**Ribo25: A celebration of 25 years of the ribosome at the LMB**

**Preliminary Programme**

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|  | **Thursday 18th September** |  | **Friday 19th September** |
| 9.30 | Coffee and pastries | 9.30 | Coffee and pastries |
|  | **Session 1** |  | **Session 5** |
| 10.00 | Brian Wimberly  Introduction to the 30S ribosome era | 10.00 | Martin Schmeing  Who needs RNA? Peptide synthesis by protein megaenzymes |
| 10.15 | Nenad Ban  Two Subunits, One Story: Ribosome Structure and Function over the Years | 10.20 | Rebecca Voorhees  Membrane protein biogenesis and quality control |
| 10.45 | John McCutcheon  Evolution of translation in endosymbiotic bacteria | 10.40 | Gao Yonggui  Molecular mechanism of protein quality control by AAA protease FtsH-type proteins |
| 11.05 | Bil Clemons  Mechanisms of virally encoded peptide and small molecule antibiotics. | 11.00 | Hong Jin  Paused but not Stalled: How Do Cells Distinguish a Physiological Pause from a Pathological Stall in Protein Synthesis? |
| 11.25 | Break | 11.20 | Break |
|  | **Session 2** |  | **Session 6** |
| 11.50 | Marina Rodnina  Translational Recoding by the Ribosome | 11.40 | Lori Passmore  Introduction to the Cryo-EM era |
| 12.20 | Ditlev Brodersen  From toxins to triggers: Redefining bacterial toxin-antitoxin systems | 11.50 | Christian Spahn  Cryo-electron microscopy of actively translating ribosomes |
| 12.40 | Reynald Gillet  Current and future prospects for developing trans-translation inhibitors in the cryo-EM era | 12.20 | Israel Fernandez  Where to start: the dynamic adventure of identifying start codons in mRNAs. |
|  |  | 12.40 | Alexy Amunts  Plasticity in Photosystem I: discovery of new antenna and photoprotection systems by cryo-EM |
| 13.00 | Lunch in the foyer | 13.00 | Lunch in foyer |
|  | **Session 3** |  | **Session 7** |
| 14.30 | Frank Murphy  Introduction to the 70S ribosome era | 14.30 | Alan Brown  Motility machine: structural studies of the axoneme |
| 14.40 | Malcolm Capel  TBC | 14.50 | Chris Fraser  Getting the message: the mechanism of mRNA recruitment to the human ribosome |
| 15.00 | Maria Selmer  Further adventures of EF-G: FusB-mediated rescue from fusidic acid inhibition of protein synthesis | 15.10 | Jay Brito Querido  Structural basis for repeat-associated non-AUG (RAN) translation initiation on C9orf72 mRNA in ALS/FTD |
| 15.20 | Albert Weixlbaumer  Cooperation between RNA polymerase and the ribosome in bacterial gene expression | 15.30 | Song Tan  When Venki dated both the ribosome and chromatin |
| 15.40 | Leong Ng  Exploring Hypothetical Proteins Reveals Potential New Enzyme Subclasses |  |  |
| 16.00 | Tea in the foyer | 15.50 | Tea in the foyer |
|  | **Session 4** |  | **Session 8** |
| 16.30 | Sabine Petry  How to make microtubules and build the cytoskeleton | 16.30 | Aswini Krishnan  Mechanisms of subcellular metabolic regulation |
| 16.50 | Raj Agrawal  The Mammalian Mitoribosome: From First Glimpse to Current Insights | 16.40 | Vish Chandrasekaran  Structures and mechanisms of the Integrated Stress Response during amino acid starvation |
| 17.10 | Joan Steitz  If you start with ribosomes, things just get better | 17.00 | Yifei Du  Efficient circular RNA synthesis for enhanced translation |
| 17.40 | Day Ends | 17.20 | Venki Ramakrishnan / Peter Moore (TBC)  Concluding Remarks |
|  |  | 17.40 | Day Ends |
| 18.45 | Drinks and Dinner in Emmanuel College  (Alumni and ribosome invitees) | 18.00 | Drinks and BBQ in the LMB garden / Dinner at the Rice Boat Indian restaurant (TBC)  (Alumni and ribosome invitees) |