

Inaugural UK Regenerative Medicine Conference

20 and 21 September 2016

Royal Institute of British Architects, 66 Portland Place, London, W1B 1AD

Agenda

Day 1 - Tuesday 20 September 2016

08:30 Registration and refreshments

09:00 Welcome and Opening Address
Professor Melanie Welham, Chief Executive BBSRC

Session 1 Pluripotent and reprogrammed cells for regenerative medicine
Chair: Professor Fiona Watt, King's College London

09:10 Keynote Lecture
Professor Martin Pera, Stem Cells Australia
Title: Human pluripotent stem cells: basic biology matters

09:40 Topic Specific Talk
Professor Kevin Docherty, University of Aberdeen
Title: Generation of functional islets from human exocrine pancreas

10:00 Topic Specific Talk
Professor David Williams, Loughborough University
Title: Translational research in regenerative medicine manufacturing: A personal reflection on progress and outstanding challenges

10:20 Short Presentation
Dr Ivana Barbaric, University of Sheffield
Title: Genetic stability of human pluripotent stem cells

10:30 Refreshments

Session 2 Regenerative Medicine approaches for endogenous repair, transplantation and regenerative biology
Chair: Professor Kevin Park, University of Liverpool

11:00 Keynote Lecture
Professor Stuart Forbes, University of Edinburgh
Title: Regenerating severely damaged liver

11:30 Topic Specific Talk
Dr Sajjad Ahmad, University of Liverpool
Title: Cell therapy approaches to reconstruct the front surface of the human eye


11:50	Topic Specific Talk Professor Martin Birchall, University College London <i>Title: Translating complex regenerative medicine surgical therapies: more steeplechase than Valley of Death</i>
12:10	Short Presentation Dr Giorgia Fanelli, King's College London <i>Title: Collectin 11 expression by hypoxia-stressed iPSC-derived RPE cells is linked to complement activation</i>
12:20	Short Presentation Dr Wei-Yu Lu, Edinburgh <i>Title: The niche of hepatic progenitor cells mediated liver regeneration</i>

12:30 Lunch

Session 3	In vivo assessment of regenerative medicine approaches Chair: Professor Francesco Dazzi, King's College London
13:30	Keynote Lecture Professor Molly Stevens, Imperial College London <i>Title: Raman and other tools to analyse the cell-material interface</i>
14:00	Topic Specific Talk Professor Matthew Rosseinsky, University of Liverpool <i>Title: Nanoprobe development and application in the evaluation of cell therapy safety and efficacy</i>
14:20	Topic Specific Talk Professor Mark Lythgoe, University College London <i>Title: Limits of perception: advances in cellular imaging</i>
14:40	Short Presentation Ms Lauren Scarfe, University of Liverpool <i>Title: Multi-modal imaging for assessing safety, efficacy, and mechanisms of action of RMTs</i>
14:50	Short Presentation Dr Phil Starkey Lewis, University of Edinburgh <i>Title: Alternatively-activated macrophage therapy for drug-induced liver injury</i>

15:00 Refreshments (and poster hanging)

Session 4	Poster Session
15:30	Please see page 29 for poster numbers and abstracts

18:00	Drinks Reception <i>Sponsored by the BioIndustry Association</i>	
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19:30 Dinner

Day 2 – Wednesday, 21 September 2016

08:30 Refreshments

Session 5 Regenerative medicine advances in biomaterials and their application
Chair: Professor Sue Kimber, University of Manchester

09:00 Keynote Lecture
Professor Fergal O'Brien, Royal College of Surgeons in Ireland
Title: Gene activated scaffolds for enhanced tissue repair

09:30 Topic Specific Talk
Professor Richard Oreffo, University of Southampton
Title: Size matters - Harnessing biomimetic materials for skeletal tissue engineering

09:50 Topic Specific Talk
Dr David Hay, University of Edinburgh
Title: Stem cell derived hepatocytes for cell based screening and tissue repair

10:10 Short Presentation
Dr Richard Day, University College London
Title: Efficient manufacturing and delivery of skeletal muscle myoblasts

10:20 Short Presentation
Professor Rachel Williams, University of Liverpool
Title: Peptide gels for corneal endothelial cell transplantation

10:30 Refreshments

Session 6 Regenerative medicine approaches for endogenous repair, transplantation and regenerative biology (2)
Chair: Professor Kevin Shakesheff, University of Nottingham

11:00 Keynote Lecture
Professor Kevin Eggan, Harvard University
Title: Inherited and acquired genetic variation in human embryonic stem cells and its implications for regenerative medicine

11:30 Topic Specific Talk
Professor Giovanna Lombardi, King's College London
Title: Immunogenicity of allogeneic iPS-derived cells: recipient dendritic cells are the key

11:50 Topic Specific Talk
Professor Robin Franklin, University of Cambridge
Title: CNS remyelination - from mechanisms to medicines

12:10 Short Presentation
Professor Alicia El Haj, Keele University
Title: Engineering solutions to regenerative medicine challenges

12:20 Short Presentation
Dr Raul Elgueta Rebolledo, King's College London
Title: Immune characterisation of iPS-derived hepatocytes

12:30 Lunch

Session 7 **Recent advances in clinical approaches to therapies**

Chair: Professor Peter Andrews, University of Sheffield

- 13:30 Keynote Lecture
Professor Robin Ali, University College London
Title: Retinal repair through hES-derived photoreceptor transplantation
- 14:00 Topic Specific Talk
Professor Dr Petra Reinke, Berlin-Brandenburg Centre for Regenerative Therapies
Title: Is Cell therapy a command strategy in solid organ transplantation?
- 14:20 Topic Specific Talk
Professor Andrew Baker, University of Edinburgh
Title: Strategies for promoting repair and regeneration in response to vascular injury
- 14:40 Short Presentation
Professor Anthony Hollander, Azellon & University of Liverpool
Title: Using MSCs to repair torn meniscal cartilage
- 14:50 Short Presentation
Dr John Sinden, ReNeuron
Title: Chronic disability after stroke: can neural stem cells provide a cure?

15:00 Refreshments

Session 8 **New frontiers in repair and replacement of diseases tissues and organs**

Chair: Steve Bates, BIA

- 15:30 Topic Specific Talk
Professor Bent Jakobsen, Immunocore
Title: ImmTACTM molecules: Bi-specific TCR-based reagents for targeted cancer immunotherapy
- 15:50 Topic Specific Talk
Dr Michael Roberts, Synpromics
Title: Synthetic Promoters: leveraging information from the genome to optimize gene expression
- 16:10 Topic Specific Talk
Professor Martin Pule, University College London
Title: TBC

16:30 Closing Comments
Dr Rob Buckle, Director UKRMP

16:35 Meeting close