

Medical physics department: recent research activity

Recent conference talks and posters

- **LM Harris.** Proteoglycan concentration in intervertebral discs assessed by $^1\text{HMRS}$ at 1.5T. *ESMRMB Annual Congress, Vienna (2016)*
- **LM Harris.** Proteoglycan concentration in intervertebral discs assessed by $^1\text{HMRS}$ at 1.5T: Gender Differences. *ISMRM Annual Meeting, Singapore (2016)*
- **LM Harris.** A systematic comparison of volume measurement of neonatal cerebellum by MRI and ultrasound. *IPEM - Fetal, Neonatal and Paediatric MR Imaging: Techniques and Applications, Leeds (2016)*
- G La Torre, **P Begley**, M Jessop, N Abdula, **M Aplin**, N Tabet, R Saha, G Raczek, JC Fowler and S Dizdarevic. Balanced dopamine transporter loss on 123I-loflupane (DaTSCAN) may correlate to presence of hallucinations in patients with suspected Dementia with Lewy Bodies (DLB). *BNMS Annual Meeting, Birmingham (2016)*
- S Dizdarevic, **P Begley**, J Hunter, JC Fowler, N Tabet, R Abraham, MG Raczek and N Singh. The added benefit of quantification on PET ^{18}F -Florbetapir reporting; First experience in one Dementia Network. *BNMS Annual Meeting, Birmingham (2016)*
- S Dizdarevic, M Jessop, **P Begley**, **M Aplin**, A Hosur, A Nikapota and A Robinson. Two Years of Experience Of ^{223}Ra -Dichloride In Clinical Practice: Have We Started Treating At Earlier Stage Of Bone Disease? *Eur J Nucl Med Mol Imaging, 43(1) (2016)*
- I Melo, O Stakhiv, M Jessop, **P Begley**, S Dizdarevic and E Sousa. SPECT Myocardial Perfusion Imaging Quantification in Obese Subjects: Influence of Adipose Tissue in the Attenuation Correction with Computed Tomography Attenuation Maps. *Eur J Nucl Med Mol Imaging, 43 (1) (2016)*
- AS Reimao, N Singh, **M Aplin**, A Clarke, A Hosur, K Day and S Dizdarevic. A 'Blunted' Heart Rate Response (HRR%) to Regadenoson Stress An Adverse Prognostic Indicator For Future Cardiac Events In Patients With A 'Low Risk' Myocardial Perfusion Study (MPS)? *BNMS Annual Meeting, Brighton (2015)*
- A Matos, M, Jessop, AM Peters, N Singh, A Hosur, V Raman, G Keramida, **M Aplin** and S Dizdarevic. The Influence of Quantification on SPECT 123 Ioflupane Reporting. *BNMS Annual Meeting, Brighton (2015)*
- S Dizdarevic, **M Aplin**, L Atkinson, J Felton, C Degiovanni, E Derrick, E Topham. and AM Peters A. M. MIBI renal and hepatic handling is altered by ABC/MDR (multi drug

resistance) transporter proteins blockade

in patients receiving ciclosporin treatment. *BNMS Annual Meeting, Harrogate* (2014)

- S Dizdarevic, **M Aplin**, MJ Newport, N Ryan, S Holt, S Goubet, L Goldberg, KA Miles and AM Peters. Is ^{99m}Tc -MIBI methoxyisobutylisonitril (^{99m}Tc -MIBI) tissue elimination influenced by variation in the MDR1 gene? *BNMS Annual Meeting, Brighton* (2013)
- R Zammit, **M Aplin**, H Snelling, AM Peters, DC Costa and S Dizdarevic. Value of the first anterior planar frame of ^{123}I -DaTSCAN SPECT in uncooperative patients. *BNMS Annual Meeting, Harrogate* (2012)
- A Staker, N Goldsmith, **M Aplin**, A Vara, N Singh and S Dizdarevic. Two day rest-stress versus Two day stress-rest Myocardial Perfusion Imaging: Does protocol order affect reasons for study cancellation? *BNMS Annual Meeting, Harrogate* (2012)

Recent papers

- **A Dunford**, G Keramida, M Aplin and AM Peters. Regional heterogeneity of hepatic glucose utilization correlates positively with regional distribution of hepatic fat, *In Print* (2016)
- G Keramida, **A Dunford**, M Siddique, GJ Cook and AM Peters, Relationships of body habitus and SUV indices with signal-to-noise ratio of hepatic ^{18}F -FDG PET, *European Journal of Radiology* 85, 1012–1015 (2016)
- GS Payne, **LM Harris**, GS Cairns, C Messiou, NM DeSouza, A MacDonald, F Saran and MO Leach, Validating a robust double-quantum-filtered (1) H MRS lactate measurement method in high-grade brain tumours, *NMR in Biomedicine*, 29(10) (2016)
- S Dizdarevic, N Singh, S Nair, A de Belder, N Ryan, **M Aplin**, A Vara, R James, VR McCready and AM Peters. Early gated SPECT adenosine myocardial perfusion imaging may influence the therapeutic management of patients with coronary artery disease. *Nucl Med Comms.*, 36(4), 386-91 (2015)
- G Keramida, **M Lee**, **M Aplin**, N Singh and AM Peters. Images in vascular medicine. Reproducible lymph-to-blood transfer of ^{99m}Tc -nanocolloid in a patient with abnormal lymphatic function. *Vasc Med.* 20(6), 569-70 (2015)
- S Dizdarevic, **M Aplin**, MJ Newport, N Ryan, S Holt, S Goubet, L Goldberg, KA Miles and AM Peters. Old tracer for a new purpose: potential role for ^{99m}Tc -2-Methoxyisobutylisonitrile (^{99m}Tc -MIBI) in renal transplant care. *Nucl Med Comms.*, 35(10), 1058-66 (2014)
- **LM Harris**, N Tunariu, C Messiou, J Hughes, T Wallace, NM DeSouza, MO Leach and GS Payne. Evaluation of Lactate Detection Using Selective Multiple Quantum Coherence in Phantoms and Brain Tumours, *NMR in Biomedicine*, 28(3) (2014)

Recent books

- IPEM Report 75 - The Design of Radiotherapy Treatment Room Facilities, **D. Prior** (Contributing Author), Expected 2017