

International Atomic Energy Agency Department of Technical Cooperation And Nuclear Medicine and Diagnostic Imaging Section Division of Human Health

WS-RAS6091-EVT1801548

IAEA Regional Workshop on Understanding CT Scan Role in Hybrid Imaging (PET/CT and SPECT/CT)

October 1-5, 2018

Osaka University Graduate School of Medicine, Osaka, Japan

Local Course Director

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IAEA TECHNICAL OFFICER

Mr. PASCUAL Thomas NB

PROGRAM

Monday, 1 October 2018				
	Multimedia hall (CoMIT 1F)			
09:30-10:00	Registration			
10:00-11:00	Opening remarks Self-Introduction Pre-Course Evaluation	Pascual, Thomas (Technical Officer, IAEA) Prof. Yasufumi Kaneda (Dean, Osaka University Graduate School of Medicine) Prof. Tadashi Kimura (Director, Osaka University Hospital) Prof. Jun Hatazawa (Course Director)		
	SESSIO	N 1		
CHAIR: Dr. Tadashi Watabe Osaka University, Osaka, Japan				
11:00-11:50	ILO: 1. Review the concept and overview of hybrid imaging. 2. Understand the basic application and safety of hybrid imaging.		Prof. Jun Hatazawa (Osaka University)	
End of session 1				
11:50-13:10	Lunch Break			
SESSION 2 Chair: Dr. Hiroki Kato Osaka University, Osaka, Japan				
13:10-14:00	Review of the diagnostic CT: Lun ILO: 1. Review the diagnostic CT ima 2. Understand the proper manage imaging.	ging for lung.	Dr. Masahiro Yanagawa (Department of diagnostic radiology, Osaka University)	

14:00-14:50	Review of the diagnostic CT: Digestive system	Dr. Hiromitsu Onishi
		(Department of
	ILO:	diagnostic radiology,
	1. Principles of scanning protocol for abdominal CT.	Osaka University)
	2. Role of CT in evaluating digestive system disorders.	
14:50-15:10	Coffee Break	
15:10-16:00	Review of the diagnostic CT: Genitourinary system	Dr. Atsushi
	н О	Nakamoto
	ILO: 1. Review the diagnostic CT imaging for genitourinary	(Department of diagnostic radiology,
	system.	Osaka University)
	Understand the proper management of hybrid imaging.	
16:00-16:50	Recent update of diagnostic radiology	Prof. Yoshiyuki
		Watanabe
		(Department of
	 Understand the state of art in the diagnostic radiology. Discuss about the AI in the diagnostic radiology. 	diagnostic radiology, Osaka University)
	2. Discuss about the Ai in the diagnostic fadiology.	Osaka Omversity)
End of session 2		
17:00- Welcome Reception		
(Venue: Minerva, Second floor of Icho Kaikan)		

IAEA

Tuesday, 2 October 2018

Multimedia hall (CoMIT 1F)

SESSION 3

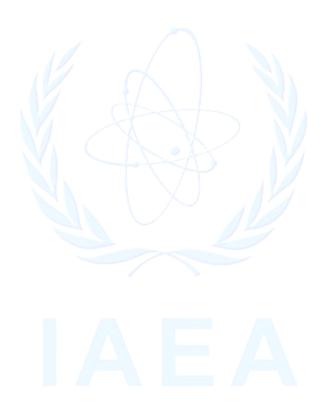
CH	AIR:
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Prof. Jun Hatazawa

Osaka University, Osaka, Japan

Osaka University, Osaka, Japan			
09:00-09:50	Review of the diagnostic CT: Head and Neck ILO: 1. Review the diagnostic CT imaging for head and neck. 2. Understand the proper management of hybrid imaging.	Dr. Hiroto Takahashi (Department of diagnostic radiology, Osaka University)	
09:50-10:40	ILO: 1. Review the diagnostic CT imaging for musculoskeletal area. 2. Understand the proper management of hybrid imaging.	Dr. Hisashi Tanaka (Department of diagnostic radiology, Osaka University)	
10:40-11:30	Review of the diagnostic CT: Mediastinum ILO: 3. Review the diagnostic CT imaging for mediastinum. Understand the proper management of hybrid imaging.	Prof. Noriyuki Tomiyama (Department of diagnostic radiology, Osaka University)	
	End of session 3		
11:30-12:20	Lunch Break		
Technical Visit			
12:20-17:00	Technical visit: SPring-8 Center (Harima, Hyogo Prefecture) SPring-8 is a large synchrotron radiation facility which depowerful synchrotron radiation currently available. The number derived from "Super Photon ring-8 GeV". SPring-8 was defrom academia, research institutes, governmental agencies	ame "SPring-8" is opened in 1997 to users	

