The 65th Annual Scientific Meeting of the Japanese Society of Nuclear Medicine

The 45th Annual Meeting of the Japanese Society of Nuclear Medicine Technology

Joint Program

IEEE/JSNM/JSNMT Joint Symposium ©

Thursday Nov.13 8:45-11:45, Room 1

Imagine Nuclear Medicine Instrumentation in 2035

Chair: Jae Sung Lee (Department of Nuclear Medicine, Seoul National University, Seoul, Korea)

Taiga Yamaya (Institute for Quantum Medical Science, National Institutes for Quantum Science and Technology)

<Oral Presentation 8:45-10:30>

1. Future instrumentation in nuclear medicine

(Institute for Quantum Medical Science, National Institutes for Quantum Science and Technology) Taiga Yamaya

2. The evolving roles of AI in nuclear medicine

(Department of Nuclear Medicine, Seoul National University, Seoul, Korea) Jae Sung Lee

3. Progress Towards the 10ps Challenge

(Department of Biomedical Engineering, University of California, Davis, California, USA) Simon Cherry

4. Multiplexed PET (mPET): Interrogating multiple disease biomarkers in a single PET scan

(Radiology, Electrical Engineering, Bioengineering, and Physics, and Molecular Imaging Program at Stanford (MIPS),
Stanford University) Craig S. Levin

5. Key points for commercializing novel PET systems

(Institute for Quantum Medical Science, National Institutes for Quantum Science and Technology) Go Akamatsu

- 6. From bench to bedside: Roadmaps and opportunities for BGO TOF PET in the next decade (Department of Biomedical Engineering, University of California, Davis, CA, USA) Sun II Kwon
- 7. Metascintillators for a paradigm shift in PET imaging

(Instituto de Instrumentación para Imagen Molecular (Centro Mixto CSIC-UPV), Valencia, Spain / CERN, Geneva, Switzerland / Metacrystal SA, Denges, Switzerland) **Paul Lecoq**

- 8. Cost-effective flat panel scanner for fast upright patient imaging: The Walk-Through PET (Medisip, Ghent University, Belgium) Stefaan Vandenberghe
- 9. A vision of positronium and quantum entanglement imaging as biomarkers in PET diagnosis (Department of Medical Physics, Institute of Physics, Jagiellonian University, Cracow, Poland) Ewa Stępień
- UNISPECT: Ultra-high performance universal stationary SPECT for superior total body and organ imaging

(TU Delft, Section of Biomedical Imaging / Free Bee International B.V.) Freek Beekman

<Poster Viewing 10:30-11:00>

11. TOF-PET advances: 200:1 channel multiplexing with self-thresholding readout

(Department of Radiology, Stanford University) Shirin Pourashraf

12. Ultra-high resolution CZT detectors: A new standard in precise gamma-ray imaging

(Kromek Ltd., Sedgefield, United Kingdom) Alexander Cherlin

13. Fully organic real-time dosimeters for personalized radiation monitoring

(Department of Physics and Astronomy, University of Bologna, Italy) Beatrice Fraboni

- 14. Sub-second and sub-0.5 mm resolution PET with DOI technology for preclinical research

 (Institute for Quantum Medical Science, National Institutes for Quantum Science and Technology) Han Gyu Kang
- 15. In-beam SIRMIO PET scanner for quasi-real-time proton range monitoring in preclinical IMPT

 (Department of Medical Physics, Ludwig Maximilian University of Munich, Munich, Germany)

 Francesco Evangelista
- 16. Experimental study of artefact reduction in partial-ring PET with 200 ps TOF resolution

 (Medical Physics and Technology, Delft University of Technology, Delft, Netherlands) Jack Wehr
- 17. Physics-informed deep learning with multi-energy windows for PET scatter correction

 (School of Physics and Astronomy, Beijing Normal University, Beijing, China) Yihao Chen
- 18. Towards brown adipose tissue prediction from CT scans using gaussian splatting

 (Institute for Particle Physics and Astrophysics, ETH Zurich, Zurich, Switzerland) Marina Béguin
- 19. Advances in multimodal imaging for radionuclide-based cancer treatment

