



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

WS-RAS6091-EVT1901109

**IAEA Regional Workshop on Nuclear Neurology SPECT
and PET applications in dementia, movement disorder, and
epilepsy**

July 29 – Aug 2, 2019

National Center of Neurology and Psychiatry, Tokyo, Japan

Local Course Director

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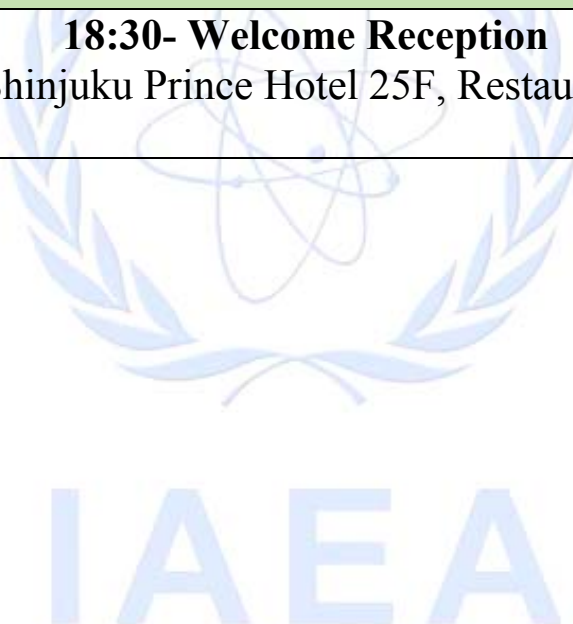
PROGRAM

Monday, 29 July 2019

Multimedia hall (Library and Conference Center 1F, NCNP)

09:30-9:50	Registration	
9:50-10:30	Opening remarks Self-Introduction Pre-Course Evaluation	Prof. Hidehiro Mizusawa (President, NCNP) Prof. Jun Hatazawa (President, Japanese Society of Nuclear Medicine, Asia Oceania Foundation of Nuclear Medicine and Biology) Prof. Hiroshi Matsuda (Course Director)
SESSION 1 (Radiopharmaceutical and Image Analysis) CHAIR: Prof. Hiroshi Matsuda National Center of Neurology and Psychiatry, Japan		
10:30-11:00	Overview of PET radiopharmaceutical ILO: 1. Recognize the significance of radiopharmaceuticals used in PET brain imaging. 2. Integrate the concepts of radiopharmaceuticals in brain imaging within the context of best practices of the nuclear technology on the brain imaging	Dr. Harumasa Takano (IBIC, NCNP)
11:00-12:00	Overview of SPECT radiopharmaceutical ILO: 1. Recognize the significance of radiopharmaceuticals used in SPECT/CT brain imaging. 2. Integrate the concepts of radiopharmaceuticals in brain imaging within the context of best practices of the nuclear technology on the brain imaging	Prof. Hiroshi Matsuda (IBIC,NCNP)
12:00-13:30	Lunch Break	
13:30-14:20	Statistical Image Analysis ILO: Review and understand basic concept of statistical parametric analysis used in SPECT and PET combined with CT or MR for Neurological Imaging using Nuclear Medicine techniques	Prof. Hiroshi Matsuda (IBIC,NCNP)

14:20-15:10	Dementia; SPECT diagnosis ILO: 1. Understand the pathophysiology of Alzheimer's disease. 2. Discuss the risk factors of Alzheimer's disease. 3. Discuss the role of SPECT nuclear medicine imaging in Alzheimer's disease	Prof. Hiroshi Matsuda (IBIC,NCNP)
15:10-16:00	SPECT measures 1. Understand the significance of SPECT measurements/ quantification factors used in PET brain imaging. 2. Integrate the concepts of radiopharmaceuticals in brain imaging within the context of best practices of the nuclear technology on the brain imaging	Prof. Hiroshi Matsuda (IBIC,NCNP)
End of SESSION 1		
18:30- Welcome Reception (Venue: Shinjuku Prince Hotel 25F, Restaurant FUGA)		



Tuesday, 30 July 2019

Multimedia hall (Library and Conference Center 1F, NCNP)

SESSION 2 (Epilepsy)

