

**12th Congress of the World Federation of Nuclear Medicine
and Biology**

20-24 April 2018
Melbourne Convention and Exhibition Centre

TRACK: Technologist

Saturday 21 April 2018

10:30-12:00	Technologist 1: Hybrid Imaging in a Multidisciplinary Team		
	Chair: Ms Kunthi Pathmaraj, Austin Health, Melbourne and Dr Peter Kench, University of Sydney, Australia		
10:30-10:50	PET/CT Hybrid Imaging in Oncology. Benefits for the Cancer Patient Learning Objectives- 1. understand the general principles of hybrid molecular imaging applications relating to the cancer patient 2. know some of the acquisition and reconstruction options available when performing hybrid imaging 3. have a better understanding of where the technologist can, or should, change hybrid CT parameters to improve quality and relevance. 4. know: who is responsible for optimising CT protocols? What is the composition of this multidisciplinary team?	David Binns, Peter MacCallum Cancer Centre, Melbourne, Australia	20 mins
10:50-11:10	Integrating PET/CT in Radiotherapy Planning Learning objectives 1. Understand the general principles of hybrid molecular imaging in radiotherapy planning 2. Be familiar with PET/CT and how it can be implemented in radiotherapy planning.	Ms Maureen Rolfo, Austin Health, Melbourne	20 mins
11:10-11:30	Cardiac CT- Techniques and Challenges. Learning objectives for this presentation will be: 1. Understand the dose implications of Cardiac CT in relation to other cardiac imaging modalities and techniques to reduce this. 2. Compare advantages and disadvantages of Cardiac CT for anatomical and pathological imaging to other imaging techniques. 3. List a brief history of cardiac imaging and discuss future direction and innovation in Cardiac CT.	Ms Hannah Lane, Austin Health, Melbourne, Australia	20 mins
11:30-12:00	Role of CT, PET,NM, and RTP - Illustrations with Case Studies; Panel Discussion	Maureen Rolfo, Hannah Lane, David Binns with Chairs	30 mins
1400-1530	Technologist 2: New Technologies and Applications in Nuclear Medicine		
	Chair: Prof. David Gilmore, Regis College, Weston, USA		
14:00-14:15	New Technologies and Applications in Nuclear Medicine: What's new in SPECT/CT learning Objectives 1. Understand the applications of whole-body and dynamic SPECT 2. Understand the enabling advances imaging technology and software.	Dr Peter Kench, University of Sydney, Australia	15 mins
14:15-14:30	The Old and New Artefacts of SPECT/CT Imaging Learning objectives: 1. Be able to recognise the most common artefacts in clinical SPECT/CT imaging; 2. Apply strategies to prevent or minimise SPECT/CT artefacts.	Dr Darin O'Keefe, Christchurch Hospital, Christchurch, New Zealand	15 mins
14:30-14:45	Current Applications in Renal Scintigraphy &GFR Evaluation The intended learning objectives are: 1. Understanding of current nuclear medicine renal imaging procedures a. Indications for procedures b. Imaging Techniques used . Planar imaging, SPECT/CT c. Current imaging recommendations 2. Have an understanding of quantitative renal procedure ie. GFRs a. Indications for procedures b. Measurement Techniques used . c. Current imaging recommendations 3. Have an understanding of radiopharmaceuticals used in renal imaging and quantitative applications a. Specific Radiopharmaceuticals used for different studies b. Advantageous Physical and Chemical characteristics 4. Awareness of new/emerging renal imaging procedures ie. PET scintigraphy 5 Awareness of potential Pitfalls in imaging and quantitative measures.	Ms Bridget Chappell, Austin Health, Melbourne, Australia	15mins
14:45-15:00	SPECT/CT in Lymphoscintigraphy Learning Objectives - A Brief History of Lymphoscintigraphy - Worldwide and in Australia Where we are at - current trends and applications Where are we heading - future technologies (Nuclear and beyond)	Dr Kevin London, The Children's Hospital at Westmead, Sydney, Australia	15 mins
15:00-15:15	New Applications for VQ Lung Imaging Learning Objectives • To understand the current role of V/Q imaging in clinical practice including suggested acquisition and processing protocols • Be aware of non-PE indications for V/Q imaging and a potential role for both clinical and research applications • Be familiar with quantitative V/Q SPECT/CT and how it can be implemented and interpreted.	Dr Elizabeth Bailey, Royal North Shore Hospital, Sydney, Australia	15mins
15:15-15:30	Panel Discussion	Kevin London, Darin O'Keefe, Elizabeth Bailey, Bridget Chappell	15 mins

