Mini Course 2
Technologist Committee
Friday, October 23, 10:00-10:50

Session Title
Advanced Practice in Hybrid Nuclear Medicine

Chairpersons
MarieClaire Attard (Groningen, Netherlands)

Programme
10:00 - 10:24 Luka Lezaic (Ljubljana, Slovenia): Clinical Applications of PET/CT
10:24 - 10:48 Walter Noordzij (Groningen, Netherlands): Hybrid Imaging in Nuclear Cardiology

Educational Objectives
The clinical applications of PET/CT
- Introduce the imaging modality of PET/CT
- Highlight some physical principles important for the technologist to know, PET, CT, and the radiopharmaceutical
- Illustrate whenever possible with clinical examples
- Describe any artefacts and pitfalls of PET/CT and what to look out for as a technologist
- Describe why CT is so important as an additional to a PET scan
- Describe briefly a good workflow within a hybrid imaging setting (eg more time allocated for patients who have to undergo CT before the next patient needs to be scanned)
- Describe some tracers in the pipeline combined with CT

Hybrid Imaging in Nuclear Cardiology
- Illustrate some cardiac anatomy
- Describe the radiopharmaceutical used and what the procedure involves
- Describe why hybrid imaging is so important especially in nuclear cardiology
- Illustrate and highlight why hybrid imaging adds to the prognosis and management of the patient
- Describe the processes involved when an incidental finding is seen or when a cardiac finding jeopardises the health of the patient at that moment
- Describe any artefacts and pitfalls of hybrid imaging in nuclear cardiology and what to look out for as a technologist
- Describe briefly other radiopharmaceuticals used in cardiac imaging as well as those in the pipeline

Summary
CT plays an important part in hybrid imaging, whether it being the low-dose CT used in the applications of PET or for nuclear cardiology. CT can be used for attenuation correction but can also be used as a diagnostic tool to aid the nuclear medicine physician make a report. The difference in radiation dose administered in the attenuation correction CT is much lower than that for a diagnostic CT. This presentation describes the importance of having the CT part in hybrid nuclear medicine.
Key Words
Computed Tomography, PET/CT, clinical applications, nuclear cardiology