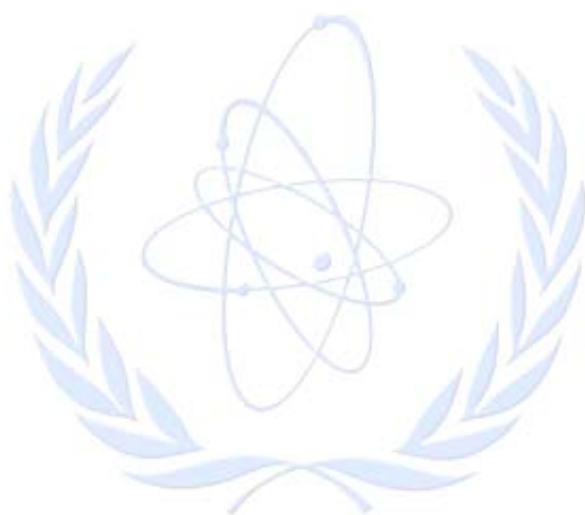
CHAIR:

Prof. Hiroshi Matsuda

National Center of Neurology and Psychiatry, Japan

09:00-10:00	Clinical diagnosis, Medical Treatment ILO: 1. Understand the pathophysiology of seizures 2. Discuss the risk factors 3. Discuss the role of nuclear medicine imaging in seizures	Dr. Eiji Nakagawa (Department of Child Neurology, NCNP)
10:00-11:00	Epileptic Surgery ILO: 1. Understand the importance of surgical management in seizures in the context of nuclear imaging	Dr. Masaki Iwasaki (Department of Neurosurgery, NCNP)
11:00-12:00	MRI diagnosis of epilepsy ILO: 1. Describe appropriate ways of report writing in neurological cases with MR interpretation 2. Discuss the role of Brain Imaging using actual cases for image interpretation and its relevance in clinical practice	Dr. Noriko Sato (Department of Radiology, NCNP)
12:00-13:30	Lunch Break	
13:30-15:00	FDG PET for detection of epileptic focus ILO: 1. Understand the pathophysiology of seizures 2. Discuss the risk factors 3. Discuss the role of nuclear medicine imaging in seizures	Dr. Emiko Morimoto (Department of Radiology, NCNP)
15:00-16:00	SISCOM for detection of epileptic focus ILO: 1. Understand the pathophysiology of seizures 2. Discuss the risk factors 3. Discuss the role of SISCOM in seizures	Dr. Yukio Kimura (Department of Radiology, NCNP)

End of SESSION 2



IAEA

Wednesday, 31 July 2019

Multimedia hall (Library and Conference Center 1F, NCNP)

SESSION 3 (Dementia)

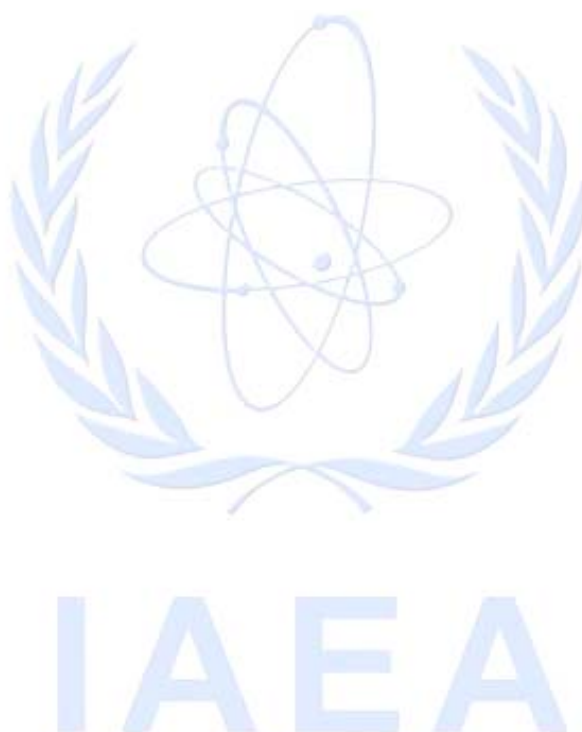
CHAIR:

