



ISRRT WC2022 Oral Presentation Programs 15-17 December 2022, Bangkok, THAILAND

Friday 16th December 2022 (M Floor)

10:00-10:30 Special Talk Session 1

Topic: ISRRT's 'Safety Culture and General Safety Management Guide for Diagnostic Imaging and Radiation Therapy Departments' – a brief overview

Speaker: *Stewart Whitley*

16 December 2022: 10:30-11:30: Scientific Session A (CT/MRI) | Room 1

Chair: Tim Agadacos

Co-Chair: Taweap Sanghangthum

• A1: 10.30-10.40	Opportunistic optimizing uses CT Imaging for Osteopenia and Osteoporosis screening as early prevention and awareness of bone density changes: Relationship between Hounsfield Unit from CT and T- scores from DXA Mohamad Farhan Mohamad Amin, Malaysia
• A2: 10.40-10.50	Evaluation Diffusion tensor imaging quality of median nerve in Carpal tunnel syndrome Thanh Hoang Ngoc, Vietnam
• A3: 10.50-11.00	Synthesis of Manganese Nanoparticles of Oolong Tea Extract by Sonication Method for a Natural Oral Contrast Media on Magnetic Resonance Cholangiopancreatography (MRCP) Fatimah Yunaeza, Indonesia
• A4: 11.00-11.10	Performance evaluation of micro-vessels imaging by deep learning reconstruction targeting ultra-high-resolution CT (UHR-CT) Katsumi Tsujioka, Japan
• A5: 11.10-11.20	Effects of contrast media and radiation dose reduction for abdominal CT examination Sue Anne Foo, Malaysia
• A6: 11.20-11.30	Improving Brain Volume Measurement Workflow using Combination of Compressed Sensing MRI and Deep Learning based Super-Resolution at 1.5T Clinical Scanner Atita Suwannasak, Thailand

10:00-10:30 Special Talk Session 2

Topic: Physical Principles behind Diffusion Imaging - An Overview

Speaker: *Panneer Selvam*

16 December 2022: 10:30-11:30: Scientific Session B (CT/MRI) | Room 2

Chair: Hakon Hjemly

Co-chair: Lakkana Apipanyasopon

• B1: 10.30-10.40	Size specific dose estimates for computed tomography cancer patients at an oncology hospital Ida-Keshia Sebelego, South Africa
• B2: 10.40-10.50	Visualization of the importance of the applied timing of the gradient magnetic field in acquiring gradient echo MR images using MRI simulation Noriyuki Tawara, Japan
• B3: 10.50-11.00	Arterial Spin Labelling Artefacts and Methods to Overcome Parameswaran Nair Sulochana Mahesh, India
• B4: 11.00-11.10	MRI Safety Report by the Norwegian Society of Radiographers Håkon Hjemly, Norway
• B5: 11.10-11.20	Diffusion Tensor Imaging of Breast MRI: A Literature Study in Breast Cancer

	Kadek Aditya Megagupta Oka, Indonesia
• B6: 11.20-11.30	Use of ARDL sequences to reduce scan time while improving imaging quality Zhu Hong Poh, Singapore

10:00-10:30 Special Talk Session 3

Topic: The impact of 3D Virtual Reality radiation safety training upon radiography and medical students

Speaker: *Louis Rainford*

16 December 2022: 10:30-11:30: Scientific Session C (Education) | Room 3

Chair: Tan Chek Wee

Co-chair: Thititip Tippayamontri

• C1: 10.30-10.40	How do experts rate radiography research topics? Sanna Törnroos, Finland
• C2: 10.40-10.50	Current Status on Medical Radiation Safety Management in Asia: A Questionnaire Survey Hiroko Yamashina, Japan
• C3: 10.50-11.00	Evaluation of case simulations for radiographer education within FORCE project Nina Dalen Seime, Norway
• C4: 11.00-11.10	Tools to Manage Burnout and Compassion Fatigue South-Winter Carole, USA
• C5: 11.10-11.20	Practice Considerations and Attitudes Regarding Large Bodied Patients in Medical Radiation Sciences Megan Brydon, Canada
• C6: 11.20-11.30	Supporting authors to publish in gold open access through global institutional transformational agreements: Will this become the new normal in medical radiation sciences? Cherry Agustin, Australia

