

Dynamic Structural Biology Workshop: Examining the life sciences case for a UK XFEL

Tuesday 5th November 2019 - The Francis Crick Institute, London

Time	Talk/topic	Speaker/moderator
09:00-10:00	Registration, tea & coffee	
10:00-10:20	Welcome - <i>The UK XFEL project</i>	Jon Marangos (Imperial College London)
10:20-10:45	<i>XFELs & life science: where we are now, "to boldly go where..."</i>	Allen Orville (XFEL Hub at Diamond Light Source)
Session 1 -	Challenges in structural biology	Moderated by Emma Raven (University of Bristol)
10:45-11:15	<i>The place of XFEL in the landscape of structural biology</i>	Dave Stuart (University of Oxford/Diamond Light Source)
11:15-11:30	<i>Community based projects for the XFEL</i>	Jim Naismith (Rosalind Franklin Institute/ University of Oxford)
Session 2a -	X-ray applications in dynamic structural biology	Moderated by Mike Hough (University of Essex)
11:30-11:55	<i>Watching an Enzyme at Work: Time-Resolved Serial Synchrotron Crystallography from milliseconds to seconds</i>	Henrike Müller-Werkmeister (University of Potsdam)
11:55-12:25	<i>Catalysis in two of the denitrifying enzymes by SR, XFEL and cryoEM</i>	Samar Hasnain (University of Liverpool)
12:30-13:30	Lunch and networking	
Session 2b -	X-ray applications in dynamic structural biology	Moderated by Robin Owen (Diamond Light Source)
13:30-13:55	<i>Synchrotron time-resolved crystallography</i>	Briony Yorke (University of Leeds)
13:55-14:20	<i>New Opportunities at SLAC for Structural Molecular Biology</i>	Aina Cohen (SLAC / LCLS)
Session 3 -	Emerging methods in studying protein dynamics	Moderated by Isabel Moraes (National Physical Laboratory)
14:20-14:45	<i>Order within disorder: complementary NMR insight</i>	Steve Matthews (Imperial College London)
14:45-15:10	<i>New technology and future prospects for cryoEM</i>	Chris Russo (MRC-LMB, University of Cambridge)
15:10-15:35	<i>Exploiting the megahertz repetition rate of European XFEL for structural biology: present capabilities and future aspirations</i>	Adrian Mancuso (SPB/SFX Instrument, European XFEL)
15:40-16:40	Breakout sessions (with tea & coffee)	
	Small group discussions led by:	Edward Snell (SUNY Buffalo, H-WMRI & BioXFEL); Mark Hunter (LCLS); Jan Kern (LBNL); Xiaodong Zhang (ICL); Anton Barty (CFEL); Ian Taylor (Crick); Radoslav Enchev (Crick); & John Helliwell (University of Manchester)
16:40-17:00	Discussions moderated by Xiaodong Zhang and Allen Orville	
Session 4 -	Outlook and Horizon View	Moderated by Xiaodong Zhang (ICL)
17:00-17:35	<i>XFEL studies on metallo-enzymes of antibiotic biosynthesis and resistance</i>	Christopher J Schofield (University of Oxford)
17:35-17:45	Closing remarks	Allen Orville (XFEL Hub at Diamond Light Source)
17:45-19:00	Networking drinks reception	

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