

BIOPHYSICAL TECHNIQUES

LECTURE SERIES 2022

Introduction to Biophysical Techniques

Tuesday or Thursday 10–11 am Zoom Webinar

1	Tues 18 Jan	Introduction to light microscopy	Nick Barry
2	Thurs 20 Jan	Image Analysis Tools	Jérôme Boulanger
3	Thurs 27 Jan	Fluorescent Labelling and Light Sheet Microscopy	Ben Sutcliffe
4	Thurs 3 Feb	Super-resolution Microscopy	Jonathan Howe
5	Tues 8 Feb	Fluorescence spectroscopy and Microscale Thermophoresis (MST)	Stephen McLaughlin
6	Thurs 10 Feb	Single Molecule Spectroscopy	Chris Johnson
7	Tues 15 Feb	Biomolecular Thermodynamics and Calorimetry (ITC)	Chris Johnson
8	Thurs 17 Feb	Biosensor Technologies (Biacore SPR, Switchsense, Octet)	Stephen McLaughlin
9	Tues 22 Feb	Introduction to Biomolecular NMR	Trevor Rutherford
10	Thurs 24 Feb	Advanced NMR applications	Jane Wagstaff
11	Thurs 3 Mar	Protein Crystallization	Fabrice Gorrec
12	Tues 8 Mar	Structural biology 2.0: Crystallography at the LMB in the era of cryo-EM and AlphaFold	Dom Bellini
13	Thurs 10 Mar	Light Scattering techniques	Chris Johnson
14	Tues 15 Mar	Analytical Ultracentrifugation (AUC)	Stephen McLaughlin
15	Thurs 17 Mar	Curve fitting, errors and analysis of binding data	Chris Johnson and Stephen McLaughlin
16	Tues 22 Mar	Introduction to Flow Cytometry	Fan Zhang
17	Thurs 24 Mar	Instrument and Sample Optimisation for Fluorescence Activated Cell Sorting (FACS)	Pier Andrée Penttilä
18	Tues 29 Mar	Bioinformatics	Tim Stevens
19	Thurs 31 Mar	Biological Mass Spectrometry	Holger Kramer
20	Thurs 7 Apr	Quantitative Proteomics and Omics Data Analysis	Holger Kramer
21	Tues 12 Apr	Alphafold2 at the LMB – Use and Applications	Clinton Lau