10:00-10:30 Special Talk Session 4

Topic: Revision of the Radiological Technologist Act and Expansion of Practice in Japan

Speaker: *Naoki Kodama*

16 December 2022: 10:30-11:30: Scientific Session D (Radiation Protection) | Room 4

Chair: Kitiwat Khamwan

Co-chair: Krisanat Chuamsamarkkee

• D1: 10.30-10.40	The safety and effectiveness of a 0.054-inch novel catheter for diagnostic cerebral angiography: closed-continuous flushing with guidewire vs. open-intermittent flushing Joon Ho Choi, Republic of Korea
• D2: 10.40-10.50	Patients' internal dose distribution and Monte Carlo simulation in association with the operator's protection from scattered radiation in radiographic examinations Shoichi Suzuki, Japan
• D3: 10.50-11.00	Variation in radiation exposure dose to the thyroid gland outside the irradiation field, during head computed tomography, with changes in tilt angle Kenta Higuchi, Japan
• D4: 11.00-11.10	Enhance the Learning Experience through the use of Interactive Pedagogies Methodology in Radiation Protection Edward Wong, Hong Kong
• D5: 11.10-11.20	Measurements of effective dose and entrance surface dose in diagnostic radiography using OSL dosimeter Waraporn Sudchai, Thailand
• D6: 11.20-11.30	A study on changes in exposure dose through development of bismuth shield during pediatric X-ray examination Yong-keun Kim, Republic of Korea

10:00-10:30 Special Talk Session 5**Topic:** A bird's eye view on research activities**Speaker:** *Hesta Friedrich-Nel***16 December 2022: 10:30-11:30: Scientific Session E (General Radiography) | Room 5****Chair:** Alain Crompt**Co-chair:** Taratip Narawong

• E1: 10.30-10.40	Radiographer-led fluoroscopic service: an evaluation report <i>Chow Yong Ng, Singapore</i>
• E2: 10.40-10.50	The practical experience of using the exposure index of digital radiography in quality assurance management <i>Edward HT Chan, Hong Kong</i>
• E3: 10.50-11.00	Conflicting radiation protection and infection prevention measures for neonatal radiography <i>Van der Linde, South Africa</i>
• E4: 11.00-11.10	DIAM: our experience with the Digital Imaging Adoption Model <i>David de Vries, The Netherlands</i>
• E5: 11.10-11.20	The experiences of Singapore radiographers performing mobile radiography in the COVID-19 pandemic <i>Lock Hui Shan, Singapore</i>
• E6: 11.20-11.30	A non-immersive virtual reality approach to general x-ray quality control <i>Mazlyfarina Mohamad, Malaysia</i>

13:10-13:40 Special Talk Session 6**Topic:** ISRR's 'Safety Culture and General Safety Management Guide for Diagnostic Imaging and Radiation Therapy Departments' – Risk Management in Radiation Therapy**Speaker:** *Tan Chek Wee***16 December 2022: 13:40-14:30: Scientific Session F (CT/MRI) | Room 1****Chair:** Stewart Whitley**Co-Chair:** Taweap Sanghangthum

• F1: 13.40-13.50	How to start a CT Dose Management Program to reduce radiation dose <i>Edward Wong, Hong Kong</i>
• F2: 13.50-14.00	Image quality in low-dose CT: Correlation of Image Quality Metrics (IQM) and Observer Performance <i>Maryam Jessop, United Kingdom</i>
• F3: 14.00-14.10	A comparison of CT brain image quality between two scanners model using texture analysis in Smitivej Srinakarin Hospital <i>Sermsak Saengphet, Thailand</i>
• F4: 14.10-14.20	A new performance evaluation of imaging for micro-vessels in CT (Imaging of perforating branch of brain) <i>Katsumi Tsujioka, Japan</i>
• F5: 14.20-14.30	Spatial resolution and motion artifacts of on-center and off-center FOV in cardiac CT examination (Usefulness of lateral movement of patient table) <i>Katsumi Tsujioka, Japan</i>

