

## 【Joint Sessions for Japan Radiology Congress】

### Opening Ceremony

- Opening Ceremony: April 11 (Fri.) 13:10–14:00 (National Convention Hall)

#### Keynote Lecture

President:	Kei Takase (Tohoku University) The 84th Annual Meeting of the Japan Radiological Society (JRS)
President:	Hideyuki Iwanaga (The University of Tokyo Hospital) The 81st Annual Meeting of the Japanese Society of Radiological Technology (JSRT)
President:	Tomonori Isobe (University of Tsukuba) The 129th Scientific Meeting of the Japan Society of Medical Physics (JSMP)
Chairperson:	Toshio Takiguchi Japan Medical Imaging and Radiological Systems Industries Association (JIRA)

### Honorary Member Award Ceremony

- Honorary Member Award Ceremony: April 11 (Fri.) 14:00–14:20 (National Convention Hall)

### Joint Special Lecture

- Joint Special Lecture: April 11 (Fri.) 14:30–15:10 (National Convention Hall)

	Chairperson: Tohoku University	Kei Takase
CSL. Unveiling the secrets of the universe with neutrinos and gravitational waves — based on our researches —		
Distinguished Professor, Institute for Cosmic Ray Research, the University of Tokyo		Takaaki Kajita

### Joint Panel Discussion

- Joint Panel Discussion: April 11 (Fri.) 15:10–16:00 (National Convention Hall)

「Sincerity to be close to others」

CPD. About our state of mind in the age of internationalization and science and technology.

Chief priest of Jigenji temple, Completer of the Omine Thousand-Day Circumambulation Practice	RyoJun Shionuma
Tohoku University	Kei Takase
The University of Tokyo Hospital	Hideyuki Iwanaga
University of Tsukuba	Tomonori Isobe
JIRA	Toshio Takiguchi

## Joint Symposium

### ★ Joint Symposium 1: April 11 (Fri.) 16:15–18:15 (National Convention Hall)

「Green radiology」

Chairperson: University of Tsukuba Tomonori Isobe

Osaka University Noriyuki Tomiyama

CSY1-1. What can radiology societies do to support the transition to sustainable radiology?

Imperial College London, United Kingdom

Andrea Rockall

CSY1-2. Advancing green radiology: an overview and path forward

Tohoku University Hospital

Hideki Ota

CSY1-3. Contrast agents and sustainability

Okayama University

Takao Hiraki

CSY1-4. Approach to the green radiology in radiology departments

Kyushu University Hospital

Toyoyuki Kato

CSY1-5. Challenges for green radiology in Japanese radiation therapy

Teikyo University

Shinji Kawamura

### ・ Joint Symposium 2: April 12 (Sat.) 9:00–11:30 (National Convention Hall)

「Contribution of medical physics to society 5.0」

Chairperson: Keio University

Masahiro Jinzaki

University of Tsukuba

Takeji Sakae

CSY2-1. Cybernics medical and healthcare innovation for Society 5.0— Wearable Cyborg HAL,  
photoacoustic imaging AcousticX, vital sensor Cyvis, C-Cloud —

University of Tsukuba, CYBERDYNE Inc., SIP, Cabinet Office, the Government of Japan

Yoshiyuki Sankai

CSY2-2. Knowledge discovery from multi-institutional distributed data through AI collaboration

University of Tsukuba

Tetsuya Sakurai

CSY2-3. Future MRI research challenged by preclinical MRI

Osaka University

Shigeyoshi Saito

CSY2-4. Developments of multi-ion radiotherapy

QST

Taku Inaniwa

CSY2-5. Clinical dosimeter for next-generation particle therapy facilities utilizing thin film diamond

Tohoku University

Wataru Kada

### ・ Joint Symposium 3: April 12 (Sat.) 15:15–17:15 (National Convention Hall)

「Considering genomic medicine: transformation of radiation diagnosis and treatment methods in future healthcare」

Chairperson: Tokyo University Hospital

Hideyuki Iwanaga

Tohoku University

Shunji Mugikura

CSY3-1. Medical AI using radiomics

University of Miyazaki

Yoshikazu Uchiyama

CSY3-2. Perspectives of precision medicine based on multimodal and multi-omics analysis

The University of Tokyo Hospital

Katsutoshi Oda

CSY3-3. Exploring the future of personalized medicine through the fusion of genomic medicine and nuclear medicine