Sunday 22 April 2018

10:30-12:00			
Technologist 3: New Technologies and Applications in PET			
Chair: Dr. Geoffrey Currie, Charles Sturt University, Wagga Wagga, Australia & ASNMT / JSNMT Member			
10:30-10:50	Innovation in PET/CT : New, Now and Next Objectives : 1/ describe impacts of developing technologies on standard PET/CT 2/ describe new technologies and future directions of PET/CT.	Mr Scott Evans, Westmead Hospital, Sydney, Australia	20 min
10:50-11:10	Paediatric PET/MRI Learning outcomes: 1. Understand and appreciate the potential advantages of PET/MRI for paediatric patients 2. Understand and appreciate the workflow considerations in paediatric PET/MRI 3. Understand and appreciate the teamwork required for provision of a paediatric PET/MRI service.	Mr Duncan Veysey, Royal Children's Hospital, Melbourne, Australia	20 mins
11:10-11:30	It's a NO-Brainer. "Why What and How to Produce Quality Neurological PET." Learning objectives: By the end of the session the attendee should understand: 1. Why we need higher-quality Neurological PET 2. What technical elements are key to produce a great Neuro PET study every-time. 3. How best to implement take-home changes to improve Brain PET	Mr Rob Williams, The University of Melbourne, Australia	20 mins
11:30-12:00	Advances in Detector Technology in Nuclear Medicine & Hybrid Imaging Learning Objectives : TBC	Dr Soma Somanesan, Singapore General Hospital, Singapore	30 mins
1400-1530			
Technologist 4: Quality Assurance and Accreditation			
Chair: Dr Elizabeth Bailey and Diana Piaz			
14:00-14:20	National Standards and Accreditation Learning Objectives: Framework and role of clinical governance Why is clinical governance required The increasing importance of Quality and Accreditation.	Dr Colin Baker, Austin Health, Melbourne Australia	20 mins
14:20-14:40	Quality Management Audits in Nuclear Medicine What, When, Why: and IAEA Approach. Learning objectives: 1. Identify the principles of Quality Management systems (QM) and Clinical Audits (CA) in Nuclear Medicine 2. Recognize the added value of implementing QM and CA to improve the quality of clinical practice.	Diana Piaz, International Atomic Energy Agency, Vienna, Austria	20 mins
14:40-15:00	Quality Assurance in Nuclear Medicine and PET, including Radionuclide Therapy The intended learning objectives: i) Understand the concept of Quality Assurance in diagnostic imaging and radionuclide therapy ii) Reflecting on the differences between Quality Management and Quality Assurance iii) Easy tips for practical and non onerous implementation of Quality Assurance in a NM/PET service.	Ms Kunthi Pathmaraj, Austin Health, Melbourne	20 mins
15:00-15:20	Quality Management in Nuclear Medicine and Molecular Imaging Learning objectives are: • What's Quality Management and its significance to the practise of Nuclear Medicine. • Introduction to the IAEA Quality Management in Nuclear Medicine or QUANUM process. • Critically reflect how the QUANUM process applies with examples and how it enhances a Nuclear Medicine department.	Dr Soma Somanesan, Singapore General Hospital, Singapore	20 mins
15:20-15:30	Mock Audit	Dr Soma Somanesan, Ms Kunthi Pathmaraj, Audience	10 mins