13:10-13:40 Special Talk Session 7**Topic:** Latest clinical application in x-ray CT**Speaker:** *Katsumi Tsujioka***16 December 2022: 13:40-14:30: Scientific Session G (Education) | Room 2****Chair:** Terry Ell**Co-Chair:** Lakkana Apipanyasopon

• G1: 13.40-13.50	Diagnostic performance of radiographers compared with an international radiology cohort from developing countries in breast cancer detection <i>Sarah Lewis, Australia</i>
• G2: 13.50-14.00	Building frameworks to map infection prevention and control in medical imaging: how methodologies affect our understanding <i>Yebelli Jimenez, Australia</i>
• G3: 14.00-14.10	Students' reflection on the community based interprofessional education intervention <i>Mable Kekana, South Africa</i>
• G4: 14.10-14.20	Prospects and Challenges of Entrepreneurship in Radiography Practice Among Radiographers in Selected Imaging Facilities in Anambra State, Nigeria <i>Okpaleke Michael Sunday, Nigeria</i>
• G5: 14.20-14.30	Historical development of medical imaging along with the Japanese radiological education system in three stages <i>Yasuaki Sakano, Japan</i>

13:10-13:40 Special Talk Session 8**Topic:** Strengthen of radiographer's professional development in Indonesia**Speaker:** *Giek Sugiyanto***16 December 2022: 13:40-14:30: Scientific Session H (Radiotherapy/Radiation Protection) | Room 3****Chair:** Yudthaphon Vichianin**Co-Chair:** Thititip Tippayamontri

• H1: 13.40-13.50	Cerebral angiographic procedure using high kV technique reduces patient radiation dose during intracranial aneurysmal diagnosis, a retrospective and phantom study <i>Woranan Kirisattayakul, Thailand</i>
• H2: 13.50-14.00	Quantitative uncertainty analysis in the calibration coefficients of GeDCOF and TLD-100 for absorbed dose measurement to water in megavoltage photon beam <i>Muhammad Safwan Ahmad Fadzil, Malaysia</i>
• H3: 14.00-14.10	Evaluation of a Time-of-Flight Imaging System for Deep Inspiration Breath-hold Radiotherapy (DIBH-RT) Patient Setup and Intra-fraction Breath-hold Monitoring <i>Abubakar Auwal, Nigeria</i>
• H4: 14.10-14.20	The knowledge and perception of radiation therapists on psychosocial and supportive care for cancer patients in hospital counselor Tuanku Mukhriz national cancer institution Malaysia <i>Nor Aniza Azmi, Malaysia</i>
• H5: 14.20-14.30	Evaluation of protective barriers of CT Scan room at a Medical College, Chitwan, Nepal <i>Suruchi Gupta, Nepal</i>

13:10-13:40 Special Talk Session 9**Topic:** Current and future trends in magnetic resonance imaging**Speaker:** *Uten Yarach***16 December 2022: 13:40-14:30: Scientific Session I (Radiation Protection) | Room 4****Chair:** Boniface Yao**Co-Chair:** Krisanat Chuamsamarkkee

• I1: 13.40-13.50	Unique Occupational Health Risks in Cardiac Catheterization Laboratory Workers <i>Christopher Steelman, USA</i>
• I2: 13.50-14.00	To Shield or Not to Shield?" Frontline Radiographer's Perspective <i>Safoora Fahim, Canada</i>
• I3: 14.00-14.10	The frequency of non-catheterization radiological examination and the contribution to radiation dose among Norwegian pediatric patients with congenital heart disease <i>Afroz S, Norway</i>
• I4: 14.10-14.20	Diagnostic Reference Level in Coronary Angiography: A Single Healthcare Facility <i>Puteri Athirah Mohamed Hanif, Malaysia</i>
• I5: 14.20-14.30	Radiographers Perspectives of Patients Contact Shielding in Nigeria <i>Elizabeth Balogun, Nigeria</i>

13:10-13:40 Special Talk Session 10**Topic:** Interventional radiology from back to the future**Speaker:** *Philippe Gerson***16 December 2022: 13:40-14:30: Scientific Session J (IR/Mammography/US) | Room 5****Chair:** Sharon Wartenbee**Co-Chair:** Taratip Narawong