Kanazawa University Hospital Hiroshi Wakabayashi

## Hands on Seminar

• Hands on Seminar 1 (JSMP Project): April 11 (Fri.) 8:30–11:30 (315)

「Introduction to uncertainty evaluation in radiotherapy: an example of absorbed dose to water in reference conditions for high-energy photon beams」

	Chairperson: University of Fukui	Naoki Kinoshita
CHS1-1.		
	University of Fukui	Naoki Kinoshita
CHS1-2.		
	AIST	Yuka Urago
CHS1-3.		
	AIST	Morihito Shimizu
CHS1-4.		
	Juntendo University	Chie Kurokawa
CHS1-5.		
	Association for Nuclear Technology in Medicine	Nobuhiro Takase
CHS1-6.		
	Iida Municipal Hospital	Hiroshi Oguchi

• Hands on Seminar 2 (JSMP Project): April 12 (Sat.) 10:00–11:30 (315)

「Radiotherapy plan check introductory seminar」

	Chairperson: Uji-Tokushukai Medical Center	Yoshitomo Ishihara
CHS2-1.		
	Uji-Tokushukai Medical Center	Yoshitomo Ishihara
CHS2-2.		
	National Cancer Center Hospital	Hiroyuki Okamoto
CHS2-3.		
	Chiba Cancer Center	Toru Kawachi
CHS2-4.		
	Kurume University Hospital	Asumi Mizoguchi

• Hands on Seminar 3 (JRS Project): April 13 (Sun.) 8:30–11:30 (315)

「Postmortem image interpretation workshop」

	Chairperson: Hokkaido University	Kohsuke Kudo
CHS3-1.		
	Fukui University	Hideki Hyodoh

CHS3-2.	The University of Tokyo	Yohsuke Makino
CHS3-3.	Tokyo Medical University	Masanori Ishida
CHS3-4.	Chiba University	Maiko Yoshida
CHS3-5.	Saiseikai Nagasaki Hospital	Tomonori Murakami
CHS3-6.	Hokkaido University	Yohei Ikebe
CHS3-7.	Hiroshima University	Wataru Fukumoto
CHS3-8.	Niigata University	Naoya Takahashi

### **Reception for All Participants**

April 11 (Fri.) 18:45–20:00 (Yokohama Bay Hotel Tokyu B2F Queen's Grand Ballroom)

### **Joint Closing and Awards Ceremony**

Joint Closing Ceremony: April 13 (Sun.) 15:30–16:45 (National Convention Hall)

## 【JSRT-JSMP Joint Session】

### ★ The 4th ICRPT Opening Ceremony

April 11 (Fri.) 11:20–11:40 (502)

### JSMP-JSRT Joint Lecture 1

April 11 (Fri.) 10:20–11:10 (418)

Chairperson: Kindai University

Akihiro Nohtomi

TPJ1. Open science and research data management for achieving transparent and trustworthy research

National Institute of Informatics

Yusuke Komiya

### JSRT-JSMP Joint Lecture 2

April 11 (Fri.) 12:00–12:50 (502)

Chairperson: Osaka Metropolitan University

Takao Ichida

★ TPJ2. Toward an ideal future for radiological technologists: insights from dual licensing experience in Korea and Japan

Dongseo University, Korea

Yoon Yongsu

### JSMP-JSRT Joint Lecture 3

April 13 (Sun.) 12:10–13:00 (502)

Chairperson: Hokkaido University

Taeko Matsuura

★ TPJ3. Respiratory motion and its impact on proton therapy for liver tumors: insights from anatomy, physiology, and biomedical engineering

National Taiwan University Cancer Center, Taiwan

Hsiang-Kuang Tony Liang

### Ceremony for Radiological Physics and Technology Awards 2024

April 12 (Sat.) 11:10–11:50 (502)

General Chairperson: QST

Nobuyuki Kanematsu

Facilitator: Fukuoka International University of Health and Welfare

Junji Shiraishi

Kindai University

Akihiro Nohtomi

TPA1-1. Greeting from RPT General Chairperson

QST

Nobuyuki Kanematsu

TPA1-2. Most Citation Award Ceremony

TPA1-3. Outstanding Reviewer Award Ceremony

TPA1-4. Doi Award Ceremony

TPA1-5. RPT Editorial Report

Springer Nature Japan

Yoko Arai

## Doi Award Lectures

April 12 (Sat.) 12:10–13:00 (502)

