



ISRRT
INTERNATIONAL
SOCIETY OF
RADIOGRAPHERS
& RADIOLOGICAL
TECHNOLOGISTS

news & views

DECEMBER 2017

from around the world

The Official Publication of the ISRRT



20th ISRRT World Congress
Trinidad & Tobago
April 12-15, 2018



VersaHD.

Powered by high definition dynamic radiosurgery.

Versa HD™ with Monaco® gives you the clinical flexibility of high definition dynamic radiosurgery (HDRS) and conventional RT in a single platform. HDRS means you can deliver stereotactic treatments within standard RT time slots, regardless of anatomy or complexity. And, with advanced image guidance tools and up to 5x less transmission to non-targeted regions, you have assurance of end-to-end precision.

Discover how Versa HD can help you meet operational efficiencies while achieving better outcomes for patients.

elekta.com/VersaHD



Focus where it matters.

 Elekta

Art. No. 4513 371 1539_03.17 © 2017 Elekta AB (publ.) All mentioned trademarks and registered trademarks are the property of the Elekta Group. All rights reserved. No part of this document may be reproduced in any form without written permission from the copyright holder.

Contents

REPORT

Medical imaging technology – Nepal	14
Italian radiographers bridging the gap	17
Pearl of Africa annual conference a success	18
Zimbabwe celebrates first PhD radiographer	20
Malaysia hosts IOF & ISCD courses	21
Return visit to Zambia provides further training	22
Vienna: IAEA technical meeting	30
Professional Practice Update	38
The e-Encyclopaedia of Medical Physics	44

ARTICLE

2017 DoseWise winner	13
Thailand: UN-QA framework and the radiological technology program	16
Exponential growth of medical imaging	26
HERCA Multi-Stakeholders workshops	28
RSNA overview of talk on “Developing Scope of Practice of Radiographer from the ISRRT Perspective”	32
2018 World Congress	36

NEWS

News from member societies:	
The Americas: America, Canada, Trinidad & Tobago	48
Australasia: Australia, Bangladesh, New Zealand	51
Europe: Finland	53
Africa: South Africa	53

REGULARS

ISRRT Officers of Board of Management	5
ISRRT Committee Regional Representatives	5
Contact details for ISRRT editorial and advertising	6
President’s Message	7
CEO Support Services report	9
Treasurer’s report	10
Diary dates	45
WRETF	46
Names and addresses of member societies & ISRRT Council Members	54

ISSN NO. 1027-0671



ISRRT Editorial Committee:

Dr Fozy Peer
Mr Alain Crompt

Editor:

Rachel Bullard

Production & Design:

Deep Blue Design Studio,

deepbluedesign1@me.com

www.isrrt.org

Views expressed in this Newsletter are not necessarily those of the ISRRT.



a Guerbet Group Company

Designed to work the way you work

FlowSens®



OptiStar® Elite



OptiOne®



OptiVantage®



Illumena® Néo



**Quality, Efficiency
Flexibility, Safety**

Ready-Box®



**LF@guerbet.com
www.guerbet.com**

Guerbet | 
Contrast for Life

Disclaimer: these products are medical devices intended for use by medical imaging and diagnostic health professionals, for injection of contrast media and saline solutions during a CT exam. For complete information about precautions and optimal usage conditions for these medical devices, we recommend consulting the instructions notice/user's manual. Ensure that injection from multi-dose containers and to more than one patient respects the valid rules of good practice and the marketing authorisation (MA) of the contrast agent and local regulatory requirements.

FlowSens®, OptiStar® Elite, OptiOne®, OptiVantage®, Illumena® & Ready-Box® are trademarks of Guerbet & Liebel Flarsheim. Patents requests on-going. FlowSens®: Class IIb – CE0459 – Manufacturer: MEDEX - 240 Allée Jacques Monod, 69800 Saint-Priest, France. OptiStar® Elite, OptiOne®, OptiVantage® & Illumena®: Class IIb – Ready-Box®: Class IIa – CE0123 – Manufacturer: Liebel-Flarsheim Company LLC - 2111 East Galbraith Road, Cincinnati, OH 45237, USA.

Document creation date: January 2017. © Copyright 2015 Guerbet - All rights reserved.

MKT-ADV-2017-001

ISRRT Officers: Board of Management

PRESIDENT

Dr Fozy Peer,
PO Box 1435, Windsbeck,
KwaZulu-Natal, South Africa 3631
Tel: 27 31 2401881; Fax: 27 31 0865215256
Email: fozypeer@gmail.com

VICE PRESIDENTS

The Americas

Terry Ell
228 Signature Pt. S.W., Calgary
Alberta, Canada
Email: terry.ell@albertahealthservices.ca

Asia and Australasia

Dr Napapong Pongnapang
Depart. of Radiological Technology,
Faculty of Medical Technology,
Mahidol University, 2 Prannok Rd,
Siriraj Hospital, Bangkok 10700, Thailand
Tel: +66 2 419 7173; Fax: +66 2 412 4110
Mobile: +66 81 900 2210
Email: napapong@hotmail.com;
mtnpp@mahidol.ac.th

Europe and Africa

Mr Philippe Gerson
Cadre Paramédical Pôle Imagerie
Hôtel Dieu de Paris
1 Place du Parvis Notre Dame
75004 Paris, France
Tel: +33142348228; Fax: +33142348741
Mobile: +33630191555
Email: philgerson@neuf.fr

FINANCE COMMITTEE

Dr Fozy Peer, Mr Stewart Whitley, Dr Napapong Pongnapang, Mr Philippe Gerson, Mr Terry Ell. See Board of Management for Finance Committee addresses.

ISRRT Committees Regional Representatives

EDUCATION COMMITTEE

The Americas

Dr Robin Hesler
594 Upper Paradise Road
Hamilton,
ON, Canada L9C 5P6
Email: lscolonel@rogers.com

Africa

Hesta Friedrich-Nel
Department of Clinical Sciences, CUT
Private Bag X20539, Bloemfontein
9300, South Africa
Email: hfried@cut.ac.za

Europe

Ian Henderson
School of Health Sciences
Robert Gordon University
Garthdee Road, Aberdeen
AB10 7QG Scotland
Email: p.i.henderson@rgu.ac.uk

Asia and Australasia

Yudthaphon Vichiani
396/20 Jarunsanidwong 32 Rd.
Siriraj, Bangkoknoi, Bangkok 10700
Email: yudthaphon@gmail.com

REGIONAL DIRECTORS

The Americas

Sharon Wartenbee
504 Autumn Lane, Sioux Falls, SD 57105 USA
Email: wartenbee@sio.midco.net

Asia and Australasia

Tan Chek Wee
National University Health System
Department of Radiation Oncology
Medical Centre Level 8
5, Lower Kent Ridge Road, Singapore 119074
Tel: +65 67728380
Email: sunrisepl@hotmail.com

Africa

Boniface Yao
18 BP 720, Abidjan 10, Cote d'Ivoire
Mobile: (00225) 07052526/55066420/
40097740
Tel: (00225) 21242900 poste 240
Email: kwame_boniface@yahoo.fr

Europe

Bodil Andersson
Temyntsgränd 3, SE-296 33 Åhus, Sweden
Mobile: +46 (0) 703 697122
Email: bodil-t.andersson@med.lu.se

TREASURER

Mr Stewart Whitley
UK Radiology Advisory Services Ltd
38, The Brooklands, Wrea Green, Preston

Lancashire, England PR4 2NQ
Tel: +44(0)1772 686689;
M: +44(0)7973458499
Email: aswhitley@msn.com

DIRECTOR OF EDUCATION

Dr Maria Y.Y. Law
Medical Physics and Research
8/F, Lee Shu Fan Block,
Hong Kong Sanatorium and Hospital
2 Village Road, Happy Valley, HK
Email: maria.law@polyu.edu.hk

DIRECTOR OF PROFESSIONAL PRACTICE

Ms Donna Newman
300 NP AVE #307
 Fargo North Dakota 58103
Tel: +1 (701) -234-5664
Email: donna.newman@sandfordhealth.org

DIRECTOR OF PUBLIC RELATIONS & COMMUNICATIONS

Alain Crompt
7700 rue du Mans # 606
Saint-Leonard, Quebec, Canada H1S 1Z9
Email: alaincrompt@videotron.ca

CHIEF EXECUTIVE OFFICER SUPPORT SERVICES

Mr Dimitris Katsifarakis
207 Providence Square,
Mill Street,
London, SE1 2EW
E-mail: ceo@isrrt.org

PROFESSIONAL PRACTICE COMMITTEE

The Americas

Christopher Steelman
43 Chestnut Street #307
Newhaven, CT 06511, USA
Email: csteelman@x-rayintl.org

Asia and Australasia

James Ho Namkoong
PETMRI Center
Department of Radiology
Seoul National University Hospital
101 Daehak-ro
Jongro-gu, Seoul, 110-744, Korea
Email: koreajamesho@gmail.com

Africa

Elizabeth Balogun
Plot 526 Aina Akingbala Street
Omole Phase 2 Estate
Isheri, Lagos
Email: kanmibalo@yahoo.com

Europe

Piret Vahtramae
Parnu Hospital
Ristiku 1, Parnu 80010, Estonia
E-mail: piretv@ph.ee or piretv@gmail.com

PUBLIC RELATIONS & COMMUNICATIONS COMMITTEE

The Americas

Ms Aneesa Ali
Email: aneesaali3042@gmail.com

Asia and Australasia

Mr Robert T.L. Shen
Dept. of Radiology, Veterans General Hospital
201, Sec. 2 Shipai Rd., Taipei, Taiwan 11217
Email: tlshen@yahoo.com

Europe

position vacant

Africa

Ayodele Okhiria
HR & Medical Department
Chevron Nigeria Limited,
2, Chevron Drive, Lekki Peninsula
PMB 12825, Lagos, Nigeria
Email: delok01@yahoo.com
modelman1956@gmail.com

The ISRRT is registered as a charity in the United Kingdom: Registration No. 27 6218.

Editorial Submissions & Deadlines

Remember to e-mail your news before the deadline to:

Production Editor

Mrs Rachel Bullard

Email: deepbluedesign1@me.com

Deadline for the three times a year issues are:

March 1 (April issue)

July 1 (August issue)

November 1 (December issue)

All material must be sent electronically.

Advertisements and images to be sent as high resolution PDF, TIF, EPS, JPEG files.

You are invited to comment in relation to the ISRRT Newsletter editorial content and make suggestions for future issues.

All comments will be considered by the Editor and her Committee.

Advertisements/Secretariat

A section is reserved for the advertising of educational programs, courses or new radiological texts.

For further details or to advertise your program or new publications please contact the ISRRT Chief Executive Officer Support Services:

Mr Dimitris Katsifarakis

207 Providence Square,

Mill Street,

London SE1 2EW

Telephone: 020 7740 7200

Email: ceo@isrrt.org

World Radiography Educational Trust Foundation (WRETF)

General Manager: Ms Sue Marchant
143 Corfield Street,
Bethnal Green,
London
E2 0DS UK
susanmarchant@wretf.org

ADVERTISING INFORMATION

The ISRRT Newsletter would like to invite readers and others to take advantage of the extent of our circulation and advertising service.

The ISRRT Newsletter *News & Views* reaches 72 countries, 4,500 associate members, libraries and schools of radiography, government bodies and professional societies.

The following are costs for colour advertising as at January 2017.

	1 issue	2 issues	3 issues
full page	£300	£550	£750
half page	£225	£400	£500
quarter page	£100	£150	£200
one eighth page	£60	£100	£150

SIZES:

FULL PAGE

210mm x 290mm (add 5mm all round for bleed)

HALF PAGE: 210mm x 140mm

QUARTER PAGE: 92mm x 140mm

EIGHT PAGE: 210mm x 65mm

Please send hi-res print ready file (PDF, JPG) to:

CEO Email: ceo@isrrt.org

Production Editor: deepbluedesign1@me.com



Dr Fozy Peer
ISRRT President

President's message

Once again, the ISRRT Board of Management and the CEO are kept very busy carrying out the duties of our respective offices and representing the ISRRT and the profession at key meetings across the globe. Much of what we do on an ongoing basis is shared on social media platforms, placed on the ISRRT website and/or captured in this newsletter. The ISRRT and its Board will continue to support the mission and vision of the Society and to represent our profession across the globe.

We have recently celebrated World Radiography Day 2017 using our annual poster that features our global presence and the theme "We Care About Your Safety". This particular theme is in keeping with actions 8 and 10 identified in Bonn Call-for-Action related to;

- Strengthen radiation safety culture in health care, and
- Strengthen the implementation of safety requirements globally.

This should remind us that we as radiographers and radiological technologists play a key role in the diagnosis and treatment of disease as well as safety as we partner with others in healthcare to care for our patients and their families.

I was recently invited to address delegates at congresses in South Africa and Dubai, UAE on radiation protection and patient safety culture, where coincidentally both countries had joint radiographer-radiologist meetings.

I stressed the role of the radiographer as gatekeeper and being an integral part of the team when it came to issues related to radiation protection and safety. The ISRRT position statements available on the ISRRT website refer to the radiographer/radiological technologist role in authorisation and justification of medical exposure as a team approach and the radiographer/radiological technologist role in optimisation of medical exposure.

At the congress in Durban, South Africa, we were privileged to host Prof Michael Kawooya, the chairman of AFROSAFE, a recently launched continental campaign for radiation safety in Africa, who presented the keynote address related to radiation safety and the Bonn Call-for-Action.



Christoph Traueunicht, Prof Michael Kawooya, Fozy Peer, Belinda van der Merwe at the 2017 Imaging Congress in Durban South Africa.



Medical Imaging students from the Higher Colleges of Technology in Dubai attending the Annual Radiology Meeting, a joint congress of Radiologists and Radiographers.

President's message continued



IIRRT local organising committee members and PCO with ISRRT meeting during site visit to Dublin, Ireland.

In September this year we were warmly welcomed by members from the Irish Institute of Radiography and Radiation Therapy (IIRRT) to a site visit of Dublin in Ireland for the 2020 ISRRT World Congress. We had very fruitful meetings with the local organising committee and the professional congress organiser and visited the conference centre and some hotels that could be used to accommodate the delegates. We were treated to the pleasant sights and sounds of this delightful city.

The 20th ISRRT World Congress is just a stone's throw away. This landmark congress will be hosted in Trinidad and Tobago from April 12-15, 2018. The academic program will most certainly provide us all with information that will stimulate our minds and open us up to what is new and exciting in the radiologic science profession. The planned social activities promise loads of fun and include a social event as well as a gala dinner. Be sure to register timeously.

I have just returned from a very successful visit to the RSNA in Chicago, Illinois.

The ISRRT-Phillips Dosewise award for 2017 was presented to Mr S. Kim from South Korea. This is the second year that the awardee is from Seoul, Korea. We look forward to a continued future collaboration with Phillips.

We secured Samsung as a Platinum Corporate Sponsor after almost two years of negotiations. Samsung is also in the process of finalising an ISRRT-Samsung research award for 'Best Practice' that will probably be awarded annually.

Guerbet, a recently signed up Corporate Sponsor, has agreed to participate in the vendor exhibition during the 20th World Congress in

Trinidad and Tobago.

A memorandum of understanding (MoU) was signed with the British Institute of Radiology (BIR). The BIR will provide free access to webinars for ISRRT members.

Interesting discussions related to the PEP connect system were held with representatives from Siemens. More on this once an agreement has been reached.

Bracco, one of our existing sponsors of long standing, is very keen to work with the ISRRT on providing educational opportunities to our members.

We visited with Carestream – trying to interest them not only in corporate membership of the ISRRT but also had discussions around the promotion of educational material to ISRRT members.

We look forward to the continued support from our existing sponsors and engaging new vendors.

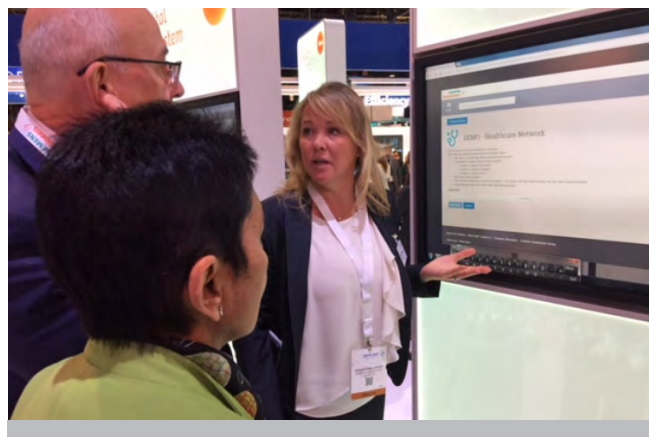
It is that time of year again where many of us enjoy a short reprieve from our usual day to day activities as the festive season befalls us. The ISRRT and its Board of Management will continue to represent the profession across the globe. I invite you to read through this ISRRT newsletter to capture all of the news related to the society and our profession.

Best wishes for a safe and peaceful festive season and new year. ■

Dr Fozy Peer
President, ISRRT



ISRRT in discussions with corporate sponsor Samsung.



Demonstration of the PEP Connect educational material by Siemens.



Dimitris Katsifarakis
ISRRT CEO Support Services

CEO Support Services report

I trust you are now reading the electronic version of the December 2017 issue of the *News & Views* through the new ISRRT website and you are enjoying flipping its pages via the new tool. The new website came out and belongs to radiographers/radiotechnologists around the world.

It will continue – in a more effective way – to disseminate important information and ISRRT documents to keep altogether the same pace through our common walk towards the continuous improvement of imaging and therapy services to patients through professional technology and human behavior. As the CEO of the ISRRT and project leader of the launch of the new website I want to deeply thank the President and the Board for their active collaboration and support, but particularly the Director of Public Relations and Communication for his tireless collaboration, comments and careful observation during the website redesigning and developing.

On the field of the ISRRT's presence in the international forum, the voice of the profession was heard loud and clear during the IAEA meeting on Radiation Therapy, where our Director of Education and RT-T by profession Dr Maria Law represented the ISRRT.

The Director of Professional Practice Ms Donna Newman represented ISRRT at the IAEA Congress on Radiation Protection along with the very well known and popular, particularly to the Asia-Australasia region, Vice President Dr Napapong Pongnapang.

I am pleased to say that the justification project launched by the ISRRT a couple of years ago is now under its second phase, as some radiography schools in Europe (especially) have imbedded it as a Master's degree program. From my position I want to thank the Drammen Radiography School and especially their Professors Dr Aud Mette, Director and Dr Hilde Olerud for making that possible. I would also like to thank our European colleagues from the EFRS who invited me to the next ECR 2018 to speak to the Junior Radiographer's session on the importance of Justification for Radiographers.

We are now less than four months until the 20th ISRRT World Congress in Trinidad and Tobago. ISRRT Board is in close collaboration with the local Organising Committee to make this congress a memorable one. The number of abstracts submitted and the quality of speakers involved guarantee a high standard in scientific content and as an educational event.

I am looking forward to meeting you all there. With my very best regards. ■

Dimitris Katsifarakis
CEO support services



Dimitris Katsifarakis and Council member at HERCA-IAEA.



ISRRT Board members meeting with Carestream at RSNA.



Stewart Whitley
Treasurer

Treasurer's report

Last April I reported that the Board had started the process of budget setting for 2018 which included determination of projects and workshops which will be held across the world in 2018.

This process has now been completed and I am pleased to report that workshops have been approved to take place in:

Africa 1:

Quality Assurance and risk management in medical imaging – Dakar, Senegal

Africa 2:

Justification of Practice and Optimization of Radiation Protection –

Mombasa, Kenya or Nairobi, Kenya

Europe: ISRR/EFRR workshop in radiation protection – Sofia (Bulgaria)

Shortly workshop sponsors will be sorting dates and details with local institutions and member organisations as well as those supporting member organisations who will be contributing resources and finances to these projects. So watch this space!

I am also pleased to report that the official accounts for 2016 have now been published and are available to inspect at the England and Wales Charity Commission website (Registration number 276218)

Representatives of the ISRR BOARD continue to attend important meetings of the IAEA and WHO which is made only possible with funding from member countries and other resources. Since my last report a representative has attended the IAEA Technical Meeting on Strengthening of Safety Culture in Radiotherapy through the Use of Incident Learning Systems, 10 to 13 October 2017 at the IAEA HQ, Vienna, Austria.

Later this year ISRR will be represented at the International Conference on Radiation Protection in Medicine: Achieving Change in Practice on 11-15 December 2017 in Vienna, Austria.

Regarding PayPal Since my last report I am pleased to say that a number of associated membership subscriptions have been received via the ISRR PayPal account facility for one and three years subscriptions. That said, now is the opportunity to visit the ISRR website and join as an associate member!

