



UK Regenerative
Medicine Platform

British
Society
for
Gene &
Cell
Therapy

Programme Overview

Wednesday April 19th 2017	
	Concert Hall
09:30-16:00	Acellular Internal Hub Meeting
14:00-16:00	PSCP Internal Hub Meeting
15:00-15:45	BSGCT Board Meeting
15:00-20:45	BSGCT Registration Desk Opens - Foyer
16:00-18:00	BSGCT Welcome and Symposium 1 (Clinical Breakthroughs) <i>Chair: Len Seymour</i>
	Kindly sponsored by 
16:00-16:30	INV01 Gene edited T cell therapies Professor Waseem Qasim, Institute of Child Health, UCL
16:30-17:00	INV02 Haemophilia gene therapy: where do we stand? Professor Amit Nathwani, University College London
17:00-17:30	INV03 Results and challenges of ex vivo gene therapy clinical trials Dr Marina Cavazzana, Paris Descartes University
17:30-17:45	SELO1 Quantification of vector shedding after transduction of murine lungs with F/HN-pseudotyped lentivirus Professor Uta Griesenbach, Imperial College London
17:45-18:00	SELO2 Haematopoietic stem cell gene therapy corrects the brain in mucopolysaccharidosis type IIIB Dr Rebecca Holley, University of Manchester
18:00-18:30	Refreshments - Exhibition, poster and catering areas
18:30-20:15	BSGCT Special Lecture & Fairbairn Award Presentations <i>Chairs: Uta Griesenbach and Aarash Saleh</i>
18:30-19:15	INV04 Translation of gene therapeutics in neurological and neuromuscular disease Dr Brian Kaspar, Nationwide Children's Hospital/the Ohio State University
19:15-19:30	FB01 CRISPR/Cas9-mediated TCR replacement greatly improves functional activity of TCR-transgenic T-cells: implications for cancer immunotherapy Mr Mateusz Legut, Cardiff University
19:30-19:45	FB02 Development of T cell mediated gene therapy for correction of humoral and cytotoxic defects in X-linked lymphoproliferative disease (XLP) Miss Neelam Panchal, PhD Student UCL-GOSICH
19:45-20:00	FB03 A tropism-modified, $\alpha\beta 6$ integrin-selective adenoviral vector for epithelial ovarian cancer therapies Miss Hanni Uusi-Kerttula, Phd Student Cardiff University
20:00-20:15	FB04 The lung as a factory to produce secreted intrapulmonary and circulatory proteins Mr Michael Paul-Smith, Imperial College
19:30-22:00	UK RMP - Formal Inter-Hub Dinner - Cardiff Castle Separate registration required for UKRMP attendees only
20:15-22:00	BSGCT Welcome Networking Reception Exhibition, poster and catering areas

Thursday April 20th 2017

Concert Hall

Richard Burton Theatre

08:30-10:30 **Joint UK RMP & BSGCT Plenary Session (BSGCT Symposium 2)**

Chairs: Peter Andrews and Andy Baker



08:30-08:40 **INV05 Implementing a strategic approach for UK regenerative medicine**

Dr Rob Buckle, Medical Research Council (MRC)

08:40-08:50 **INV06 BHF Regenerative Medicine Centres**

Professor Sian Harding, Imperial College London

08:50-09:00 **INV07 The British Society for Gene and Cell Therapy**

Professor Andy Baker, University of Edinburgh

09:00-09:20 **INV08 The MATCH Study – Autologous Macrophages for the Treatment of Cirrhosis**

Professor John Campbell, SNBTS Advanced Therapeutics

09:20-09:40 **INV09 Liver directed gene therapy**

Professor Paul Gissen, University College London

09:40-10:00 **INV10 Selective vs widespread CNS gene transfer with viral vectors**

Professor Nicholas D. Mazarakis, Lucas-lee Chair In Molecular Biomedicine Head Gene Therapy Imperial College London

10:00-10:20 **INV11 Cell therapy for Parkinson's disease**

Dr Gesine Paul, Lund University And Skane University Hospital

10:30-11:00 **Morning refreshments, posters and exhibition - Foyer, Café and Gallery**

11:00-12:30 **Joint UK RMP & BSGCT Plenary Session (BSGCT Symposium 3)**

Chairs: Sian Harding and Fiona Watt



11:00-11:20 **INV12 Cell therapy for cartilage and bone repair: A small UK manufacturer's update**

Professor Sally Roberts, Prof of Orthopaedic Research NHS

11:20-11:40 **INV13 Advances in combined gene - and tissue engineering-based approaches for cartilage regenerative medicine**

