# (Joint Sessions for Japan Radiology Congress)

## **Opening Ceremony**

· Opening Ceremony: April 12 (Fri.) 13:15–14:10 (National Convention Hall)

Keynote Lecture

President: Masahiro Jinzaki (Keio University)

The 83rd Annual Meeting of the Japan Radiological Society (JRS)

President: Toru Negishi (Tokyo Metropolitan University)

The 80th Annual Meeting of the Japanese Society of Radiological Technology

(JSRT)

President: Masayori Ishikawa (Hokkaido University)

The 127th Scientific Meeting of the Japan Society of Medical Physics (JSMP)

Chairperson: Akio Yamamoto

Japan Medical Imaging and Radiological Systems Industries Association

(JIRA)

### **Honorary Member Award Ceremony**

· Honorary Member Award Ceremony: April 12 (Fri.) 14:10–14:40 (National Convention Hall)

## Joint Special Lecture

· Joint Special Lecture: April 12 (Fri.) 14:40–15:20 (National Convention Hall)

Chairperson: Keio University Masahiro Jinzaki

CSL. Humanity in the Age of AI

Director-General, Research Institute for Humanity and Nature /

#### Joint Symposium

· Joint Symposium 1: April 12 (Fri.) 16:30–18:30 (National Convention Hall)

[Charting the future of radiology beyond generative AI]

Chairperson: National Institutes of Biomedical Innovation, Health and Nutrition Yusuke Nakamura

Teikyo University Jun'ichi Kotoku

CSY1-1. The current status and challenges of generative AI

Keio University Masahiro Hashimoto

CSY1-2. Health at Google

Google Hiroki Kayama

CSY1-3. Empower 'Better Medical Care' with advanced technology

Healthcare Industry, Microsoft Japan Co., Ltd. Kunihiro Ohyama

CSY1-4. Accelerating healthcare innovations with Generative AI and ML technologies, powered by AWS

AWS Japan Yoichi Takizawa

CSY1-5. The role of Radiologists in the Age of AI

Osaka Metropolitan University Daiju Ueda

· Joint Symposium 2: April 13 (Sat.) 8:30–10:30 (Main Hall)

[Innovation in radiological diagnosis and industry-academia collaboration]

Chairperson: Tokyo Metropolitan University Toru Negishi

Tsukuba International University Satoshi Yanagita

CSY2-1. Developing products to meet radiographers' needs through industry-academia collaboration

The Jikei University Daisan Hospital Sousuke Higuchi

CSY2-2. Academia-industry collaboration using "SYNAPSE Creative Space," a development platform for AI to support diagnostic imaging

FUJIFILM Corporation Hironori Matsumasa

CSY2-3. Creation of new imaging diagnostics through industry-academia collaboration: Development to market in dynamic digital radiography

KONICA MINOLTA, INC. Tsutomu Yoneyama

CSY2-4. Development of new era ct system solutions based on industry-academia collaboration

CANON MEDICAL SYSTEMS CORPORATION Akira Taniguchi

CSY2-5. Development of next-generation radiation therapy devices through industry-academia collaboration

Kyoto University Mitsuhiro Nakamura

CSY2-6. Medical device development through medical-engineering-industry-academia collaboration - Focusing on the IVR field -

Tohoku University Kei Takase

· Joint Symposium 3: April 13 (Sat.) 13:30–15:30 (Main Hall)

Leading science and technology for undiscovered radiation medicine

Chairperson: Hokkaido University Masayori Ishikawa

CSY3-1. The forefront of artificial intelligence: remaining challenges and the future

GSIS, Tohoku University/RIKEN Center for AIP Takayuki Okatani

CSY3-2. Toward applications of quantum computing for bio and medical science

Osaka University Keisuke Fujii

CSY3-3. Current status and outlook of the laser driven ion acceleration research

KPSI, OST Mamiko Nishiuchi

CSY3-4. Panelist

CYRIC, Tohoku University Manabu Tashiro

CSY3-5. Panelist

Meijo University Atsushi Teramoto

Osaka University Teiji Nishio

#### Hands-on Seminar

· Hands on Seminar: April 11 (Thu.) 17:15-18:30 (315)

MR elastography

Chairperson: Keio University Daiki Ito

CHS1-1.

