

# 8<sup>th</sup> European Workshop on Cannabinoid Research


University of Roehampton  
31 August – 2 September 2017

## DAY 1: THURSDAY 31 AUGUST 2017

- 11.30-12.30 Registration and lunch
- 12.30-12.45 Welcome and introduction
- 12.45-13.45 Keynote speaker: Mapping and characterizing endocannabinoid metabolic pathways  
*Professor Ben Cravatt, Scripps Institute, USA*

### Session 1: Brain Repair and the Endocannabinoid System

Chair: *Dr Francisco Molina-Holgado, University of Roehampton, UK*

- 13.45-14.00 Crosstalk between the immune system and the brain cannabinoid system  
*Dr Francisco Molina-Holgado, University of Roehampton, UK*
- 14.00-14.30 EPHAR Lecture: The current biomedical challenge of neurodegenerative disorders: an opportunity for cannabinoid-based therapies  
*Professor Javier Fernandez Ruiz, Universidad Complutense, Spain*
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- Spinal cord injury and endocannabinoids  
*Dr Eduardo Molina-Holgado, National Paraplegics Hospital, Spain*
- 15.00-15.15 Oral communication – OC001  
2AG favors myelin debris phagocytosis by microglia supporting remyelination  
*Dr Miriam Mecha, Cajal Institute, CSIC, Spain*
- 15.15-15.30 Oral communication – OC002  
Analysis of CB1 and CB2 receptor levels in the post-mortem spinal cord and motor cortex of amyotrophic lateral sclerosis patients,  
*Mr Francisco Espejo-Porrás, Complutense University of Madrid, Spain*

15.30-16.00 Refreshment break

## **Session 2: Endocannabinoid system in neurodevelopmental and affective disorders**

Chairs: *Dr Michelle Roche, National University of Ireland, Ireland and Professor Patrick Doherty, King's College London, UK*

16.00-16.30 CB1 cannabinoid receptors regulate cortical neuron migration: implications in neurodevelopmental malformations  
*Dr Ismael Galve Roperh, Universidad Complutense, Spain*

16.30-17.00 Disruption of Anandamide Signaling and Anxiety: Common Mechanisms Between Stress and Inflammation  
*Dr Matt Hill, Hotchkiss Brain Institute, Canada*

17.00-17.30 Regulation of endocannabinoid signaling by sterol carrier proteins  
*Professor Cecilia Hillard, Medical College of Wisconsin, USA*

17.30-17.45 Oral communication - OC004  
Neuroprotection in an experimental model of multiple sclerosis via fatty acid amide hydrolase or monoacylglycerol lipase inhibition  
*Dr Gareth Pryce, Queen Mary University of London, UK*

17.45-18.00 Closing remarks of day 1

18.00-19.30 Poster presentation and Welcome Reception

## **DAY 2: FRIDAY 1 SEPTEMBER 2017**

8.30 – 9.00 Registration and refreshments

9.00-10.00 Keynote speaker: Possible use of non-psychotropic plant cannabinoids against Duchenne's muscular dystrophy  
*Professor Vincenzo di Marzo, Institute of Biomolecular Chemistry, Italy*

10.00-10.30 Refreshment break

## **Session 3: Cannabinoid uses in cardiovascular pathologies**

Chair: *Dr Saoirse O'Sullivan, University of Nottingham, UK*

10.30-10.45 The potential of cannabinoid-based therapies in cardiovascular disorder  
*Dr Saoirse O'Sullivan, University of Nottingham, UK*

- 10.45-11.15      Cannabinoids and hypertension  
*Dr Barbara Malinowska, Medical University of Białystok, Poland*
- 11.15 – 11.30      Oral communication – OC005  
Cannabinoid receptor GPR55 deficiency impacts on structural and functional remodelling post myocardial infarction in mice  
*Dr Sarah-Lena Puhl, Ludwig Maximilian University of Munich, Germany*
- 11.30-11.45      Oral communication – OC006  
Cannabidiol is more effective for stroke-induced brain damage in newborn than in adult rats  
*Mr Guillermo Pagés, NEURO-INA-IN, Hospital Clínico San Carlos-IdISSC, Spain*
- 11.45-12.00      Oral communication – OC007  
Effect of Phytocannabinoids in the Modulation of Platelet Function, Thrombosis and Haemostasis  
*Mrs Eman Alzahrani, University of Reading, UK*

**Session 4: Hot topics in cannabinoid research-breakout sessions**

Chairs: *Professor Steve Alexander, University of Nottingham, UK and Professor Michelle Glass, University of Auckland, New Zealand*

- 12.00 – 12.15      Oral communication – OC008  
Allosteric modulation of cannabinoid 1 receptor as a therapeutic strategy for ocular surface disease  
*Professor Melanie Kelly, Dalhousie University, Canada*
- 12.15 – 12.30      Oral communication – OC009  
Activity-based protein profiling reveals off-target proteins of the FAAH inhibitor BIA 10-2474  
*Mrs Annelot van Esbroeck, Leiden Institute of Chemistry, Leiden University, The Netherlands*
- 12.30 – 12.45      Oral communication – OC010  
AM630, a CB2 cannabinoid receptor antagonist, inhibits proliferation of human U87 glioblastoma cells by targeting the mitochondrial unfolded protein response  
*Ms Angeliki Nikoloudakou, University of Roehampton, UK*
- 12.45-14.00      Lunch and poster presentation