Prof. Hiroshi Matsuda

National Center of Neurology and Psychiatry, Japan

09:00-10:00	Clinical Diagnosis of Alzheimer's disease ILO: 1. Understand the pathophysiology of Alzheimer's disease. 2. Discuss the risk factors of Alzheimer's disease. 3. Discuss the role of nuclear medicine imaging in Alzheimer's disease	Dr. Yuma Yokoi (PMDA, Department of Psychiatry, NCNP)
10:00-11:00	Clinical Diagnosis of Dementia with Lewy Bodies ILO: 1. Understand the pathophysiology of Dementia with Lewy Bodies. 2. Discuss the risk factors of Dementia with Lewy Bodies. 3. Discuss the role of nuclear medicine imaging in Dementia with Lewy Bodies	Dr. Tadashi Tsukamoto (Department of Neurology, NCNP)
11:00-12:00	MRI diagnosis of Dementia ILO: 1. Discuss the role of nuclear medicine imaging and MRI in Dementia	Dr. Noriko Sato (Department of Radiology, NCNP)
12:00-13:30	Lunch Break	
13:30-14:30	PET/MRI Molecular imaging ILO: 1. Discuss the role of PET/MRI nuclear medicine imaging in Alzheimer's disease	Prof. Hidehiko Okazawa (Biomedical Imaging Research Center, Fukui University)
14:30-15:30	Molecular Imaging ILO: 1. Understand the pathophysiology of Alzheimer's disease. 2. Discuss the risk factors of Alzheimer's disease. 3. Discuss the role of molecular imaging in Alzheimer's disease	Dr. Yoko Shigemoto (Department of Radiology, NCNP)

15:30-16:30	PET measures ILO: 1. Understand the significance of PET measurements/ quantification factors used in PET brain imaging. 2. Integrate the concepts of radiopharmaceuticals in brain imaging within the context of best practices of the nuclear technology on the brain imaging	Dr. Kyoji Okita (IBIC, NCNP)
End of session 3		
17:00- Excursion and Dinner (Venue: Tokyo Tower and Japanese Restaurant near Tokyo Tower)		



Thursday, 1 August 2019

Multimedia hall (Library and Conference Center 1F, NCNP)

SESSION 4 (Movement Disorder)

CHAIR:

Prof. Hiroshi Matsuda

National Center of Neurology and Psychiatry, Japan

09:00-10:00	Clinical diagnosis, Medical Treatment ILO: 1. Understand the pathophysiology of Movement disorders. 2. Discuss the utilization of nuclear medicine imaging modalities in the evaluation of movement disorders	Dr. Noriko Nishikawa (Department of Neurology, NCNP)
10:00-11:00	Deep Brain Stimulation ILO: 1. Discuss the utilization of Deep Brain Simulation in the evaluation of movement disorders	Dr. Yuiko Kimura (Department of Neurosurgery, NCNP)
11:00-12:00	MRI diagnosis of movement disorders ILO: 1. Discuss the utilization of MRI in the evaluation of movement disorders	Dr. Yukio Kimura (Department of Radiology, NCNP)
12:00-13:30	Lunch Break	
	Blood flow and Metabolism ILO: 1. Review the significance of Blood flow and metabolism in the management of movement disorders	Prof. Hiroshi Matsuda (IBIC,NCNP)
	Role of MIBG ILO: 1. Review the significance of MIBG in the management of movement disorders	Prof. Hiroshi Matsuda (IBIC,NCNP)
	Role of DaT SPECT ILO: 1. Review the significance of DAT SPECT in the management of movement disorders	Prof. Hiroshi Matsuda (IBIC,NCNP)

END OF SESSION 4

Friday, 2 August 2019

Multimedia hall (Library and Conference Center 1F, NCNP)

SESSION 5 (Neuropathology and Radiochemistry)

CHAIR:

Prof. Hiroshi Matsuda

National Center of Neurology and Psychiatry, Japan

09:00-10:00	Neuropathology of neurodegenerative diseases ILO: 1. Understand the pathophysiology of neurodegenerative disorders 2. Discuss the utilization of nuclear medicine imaging modalities in the evaluation of neurodegenerative disorders	Dr. Yuko Saito (Department of Neuropathology, NCNP)
10:00-11:00	Radiochemistry and Pharmacy ILO: 1. Recognize the significance of radiopharmaceuticals used in neurodegenerative disorder imaging. 2. Integrate the concepts of radiopharmaceuticals in brain imaging within the context of best practices of the nuclear technology on the brain imaging"	Dr. Koichi Kato (IBIC, NCNP)
End of Session 5		
11:00-12:00	Closing Remarks Post course evaluation	Prof. Hiroshi Matsuda (IBIC,NCNP)

This workshop is accredited by the UEMS- EACCME (European Union of Medical Specialists - European Accreditation Council for Continuing Medical Education) with 24 European CME credits.