Professor Magali Cucchiari, Saarland University Medical Center

11:40-12:00 **INV14 Developmental programming of the cardiac lymphatics towards improved heart repair**

Professor Paul Riley, University of Oxford

12:00-12:05 **SEL03 In vivo reprogramming to a transient pluripotent-like state enhances regeneration of injured skeletal muscle**

Dr Irene De Lazaro, Post-doctoral Research Associate University Of Manchester

12:15-12:30 **SEL04 Mesenchymal cells engineered to express Collagen VII in a human:murine Recessive dystrophic epidermolysis bullosa model**

Dr Anastasia Petrova, UCL Great Ormond Street Institute of Child Health

12:30-13:30 **BSGCT Annual General Meeting - Concert Hall BSGCT Members only**

12:30-13:30 **Lunch, posters and exhibition - Foyer, Café and Gallery**

12:45-13:30 **Cell and Gene Therapy Catapult Drop-in Session - Gibson studio**

13:30-15:30 **BSGCT Symposium 4 - Cancer gene and cell therapy**

Chairs: Angela Bradshaw and Alan Parker

13:30-14:00 **INV15 Oncolytic Adenoviruses**

Dr Ramon Alemany, Catalan Institute of Oncology

14:00-14:30 **INV16 ErbB targeted CAR T-cell immunotherapy of head and neck cancer – a phase 1 clinical trial**

Dr John Maher, Kings College London

14:30-15:00 **INV17 Targeting pancreatic and prostate cancer with E1B19K-deleted oncolytic adenoviruses**

Dr Gunnel Hallden, Barts Cancer Institute, Queen Mary University of London

Thursday April 20th 2017 (continued)

	Concert Hall	Richard Burton Theatre
15:00-15:15	SEL05 3CAR: Gene edited anti-CD3 chimeric antigen receptor T cells Dr Jane Rasaiyaah, Research Associate Institute Of Child Health, UCL	
15:15-15:30	SEL06 Development of chimeric Ad5/Ad49 adenovirus vectors that exhibit enhanced tropism for tumour cell lines Mr Alex Baker, Cardiff University	
13:30-15:30	UKRMP/BHF Session 1 <i>Chairs: Oliver Thompson and Deepak Kumar</i>	
	 	
13:30-13:50	SS01 Novel biofunctionalized scaffolds for anti-fibrotic, cartilage, and retinal applications Dr Jennifer Puetzer, Postdoctoral Research Associate Imperial College London	
13:55-14:15	SS02 A vessel wall progenitor cell niche underpins endogenous vascular regeneration Dr Mairi Brittan, University Of Edinburgh	
14:20-14:40	SS03 Pluripotent stem cells to chondrocytes for cell therapy and disease modeling Dr Steven Woods, University of Manchester	
14:45-15:05	SS04 Utilising multispectral optoacoustic tomography (MSOT) to assess organ function and to track labelled therapeutic cells for regenerative medicine therapies in vivo Dr Jack Sharkey, University of Liverpool	
15:10-15:30	SS05 Cell therapy of the heart studied using adult myocardial slices in vitro Dr Filippo Perbellini, Imperial College London	
15:30-16:00	Afternoon refreshments, posters and exhibition - Foyer and Café	
16:00-18:00	BSGCT Symposium 5 - Genome Editing <i>Chairs: Helen O'Neill and Simon Waddington</i>	
16:00-16:30	INV18 CRISPR screens for functional genomics: technology and applications Professor Neville Sanjana, New York Genome Center and NYU	
16:30-17:00	INV19 Cas9 and Cpf1 gene editing of rare Cystic Fibrosis-causing mutations Dr Patrick Harrison, University College Cork	
17:00-17:30	INV20 Targeting differences at the T-cell receptor beta constant region for the diagnosis and treatment of T-cell malignancies Dr Martin Pule, Autolus/UCL	
17:30-17:45	SEL07 Development of a high-throughput sequencing approach for off-target assessment in therapeutic genome editing applications Dr Ayokunmi Ajetunmbi, Head Of Sequencing Services, Desktop Genetics	
17:45-18:00	SEL08 CRISPR-CAR coupled lentiviral vector for efficient and homogenous T cell modification Dr Christos Georgiadis, UCL, GOS Institute of Child Health	
16:00-18:00	UKRMP/BHF Session 2 <i>Chairs: Rob Thomas and Katie Bardsley</i>	
	 	