TPA2-1. Medical Imaging

Chairperson: Fukuoka International University of Health and Welfare

Junji Shiraishi

Deep learning-based correction for time truncation in cerebral computed tomography perfusion

[RPT Vol. 17, pp. 666–678 (2024)]

Niigata University

Shota Ichikawa

TPA2-2. Nuclear Medicine and Magnetic Resonance Imaging

Chairperson: QST

Taiga Yamaya

Visualization of distribution in the vitreous cavity via eye drops using ultra-heavily T2-weighted

sequences in MRI: a preliminary study with enucleated pig eyes [RPT Vol. 17, pp. 715–724 (2024)]

Nagoya University Hospital

Yutaka Kato

TPA2-3. Radiation Therapy

Chairperson: University of Tsukuba

Takeji Sakae

A novel internal target volume definition based on velocity and time of respiratory target motion for external beam radiotherapy [RPT Vol. 17, pp. 843–853 (2024)]

Shonan Kamakura General Hospital

Masashi Yamanaka

## 【JSMP Program】

### Educational Lecture 1

April 10 (Thu.) 12:00–12:50 (418)

Chairperson: Kumamoto University

Takeshi Ono

PEL1. Exploring the world unlocked by 3D dosimetry in clinical practice: Insights revealed by three dimensions

Jichi Medical University Saitama Medical Center

Yuta Takahashi

### Educational Lecture 2

April 11 (Fri.) 9:00–9:50 (418)

Chairperson: Kyushu University

Hidetaka Arimura

PEL2. Status and future perspective of cancer genomic medicine

Kyushu University

Eishi Baba

### Educational Lecture 3

April 12 (Sat.) 8:00–8:50 (418)

Chairperson: Kanazawa University Hospital

Hironori Kojima

PEL3. Child-friendly medical care, from the Child Life Specialists' perspective

Nagoya University Hospital

Miwa Sasaki

### Educational Lecture 4

April 12 (Sat.) 9:00–9:50 (418)

Chairperson: Gunma Prefectural College of Health Sciences

Kenta Takada

PEL4. Physics and machine learning

Tokushima University

Akihiro Haga

### Educational Lecture 5

April 13 (Sun.) 8:00–8:50 (418)

Chairperson: University of Tsukuba

Hiroaki Kumada

PEL5. Recent trends and future prospects of accelerator-based boron neutron capture therapy

Kyoto University

Hiroki Tanaka

## JSMP Committee Program 1

April 11 (Fri.) 12:00–13:00 (418)

Chairperson: Juntendo University

Chie Kurokawa

★ PCP1. The fusion of AI and LLM: Shaping the future of radiation oncology

Yonsei University, Korea

Jin Sung Kim

## JSMP Committee Program 2

April 11 (Fri.) 16:40–18:00 (418)

Disease-modifying therapy of AD and amyloid PET

Chairperson: Juntendo University

Keisuke Tsuda

QST

Go Akamatsu

PCP2-1. Overview of amyloid PET

Kindai University

Makoto Hosono

PCP2-2. Theory and its practical consideration on quantitative imaging of neuroreceptor density and A $\beta$  deposition using PET

Kindai University

Yuichi Kimura

PCP2-3. JSNM PET imaging site qualification program (J-PEQi)

Juntendo University

Keisuke Tsuda

PCP2-4. Commercializing hemispherical brain PET for defeating dementia

QST

Go Akamatsu

## JSMP Committee Program 3

April 12 (Sat.) 13:10–14:00 (418)

Chairperson: Teikyo University

Hidemi Kamezawa

PCP3. There are not only therapy but diagnosis + AI in medical physics!

Kyushu University

Hidetaka Arimura

## JSMP International Affairs Committee Program

April 11 (Fri.) 15:30–16:30 (418)

Chairperson: Fujita Health University

Naoki Hayashi

★ PCP4. Patient-specific dosimetry for Lu-177 molecular radiotherapy

Chulalongkorn University, Thailand

Kitiwat Khamwan

## JSMP Special Session 1

April 11 (Fri.) 10:45–11:30 (National Convention Hall 1F)

JSMP Letter 1

Chairperson: University of Tsukuba

Tomonori Isobe

PSP1. Exosome orchestra vision

ExoEarth Corporation

Takashi Nishihira



## JSMP Special Session 2

April 12 (Sat.) 13:30–15:00 (National Convention Hall 1F)

