



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

TN-RAS6083-1702276

**IAEA/RCA Regional Training Course on Theragnostics and
Dementias**

December 4-8, 2017

**Osaka University Graduate School of Medicine,
Osaka, Japan**

Local Course Director

HATAZAWA, Jun
Osaka University Graduate School of Medicine
Department of Nuclear Medicine and Tracer Kinetics
565-0871 Osaka
Japan
Tel: 81668793461
Fax: 81668793469

E-mail: hatazawa@tracer.med.osaka-u.ac.jp

IAEA TECHNICAL OFFICER

Mr. PASCUAL Thomas NB

PROGRAM

Monday 4 December 2017

AM: Cancer board hall (Oncology center 5F)

PM: Multimedia hall (CoMIT 1F)

10:00-10:30	Opening remarks Pre-Course Evaluation	Pascual, Thomas (Technical Officer, IAEA) Prof. Jun Hatazawa Course Director
SESSION 1		
Chair: Dr. Frederik Giesel University Hospital Heidelberg Heidelberg, Germany		
10:30-11:20	Introduction of theragnostics ILO: 1. Review the concept and overview of theragnostics. 2. Understand the basic principle of BNCT.	Prof. Jun Hatazawa Osaka University, Osaka, Japan
11:20-12:00	Basic principle of theragnostics ILO: 1. Recognize the significance of radiopharmaceuticals used in theragnostics. 2. Integrate the concepts discussed in relation to best practices of theragnostics.	Dr. Toru Shiga Hokkaido University, Sapporo, Japan
12:00-13:30	Lunch Break	
13:30-14:20	Theragnostics: Neuroendocrine tumors ILO: 1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for neuroendocrine tumors. 2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for neuroendocrine tumors.	Dr. Yuji Nakamoto, Kyoto University, Kyoto, Japan
End of session 1		

SESSION 2

Chair:
Prof. Jun Hatazawa
Osaka University, Osaka, Japan

14:30-15:20	Brain perfusion SPECT for dementia ILO: 1. Summarize the radiopharmaceuticals and typical findings of each dementia in brain perfusion imaging. 2. Recognize the typical pattern of dementia SPECT.	Dr. Hiroshi Matsuda National Center of Neurology and Psychiatry, Tokyo, Japan
15:20-15:40	Coffee Break	
15:40-16:20	Statistical Parametric Analysis in Nuclear Medicine ILO: 1. Discuss the utilization of statistical image analysis in dementia. 2. Recognize the limitations of statistical image analysis and importance of visual analysis.	Dr. Hiroki Kato Osaka University, Osaka, Japan
16:20-17:00	Case presentation of Brain perfusion SPECT ILO: 1. Discuss the key point of SPECT image interpretation in dementia. 2. Recognize the limitations of statistical image analysis and importance of visual analysis.	Prof. Eku Shimosegawa Osaka University, Osaka, Japan
End of session 2		
17:30- Welcome Reception (Venue: Minerva, Second floor of Ichō Kaikan)		

Tuesday, 5 December 2017

AM: Multimedia hall (CoMIT 1F)

PM: Cancer board hall (Oncology center 5F)

SESSION 3

09:00-12:00	<p>Parametric image analysis of brain images (including software practice):</p> <p>ILO:</p> <ol style="list-style-type: none">1. Describe appropriate ways of report writing in neurological cases with CT or MR interpretation.2. Discuss the role of Brain Imaging using clinical cases for image interpretation and its relevance in clinical practice.	<p>Dr. Tadashi Watabe Osaka University, Osaka, Japan</p> <p>Dr. Hiroki Kato Osaka University, Osaka, Japan</p>
--------------------	---	--

End of session 3

12:00-13:00	Lunch Break
--------------------	-------------

SESSION 4

Chair:
Dr. Pascual, Thomas (Technical Officer, IAEA)

13:00-13:30	<p>Theragnostics: Neuroendocrine tumors (2)</p> <p>ILO:</p> <ol style="list-style-type: none">1. Recognize the radiopharmaceuticals used in diagnosis and radionuclide therapy for neuroendocrine tumors.2. Learn from the clinical case presentation of DOTATOC imaging and Lu-Therapy.	<p>Dr. Frederik Giesel (University Hospital Heidelberg, Heidelberg, Germany)</p>
13:30-14:20	<p>Alzheimer's Disease</p> <p>ILO:</p> <ol style="list-style-type: none">3. Understand the pathophysiology of Alzheimer's disease.4. Discuss the role of nuclear medicine imaging in Alzheimer's diseases.	<p>Prof. Kazunari Ishii (Kinki University, Osaka, Japan)</p>

