





## **INTERNATIONAL CONFERENCE ON RADIATION MEDICINE**

/irtual Event, Hosted by King Faisal Specialist Hospital & Research Centre, Riyadh, Saudi Arabia 12 - 16 RAJAB 1443 | 13 - 17 FEBRUARY 2022



# Diagnostic Imaging Physics Review Course

Saturday-Sunday, 12 - 13 February 2022

#### **Course Coordinators:**

Omar Noor, MSc Habib Alsaleh, PhD Maryam Alhashim, PhD

### **SPEAKERS**



Abdullah Abu Jamea, PhD Medical Physicist, KSU & King Khaled, University Hospita Rivadh, Saudi Arabia

FCCPM, P.Eng.

Physics, Cross Cancer Institute

Associate Professor, Department of

Oncology, University of Alberta

Edmonton, Alberta, Canada

Fahad Abdulkhaliq

Medical physicist,

Diagnostic Imaging King Abdulaziz Medical City



Abulrahman Alfuraih, PhD Prince Sattam Bin Abdulaziz University Alkhari, Saudi Arabia



Chief, Diagnostic Radiology Physics Director, Yale Diagnostic Medical Associate Professor, Dept. of Radiology and Biomedical Imaging, Yale
University School of Medicine/Yale New



Ahmed Masawi, MSc Biomedical Physics Dept. Kina Faisal Specialist Hospital



Eenas Omari, PhD Dept. of Radiation Oncology Medical College of Wisconsin



Milwaukee, Wisconsin, USA



Mohammad Hassan Kharita Director, Radiation Safety Hamad Medical Corporation



Bassem Elshahat, PhD.

DABR, MCCPM, MCCPM

Assistant Professor, OUWB school

of Medicine Regument Health

Royal Oak, Michigan

Adjunct Professor, Memorial

Habib Alsaleh, PhD Medical Physicist, Radiation Oncology Physics Section. Biomedical Physics Departmen King Faisal Specialist Hospital & Rivadh, Saudi Arabia

Omar Noor, MSc

Biomedical Physics Department King Faisal Specialist Hospital &

Riyadh, Saudi Arabia



Belal Moftah, PhD, FCCPM

Chairman ICRM2022 Chairman, Biomedical Physics

Department, King Faisal Specialist

Hospital & Research Centre

Rivadh, Saudi Arabia Adjunct Professor, McGill University,

Montreal, Canada

Konstantinos Chantziantoniou, MSc Consultant Medical Physicist Radiology PACS & IT Consultant Team lead, Imaging Support Team, Johns Hopkins Aramco Healthcare Radiology Imaging Department, Dhahran, Saudi Arabia



Timothy Szczykutowicz, PhD, DABR Departments of Radiology Medical Physics and BME University of Wisconsin Madison Madison, Wisconsin, USA



Walter Block, PhD Vice Chair, for Mentorship, Diversity and Strategic Collaborations Professor, MRI Imaging Biomedical Engineering, University of Wisconsin School of Medicine & Public Health, Madison, Wisconsin, USA



#### Diagnostic Imaging Physics Review Course

#### Saturday, February 12, 2022

SESSION I	Digital	Radiography	Physi
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15:30	BREAK	
14:50	Digital Radiography Annual Physics QC	Mohammed Kharita
14:10	Image Processing, Artifacts and Image Quality Assessment	Konstantinos Chantziantonio
13:40	Digital Detectors & AEC	Fahad Abdulkhaliq
13:00	Digital Radiography Imaging Chain Overview	Mahmoud Ahmed

#### **SESSION II: CT Physics** Moderator: Konstantinos Chantziantoniou

16:00	CT Physics: Principles and advances of CT	Adel Mustafa
16:40	CT Dosimetry	Adel Mustafa
17:20	CT ACR/ Annual Physics QC	Timothy Szczykutowicz
18:00	BREAK	

#### **SESSION III: Ultrasound** Moderator: Maryam Albashi

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18:30	Ultrasound Physics: Principles and Current Vendor Technologies	Eenas Omari	
19:00	Advance US Techniques	Abdulrahman Alfuraih	
9-30-20-00	LIS Applied Physics OC	Fenas Omari	

#### Sunday, February 13, 2022

#### **SESSION IV: Digital Mammography Physics** Moderator: Abdullah Aldossari

13:00	Mammography Physics: Principles & Current Vendor Technologies	Bassem Elshahat
13:40	Breast Screening: Contrast Enhanced & MRI/ US Mammography	Bassem Elshahat
14:10	Mammography Quality Control tests: Technologist and Physicists	Bassem Elshahat
14:50	ACR accreditation: Do's and Don'ts	Bassem Elshahat
15:30	BREAK	

#### **SESSION V: MRI Physics** Moderator: Habib Saleh

16:00	MRI Physics	Atiyah Yahya
16:40	MRI Image Formation	Walter Block
16:40	Pulse Sequences	Abdullah Abu Jamea
18:00	BREAK	

#### **SESSION VI: MRI Physics** Moderator: Abdullah Abu Jamea

18:30	MRI Artificats	Walter Block
19:00	MRI Annual Physics QC	Habib Saleh
19:30-20:00	MR Safety	Ahmed Masawi