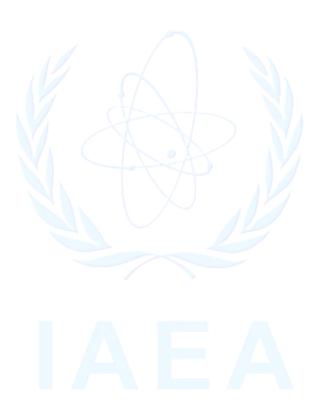




Wednesday, 3 October 2018

Multimedia hall (CoMIT 1F)				
	SESSION 4			
Chair: Prof. Jun Hataza Osaka Universit				
09:30-10:30	 Utility of CT in hybrid imaging: Neurology ILO: 1. Review the utility of CT imaging for attenuation correction and image coregistration. 2. Discuss the further possibility of hybrid imaging. 	Dr. Hiroki Kato (Osaka University, Osaka, Japan)		
10:30-11:00	Coffee Break			
11:00-12:00	 Utility of CT in hybrid imaging: Oncology ILO: 1. Review the utility of CT in the hybrid imaging about oncology. 2. Discuss the further possibility of hybrid imaging. 	Dr. Frederik Giesel (University Hospital Heidelberg, Heidelberg, Germany)		
	End of session 4			
12:00-13:30	Lunch Break			
	SESSION 5			
13:30-14:30	Overview of Dose Optimization of CT and DRLs ILO: 1. Recognize the basic concept of DRL and dose optimization. 2. Understand the proper estimation of radiation exposure in the patients.	Dr. Kosuke Matsubara (Kanazawa University, Kanazawa, Japan)		
14:30-15:00	Coffee Break			
15:00-16:30	Hands on session (1): utilization of hybrid imaging.	Dr. Tadashi Watabe (Osaka University,		

 Read the actual clinical cases of hybrid imaging and make a proper diagnosis. Discuss the utility of hybrid imaging and its value 	
for image interpretation in clinical practice. End of session 5	



Thursday, 4 October 2018 Multimedia hall (CoMIT 1F) **SESSION 6:** Chair: Dr. Tadashi Watabe Osaka University, Osaka, Japan 09:30-10:30 Clinical cases: utility of contrast enhancement in Dr. Kazuhiro Kitajima hybrid imaging (Hyogo Medical College, Hyogo, Japan) ILO: 1. Understand the utility of contrast enhancement in PET/CT. 2. Discuss the need for contrast enhancement in hybrid imaging. 10:30-11:00 Coffee Break Clinical cases: Limitation of PET/CT and utility of 11:00-12:00 Dr. Tetsuya PET/MR Tsujikawa (University of Fukui, Fukui, Japan) ILO: 1. Understand the utility of PET/MR compared to PET/CT. 2. Discuss the further possibility of PET/MR in hybrid imaging. END OF SESSION 6 12:00-13:30 Lunch Break **SESSION 7:** Chair: Dr. Frederik Giesel **University Hospital Heidelberg** Heidelberg, Germany 13:30-14:30 Hands on session (2): utilization of hybrid imaging. Dr. Keiko Matsunaga (Osaka University, Osaka, Japan) ILO:

1. Read the actual clinical cases of hybrid imaging and

14:30-15:00	make a proper diagnosis. 2. Discuss the utility of hybrid imaging and its value for image interpretation in clinical practice. Coffee Break	
11100 10100	Contro Brown	
15:00-15:50	ILO: 1. Understand the proper use of CT in the hybrid imaging (PET/CT and SPECT/CT). 2. Discuss about the image quality and dose optimization	Dr. Mitsuaki Tatsumi (Osaka University, Osaka, Japan)
15:50-16:40	Review of the diagnostic CT: Cardiovascular / Lymph region ILO: 1. Review the diagnostic CT imaging for cardiovascular / lymph region. 2. Understand the proper management of hybrid imaging.	Dr. Kentaro Takanami (Department of diagnostic radiology, Tohoku University)
END OF SESSION 7		



Friday, 5 October 2018

Multimedia hall (CoMIT 1F)

SESSION 8

CHAIR:

Dr. Tadashi Watabe

Osaka University, Osaka, Japan

09:30-10:20	Hybrid imaging and theragnostics	Dr. Frederik Giesel	
	ILO:	(University Hospital Heidelberg, Heidelberg,	
	1. Recognize the utility of hybrid imaging for the evaluation of treatment effects.	Germany)	
	2. Understand the further utilization of hybrid imaging.		
10:20-11:00	Future of hybrid imaging and nuclear medicine	Prof. Jun Hatazawa (Osaka University)	
End of Session 8			
11:00-12:00	Closing Remarks	Pascual, Thomas	
	Post course evaluation	(Technical Officer, IAEA) Prof. Jun Hatazawa (Course Director)	