

BSGT 2008 CONFERENCE PROGRAMME

Monday 7th April 2008

09.00 – 15.30 BSGT Public Engagement Day – James Watt Centre | Main Auditorium 'Journeys in the Genetic Jungle'

15.00 Conference Registration Opens – JWC I

BSGT EDUCATION SYMPOSIUM

James Watt Centre | Main Auditorium

Chair: Professor Adrian Thrasher, UCL Institute of Child Health

- 16.00 RNA Polymerase II Transcriptional Termination **1**
Michael Dye
University of Oxford
- 16.30 Role of micro RNAs in Development and Disease **2**
Tamas Dalmay
University of East Anglia
- 17.00 Adeno-Associated Viral Vectors **3**
Hildegard Büning
University of Cologne
- 17.30 Imaging Gene Delivery and Viral Activity **4**
Iain McNeish
Barts and The London School of Medicine and Dentistry

18.00 Buffet - JWC I

OPENING SYMPOSIUM

Chair: Professor Charles Coutelle, Imperial College London

- 19.15 Welcome and opening announcements
Andy Baker and Chris Boyd
The opening lecture is kindly supported by a donation from Scottish Enterprise
- 19.30 16 Years Experience of Clinical Studies in Gene Transfer – Where are we? **5**
Alan Smith
Genzyme, USA
- 20.10 Lung Gene Therapy **6**
Dusty Miller
Fred Hutchinson Cancer Research Center, USA
- 20.50 Gene Therapy for Chickens: Efficient Transgenesis Using Lentiviral Vectors **7**
Helen Sang
Roslin Institute, UK

21.30 Bar Open

Tuesday 8th April 2008

08.00 Conference Desk Open – JWC I Foyer

SYMPOSIUM I

RESPIRATORY AND OTHER GENETIC DISEASES

Chair: Dr Chris Boyd, University of Edinburgh

This symposium is kindly supported by a donation from the Cystic Fibrosis Trust

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| 08.30 | UK CF Gene Therapy Consortium Preclinical and Clinical Research Programme
Uta Griesenbach
Imperial College London | 8 |
| 09.00 | Targeted Gene Delivery to the Lung
Carsten Rudolph
University of Munich | 9 |
| | Proffered papers: | |
| 09.30 | Biomarkers for Gene Therapy: from Microarrays to Immunocytochemical Assays
Varrie Ogilvie
University of Edinburgh | 10 |
| 09.40 | Long Term Perinatal Gene Transfer After Clinically Applicable Delivery of Prenatal Gene Therapy in the Sheep
Jenny McIntosh
University College London | 11 |
| 09.50 | A Therapeutic Strategy for Dominantly Inherited Retinitis Pigmentosa
Naomi Chadderton
Trinity College Dublin | 12 |

10.00 Refreshments, Posters and Commercial Exhibition

SYMPOSIUM II

CARDIOVASCULAR AND GENE DELIVERY SYSTEMS

Chair: Professor Jill Belch, University of Dundee

This symposium is kindly supported by a donation from the British Heart Foundation

- 10.30 Gene Therapy for Heart Failure **13**
Walter Koch
Thomas Jefferson University, USA
- 11.00 Tissue Kallikrein Gene Therapy: a Novel Approach to Promote Arteriogenesis and Collateralization in Ischemic Tissues **14**
Dr Paolo Madeddu
University of Bristol
- Proffered papers:**
- 11.30 Factor X Enhances Binding and Transduction of Human Cancer Cell Lines by Adenovirus (Ad) Serotype 5 Vectors but not by Ad35 **15**
Jenny Greig
University of Glasgow
- 11.40 Adenoviral-Mediated Over-Expression of the Hepatocyte Growth Factor Inhibitor NK4 Attenuates Mineralisation of Cultured Human Vascular Smooth Muscle Cells: Links with Notch Signalling? **16**
Yvonne Alexander
University of Manchester
- 11.50 Efficient Gene Delivery to the Adult and Fetal Central Nervous System Using Pseudotyped Non-Integrating Lentiviral Vectors **17**
Ahad Rahim
University College London

12.00 BSGT Annual General Meeting – BSGT Members

12.00 Lunch, Posters and Commercial Exhibition

SYMPOSIUM III INNATE IMMUNITY AND VIRAL GENE THERAPY

Chair: Professor Len Seymour, University of Oxford

[This symposium is kindly supported by a donation from Cancer Research UK](#)

- 13.30 Stimulatory Nucleic Acids as Adjuvants for Cancer Immunotherapy **18**
Sandra Diebold
King's College London
- 14.00 E3B Genes of Adenovirus Interfere with Macrophage Function: an Opportunity to Enhance the Anti-Tumour Potency of Oncolytic Adenoviruses **19**
Nick Lemoine
Barts and The London School of Medicine and Dentistry
- Proffered papers:**
- 14.30 Oncolytic Adenoviral Mutants Define a Novel Mode of Programmed Cell Death in Ovarian Cancer **20**
Iain McNeish
Barts and The London School of Medicine and Dentistry
- 14.40 Development of Hydrophilic Polymers to Reduce the Interaction of Adenovirus Type 5 with Human Blood Components. **21**
Robert Carlisle
University of Oxford
- 14.50 A Strategy for Systemic Delivery of the Oncolytic Herpes Virus HSV1716: Optimization of Redirected Tropism by Antibody Binding Sites Incorporated on the Virion Surface as Glycoprotein D Fusion Proteins **22**
Joe Conner
Crusade Laboratories Ltd, UK

