

Conference Programme Day 1

08:00 – 09:00	Registration	
08:50 – 09:00	Welcome Addresses	
Scientific Session 1: Cell Survival and Cell Death Responses in Neurons		
Chair: J. Prehn, R. Simon		O'Flanagan Lecture Theatre
09:00 – 09:30	V. Dawson School of Medicine, The Johns Hopkins University Baltimore, USA <i>PARP activation and AIF release as mediators of parthanatos and neuronal injury</i>	
09:30 – 10:00	M. Deshmukh School of Medicine, University of North Carolina at Chapel Hill, USA <i>Caspase activation in neurons and how to escape it</i>	
10:00 – 10:15	L. Carleton Biochemistry, National University Ireland - Galway, IE <i>Selected Talk: Investigation into the mechanism of Nerve Growth Factor-induced turnover of active caspase-3 in PC12 cells</i>	
10:15 – 10:45	D. Rubinsztein Cambridge Institute for Medical Research, University of Cambridge, UK <i>Autophagy and Neurodegeneration</i>	
10:45 – 11:00	Coffee Break	
Scientific Session 2: Transcriptional Stress Responses and Neuronal Injury		
Chair: C. Culmsee, A. Behan		O'Flanagan Lecture Theatre
11:00 – 11:30	G. Hardingham Centre for Integrative Physiology, University of Edinburgh, UK <i>Transcriptional control of intrinsic neuronal antioxidant enzyme systems by electrical activity</i>	
11:30 - 12:00	C. Taylor School of Medicine & Medical Science, University College Dublin, IE <i>Into thin air: Regulation of inflammatory gene expression by hypoxia</i>	
12:00 - 12:30	R. Ratan Burke-Cornell Medical Research Institute, Cornell University New York, USA <i>Harnessing hypoxic adaptation to prevent, treat and repair neurological disorders</i>	
12:30 - 12:45	W. Paschen Dept. of Anesthesiology, Duke University Medical Center, North Carolina, USA <i>Selected Talk: SUMO transgenic animals to uncover the role of SUMO conjugation in cerebral ischemia</i>	
12:45 – 15:00	Lunch & Poster Viewing	Exam Hall
Scientific Session 3: Non-Cell Autonomous Pathways and Neuroinflammation		
Chair: E. Mandelkow		O'Flanagan Lecture Theatre
15:00 – 15:30	B. Zlokovic Keck School of Medicine, University of Southern California, USA <i>Does vascular dysfunction lead to neurodegeneration?</i>	
15:30 – 15:50	M. Fuhrmann German Center for Neurodegenerative Diseases DZNE, Bonn, GER <i>In vivo two-photon imaging of microglia activation and neuronal dysfunction in AD mice</i>	
15:50 – 16:10	M. Lynch Institute of Neuroscience, Trinity College Dublin, IE <i>Microglia activation and blood brain barrier permeability in the ageing brain</i>	
16:10 – 16:25	D. Loane School of Medicine, University of Maryland, Baltimore, USA <i>Selected Talk: Phenotypic heterogeneity and imbalance in classical and alternative microglia/macrophage activation states in the aged brain after traumatic brain injury</i>	
16:25 - 16.45	Coffee Break	
Workshop 1: Recent Developments and Application of Oxygen and Bioenergetics Sensors		
Chair: E. Jonas		Houston Lecture Theatre
17:00 – 17:20	D. Papkovsky Laboratory of Biophysics and Bioanalysis, University College Cork & Luxcel Biosciences, IE <i>Novel nanosensors for monitoring cellular oxygen</i>	
17:20 – 17:40	H. Duessmann Dept. of Physiology and Medical Physics, Royal College of Surgeons in Ireland, IE <i>Single cell detection of glucose metabolism</i>	
17:45 – 18:45	OXY-SENSE Consortium Meeting with SAB (private)	Robert Smith Room
19:30 – 22:00	Conference Dinner	College Hall

Conference Programme, Day 2

08:00 – 09:00 Registration

Scientific Session 4: Bioenergetics, Mitochondria and Intracellular Transport

Chair: M. Deshmukh, S. Kilbride Houston Lecture Theatre

09:00 – 09:25	J. Prehn	Dept. of Physiology and Medical Physics, Royal College of Surgeons in Ireland, IE	<i>Role of the energy sensor AMPK and Bcl-2 family proteins in the control of neuronal survival</i>
09:25 – 09:55	E. Jonas	Internal Medicine, Yale University, USA	<i>A Bcl-xL sensitive ATP synthase leak conductance comprises the mitochondrial permeability transition pore</i>
09:55 – 10:15	T. Dawson	School of Medicine, The Johns Hopkins University Baltimore, USA	<i>Transcriptional control of neurodegeneration in parkinsons disease by PGC1a and Znf746</i>
10:15 – 10:45	E. Mandelkow	German Center for Neurodegenerative Diseases DZNE, Bonn, GER	<i>Diffusion barrier for Tau at axon initial segment and breakdown in neurodegeneration</i>
10:45 – 11:00	C. Culmsee	Biochemical-Pharmacological Center Marburg, Philipps-University Marburg, GER	<i>Selected Talk: Role of Bid and mitochondrial fission in neuronal injury</i>
11:00 – 11:30	Coffee break		