Corporate partnerships We are always looking for new Corporate sponsors and ideas to generate funds for all our activities. So I invite ideas that would generate valuable funds – please contact me at aswhitley@msn.com.

All of our activities are funded by member societies, associate members, corporate sponsors and surplus income from World Congresses. The Board members are grateful for your on-going financial support.

We look forward to the future and assure you of our ongoing commitment to be prudent and good stewards of our limited resources. ■

Stewart Whitley
Treasurer



DoseWise Portal

Take control of dose management across your organization

DoseWise Portal is the core component in your radiation dose management program. DoseWise Portal is a vendor-agnostic, web-based solution that collects, measures, analyzes, and reports patient and staff radiation exposure, assisting you to make data-informed decisions, improve efficiency, and demonstrate a commitment to quality, satisfaction, patient and staff safety.

innovation  you

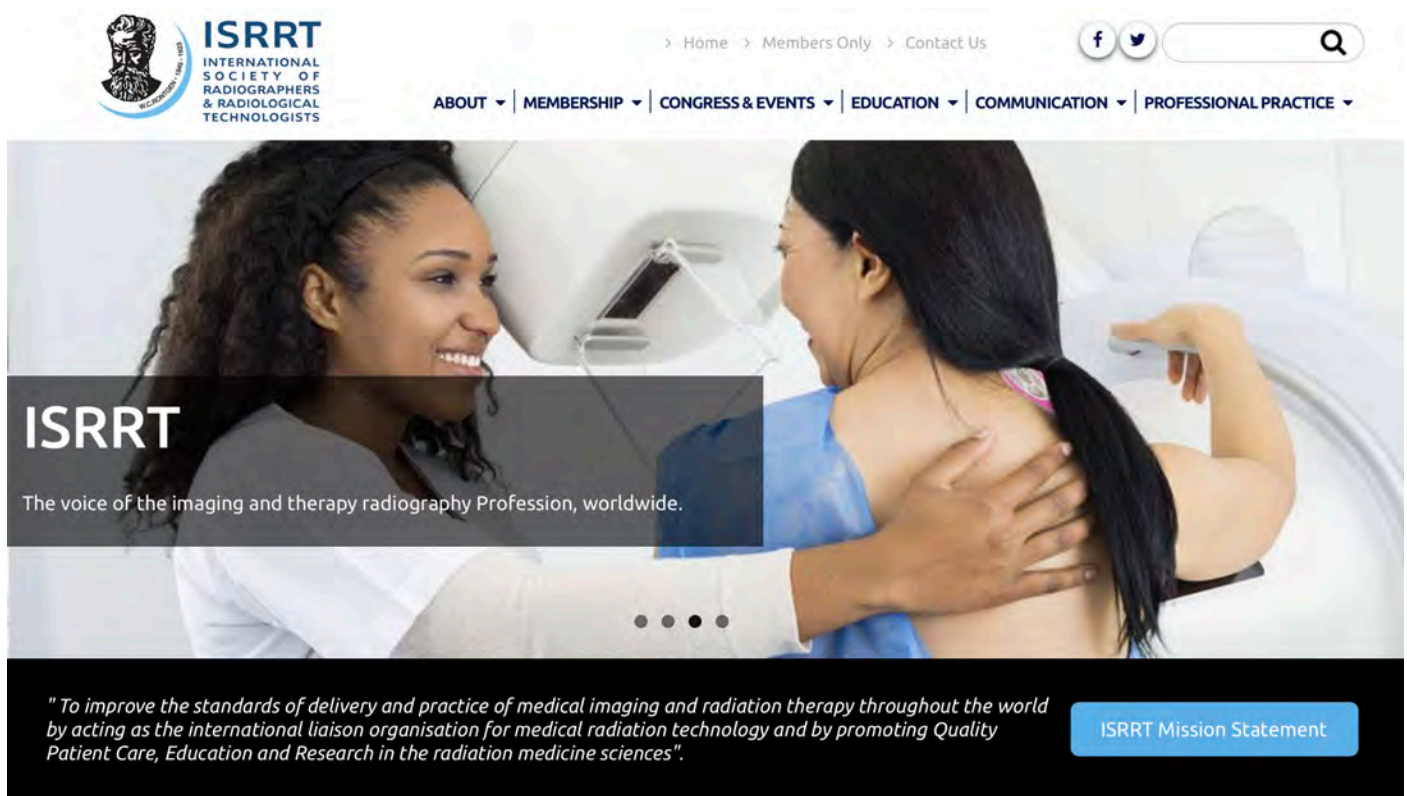
www.philips.com/dosewise

PHILIPS

The ISRRT is proud to present their new website.

Please go to www.isrirt.org
and have a look at all the information available about the ISRRT.

We encourage you to share this link with your colleagues.

The banner features the ISRRT logo on the left, which includes a circular emblem with a profile of a head and the text 'ISRRT INTERNATIONAL SOCIETY OF RADIOGRAPHERS & RADIOLOGICAL TECHNOLOGISTS'. To the right of the logo is a navigation menu with links: Home, Members Only, Contact Us, ABOUT, MEMBERSHIP, CONGRESS & EVENTS, EDUCATION, COMMUNICATION, and PROFESSIONAL PRACTICE. Below the navigation menu is a large image of a female radiographer in a white lab coat smiling and touching the back of a patient who is lying down. The text 'ISRRT' is overlaid on the left side of the image, followed by the tagline 'The voice of the imaging and therapy radiography Profession, worldwide.' At the bottom of the banner, there is a quote: '"To improve the standards of delivery and practice of medical imaging and radiation therapy throughout the world by acting as the international liaison organisation for medical radiation technology and by promoting Quality Patient Care, Education and Research in the radiation medicine sciences".' To the right of the quote is a button labeled 'ISRRT Mission Statement'.

free e-book for ISRRT members

The British Institute of Radiology has just published
The Safe Use of Ultrasound in Medical Diagnosis
edited by Gail ter Haar

Sonographers and other practitioners increasingly need to be knowledgeable about the safety of a diagnostic ultrasound scan as the onus has shifted from the manufacturers to the person performing the scan.

This book, now in its third edition, is written for the practitioner and covers basic concepts important to the safe use of ultrasound and directs readers to extensive literature on the topic.

As part of the BIR's open access initiative, BIR Open, the eBook version is **FREELY AVAILABLE ONLINE** at:

www.birjournals.org/site/books/ultrasound.xhtml

as well as in print



2017 DoseWise Award winner

The ISRRT-Philips DoseWise Award for 2017 was presented to Mr Sanghun Kim from South Korea at RSNA, Chicago 2017. Mr Kim is pictured above receiving his award from the ISRRT President Dr Fozy Peer. This is the second year that the awardee is from Seoul, South Korea.

The theme of Kim's submission for the DoseWise competition was "Effects of dose reduction using the DSFS (digital subtraction fluoroscopy save)".

The ISRRT looks forward to a continued future collaboration with Phillips.

ISRRT WEBSITE

The ISRRT website carries up-to-date addresses of all member societies and information on the ISRRT and details of future meetings.

www.isrtr.org

or contact the ISRRT CEO:

ceo@isrtr.org

COMMENTS ON THE NEWSLETTER

You are invited to comment on the presentation and contents of the newsletter and make suggestions for future issues.

Your comments will be considered by the Editor and her Committee.

email: deepbluedesign1@me.com



Delegates with awards at the First National Conference of Medical Imaging Technology and Radiological Sciences.

Medical imaging technology – Nepal

Kathmandu, Nepal

Report by Prof. Ganesh Badhur Pokharel

Radiotherapy Educational Tour Kathmandu Cancer Centre May 2017

Education is the greatest treasure of all and the greatest weapon a person can use to attain in all walks of life. For this mere reason, the B.Sc. MIT Faculty, Department of Radiology & Imaging, National Academy of Medical Sciences, Bir Hospital, Kathmandu, Nepal to provide high standards of learning to the students with the incorporation of educational field trips. This wonderful tour was organised by our Prof. Ganesh Badhur Pokharel & Lect. Mr. Narendra Siwakoti in collaboration with different respected person of Kathmandu Cancer Centre, Tathali, Bhakatpur, Nepal on May 23, 2017 & Nepal Cancer Hospital and Research Center, Harisiddhi, Lalitpur, Nepal

Tour Report

We had been to the research center around 10:00am. All 10 students of B.Sc.MIT 2nd year was divided into three groups by Medical Physicist Mr Sudeep Chanda with brief a introduction of the research center and basic principle of production X-rays and its application in treatment of tumor cells.

Treatment planning session

In this 1st session we were introduced to Medical Physicist Mr Suresh Poudel. He explained about the basic treatment planning system of Ca-cervix, Ca-Oropharynx with explanation of basic method of delivering radiation dose to the cancerous cells. In this session, we got basic information about the process of treatment via the use of available machine in research center. (Linac, Ture beam II & Brachytherapy HDR) The treatment process involves indication of radiotherapy, consent form, mould making for immobilisation, CT-simulation, planning, dose distribution and finally radiation delivery to the tumor cell from the console. We had a chance to see how the dose is fractionated and application of IMRT, IGRT AND VMAT. We also had the chance to see the water phantom which can be used for the



Vice Chancellor Prof. Dr Ganesh Bdr. Gurung & Prof. Ganesh Bdr. Pokharel discuss running the CME program in NAMS Bir Hospital, Kathmandu, Nepal.

calibration of the Linac machine. We also held a discussion about the scope and future of radiotherapy in context of our country, Nepal.

- 1. Brachytherapy session:** The last session was followed by the observation of brachytherapy unit by Medical Physicist Mr Suresh Poudel. Brachytherapy machine was 24 channels, high dose rate with Ir-192 source with half-life of 78.18 days of GammaMed Plusix company. There were many safety measures in this unit like emergency switch, CC-TV monitoring, gamma zone monitoring device, speaker, last man switch and dosimetry device.
- 2. Mould making session:** The 3rd session was coordinated by Sr Radiotherapy Technologist Mr Praphulla Jha. Here we got the details about the basic principle of radiotherapy and the types and methods of treatment. We also got the basic idea of On Board Imaging system, 16 slice Somatom CT-simulator, advancement of



First National Conference of Medical Imaging Technology and Radiological Sciences June 24, 2017

National Academy of Medical Sciences organised the First National Conference of Medical Imaging Technology and Radiological Sciences on June 24, 2017 which included a symposium on nine topics and a few paper presentations in collaboration with Nepal Radiological Society. These were all informative and well presented.

Continued Medical Education Program

Different CME programs are being organised on a regular basis that include CME's done by Nepal Radiological Society itself during its Annual Day and on World Radiography Day and from different institutions (IOM, BPKIHS, NAMS & PAHS etc.) where those who are interested can attend and as well as those done by the clinical faculties (Nepal Radiologists Association).

We had the opportunity to participate at Nepal Radiological Society 27th Annual Day Scientific Session Continuing Medical Education on 24th Bhadra 2074 at Pokhara, Nepal. We had a beautiful opportunity to explore the natural beauty of Pokhara city and many more historical places during our stay. Some of colleagues had done wonderful presentations on the following topics. We also had the chance to upgrade and update the knowledge of medical imaging technology and its recent advances.

Oral presentation

1. Suraj Sah: MRI safety and its bio-effects
2. Sushila Kaju: Risk Management in radiology
3. Anjan Dangal: Radiation effects and its safety

Poster presentation

1. Suraj Sah, Sabina Shrestha and Sabita Mandal:
Things that need to be considered before giving contrast media in radiology department.
2. Anjan Dangal: Radiation safety and its bio-effects. ■



IMRT, importance & function of multileaf collimator (MLC) and basic method of construction of patient immobilisation device i.e. mould. The mould are made using thermoplastic material which are of tissue equivalent material with 3.2mm thickness. We had also got an information about the universal water phantom and its types and importance. Mould mask can also be reusable which depends upon the types of cases. We were also aware about the different mode that are inbuilt in the Linac True Beam II like Cone beam CT mode, X-ray mode, Cine mode and fluoro mode.

After the lunch break for half an hour, Medical Physicist Mr. Sudeep Chanda had continued the main principle behind the operation and functioning of linear accelerator true beam II with pictorial diagram.

3. Clinical session: Final session around 4:00pm was taken by Dr Pradeep Baral on Ca- Head & Neck. Session was followed by the discussion of scenario of cancer in world and in our country Nepal. We had got so many interesting facts about the tumor and ongoing research about its causes and prevention. Dr Baral had illustrated about the knowledge of effects of radiation at the genetic level and how it can be cured. We had got idea about the local and systemic treatment. We were also benefited by the knowledge of adjuvant and palliative treatment. We had also got the information about the major role of radiologist, pathologist, oncologist and radiotherapy technologist to provide highest quality care and services in prevention, diagnosis, treatment and palliation of cancer.

Conclusion

We are deeply thankful to whole team of Department of Radiation Oncology, Nepal Cancer Hospital and Research Center & Kathmandu Cancer Centre, Tathali, Bhakatpur, Nepal. This beautiful educational tour wouldn't have been possible without your support. The studios and efforts were completely successful.





Mahidol University, Thailand

AUN-QA framework and the radiological technology program

Report by [Yudthaphon Vichianin](#),

Ph.D. ISRR Education Coordinator, Asia and Australasia region, TSRT Council member (Thailand)

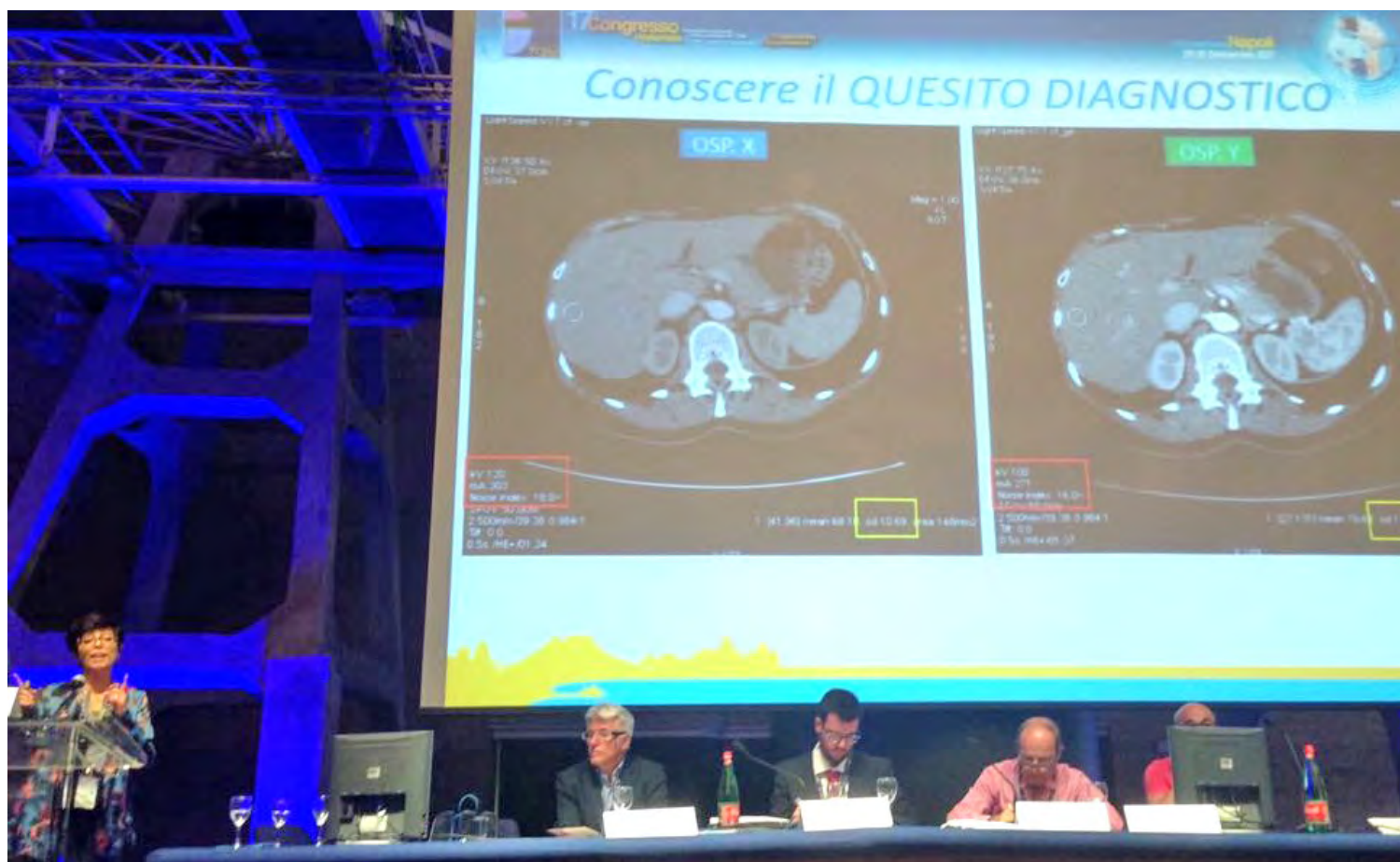
THE ASEAN Economic Community (AEC) was formally started at the end of the 2015 aiming at implement economic integration to create a single market across ASEAN nations. One of the AEC goals is a co-operation in education and capability building programs to develop the skills and capabilities of manpower for member nations. As Thailand is the member nation of the ASEAN. Higher education programs in various universities in the country now redesign their program curriculum to submit for AUN-QA assessment.

The AUN-QA is the quality assurance network for the higher education for the benefit of the ASEAN community. The objective of the AUN-QA is to improve the quality of education, research, and services in the university. At Mahidol University, one of the leading universities in Thailand, the radiological technology department at the faculty of Medical Technology has embraced the AUN-QA framework for its undergraduate and graduate program in 2017. The programme are redesigned and reorganised to become outcome-based and student-centered education. For its undergraduate program, the program curriculum was approved at the faculty level and submitted to the university for approval, while the graduate level curriculum is

in the pipeline of curriculum redesign and development.

The AUN-QA framework for program level put great emphasis on the quality of the various educational activities in term of quality of incoming students, related processes, and the program output. As of the third version of the framework, the curriculum is developed starting from analysis the stakeholders' requirement. Then the expected learning outcomes are formulated. Later, the program specification, program structure and content, teaching and learning approach, student assessment, academic and support staff quality, facilities and student supports all together are put into attention for alignment and quality enhancement the yield the expected output of the program.

All faculty members, at the radiological technology department, faculty of Medical Technology, Mahidol University, are working ardously to pursue our program goal: "strong in practice, smart in profession", which align to the organisation motto 'Excellence in Science and Medical Technology for the Betterment and Self-Sufficiency of the Society'. ■



Italian radiographers bridging the gap

Naples, Italy
September 29-30, 2017

IN the 17th National Congress of Italians radiographers, held on the September 29-30, 2017 in Naples, many members of AITRI's Board and Scientific Commission (the Italian Association of Interventional Radiographers) were invited to speak about the radiographers' role in interventional suite.

Among these, Roberta Gerasia, AITRI's scientific commission member, spoke about the radiographers role on patients and operators' radiation exposure optimisation in a students dedicated session. She put her focus on the true meaning of "optimisation" for radiographers and radiology technologist in view of coming in force of the Directive 2013/59/Euratom on protection against ionising radiation. She discussed on paediatric interventions images and compared the differences in CT images performed on the same patients by two radiographers with different level of expertise in radioprotection showing that optimisation doesn't mean "make a nice picture". It means to adjust technical parameters on procedures and patients own characteristics, also when automatic acquisition protocols were present, resulting on the correct answer to the diagnostic question. It isn't always possible to use shields or to reduce field of view but radiographers always can and must choose the most adequate parameters to contain patients and occupational radiation exposure maintaining a positive procedures outcome. It is possible only with an in-depth knowledge of equipment, the oldest or

the newest ones, and of procedures.

Also, speaking to patients to better understand how much he collaborates (technical parameters depend also on this!!). Working in close liaison with radiologists, or other physicians, make radiographers and radiology technologists bridge the gap between patients and themselves. ■





Delegates from Uganda.

Pearl of Africa annual conference a success

Kampala, Uganda
September 29-30, 2017

Report by [Am Ali](#), ISRRT Council Member for Uganda

THE 8th Society of Radiography of Uganda (SRU) Annual Scientific Conference was held at Makerere University, Kampala, Uganda September 29-30, 2017. Uganda, commonly known as the Pearl of Africa is located in Eastern Africa and blessed with unique features ranging from the lush and luxurious forests, mountains, longest river in the world and friendly people. These features make Uganda an exotic destination for adventure.

