

## Central Manchester University Hospitals Nuclear Medicine Centre

### Publications, presentations, prizes and theses

2016

#### Publications – papers

**Armstrong IS, Saint KJ, Tonge CM, Arumugam P.** *Evaluation of general-purpose collimators against high-resolution collimators with resolution recovery with a view to reducing radiation dose in myocardial perfusion SPECT: A preliminary phantom study.* J Nucl Cardiol 2016

Cole P, Chapple, C-L, Thurston J, Rogers A, Murry M, Riley P, **Bradley A**, Reay J. *Developing the radiation protection safety culture in the UK healthcare sector.* Invited article - Rad Magazine: Vol 42, No 492, May 2016

**Armstrong IS, Memmott MJ, Arumugam P and Tonge CM.** *The impact of prompt gamma compensation on myocardial blood flow measurements with rubidium-82 dynamic PET.* J Nucl Cardiol. Sept 2016 [Epub ahead of print]

**Armstrong IS, Hoffman SA.** *Activity concentration measurements using a conjugate gradient (Siemens xSPECT) reconstruction algorithm in SPECT/CT.* Nuc Med Commun 2016; **37**:1212-17

**Memmott MJ, James JM, Armstrong IS, Tout D, Ahmed FZ.** *The performance of quantitation methods in the evaluation of cardiac implantable electronic device (CIED) infection: A technical review.* J Nucl Cardiol 2016; **23**:1457-66

Ahmed F, **James JM, Memmott MJ and Arumugam P.** *Radionuclide imaging of cardiovascular infection.* Cardiology Clinics. 2016. 34(1). 149-65.

Thorpe CL, Lloyd JR, Law GTW, **Williams HA**, Atherton N, Julian H. Cruickshank JH and Morris K (2016). "Retention of <sup>99m</sup>Tc at Ultra-trace Levels in Flowing Column Experiments – Insights into Bioreduction and Biomineralization for Remediation at Nuclear Facilities". *Geomicrobiol* 33:199

#### Publications – books

Deborah Tout, John Dickson, **Andy Bradley.** *Basic principles of PET-CT Imaging, The Clinicians' Guide to Radionuclide Hybrid Imaging, PET/CT.* Series Editors Bomanji, Gnanasegaran, Fanti & Macapinlac. BNMS/Springer, 2016.

Chapter 6, PET/CT in Neuroendocrine Tumors, V Ambrosini & S Fanti

Chapter 5, PET/CT in Gynecological Cancers, T Barwick & A Rockall

Chapter 5, PET/CT in Oesophageal and Gastric Cancer, T A Szyszko.

## **Presentations – invited**

**Armstrong IS.** BNCS AGM. Birmingham, 4<sup>th</sup> May 2016. *Debunking myths in ionising radiation for MPI*

**Armstrong IS.** BNMS Annual Meeting. Birmingham, 17–19<sup>th</sup> April 2016. *Dos and don'ts of cardiac SPECT imaging*

## **Presentations – papers**

**Armstrong IS, Memmott MJ, Tonge CM, Arumugam P.** The impact of prompt gamma compensation on myocardial blood flow measurements with rubidium82 dynamic PET. *Eur J Nucl Med Mol Imaging* 2016; 43 (Suppl 1) S150 (OP497)

**Boloz A, Memmott MJ, Mutambo F, Brown G, Crook L, Davidson G, Tonge CM, Arumugam P and Ellis B.** (2016). Validation of caffeine measurements in blood for patients undergoing Rb-82 adenosine myocardial perfusion scintigraphy (MPS) studies. *Nuc Med Comms.* **37**(5):A35, p548.

**Armstrong IS and Memmott MJ.** (2016). *Evaluating image quality gains with TOF in cardiac imaging.* *Nuc Med Comms.* **37**(5):A40, p550.

**Nietmatallah I, Spencer A and Prescott M** (2016) *renography following renal transplant: experience from a specialist transplant centre.* *Nuc Med Comms.* **37**(5):A48, p553.

## **Presentations – posters**

**Armstrong IS, Memmott MJ.** *The evaluation of the spatial dependence of noise correlation structure in SPECT images with and without resolution modelling.* *Eur J Nucl Med Mol Imaging* 2016; 43 (Suppl 1) S500 (EP735)

**Armstrong IS, Saint KJ, Chilrá P, Bartley S, Tonge CM, Arumugam P.** *General purpose collimators with resolution recovery enable significant dose reductions while maintaining image quality in myocardial perfusion SPECT.* Annual European Association of Nuclear Medicine Congress, Barcelona, October 2016.

**Memmott MJ, Armstrong IS and Saint KJ.** *A novel two-sample approach for clinical SPECT noise estimation.* *Nuc Med Comms* **37**(5) P77, p564.

**Memmott MJ, Armstrong IS, Saint KJ and Muthu S.** *A-priori noise estimation for maintain VQ SPECT image quality.* *Nuc Med Comms* **37**(5) P78, p564.

## **Prizes**

**BNMS 2016**

### **3<sup>rd</sup> place Presentation**

**Nietmatallah I, Spender A and Prescott M** (2016) *renography following renal transplant: experience from a specialist transplant centre*. *Nuc Med Comms*. **37**(5):A48, p553.

### **1<sup>st</sup> Place Poster**

**Memmott MJ, Armstrong IS, Saint KJ and Muthu S**. *A-priori noise estimation for maintain VQ SPECT image quality*. *Nuc Med Comms* **37**(5) P77, p564.

### **3<sup>rd</sup> Place Poster**

**Memmott MJ, Armstrong IS and Saint KJ**. *A novel two-sample approach for clinical SPECT noise estimation*. *Nuc Med Comms* **37**(5) P77, p564.

### **Theses**

**Armstrong IS**. *Quantitative Accuracy of Iterative Reconstruction Algorithms in Positron Emission Tomography*. PhD thesis. University of Manchester.