8th 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

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-Porras, 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 PPARα, CB2 and TRPV1
Dr Daniel Couch, University of Nottingham, UK
12.15-12.30 Oral communication – OC017
Anit-inflammatory properties of PGD2-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