The SRU 2017 annual conference theme was Improving Practice and Education Standards in Radiography. The main aim of this get-together was to share experiences and new discoveries in our field; identify research gaps and priority areas that need tackling; and to further strengthen relations and partnerships amongst stakeholders involved in training, regulation of practice and ensuring the welfare of Radiography professionals. This CPD credit points awarding seminar was graced by among others Radiographers, Radiotherapists, Physicists and Radiologists from Uganda and other countries such as Kenya, Rwanda, Tanzania and Zimbabwe.

The highlights from this conference included but were not limited to keynote speeches from the Registrar of Allied Health Professionals Council (AHPC), Mr Mpiima Kibirango Patrick; the CEO and Secretary Atomic Energy



Mr Ceasar Barare, left, with delegates from Kenya.



Pictured left to right: Mr Jean Felix, Rwanda, receiving his award, Guest of Honour, Mr Mpiima Patrick and SRU President Mr Wairu A. Nicholas.

Council of Uganda, Mr Luwalira Deogratius; and very informative research findings. Some interesting topics included ultrasound scan in high risk pregnancies, advances in imaging of acute pulmonary embolism, and the benefits of computer based simulation in radiography education for students in resource constrained settings.

In addition, clinical demonstration sessions to enhance the practical skills of the professionals were offered by local expatriates such as Ms Biira Alice Esther.

On the last day, individuals and sponsors that have set standards of excellence in SRU were awarded glass plaques in recognition of their outstanding leadership, commitment and dedication. In line with this, SRU rewarded Mr Jean Felix Habimana from Rwanda for his longstanding support as an international delegate. Mr Sam Ali received a plaque in acknowledgement of his service as the most active member of SRU Executive in the year 2016/17, and was chosen to continue serving as the ISRRT Council member for Uganda.

Other individuals rewarded were; Mr Bayo Jenous, Mr Kalende Rogers, Mr Tumwebaze Mathias and Professor Kasozi Henry.

This notable event closed with an outdoor cocktail party to allow delegates the opportunity to socialise. ■



ISRRT is changing to payments via PayPal

The ISRRT is pleased to report that we have set up a PayPal account and that with immediate effect Associate Membership subscriptions can now be made via the ISRRT PayPal account for **one** and **three** years subscription via the website as well as accepting donations.

Now is the opportunity to join as an associate member!

Trinidad and Tobago World Congress Registrations

Payments for 2018 Congress Registration should be made using the PayPal donate button found on the ISRRT website near the link to the Congress registration form.

website www.isrirt.org

We are always looking for new Corporate sponsors and ideas to generate funds for all our activities.

Ideas are invited that would generate valuable funds – please contact ISRRT Treasurer Stewart Whitley at aswhitley@msn.com



Part of the group of radiographers who participated in the Breast Cancer Awareness Expo.

Zimbabwe celebrates first PhD radiographer and holds breast cancer awareness expo



First PhD radiographer

We wish to congratulate Dr Lidion Sibanda, pictured left, for his attainment of a Doctoral Degree in Radiography from the Cape Peninsula University of Technology, South Africa, and on becoming the country's first PhD radiographer.

Dr Sibanda, currently a lecturer at the National University of Science and Technology (NUST),

Zimbabwe, graduated with a Bachelors degree at NUST in 2006. He rose through the ranks and eleven years down the line he has graduated with a Doctoral Degree in Radiography.

His attainment of the PhD is expected to greatly help improve radiography practices in Zimbabwe through research and innovation to develop a home grown evidence base in fostering evidence based radiography practice. This is particularly so as the conclusion of his philosophical study supports blurring the scope of practice boundaries between radiographers and radiologists, timely execution of radiography examinations and evidence based capacity planning.

Dr Sibanda we wish you all the best in your career and life, with your guidance and inspiration Zimbabwe is likely to be getting more and more PhD radiographers and ultimately improve the standard of the management of the patient in Zimbabwe.

Radiography Association of Zimbabwe on a massive breast cancer awareness expo

On October 21, 2017, Zimbabwe radiographers embarked on a breast cancer awareness expo. The expo was named "Think Pink

Zumbathon", with several activities throughout the day. Among the activities were the awareness walk from Belgravia sports club to the University of Zimbabwe grounds for the Zumba. The radiographers were motivated to partake in the sponsored expo not only because October is breast cancer awareness month but also by the late detection of the majority of breast cancer patients in the country something the radiographers attributed to lack of awareness.

There have been efforts to improve the detection of breast cancer in the country as evidenced by the recent installation and commissioning of mammographic equipment in government major hospitals followed by free breast cancer screening services at these institutions.

Breast cancer accounts for 12% of all cancers affecting the Zimbabwean population and is a major cause of morbidity and mortality among women, second only to cervical cancer (Cancer Registry of Zimbabwe, 2013).

The expo was organised by Radiography Association of Zimbabwe, Talk Cancer Zimbabwe and the Rotaract Club and was attended to by more than a hundred healthcare professionals the majority of which were radiographers. The expo was running under the theme "Together we are strong" implying if everyone joins the fight against breast cancer we will surely defeat the disease. ■





IOF/ISCD Osteoporosis Essentials Course and ISCD Advanced Densitometry Courses

Kuala Lumpur, Malaysia
October 4-5, 2017

Report by [Chan Lai Kuan & Stephanie Loo](#), MSR Committee Members

THE Malaysian Society of Radiographers was given the honour to collaborate with the International Society for Clinical Densitometry (ISCD) to host the IOF/ISCD Osteoporosis Essentials Course and ISCD Advanced Densitometry Courses on October 4-5, 2017. The event was held at the Berjaya Times Square Hotel, Kuala Lumpur, Malaysia. The event was graced by 185 national and international delegates coming from Macau, Philippines, Singapore, China, Indonesia and Thailand.

The IOF/ISCD Osteoporosis Essentials course has common as well as special lectures for both delegates coming from the technologist or clinician background. The lectures provide coverage on standard DXA examination, Quality DXA interpretation, the clinical assessment, prevention, treatment and management of osteoporosis and the essential role that high-quality DXA plays in treatment initiation decisions and monitoring of osteoporotic patients. For the ISCD Advanced Densitometry Courses, the topics covered include body composition analysis, vertebral fracture recognition and the paediatric bone densitometry. The lectures were presented by experienced osteoporosis clinicians from USA, China, Taiwan, Singapore and Malaysia representing the ISCD faculty and were very well received by the participants.

The experience of hosting this international event for the Malaysian Society of Radiographers (MSR) was a very remarkable one as it would be the first collaboration for MSR with the ISCD faculty. The process towards making the event a successful one was a joint effort from the local committee members coming from both the public and private healthcare sectors in Malaysia.

With everything tailored to the finest details, the committee also prioritised that the comfort and environment were well suited to

the attendees. The delegates had the opportunity to taste delectable Malaysian cuisines exquisitely selected by the committee during the tea and lunch breaks as well as the sharing sessions.

In lieu of the Malaysian government's national 'Go Green' movement, the team also took pleasure in providing conference bags and materials which are eco-friendly. Conference materials were also provided in thumb drives for all delegates to reduce printing of paper.

Overall, the event was a very successful and eye-opening one and we, the Malaysian Society of Radiographers (MSR) are very humbled to be given this opportunity to collaborate with the International Society for Clinical Densitometry (ISCD) in hosting this event. We look forward to more fruitful collaborations in the near future.

Last but not least, MSR would also like to express our gratitude to the companies that provided the financial support for the hosting of the event. ■





Return visit to Zambia provides further training

Livingstone, Zambia

Report by

Brigitte Kaviani, Assistant Operations Director, Sheffield Teaching Hospitals

Sydney Mulamfu, Radiology Manager, Livingstone Central Hospital & Co-ordinator of the Imaging services in Southern Province, Zambia

As a follow-on from the article published in *News & Views* August 2017 we would like to give an update on our collaborative work in the Southern Province of Zambia. Brigitte travelled to Livingstone in August/September and again in November this year. A total of nine radiology departments were visited in the Southern Province.

IN the radiology department of Livingstone Central Hospital Brigitte met the radiographers again. The department employs approximately 19 radiographers and is the largest hospital in Southern Zambia. The department has one general radiography room, several ultrasound machines, a 32 slice CT scanner, a mammography unit and a fluoroscopy unit (not currently working during visit). The department will soon receive its first digital unit and in the next two years is mostly likely to have an MRI scanner installed.

During the first week the staff were able to share information about their challenges and give an update since Brigitte's last visit in March 2017. Over 300 books had been donated by radiographers from Sheffield, UK. The first radiology library has been set up under the management of one radiographer, Melannie Lisimba. Although there has been many challenges in getting all these books from the UK to Livingstone we never gave up hope that they would be received.

On this occasion a further 120 anatomical markers were delivered to add to the 30 received back in March 2017. Radiographers described the markers as gold and books as diamonds. These have made a huge difference.

During this visit eight radiographers received CPR and basic first

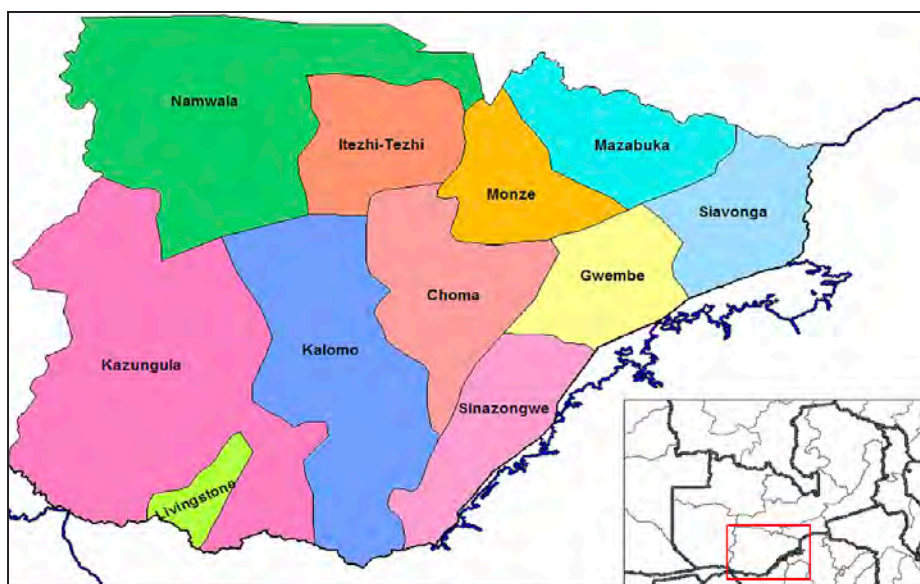
aid training delivered by Brigitte along with six nurses who will deliver training to others. Unlike in the UK where this is an annual training program, this training is only delivered in the first year of the radiography course in Zambia.

During the first week a shipment organised by Brigitte arrived in Livingstone. This comprised of ten neonate and several adult resus manequins and airway bags and masks. This concluded the equipping of a clinical skills unit at Livingstone Central Hospital.

During the second week we started a 510km journey from Livingstone to Siavonga visiting nine radiology departments. These included Zimba, Namwianga, Kalomo, Choma, Gwembe, Monze, Mazabuka and Siavonga. We arrived unannounced and met an amazing group of radiographers. The departments varied from having wet developing, processors in darkrooms to digital radiography. An amazing contrast. The common thing between all of them was the lack of staff, lack of training material e.g. textbooks.

The radiographers we met were very happy and positive believing that change would come at some point. We delivered textbooks, anatomical markers and pens as gifts with the promise that Sydney would follow on with their requests.

Gwembe and Monze stood out in particular. Gwembe for



Radiographer Elina.

receiving funds to re-design and decorate the department. Monze for having digital equipment sponsored by Japan. Training material lacked everywhere. We returned to Livingstone and established a list of needs for everyone.

In November 2017 Brigitte returned with senior radiographer, Mr David Smith and senior physiotherapist Craig Wilson, who delivered a program of training tutorials for the radiographers, physiotherapists and OTs in Livingstone. Brigitte and David aim to provide every hospital in the region with training material on USB sticks. It is imperative that radiographers in Zambia are given the opportunity to be educated further. There is certainly the thirst and the will for this by every radiographer we met.

Brigitte agreed to sponsor the decorating of two rooms in the radiology department at Livingstone Central Hospital in September 2017. Setting up a new regime of damp dusting and teaching radiographers to cannulate. We need to encourage radiographers to read more and hoping that a journal club is set-up by January 2018.

Although we are only into our six months of collaboration we feel we have already come a long way in 2017, making some fundamental changes to the vision and hope of our radiographers in the southern region of Zambia.

We hope that in the near future some Zambian radiographers would be sponsored to come to the UK to shadow our staff at Sheffield Teaching hospitals and take the knowledge back to Zambia.

Zimba Missionary Hospital was founded in 1960 and is 50km from Livingstone. It is a notable large market town. The hospital covers

a population over 75,000. The radiology department employs three radiographers and comprises of a general room and two Ultrasound machines.

Namwianga Zonal Health Centre

The hospital provides a wide range of services to the community. The radiology department has one radiographer who is trained in ultrasound. There is one general room as well as one ultrasound machine.

Kalomo District Hospital

The hospital caters for a population of 258,000 people and located in the small town of Kalomo, 126km from Livingstone. There are four radiographers and the department has one general radiography room as well as one ultrasound machine.

Choma General Hospital

This is a 200-bed district hospital. It provides health care for the 30,000 people living in Choma district and serves as a referral centre for the 380,000 people living in HII Choma town, it is a small friendly

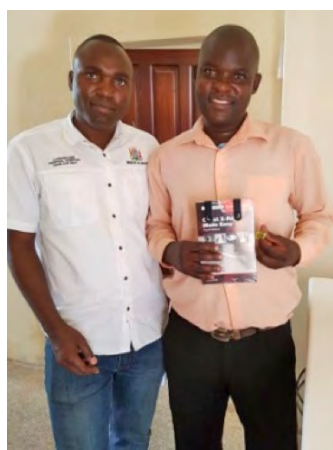
Below L-R:

Zimba Missionary Hospital medical imaging building.

Sydney Mulamfu (on left) with radiographer Michelo.

Kalomo radiology manager Mr Sydney Mulamfu and radiographers at Kalomo radiology department.

Kalomo Hospital radiology room.

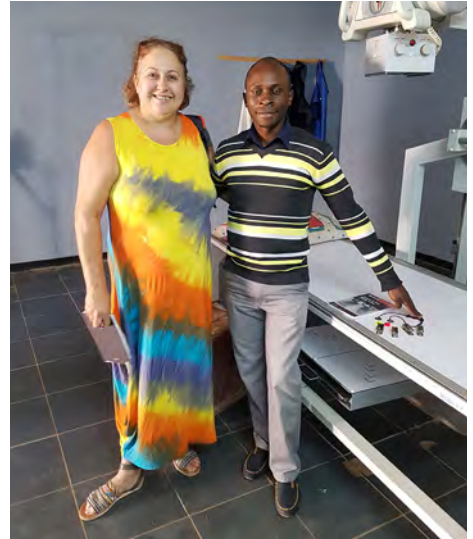




Sydney Mulamfu and radiographer in department receiving markers and book.



Gwembe District Hospital radiology room.



Brigitte Kaviani with the Gwembe Hospital Radiology Manager.

town approximately 188km from Livingstone. There are many shops, markets, banks, supermarkets as well as an interesting museum. The radiology department in Choma General Hospital employs four radiographers and the department has two general radiography machines (one not opened as yet) as well as two ultrasound machines.

Gwembe District Hospital

Gwembe is a small town in Southern Province of Zambia with a population of about 2000 people.

Monze Mission Hospital

Has an impressive Radiology department. The department employs a total of 11 Radiographers. One of their general rooms was digital installed from sponsorship from Japan. The department has a further general room and two ultrasound machines. See images left and middle below.

Mazabuka General Hospital

Located in the town of Mazabuka this hospital services a population of 274,495. The radiology manager Cuthbert Mulenga, pictured bottom right with Sydney, manages the radiology department which employs several radiographers. The department is in need of re-designing and modernising.

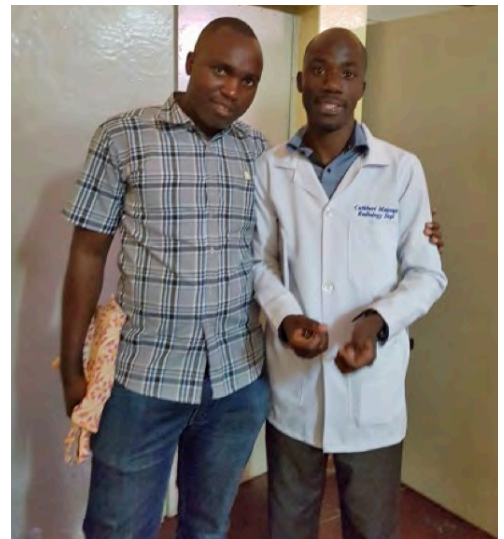
Siavonga District Hospital

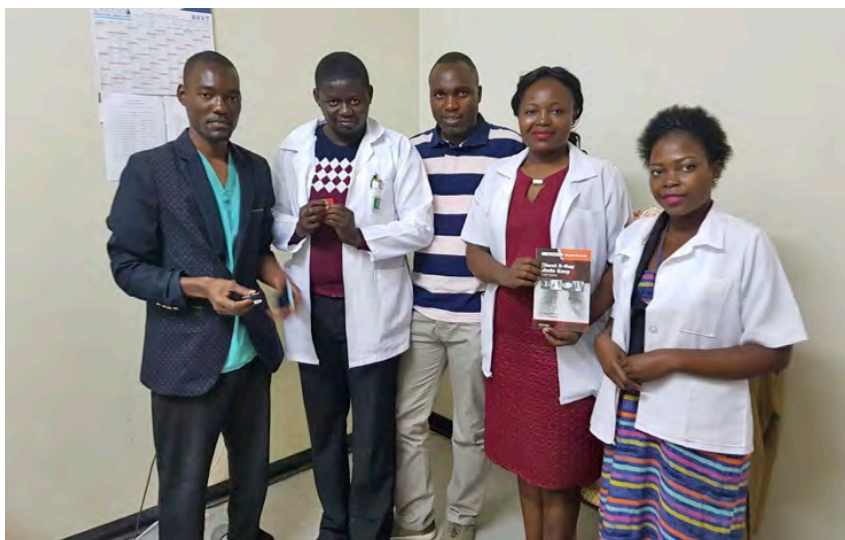
Located in a beautiful location and in the town of Siavonga which overlooks Lake Kariba. The Radiology department run by Gertrude employs a total of four Radiographers. There is a general radiography room and an Ultrasound machine.

November 2017

In November Brigitte travelled back to Livingstone this time with Mr David Smith, Practice Educator and Senior Radiographer and Mr Craig Wilson, Senior Physiotherapist both from Sheffield. They delivered a program of tutorials to the radiographers, Physiotherapists and OTs at Livingstone Central Hospital. David delivered 8 tutorials on Chest technique and interpretation; Upper Limb technique and interpretation; Lower Limb technique and interpretation and CT Head technique and interpretation. All the tutorial material were provided on USB sticks to be distributed to the regional hospitals visited in September.

Further first aid and CPR sessions were delivered to many radiographers. A program of venepuncture training for radiographers was set up and delivered (training guide and textbook were provided) and CV workshop were delivered for radiographers and physiotherapists





Gertrude and radiographers at Siavonga District Hospital radiology department.



Darkroom technician at Mazabuka General Hospital.

We were able to take with us more anatomical markers; anatomical posters for Livingstone and regional hospitals; more Radiography textbooks; Training aids e.g. skeleton. We donated a laptop and projector to the radiology department and provided them with hundreds of pens.

During the two week period the team of three also travelled to Mukuni Village and delivered basic first aid and CPR to over 120 students, teachers and adults.