Workshop 2: Bench-to-Bedside and Therapeutic Approaches

Chair: G. Hardingham, C. Concannon Cheyne Lecture Theatre

11:30 – 11:45	N. Terpolilli	Ludwig-Maximilians University, Munich, GER	<i>Nitric oxide inhalation for the treatment of ischemic stroke</i>
11:45 – 12:00	C. Long-Smith	BioSciences Institute, University College Cork, IE	<i>Selected Talk: Alterations in localisation and distribution of insulin receptor in mouse models of Alzheimer's disease: the diabetes drug liraglutide as a potential therapeutic</i>
12:00 – 12:15	A. Behan	Dept. of Physiology and Medical Physics, Royal College of Surgeons in Ireland, IE	<i>Selected Talk: Acid Sensing Ion Channels (ASICs) contribute to motoneuron degeneration in an animal model of amyotrophic lateral sclerosis</i>
12:15 – 12:30	A. Dolga	Philipps-University Marburg, GER	<i>Selected Talk: Novel small conductance SK2/KCa2.2 channels in mitochondria prevent glutamate-induced mitochondrial dysfunction</i>

Workshop 3: Imaging and Systems Biology Approaches

Chair: B. Kavsek Houston Lecture Theatre

11:30 – 11:50	H. Huber	Centre for Systems Medicine, Royal College of Surgeons in Ireland, IE	<i>Computational Modelling of Bioenergetics</i>
11:50 – 12:10	B. Laenger	Bio Sensors, Research & Technology Center, CT, Siemens, AT	<i>Process Modeling at Siemens– From Systems Biology to Pharma</i>
Data Blitz			
Chair: H. Huber Houston Lecture Theatre			
12:10 – 12:25	W. Ottowitz	Cushing Neuroscience Institute, North Shore University Hospital, USA	<i>Selected Talk: High Stress Cortisol Increases Functional Connectivity Between the Amygdala and Hippocampus: An fMRI Study</i>
12:25 – 12:40	N. Roehner	Neuroscience Center, Goethe University Hospital, GER	<i>Selected Talk: Neuroprotection by soluble APP requires expression of holo-APP, but not APLP1 and APLP2</i>

College Hall

12:40 – 14:00 Lunch and Poster Viewing

Scientific Session 5: ER Stress and Translational Control of Stress Responses

Chair: V. Dawson, W. Paschen Houston Lecture Theatre

14:00 – 14:30	G. Mallucci	Medical Research Council - Toxicology Unit, Leicester, UK	<i>Proteostasis and Neurodegeneration</i>
14:30 – 14:45	W. Scheper	Academic Medical Center, University of Amsterdam, NL	<i>Selected Talk: Endoplasmic Reticulum Stress and Tau Phosphorylation in Alzheimer's Disease</i>
14:45 – 15:05	D. Henshall	Centre for the Study of Neurological Disorders, Royal College of Surgeons in Ireland, IE	<i>CHOP regulates the p53-MDM2 axis in brain and is required for neuronal survival after seizures</i>
15:05 – 15:35	M. Meffert	School of Medicine, The Johns Hopkins University Baltimore, USA	<i>miRNA-mediated repression controls target specificity in neuronal protein synthesis</i>
15:35 – 15:50	N. Golenhofen	Institute of Anatomy and Cell Biology, University of Ulm, GER	<i>Selected Talk: Phosphorylation-dependent recruitment of small heat shock proteins HspB1/Hsp25 and HspB5/alphaB-crystallin to synapses</i>
15:50 – 16:15	Coffee break		

Scientific Session 6: Stress Granule Formation and RNA Metabolism

Chair: M. Meffert Houston Lecture Theatre

16:15 – 16:45	B. Wolozin	School of Medicine, Boston University, USA	<i>Stress granules in neurodegenerative disorders</i>
16:45 – 17:00	E. Holohan	Institute of Neuroscience, Trinity College Dublin, IE	<i>Selected Talk: Drosophila Ataxin-2 regulates the formation of mRNP particles, functions in the miRNA pathway and is required in olfactory synapses for encoding long term memory</i>
17:00 – 17:30	J. Ule	Medical Research Council - Laboratory of Molecular Biology, Cambridge, UK	<i>iCLIP analysis of RNA binding proteins implicated in the pathophysiology of neurodegenerative disorders</i>
17:30 – 17:45	Poster Prize Giving and Closing Remarks		