• J1: 13.40-13.50	Selective Internal Radiation Therapy (SIRT) treatment for Liver Cancer <i>Goran Obradovic, Australia</i>
• J2: 13.50-14.00	Effect of Mammographic Breast Density on Average Glandular Dose (AGD) during Full-Field Digital Mammogram <i>Rafidah Supar, Malaysia</i>
• J3: 14.00-14.10	Can new ultrasound software accurately grade hepatic steatosis? <i>Marilyn Zelesco, France</i>
• J4: 14.10-14.20	Patient dose from conventional 2-dimension mammography and combined tomosynthesis techniques: a comparative study with the Diagnostic Reference Levels <i>Phattharaphon Khampukdee, Thailand</i>
• J5: 14.20-14.30	Implementation Benefits, Challenges and Strategies for Sustainable Ultrasound Use in Low- and Middle-Income Countries: A Systematic Review <i>Samuel Laushugno Shem, Nigeria</i>

Saturday 17th December 2022 (M Floor)

17 December 2022: 09.00-09:30: Sunrise Session A (Artificial Intelligences) | Room 1

Chair: Donna Newman

Co-Chair: Taweap Sanghangthum

• SR1: 09.00-09.10	Collimation border with U-net segmentation on chest radiographs compared to radiologists Pedersen Alex Elgaard, Ireland
• SR2: 09.10-09.20	Artificial intelligence and radiotherapy: the present unavoidable reality Joseph Dlana Zira, Nigeria
• SR3: 09.20-09.30	Brain morphometry and seed-based analysis of resting-state functional connectivity in default mode network of Alzheimer's disease patients compared with healthy control subjects in the Klang Valley, Malaysia Mohad Azmi NH, Malaysia

17 December 2022: 09.00-09:30: Sunrise Session B (Artificial Intelligences) | Room 2

Chair: Dimitris Katsifarakis

Co-Chair: Lakkana Apipanyasopon

• SR4: 09.00-09.10	Artificial intelligence software: Can it improve the MSK decision making of radiographer? A pilot study in France Florian Nassiri, France
• SR5: 09.10-09.20	i-DetectBC: An early design of computer aided diagnosis with artificial intelligence for breast cancer detection Kamarul Amin, Malaysia
• SR6: 09.20-09.30	Accuracy of skull stripping in a single-contrast convolutional neural-network model on eight contrast magnetic resonance images Masami Goto, Japan

17 December 2022: 09.00-09:30: Sunrise Session C (Education) | Room 3

Chair: Philippe Gerson

Co-Chair: Thititip Tippayamontri

• SR7: 09.00-09.10	The future roles of a radiographers Friedrich-Nel Hesta, South Africa
• SR8: 09.10-09.20	Education and empowerment for coping (EEC) support strategies: a framework for diagnostic radiography students to cope with death and dying patient experiences in the workplace van de Venter R, South Africa
• SR9: 09.20-09.30	Ascertaining the Relationship Between the Radiologic Technologists' Standard Precaution Practices and Attitudes in Handling Covid-19 Patients Torio Mark Anthony G, The Philippines

17 December 2022: 09.00-09:30: Sunrise Session D (CT/MRI) | Room 4

Chair: Tim Agadacos

Co-Chair: Nuanpen Damrongkijudom

• SR10: 09.00-09.10	Visual grading assessments of model-based iterative reconstruction in abdominal CT: Can radiologists learn to adapt to the unusual image quality Kataria Bharti, Sweden
• SR11: 09.10-09.20	Paediatric computed tomography radiation dose optimization strategies Liang Chong Ri, Singapore
• SR12: 09.20-09.30	Comparative analysis 64-slice single source single energy and first-generation dual source dual energy CT in CT brain Muhammad Nazmi Zulkafli, Malaysia

17 December 2022: 09:00-09:30: Sunrise Session E (Education/Others) | Room 5**Chair: Tan Chek Wee****Co-Chair: Taratip Narawong**