Our thanks go to:

1. All Zambian radiographers we have spoken to and met in the Southern province of Zambia who shared with us their joys of working as radiographers as well as their challenges.
2. The brilliant team of Radiography managers and radiographers at Livingstone Central Hospital who made us smile and laugh at our evenings out in town especially Mr Bruce Muleya, Mr Misheck Sinkala, Mrs Victoria Kanyoze and Mr Justin Mumbi
3. To all radiographers in the UK who donated books and Anatomical markers
4. To Susan Marchant, General manager of World Radiography Educational Trust Foundation (WRETF) for facilitating the

twinning program between Sheffield Teaching Hospitals and Livingstone Central Hospital and all hospitals in the Southern Province of Zambia

5. To Emily Slater at myxraymarkers who donated anatomical markers info@myxraymarkers.co.uk
6. To Frank Bigley owner of Mail Boxes etc (Sheffield) who assisted and facilitated the delivery of many parcels to Zambia safely info@mbesheffield.co.uk
7. To Andy Creede who donated markers and who circulates our article in idsig@yahoo.co.uk (IDC-SIG) Imaging in Developing Countries – Special Interest Group
8. To Brigitte's small team of staff back in Sheffield Teaching Hospitals Legion Care Group training hub who listened to her passionate stories of her trips to Zambia endlessly. Thank you Nicole, David, Nikki, Steve and Louise ■

If you have any suggestions or donations please contact:

Mr Sydney Mulamfu smulamfu61@gmail.com or
Ms Brigitte Kaviani Brigitte.Kaviani@sth.nhs.uk



Left and below:

Tutorial plus basic first aid and CPR delivered by David Smith at Mukuni Village school.



Exponential growth of medical imaging

World Radiography Day November 8, 2017

Report by [Nicole Dhanraj](#), Guam

Every year, across the globe, radiology professionals celebrate the anniversary of the discovery of x-rays. The birth of our profession arose out of the works of German physicist WC Roentgen in 1895. For the past 122 years we have grown exponentially as professionals and as an industry. We are mesmerised at the growth in technology and the advances in our clinical practices. Considering our tremendous growth and progress in such a brief period, the radiology industry have much to celebrate and brag about to the world!

Celebration Activities

This month's article highlights some of the ways our profession is celebrated around the world.

It is often celebrated in facilities in the following ways

- 1) Managers provide gifts to staff. These gifts include items like lunch bags, t-shirts, cups, mugs, pens, umbrellas, gift certificates and other novelty items.
- 2) Vendors sponsor continuing education at various facilities or online, most of which are free or deeply discounted.
- 3) Vendors, radiologists or organisations sponsor luncheons, snacks, cake, and other goodies to all staff members.
- 4) Managers sometimes provide a short public announcement which is typically published in the newspaper.
- 5) Associations like the ASRT, AHRA, and ACR post, tweet and share information on social media regarding celebration activities and events.
- 6) Various journals or newsletters publish the many accomplishments of various professional bodies within the field
- 7) The local governing body can provide an official proclamation recognising the celebration.
- 8) Organisations or vendors sponsor community events to emphasise the importance and role of radiology.

- 9) Organisations create events to increase patient awareness of the facilities services, expertise and offerings.
- 10) Local or national lectures that enhance knowledge and learning with the goal of improving ourselves as professionals which in turn results in improved care for the patients.

Around the world highlights

In the US, celebration is a week-long activity centered around November 8 and is referred to as National Radiologic Technology Week. The goal is to call attention to the role that medical imaging plays in health care.

In the UK, there are similar celebrations like the United States. However, the celebration is typically centered on the date x-rays were discovered, November 8 and is referred to as World Radiography Day. On this day, radiography professionals are urged to promote the profession as much as they can.

In other countries like Bhutan, India, Nigeria, Palestine, Bangladesh, Saudi Arabia, the Caribbean, Canada, the Philippines the day is celebrated as Word Radiology Day, World Radiography Day or International Day of Radiology with similar celebration activities.

While many radiology departments are fortunate to have the budget dedicated for celebration or receive sponsorship from third party sources, lack of financial resources do not deter our celebration activities. They may not be as grand as some celebrations, but in most cases, we can see the dedication and pride put forth to celebrate in whatever way possible.

Regardless of the economic state of the country or department, most of the radiology professionals make the effort to muster decorations, food and host a learning event – three key items needed for any celebration!

The following are some photo highlights from around the world!■





ECR 2018 DIVERSE & UNITED

**26 Sessions
for Radiographers
in 5 Days**

The ECR is recognised as the **official annual scientific meeting in medical imaging for radiographers** by both the European Federation of Radiographer Societies (EFRS) and the European Society of Radiology (ESR)

February 28 – March 4 | Vienna
myESR.org

the annual meeting of
ESR
EUROPEAN SOCIETY OF RADIOLOGY

ISRRT represented at HERCA Multi-Stakeholders workshops

Report by [E. Agadakos](#), ISRRT Council Member and President of the Panhellenic Society of Radiological Technologists

IN October 2017, the President of the Panhellenic Society of Radiological Technologists, Mr Euthimios (Tim) Agadakos was granted the opportunity and the responsibility to represent the ISRRT at the HERCA Multi-Stakeholders Workshops (MSWs) on Generic Justification and on Accidental and unintended (medical) exposures. These MSWs were held at the premises of ASN Headquarters-Montrouge, Paris (French Nuclear Authority). Approximately 40 representatives from 10 organizations attended. The general objectives of both MSW were:

- To explore a common understanding of the new Basic Safety Standards (BSS) requirements
- To exchange on national approaches relating to the implementation of these new BSS requirements;
- To collect the opinion of important European stakeholders, particularly the European medical societies and manufacturers;
- To assist in the development of HERCA Positions Papers intended to facilitate implementation of the BSS.

During the first workshop the new EURATOM 2013/59 Council Directive and the Medical Device Regulation were correlated with the key topic of Generic Justification which had not been included in the previous EURATOM 96/29. The general discussion underlined the directive inconsistencies in relation to the roles of the health professionals and how the traditional role of the radiographer is changing to accommodate for the innovative medical technologies introduced. This was further emphasised by the IAEA representative, Debbie Giley who highlighted the importance of radiographer advancement and involvement in justification during her presentation as part of the View of International Organisations on Justification of Types or classes of Practices. Moreover, Dr Maria Perez from WHO discussed the significance of radiographer involvement in the justification process particularly at the point of care as part of radiographer role expansion.

The first workshop consisted of six plenary sessions, where the European organisations ESR, EFRS, EANM, ESTRO and manufacturers COCIR were asked to provide feedback for particular issues. This part of the MS was very constructive and useful for the development of the HERCA Positions Papers.

At the end of the workshop, Mr Agadakos discussed the ISRRT actions on total justification. The presentation included:

- ISRRT's flow chart on justification and authorisation of Medical Exposures by radiographers/medical radiation technologists illustrating the typical process following a receipt of a request for exposure to ionizing radiation
- formulation of commitments following the SMART approach for the web based decision tool for radiographers
- recent collaborations with the three tertiary

institutions for the incorporation of the decision tool into their educational curricula program study module on justification as part of the ISRRT-HERCA synergy

- the ISRRT position statement on justification as a resource

Upon completion of the first MSW, the radiographer representatives, Shane Foley from the EFRS and Tim Agadakos from the ISRRT, agreed to collaborate and share views on the subject prior to the production the HERCA discussion paper.

During the second MSW on accidental and unintended (medical) exposures, representatives from France, Finland, Germany, UK and Czech Republic presented their national approaches relating to the definition and notification of significant events. Feedback from multi-stakeholders demonstrated hesitancy in reporting significant events as part of a blame culture. However several events revealed poor radiographic critique, a process undertaken by radiographers which has unfortunately faded with the advent of digital medical imaging systems. Following discussion, most stakeholders recognised the need of radiographer involvement as the sole health professional at the point of care and valued the input of the radiographer representation from both EFRS and ISRRT. Consequently, representatives agreed that awareness of the process involving detection, evaluation and notification of such events at the point of their occurrence is vital and must involve all professionals in medical imaging, therapy and nuclear medicine.

The third and final HERCA MSW on the optimised use of CT scanners was held at the Headquarters of IAEA in Vienna, Austria on March 6, 2017. Approximately 20 representatives from 13 organisations attended. The stakeholders participating were:

- COCIR, supported by the main manufacturers of CT equipment (GE, Philips, Siemens and Toshiba)
- The professional organisations: ESR, ESPR, EANM, EFRS, ISRRT, ESTRO and EFOMP



Mr Tim Agadakos.

- The international organisations IAEA, EC ENER, WHO, IRPA and the US FDA observed these meetings.

On behalf of the ISRR, Mr Tim Agadakos had developed a short web version survey questionnaire on the SurveyMonkey™ platform with the support of D. Katsifarakis CEO and the input of D. Newman in order to investigate the current situation in CT departments of ISRR member countries. This was approved by the ISRR and was disseminated to the board and council members via e-mail. The initial findings indicated diversities in radiography education in CT and national requirements and thus were presented as part of the ISRR activities for CT optimisation and training commitments.

The outline of the presentation consisted of the following components:

1. introduction

- ISRR mission
- ISRR role and funding in education and training ,
- ISRR collaborations

2. description of

- self commitments
- related activities conducted in the past and planned for the future

3. aims to highlight

- the importance of RG/RT role in CT optimisation
- our direct involvement as the interface between technology and patients
- inconsistencies in radiography training
- the need of RG/RT importance recognition by regulation authorities

4. the reservation on “how will we ensure and promote patient safety, dose management and quality of services in CT when the importance of the radiographer who actually administers the radiation dose to the patient is not recognised by legislative authorities?”



ISRR and EFRS at HERCA.

The presentation aimed to emphasise the importance of the radiographer role in acting as the patient’s advocate for radiation protection and dose management in CT and how crucial it is that adequate training in CT reaches all RG/RTs. Furthermore the lack of recognition of our role in medical imaging and therapy by regulators will maintain the problems of the past throughout the new EURATOM Directive 59/2013 embodiment in EU member states national law. This opinion was also enhanced by Mr T. Berglund’s EFRS feedback.

In conclusion, the meeting was constructive as all stakeholders agreed that it was fundamental that we all collaborate to enhance homogeneous education and specific training to enhance CT optimisation throughout Europe. Moreover it is most critical that this is communicated to regulators in order to include RG/RT in the process of optimisation. ■

IAEA technical meeting on strengthening of safety culture in radiotherapy through the use of incident learning systems

IAEA, Vienna, Austria

October 10–13, 2017

Report by [Maria Law](#), ISRRT Director of Education

The technical meeting

The ISRRT was invited to participate the Technical Meeting on Strengthening of Safety Culture in Radiotherapy through the Use of Incident Learning Systems on October 10–13, 2017. I committed to attend on behalf of ISRRT.

About 40 delegates from different countries and different international societies were in the meeting. They include representatives or regulators from: Belgium, Cyprus, China, Czech Republic, France, Finland, Germany, Ghana, Greece, Indonesia, Malta, Mexico, New Zealand, Norway, Pakistan, Singapore, Slovenia, S. Korea, Sudan, UK, USA.

Societies attended include:

AAPM, ASTRO, CPQR, DITTA, ESTRO, HERCA, IAEA, ISRRT, WHO.

There were 4 sessions:

1. Accidents do happen (one morning)
2. Reporting and learning systems
 - a. Required reporting (one afternoon)
 - b. Voluntary reporting (one day)
3. Efforts to prevent errors (one day)
4. Impact on the use of incident learning systems on strengthening safety culture (one morning)

Regulating body representatives and international society/organisation representatives take turn to present different topics. Dr Maria Perez, Director of WHO also attended the last two days of the meeting and presented that background on how “safety culture” started as a working goal of WHO.

I chaired the second session, which lasted one and a half days and to present a talk on “Components of a strong safety culture in medicine, ISRRT effort” on the third day.

In the ISRRT efforts, I include the following:

- In delivery of radiotherapy workshops, incident/accidents including ways to manage or minimised them are addressed. A blame free environment and open communication culture are encouraged though such culture would take time in Asia and Africa.
- Risk management and quality assurance topics are included in most conferences. (It is hoped that these themes continuous to exist in our conferences, especially in the radiotherapy context.)
- The ISRRT actively participate in quality assurance and radiation safety (dose reduction) related meeting of other international organisations.
- Related workshops would be conducted upon request from countries.
- In response to the “Bonn Call for Action”, the ISRRT set themes to address those issues such as justification of medical use of radiation and quality assurance for research grants.

Challenges within ISRRT:

- Education & training
 - Different standards of training of radiation therapists
 - Countries may not offer training programmes for the education of therapists
 - Non-trained personnel is employed to do clinical work in radiotherapy
- Fast development of equipment
 - Professionals may not be able to catch up with the pace of technological development or technologists are not provided the required training when new equipment is commissioned. This either under-utilises the new equipment or creating error-prone environment.

The meeting ended with an across-the-board discussion among the professional organisations regarding their importance in strengthening safety culture and participating in incident learning systems.

The following points were suggested and it is hoped that the ISRRT board and council will support the initiatives.

- Strengthen education for RTTs
- Training for countries transiting from Co-60 to Linac
- Conducting workshops for practitioners relating to safety culture
- Encourage and empower implementation of incident reporting
- Disseminate the concept of learning from incident reporting

The discussion on inclusion of safety culture in medical school training, resident physicist training were discussed. Emphasis on safety culture should also be placed in the curriculum for the training of radiological or radiation therapy technologists.

To strengthen the culture, we need leadership and champions. It is found that reporting of incidents by radiation therapists take up more than 30% of all cases, RTTs engagement is considered important. To promote the culture of safety and increase participation in reporting incidents voluntarily, information sharing in newsletter and collaboration between organisation would be an asset.

Incident learning systems

Nationally or enterprise wise may have their own incident reporting systems. Some reporting is mandatory by regulatory bodies while other minor ones are voluntary. Instead of just calling it incident reporting system, the concept is now turned to the learning from incidents and so such systems are most renamed as “Incident Learning Systems (ILS)” to reflect the philosophy of learning from errors. There was a consensus that reporting of minor incidents should be encouraged so that practitioners can gain from the process.

The national ILSs are mostly not accessible by outsiders but there exist a few free reporting systems from major organisations which readers can try out. ►

1. SAFRON (Safety in Radiation Oncology, from IAEA)

www.iaea.org/resources/rpop/training-and-resources/databases-and-learning-systems/safron

“SAFRON, Safety in Radiation Oncology is an integrated voluntary reporting and learning system of radiotherapy incidents and near misses. The main goal of SAFRON is to improve the safe planning and delivery of radiotherapy by sharing safety-related events and safety analysis around the world. Information submitted is dependent on facilities registering and sharing incidents that occur in their institutions.

“Having started in December 2012, SAFRON has over 50 registered radiotherapy facilities and hospitals all over the world. The system has over 1300 radiotherapy incident reports covering various types of incidents including errors and near misses.” (IAEA website)

2. ROILS (Radiation Oncology Incident Learning System, from ASTRO)

www.astro.org/RO-ILS.aspx

“Since its launch in June 2014, more than 350 facilities across the country have joined RO-ILS: Radiation Oncology Incident Learning System® to contribute patient safety data to the only medical specialty society-sponsored radiation oncology incident learning system. The mission of RO-ILS is to facilitate safer and higher quality care in radiation oncology by providing a mechanism for shared learning in a secure and non-punitive environment. Participation in RO-ILS is free and provides US-based practices access to a secure, web-based portal and the ability to send data to a federally listed Patient Safety Organization (PSO).

“Benefits to Participating:

- Contribute to a national database and collectively improve the field of radiation oncology.
- Track and review internal incidents, near misses, and unsafe conditions.
- Receive Quarterly Aggregate Reports on events submitted throughout the country that include suggestions on how to prevent errors. See recent aggregate reports.
- Receive bi-annual practice-specific reports on events submitted by your institution.

- Meet the requirements for one Improvement Activity in Medicare’s new Merit-Based Incentive Payment System (MIPS).
- Gain access to analysis tools, such as the Analysis Wizard, within the RO-ILS portal.
- Receive regular Tips of the Month about features/tools, best practices, and general patient safety initiatives.
- Learn from PSO-sponsored instructional webinars.
- RO-ILS has been qualified for physicians and physicists by the American Board of Radiology in meeting the criteria for practice quality improvement (PQI), toward the purpose of fulfilling requirements in the ABR Maintenance of Certification Program.” (from ASTRO website)

3. ROSEIS (Radiation Oncology Safety Education Information System, from ESTRO)

<https://roseis.estro.org>

“ROSEIS is an acronym for “Radiation Oncology Safety Education and Information System”. It is a voluntary web-based platform designed for use as an individual clinic reporting and learning tool and also as a platform to exchange or share information with the wider radiotherapy community. It represents an evolution of the original ROSIS project.

The fundamental aim of ROSEIS is to improve safety in radiotherapy clinics by learning from incidents and near incidents locally and by sharing knowledge, information and experience with the wider radiotherapy community. The components of the platform are:

- A reporting and learning system where incidents and near incidents can be recorded and used within the individual clinics to support learning and improving safety locally
- A platform which enables the sharing of safety information with the wider community; to highlight where incidents or near incidents may occur and any actions taken to eliminate them or to mitigate their impact
- Provision of information on safety related developments as they apply to radiotherapy
- Documents or publications in the area
- Online lecture material on related topics
- Links to the other professional or scientific societies active in the area of radiotherapy safety.” (From ESTRO website) ■

Associated Science Meeting at RSNA overview of talk on

“Developing Scope of Practice of Radiographer from the ISRRT Perspective”

RSNA, Chicago

November 2017

Report by [Donna Newman](#), Director of Professional Practice ISRRT

During this year's RSNA meeting at the Associated Science session on Tuesday November 28th, 2017 I gave a presentation during the morning session call the developing scope of practice of the radiographer/radiological technologist along with a researcher from the UK Anne Marie Culpan who spoke on the developing scope of practice of the radiographer/radiological technologist in Breast imaging services. My presentation was called the Developing Scope of Practice of Radiographer from the ISRRT Perspective. In this article I am summarising my presentations points and overview for the News & Views.

IN Healthcare in 2017 the ISRRT believes that the team approach is needed in order to meet the World Health Organizations (WHO) ambitious agenda of Universal Health Care for all people by 2030. Included in this is the fact that the workforce shortage is happening everywhere with health care and the education can't keep up with the emerging technology facing our profession. The ISRRT believes that by developing the role and scope of practice for radiographers we may be able to help meet the needs of our patients and ensure that this global strategic goal is met by 2030.

The ISRRT as a global stakeholder contributes to these changes by help and promoting the basic role development and advanced practice development of radiographers. I think it is important to understand some background regarding the strategic agenda set forth by the WHO and see how it specifically relates to the radiology profession.

First I think it is important to know that in 2015 the member states of the United Nations adopted the Sustainable development goals which was a to do list for the next fifteen years for the WHO budget and agenda to make the world a healthier, safer and fairer world by 2030. There are 17 interlinked goals and 169 targets to meet by 2030. These sustainable development goals are for all countries but there are particularly about 67 low and middle income countries that will have the great challenges to meet these goals.

Universal Health Care means according to the WHO that people around the world have a financial risk protection, access to quality essential healthcare and access to safe effective, quality and affordable health care. A simplistic way to describe it would be that everyone will have access to basic health care and no one will be denied this right in any country. It important to note that there are 4 million people today that don't have this healthcare access worldwide in large part due to the huge shortage of health care workers. Some of this is related to the fact that health care worker's skill mixes and uneven geographical distribution isn't meeting the needs of the local area they serve.

There are many strategies within the sustainable

goals but I want to specifically focus on the ones that are related to the radiology profession. The preventative strategies are set to have a 25% reeducation in mortality by 2025. Within this strategy related to radiology is the strategy to reduce exposure of ionizing radiation both occupationally and for the medical exposure. The ISRRT helped with project within this strategy that is now complete which was the development of a communication tool to talk about risk and benefit for pediatric imaging Communication risk and benefit, this book is available for download on the ISRRT website. We are encouraging our member countries to download this book and get this information out to the entire profession and help the strategy to reduce medical exposure to pediatric patients. This also ensure the correct test is being done for the correct reason and that members of the family are



Moderator & ISRRT CEO Support Services Dimitrios Katsifarakis, Donna Newman Director of Professional Practice ISRRT, Anne-Marie Culpan speaker and Charlotte Beardmore Moderator morning session of the Associated Science Program at RSNA 2017.

well informed about radiation exposure.

There are also the 9-voluntary global non-communicable disease target for 2025 which includes radiology as well with the goal of 80% coverage of essential non-communicable disease medicine and technology by 2025. The ISRTT just participated in and contributed to the WHO's book on list of medical devices needed to develop standards and rules to guide the planning and implementation of interventions for prevention, early detection, treatment and care for cancer. For those of you that aren't aware there are 30 countries in the world that have no basic cancer care at all. Can you imagine being a patient in one of those countries? This document can be used for countries policy, budget and ministry of health to develop and implement cancer care within their countries for the future. For those of you that aren't aware. We have a copy of this book on the ISRTT website under the professional practice tab which can be downloaded and used within your country. We also took the opportunity within the human resource part of the book to ensure the scope of practice for radiographers was represented correctly. For more specific information about this project see our previous *News & Views* and the ISRTT website www.isrtt.org

The ambitious target under consideration by the United Nations as part of the sustainable development goals will only be achieved if dramatic improvements are made to strengthen the health workforce.