Chairperson: Young Researchers' Association of Medical Physics	Koki Kasamatsu
Young Researchers' Association of Medical Physics	Tomohiro Ohta
Young Researchers' Association of Medical Physics	Shuta Ogawa
Young Researchers' Association of Medical Physics	Madoka Sakai
Young Researchers' Association of Medical Physics	Misato Kishi

PSP2. The 3rd next generation discussion for young researchers in medical physics

## JSMP Special Session 3

April 12 (Sat.) 15:15–16:00 (National Convention Hall 1F)

JSMP Letter 2

Chairperson: Kobe Tokiwa University	Nao Ichikawa
PSP3. Gonadal shield discontinuing and risk communication in pediatric pelvic radiography	
Kawasaki University of Medical Welfare	Yasutaka Takei

## JSMP Special Program 1

April 12 (Sat.) 14:10–16:00 (418)

From next-generation seeds to the future

Chairperson: University of Tsukuba	Tomonori Isobe
Osaka University	Teiji Nishio
PSY1-1. A support hub for medical startups aiming for global expansion	
University of Tsukuba	Takeshi Machino
PSY1-2. Seeds-oriented and needs-oriented research in radiological physics and technology	
QST	Nobuyuki Kanematsu
PSY1-3. How to match the research outcome (seeds) in medical physics with clinical needs?	
Hokkaido University	Masayori Ishikawa

## JSMP Special Program 2

April 13 (Sun.) 9:00–12:00 (418)

Mastering radiation measurement: Advances and innovations

Chairperson: Tokyo Metropolitan University	Kiyomitsu Shinsho
Nagoya City University	Toshiyuki Toshito
PSY2-1. The cutting edge and future of lab-grown diamond	
Orbray. Co., Ltd.	Seongwoo Kim
PSY2-2. The promise of large-diameter diamond detectors	
Tohoku University	Keitaro Hitomi

PSY2-3. Development and future prospects of tissue-equivalent radiophotoluminescent dosimeter materials based on radiation chemical reactions

Shizuoka University Masanori Koshimizu

PSY2-4. Development of a new gamma-ray imaging method

The University of Tokyo Hiroyuki Takahashi

## JSMP Educational Affairs Committee Program

April 12 (Sat.) 16:10–18:10 (419)

Medical physics education and medical physicists

Chairperson: HIPRAC Shuichi Ozawa

Uji-Tokushukai Medical Center Yoshitomo Ishihara

PCP5-1. Transition of medical physics education

Uji-Tokushukai Medical Center Yoshitomo Ishihara

PCP5-2. The roles and skills required for clinical medical physicists in Japan

Tokyo Medical University Hospital Masahiko Kurooka

PCP5-3. Medical physicist contributing to research

Tohoku University Noriyuki Kadoya

PCP5-4. The hurdles to becoming a national qualification

Tsukuba International University Masahiro Fukushi

PCP5-5. Panel Discussion

Shinmatsudo Central General Hospital Yuichiro Narita

PCP5-6. Panel Discussion

Fujita Health University Naoki Hayashi

PCP5-7. Panel Discussion

Tokyo Metropolitan Cancer and Infectious Diseases Center Komagome Hospital Satoshi Kito

PCP5-8. Panel Discussion

Medipolis Medical Research Institute Munefumi Shimbo

## JSMP Radiological Protection Committee Program

April 13 (Sun.) 12:10–13:10 (418)

Simulating resident radiation exposure doses following the Fukushima Daiichi nuclear accident

Chairperson: QST Yusuke Koba

Fukushima Medical University Hospital Yuichi Miyaoka

PCP6-1. Uncertainties in calculations and simulations of external exposures

QST Keiichi Akahane

PCP6-2. Estimation of internal exposure doses and uncertainty of its simulation

Fukushima Medical University Takashi Ohba

## **Interdisciplinary Communication Committee Program: JSMP-JSMBE Joint Session**

April 12 (Sat.) 12:00–13:00 (418)

Research trends and fundamental mathematics of non-rigid medical image registration

Chairperson: Kindai University

Yuichi Kimura

QST

Shigekazu Fukuda

PJP-1. Research trends and fundamental mathematics of non-rigid medical image registration

Nagoya Institute of Technology

Hidekata Hontani

PJP-2. Panel Discussion

Teikyo University

Jun'ichi Kotoku

## **JSMP Board of Directors**

April 10 (Thu.) 12:00–15:00 (411)

## **JSMP Member Meeting**

April 10 (Thu.) 16:30–18:00 (418)