 (Department of Radiation Science & Technology, TU Delft, Delft, Netherlands) Marc Snoeyink
- 20. Ortho-positronium imaging in a long-axial FOV PET/CT scanner

 (Siemens Medical Solutions, Knoxville, Tennessee, USA) William Steinberger

<Oral Presentation 11:00-11:30>

- 21. Beyond SPECT: Next-generation PET as the disruptive force in nuclear medicine diagnostics (University Hospital Wuerzburg, Wuerzburg, Germany) **Takahiro Higuchi**
- 22. Non-invasive accurate diagnosis

(Department of Molecular Imaging and Theranostics, Institute for Quantum Medical Science, National Institutes for Quantum Science and Technology) Miwako Takahashi

<Discussion 11:30-11:45>

Sponsored by : Siemens Healthcare K.K.

Plenary Lecture 1

Thursday Nov.13 13:30-14:30, Room 1

Chair: Seigo Kinuya (Department of Nuclear Medicine, Kanazawa University)

Exploring the Future: The Fusion of Mass Spectrometry and Medicine

(Shimadzu Corporation) Koichi Tanaka

Plenary Lecture 2 E

Thursday Nov.13 14:40-15:40, Room 1

Chair: Taiga Yamaya (Institute for Quantum Medical Science, National Institutes for Quantum Science and Technology)

Jagiellonian PET: Democratizing access to positron emission tomography with low-cost, modular, lightweight, and portable PET scanners based on plastic scintillators

 $(Institute\ of\ Physics,\ Jagiellonian\ University,\ Poland\ /\ Center\ for\ Theranostics,\ Jagiellonian\ University,\ Cracow,\ Poland)$

Pawel Moskal

Joint Symposium 1

Thursday Nov.13 9:45-11:45, Room 3

Optimizing the Appropriate Use of PSMA

Chair: Seigo Kinuya (Department of Nuclear Medicine, Kanazawa University)
Kazuko Ono (Kyoto University of Medical Science)

- 1. PSA and imaging in prostate cancer care: optimal use of PSMA for diagnosis and treatment

 (Department of Urology Kanazawa University) Atsushi Mizokami
- 2. The Appropriate Use of PSMA Imaging and Therapy: The Role of Nuclear Medicine Physicians

 (Department of Diagnostic Radiology, National Cancer Cener Hospital) Kimiteru Ito
- 3. From the perspective of a radiation oncologist

(Department of Radiation Oncology & Image-Applied Therapy, Graduate School of Medicine, Kyoto University)

Takashi Mizowaki

4. Toward Future Radiation Safety Management Systems: From Formal to Cognitive Control

(Radiation Department, Yokohama City University Hospital / Department of Diagnostic Image Analysis, Graduate School

of Medicine, Tohoku University) Matsuyoshi Ogawa

Sponsored Symposium 1

Friday Nov.14 9:40-11:40, Room 1

PET/MRI in Practice and Perspective: Frontline Insights from Clinical Implementation

Chair: Kazunari Ishii (Department of Radiology, Kobe University Graduate School of Medicine)
Yukio Miki (Department of Diagnostic and Interventional Radiology, Graduate School of Medicine, Osaka
Metropolitan University)

1. Structure of PET/MRI Systems

(Division of Clinical Radiology Service, Kyoto University Hospital) Koji Itagaki

2. Implementation and Practical Operation of PET/MRI

(Radiological Technology Department, HAKUAIKAI Social Medical Corporation Sagara Hospital) Shunichi Oosako

3. Advanced MRI Techniques to Maximize the Potential of PET/MRI

(Siemens Healthcare K.K.) Yoshito Ichiba

4. Clinical and Future Perspectives of PET/MRI in Breast Cancer

(Department of Diagnostic Imaging, HAKUAIKAI Social Medical Corporation, Sagara Hospital) Michiro Sasaki

5. Clinical Application of PET/MRI in Fukushima Medical University

(Department of Radiology and Nuclear Medicine, Fukushima Medical University) Hiroshi Ito

6. Ten Years Since We First Asked: Is PET/MRI Clinically Viable?

(Department of Radiology, Kobe University Hospital / Biomedical Imaging Research Center, University of Fukui)

Munenobu Nogami

JSNM-JSNMT-JSMRM Joint Program Sponsored by : Siemens Healthcare K.K.