What does this all mean, just increasing the number of workers will not work as the shortage of health workers is compounded by the fact that their skill set, competencies and clinical experience are poorly suited to meet the needs of the population they are serving in many countries. The WHO is recommending that scaling up of educational programs need to happen to produce a multi-disciplinary service delivery team to meet the needs of future health care. There are about 67 low and middle-income countries will have the hardest time meeting this challenge.

The WHO is also focusing on the sustainable development goal of Health and under this goal is a strategic target of collaborative links with professional health association just like the ISRTT. Within this collaboration the WHO is calling for stakeholders like the ISRTT to contribute to the health care worker. Out of this initiative came the WHO Commission on Health Employment and Economic Growth. This commission was tasked to come up with a solution that would address the health care worker shortage and stimulate economic growth within countries to deliver this universal health care by 2030.

The commission focus on the health care worker and education and called for a shift in education to produce a community based health worker. Within this report was the call for three fundamental shifts in education. First being a changed from fact based learning to more of an analysis and system decision making model. Second was the shift from professional credentials to core competencies for effective team work within a health system. Final the report called for a transformation from passive adoption of educational models to creating systems adapted to meet the local need of the countries. Within the report they gave a great example of using the nurses and midwives model to meet the increasing shortage of physicians globally and the belief that his model would improve quality care and provide supervision to the fellow health workers to meet this local need model.

The WHO believed that the community based health worker would play a complementarity part to fill the void in rural health setting and give more access to qualified health professionals. The WHO Commission on Health employment and economic growth sent out a call for consultation from stakeholder to gather a summary of evidence, input and technical guidance in completing the final report. The ISRTT as a stakeholder contributed several suggestions specific to the radiology profession.

The first suggestion we gave was a four tiered education system

for the field of radiology beginning with basic education to an advance practice or post graduate education program. As you can see this is very similar to the nursing and midwives model except it is modeled to meet the needs of the shortage of radiologist globally.

The second suggestion we offered was an expansion base level education and specialisation for high school student included gender equality in all countries for all student to get education in biology, chemistry, math and physicist to prepare student entering the field of radiology and a radiographer. You can see that this is right in line with the report that came out from the commission.

The third suggestion we offered was an implementation of global and distance learning program from well-established programs to be used in these low and middle income countries.

The ISRTT believes that implementing these core ideas in the field of radiology will ensure the right amount of health care workers with the right skill set are available to meet the sustainable goals of universal health care by 2030.

The WHO's sustainable development goals will only be achieved if dramatic improvements are made to strengthen the health workforce. As a global stakeholder the ISRTT has developed a Radiography Education framework document that is housed on the ISRTT website under the education tab that can be used in these low and middle income countries that are just starting basic entry level education for diagnostic radiography programs to ensure consistency for minimal education requirement to be met. These countries could validate or improve the outcome of health care workers which will ultimately improve and strengthen radiography programs around the world. The document includes benchmarking and assessing tools to ensure the individual program are consistent with the ISRTT framework and criteria. The document includes prerequisites education needed for students to enter the program along with a set of characteristics identifying key elements to a successful program. The document contains categories which included standards needed for measurement in order to assess the standards and finally there are seven domains to measure against to ensure a successful program.

As a global organisation the ISRTT also supports models in countries that have well established education programs. The ISRTT believes these well-established programs can be used as a model in other countries to help meet the sustainable development goals from the WHO. The ISRTT believes that the European model fits right along with this concept in their education program. The European model is in line with the WHO's move from a passive adoption of education to a system that addresses the local needs. If you look at the EFRS 2014 survey done on education program in Europe you will find that 26 of the 46 schools in Europe offered combined programs of Medical Imaging, Radiotherapy and Nuclear Medicine curriculum together in one school. This program offered the same core learning outcomes for all three of these programs at one time then offer the specific outcome for each field after. The ISRTT believes this model



Donna Newman Presenting The developing scope of Practice of Radiographer from the ISRTT.

might work in these low and middle income countries to meet the local needs of education needed to achieve Universal HealthCare.

The ISRRT also supports that a radiographer is key part of the multi-disciplinary team and has active role in ensuring radiation protection and radiation safety for the patient is met in every day practice. The ISRRT supports the team approach to this as they understand the radiographer is the last person with the patient before the exposure is made they are a key person in the team approach to Justification and Optimization of protection and safety of the medical exposure.

The BSS requirement 36 defines who is responsible for optimization of protection of safety of medical exposure as the team of the radiologist, radiation physicist and the radiographer. As a global stakeholder representing the radiographers voice they believe that radiation protection is a shared responsibility. The BSS also describes that the radiologist is responsible for the overall medical exposure in 2.40 but it also goes on to say that in 2.41 other parties also have a responsibility in protection and safety or radiation medical exposure specifically the radiographer and the physicist. The team approach is the appropriate way to ensure over all protection to the patient. To support this very important concept the ISRRT has developed a position statement on Optimization and Justification as a team approach being part of the radiographer's scope of practice. Both of these position statements can be found on the ISRRT website www.isrrt.org under professional practice tab. These two position statements are available for radiographers to download and use within their countries to elevate the optimisation of protection and safety to the patient.

While there are three levels of Justification the second and third level are practiced every day in a radiographer's job as well as all the healthcare team. The ISRRT believes it is part of every radiographer's scope of practice to ensure that a duplicate study isn't performed or that an inappropriate study isn't done as will that doesn't meet the established protocol that was over seen by the radiologist but developed in a team approach with both management, the radiographer and the physicists. Finally, ISRRT believes that it is within the scope of practice of a radiographer to ensure the appropriate dose is being used in all studies as appropriated by the protocol.

As part of the team approach to Justification the ISRRT has several initiatives to support this process. The first being the position statement that we have already talked about. The second being a Web based decision tool for radiographers for authorisation and Justification of imaging procedures using ionizing radiation. This tool gives radiographers important information that can be used in their everyday jobs or also can be used as a teaching tool for students in radiography programs to understand the role of the radiographer in the team approach to Justification. We understand it isn't feasible for a radiologist to review all request for procedures and this guideline give radiographers direction for daily practice. For detailed information regarding this tool and information about it just log into the ISRRT website under the professional practice tab.

Finally, the ISRRT supports and contributes to advanced practice development which will help play an integral part in imaging and treatment to improve services and delivery of health care universally. The ISRRT believes that advanced practice in the radiography field can help in those middle and low income countries to help achieve the WHO's strategic agenda of meeting the local needs of health care in the sustainable development goals. The ISRRT supports countries that have established advance roles for radiographers that are based on good education models. I want to share two examples of good advance practices that could be used as a model or combined in these low and middle income countries to meet the shortage of radiologist globally. The first one I want to share with you is the United States

role expansion model or advance practice Called the Radiologist Assistant. It was developed in 2005 by the ACR, ASRT and the ARRT where a radiologic technologist worked under the general supervision of a radiologist. Their education was based on being a radiographer first than continuing on for more schooling and clinical preceptorship which ended in a Bachelors or Master's degree. This Radiology Assistant acts as a radiologist extender and help improve productivity and efficiency to improve patient access. Their job duties include taking a lead role in patient management and assessment, performing selected radiology examination and procedures and evaluating imaging quality and sometimes making initial image observation and forwarding those observations on to the radiologist for final interpretation and diagnosis. The ASRT did a radiologist assistant practice survey to track exactly where this profession was spending most of their time and found that the top five procedures they perform are esophageal studies, upper GI studies, small bowel studies, arthrograms and enema with contrast. Although the survey covered all procedures done in detail I am just giving the top five procedures performed.

Another successful advance practice role model that the ISRRT supports is the European model which is called the Consultant Radiographer or Radiologic Assistant or even a Consultant Practitioner depending on role and education the radiographer has completed. In Europe increasingly radiographers are performing duties that radiologist use to perform or other health care workers. The European model has two separate tracks that a radiographer can take to become in this advanced practice model. The first is a clinical track in imaging or radiation therapy and the other is a non-clinical track which includes, managers, academic staff and research staff. No matter which track you decide to take according to the EFRS document the EQF is on a level 7 which means a post graduate or masters level degree.

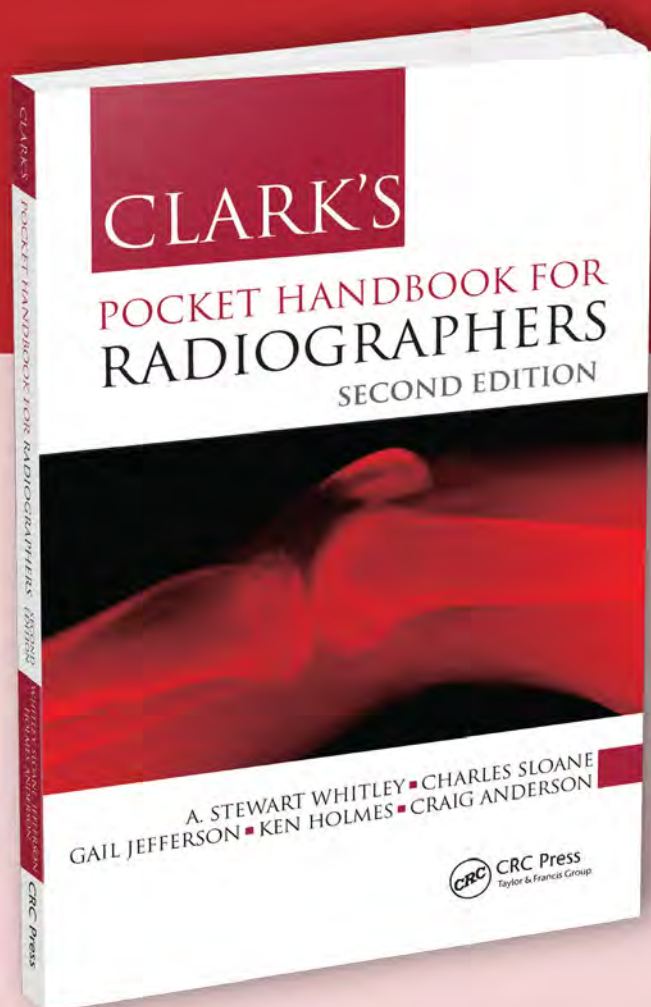
More and more countries in Europe are relying on radiographer's role to develop and improve service delivery because of the physician shortage. Depending on the country you are working in you may or may not be able to interpreted and give a final diagnosis on an exam. These role extenders are called consultant radiographers and they can report and the most common areas this is happening in is Ultrasound, Mammography and Muscular skeletal images in Europe.

ISRRT believes and supports the role expansion as an opportunity to provide clinical leadership within a specialization bringing strategic direction innovation and influence through practice, research and education.

The ISRRT has developed a position statement on Imaged interpretation to support the components of the expanding role of radiographers in countries where this is permitted by regulation or national law. As a global organisation for radiographer profession the ISRRT support and promotes the expansion of this role in countries that comply with national law

The ISRRT has also provided a distance learning tool that can be used to learn pattern recognition to support this role expansion. The ISRRT believes that role expansion in all capacities is a valuable part of a multi discipline approach to patient care and can be used as model for developing and developed countries. The ISRRT also believes that either of these two advance practice models or a combination of the two together could be rolled out to help meet the needs of the 67 low and middle-income countries and this model will also support the sustainable development goal including Universal Health Care by 2030

If you are interested in finding the ISRRT documents they are all housed on the ISRRT website www.isrrt.org and just look for the position statements and Justification tool under the professional practice tool and the education framework document under the education tab. ■



Clark's Pocket Handbook for Radiographers

Second Edition is a hands-on guide that provides clear and practical advice to help radiographers in their day-to-day work.

- Designed for rapid reference, it covers how to position the patient and the central ray, describes the essential image characteristics and illustrates each radiographic projection with a positioning photograph and a radiograph.
- Provides a systematic approach, covering all commonly encountered projections
- Illustrates subject matter with clear photographs and corresponding radiographs for each projection
- Includes image evaluation, medical abbreviations, relevant normal blood values, diagnostic reference levels and radiation protection.

December 2016 • 252pp • 9781498726993 • £19.99

Order your copy today from **www.crcpress.com**
and receive 20% discount with checkout code DBR17

ISRRT

20th WORLD CONGRESS

April 12th to 15th 2018
Port of Spain,
Trinidad & Tobago



ISRRT
INTERNATIONAL
SOCIETY OF
RADIOGRAPHERS
& RADIOLOGICAL
TECHNOLOGISTS



Email:
soradtt@yahoo.com

Website:
www.isrirt.org

www.soradtt.com

Whatsapp:
868 705 8482
868 712 1744

ISRRT 20th World Congress

April 12-15, 2018

Trinidad and Tobago



On behalf of the executive members as well as all the radiographers in Trinidad and Tobago we would like to personally invite each of you to the **ISRRT 20th World Congress** with the global theme “**We Care**” and to our beautiful islands of Trinidad and Tobago.

It's an exciting time for the Society of Radiographers of Trinidad and Tobago as we look towards hosting you on the **April 12-15, 2018**. The world of radiography, medical imaging and radiation therapy is an exciting area to be a part of, and we are inspired by your dedication, hard work and care for our profession so that we are always at the cutting edge.

Closing of Early Registration: January 12, 2018

Our local and regional colleagues and our government and corporate partners are very proud of where we are today and excited about where we are headed.

A few key points for all our visitors to note:

- Trinidad is the where the Steelpan was invented.
- Carnival one of the most colourful and divers celebrations will be held 2 weeks prior to the Congress.
- We are home to the Scarlet Ibis which is a magnificent sight when nesting at dusk.
- We are known for our local cuisines and street food.
- We have the largest natural deposit of Asphalt in the world and it is a sight one must see on visiting our Island.
- Our sister island is known for its beaches and is the home of the largest brain coral in the world.

These are just a few of the highlights of Trinidad and Tobago and we hope that not only will you be visiting for the Congress but hopefully you all will get to see some of the beauty which our country has to offer.

www.tourism.gov.tt/Sites-Attractions

For inquiries please feel free to contact us and we will be happy to answer any question you may have 2018.org.tt

Reshma Maheepat
President
Society of Radiographers of Trinidad and Tobago

Professional Practice Update: Work on ISRRT's strategic goals

Report by [Donna Newman](#), Director of Professional Practice ISRRT

Three key goals were established at the strategic planning meeting that the professional practice committee and board sub-committee that I am participating in that will be contributing to over the next several years. I would like to take a few moments to highlight the progress and phases on a few of these initiatives since our last newsletter to keep our member societies up to date on professional practice issues and radiation safety issues these initiatives.

THE First Goal that fits into the portfolio of the professional practice from the ISRRT's strategic planning meeting is: Goal: Collaborate to develop and promote International Standards:

Strategic Priority: Contribute to and promote a radiation protection safety culture

This Past May, 2017 the ISRRT was asked to contribute and participate in a Survey from the WHO which dealt with SSFEC medical Products. This project came out of the world health Assembly and the resolution pertaining to this project was Resolution 65.19 which dealt with availability of quality, safe and efficacious medical products globally. As director of professional practice, I gathered the information related to the radiology profession and filled out the survey on behalf of the ISRRT to ensure the radiographers/radiological technologists voice was represented in this survey.

Relating to the ISRRT Response to the Bonn Call-for-Action the ISRRT has finished the phase one of the Action to Enhance implementation principle of Justification by developing the decision tool on Justification and Authorization and have it published on the ISRRT website under professional practice tab www.isrtr.org/justification for member countries to download and use both in educational schools as a teaching tool for students but also for a tool to be used for radiographers in their daily practice at their place of work. The ISRRT has also finished the position statement on the team

approach to Justification and it is under the professional practice tool on the ISRRT website www.isrtr.org/position-statements as well. The ISRRT hopes that this position statement will help radiographers around the world help elevate standard of care for patient where needed and support radiographers scope of practice issues in countries that need this information. Please feel free to download this document and use this in your countries as well.

Phase two is a pilot study which will include testing the web based decision tool on Justification and Authorization tool as a pilot project in a radiography school. The ISRRT will continue to update the membership as we receive these updates. The objectives include reviewing actions taken and developments since the 2012 Bonn conference, especially focusing on actions taken in line with the Bonn Call-for-Action by all relevant parties; this will enable a review of the overall approach to the implementation of these actions and the harmonisation of activities between international organisations and other stakeholders, as well as to allow stakeholders to look ahead at new developments impacting on radiation protection in medicine. I will be attending this meeting representing the ISRRT and presenting the ISRRT's work in the opening session call, "The Bonn Call-for-Action – A Joint Position Statement by the IAEA and the WHO with Briefing activities and priorities influenced by the Bonn Call-for-Action from global stakeholders". I will also be participating

in the fourth session called Radiation Protection of patients, staff and the public in diagnostic and therapeutic nuclear medicine and hybrid imaging. I am happy to report that Napapong Pognaapang will be representing the ISRRT in the Radiation protection in medical exposures of children and pregnant women. We will be sure to report out the findings to our members from this meeting in the near future.

Part of the second action of our plan from the ISRRT response to the Bonn Call-for-Action

Enhance implementation of principle of optimisation of protection and safety I have two items to report about, the first being I represented the ISRRT at the Associated Science session of the RSNA meeting where I presented a session on the developing scope of practice of Radiographer/Radiologic Technologist in the Tuesday morning session which is reported elsewhere in this issue of *News & Views* to give detail about the presentation for the members that have asked for this information.

The second item I want to invite members to attend our Pre-congress workshop on radiation



ISRRT Board members at RSNA.

Protection which will be held at the 20th ISRRT World Congress in Port of Spain which the ISRRT is cosponsoring and coordinating with the ASRT. I want to personally thank Sal Martino CEO for sponsoring four excellent speakers for this workshop along with the lunch for all attendees. Please think about coming as the ISRRT will be updating members about the outcome of the Bonn meeting from December.

Action 9: Foster improved radiation benefit-risk dialogue

I want to report out that we have finished contributing to the WHO document "Communication radiation risks in pediatric imaging: Information to support health care discussions about benefit and risk". This document is intended to be a tool for health care providers to communicate about risks associated with pediatric imaging procedures. The document is available to download and distribute and use in our everyday practices of radiology as professional. You can easily find this document on the ISRRT website under the professional practice tab. We are encouraging all member societies to download this document and make it available for all members to be used in daily practice.

Action 10:

Strengthen implementation of safety requirements globally

I want to report that in July of 2017 as Director of Professional Practice I was asked to review the document called "Guidelines for best practice: Imaging for age estimation in the living from the International Association of Forensic Radiographers. The document was reviewed by Professional Practice, Education and Public Relations committees of the ISRRT as well as the ISRRT Board of Directors. All reviewers were asked to read and give feedback from the draft guideline relating to scope and completeness as well as quality and clarity. The reviewers were also asked to determine if the draft reflected current consensus and contained supportive evidence for global practice, the last item the reviewers were asked to present were any gaps in practice that might be missing in the document. The comments written by reviewers were grouped as a general comment which pertains to the entire document or a specific comment that is specific to a section, the specific section has the page number and paragraph it pertains along with draft suggestions to consider. ISRRT general comments received regarding the document.

Some of the general comments about the guidelines themselves were that the document was written fluidly and organised in a manner that is quick to reference and logical to follow. With the exception of a few sentence structures, the document is well written with cohesive paragraphs strongly supported by literature. Of particular merit is the attention paid to welfare of the multidisciplinary team involved in the imaging and analysis of bone age. Inclusion of radiographers as one of the main objected audiences. In my experience, bone age examination in the living is most commonly performed in a clinical setting and as such, more commonly performed by non-forensically trained Radiographers. The manuscript offers a much-needed collection of guidelines to start the discussion of best practices in age estimation of the living. As technology advances and the capabilities of diagnostic imaging continue to unfold, so too will the applications of diagnostic imaging in age estimation in both the living and the dead.

Rarely in scientific literature are the needs and interest of the team itself discussed or brought to light and I applaud the guidelines' inclusion of counseling and debriefing recommendations.

Regardless of the circumstances surrounding the question of child age, the degree of malnutrition or disease exposure must be taken into consideration for an accurate bone age analysis to be concluded. Research and literature continuously demonstrate the correlation between malnutrition and disease and a decrease in bone age

compared to chronological age.