• SR13: 09.00-09.10	The FORCE project: a framework for online radiographer clinical education <i>Kate Matthews, Ireland</i>
• SR14: 09.10-09.20	Post COVID 19 experience among radiographers in Tanzania <i>Stephen Samson Mkoloma, Tanzania</i>
• SR15: 09.20-09.30	Radiographer competency - peer review modality image quality audit <i>Nurul Jannah, Singapore</i>

09:30-10:00 Special Talk Session 11**Topic: Shielding: the continued discussion****Speakers: Melissa Pergola, Kristi Moore (ASRT)****17 December 2022: 10:30-12:00: Scientific Session K (Education) | Room 1****Chair: Boniface Yao****Co-Chair: Taweap Sanghangthum**

• K1: 10.30-10.40	Developing patient case simulations for teaching: experience and advice from the FORCE project <i>Kate Matthews, Ireland</i>
• K2: 10.40-10.50	Review analysis of request forms necessary for radiological procedures: is the information justifiable? <i>Stephen Samson Mkoloma, Tanzania</i>
• K3: 10.50-11.00	A postgraduate introductory module in artificial intelligence for radiographers: experiences of students and educators <i>van de Venter R, United Kingdom</i>
• K4: 11.00-11.10	Evaluating Satisfaction of the Radiologist Assistant within an Academic Pediatric Institution: Comparing Reviews from Staff Radiologic Technologists, Radiologists, and Radiology Residents <i>Jason Lee, USA</i>
• K5: 11.10-11.20	Clinical indication versus anatomical diagnostic reference level for computed tomography: a nitty gritty for dose optimization in radiography practice <i>Joseph Dlama Zira, Nigeria</i>
• K6: 11.20-11.30	Assessment of knowledge and practice regarding infection control among radiography professionals of five tertiary level hospitals of Nepal <i>Suman Duwal, Nepal</i>
• K7: 11.30-11.40	Examining factors associated with acceptance of illness among Malaysian patients with cancer undergoing treatment with radiotherapy <i>Wun Chin Leong, Malaysia</i>
• K8: 11.40-11.50	Effectiveness of methodology of teaching in radiology imaging technology <i>Abhishek Sehwat, India</i>

09:30-10:00 Special Talk Session 12**Topic: The new normal in Canada – insights from the CAMRT****Speaker: Megan Brydon, Irving Gold (CAMRT)****17 December 2022: 10:30-12:00: Scientific Session L (US/Mammography/Others) | Room 2****Chair: Dimitris Katsifarakis****Co-Chair: Lakkana Apipanyasopon**

• L1: 10.30-10.40	The influence of COVID-19 on Ultrasound practice <i>Macia Smoke, Canada</i>
• L2: 10.40-10.50	What about small gallbladder polyps? <i>Malene Roland Pedersen, Denmark</i>
• L3: 10.50-11.00	Implementation Benefits, Challenges and Strategies for Sustainable Ultrasound Use in Low- and Middle-Income Countries: A Systematic Review

	Shem Samuel Laushugno, Nigeria
• L4: 11.00-11.10	Patient safety in sonography, lessons for the new normal John McInerney, Australia
• L5: 11.10-11.20	Variability in mammographic images quality evaluation and Predictive factors affecting it Norhashimah Mohd Norsuddin, Malaysia
• L6: 11.20-11.30	Value-based model in radiology: Establishing value-based radiology metrics project part one-baseline study in service consumption and expenses of radiological services through data analytics Wee Siang Tan, Singapore
• L7: 11.30-11.40	Analysis of BM3D denoising techniques to Improvement of thoracal MRI image; study on low field MRI Fisnandya meita Astari, Indonesia