Work in Progress 1

Friday Nov.14 13:30-15:30, Room 3

Chair: Ryuichi Nishii (Biomedical Imaging Sciences, Department of Integrated Health Sciences, Nagoya University
Graduate School of Medicine)

Shingo Baba (Department of Health Sciences Graduate School of Medical Sciences Kyushu University)

1. Siemens Healthineers Molecular Imaging Update

(Siemens Healthcare K.K.) Genki Horitsugi

2. Recent Highlights from Shimadzu Corporation

(Shimadzu Corporation) Hidehiko Tanimoto

3. The Latest Technologies of Semiconductor SPECT

(Spectrum Dynamics Medical Japan K.K.) Hayato Kitaoka

4. Total MI for Theranostics

(GE HealthCare Japan) Hideyasu Hosono

5. Optimized 'Observation': Panvivo-Enabled Fast and High-Throughput Nuclear Medicine for Future Healthcare

(United Imaging Healthcare) Xibin Quan

Canon Medical Systems Latest Updates

(Canon Medical Systems Corporation) Kenji Kuse

List of Participating Companies (as of September 24, 2025) – in no particular order Sponsored by: Siemens Healthcare Corporation / Shimadzu Corporation / Spectrum Dynamics Medical Japan K. K. / Canon Medical Systems Corporation / GE HealthCare Japan / United Imaging Healthcare Japan Corporation

Sponsored Symposium 2

Friday Nov.14 13:30-15:30, Room 5

Rising Star Session - Practical Insights from Young Professionals

Chair: Sho Koyasu (Kyoto Univeristy)

Shoko Takano (Department of Nuclear Medicine, Yokohama City University Hospital)

1. Regional perspectives on nuclear medicine: challenges and collaborative possibilities

(Department of Radiology, Kochi Health Sciences Center) Hitomi Iwasa

2. Tech advances and knowledge integration: Skills for the future of nuclear medicine

(Radiological Technology Section, Department of Medical Technology, QST Hospital, National Institutes for Quantum Science and Technology) Takamasa Maeda

Overcoming Challenges Faced by Novice Researchers

(Department of Radiology and Nuclear Medicine, Fukushima Medical University School of Medicine)

Ryo Yamakuni

4. Innovation and challenges in PET drug development: pioneering new frontiers

(Research Team for Neuroimaging, Tokyo Metropolitan Institute for Geriatrics and Gerontology)

Tetsuro Tago

5. To realize the highly advanced achievement of all the involved collaborators in Japan

(Department of Diagnostic Imaging and Nuclear Medicine, Kyoto University) Masao Watanabe

Sponsored by : GE HealthCare Japan

Joint Session of JSNM DE&I comittee and JSNMT "Hanamizuki" Women in Nuclear Medicine~Empowering Women Committee

Partially English
Friday Nov.14 13:30-15:30, Room 6

What is the workstyle like in Europe? — Tips to the future —

Chair: Kazuko Ono (Kyoto University of Medical Science)
Mieko Ota (Gifu Prefectural General Medical Center)

 Technologists in Europe – history, challenges and future perspectives. A special focus on Women in Medicine

(Nuclear Medicine Dep., Greater Poland Cancer Centre, Poznan, Poland / Electroradiology Dep., Poznan University of Medical Sciences, Poznan Poland / the European Association of Nuclear Medicine Technologists' Committee / the European Association of Nuclear Medicine Women's EmpoWErment Initiative) Agata Karolina Pietrzak

2. Latest Topics on Canon PET-CT

(Canon Medical Systems Corporation) Sayaka Sato

3. Toward Diverse Work Styles in Radiological Practice: Perspectives on Career Development, Role Assignment, and Institutional Systems

(Nippon Medical School Clinical Imaging Center for Healthcare) Satoe Aoyama

4. Diversity Illuminating the way of Nuclear Medicine

(Division of Positron Emission Tomography Institute of Advanced Clinical Medicine, Kindai University)