Another potential flaw in the proposed guidelines for best practice is the projection towards 'Forensic Radiographers' as opposed to 'Radiographers' or 'Medical Radiologic Technologists'. Being that these age estimations are concerning those living, it is predicted the majority of these examinations will be occurring in clinical settings such as private radiology clinics, hospitals and urgent cares as opposed to morgues, coroners, medical examiner's offices, court houses or prisons. With this being said, the chances that the radiographer in the clinical setting has additional forensic radiography or forensic science training are rare. As a clinical and forensic radiographer, I appreciate where additional forensic training is most beneficial. I fear with these guidelines focused mainly towards forensic radiographers, the larger more affected population of Radiographers are missing out on valuable, pertinent information that directly influences their practice. These guidelines highlight the role of the forensic radiographer and the education and training expected for the role of performing age estimation imaging; yet the large majority of radiographers involved in age estimations in the living are not forensically trained. Demonstrates how disease and/or malnutrition can negatively influence the development of dentition, bone and overall growth and should be taken into consideration when imaging for age estimation in the living.

Some of the specific detail is listed:

ISRRT specific suggesting to be consider:

Pg3 & 4 Introduction/ preamble as against context

Pg 4 "These guidelines include therefore an overview of the requirements....." - consider- "Therefore, these guidelines offer an overview of the requirements....."

Pg 5 all definitions e.g. Bone age should have in text citations (references)

Pg 5&7 the subtitles should not be questions title like other subtitles in pg. 9,15, 18, 22 etc. Consistency should be maintained.

Pg 7 Role of Forensic Radiographer- (who has undertaken further postgraduate education in forensic radiography) regarding this information from the paragraph - (This is not the case in the USA. Those who perform forensic radiography have no formalized training in how to perform this imaging, and there are no post-graduate courses offered.

For those radiographers who are members of DMORT (Disaster Mortuary Operational Response Teams), ideally, that radiographer would have some exposure to forensic / medicolegal radiography, but that is not always required.

Pg 7 Role of Forensic Radiographer paragraph two (With the ALARA Principle) Exclusively referring to post mortem imaging only:

From my Perspective, we are to perform the highest quality imaging, maintaining ALARA, for the occupational workers performing the imaging. At some facilities I have worked at, we employ techniques that are generally higher mAS setting in order to create imaging that was of higher quality, and were not necessarily the same dose that a living patient would receive. This is especially true of our post mortem CT protocol we used, as this was a thin slice imaging and of the whole body.

Pg 7 Regarding this paragraph- (The IAFR recognises that Forensic Radiography uses diagnostic imaging to answer questions of the law and therefore may be performed on live individuals) This is a bit divergent in the US. We do not receive requests such as these for all cases that could be considered forensic. An example: we do receive orders for skeletal surveys on paediatric patients in the living, clinical setting. We perform the x-rays as per the protocol, but do not have the same documentation as would be seen I systems

such as the UK.

Alternatively, Adult cases of assault, for example, head CT scans are not necessarily treated as scans that are going to be used to answer question of law, so those patients would be scanned in normal fashion, with probably less "high states" as would be present for paediatric skeletal surveys for non-accidental trauma

Pg 6-18 delete all the authors initials in text citations.

Pg 6 UNCR 1989 is wrong but UN 1989

Pg 9 Franklin et al(2011a). The alphabet a should be deleted.

Pg 9 "This method has been used in a variety of populations in order to establish the accuracy and reliability"- consider- "This method has been utilized in a variety of populations in order to establish accurate and reliable dental age assessments"

Pg 11 Hern.....at el atlas 1991, delete atlasIn collaboration with

Pg 11 ".....and its results are used in Spain as a national reference for bone age in hand and wrist in Spanish children." –consider "and its results are utilized in Spain as a national reference for hand and wrist bone age in Spanish children.

Pg 12 "a new digital atlas developed in 2005." Sentence fragment – consider – "A new digital atlas was developed in 2005 producing idealized and artificial images for specific age and sex standards of skeletal maturity. They accomplished this by analyzing in detail the size, shape, morphology....."

Pg13 Kellinghausat....2010 was not properly reference in reference list.

Pg 13 "The literature demonstrates that of the imaging modalities available, however, the use of radiographs is the....." consider deleting the word however "The literature demonstrates that of the imaging modalities available, general radiography is the...."

Pg 14 under Dual-energy X-ray absorptiometry (DXA/DEXA)- DXA does emit low radiation but as stated there is insufficient detail to accurately assess bone age. Therefore, DXA is NOT an acceptable modality for measuring bone age.

Pg 16 "Being familiar with the most common in image processing tools and techniques used" – consider- "Being familiar with the most widely utilized and current processing tools and techniques available."

Pg 17 "Ensure that accurate written records are kept by the institution and that these remain...." – consider – "Ensuring that accurate written records are kept..."

Pg 17 "Advocating that all age estimation processes that they are involved in adhere to jurisdictional and" – consider- "Advocating that all age estimation processes adhere to jurisdictional and...."

Pg 17 under Education and Training - There is no formal training in the US for forensic radiography

Pg 31 first reference had repetitions, delete one

Pg 32 last reference not able to trace in text reference citations

Pg 33 kellingh....et al 2010 incomplete reference

Pg 34 delete last reference, repetitions.

Pg 36 Schurlz et all 2005, incomplete reference and use of different font types.



Weber State representatives (Bob Walker and Rex Christensen) discussing Study Aboard Program with ISRRT Board members Alain Crompt, Dr Fozy Peer, Dimitris Katsifarakis and Donna Newman.

The radiographic technique is very scanty and imaging modalities. There is a need to emphasize different countries especially in Africa to develop their own normative age estimations of different Imaging modalities: MRI, USS etc.

NB: The use of CT in children is also worrisome as it does not conform to radiation protection.

Goal:

Collaborate to develop and promote International Standards:
Strategic Priority: Contribute to and promote Professional Practice
2. Collaborate when Policy makers require information on profession

April of 2017 I sent out to the Board of ISRRT and committee for input on the final Consultation and final draft version of the for-WHO priority list of medical devices required for cancer management", the document is now published and available on the ISRRT website www.isrrt.org/safety-culture under the professional Practice tab labeled Safety culture, Medical devices WHO Medical device technical series is now available for download www.isrrt.org

June 2017 Review, gathered and submit comments on behalf of ISRRT on draft ICRP report Occupational Radiological Protection in Interventional Procedures submitted out comments to their website as well as published article for *News & Views* with complete report about our comments in August issue 2017 www.isrrt.org/communication under communication tab, news and views.

Goal:

Collaborate to develop and promote International Standards:
Strategic Priority:
Contribute to Radiation Protection and Safety Education

The ISRRT Professional Practice Committee focuses on strategic priorities to show commitment to the universal standards in radiation protection in medicine. These priorities include development of position statements regarding radiation protection requirements

consistent with the BSS. By creating these the ISRRT is trying to create an infrastructure for our member countries

December 2017: Two draft ISRRT Position/Policy Statements that will be presented at the World Congress council meeting April 2018, have been circulated to the Professional Practice committee, Education committee and Public Relations committee as well as some stakeholders to get feedback and suggestions on wording and supporting reference from each by the end of December 2017 or council meeting. The two draft position statements for consideration at the council meeting are:

1. ISRRT draft Position/Policy Statement-Radiographers/Radiological Technologist role in Quality Assurance and Quality Control as a Team Approach
2. ISRRT draft Position/Policy Statement: The prescribing, supply, preparation and/or administration of medication to patients by radiographers/radiological technologists

Follow up on the previous position statements that were presented at the Seoul Korea meeting in 2016.

The position statements were sent out to the member societies for input after the World Congress in Seoul, South Korea, gathered and combined the input and submitted the results and had them published on the ISRRT website www.isrrt.org/professional-practice under Profession Practice tab, Position statements

1. ISRRT Position/Policy Statement: Radiographer/Radiological Technologist (Medical Radiation Technologist) Role in Authorization and Justification of Medical Exposure as a Team Approach
2. ISRRT Policy/Position Statement – Radiographer/Radiological Technologist (Medical Radiation Technologist) Role in Optimization of Medical Exposure
3. ISRRT Policy/Position Statement on the Supply, Preparation and Administration of Contrast Agents to patients by Radiographer/Radiologic technologist and Radiation Therapist (Medical Radiation Technologist)

On a side note as Director of Professional Practice I received an invitation to visit Bob Walkers program at Weber State. Sharon Wartenbee, Chris Steelman and I spent the day learning about the Sino American Cultural exchange program that Bob Walker has been running for the past 12 years. We had a fantastic day learning about their global study abroad program with China. This program allows Weber State students and technologists to learn global competency and leadership skills from students while spending time immersed in a Chinese culture, learning that although we come from different background we are all the same profession. This program allows students to network and share knowledge about health care while getting exposed to real world of the radiology profession in a different country. This type of opportunity gives students an understanding of a global perspective. Bob believes that by having this type of program we are creating a new generation of technologist that will think differently about medicine. At the RSNA conference we again had a chance to catch up with Mr Walker and share ideas about how students might fit into the ISRRT organisation. Many good ideas were shared and will be brought back for consideration for the full board to consider.

RSNA was a great experience this year to attend as a speaker for the Associated Science meeting and also to have the opportunity to visit with many of our members throughout the world that were attending the conference. I found it just fascinating to share practice related ideas on radiation protection and safety issues facing different countries. Our president Dr Fozy Peer, Treasurer Stewart Whitley and CEO Support Services Dimitris Katsifarakis had many meetings each day with vendors. I am excited to say they had much success

with future research projects sponsored by vendors coming soon to our members as well and serious discussion about distance learning continuing education that may be able to be provided for our members to use. Watch for announcement coming in the near future.

Since several of the ISRRT Board members were already attending RSNA for their personal work we took the time to meet informally to discuss professional issues related to the ISRRT. It was greatly appreciated that Board members helped cover the booth when Dr Fozy Peer, Stewart Whitley and Dimitris were attending meetings on behalf of the organisation. I personally appreciated the help from my fellow Board members that were attending the meeting on their personal time or for their own work. ■

Donna Newman

Professional Practice for the Americas

Report by **Christopher Steelmann**,

Regional Coordinator of Professional Practice for the Americas

The United States recognises Radiologic Technologists

National Radiologic Technology Week (NRTW) is celebrated annually in the United States to recognise the important role medical imaging and radiation therapy professionals play in patient care and health care safety. The celebration takes place each year during the entire week that includes November 8 to commemorate the discovery of the x-ray.

The American Society of Radiologic Technologists provide enormous support for this event which includes offering downloadable templates for newsletters, fliers and posters which are used to promote this important event. The ASRT also designed five Facebook profile photo frames that helped bring attention to this year's theme "Positioning To Save Lives." Radiologic technologists and those who support the profession use these frames to demonstrate their pride in their work on social media. Once again, the ASRT, Affiliate Societies, facility administration and individuals came together as professionals to bring national awareness to medical imaging and radiation therapy professionals.

ASRT Practice Standards Revision

The ASRT has just completed collecting public comment on proposed revisions to The American Society of Radiologic Technologists Practice Standards for Medical Imaging and Radiation Therapy. The Practice Standards are authoritative statements established by the profession for evaluating the quality of practice, service and education provided by individuals who practice in medical imaging and radiation therapy. This call for public comment is a critical phase in the development of these important documents because it invites all stakeholders to comment upon changes that may affect their daily practice. The comments are carefully considered and often contribute to the final version.

The revision process challenges all members of the Society to collaborate and come to a consensus on the definition, clarification and guidance for the most appropriate practice for established disciplines and modalities. The Practice Standards Council reviews these documents on a regular basis because professional practice is continuously changing due to market and economic forces, statutory and regulatory mandates, technological advances and evolving methods of practice. Updating these documents is a challenging task. The ASRT staff choreographs the revision process, facilitating the collaboration of the Practice Standards Council, the Practice Standards subcommittees and the ASRT membership who play a vital role in the process. Members can review and provide comments through the ASRT's Online discussion forums. These online

“communities” ensure that the documents represent the collective expertise of all ASRT members. The ASRT House of Delegates will consider the proposed revisions to the Magnetic Resonance, Medical Dosimetry, Radiologist Assistant Practice Standards during the 2018 Annual Governance and House of Delegates Meeting, June 21-24 in Las Vegas.

ASRT at RSNA 2017

The theme of this year’s Radiological Society of North America (RSNA) Annual Meeting is “Explore. Invent. Transform.” Attendees are invited to “investigate and advance radiology through innovation as a means of creating positive impact on patient care.” Established in 1915, the RSNA is an international society with more than 54,000 members across the globe. Each year, the RSNA organises the world’s largest scientific and educational meeting for the radiologic sciences. In November nearly 51,000 radiologists, radiologic technologists, radiation therapists, nurses and other radiology professionals from around the world come to Chicago to learn from the world’s leading radiology experts, view cutting-edge technology, connect with peers and see the latest research on medical imaging. With over 650 leading manufacturers, suppliers and developers of medical information and technology, attendees will see the worlds latest innovations in medical imaging.

Since 2009, the ASRT and RSNA have featured a popular one-and-a-half-day program with education specifically targeted to technologists. This year’s attendees heard from Donna E. Newman, ISRTT Director Professional Practice who presented “Developing Scope of Practice of the Radiographer from the ISRTT Perspective.”

ISRTT American delegation visits Weber State University

The ISRTT American delegation composed of Donna Newman, Director of Professional Practice, Sharon Wartenbee, Regional



Chris Steelman, Sharon Wartenbee, Bob Walker and Donna Newman.

Director of Americas and Christopher Steelman, Regional Coordinator of Americas Professional Practice were recently invited by Robert Walker, Chairperson/Professor of the Weber State University, Department of Radiologic Sciences to learn about their Global Study Abroad program. The 2018 trip will be the “12th Annual Sino American Health Care and Culture Exchange.” The program teaches students a unique mix of Chinese culture and traditional eastern medicine through tours and hands-on experience. In addition to touring the Universities world-class facilities they visited the departments state-of-the-art 3D reconstruction lab. The delegation also had the opportunity to collaborate with some of the Weber State radiology faculty. ■

Christopher Steelman



OFFERING HOME STUDY COURSES SINCE 1985
IN
ECHOCARDIOGRAPHY
VASCULAR TECHNOLOGY
DIAGNOSTIC MEDICAL ULTRASOUND

STUDENTS FROM MANY COUNTRIES
HAVE GRADUATED FROM OUR HOME STUDY COURSES

THE COURSES PROVIDE ALL THE THEORY NEEDED TO
PERFORM ULTRASOUND IN THE FOLLOWING AREAS:

PELVIS
BREAST
ABDOMEN
OBSTETRICS
GYNECOLOGY
NEUROSONOLOGY
MUSCULOSKELETAL
ECHOCARDIOGRAPHY
VASCULAR TECHNOLOGY

MOST COURSES ARE WORTH 30 CME CREDITS

www.burwin.com



PHONE: 204-254-1439 (Central Time) or 902-634-3238 (Atlantic Time)
FAX: 204-254-7473

The e-Encyclopaedia of Medical Physics

WWW.EMITEL2.EU – a brief User Guide

Report by [Slavik Tabakov](#), EMITEL Project manager, President IOMP

DURING 2010 the international project EMITEL launched the first e-Encyclopaedia of Medical Physics www.emitel2.eu. The project was developed over seven years and attracted as contributors over 300 specialists from 36 countries. The project developed first a Thesaurus of Medical Physics terms (related to our previous project EMIT, awarded with the EU Leonardo da Vinci Award). These terms were translated into 29 languages. Following this the Encyclopaedia was developed (using original methodology), where each term was explained with an article in english. The length of the articles vary and many articles are supported with images and diagrams. The e-Encyclopaedia includes c. 3400 articles. Currently EMITEL has 7000+ users per month. The e-Encyclopaedia was made for medical physicists and students, but can be also very useful to radiologists, radiographers, and other specialists applying radiation in medicine. Below is a brief User Guide for EMITEL.

1. To use the Dictionary >> select *Dictionary* >> choose the Input and Output languages >> write the term you want to see at the window >> click search. A list with terms is displayed, where the terms are found either as single word, or in combination with other words (the e-Dictionary assumes that the user's Internet browser already supports the Languages). Terms without existing translation are in English. The Dictionary can translate between any two languages
2. To use the Encyclopaedia article titles only (quick search in English) >> select *Encyclopaedia* plus *Title* combo >> write the term you want to see in the window >> click search. A list with terms is displayed – against each one is a blue hyperlink related to the area of the term >> click the hyperlink to read the article. This search covers only the titles of the articles. Some articles have two entries (related to two categories – e.g. Magnetic Resonance and Ultrasound). To minimise problems with spelling the search may use part of the word only.
3. The website was built with two Search Engines – one searching into the Lists of terms (in all languages) and another one (in English only) searching inside the text of the articles (Fig.1). The latter allows significant increase of the potential of the e-Encyclopaedia, including search for related terms, acronyms and synonyms (the authors made all efforts to include these in the text). To use this powerful facility the user has to select *Encyclopaedia* plus *Search in Full Text* combo >> specify the category/area of the search (e.g. Radiotherapy) and proceed as above. In case of UK or

American/English differences (e.g. colour>color; optimise>optimize) search only part of the term (e.g. colo, optim). Most entries include references and related articles. To see the latter, copy and paste the related article title into the search window.

4. To use both the Encyclopaedia + Dictionary >> select *combined* and proceed as above (this search is limited only to the title of the article, not inside its text). The text and images of the articles allow copy/paste in another file (N.B. formula-related text is presented as image).

Slavik Tabakov

PhD, Dr h.c., CSci, FIPEM, FHEA, FIOMP, Hon.Prof.

Founding Programme Director for MSc in Medical Engineering & Physics and MSc Clinical Sciences

• President IOMP

(International Organization for Medical Physics www.iomp.org)

Founding Co-Editor of IOMP Journal Medical Physics International – www.mpjournal.org

• Dept. Medical Engineering and Physics

King's College London – Faculty of Life Sciences and Medicine

King's College Hospital, London SE5 9RS, UK

e-mail: slavik.tabakov@kcl.ac.uk; slavik.tabakov@emerald2.co.uk

The screenshot displays the EMITEL e-Encyclopaedia interface. At the top, there are logos for the European Union, Leonardo da Vinci, King's College London, NHS, and LUND University. The main navigation bar includes 'ENCYCLOPEDIA', 'DICTIONARY', and 'COMBINED'. Below this, a search bar contains the word 'phase'. A dropdown menu for 'Search in' is open, showing options like 'All', 'General', 'Diagnostic Radiology', 'Nuclear Medicine', 'Radiotherapy', 'Magnetic Resonance Imaging', 'Ultrasound Imaging', and 'Radiation Protection'. The 'Magnetic Resonance Imaging' category is selected. The search results list various terms, with 'Aliasing (Wraparound artefact)' highlighted. To the right, the article 'Aliasing (Wraparound artefact)' is displayed, featuring a diagram of a test object and its aliased image, and a figure caption explaining the phenomenon.

Aliasing (Wraparound artefact)

Magnetic Resonance Imaging

Aliasing, 'phase wrap' or 'foldover' is an image artefact that occurs in MRI where there is anatomy outside of the user defined field of view (FoV) in the phase encoding direction.

Figure 1: Image of a test object (left) and an aliased image of the same object (right). In the aliased case, the Field of View (FOV) in the phase encoding direction is set as shown, with some of the object outside the FOV.

Application of a phase encoding gradient creates a spatial variation in temporal frequency given by:

$$(1) \quad \Delta\omega = 2\pi\gamma G_y \quad (\text{rads/sec})$$

where y is distance from isocentre along the direction of the applied gradient G_y and γ is the gyromagnetic ratio. On completion of phase encode step i of duration T , the variation of phase with location y in the phase encoding direction is:

Fig.1. An example of the 'Search inside' feature of the EMITEL Encyclopaedia (in all areas); here the search for the term 'phase' has resulted in a list of articles, where 'phase' is mentioned in the text, including one with a synonym of 'phase wrap' – 'aliasing'.