09:30-10:00 Special Talk Session 13

Topic: The advanced of radiobiology in the radiologic sciences

Speaker: *Thititip Tippayamontri*

17 December 2022: 10:30-12:00: Scientific Session M (Education/General Radiography/Others) | Room 3

Chair: Alain Crompt

Co-Chair: Thititip Tippayamontri

• M1: 10.30-10.40	Students' reflection on the community based interprofessional education intervention Mable Kekana, South Africa
• M2: 10.40-10.50	Determination of correlation between the measured radial inclination on a posteroanterior (PA) wrist radiograph and the degree of tube angulation required for anatomic tilt lateral (ATL) wrist radiograph Kia Yan Kwok, Singapore
• M3: 10.50-11.00	Perception of Learning Environment among Medical Imaging and Radiotherapy Students at Catholic University of Health and Allied Sciences in Tanzania Diana Robert Mafje, Tanzania
• M4: 11.00-11.10	Estimation of Gender from Anteroposterior Pelvis Radiograph among Nepalese population Suraj Sah, Nepal
• M5: 11.10-11.20	Optimizing Radiology-related workflows in an Emergency Department: a single centre experience from National University Hospital of Singapore Choon Ann Tan, Singapore
• M6: 11.20-11.30	The New Normal in Clinical Radiography Education and Practice in A Nigerian Population Post-Covid 19 Okpaleke Michael Sunday, Nigeria
• M7: 11.30-11.40	Evaluation of Intracranial Physiological Calcifications in Computed Tomography Bhupendra Prasad Bhatt, Nepal

09:30-10:00 Special Talk Session 14

Topic: Challenging of personalized molecular dosimetry for theranostics and radiopharmaceutical therapy in the era of precision medicine

Speaker: *Kitiwat Khamwan*

17 December 2022: 10:30-12:00: Scientific Session N (Nuclear Medicine/Radiation Protection/Others) | Room 4

Chair: Kitwat Khamwan

Co-Chair: Nuanpen Damrongkijudom

• N1: 10.30-10.40	Anti-EpCAM and Anti-EGFR Targeted Theranostic Functionalized I-131 labeled Poly (lactic-co-glycolic acid) (PLGA) Radio-Nanotherapy for Cancer Treatment Suphalak Khamruang Marshall, Thailand
• N2: 10.40-10.50	The comparison of radiation attenuation correction techniques for relative renal function in renal cortical scintigraphy Benchamat Phromphao, Thailand
• N3: 10.50-11.00	COVID-19: Changes in Radiographers' Infection Control Practices in Malaysia Nur Anis Izzati Che Mut, Malaysia

• N4: 11.00-11.10	The performance study of the automated radiopharmaceutical administration for PET/CT patients at KCMH Surasith Ploymanee, Thailand
• N5: 11.10-11.20	Assessing Variability and Correlation between the SUV and ADC Parameters of Head and Neck Cancer Derived from Simultaneous PET/MRI: A Single Center Pilot Study in Thailand Monchai Phonlakrai, Thailand
• N6: 11.20-11.30	Estimation of Occupational Eye Lens Dose in Nuclear Medicine: A Monte Carlo Study Pakjira Morhrasi, Thailand
• N7: 11.30-11.40	Study of eye lens radiation dose reduction during head CT scan examination Anisa Nur Istiqomah, Indonesia

09:30-10:00 Special Talk Session 15

Topic: Simulated patient training toward OSCE (Objective Structured Clinical Examination) in Japan

Speaker: Hiroko Yamashina (JSRT)

17 December 2022: 10:30-12:00: Scientific Session O (Education/Others) | Room 5

Chair: Hiroko Yamashina

Co-Chair: Taratip Narawong

• O1: 10.30-10.40	Training of radiographers in North Estonia Medical Centre Reelika Hlevnjuk and Elvis Russki, Estonia
• O2: 10.40-10.50	Radiotherapy communication skills training using Chatbot-Based Prototype (SCIMORT) Nor Aniza Azmi, Malaysia
• O3: 10.50-11.00	Evaluating educational videos to teach radiographers professionalism Gazali NA, Singapore
• O4: 11.00-11.10	Job satisfaction among radiographers in a kingdom of Himalayas, Nepal Anjan Dangal, Nepal
• O5: 11.10-11.20	Awareness on ionizing radiation among non-radiation healthcare workers at teaching and referral hospital in East Africa Caesar Barare, Kenya
• O6: 11.20-11.30	How to deal with MRI artefacts Catherine Muchuki, Kenya
• O7: 11.30-11.40	The role of world radiography education trust foundation Adam Francis Zuberi, Tanzania