SPEAKERS/INSTRUCTORS



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2017 RADIATION IN MEDICINE SYMPOSIUM & WORKSHOP

KING FAISAL SPECIALIST HOSPITAL &
RESEARCH CENTRE, RIYADH, SAUDI ARABIA
12 - 16 FEBRUARY 2017



QUALITY CONTROL OF

SPECT SYSTEMS



MONDAY-WEDNESDAY 13-15 FEBRUARY 2017 VENUE: POST-GRADUATE CENTRE

CHAIR: Mr. Refaat Al-Mazrou Email: Mazrou@kfshrc.edu.sa Tel. No.: 0112162919 ext. 49268

For more information, please contact

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PHYSICS TRACK

- 1. To educate the users with the new advances of the Gamma Cameras including SPECT and SPECT/CT systems.
- 2. To give overview of the different components of the available systems.
- 3. To provide information on state-of-the-art different clinical procedures including some image artifacts due to Radiopharmaceuticals and system malfunctions.
- 4. To explain and discuss the theory and practical side of the major Quality Control procedures of the gamma camera including the SPECT and SPECT/CT systems.
- 5. To demonstrate the important quality control testing methods on these systems.
- 6. To allow participants to learn phantoms and sources preparation
- 7. To show the methods of processing and analysis of the images.
- 8. To give an introductory to some clinical nuclear medicine protocols.
- 9. To show detailed description of Myocardial perfusion, Thyroid, Bone and Renal procedures.

TECHNOLOGIST TRACK

- 1. To educate the users with the new advances of the Gamma Cameras including SPECT and SPECT/CT systems.
- 2. To give overview of the different components of the available systems.
- 3. To provide information on state-of-the-art different clinical procedures including some image artifacts due to Radiopharmaceuticals and system malfunctions.
- 4. To explain and discuss the theory and practical side of the major Quality Control procedures of the gamma camera including the SPECT and SPECT/CT systems.
- 5. To demonstrate the important quality control testing methods on these systems.
- 6. To give an introductory to some clinical nuclear medicine protocols.
- 7. To show detailed description of Myocardial perfusion, Thyroid, Bone and Renal procedures.

PROGRAM LAYOUT

DAY 1. MONDAY, FEBRUARY 13, 2017

DAY 1, MONDAY, FEBRUARY 13, 2017			
Mins			
60	Registration		
SESSION I			
45	L1: Basics of Gamma Camera, SPECT and SPECT/CT Speaker: Dr. Salem Sassi		
30	L2: Introduction to Quality Control of Gamma Camera including SPECT/CT Speaker: Mr. Refaat AlMazrou		
30	L3: Quality Control of CT Scanners Speaker: Dr. Omer Demirkaya		
45	OPENING CEREMONY		
SESSION II			
30	L4: Quality Management and Safety in Nuclear Medicine Services Speaker: Dr. Meshari Al-Nuaimi		
30	L5: Optimization of Image Acquisition and Processing in SPECT and SPECT/CT systems Speaker: Richard Meades		
75	PRAYER & LUNCH BREAK		
SESSION III			
30	L6: Current State of the Art in SPECT/CT Speaker: Richard Meades		
30	L7: Image Artifacts in Gamma Camera, SPECT and SPECT/CT Speaker: Mr. Refaat AlMazrou		
30	L8: Dose Optimization in SPECT/CT (Image Gently, Image Wisely) Speaker: Dr. Salem Sassi		
45	L9: QC of Radiopharmaceuticals Speaker: Mrs. Noha Alsrear		
30	PRAYER & AFTERNOON BREAK		
SESSION IV			
30	L10: Clinical Indications of SPECT/CT Speaker: Dr. Mahmoud Tuli		
30	L11: Patient Dosimetry in SPECT/CT Speaker: Richard Meades		
	Mins 60 45 30 45 30 30 75 30 30 45 30 30 30 30 30 30 45		

DAY 2, 7	ΓUESD.	AY, FEBRUARY 14, 2017	
Time	Mins		
		SESSION V	
08:30 - 09:00	30	L12: Introduction to Clinical Nuclear Medicine Procedures Speaker: Dr. Ahmad Almuhaideb	
09:00 - 09:430	30	L13: Myocardial Perfusion Procedures Speaker: Mr. Abdulwahab Alharithi	
09:30 - 10:00	30	L14: Bone and Renal Scan Procedures Speaker: Ms. Sara Almanea	
10:00 - 10:15	15	PRAYER & MORNING BREAK	
SESSION VI			
10:15 - 10:45	30	L15: Thyroid Scan Procedures Speaker: Mr. Mohamed Onaizan	
10:45 - 11:15	30	L16: Description of the Energy Windowing, Intrinsic & Extrinsic Uniformities, Bar Phantom, Extrinsic Resolution, Sensitivity & Maximum Count Rate tests Speaker: Mr. Refaat AlMazrou	
11:15 - 12:00	45	L17: Description of Center of Rotation (COR), Total Performance (SPECT) Accuracy of Attenuation Correction, Accuracy of Image registration and Linearity of Conversion of CT-HU tests in SPECT/CT systems Speaker: Dr. Salem Sassi	
12:00 - 13:00	60	PRAYER & LUNCH BREAK	
		WORKSHOP	
13:00 - 17:00	240	Practical A: Technologists Track (Quality Control of Radiopharmaceuticals Labeling)	
		Practical B: Physics Track (Tests of Energy Windowing, Intrinsic & Extrinsic Uniformities, Bar Phantom, Extrinsic Resolution, Sensitivity & Maximum Count Rate	
DAY 3, WEDNESDAY, FEBRUARY 15, 2017			
Time	Mins		
		WORKSHOP	
08:30 - 13:30	240	Practical Session C: Physics Track (Tests of Center of Rotation (COR), Total Performance (SPECT), Accuracy of Attenuation Correction, Accuracy of Image registration and Linearity of Conversion of CT-HU in SPECT/CT systems Speaker:	