## **Session 5: Cannabinoids and psychiatric disorders**

Chair: *Professor Colin Davidson, UCLAN, UK*

- 14.00-14.30      Effect of synthetic cannabinoids on the dopamine system  
*Professor Colin Davidson, UCLAN, UK*
- 14.30-15.00      Synthetic cannabis use: Views from the clinical front line  
*Dr Owen Bowden Jones, ACMD, UK*
- 15.00-15.15      Oral communication – OC011  
Possible contribution of Cannabinoid CB1 receptors as a  
pharmacotherapy for clozapine-induced weight gain in rat model  
of schizophrenia  
*Dr Farhat Batool, University of Karachi Pakistan, Pakistan*
- 15.15-15.30      Oral communication – OC012  
Effect of increasing doses of anandamide in the anterior and  
dorsomedial hypothalamus on panic-like behavior  
*Mr Tayllon dos Anjos-Garcia, University of São Paulo, Brazil*
- 15.30-16.00      Refreshment break

## **Session 6: Non-CB1/CB2 cannabinoid receptor-related targets**

Chairs: *Professor David Baker, Queen Mary University of London, UK and  
Professor Gary Stephens, University of Reading, UK*

- 16.00-16.30      CBD in epilepsy  
*Dr Ben Whalley, University of Reading, UK*
- 16.30-17.00      GPR55 receptors  
*Dr Michael Bazelot, GW Pharmaceuticals, UK*
- 17.00-17.30      GPR55 receptors  
*Dr Andrew Irving, University College Dublin, Ireland*
- 17.30-17.45      Oral communication – OC013  
Neuroprotection in an experimental model of multiple sclerosis  
via opening of big conductance, calcium-activated potassium  
channels  
*Professor David Baker, Queen Mary University of London, UK*
- 19.00-22.00      Conference dinner

### **DAY 3: SATURDAY 2 SEPTEMBER 2017**

8.30 – 9.00 Registration and refreshments

#### **Session 7: Pain modulation by the endocannabinoid system**

Chair: *Professor David Finn, National University of Ireland, Ireland*

- 9.00-9.30 Bone and joint problems arising from lack of repair mechanisms: can cannabinoids help?  
*Dr Katarzyna Starowicz, Institute of Pharmacology, Polish Academy of Sciences, Poland*
- 9.30-10.00 Modulation of pain by negative affective state: role of the endocannabinoid system  
*Professor David Finn, National University of Ireland, Ireland*
- 10.00-10.15 Oral communication – OC014  
Endocannabinoid modulation of TLR3-induced neuroinflammation and behavioural alterations in rats  
*Dr Michelle Roche, National University of Ireland, Ireland*
- 10.15-10.30 Oral communication – OC015  
Molecular foundations of OMDM198, dual-target FAAH inhibitor and TRPV1 antagonist, analgesic potential: role of TRPV1 upregulation and sensitization in osteoarthritis  
*Mr Jakub Mlost, Institute of Pharmacology PAS, Poland*
- 10.30-11.00 Refreshment break

#### **Session 8: Cannabinoids and gastrointestinal function**

Chair: *Dr Karen Wright, Lancaster University, UK*

- 11.00-11.30 Functional selectivity at the barrier, good or bad?  
*Dr Karen Wright, Lancaster University, UK*
- 11.30-12.00 N-acylethanolamines and monoacylglycerol in the intestine  
*Professor Haral Hansen, University of Copenhagen, Denmark*
- 12.00-12.15 Oral communication – OC016  
The anti-inflammatory effects of palmitoylethanolamide and cannabidiol in the human colon are mediated by PPAR $\alpha$ , CB2 and TRPV1  
*Dr Daniel Couch, University of Nottingham, UK*

12.15-12.30 Oral communication – OC017  
Anti-inflammatory properties of PGD<sub>2</sub>-G in a murine model of colitis  
*Dr Mireille Alhouayek, The Université Catholique de Louvain, Belgium*

12.30-13.30 Lunch

### **Session 9: Anti-tumoral actions of cannabinoids**

Chair: *Dr Guillermo Velasco, Universidad Complutense, Spain*

13.30-14.00 Towards the utilization of cannabinoids as anticancer agents in Gliomas  
*Dr Guillermo Velasco, Universidad Complutense, Spain*

14.00-14.30 Anti-tumoral actions of cannabinoids  
*Professor Burkhard Hinz, Rostock University Medical Center, Rostock, Germany*

14.30-14.45 Oral communication – OC018  
Investigation of the selective cytotoxicity-induced by cannabidiol (CBD) in human ovarian carcinoma cells  
*Dr Farideh Javid, University of Huddersfield, UK*

14.45-15.00 Oral communication – OC019  
The effect of cannabidiol (CBD) in a zebrafish model of tuberous sclerosis complex (TSC)  
Ms Ines Serra, Reading University, UK

15.00-16.00 Keynote speaker: Endocannabinoids and stress: The good, bad and ugly  
*Professor Cecilia Hillard, Medical college of Wisconsin, USA*

16.00- 16.30 Prizes and closing remarks