

2nd UK & Ireland Early Career Blood-Brain Barrier Symposium

Friday 23rd of November 2012

Foresight Centre, University of Liverpool, 1 Brownlow Street, Liverpool, L69 3GL

Program

- 10.30-11.00** **Coffee and registration**
- 11.00-11.25** **Welcome and introduction; Transport of lamotrigine and gabapentin in brain endothelial cells** David Dickens, University of Liverpool
- 11.25-12.05** ***Session 1; Drug delivery utilising nanoparticles (Chair; Steffen Raedisch)***
- Delivery of glucose-coated gold nanoparticles to astrocytes by transcytosis across human brain endothelium,** Radka Gromnicova, Open University
- Assessment of aqueous and nanoparticle antiretroviral drug transport in the blood brain barrier,** Paul Curley, University of Liverpool
- 12.05-13.05** **Lunch + poster session**
- 13.05-13.50** **Keynote lecture; CNS inflammation and the blood-brain barrier: an overview,** Nacho Romero, Open University
- 13.50-15.10** ***Session 2; Transport and modelling at the BBB (Chair; Adjanie Patabendige)***
- Drug-drug interaction of clozapine and lamotrigine,** Steffen Radisch, University of Liverpool
- Neurotrophins and the BBB: some new evidence of crossing,** Svetlana Drndarski, King's College London
- Modelling the function of the blood-brain barrier using an agent-based approach,** Gavin Fullstone, University of Sheffield
- Differences in the ABC efflux transporters under non-cancerous and cancerous conditions,** Ana Georgian, King's College London

3.10-3.30 Coffee break

3.30-4.50 *Session 3; Disease and development (Chair; David Dickens)*

Understanding the mechanisms of blood-brain barrier disruption caused by Japanese encephalitis virus in an *in-vitro* human model, Adjanie Patabendige, University of Liverpool

MiR-126 and miR-126* play a role in flow-based leukocyte adhesion on cytokine-activated human brain microvascular endothelium *in-vitro*, Camilla Cerutti, Open University

Absence of glial alpha-dystrobrevin causes abnormalities of the blood-brain barrier and progressive brain edema, Chun Fu Lien, University of Portsmouth

VEGF-regulated vascular permeability, Alessandro Fantin, University College London

4.50-5.00 Final remarks

Poster Presentations;

Non-viral vectors for drug delivery to the brain: in vitro assessment of alkylglyceryl-functionalised chitosans, Chun Fu Lien, University of Portsmouth

Delivery of iron chelators across the blood-brain barrier: GLUT1 as potential facilitator?, Ferdinand Fuchs, King's College London

Regulation of adherens and gap junction formation in cultured endothelial cells, Rachael Quinn, University of Liverpool

Investigation of antiepileptic drug transport by the blood-brain-barrier expressed solute carrier transporters: OATP1A2 and MCT1, Hayley Jones, University of Liverpool

Antiepileptic drug transport at the blood-brain barrier, Steffen Radisch, University of Liverpool

MicroRNA-146a prevents leucocyte adhesion through targeting NFkB signalling, Dongsheng Wu, Open University

Predicting the regional impact of drug permeability, tissue/protein binding and active efflux on CNS drug disposition, Raj K. Singh Badhan, Aston University

Talks by early career scientists;

Presentations to be 15 minutes long plus 5 minutes for questions.

Registration;

Please contact david.dickens@liv.ac.uk.

Directions;

The meeting will be held at the Foresight Centre on the main University of Liverpool campus.

Liverpool Lime Street Station is a ten minute walk away.

http://www.foresightcentre.co.uk/FileUploads/maps_directions_03_2010.pdf