

# 6<sup>th</sup> Annual UK & Ireland Early Career BBB Symposium

## Schedule – 25<sup>th</sup> November 2016

**09:30-10:30 Registration in Science Gallery, Trinity College Dublin**

**10:30-11:40 Session 1 (Chaired by Dr. Matthew Campbell and Mr. Chris Greene)  
Paccar Theatre, Science Gallery**

10:30-10:40 Welcome address

10:40-11:10 Dr. Sarah Doyle, Trinity College Dublin – “Privileges and Immunities”

11:10-11:40 Data Blitz 1

- Carolina Esteveao, University College London – “The role of CXCL8, CXCL10 and CCL4 in endothelial cell signalling and permeability”

- Eduardo Frias-Anaya, Open University – “Methods for the isolation of cerebral microvessel fragments from young and old mice”

- Kuo-Ching Mei, King’s College London – “Investigational studies on interactions of modified graphene oxide and the Blood-Brain Barrier (BBB) *in vitro*”

- Eoin O’Keeffe, Trinity College Dublin – “Linking systemic biomarkers with Blood-Brain Barrier changes following sports related mild Traumatic Brain Injury”

- Juan Aparicio-Blanco, Open University – “Fluorescently-labelled lipid nanocapsules for drug delivery across the blood- brain barrier: *in vitro* assays on the human brain endothelial cell line D3”

- Natalie Hudson, Trinity College Dublin – “Circadian regulation of the inner retinal vasculature; A paradigm for geographic atrophy development”

**11.40-12:00 Tea & Coffee**

**12:00-13:30 Session 2 (Chaired by Dr. Natalie Hudson and Mr. Eoin O’Keeffe)  
Paccar Theatre, Science Gallery**

12:00-12:15 Rodrigo Loiola, Queen Mary University of London – “Type 2 Diabetes Mellitus disrupts blood-brain barrier and down-regulates annexin A1”

12:15-12:30 Chris Greene, Trinity College Dublin – “Cerebrovascular contributions to psychiatry: claudin-5 and psychosis”

12:30-12:45 David Roig-Carles, Open University – “Initial microRNA and mRNA characterization of brain endothelial-derived extracellular vesicles in inflammation”

12:45-13:00 Christina Simoglou Karali, University of Oxford – “Towards TNF type-1 receptor specific permeabilisation of the blood-brain barrier in brain metastasis”

13:00-13:30     Data Blitz 2

- Lucia Čelková, Trinity College Dublin – “Diurnal NLRP3 inflammasome processing at the outer blood-retina barrier (oBRB)”
- Diana M. Leite, University of Portsmouth – “Peptide nanomaterials as targeted therapies for Glioblastoma Multiforme”
- Franklin Lincoln, Royal College of Surgeons in Ireland – “Molecular patterns underlying TRAIL sensitization by IAP antagonists in Glioblastoma Multiforme”
- Shereen Nizari, Open University – “The effect of loss of cholinergic perivascular innervation on cerebral blood flow”
- Conor Delaney, Trinity College Dublin – “An autosomal dominant CSF1R mutation driving perivascular P-Tau accumulation in Leukoencephalopathy”

**13:30-15:00     Lunch**  
**Science Gallery**

**15:00-17:20     Session 3 (Chaired by Dr. John Kealy and Ms. Lucia Čelková)**  
**Schrödinger Lecture Theatre, Fitzgerald (Physics) Building**

- 15.00-15:15     John Kealy, Trinity College Dublin – “The blood-brain barrier and behaviour”
- 15.15-15:30     Conor McQuaid, Open University – “Delivery of mutated BDNF into the CNS using gold nanoparticles”
- 15:30-16:00     Prof. Pete Adamson, ProQR – “Translating blood-brain barrier research to the clinic”
- 16:00-16:20     Prof. N. Joan Abbott, King’s College London – “Forward Look: Blood-brain barrier sciences over the next 10-15 years, Views, Hopes and Guesses...”
- 16.20-17:20     Keynote Address:  
Prof. Damir Janigro, Flocel, Inc./ Cleveland Clinic Lerner College of Medicine  
– “Blood-brain barrier, immunity and neurological diseases”

**From 17.20     Dinner & Drinks**  
**Kennedys Bar & Restaurant, 31-32 Westland Row**