

**BCA/CCP4 Protein Crystallography Summer School 2014
Programme**

Tuesday 26th August 2014

15:00		<i>Arrival and registration</i>
16:00		<i>Welcome</i>
16:00	#1	Lecture: Protein Expression and Purification Jane Endicott
16:30		Student Stories I
18:30		<i>Dinner - Buffet</i>
19:00		Student Stories II
21:00	#2	Lecture: Diffraction Airlie McCoy
21:30		<i>Drinks</i> — sponsored by Bruker

Wednesday 27th August 2014

7:30		<i>Breakfast</i>
9:00	#3	Lecture: Crystallization Jane Endicott
9:45	#4	Lecture: Symmetry Martin Noble
10:30		<i>Coffee</i>
11:00	#5	Lecture: Crystal Preparation for Cryocrystallography Elspeth Garman
12:30		<i>Lunch</i> Practical: Crystal Manipulation for Cryocrystallography <i>Group 1</i> Elspeth Garman
13:30	#6	Lecture: Data Collection Katherine McAuley
14:30	#7	Lecture: Data Scaling and Merging Frank von Delft
15:30		<i>Tea</i>
16:00		Bus to Oxford
17:00 - 21:30		Cruise on the River Thames in a Salter's steamer

Thursday 28th August 2014

7:30		<i>Breakfast</i>
9:00	#8	Practical: Data Processing Leader: Ed Lowe
10:30		<i>Coffee</i>
11:00	#9	Lecture: Models for Molecular Replacement Nick Keep
11:30	#10	Lecture: Molecular Replacement Martin Noble/Airlie McCoy
12:30		<i>Lunch</i> Practical: Crystal Manipulation for Cryocrystallography <i>Group 2</i> Ed Lowe
13:30	#11	Practical: Molecular Replacement Leaders: Nick Keep/Airlie McCoy
15:30		<i>Tea</i>
16:00		Tour of Ring
17:30	#12	Demonstration: ccp4i2 Martin Noble
18:30	#13	Lecture: Data Management Alun Ashton
19:00		<i>Dinner</i>
20:00		<i>Guest Lecture</i> <i>Liz Carpenter "Crystallography of Membrane Proteins"</i>

Friday 29st August 2014

7:45-8:30		<i>Breakfast</i>
9:00	#14	Lecture: Maximum likelihood with Dice Airlie McCoy
9:45	#15	Lecture: Radiation Damage Elspeth Garman
10:30		<i>Coffee</i>
11:00	#16	Lecture: Preparation of Derivatives Elspeth Garman
11:30	#17	Lecture: Finding Heavy Atom Sites/Pattersons Martin Noble
12:00	#18	Lecture: Experimental Phasing MAD/SAD Airlie McCoy
12.30		<i>Lunch</i> Practical: Crystal Manipulation for Cryocrystallography <i>Group 3</i> Elspeth Garman

13:30	#19	Lecture: Phase Improvement and Model Building Kevin Cowtan
15:00		<i>Tea</i>
15:30	#20	Practical: MAD/SAD Phasing Leader: Martin Noble
17:30	#21	Quiz I
19:00		<i>Dinner</i>
20:00		<i>Guest Lecture</i> <i>Brian Sutton</i>

Saturday 30th August 2014

7:30		<i>Breakfast</i>
9:00	#22	Lecture: Refinement Nick Keep
10:30		<i>Coffee</i>
11:00	#23	Lecture: Validation Swanand Gore
12:30		<i>Lunch</i> Practical: Crystal Manipulation for Cryocrystallography <i>Group 4</i> Elspeth Garman
13:30	#24	Lecture: Graphics and Representations Martin Noble
14:15	#25	Lecture: Twinning Airlie McCoy
15:30		<i>Tea</i>
16:00	#26	Practical: Map Interpretation and MIR Phasing Leader: Paul Emsley
19:30		<i>Conference Dinner</i> <i>Guest Speaker: Stephen Curry</i>

Sunday 31st August 2014

7:30		<i>Breakfast</i>
9:30	#27	Lecture: Complementing crystallography with other structural techniques Nick Keep
11:00		<i>Strong Coffee</i>
11:30	#28	Quiz II
12:30		<i>Close</i> Practical: Crystal Manipulation for Cryocrystallography <i>Group 5</i> Elspeth Garman