Keio University Hospital Daiki Ito

CHS1-2.

Keio University Hospital Tetsushi Habe

CHS1-3.

NHO Tokyo Medical Center Shigeo Okuda

· Hands on Seminar: April 12 (Fri.) 9:00–11:30 (315)

Operation of sickrooms with radioprotective special measures for patients receiving radioisotopes

Chairperson: Fukushima Medical University Naoyuki Ukon

CHS2-1. The role expected of sickrooms with radioprotective special measures

Japan Radioisotope Association; JRIA Asami Kitaoka

CHS2-2. The sickrooms with radioprotective special measures of Yokohama City University Hospital

Yokohama City University Hospital Matsuyoshi Ogawa

CHS2-3. The operation of sickrooms with radioprotective special measures and radiation exposure of medical workers

Kindai University Hospital Shuhei Yoshida

CHS2-4. Design and operation of sickrooms with radioprotective special measures based on a pharmacokinetic perspective

Kyoto University Hospital Yoichi Shimizu

CHS2-5. Operation of sickrooms with radioprotective special measures for patients receiving radioisotopes

Fukushima Medical University Naoyuki Ukon

· Hands on Seminar: April 13 (Sat.) 16:00–18:00 (315)

[PI-RADS |

Chairperson: Aijinkai Takatsuki General Hospital Satoru Takahashi

CHS3-1.

Aijinkai Takatsuki General Hospital Satoru Takahashi

CHS3-2.

Tentative

CHS3-3.

National Defense Medical College Hiroshi Shinmoto

CHS3-4.		
	Kawasaki Medical School	Tsutomu Tamada
CHS3-5.		
	Kajiicho Medical Imaging Center	Hirotoshi Ito
CHS3-6.		
		Tentative
CHS3-7.		
	National Defense Medical College	Hiromi Edo
CHS3-8.		
	Kawasaki Medical School	Akira Yamamoto
· Hands on Seminar: April 14 (Sun.) 8:30–11:30 (3	15)	
Postmortem Image Interpretation Workshop		77 1 1 77 1
	Chairperson: Hokkaido University	Kohsuke Kudo
CHOA 1	University of Fukui	Hideki Hyodoh
CHS4-1.	University of Euleni	Hidaki Hwadah
CHS4-2.	University of Fukui	Hideki Hyodoh
CH5 <del>4-</del> 2.	The University of Tokyo	Yohsuke Makino
CHS4-3.	The Oniversity of Tokyo	Tollsuke Wakillo
CHST-3.	Tokyo Medical University	Masanori Ishida
CHS4-4.	Toky o Modiodi Omversity	iviasaiioii isiiiaa
	Hiroshima University	Wataru Fukumoto
CHS4-5.		
	Saiseikai Nagasaki Hospital	Tomonori Murakami
CHS4-6.		
	Chiba University	Maiko Yoshida
CHS4-7.		
	Niigata University	Naoya Takahashi
CHS4-8.		
	Hokkaido University	Yohei Ikebe

# Joint Awards and Closing Ceremony

Joint Closing Ceremony: April 14 (Sun.) 15:30–16:45 (Main Hall)

Performance: JRC2024 Festival Orchestra

# [JSRT-JSMP Joint Session]

### ★ The 3rd ICRPT Opening Ceremony

April 12 (Fri.) 11:30-11:50 (502)

#### JSRT-JSMP Joint Lecture 1

April 12 (Fri.) 12:10-13:00 (502)

"Topics in medical physics and radiological technology in Southeast Asian countries"

Chairperson: Kanazawa University Kosuke Matsubara

Fukushima Medical University Hiroko Yamashina

★ TPJ1-1. Establishment of the ASEAN Diagnostic Reference Level in medical imaging

Chulalongkorn University, Thailand Anchali Krisanachinda

★ TPJ1-2. Current status and foresight of radiological technology in Laos: Educational system