Diary Dates 2018

February 28 – March 4
ECR Diverse and United
Vienna, Austria
myESR.org/radiographers

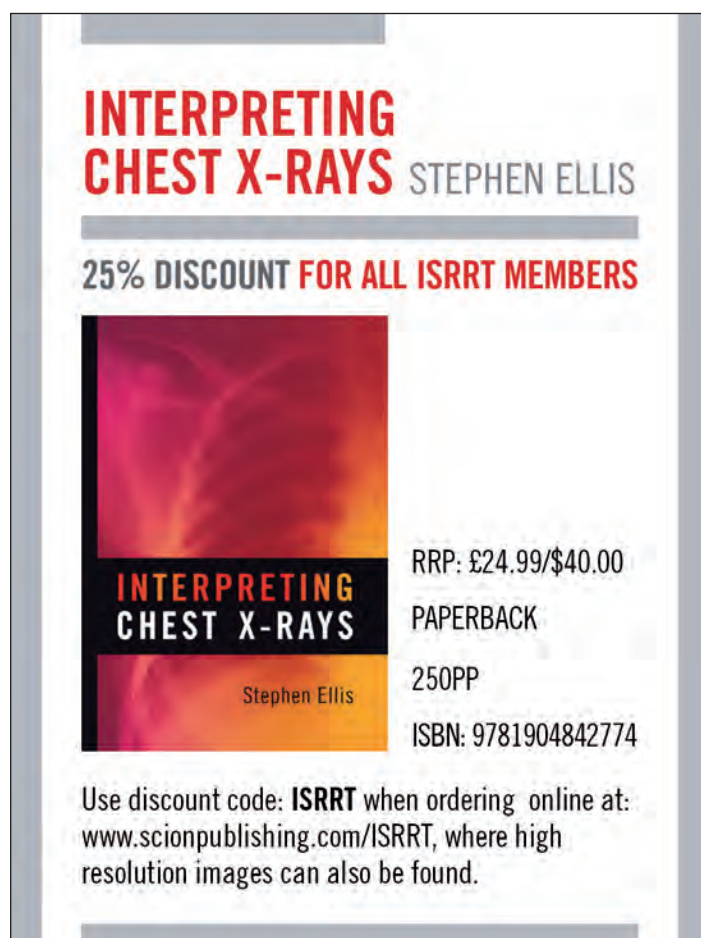
March 15–18
ASMIRT Annual Conference
Canberra, Australia
asmirt.org/conference/2018/

April 12–15
20th ISRTT World Congress
Port of Spain, Trinidad and Tobago
Contact: email:
soradtt@yahoo.com
www.soradtt.com

September 10–15
CARO-COMP-CAMT Joint Scientific Meeting
Montreal, Canada

October 21–23
ASRT Radiation Therapy Conference
San Antonio, Texas

November 25–30
RSNA
Chicago, USA

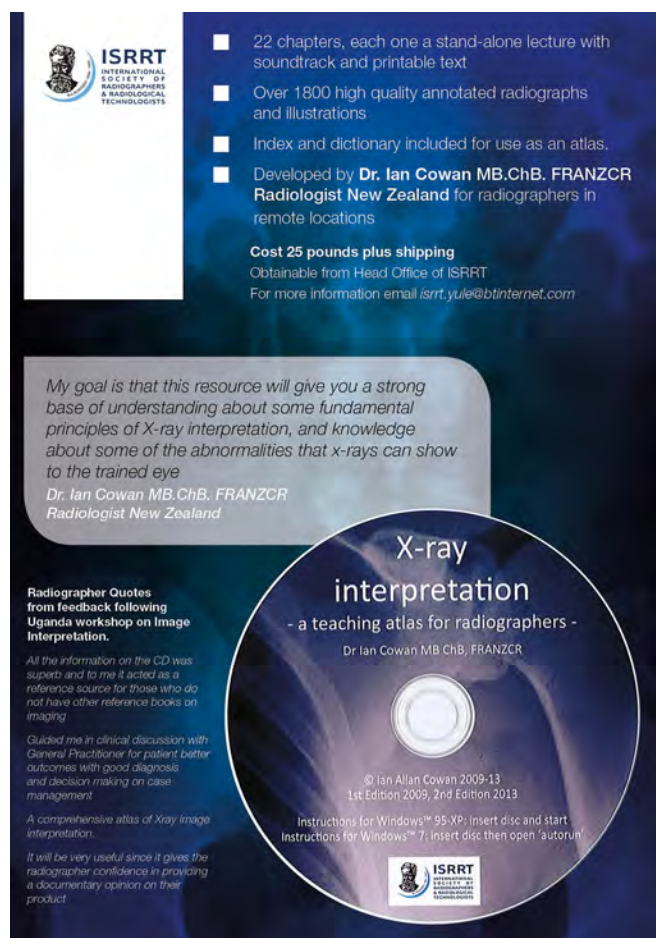


INTERPRETING CHEST X-RAYS STEPHEN ELLIS

25% DISCOUNT FOR ALL ISRTT MEMBERS

RRP: £24.99/\$40.00
PAPERBACK
250PP
ISBN: 9781904842774

Use discount code: **ISRTT** when ordering online at:
www.scionpublishing.com/ISRTT, where high resolution images can also be found.



ISRTT
INTERNATIONAL
SOCIETY OF
RADIOGRAPHERS
& RADIOLOGICAL
TECHNOLOGISTS

- 22 chapters, each one a stand-alone lecture with soundtrack and printable text
- Over 1800 high quality annotated radiographs and illustrations
- Index and dictionary included for use as an atlas.
- Developed by **Dr. Ian Cowan MB.ChB. FRANZCR** Radiologist New Zealand for radiographers in remote locations

Cost 25 pounds plus shipping
Obtainable from Head Office of ISRTT
For more information email isrtt.yule@btinternet.com

My goal is that this resource will give you a strong base of understanding about some fundamental principles of X-ray interpretation, and knowledge about some of the abnormalities that x-rays can show to the trained eye
Dr. Ian Cowan MB.ChB. FRANZCR
Radiologist New Zealand

Radiographer Quotes
from feedback following
Uganda workshop on Image
Interpretation.

All the information on the CD was superb and to me it acted as a reference source for those who do not have other reference books on imaging

Guided me in clinical discussion with General Practitioner for patient better outcomes with good diagnosis and decision making on case management

A comprehensive atlas of X-ray Image interpretation.

It will be very useful since it gives the radiographer confidence in providing a documentary opinion on their product

X-ray interpretation
- a teaching atlas for radiographers -
Dr Ian Cowan MB ChB, FRANZCR

© Ian Allan Cowan 2009-13
1st Edition 2009, 2nd Edition 2013

Instructions for Windows™ 95-XP: Insert disc and start
Instructions for Windows™ 7: Insert disc then open 'autorun'

ISRTT
INTERNATIONAL
SOCIETY OF
RADIOGRAPHERS
& RADIOLOGICAL
TECHNOLOGISTS



TRUSTEES

Cynthia Cowling
(Australia)

Alan Budge (UK)

Marie-Dominique Galy
(France)

Chris Steelman (USA)

Noreen Sinclair (UK)

Ian Henderson (UK)

Robert Shen (Taiwan)

Chairperson:
Cynthia Cowling

Honorary Treasurer:
Alan Budge

Honorary Secretary:
Noreen Sinclair

General Manager:
Sue Marchant

Website Manager:
Sue Marchant

www.wretf.org

World Radiography Educational Trust Foundation

News

The education sub-group has been active in reviewing and revising the bursary application forms and scoring sheets. The new forms will be in use for the next round of applications in 2018.

Support

While the Trust still sends out book parcels, the number of applications for books has decreased significantly reflecting the more electronic approach to learning that is available now in developing countries.

Bursary Scheme

Elizabeth Olanloye of Nigeria made her educational visit to the Radiotherapy Department at the Groote Schuur Hospital in Cape Town in July. She spent almost 4 weeks under the direction of Professor Penny Engel-Hills, learning about up to date techniques and patient care that she can use in her own department. Her report of her visit is on the WRETF website. Pictured below is Penny with Elizabeth. One bursary recipient is currently in Malaysia on his educational visit. He is a lecturer in Pakistan and will take back to his university and hospital new and current techniques for learning programs and techniques which will benefit the patients in the department.



Twinning

While there has not been much activity recently, Brigitte Kaviani Assistant Operations Director in the Radiology Department of Sheffield Teaching Hospitals UK, has been very active on behalf of her department, recently visiting Zambia and some of its hospitals with the Radiology Manager of the Livingstone Central Hospital's department. She is planning another visit shortly along with two colleagues to take out small items of equipment. She has already supplied a lot of used textbooks to support the library in the radiology department of Livingstone Central Hospital. It is hoped that the Radiology Manager

– Mr Sydney Malumfu of the Livingstone Central Hospital can make an educational visit to Sheffield next year. Pictured right is Brigitte with the Radiology Manager of Gwembe Hospital.



Social Media

The WRETF social media outreach revolves around the WRETF Facebook page. Visitors to this page are greeted by vibrant and engaging exchanges which not only focus on developing friendships but also on collaboration to meet the challenges faced by the radiological technologist community around the world. One soon realises that there is truly a worldwide community of professionals who have much more in common than anyone would expect. So writes Chris Steelman, Trustee and leads the social media outreach.

Fundraising

The WRETF has seen a productive last few months with several substantial donations received into its 50th Anniversary Birthday Fundraising Appeal – these include £594 (US\$790) as an anonymous donation in memory of a UK radiographer in July; £956 (US\$1,275) from a recent Hong Kong Radiographers Fundraising Event in September; £500 (US\$665) donation from Mr & Mrs Tony Bowden to support an upcoming WRETF special initiative at the National Hospital for Neurology and Neurosurgery in October and the donation from the Monash University Radiography Students Society in Melbourne is in the pipeline at the time of writing. The Trust is hugely grateful for these generous donations that will help secure attendee support for conferences and educational training awards for developing country applicants as part of the WRETF Bursary Scheme.

If you would like to donate to this special birthday appeal please contact either abudge@btinternet.com or susanmarchant@wretf.org

ADVANCED HEALTH EDUCATION CENTER

EDUCATION ▲ STAFFING ▲ CONSULTING

**I'm sure glad the hole isn't
at my end of the boat!**



Is your boat sinking? Let us help you!

Skills Training Provided In:

- ▲ **Bone Densitometry**
- ▲ **Computed Tomography**
- ▲ **Digital Technology**
- ▲ **Mammography**
- ▲ **Magnetic Resonance Imaging**
- ▲ **Quality Management**
- ▲ **Ultrasound**
 - General Ultrasound
 - Echocardiography
 - Vascular Ultrasound

***Also Available: Short-Term Training
and On-Site Consulting***

See us on the web at: www.AHECOnline.com

or call us at: **1-800-342-6704**

Advanced Health Education Center • 8502 Tybor Drive • Houston, TX 77074

News from member countries

THE AMERICAS

AMERICA



ASRT Museum and Archives Shines in "Jeopardy!" Spotlight

THERE'S AN EARLY X-RAY ROOM IN THE ALBUQUERQUE MUSEUM OF THE ASRT, THE "R" REFERRING TO THIS MEDICAL FIELD

The long-running television game show "Jeopardy!" highlighted the ASRT Museum and Archives during an episode in September. The clue was offered in the category of "Lesser-Known Museums." Located in the ASRT's Albuquerque office, the \$3 million facility encompasses 4,500 square feet and features smart-screen technology, rare radiologic science artifacts and powerful interpretive displays. An Albuquerque television station also highlighted the museum during its newscast to preview the museum's appearance on "Jeopardy!"

ASRT offers hurricane relief and member support

On behalf of its members, ASRT donated \$30,000 to the American Red Cross to assist with disaster relief efforts after Hurricanes Harvey, Irma and Maria. The storms devastated Puerto Rico, the U.S. Virgin Islands and areas in Texas and Florida. In addition to the financial support, ASRT implemented a series of measures to support its members in affected areas:

- ASRT automatically extended membership until Dec. 31, 2017, for members scheduled to renew within the next three months. The move allowed members to retain their original join date and show no lapse in membership.
- ASRT waived the \$20 change fee to switch to the Directed Reading Flex Plan™ to allow online access to a library of all of ASRT's Directed Readings to make it easier to keep up with continuing education requirements.

These accommodations were made available upon request to any member residing in a county or state declared a disaster area by FEMA because of the hurricanes.

ASRT member selected for FDA Mammography Quality Assurance Committee



ASRT member Rhonda Engebretson, BS, RT(R)(M) (CT), has been selected to serve on the US Food and Drug Administration National Mammography Quality

Assurance Advisory Committee. The National Mammography Quality Assurance Advisory Committee advises on developing appropriate quality standards and regulations for use in mammography facilities. The committee includes mammographers, oncology doctors, regulatory affairs specialists, and industry, equipment and consumer representatives. Engebretson is currently a breast imaging navigator at Avera Breast Center in Sioux Falls, South Dakota. Nominated by the ASRT, Engebretson will serve a five-year term. She is the first ASRT member to serve on the committee. "I'm looking forward putting my experience as a registered mammographer to good use. As someone who has worked in the trenches in the mammography practice area for decades, I'm confident that I can bring experience and insight to the table and provide in-depth information about best practices, equipment protocols and top-notch patient care," said Engebretson. **ASRT Radiation Therapy**

Conference welcomes nearly 1,000 attendees

ASRT hosted the 41st ASRT Radiation Therapy Conference in San Diego, California, in September. ASRT welcomed just under 1,000 radiation therapists, medical dosimetrists and educators to the three-day event. Educational offerings included more than 60 courses, presentations and workshops, along with an opportunity for hands on demonstration and a chance to speak with manufacturers and other exhibitors. An interactive, graffiti-style wall at the conference asked attendees to share why they chose their profession. The handwritten responses offered insight to career motivations and personal inspirations. For many, the wall was a meaningful addition to their meeting experience.

ASRT foundation and Toshiba Medical announce 2017 Safety FiRST® grant recipients

Mary Washington Hospital and Union Health-Union Hospital will both receive Safety FiRST® grants to implement safety initiatives that will elevate technologist safety in the workplace. Launched in 2015 by the ASRT Foundation and Toshiba America Medical Systems Inc., the Safety FiRST program awards two ASRT members per year a grant of up to \$7,000 each to improve radiologic technologist safety in their departments.

This year's recipients are:

- Ericka Lasley, RT(R), who applied on behalf of Mary Washington Hospital in Fredericksburg, Virginia. The grant will be used to purchase lightweight and lead-free aprons that provide 20 percent more protection than standard lead-based equivalents. The new aprons will provide



a more ergonomically correct fit as well as help to alleviate neck, shoulder and back fatigue and pain due to their lighter weight. The hospital will conduct in-service training on the new lead-free alternative and improved protection to ensure proper use, care and storage of the aprons. They are purchasing a range of apron sizes to accommodate all members of the staff.

- Meghan Whittaker, RT(R), who applied on behalf of Union Health-Union Hospital in Terre Haute, Indiana. The grant will be used to purchase an MRI safe cart. The cart will raise and lower for proper positioning of the patient and proper ergonomics for the technologist, thus reducing employee injuries during patient transfer and positioning. The grant will also facilitate in-service training on proper cart-to-table transfers, wheelchair-to-bed transfers and gait-belt transfers, as well as the purchase of Safety Essentials continuing education modules for radiologic technologist staff members.

ASRT accepts nominations for national officers and chapter delegates

ASRT accepted nominations for national officers and chapter delegates during the three-month period that closed October 2. Each year, ASRT members elect national officers to serve on the ASRT Board of Directors and as representatives for each chapter in the House of Delegates. The elected volunteers help the ASRT develop and implement strategic initiatives and set direction for the radiologic science profession. The 2018 ASRT election will open on February 13, 2018, and conclude on March 6, 2018.

Upcoming ASRT Events 2018

- February 13, 2018
Nationwide
ASRT election opens
- June 21-24, 2018
Las Vegas, Nevada
ASRT Educational Symposium and Annual Governance and House of Delegates Meeting
- October 21-23, 2018
San Antonio, Texas
ASRT Radiation Therapy Conference

Donna Long Council Member

ASRT Contest will send eight to 20th ISRTT World Congress

ASRT is sponsoring a contest to provide an all-expenses-paid trip for four ASRT members and four student members to attend the 20th ISRTT World Congress in Trinidad and Tobago.

This is a one-of-a-kind opportunity for ASRT members to share experiences with the global medical imaging and radiation therapy community and to see the latest advancements in the profession.

Four ASRT members and four student members will win airfare, a five-night hotel stay, conference registration and a stipend to attend the World Congress. The event will take place in the Hyatt Regency Trinidad, April 12 -15, 2018, in Port-of-Spain, Trinidad and Tobago.

ASRT scanner to add international news column

In an effort to provide an increased international perspective, ASRT's member magazine *Scanner* has launched a new column devoted to coverage of international developments in radiologic technology.

Called "Global Outlook," the new column educates ASRT members about worldwide radiologic technology programs and issues.

The first column, entitled "Outreach Benefits the Entire Profession," appeared in the magazine's October/November 2017 issue and was authored by ASRT council member to the ISRTT Donna Long, M.S.M., R.T.(R)(M)(QM), FASRT. The article details Long's decade-long membership in the ISRTT, her participation in the 2014 World Congress in Helsinki, Finland, and how it has broadened her perspective of the profession. Future articles will be authored by Long, Sharon Wartenbee, R.T.(R)(BD), CBDT, FASRT, regional director of the Americas on the ISRTT board of management, and other ASRT members.

ASRT Foundation Offers International Speakers Exchange Award

Applications for the ASRT Foundation International Speakers Exchange Award for 2018 were accepted through Oct. 31, 2017. The ASRT Foundation has presented the award to medical imaging and radiation therapy professionals for more than a decade.

One speaker will be selected to present at the United Kingdom Radiological Congress to be held July 2-4, 2018, in Liverpool, England. This joint meeting of the British Institute of Radiology, the Society and College of Radiographers, the Institute of Physics and Engineering

in Medicine, and the Royal College of Radiologists covers all aspects of diagnostic imaging and oncology, as well as radiology informatics and service delivery.

Another speaker will present at the CARO-COMP-CAMT Joint Scientific Meeting in Montreal, Canada, September 10-15, 2018. This conference is for radiation oncologists, medical physicists, radiation therapists, basic science researchers, oncology nurses, and administrators, as well as their trainees, but all health care professionals involved in the care of oncology patients are welcome to attend.

The International Speakers Exchange Award includes:

- Invitation to present in front of an international audience of radiologic science professionals.
- Conference registration expenses to either the CAMRT or UKRC meeting.
- Travel between the United States and the country of the meeting location.
- Lodging for up to five nights.
- \$500 stipend to cover food and related costs.

See list of [previous recipients](#)

ASRT Foundation Community Outreach Fellowship Program

Working in conjunction with our partner RAD-AID, the ASRT Foundation Community Outreach Fellowship Program has supported technologist volunteer work in eight countries. The ongoing program has become incredibly popular within the radiologic technology community. From Kenya to Nigeria to Laos and Ghana, ASRT members have provided patient care services and education for local health care personnel. The program offers a wide range of services ranging from training on equipment sanitation to providing education on 3-D conformal radiation therapy treatment planning. [More here](#)

Sharon Wartenbee Regional Director for the Americas

CANADA



Advanced Practice Certification in Radiation Therapy

The Canadian Association of Medical Radiation Technologists is excited to announce the completion of its Advanced Practice Registered Technologist (APRT) Certification Pilot.

Three radiation therapist candidates successfully navigated the multi-phase APRT certification process to become the first advanced practice MRTs in Canada. These APRTs represent a new pinnacle for MRT clinical practice and set the path for the development of advanced practice roles in all MRT disciplines across the country.

The CAMRT has now opened its Advanced Practice Certification in Radiation Therapy program to applicants. Information on the process is available at: www.aprt.ca/

MRT Week (and International Day of Radiology)

CAMRT has been working with its many thousands of members across the country to ensure that the week of November 5-11 (MRT Week) is a time full of celebration and promotion of the MRT profession. The CAMRT helps facilitate the event directly by providing thousands of posters and information materials to equip its members to engage in conversations about the profession.

The CAMRT would also like to extend its warmest wishes for a Happy MRT Week and International Day of Radiology to all MRTs the world over. May our activities through this week continue to expand the recognition and role of the profession.

CPD from CAMRT

CAMRT continues to be a first rate developer and provider of CPD for MRTs. All CAMRT CPD courses are available at competitive rates in distance learning formats to any graduate of a medical radiation technology program, regardless of the country of education. All courses are approved for Category A credit, accepted by the ARRT and others.

To see what courses are available to you, visit the popular and user-friendly CAMRT repository www.camrt.ca/repository

Journal of Medical Imaging and Radiation Sciences (JMIRS)

JMIRS www.jmirs.org is calling for papers for a special issue on the topic of Personalised Medicine to be published in

December 2018. The goal for this issue is to present research findings, educational and clinical perspectives, systematic reviews, teaching cases, and commentaries of the highest quality that inform on the role and impact of our professions in personalised medicine. JMIRS is also interested in papers with an international focus that cover personalised medicine topics worldwide. Submissions are due **May 1, 2018**.

Please submit all papers to JMIRS through the JMIRS website: www.jmirs.org If it is a special issue submission, please indicate this in your cover letter.

