

**12th Congress of the World Federation of Nuclear Medicine
and Biology**
20-24 April 2018
Melbourne Convention and Exhibition Centre

TRACK: Infection and Inflammation

Saturday 21 April 2018

10.30-12.00		Infection 1: Molecular Imaging in the Immunocompromised Patient	
		Chairs: Uday Bhonsle Prof Victoria Soroa	
10:30-10:50	Update on HIV: Prevention, Treatment and Cure Learning Objectives: 1. Provide attendees with the latest information on research and interventions to prevent HIV infection 2. Provide a summary of the latest developments in treatment of HIV with antiretroviral therapy 3. Describe the latest developments in the field of science seeking a way to cure HIV with a focus on clinical studies	Dr James McMahon, Department of Infectious Diseases, Alfred Hospital, Monash Health and Monash University, Melbourne, Australia	20 min
10:50-11:10	Tracking Virus Infection and Immune Responses in Vivo: From Macro to Microscopic Characterization Learning Objectives: 1) Tracking virus replication in real time. 2) Identification of functional HIV reservoirs 3) in vivo labeling for confocal microscopy	Prof. Francois Villinger, University of Louisiana at Lafayette, New Iberia USA	20 mins
11:10-11:30	Imaging Tuberculosis Learning Objectives: 1. Understand detection and assessment of lesion activity and characterizing TB granuloma 2. Distinguishing active from inactive disease 3. Identification of patterns of metabolic uptake in the lung parenchyma and thoracic nodes 4. Prediction of developing active TB from LTBI 5. Identification of the risk of developing active TB in patients with old healed TB lesions 6. Assessing patients after a clinical cure of pulmonary TB 7. Monitoring response to TB chemotherapy.	Prof. Mike Sathekge, University of Pretoria & Steve Biko Academic Hospital, South Africa	20 mins
11:30-11:50	Imaging Fungal Infections Learning points: 1. Diagnosis- 18F-FDG-PET/CT is able to detect infectious foci and determining best location for biopsy leading to the diagnosis invasive fungal infection (IFIs) at an early stage, potentially reducing the morbidity and mortality associated with delayed diagnosis 2. Staging- 18F-FDG-PET/CT allows accurate staging of IFIs often detecting previously unknown sites which are not visualized on other imaging modalities 3. Monitoring therapy- 18F-FDG-PET/CT may prompt a change in antifungal treatment strategy (changing antifungal drugs or suggesting surgical resection of lesion). It may also provide at an earlier stage when patient on antifungal therapy may be eligible for more aggressive treatments for their underlying disease such as intensive chemotherapy or hematopoietic stem cell transplantation.	Dr. Alfred Ankrah, National Centre for Radiotherapy and Nuclear Medicine, Korle Bu Hospital, Accra, Ghana	20 mins
11:50-12:00	Questions and Discussion		10 mins

Monday 23 April 2018

10:30-12:00		Infection 2: Cardio-Vascular Infection and Inflammation	
	Chairs: Dr Chris Palestro, Northwell Health, NY, USA Prof Mike Sathekge, University of Pretoria & Steve Biko Academic Hospital, South Africa		
10:30-10:50	Stem Cells: A Regenerative Pharmaceutical Learning objectives: To be confirmed	Uday Bhonsle	20 mins
10:50-11:10	Imaging of Atherosclerosis Learning objectives: 1) understand the pathomechanism of lesion at risk, 2) understand the cellular uptake mechanism, 3) understand the potential of PET-radiopharmaceuticals	Prof. Helmut Sinzinger, Medical University of Vienna, Vienna, Austria	20 mins
11:10-11:30	Imaging Vascular Graft Infection Intended Learning Objectives: 1. Identification of both SPECT and PET tracers used in vascular graft imaging and understanding the various advantages and limitations of these. 2. Pattern recognition in the interpretation of infected vs non-infected vascular grafts. 3. Understanding the role of Nuclear Medicine in the imaging of infected vascular grafts	Prof Dr Mariza Vorster, University of Pretoria Steve Biko Academic Hospital, South Africa	20 mins
11:30-11:50	Molecular Imaging of Cardiovascular Infections-Past, Present and Future Outlook Learning Objectives: 1: To gain knowledge on diagnostic imaging procedures that can be used in various cardiovascular infections 2: To recognize past, present and future imaging procedures used in cardiovascular infections 3: To be able to identify the correct molecular imaging procedure that should be used in specific cardiovascular infections	Prof. Helmut Sinzinger, Medical University of Vienna, Vienna, Austria	20 mins
11:50-12:00	Questions and Discussion		10 mins

Tuesday 24 April 2018

13:00-14:30		Infection 3: Musculoskeletal and Leukocyte Imaging	
	Chairs: Dr. Madhukar (Mathew) Thakur Prof Victoria Soroa		
13:00-13:20	WBC labeling: Pearls and Pitfalls Learning objectives of this lecture are as follows: 1. WBC radiolabeling; 2. Potential risks of blood cell radiolabeling procedures; 3. Current guidelines and regulations related to the preparation of radiopharmaceuticals and radiolabeled blood cells.	Dr. Kutlan Ozker Medical College of Wisconsin, USA	20 min
13:20-13:40	Molecular Imaging of Infection in the Prosthetic Joint At the end of this session attendees should be 1. Familiar with causes of prosthetic joint infection. 2. Knowledgeable about the various molecular imaging tests used for diagnosing prosthetic joint infection, including their interpretation and limitations.	Prof. Christopher Palestro, Northwell Health, NY, USA	20 mins
13:40-14:00	Molecular Imaging in Diabetic Patients with Infection Intended learning objectives: 1) Role of white blood cell scintigraphy in the diagnosis of diabetic foot infection. a) Utility of the use of late planar images and time decay corrected acquisition b) Utility of the use of SPECT-CT 2) Role of PET-CT in the diagnosis of diabetic foot infection	Dr Edel Noriega, Hospital General Universitario of Ciudad Real, Spain	20 mins
14:00-14:20	Which? Where & When to Select Radioantibiotics, Radiolabelled WBC or Radiolabelled Peptides for Infection / Inflammation. +B16 Learning Outcomes and Objectives 1) Revision of the radiolabelled compounds: radioantibiotics, labelled leucocytes, and radiolabelled peptides available in the country 2) Suggest possible utilization on availability of the region. 3) Conceptual knowledge on different mode of action of the radiotracers discussed, biodistribution, applying them, considering time of event, site and clinical situation, 4) estimate possibilities of use, depending on technical staff & reporting expertise, to implement adequate procedure. 5) Attendees should also take in account new instrumental capabilities of their Nuclear Medicine Departments and extend concepts to FDG-F18 PET/CT. 6) Learners with the concepts taught should be able to resolve the infection/ inflammation pathologies in the most efficient way for the patient and the medical system.	Prof Victoria Soroa, CDRossi, Buenos Aires, Argentina	20 mins
14:20-14:30	Questions and Discussion		10 mins