



Translational science update: today's science shaping tomorrow's clinical practice

Monday 1 December 2014

Royal College of Physicians, 11 St Andrews Place, Regent's Park, London NW1 4LE

Conference organisers:

Professor Ajit Lalvani, National Heart and Lung Institute, Imperial College London

Professor John Wass, academic vice president, Royal College of Physicians

09.00 **Registration and coffee**

09.25 **Welcome, introduction and theme of the conference**

Professor Jane Dacre, president, Royal College of Physicians

Professor Ajit Lalvani, National Heart and Lung Institute, Imperial College London and

Professor John Wass, academic vice president, Royal College of Physicians

Session 1: Beyond DNA

Chair: Professor Ajit Lalvani, National Heart and Lung Institute, Imperial College London

09.30 **Epigenetic reprogramming in development and stem cell generation**

Professor Wolf Reik, Babraham Institute Cambridge.

09.55 **MicroRNA: gene regulation, natural variation and epigenetics**

Professor Eric Miska, Gurdon Institute, University of Cambridge

10.20 **Big Data and Genomics in Healthcare**

Dr Alvis Brazma, European Bioinformatics Institute, Cambridge

10.45 **RNA-based therapeutics: principles and clinical applications**

Professor Matthew Wood, University of Oxford

11.10 Coffee

Session 2: Cancer

11.30 **Clinical Cancer care: where we were, where we are and where we are going**

Professor Justin Stebbing, Imperial College London



- 11.55 **Cancer immunotherapy: the future is here**
Professor Dirk Jaeger, German Cancer Research Centre and Heidelberg University Hospital, Germany

Session 3: Obesity I

- 12.20 **Shedding pounds after going under the knife: metabolic insights from cutting the gut**
Dr Rachel Batterham, UCL
- 12.45 ***Q & A discussion panel with morning speakers***
- 13.00 **Lunch**

Session 4: Immunology

Chair: Professor John Wass, academic vice president, Royal College of Physicians

- 13.55 **Inherited immunodeficiencies and what they teach us about human immunology**
Professor Sophie Hambleton, Newcastle University
- 14.20 **Therapeutic redirecting of cell-mediated immunity**
Professor David Adams, University of Birmingham

Session 5: Obesity II and genomics England

- 14.45 **Translational research in obesity : from genetics to physiology and behaviour**
Professor Sadaf Farooqi, University of Cambridge
- 15.10 **100,000 Genomes Project: current and future impact on the NHS**
Professor Mark Caulfield, Queen Mary University London
- 15.35 **Tea**

Session 6: Cognition, ageing and functional neuro-imaging

- 15.55 **Cognitive function and ageing populations**
Professor Carol Brayne, University of Cambridge
- 16.20 **Functional neuroimaging: how the brain responds to change and implications for preventing and treating disease**
Professor Heidi Johansen-Berg, The Nuffield Department of Clinical Neurosciences, Oxford
- 16.45 **Q & A discussion panel with afternoon speakers**
- 17.05 **Closing Remarks**
- 17.10 **Close of conference**