University of Health Sciences, Lao PDR Naly Khaminsou

★ TPJ1-3. Current status and foresight of radiological technology in Laos: A radiologist's point of view

University of Health Sciences, Lao PDR Virasack Rajpho

★ TPJ1-4. Current status and foresight of radiological technology in Laos: voice of the rad tech

University of Health Sciences, Lao PDR Bounkeo Phonesavanh

## JSRT-JSMP Joint Lecture 2

April 14 (Sun.) 12:10-13:00 (502)

"Management system for reducing occupational exposure of healthcare workers focusing on exposure to the lens of the eye"

Chairperson: QST Keiichi Akahane

Tokyo Metropolitan University Shinnosuke Matsumoto

TPJ2-1. Legal framework for occupational exposure control

QST Takashi Moritake

TPJ2-2. Occupational safety and health management system related to radiation exposure control embodying International Commission on Radiation Protection publication 75

Hospital of the University of Occupational and Environmental Health Koichi Nakagami

#### JSRT-JSMP Joint Program (RPT Journal Editing Committee Program)

April 13 (Sat.) 13:30-14:00 (502)

"Invited Lecture from RPT"

Chairperson: Miyazaki Univeristy Yoshikazu Uchiyama

★ TPR.

The Jikei University School of Medicine Norio Nakata

# Ceremony for Radiological Physics and Technology Awards 2023 and Award Lectures

April 13 (Sat.) 12:00-13:20 (502)

General Chairperson: QST Nobuyuki Kanematsu

Facilitator: Kumamoto Univertisy Junji Shiraishi

Kyushu University Akihiro Nohtomi

★ 1) Most Citation Award Ceremony

★ 2) Outstanding Reviewer Award Ceremony

★ 3) Distinguished Editor Award Ceremony

★ 4) Doi Award Lectures

A) Medical Imaging

Chairperson: Kanazawa University Katsuhiro Ichikawa

RPT Vol. 16, No. 4, pp.471-477 (2023)

TPA-1. Method for measuring noise-power spectrum independent of the effect of extracting the region of

interest from a noise image

Niigata University Akihiro Narita

B) Nuclear Medicine and Magnetic Resonance Imaging

Chairperson: QST Taiga Yamaya

RPT Vol. 16, No. 4, pp.516-531 (2023)

TPA-2. Discrimination of inter-crystal scattering events by signal processing for the X'tal cube PET detector

LMU Munich Munetaka Nitta

C) Radiation Therapy

Chairperson: University of Tsukuba Takeji Sakae

RPT Vol. 16, No. 4, pp.262-271 (2023)

TPA-3. Virtual clinical trial based on outcome modeling with iteratively redistributed extrapolation data

Komazawa University Kohei Oguma

# [JSMP Program]

#### **Educational Lecture 1**

April 11 (Thu.) 12:00-12:50 (418)

Chairperson: Nagoya City University West Medical Center Yoshitomo Ishihara

PEL1-1. Radiation imaging for the future nuclear medicine and particle therapy

Waseda University Jun Kataoka

#### **Educational Lecture 2**

April 12 (Fri.) 8:00–8:50 (418)

Chairperson: Kyusyu University Hidetaka Arimura

PEL2-1. AAPM task group 273 report: best practices for AI and machine learning for computer-aided diagnosis

Tokyo Institute of Technology Kenji Suzuki

#### **Educational Lecture 3**

April 12 (Fri.) 17:20–18:10 (418)

Chairperson: Komazawa University Taiki Magome

PEL3-1. Medical Dx talent development through "Academia-Industry collaboration platform for cultivating Medical AI Leaders"

Nagoya University Shintaro Oyama

#### **Educational Lecture 4**

April 13 (Sat.) 8:00-8:50 (418)

Chairperson: ShinMatsudo Accuracy Radiation Therapy Center Yuichiro Narita

PEL4-1. Introduction of an international standardization activity regarding traceable reporting of predicted NTCP information

Hokkaido University Keiji Kobashi

#### **Educational Lecture 5**

April 13 (Sat.) 17:20–18:10 (418)

