## **NSC-Reconstruct**

## NSC-Reconstruct Workshop #4: November 22-23, 2023 in Cambridge, UK Strategies for the development of cell products that can evade the immune system, and the development of tools to monitor graft rejection

Venue address: WYNG Gardens, Thompson's Lane Cambridge CB5 8AQ

Day 1: November 22

13.00 - 14.00 Lunch

14.00 – 14.10 Elena Cattaneo: Welcome and Introduction

Session 1: The host's immune/inflammatory response

Session chair: Anders Björklund

External speakers: 30+10 min discussion

14.10 – 14.50 Kourosh Saeb-Parsy

Department of Surgery, University of Cambridge

Assessment and Amelioration of Immunogenicity of Liver Cellular Therapies

14.50 – 15.30 Yen Tai

Imperial College London, Department of Brain Sciences

Using PET to monitor the inflammatory response in cell replacement therapy for

neurodegenerative disorders

15.30 – 16.00 BREAK

External speaker: 30+10 min discussion

16.00 – 16.40 Iwijn De Vlaminck online

Cornell University, Meinig School of Biomedical Engineering

Minimally Invasive Monitoring of Complications of Stem Cell Therapy

16.40 - 17.00 Discussion

Session 2: Strategies to develop cell products that can evade the immune system

Session chair: Roger Barker

External speaker: 30+10 min discussion

17.00 – 17.40 Sonja Schrepfer online

Head of the Hypoimmune Platform at Sana Biotechnology, San Francisco

Translating Discoveries: Engineering of Allogeneic Donor Cells for Acceptance by

the Host's Immune System

17.40 - 18.10 Discussion

Dinner venue address: King's College, Beves room, King's Parade, Cambridge, CB2 1ST

Accommodation booked at: Arundel House Hotel, Chesterton Rd, Arbury, Cambridge CB4 3AN

## Day 2: November 23

**Session 2:** continued

Session chair: Roger Barker

External speakers: 30+10 min discussion

09.00 – 09.40 Asuka Morizane online

Kobe City Medical Center General Hospital, Kobe, Japan

Strategy for immune control in cell replacement therapies for Parkinson's

Disease

09.40 – 10.20 Micha Drukker

Leiden Academic Centre for Drug Research (LACDR) / Leiden University Perspectives on the immunological assessment of autologous, homozygous,

and hypoimmunogenic i/ePSCs

10.20 – 10.30 Discussion

10.30 – 11.00 BREAK

Internal speakers: 20+10 min discussion

11.00 – 11.30 Shaline Fazal

John van Geest Centre for Brain Repair, University of Cambridge

Characterisation of MHC class I KO dopamine neurons

11.30 - 12.00 Tristan Thwaites

Novo Nordisk

Strategies to develop cell products that can evade the immune system

12.00 – 13.00 LUNCH

**Session 3:** Exploration of Immune Mechanisms

Session chair: Carlos Villaescusa

External speakers: 30+10 min discussion

13.00 – 13.40 Caroline Williams-Gray

John van Geest Centre for Brain Repair, University of Cambridge

The role of the immune system in the progression of Parkinson's disease

13.40 – 14.20 Joanne Jones

Department of Clinical Neurosciences, University of Cambridge

How can we assess the immunogenicity of stem cell derived therapies - and

what are the challenges?

14.20 - 14.40 BREAK

Internal speaker: 20+10 min discussion

14.40 – 15.10 Annabel Curle

Department of Clinical Neurosciences, University of Cambridge

How immunogenic are ESC derived DA neurons?

15.10 – 16.00 Concluding discussion

Session chair: Roger Barker