Monday 23 April 2018

10:30-12:00			
Technologist 5: Theranostics – pearls and pitfalls			
Chair: Ms Karren Fader and Mrs Julie Crouch			
10:30-10:55	What's New in Thyroid Therapy Learning objectives: 1. Brief overview of main points of new American thyroid Association guidelines 2. Update on risk factors for recurrence including BRAF 600E mutation 3. Options for dose minimisation	Dr Geoff Schembri, Royal North Shore Hospital & Univeristy of Sydney, Sydney, Australia	25 min
10:55-11:20	¹⁷⁷Lu/⁶⁸Ga -PSMA Theranostics Learning Objectives 1. understand the general principles of PSMA theranostics 2. appreciate methods of optimising Ga-PSMA PET/CT acquisitions 3. understand basic workflow considerations relating to the therapeutic administration of Lu-PSMA and subsequent post-therapy SPECT/CT scanning.	David Binns, Peter MacCallum Cancer Centre, Melbourne, Australia	25 mins
11:20-11:45	Peptide Receptor Radionuclide Therapy using [¹⁷⁷Lu]-Dota-SSR Learning Objectives: 1. To understand the role of [¹⁷⁷ Lu]-Dota-SSR in the treatment of Neuroendocrine tumours 2. Be familiar with current best practice protocols for the administration and monitoring of patients having [¹⁷⁷ Lu]-Dota-SSR 3. Have an understanding of the radiation dosimetry and potential side effects associated with PRRT 4. Have the skills and knowledge needed to setup a [¹⁷⁷ Lu]-Dota-SSR therapy program for the treatment of NET.	Dr Elizabeth Bailey, Royal North Shore Hospital , Sydney, Australia	25 mins
11:45-12:00	Panel Discussion / Question time	Dr Geoff Schembri, David Binns, Dr Elizabeth Bailey	15 mins
1400-1530			
Technologist 6: Art and science continuum - optimising product and service			
Chair: Prof David Gilmore and Karren Fader			
14:00-14:20	Educating Medical Imaging Technologists: Science v Art Learning Outcomes: 1. To understand the nexus of science and art in medical imaging 2. To understand the educational methods used to teach both science and art in medical radiation science.	Dr. Daphne James, The University of Newcastle, Australia	20 mins
14:20-14:40	Revolution of Science in Medical Radiation Science 1. Consider the pivotal scientific discoveries that have advanced medical imaging 2. Identify current scientific discoveries that have the potential revolutionise medical radiation science.	Dr Peter Kench, University of Sydney, Australia	20 mins
14:40-15:00	The Craft of Medical Radiation Science Learning Objectives: 1. Understand integration of art and science in our work function 2. Recognize the craft of our profession and value of craftsmanship to the quality of our outputs •Develop strategies to develop and implement mastery of our craft.	Dr Geoffrey Currie, Charles Sturt University, Wagga Wagga, Australia	20 mins
15:00-15:30	Panel discussion and delegate workshop around communication, cultural competence and emotional intelligence	Dr Daphne James, Dr Peter Kench, Dr Geoff Currie, Prof David Gilmore, Ms Karren Faber	30 mins

Tuesday 24 April 2018

10:30-12:00	Technologist 7: Advanced practice and career development		
	Chair: Dr Elizabeth Bailey and Dr Daphne James		
10:30-10:50	Advanced Practice: An International Perspective Objectives: The participant will be able to: 1. identify models of advanced practice. 2. recognize core competencies of advanced practice. 3. appreciate the impact of the role on patient and system outcomes	Ms Karren Fader, Dalhousie University, Halifax, Canada	20 min
10:50-11:10	Advanced Practice in Nuclear Medicine - A Practical Necessity or Unnecessary and Impractical? Learning objectives: 1. Understand the different scope of practice between a conventional nuclear medicine practitioner and an advanced practitioner (AP). • Identify the step required to achieve AP status in various jurisdictions. • Summarise the current status in Australia towards formalised AP programs.	Mr Peter Tually, Telemed Health Services, Australia	20 mins
11:10-11:30	A Paradigm Shift: Technologist Advanced Practice and Career Development - the European Perspective Educational Objectives 1. Be familiarised with the possible professionalisation paths for Nuclear Medicine Technologists 2. Get acquainted with a variety of career progression possibilities for Nuclear Medicine Technologists 3. Identify the possible tools for career progression 4. Understand the global trend on Technologist advanced practice	Mr Pedro Fragoso Costa, Carl von Ossietzky University, Oldenburg, Germany.	20 mins
11:30-12:00	Panel Discussion	All Speakers & Chairs and Erin Snay, Boston, USA	30 mins
1300-1430	Technologist 8: Internationalisation and globalisation in MRS: overcoming barriers to geographic and professional isolation		
20 min talks	Chair: Mr Peter Tually and Ms Kunthi Pathmaraj		
13:00-13:20	Globalisation Learning Objectives: 1. Understand the drivers for globalization and internationalization in higher education 2. Recognize the gamut of opportunities for globalization and internationalization	Dr. Geoffrey Currie, Charles Sturt University, Wagga Wagga, Australia	20 mins
13:20-13:40	Internationalization and Globalization's Impact on Nuclear Medicine Objectives: 1. Articulate the benefits of being a part of the globalization of nuclear medicine and molecular imaging. 2. Describe how to develop and implement standardization and practice standards within ones' own country. Develop a model for being an active member within the internationalization movement within nuclear medicine and molecular imaging.	Dr. David Gilmore, Regis College, Weston, USA	20 mins
13:40-14:00	Partnering Learning Objectives: 1. Develop strategies to identify partners and develop productive partnerships 2. Develop capacity to initiate partnering and recognize/overcome start-up barriers.	Dr. Geoffrey Currie, Charles Sturt University, Wagga Wagga, Australia	20 mins
14:00-14:30	Panel Discussion	Dr Geoff Currie, Dr David Gilmore	30 mins