Chairperson: Teikyo University Jun'ichi Kotoku

PEL5-1. Exploitation of precision medicine using mathematical modeling

Osaka University Takashi Suzuki

#### **Educational Lecture 6**

April 14 (Sun.) 8:00-8:50 (418)

Chairperson: Tokushima University Akihiro Haga

PEL6-1. Effects of cosmic radiation on food and medical physics

Juntendo University Machiko Hatsuda

# JSMP International Affairs Committee Program

April 12 (Fri.) 16:10-17:10 (418)

Current status of Medical Physics Education to maintain professional skill

Chairperson: Fujita Health University Naoki Hayashi

★ PCP1-1. Current status of medical physics in Malaysia

Universiti Malaya Aik-Hao Ng

★ PCP1-2. Current Status of Medical Physics Education in Japan

Fujita Health University Naoki Hayashi

# JSMP Dosimetry Committee Program

April 13 (Sat.) 12:00–13:30 (418)

A code of practice for dosimetry based on the Japanese standard of absorbed dose to water in high-energy photon and electron beams

Chairperson: Nagoya City University West Medical Center Toshiyuki Toshito

PCP2-1. An overview of a code of practive for dosimetry based on the Japanese standard of absorbed dose to water in high-energy photon and electron beams

National Metrology Institute of Japan, AIST Morihito Shimizu

PCP2-2. Uncertainty reduction in measurement required by the user (including cross-calibration)

Iida Municipal Hospital Hiroshi Oguchi

PCP2-3. Early user experience of the absorbed dose to water calibration service with medical accelerator beams

Komazawa University Yukio Fujita

PCP2-4. Significance of AIST's ionization chamber calibration service in technical support activities for radiotherapy

Hiroshima High-Precision Radiotherapy Cancer Center Shuichi Ozawa

# JSMP Special Lecture

April 12 (Fri.) 12:00–13:00 (418)

Chairperson: QST Hospital, QST Shigekazu Fukuda

PSL-1. Research and development and education program at quantum solution hub in Tohoku University

Tohoku University Masayuki Ohzeki

# JSMP Special Symposium

April 13 (Sat.) 10:00-11:50 (418)

Future of the photoimmunotherapy

Chairperson: Hokkaido University Masayori Ishikawa

PSY-2. Development of computer-assisted surgery in photoimmunotherapy

Hokkaido University Yuichi Ashikaga

PSY-3. Three treatment strategies for photoimmunotherapy challenging clinical trials

Fujita Health University Yasuhiro Hida

PSY-5. Device development for high accuracy photoimmunotherapy -- from design to fabrication

Hokkaido University Hospital Yuki Wakabayashi

PSY-1. Guide the light: strategies of infrared-light irradiation in photoimmunotherapy

Hokkaido University Takayoshi Suzuki

PSY-4. Therapeutic mechanism of photoimmunotherapy -Discovery of photo-immunoreactivity and elucidation of its mechanism

Hokkaido University Mikako Ogawa

# JSMP Special Session

April 13 (Sat.) 15:40-17:10 (418)

The 2nd next generation discussion for young researchers in medical physics

Chairperson: Young Researchers' Association of Medical Physics Sodai Tanaka

Young Researchers' Association of Medical Physics Koki Kasamatsu

Young Researchers' Association of Medical Physics Madoka Sakai

PSP1-1. The 2nd next generation discussion for young researchers in medical physics

# JSMBE-JSMP Joint Symposium

April 14 (Sun.) 12:00-13:00 (418)

Medical application of generative AI and its prospects

Chairperson: University of Hyogo Ryo Haraguchi

QST Hospital, QST Shigekazu Fukuda

Panelist: Kindai University Osamu Sugiyama

Hiroshima University Daisuke Kawahara

PJP-1. Medical application of generative AI and its prospects

Kindai University Osamu Sugiyama

PJP-2. Panel discussion

# JSMP Educational Affairs Committee Program

April 13 (Sat.) 15:40-18:00 (419)

Educational committee organized session: the 6th medical physics education course workshop

Chairperson: Chair of Educational Committee Shuichi Ozawa

PCP3. The 6th medical physics education course workshop