2018 SINAPSE Annual Scientific Meeting

Monday 25 June 2018 RCSEd Quincentenary Building, Edinburgh

09.30	Registration and Coffee					
10.00	Welcome	Prof Edwin van Beek, University of Edinburgh				
	Session 1		•	J		
10.05	10 Years of SINAPSE: The Beginning Prof Joanna Wardlaw, University of Edinburgh					
10.15	Synthesis of LW223: A Novel Fluorine-Labelled In	naging	Mr Tim Morgan,	Proffered		
	Agent for the Translocator Protein (TSPO)		University of Glasgow			
10.25	Distance-weighted fuzzy C-means for Automatic L	Lung	Dr Surajit Ray,	Proffered		
	Tumor Segmentation on PET Images	University of Glasgow				
10.35	Imaging and Pulmonary Hypertension: Ready	Prof Davi	d Kiely, Sheffield	Keynote		
			ry Vascular Disease Unit			
11.20	Morning Tea Break					
	Session 2					
11.50	Topological organisation of cortical thickness and surface area networks in AD and behavioural variant frontotemporal dementia		Dr Vesna Vuksanovic,	Proffered		
			University of Aberdeen			
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12.00	Multimodal retinal neurovascular imaging shows of	clinical	Dr James Cameron,	Proffered		
	utility in the personalised disease stratification of multiple		University of Edinburgh			
	sclerosis					
12.10	10 Years of SINAPSE: The Transition	Prof Dave	of Dave Wyper, University of Glasgow			
12.20	Arterial Spin Labeling MRI – technical	Prof Mari	Prof Marion Smits, Erasmus Ke			
	considerations and clinical implementation	University Medical Center				
13.05	Lunch including exhibition and networking			•		
	Session 3 [Parallel sessions]					
	TOPIC 1 – Preclinical Imaging		TOPIC 2 – Clinical Imagin	g		
13.50	Invited speaker: Dr Carmel Moran, U. Edinburgh	Invited speaker: Prof Keith Muir, U. Glasgow				
14.20	Characterising the Effects of Combined Medetomi-	High-resolution MRI Imaging Of Bone-Muscle-Fat In				
	dine and Isoflurane Anaesthesia on Neurovascular	Glucocorticoid Treated Boys With Duchenne				
	Coupling – Mr Robert Morgan, U. Glasgow	Muscular Dystrophy - Dr Shuko Joseph, U. Glasgow				
14.30	Stacked In-plane Histology for Quantitative MRI	A comparison of cerebrovascular reactivity at 1.5 an				
	Assessment: Application to An Infiltrative Brain	3T in cerebral small vessel disease patier		ents – Dr		
14.40	Tumour Model – Mr Haitham Al-Mubarak, U. Glasgow A novel multi-transgenic vector for in vivo delivery of		Michael Stringer, U. Edinburgh Estimating age related tissue changes from T1w			
14.40	a radionuclide reporter gene to somatic cells – Dr	MRI: impact of segmentation and quality control				
	David Lewis, Beatson Institute for Cancer Research			•		
14.50	The use of Thiel-embalmed cadavers in	Fully Convolutional Network Ensembles for White				
	endovascular medical device development – Miss	Matter Hyperintensities Segmentation in MR Im		MR Images		
	Claire Fitton, U. Dundee	– Mr Hongwei Li, U. Dundee				
15.00	Afternoon Tea Break and poster session					
	Session 4					
16.00	Perfusion as a marker of brain tumour infiltration into healthy brain tissue: a quantitative MRI evaluation		Dr Antoine Vallatos,	Proffered		
			University of Edinburgh			
16.10	Identifying the needle tip position with needle tip pressure		Dr Anu Chandra,	Proffered		
	using microultrasound imaging during regional anaesthesia		University of Dundee			
16.20	Multi-centre standardization of preclinical PET/CT imaging		Ms Wendy McDougald,	Proffered		
			University of Edinburgh			
16.30	10 Years of SINAPSE: The Future Prof Alison Murray, University of Aberdeen					
16.40	Announcements and prizes					
16.50	Close					

Poster session (15.00-16.00)