14:20-15:10	<p>PET and SPECT in Dementias (other than Alzheimer's disease)</p> <p>ILO:</p> <ol style="list-style-type: none"> 1. Understand the pathophysiology of dementias. 2. Discuss the role of nuclear medicine imaging in dementias. 	Dr. Takashi Kato (National Center for Geriatrics and Gerontology, Aichi, Japan)
15:10-15:30	Coffee Break	
15:30-16:10	<p>Case presentation of PET and SPECT about dementia (1)</p> <p>ILO:</p> <ol style="list-style-type: none"> 1. Recognize the utility of PET and SPECT probes in dementias. 2. Discuss the role of PET and SPECT imaging in dementias. 	Prof. Hiroshi Toyama (Fujita Health University, Aichi, Japan)
16:10-16:50	<p>Case presentation of PET and SPECT about dementia (2)</p> <p>ILO:</p> <ol style="list-style-type: none"> 1. Understand the utility of nuclear medicine in dementias. 2. Discuss the clinical relevance of nuclear medicine imaging in dementias. 	Prof. Toshimitsu Momose (International University of Health and Welfare, Chiba, Japan)
End of session 4		

Wednesday, 6 December 2017

AM: Multimedia hall (CoMIT 1F)

SESSION 5

09:00-12:00	<p>Parametric image analysis of brain images (including software practice):</p> <p>ILO:</p> <ol style="list-style-type: none">1. Perform the statistical image analysis and write report by yourself.2. Discuss the role of Brain Imaging using clinical cases for image interpretation and its relevance in clinical practice	<p>Dr. Hiroki Kato Osaka University, Osaka, Japan</p>
End of session 5		
12:00-14:00	Lunch Break	
14:00-17:00	Technical visit	

IAEA

Thursday 7 December 2017

AM: Multimedia hall (CoMIT 1F)

PM: Meeting room B,C (Icho Kaikan 3F)

SESSION 6:

Chair:

Prof. Jun Hatazawa

Osaka University, Osaka, Japan

9:30-10:10	Theragnostics: Brain tumor ILO: 1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for brain tumor. 2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for brain tumor.	Dr. Frederik Giesel (University Hospital Heidelberg, Heidelberg, Germany)
10:10-10:50	Theragnostics: gastrointestinal tumors ILO: 1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for gastrointestinal tumors. 2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for gastrointestinal tumors.	Prof. Ukihide Tateishi (Tokyo Medical and Dental University, Tokyo, Japan)
10:50-11:30	Theragnostics: lung cancer ILO: 1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for lung cancer. 2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for lung cancer.	Dr. Hirofumi Fujii (National cancer center, Tokyo, Japan)
END OF SESSION 6		
11:30-13:10	Lunch Break	

SESSION 7:

Chair:

Dr. Frederik Giesel

University Hospital Heidelberg

Heidelberg, Germany

13:10-14:00	<p>Theragnostics: thyroid</p> <p>ILO:</p> <ol style="list-style-type: none">1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for thyroid.2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for thyroid.	<p>Dr. Tatsuya Higashi (National Institute of Radiological Sciences, Chiba, Japan)</p>
14:00-14:40	<p>Theragnostics: liver tumors (TACE and SIRT)</p> <p>ILO:</p> <ol style="list-style-type: none">1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for liver tumors.2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for liver tumors.	<p>Dr. Keigo Osuga (Osaka University, Osaka, Japan)</p>
14:40-15:00	Coffee Break	
15:00-15:50	<p>Theragnostics: malignant lymphoma</p> <p>ILO:</p> <ol style="list-style-type: none">1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for malignant lymphoma.2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for malignant lymphoma.	<p>Dr. Mitsuaki Tatsumi (Osaka University, Osaka, Japan)</p>

END OF SESSION 7

Friday 8 December 2017

Multimedia hall (CoMIT 1F)

SESSION 8

CHAIR:

Dr. Tadashi Watabe

Osaka University, Osaka, Japan

09:00-09:40	Theragnostics: pediatric cancer ILO: 1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for pediatric cancer. 2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for pediatric cancer.	Dr. Keiichiro Yoshinaga (National Institute of Radiological Sciences, Chiba, Japan)
09:40-10:30	Theragnostics: Prostate cancer ILO: 1. Recognize the radiopharmaceuticals used in PET and SPECT imaging for prostate cancer. 2. Understand the preparation and clinical regimen of the therapy using radiopharmaceuticals for prostate cancer.	Dr. Frederik Giesel (University Hospital Heidelberg, Heidelberg, Germany)
10:30-11:10	Future application of theragnostics	Prof. Seigo Kinuya (Kanazawa University, Kanazawa, Japan)
End of Session 8		
11:10-12:00	Closing Remarks Post course evaluation	Pascual, Thomas (Technical Officer, IAEA) Prof. Jun Hatazawa Course Director

- Map -

