The 14th Nucleic Acids Forum

Royal Society of Chemistry, Burlington House, London, Friday 6th July 2018

Morning

9:20 – 10:20 am Registration (Coffee Available)

10:20 – 11:30 Session 1 – Chair: James Tucker

Welcome message from the Nucleic Acids Group – Mark Dillingham

Tabitha Jenkins – DNA translocation by human DNA repair helicase HelQ: a model for RPA-stimulated displacement of nucleoprotein complexes

Daniel R Burnham – The mechanism of DNA unwinding by the eukaryotic replicative helicase

Rebecca Andrews – Short-read single-molecule DNA sequencing for highly parallel analysis of protein-DNA interactions

11:30 – 12:00 Coffee Break

12:00 – 13:00 Session 2 – Chair: David Williams

Philip Gillespie – Molecular Dynamics Simulations of PNA:miRNA templated Reactions

Januka S. Athukoralage – Breaking the ring: identification of nucleases degrading cyclic oligoadenylates generated by type III CRISPR systems

Ian Bennet – Regional Conformational Flexibility Couples Substrate Specificity and Scissile Phosphate Diester Selectivity in Human Flap Endonuclease 1

Afternoon

13:00-14:45 Lunch and Posters

14:45 – 15:45 Session 3 – Chair: Christine Cardin

Lin Huang – The crystal structure of a new SAM-binding riboswitch

Max Wilkinson – The structural basis of splicing catalysis

Andrea Taladriz-Sender – Nucleic acid assembly mediated by the fluorous effect

15:45-16:15 Coffee Break

16:15 – 17:15 Session 4 – Chair: Glenn Burley

Alex Borodavka – Illuminating the molecular choreography of multi-segmented viral RNA genomes

Mahmoud Abdelhamid – Redox Dependent Control of i-Motif DNA Structure Using Copper Cations

Philipp Holliger – Replicating RNA with RNA

17:15 – 17:20 Prizes

17:30-18:30 Wine Reception