16:00-16:20	SS06 Human stem-cell derived epicardial cells in myocardial graft development Dr Johannes Bargehr, Phd Student University of Cambridge	
16:25-16:45	SS07 Regenerating the kidney using lentivirus-labelled human pluripotent stem cells Dr Ioannis Bantounas, Post-doctoral Research Associate University of Manchester	
16:50-17:10	SS08 Progress towards a stem cell-derived cell replacement therapy for Parkinson's disease Dr Nicholas Blair, Postdoctoral Research Associate University Of Cambridge	
17:15-17:35	SS09 Heart disease in systemic autoimmunity; an inducible mouse model to study regenerative processes and therapies under inflammatory conditions Dr Susanne Sattler, Imperial College London	
17:40-18:00	SS10 Quality approaches to allow multi-site equivalence in pluripotent stem cell based product manufacturing Dr Maryam Shariatizadeh, Loughborough University	
18:00-19:15	BSGCT Exhibition, drinks & poster judging - Foyer, Café and Gallery	
19:30-23:00	Conference Dinner - National Museum Cardiff (Pre-registration required) Guest speaker - Professor Jonathan Bisson, Director, Health and Care Research Wales	

Friday April 21st 2017

	Concert Hall	Richard Burton Theatre
09:00-10:30	BSGCT Symposium 6A - Gene and cell therapy for rare diseases <i>Chairs: Alex Baker and Mustafa Munye</i>	
09:00-09:30	INV21 Development of in vitro models of the human blood-brain barrier (BBB) using endothelial cells derived from induced pluripotent stem (iPS) cells Dr Rafael J. Yáñez-Muñoz, Royal Holloway, University of London	
09:30-10:00	INV22 Platelet production in vitro for transfusion from human pluripotent stem cells: the added power of genome editing Dr Cedric Ghevaert, University of Cambridge	
10:00-10:15	SEL09 Vector optimization for AAV-mediated gene therapy for Rett syndrome Dr Ralph Hector, University of Glasgow	
10:15-10:30	SEL10 Development of gene therapy for Niemann-Pick Type C disease Mr Michael Hughes, University College London	
09:00-10:30	BSGCT Symposium 6B - Cell and Vector production <i>Chairs: Wardiya Afshar and Mimoun Azzouz</i>	
09:00-09:30	INV23 Stable producer cell lines for lentiviral vector manufacture Dr Conrad Vink, GlaxoSmithKline	
09:30-10:00	INV24 Creation of lentivirus vectors using novel DNA vectors Dr Rajvinder Karda, University College London	
10:00-10:15	SEL11 Dynamic mechanistic modelling for optimisation of therapeutic cell culture processes Dr Robert Thomas, Loughborough University	
10:15-10:30	SEL12 Sensitivity of lentiviral vectors pseudotyped with vesiculovirus G proteins to inactivation by human serum complement Mr Altar Munis, Nibsc	
10:30-11:00	Morning refreshments, posters and exhibition - Foyer, Café and Gallery	
11:00-12:30	BSGCT Symposium 7A - Future challenges <i>Chairs: Andrew Baker and Zoe Hewitt</i>	
11:00-11:20	INV25 Genetic changes in human pluripotent stem cells: implications for basic biology and regenerative medicine Dr Ivana Barbaric, University of Sheffield	
11:20-11:40	INV26 Unravelling AAV genotoxic potential: where do we stand Dr Irene Gil-Farina, German Cancer Research Center (DKFZ) / National Center for Tumor Diseases (NCT)	
11:40-12:00	INV27 Regulatory issues related to gene and cell therapy Dr Jacqueline Barry, Cell And Gene Therapy Catapult	
12:00-12:15	SEL13 Are hospital pharmacy departments ready to handle gene therapy medicines? Professor Nicola Stoner, Consultant Pharmacist, Oxford University Hospitals Nhs Foundation Trust	
12:15-12:30	SEL14 A human IPS cell model for gene therapy vector safety evaluation Dr Michael Themis, Lecturer Brunel University London	
11:00-12:30	BSGCT Symposium 7B - Gene and cell therapy for blindness <i>Chairs: Ralph Hector and Sue Kimber</i>	
11:00-11:30	INV28 Cell therapy for age-related macular degeneration Dr Amanda Carr, Research Fellow UCL Institute of Ophthalmology	
11:30-12:00	INV29 Gene therapy for inherited blindness Professor James Bainbridge, University College London	
12:00-12:15	SEL15 AAV-mediated transduction of bipolar cells is essential to prolong photoreceptor survival in Cln6nclf mice Dr Sophia Kleine Holthaus, Ucl Institute Of Ophthalmology	
12:15-12:30	SEL16 Combining stem cells and cochlear electrode arrays: towards a true 'bionic' ear Professor Marcelo Rivolta, Centre For Stem Cell Biology, University Of Sheffield	
12:30-13:00	BSGCT Networking Lunch and end of Conference - Foyer & Café	