15.00 Refreshments, Posters and Commercial Exhibition

SYMPOSIUM IV

RECENT ADVANCES IN TREATMENT OF EYE DISEASE

Chair: Professor Andy Baker, University of Glasgow

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| 15.30 | Advancement in AAV-Mediated Retinal Gene Transfer for Inherited Retinal Diseases
Alberto Auricchio
Telethon Institute of Genetics and Medicine, Italy | 23 |
| 16.00 | Development of Cell Transplantation Strategies for the Treatment of Retinal Degeneration
Robin Ali
UCL Institute of Ophthalmology | 24 |
| 16.30 | Clinical Trials of Ocular Gene Therapy
James Bainbridge
UCL Institute of Ophthalmology | 25 |

17.00 - 19.00 Drinks Reception and Poster Judging

17:00 – 18:00 Odd Poster Numbers 45 – 117

18:00 – 19:00 Even Poster Numbers 44 – 118
Posters displayed according to numbering in the abstract book

19.15 - 01.00 Banquet and Ceilidh – James Watt Centre II

**After dinner speaker Rt Revd Dr Lee Rayfield,
Bishop of Swindon**

SYMPOSIUM V

**CANCER GENE THERAPY,
INCLUDING CLINICAL ADVANCES**

Chair: Professor Moira Brown and
Professor Nicol Keith, University of Glasgow

- 08.30 Oncolytic Viral Therapy in Brain Tumours: **26**
A Translational Study
Garth Cruickshank
University of Birmingham

This lecture is kindly supported by a donation from BioReliance

- 09.00 Getting Regulatory Approval for Gene Therapy **27**
David Eckland
Ark Therapeutics Ltd, UK

- 09.30 Clinical Translational Trials of Oncolytic Virotherapy **28**
Kevin Harrington
Institute of Cancer Research

10.00 Refreshments, Posters and Commercial Exhibition

KEYNOTE SPEAKER

Chair: Professor Andy Baker, University of Glasgow

*This lecture is kindly supported by a donation from
Scottish Enterprise*

- 10.30 Integration of Gene Delivery and Drug Development **29**
Douglas Jolly
Tocagen Inc, USA

SYMPOSIUM VI

FAIRBAIRN AWARD SYMPOSIUM

*Chairs: Professor Mary Collins, University College London and
Dr Dusty Miller, Fred Hutchinson Cancer Research Center*

*This award is kindly supported by the
Paterson Institute for Cancer Research and BSGT*

*Judging Panel: Dr Chris Boyd, Professor Mary Collins,
Dr Vivien Mautner, Dr Dusty Miller*

- 11.00 Persistent Episomal Transgene Expression **30**
in Liver Following Hydrodynamic Delivery of
S/MAR-Containing Plasmid DNA
Orestis Argyros
Imperial College London

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| 11.15 | Restoration of Migratory Defects in a Murine Model of Wiskott-Aldrich Syndrome Gene Therapy
Mike Blundell
UCL Institute of Child Health | 31 |
| 11.30 | <i>In Vivo</i> Modulation of Nogo-B Attenuates Neointima Formation
Angelika Kritz
University of Glasgow | 32 |
| 11.45 | Development of a 'Stealth' Adenovirus Vaccine Vector
Veronique Bachy
King's College London | 33 |

12.00 **BSGT Committee Meeting – Carnegie Room A**

This meeting is open to the BSGT Executive and Co-opted members – lunch will be provided

12.00 **Lunch, Posters and Commercial Exhibition**

SYMPOSIUM VII

VECTOR-MEDIATED PATHOGENESIS

Chair: Professor Adrian Thrasher, UCL Institute of Child Health

This symposium is kindly supported by a donation from the Scientific Development and Bioethics Division of the Department of Health

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| 13.00 | Risk Factors in X-SCID Gene Therapy
Jim Neil
University of Glasgow | 34 |
| 13.25 | Assessment of Genotoxicity by Retroviral Gene Transfer
Ute Modlich
Hannover Medical School | 35 |
| 13.45 | Severe Combined Immunodeficiency: Clinical Update and Development of Safer Protocols
Adrian Thrasher
UCL Institute of Child Health | 36 |
| 14.10 | Limiting γ c Expression Differentially Affects Signaling via the Interleukin (IL)-7 and IL-15 receptors
Samantha Ginn
Children's Medical Research Institute, Australia | 37 |

Proffered papers:

- 14.30 Efficient Transduction of Human CD34+ Cells Using Adeno-Associated Virus Vectors **38**
Hildegard Büning
University of Cologne
- 14.40 Self-Inactivating Retroviral Vectors for Gene Therapy of SCID-X1 **39**
Susannah Thornhill
UCL Institute of Child Health
- 14.50 Cell-Based Delivery of a Prostate Cancer Suicide Gene Therapy **40**
Rosetta Martiniello-Wilks
Royal Prince Alfred Hospital and Centenary Institute, Australia

15.00 Announcements and refreshments

**SYMPOSIUM VIII
VIRAL VECTOR GENE THERAPY FOR
NEURODEGENERATIVE DISEASES**

Chair: Professor Nicholas Mazarakis, Imperial College London

- 15.20 RNA Interference as Therapeutic Strategy to Counteract Huntington's Disease **41**
Nicole Déglon
Atomic Energy Commission, France
- 15.50 Using Heat Shock Protein Co-Chaperones To Decrease Inclusion Formation in Polyglutamine Disease **42**
James Uney
University of Bristol
- 16.20 Gene Therapy for Parkinson's Disease: Continuous Dopamine Delivery Strategy **43**
Deniz Kirik
Lund University
- 16.50 Closing remarks and prizes

17.00 Meeting Close