Poster	Title	Presenting Author
No.		–
P1	Integrating Ultrasound Scanning into the Undergraduate Medical Curriculum	Linda Provan
P2	Developing a Methodology Protocol for Identifying the Superficial	Katie Turnbull
	Peroneal Nerve in Living Models Sonographically and Formalin-Fixed	
	Cadavers Morphologically: A Proof of Concept Study	
P3	Applications of Intraoperative Microultrasound to Improve Brain Tumour	Hannah Thomson
	Resection	
P4	Early delayed radiation-induced brain injury in mice: preliminary findings	Abdulrahman
	using magnetic resonance imaging	Hussain T. Qaisi
P5	Preclinical evaluation of PARP inhibitors in combination with	Maria Clara Liuzzi
	radiotherapy in glioblastoma	
P6	New Selective PET Imaging Agents for S1P5 Receptors	Tim Morgan
P7	Synthesis of Tau Binding Ligands for PET Imaging	Kotryna Baronaite
P8	Preclinical assessment of 18 F-LW223; a novel TSPO radiotracer for	Mark G. MacAskill
	the detection of inflammation using PET	
P9	Rapid and reproducible method for measurement of pharmacokinetics/	Agne Stadulyte
	pharmacodynamics (PK/PD) of drugs to support quantification of	
	Positron Emission Tomography (PET) receptor-occupancy data	
P10	Experimental set-up and optimization of automatic blood sampling	Carlos José Alcaide-
	protocols to improve quantification of PET data at the Edinburgh	Corral
	Preclinical Imaging Facility	
P11	Comparison of renal split function using 1.5T DCE-MRI and Nuclear	Sau Lee Chang
	Medicine	
P12	CT imaging of Functionalised Human Thiel embalmed cadavers – A	Helen Donald-
	pre-clinical tool	Simpson
P13	Calcium scoring in lower extremity peripheral arterial disease and	Awad Alzahrani
-	calcification impact on clinical outcomes	
P14	Impact of non-cardiac findings in patients undergoing CT coronary	Michelle C. Williams
	angiography	
P15	Evaluation of the Clinical Efficacy of Texture Analysis in Myocardial	Ping Tie
	Quantification	
P16	High Resolution Magnetic Resonance Imaging of the Skin	Stephen Gandy
P17	The impact of altering MRI equipment and scanning parameters on	Laura Young
	phantom signal intensity ratio measurements – possible implications for	J
	interpreting gadolinium signal changes within the brain	
P18	Comparison of Vessel Radius Depiction from Two Non-Contrast MRI	Conor MacDonald
	Sequences	
P19	First clinical brain images with fast field-cycling magnetic resonance	Mary Joan MacLeod
	imaging	
P20	Cohort Profile: STratifying Resilience And Depression Longitudinally	Tina Habota
_	(STRADL): A depression-focused investigation of Generation Scotland,	
	using detailed clinical, cognitive, and neuroimaging assessments	
P21	The TriBEKa Imaging platform: an infrastructure to enable large-scale	Samuel O. Danso
	data-driven dementia prevention research from midlife across	
	populations	
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P22	Multimodality Magnetic Resonance Imaging and novel image analysis	Maria del C. Valdés	
	methods in Future MS	Hernández	
P23	Exploratory Analysis of the Role of Brain Iron Deposition and	Maria del C. Valdés	
	Microbleeds in Cognition after a Non-Disabling Ischaemic Stroke	Hernández	
P24	The effect of changes in blood pressure and neuroimaging markers on cognition after stroke	Annick Wyss	
P25	Aspirin use, brain MRI hyperintensities, hippocampal atrophy and cognitive function in older adults: a cohort study	Mina Khezrian	
P26	Group differences in improvement, maintenance, or decline in Alzheimer's Disease Assessment Scale score based on longitudinal white matter hyperintensity lesion volume changes	Jennifer Waymont	
P27	Birth weight, metabolic syndrome and their associations with information processing speed in mid-life in the Generation Scotland subsample of the Aberdeen Children of the 1950s	Dorota Chapko	
P28	Cortical complexity predicts IQ	Anca-Larisa Sandu	
P29	Clinical Validation of Automatic Quantitative Measurements of Perivascular Spaces in Older Age MRI Brain Data	Lucia Ballerini	
P30	Automated laterality determination in Ultra-Widefield Scanning Laser Ophthalmoscopy	Peter Wakeford	
P31	Volume estimation of hippocampus and amygdala using Freesurfer	Naif Majrashi	
P32	Global and tract-based diffusion tensor correlates of executive function	Shaun Stone	
P33	A neuroimaging model of Rheumatoid Arthritis related fatigue: A machine learning study	Maria Goñi	
P34	Neural Similarity between Motor Imagery and concurrent Action Observation and Motor Imagery using Representational Similarity Analysis (RSA)	Salim Al-Wasity	
P35	Single ROI-fMRI Neurofeedback Treatment of Phantom Limb Pain	Salim Al-Wasity	
P36	Imaging subcortical pathways for extraocular muscle proprioception	Alexandra Mitchell	
P37	Neuroimaging to identify the mechanisms underlying the qualitative impression of stereopsis	Makoto Uji	
P38	"Me", "You" and "We" representations in joint action planning: Evidence from EEG studies		
P39	Sex Differences in the Effects of Residual Cannabis use on Emotional Expression Processing Lucy J. Troup		
P40	Sex differences in dissociable prefrontal correlates of cognitive and affective theory of mind: An fNIRS study	Marcin A. Radecki	