions in alpha-synuclein aggregation
- 2:50 pm Tony Watts (U. Oxford)
Linking dynamics to function in membrane proteins - high resolution crystallography, AFM, NMR
- 3:20 pm Break
- 3:30 pm The BBS Kendrew Doctoral Thesis Prize Lecture
Daniel Hurdiss (Utrecht University)
A belt and braces: different strategies to inhibit a haemorrhagic conjunctivitis virus
- 4:00 pm Ben Luisi (U. Cambridge)
The dynamic machinery of bacterial riboregulation
- 4:30 pm Elevated Poster Talk: Conrado Pedebos (U. Southampton)
The hitchhiker's guide to the periplasm: unexpected molecular interactions of antibiotics in *E. coli*
- 4:45 pm Elevated Poster Talk: Giulia Paci (UCL)
Deciphering large cargo transport through the nuclear pore complex

Chair: Ann Dixon (U. Warwick)

- 5:00 pm Virtual Poster Session and Flash Talks
- 6:00 pm Finish

Tuesday 15 Sep

Chair: Tharin Blumenschein (UEA)

- 2:00 pm KEYNOTE: Mike Fried (U. Kentucky)
Quaternary interactions and DNA twist modulate the cooperative binding of AGT
- 2:45 pm Corinne Smith (U. Warwick)
Clathrin - the molecular shape shifter - explored using high resolution cryo-EM
- 3:15 pm Break
- 3:30 pm Venki Ramakrishnan (LMB, Cambridge)
Using cryo-EM to understand how eukaryotic ribosomes initiate translation
- 4:15 pm Marcello Nollmann (CNRS, Montpellier)
Through the looking-glass: does DNA structure determine transcriptional activity?

- 4:45 pm Tom Clarke (UEA)
Structural modelling of biological nanowires: from low to high resolution
- 5:15 pm Break
- Chair: Ann Dixon (U. Warwick)
- 5:30 pm Virtual Poster Session and Flash Talks
- 6:30 pm Finish

Wednesday 16 Sep

Chair: Olwyn Byron (U. Glasgow)

- 2:00 pm KEYNOTE: Richard Henderson (LMB, Cambridge)
Electron microscopy and cryomicroscopy: BBS@60
- 2:45 pm Bert de Groot (Max Planck Institute for Biophysical Chemistry, Göttingen)
The molecular dynamics of potassium channel permeation, selectivity and gating
- 3:15 pm Break
- 3:30 pm Peter Crowley (NUI, Galway)
Macrocyclic-mediated protein frameworks
- 4:00 pm Perdita Barran (U. Manchester)
Measuring conformational distributions of disordered proteins and the influence of charge on form and function
- 4:30 pm The BBS Louise Johnson Early Career Award Lecture
Séamus Holden (U. Newcastle)
How do you build a wall? Using advanced optical microscopy to understand how protein bionanomachines remodel the bacterial cell envelope
- 5:00 pm Banafshe Larijani (U. Bath)
Oncoprotein activation and dynamics in cancer- A quantitative imaging approach
- 5:30 pm Finish

Thursday 17 Sep

Chair: John Sanderson (U. Durham)

- 2:00 pm KEYNOTE: Alison Rodger (U. Macquarie)
Attenuated total reflectance infra-red spectroscopy for proteins: innovation @60
- 2:45 pm Allen Orville (Diamond Light Source)
Time-resolved serial femtosecond crystallography of O₂ dependent reactions by metalloenzymes
- 3:15 pm The Sosei Heptares Prize for Biophysics Lecture
John Christodoulou (University College London (UCL), Birkbeck College, London and The Francis Crick Institute)
Protein folding on the ribosome

3:45 pm Amanda Wright (U. Nottingham)
Imaging and sensing the micro-environment of cells in 4D

4:15 pm Break

Covid-19 Session

Chair: Rob Gilbert (U. Oxford)

4:30 pm Dave Stuart (U. Oxford/Diamond Light Source)
Title tbc

5:00 pm John Briggs (LMB, Cambridge)
Structures of the SARS-CoV-2 spike protein on intact virions

5:30 pm Peijun Zhang (eBIC/Diamond Light Source)
Multi-scale imaging of SARS-CoV-2 with electrons

6:00 pm Olwyn Byron (U. Glasgow)
Closing remarks

6:20 pm End of meeting