Kohei Hanaoka

5. Working Across Diversity -Building the Future of Nuclear Medicine Practice-

(Fujita Medical Innovation Center Tokyo / Department of Radiology, Fujita Health University) Yoko Satoh

Sponsored by : Canon Medical Systems Corporation

Public Seminar 1

Friday Nov.14 13:30-16:30, Room 9

To the Future of Radiological Medicine – A Message to High School Students

Facilitator: High School Teacher (Kyoto Koka Senior High School)

(Department of Nuclear Medicine, Kanazawa University) Seigo Kinuya

Sponsored Symposium 3

Saturday Nov.15 9:40-11:40, Room 1

Towards the appropriate expansion of special measures room for Nuclear Medicine Therapy

Chair: Kazuko Ono (Kyoto University of Medical Science)

Ryogo Minamimoto (Department of Radiology, Nagoya University Graduate School of Medicine)

1. Recent Advances in Nuclear Medicine Therapy: Evidence, Practice, and Future Outlook

(Department of Nuclear Medicine, Yokohama City University Hospital) Shoko Takano

2. Overview of the operation of special measures wards in facilities without RI rooms

(Department of Radiological Technology, Kariya Toyota General Hospital) Taku Aoki

3. The PRRT team at our hospital as seen by nurses

(Kansai Electric Power Hospital) Etsuko Hattori

4. Regulations of relevant laws and practices to keep in mind

(Medical Safety Section, Medical Policy Division, Bureau of Public Health, Tokyo Metropolitan Government)

Tsuyoshi Kobayashi

5. Design and operation of sickrooms with radioprotective special measures for RI therapy

(Department of Radiology, Kyoto University Hospital) Yoichi Shimizu

Sponsored by : Novartis Pharma K.K.

JSNM-JSNMT Roundtable Discussion

Saturday Nov.15 13:15-14:15, Room 1

Communicating Through Manga: The Power of Functional Manga

(Kvoto University of Medical Science) Kazuko Ono

(Gifu Prefectural General Medical Center) Mieko Ota

 $({\tt Manga\ original\ author,\ Screenwriter})\ \ Tomohiro\ \ Yokomaku$

(Ibaraki Prefectural University of Health Sciences) Kosaku Saotome

Work in Progress 2

Saturday Nov.15 13:15-14:15, Room 3

Chair: Daisuke Kano (Department of Pharmacy, National Cancer Center Hospital East)
Daiki Kayano (Department of Nuclear Medicine, Kanazawa University)

1. Longitudinal Evaluation of Amyloid PET Imaging with Vizamyl

(Nihon Medi-Physics Co., Ltd.) Naoyuki Tamamura

 From "See it" to "Treat it": The Present and Future of Japan-Origin Theranostics PD/PDR-Led Innovation and Industry–Academia–Government Collaboration at the Frontline of Overcoming Barriers

(PDRadiopharma Inc. / PeptiDream Inc. / Japan Radiopharmaceuticals Association) Masato Murakami

3. Research on the Domestic Stable Supply of Ac-225 for Next-Generation Nuclear Medicine and Targeted Alpha Therapy (preliminary report)

(NovAccel Inc.) Shinya Oku

List of Participating Companies (as of September 24, 2025) – in no particular order Sponsored by: Nihon Medi-Physics Co., Ltd. / PDRadiopharma Inc. / NovAccel Inc.

Joint Symposium 2

Saturday Nov.15 8:30-10:00, Room 4

Advance in Interventional Radiology Using Radiopharmaceuticals

Chair: Miyuki Sone (Department of Diagnostic Radiology, National Cancer Center Hospital)

1. Yttrium-90 Radioembolization for the TLiver TumorsLiver Tumors

(Department of Radiology, Hyogo Medical University) Koichiro Yamakado

- 2. Development of IVR with Radiopharmaceuticals; From a Radiation Safety Officer's Perspective

 (Department Of Radiological Technology, Hyogo Medical University Hospital) Kazuma Matsumoto
- 3. Dose optimization of radioembolization for liver malignancies using new dosimetry

 (Department of Diagnostic Imaging and Nuclear Medicine, Kyoto University) Masao Watanabe