Cancer Research UK Cambridge Institute
Applications of *In Situ* Hybridisation in Research and Disease

7 – 8 May 2015
Programme
Thursday 7 May

9.00–9.05 Welcome from Will Howat

Session 1 Chromogenic and Fluorescent In Situ Hybridisation
Chair: J Howard Pringle, University of Leicester

9.05–9.10 Introduction of the Chair by Will Howat

9.10–9.40 J Howard Pringle
University of Leicester
Probe technology for in situ hybridisation

9.40–10.10 Sheila O’Connor
St James’s Institute of Oncology, Leeds
Detection of BCL2 gene rearrangements in the Reed-Sternberg cells of composite lymphoma

10.10–10.40 Jane Starczynski
Heartlands Hospital, Birmingham
Tumours break rules: The importance of integrating pathology and genetics in identifying patients for targeted therapy.

10.40–11.10 Coffee/tea

11.10–11.40 Thomas Bjarnsholt
University of Copenhagen
The in vivo Biofilm

11.40–12.10 Aldo Ciau-Uitz
University of Oxford
Gene expression dynamics indicate the establishment of gene regulatory networks during haematopoietic stem cell programming

12.10–12.25 Selected talk from submitted abstracts: José Luis Ferran
University of Murcia, Spain
Exploring Brain Genoarchitecture by Chromogenic In Situ Hybridization in Whole-Mount, Cryostat or Floating sections

12.25–12.55 Panel discussion introduced by J Howard Pringle, University of Leicester

12.55–14.30 Lunch and poster session
Session 2  Automation of *In Situ* Hybridisation
Chair: Julia Jones, Cancer Research UK Cambridge Institute

14.30–14.35  Introduction of the Chair by Will Howat

14.35–15.05  Julia Jones
Cancer Research UK Cambridge Institute
*Multiplex ISH on the Bond Rx*

15.05–15.35  Paul Murdock
Asterand Bioscience, Royston
*Experiences with the latest generation in situ hybridisation methodologies*

15.35–16.05  Adrian Murillo
Ventana Medical System, Tucson
*Automated ISH as a System*

16.05–16.30  Coffee/tea

16.30–17.00  Amy Bernard
Allen Institute for Brain Science, Seattle
*Automating Atlases: Development of an in situ hybridization platform for integrating data acquisition and analysis*

17.00–17.30  Stephen Taylor
University of Oxford
*Zegami: A tool for image data exploration and analysis*

17.30–17.45  *Selected talk from submitted abstracts: Vikram Deshpande*
Massachusetts General Hospital
*Application of RNA in situ Hybridization in Routine Clinical Practice: targeting Albumin, hr-HPV and Kappa/Lambda*

17.45–18.15  Panel discussion introduced by Julia Jones, Cancer Research UK Cambridge Institute

18.15  Drinks reception

18.45  Buffet dinner at the CRUK Cambridge Institute
Friday 8 May

8.30–9.00 Coffee/tea

Session 3 Single Molecule Detection In Situ Hybridisation
Chair: Scott Fraser, University of Southern California

9.00–9.05 Introduction of the Chair by Will Howat

9.05–9.35 Scott Fraser
University of Southern California
Multiplex Imaging and Sensing the Signatures of Embodied Cells

9.35–10.05 Sanjay Tyagi
Public Health Research Institute Center, New Jersey
Studying barriers to transmission of transcriptional noise by single molecule-FISH

10.05–10.35 Shalev Itzkovitz
Weizmann Institute of Science, Israel
Bursty gene expression in the intact mammalian liver

10.35–11.05 Coffee/tea

11.05–11.35 Ola Söderberg
Uppsala University, Sweden
Molecular tools for single-cell analysis: use of the Proximity Ligation Assay

11.35–12.05 Je H. Lee
Cold Spring Harbor Laboratory
Next Generation Sequencing In Situ: Implications for biomarker discovery and cancer biology

12.05–12.35 Panel discussion introduced by Scott Fraser, University of Southern California

12.35–13.30 Lunch
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<th>Time</th>
<th>Session 4 Non-coding RNA In Situ Hybridisation</th>
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<td>Chair: Boye Schnack Nielsen, Bioneer, Denmark</td>
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<td>13.30–13.35</td>
<td>Introduction of the Chair by Will Howat</td>
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<td>13.35–14.05</td>
<td>Boye Schnack Nielsen</td>
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<td>Visualizing the world of non-coding RNA</td>
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<td>14.05–14.35</td>
<td>Yuling Luo</td>
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<td>Advanced Cell Diagnostics Inc, California</td>
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<td>The Renaissance of In Situ Hybridization</td>
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<td>14.35–15.05</td>
<td>John Le Quesne</td>
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<td>University of Leicester</td>
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<td>Semi-quantitative LNA-ISH for the detection of micro-RNA expression in tissue microarrays of archival breast tumour tissue</td>
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<td>15.05–15.35</td>
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<td>15.35–16.05</td>
<td>Lorenzo Sempere</td>
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<td>Van Andel Institute, Michigan</td>
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<td>Tissue slide–based multiplex assays for co-detection of microRNA and protein biomarkers in translational cancer research</td>
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<td>16.05–16.35</td>
<td>Thomas Tuschl</td>
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<td>The Rockefeller University, New York</td>
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<td>Characterization of miRNA expression patterns by small RNA sequencing and miRNA-FISH in archival tissues</td>
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<td>16.35–16.50</td>
<td>Selected talk from submitted abstracts: Joseph Krueger</td>
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<td>Automated Quantitative Chromagenic In Situ Hybridization to Enable Companion Diagnostic Approaches</td>
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<td>16.50–17.20</td>
<td>Panel discussion introduced by Boye Schnack Nielsen</td>
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<td>17.20–17.30</td>
<td>Announcement of poster prize winner and symposium close</td>
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