Support for those interested in working in Canada

The CAMRT encourages those thinking about working as MRTs in Canada to check out its two learning modules for Internationally Educated Medical Radiation Technologists (IEMRTs). The first module on describes practice/employment in Canada. The second is a module providing education on "How to Write a Competency Based Exam". Both are available in the certification section of the CAMRT website: www.camrt.ca/certification

Marcia Smoke
smokem@hhsc.ca

TRINIDAD AND TOBAGO



The Society of Radiographers of Trinidad and Tobago is very busy preparing for the 2018 ISRRRT World Congress to be held on April 12-15, 2018, at the Hyatt Regency Hotel and Conference Centre in Port of Spain, Trinidad and Tobago.

The Society organised a boat cruise on September 1 and a small goal football tournament was held in October.

Our President had the pleasure to attend



the Barbados conference in November where he was able to meet with the Vice President of the Americas Mr Terry Ell and the Barbados Society.

Various activities were held in departments around the country in celebration of World Radiography Day/Week and a cultural show was recently held by the Society.

We are excited to welcome all our colleagues from around the globe to the World Congress in Trinidad and Tobago In



April next year. See you all in a few months! The request for abstracts has been extended and registration is now open for the ISRRT World Congress.

www.isrrt.org/congress-2018

We are looking forward to welcoming one and all to the 20th ISRRT World Congress in Trinidad and Tobago and also to thank everyone for the support.

Aneesa Ali
Council member

AUSTRALASIA

AUSTRALIA



ASMIRT moves home

After many months of site visits to potential properties, a contract for purchase was recently signed,

heralding a new era for the organisation. ASMIRT will take over the keys to Level 10, 1 Queens Road, Melbourne on December 8, 2017. A small fitout will take place before the complete move into the new offices by January 26, 2018.

This purchase is part of the new strategic plan for ASMIRT, which will also see a significant upgrade of the society's IT infrastructure including a new website and CPD portal.

ASMIRT's book library has made it to Fiji

We are pleased to announce that after an uneventful seafaring journey, ASMIRT's books arrived safely in Suva, Fiji. The hefty 125Kg cargo has been donated to the Medical Imaging and Anatomy School of Health Sciences College of Medicine, Nursing & Health Sciences, Fiji



National University.

This will assist our colleagues overseas with access to materials to assist them with their medical imaging studies.

Pictured above is Raymond R. Keshwan, Head of Department with some of the books.

ASMIRT vintage artefacts find a new home

With the purchase of ASMIRT's new home, the enormous task of downsizing has begun. ASMIRT had many pieces of equipment which reflected x-ray machine development over the years. In a recent collaboration with ARPANSA, this equipment is now to be housed on display in Yallambie with other equipment of the same vintage.

ASMIRT develops PIE

The mantra of medical imaging services is to improve quality and productivity while ensuring optimal patient safety and care is provided. With this increasing pressure, health care providers must maximise the contributions of each profession, by designing and implementing innovative clinical service delivery. Diagnostic radiographers are well placed to support the development of medical imaging services. With appropriate skills development, they can provide a first line evaluation of images in support of patient management (such as radiographer commenting). ASMIRT

supports radiographers communicating their image evaluation to referrers as a core part of the profession's scope of practice. ASMIRT has a long-standing record of advocating and supporting the development of the radiographer's role and is now committed to leading the development of radiographer commenting within Australia. ASMIRT has formed a steering committee of enthusiastic, passionate, expert radiographers who are volunteering their time to create a certification process to provide support and practice guidance for radiographers in providing written comments on general x-ray examinations.

A recent survey sent to ASMIRT members in February 2017 yielded responses from radiographers across the public, private and education sectors. Their opinions demonstrated a high level of support for the project and gained a sense for the current climate in medical imaging departments across the nation regarding radiographer commenting. Common themes were raised, as were logistical concerns. The resounding majority of respondents were in favour of a certification process and believed that this would provide confidence, support and a standard level of practice.

The project's aim is to improve patient safety and to encourage all members of the healthcare team to communicate medically significant findings to referring clinicians. Hence, PIE was created, Preliminary Image Evaluation. The certification process that this committee is developing aims to certify any Australian registered health professional in Preliminary Image Evaluation (PIE).

A Preliminary Image Evaluation (PIE) is a brief written comment provided by a health professional which describes findings in the radiographic examination. It has been developed to create consistency and understanding in the terms used by the profession to describe this first line interpretation (i.e. radiographer commenting). It now defines this radiographer's (or other health professional) contribution to patient safety as Preliminary Image Evaluation (PIE). A PIE is very different to a radiology report. A Radiology report is a diagnostic report of a radiology investigation that, in Australia, is produced by a radiologist.

The certification process will involve an examination based on the minimum requirements of the Australian registration board and includes identification of medically significant findings for general x-ray and fractures of the appendicular skeleton. This will provide a platform for practicing radiographers to meet the current minimum requirements of registration.

It is a very exciting time for radiographers ►



in Australia. The close collaboration between the Australian registration board and ASMIRT in the development of this certification process will continue to strengthen the radiography profession through the promotion of radiography and patient safety in Australia.

Christopher Whennan
Council Member

BANGLADESH



Bangladesh Association of Radiology & Imaging Technologists (BARIT) observed World Radiography

Day 2017 on November 8, 2017. More than 2,500 radiology & imaging technologists from around the whole country observed this day.

Bangladesh Association of Radiology & Imaging Technologists (BARIT) observed this day by organising different programs, such as a colourful road rally which was held on the National Museum to National Shahid Minar at 8:00am. SWACHIP President Prof. Dr M Iqbal Arsal and General Secretary Prof. MA Aziz inaugurated the program and discussed the growing public awareness about radiological



imaging and radiation safety.

At the end of the rally BARIT President- Md. Shah Alam Khan Parvez, General Secretary, Jahirul Islam Bhuiyan and Organising Secretary, Moniruzzaman Liton held discussions. Lots of students, technologists, and general people attended the discussion program.

More than 2,500 radiology and imaging technologists have taken part in this program from around the country. Moreover, different regional committees have also offered different programs for observing this day with a good outcome.

Photos:

Above: Inauguration photo of BARIT Central Committee.

Below: BARIT Bogra Zonal Committee.

Bottom: BARIT Chittagong Zonal Committee.



NEW ZEALAND



The New Zealand Institute of Medical Radiation Technology held their annual conference in Nelson in August.

The conference was aptly named "Perfectly Centred – Making a Difference" as Nelson is situated at the top of the South Island of New Zealand – basically in the middle of the country! The conference was well supported with approximately 300 delegates plus trade exhibits. The theme 'making a difference' was a great reminder to us all that we are privileged to participate in the patient journey and we therefore are all duty bound to perform to the best of our ability to support in a time of need.

The NZIMRT launched access to the UK online learning program 'E Integrity' free to NZIMRT members at the annual conference. This access along with the new online CPD portfolio within the new NZIMRT website are welcome additions to support all members perform their compulsory continuing education requirements. See www.nzimrt.co.nz

During the conference the volunteer project supporting educational opportunities within the Asia / Pacific region was introduced to the membership. These conversations generated much interest and the NZIMRT is maintaining a register of those interested in volunteering their time and expertise. In order to support this initiative aprons and tea towels were printed with the NZIMRT logo and were sold during the conference.

Radiographers and radiation therapists celebrated World Radiography day on November 8. Most workplaces created displays within waiting rooms and enjoyed a shared meal with colleagues. Departments were encouraged to use this opportunity to fundraise to support those prepared to travel to provide educational workshops.

The NZIMRT has a webpage for members labelled "Around the World" which provides a link to the ISRT newsletters and webpage. This supports an awareness of the role ISRT plays in radiographer support and education across the globe. The new challenge for the NZIMRT will be to encourage ISRT associate membership.

On behalf of the NZIMRT I would like to take this opportunity to wish all of our international colleagues a safe and happy Christmas and New Year season.

Kathy Colgan
NZIMRT ISRT Director

EUROPE

FINLAND



The Society of Radiographers in Finland will be turning 60 years in 2018. We will

be celebrating this event at our National Congress Radiografia Päivät in May.

The preliminary clinical evaluation (PCE) has moved forward and First Finnish Radiographer with a master degree in PCE will be graduating from Canterbury University shortly. In addition we have held first courses for radiographers in PCE and the results are excellent.

The legislation of radiation in Finland will be renewed, this has been a very challenging and we as a society have been making the changes and commenting the new law from the beginning with the other stakeholders and legislators.

The biggest change in the new law will be the radiographers larger role as an optimizer. This will make new higher requirements for the education of radiographers.

In future the new law will allow radiographers to work as a Radiation Protection Officer (RPO) in hospitals and in radiological departments. To be able to work as a Radiation Protection Officer, radiographers have to undergo additional education for the role.

and gaining knowledge for members and non-members. Student radiographers were also given an opportunity to present at some events, thus allowing them to show-case their research and gain confidence in public speaking.

In November there were CPD events of which the highlight was the joint initiative from SORSA and the Radiological Society of South Africa (RSSA) presenting SA 2017 Imaging Conference. Some of the courses in the program hosted from November 3-5 at the International Convention Centre in Durban, South Africa included:

- Musculoskeletal (MSK) course;
- Ethics course;
- Course on adult fractures.

In addition, there are sessions devoted to scientific papers that include:

- Advances in imaging and radiation therapy;
- Role extension and scope of practice;
- Fusion imaging;
- Management advances;
- Review of new radiography qualifications;
- Radiation protection in terms of dose optimisation, justification and authorisation;
- Professional ethical practice and law.

Furthermore, a panel discussion facilitating perspectives from radiology, radiography and medical physics professionals forms part of the program.

'The Bonn Call-for-Action: 'Africa's progress towards the call' will be the opening address for SA 2017 Imaging Conference, presented by Professor M Kawooya, from Uganda, a champion for AFROSAFE who has successfully launched the AFROSAFE program in many countries of Africa.

Professor Kawooya is the founding member and current director of Ernest Cook Ultrasound Research and Education Institute (ECUREI) located in Kampala City, Uganda.

To conclude, CPD events offered under the auspices of SORSA advocate clinical, professional and personal developments. Applications for accreditation of these events undergo rigorous considerations by the SORSA CPD committee, thus ensuring a high standard program and adherence to guidelines set by the Health Professions Council of South Africa (HPCSA).

Fathima Mulla

Chairperson SORSA CPD committee

Bloemfontein Branch of SORSA

Accreditation was granted by the Health Professions Council of South Africa

(HPCSA) for Continuous Professional Development (CPD) activities in Bloemfontein to be held during October 2017. A SORSA member, Ms Ida-K Sebelego, arranged to present the topic "Radiographer's utilisation of radiographic technique in routine shoulder projections" for 1 Continuing Education Point (CEU) on three different occasions. The presentations were to take place at three local hospitals, namely Pelonomi, National and Universitas.

The first group of Bachelor in Radiography (Diagnostic) student co-hort will complete their studies at the end of 2017. This group will present the outcome of their research at a Research Showcase Seminar on 14 November 2017. The Society of Radiographers of South Africa (SORSA) has accredited the seminar entitled "We care about your safety" as a CPD event, with 6 general CEU's and 1 Ethics CEU's. The celebration of World Radiography Day at the Bloemfontein SORSA branch will be incorporated into the Research Showcase Seminar.

The upcoming RSSA-SORSA SA 2017 Imaging Congress, ICC, Durban, 3-5 November 2017, will be supported by a number of Bloemfontein radiographers. Committee members from SORSA Bloemfontein will assist at the SORSA booth during the congress.

Ms Taahirah Mookrey, a 4th year CUT radiography student and student representative in the SORSA branch was sponsored to attend the OPTIMAX Summer School programme in Oslo, Norway in August 2017. The students completed a project highlighting dose optimisation and image quality. She reported that interactions with student radiographers from across the globe was very beneficial, and she highlighted the benefits of the exchange of ideas by participants.

Carol Kridiotis

Secretary Bloemfontein Branch

AFRICA

SOUTH AFRICA



CPD matters

2017 has been an exciting and eventful year for The Society of Radiographers of South Africa (SORSA). The

SORSA branches have successfully offered 16 CPD events to date. Themes at these events included:

- An evening with Dr Bortz – where CT Colonography was discussed;
- Ethics and medical imaging;
- Compliance with the regulations of radiation control;
- Research ethics and science integrity;
- Women's health;
- Occupational health and safety;
- Maintenance of patient confidentiality.

These events provided platforms for sharing

Australia	Australian Institute of Radiography 25 King Street Melbourne, Vic. Australia 3000 PO Box 16234 Collins St. West Melbourne, Vic., Australia 8007 Tel. +61 3 9419 3336 Fax +61 3 9416 0783 Email: info@air.asn.au Website: www.air.asn.au	<i>Council Member</i>	Chris Whennan Email: Chris.Whennan@health.wa.gov.au
Austria	Austrian Association for Radiological Technology Johannes Gutenberg-Strasse 3 2700, Wiener Neustadt, Austria Tel: + 43 699 1749 8367 Fax: +43 2622 321 2685 Email: international@radiologietechnologen.at Website: www.radiologietechnologen.at	<i>Council Member</i>	Mrs Sabine Weissensteiner Email: international@radiologietechnologen.at
Argentina	Argentine Society of Radiology Arenales 1985 PB Ciudad de Buenos Aires (C1124AAC) Argentina Dr Alfredo Buzzi	<i>Council Member</i>	
Bangladesh	Bangladesh Association of Radiology & Imaging Technologists (BARIT) President: SM Abdur Rabm Department of Radiology and Imaging Dhaka Medical College Hospital Dhaka 1207 Mobile: +8801721176300 Email: president@barit.org Mr S.M Abdur Rab Mobile: +8801721176300 Email: president@barit.org Website: www.barit.org	<i>Council Member</i>	
Barbados	Barbados Association of Radiographers c/o X-ray Dept, Queen Elizabeth Hospital Martinsdale Road, St. Michael, Barbados Tel: 246 426-5378 Fax: 246 429-5374 Email: info@imagingandtherapy.bb Web Site: www.imagingandtherapy.bb Derlwyn Wilkinson Email: bar@imagingandtherapy.bb	<i>Council Member</i>	
Belgium	Medical Radiological Technicians of Belgium, Avenue des Paquerettes, 23 B - 1410, Waterloo, Belgium Tel: 32 64 55 71 99 Fax: 32 64 55 71 99 Email: mrtb@skynet.be Mr Eric Bertrand, Rue Provinciale 81, B-4042 Liers Email: Eric.bertrand@hologic.be	<i>Council Member</i>	
Belgium	APIM Belgium ASBL - Association des Professionnels en Imagerie Médicale Rue Georges Simpson, 45 B-1083, Ganshoren, Belgium Email: apim.comite@gmail.com		
<i>Council Member</i>		<i>Council Member</i>	Mr Arnaud Tempels Rue des Mésanges 6, B-6534 Gozee Email: atempels@apimasbl.be
Benin	Organisation Des professionnels En Imagerie Médicale Du Benin 02 BP 8125, Cotonou Tel: (229) 39 02 99 Mr Antoine Agbo 02 BP 8125, Cotonou Email: ag_antoine@yahoo.fr	<i>Council Member</i>	
Bosnia & Herzogovina	The Association of Engineers of Medical Radiology in Federation of Bosnia and Herzegovina Udruzenje Inzinjera Medicinske Radiologije Federacije Bosne i Hercegovine		
Botswana	Radiological Society of Botswana PO Box 80789, Gaborone, Botswana Tel: (267) 585475 Fax: (267) 585475 Email Soc: xtina@mega.bw Mrs Avis N. C.Bareki , address as Society Email: avis@it.bw	<i>Council Member</i>	
Burkina Faso	Association Burkinabe du Personnel Paramédical d'Electro-Radiologie S/C CHNYO (Service de Radiologie) 03 BP 7022 Ouagadougou 03 Tel: 226 33 37 14 & 31 59 90/91 Poste 506 & 590 Email: abpper@bf.refer.org Mr Landry Power Kabore address as Society Email: kaborecissaka@yahoo.fr	<i>Council Member</i>	
Cameroun	Association Camerounaise du Personnel Technique d'Electroradiologie Médicale Acptimr BP 4856, Douala, Cameroon Tel: 237 2236218 Fax: 237 2222086 Email: acptimr@yahoo.fr Website: www.acptimr.org Mrs Gale Tientcheu Email: galetien@yahoo.fr	<i>Council Member</i>	
Canada	Canadian Association of Medical Radiation Technologists, 10th Floor, 85, rue Albert Street Ottawa, ON K1P 6A4 Tel: 613 234-0012 Fax: 613 234-1097 Email: fcouillard@camrt.ca Website: www.camrt.ca Ms Marcia Smoke Email: smokem@hhsc.ca	<i>Council Member</i>	
Croatia	Croatian Association of Engineers of Medical Radiology, Mlinarska 38, 10000 Zagreb Tel: 00 385 1 4669771 Fax: 00385 1 4669772		

<i>Council Member</i>	Email Soc: vladimir@bahun.com Website: www.hdimr.hr Mr Nenad Vodopija Vlascika 15, 10000 Zagreb Email: Nenad.vodopija@vmskola.hr nenad@hdimr.hr	<i>Council Member</i>	Email: errta2006@gmail.com Esayas Tiruneh
Cyprus	Cyprus Society of Registered Radiologic Technologists & Radiation Therapy Technologists 215 Old Road Nicosia-Limassol 2029, Strovolos, Nicosia, Cyprus Tel: 357 99 646410 / 357 22 604105 www.aktinografia.com.cy / www.psetaa.com Email: psetaa.cy@hotmail.com / psetaa.cy@gmail.com	<i>Council Member</i>	Fiji Society of Radiographers P.O. Box 4307, Samabula, Suva, Fiji Islands Tel: 679 3215548 Email: jsalabuco@govnet.gov.fj Mr Jone Salabuco, address as Society Email: jsalabuco@govnet.gov.fj
<i>Council Member</i>	Mr Thasos Athanasiou, address as Society Email: kalaidjis@logos.cy.net		
Czech Republic	Czech Radiographers Society Sekretariat SRLA CR, Na Zlate Stoce 14 370 05 Ceske Budejovice, Czech Republic Email: info@srla.cz Website: www.srla.cz	<i>Council Member</i>	The Society of Radiographers in Finland PO BOX 140 00060 Tehy, Finland Tel: 358 40 5227 358 Fax: 358 9 61500 267 Email: tomisto@sorf.fi Website: www.sorf.fi Tiina Nousiainen Email: tiina.nousiainen@sorf.fi
<i>Council Member</i>	Mr Cestmir David address as society Email: cestmir.david@medicon.cz		
Denmark	Foreningen af Radiografer i Danmark H. C. Orstedes Vej 70, 2. tv. DK 1879 Frederiksberg C Tel: 45 3537 4339 Fax: 45 3537 4342 Email: frd@radiograf.dk Website: www.radiograf.dk	<i>Council Member</i>	Association Francaise du Personnel Paramedic d'Electroradiologie 47 Avenue de Verdier, 92120 Montrouge Tel: 33-1-49-121320 Fax 33-1-49-121325 Email: webmaster@afppe.com Website: www.afppe.com Agnès Antoine Cadre Supérieur du Pôle MTTC Hôpital de Lagny Lagny-Marne la Vallée Paris France 01 64 30 74 85 Email: aantoine@ch-lagny77.fr
<i>Council Member</i>	Ms Charlotte Graungaard Bech, Dragebakken 289, 5250 Odense SV Email: charlotte@radiograf.dk		
El Salvador	Asociación Salvadoreña de Técnicos en Radiología e Imágenes Diagnósticas 6a calle poniente y 6a ave. sur reparto 6a calle, 3-8 bis #4, Santa Tecla Email: oc.astrid_es_rad@yahoo.com.mx	<i>Council Member</i>	Association du Personnel Paramedical d'Electroradiologie du Gabonais BP 13326 Libreville Mr Apollinaire Mberagana, address as Society Email: samuelrokossa@yahoo.fr
<i>Council Member</i>	Mrs Elizabeth Ventura, address as Society Email: oc.astrid_es_rad@yahoo.com.mx		
Estonia	Estonian Society of Radiographers Sillutise 6, Pärnu 80010 Tel: 372 44 7312 Fax: 372 44 73 102 Website: www.eroy.ee	<i>Council Member</i>	The Gambia Association of Radiographers and Radiographic Technicians c/o X-Ray Department, Royal Victoria Hospital Banjul, The Gambia Mr Abdou Colley, address as Society
<i>Council Member</i>	Ms Piret Vahtramae Sillutise 6, Pärnu 80010, Estonia Email: piretva@ph.ee		
Ethiopia	Ethiopian Radiographers and Radiologic Technologists Association Churchill Street, Addis Ababa, Ethiopia Inside ERPA, Office number 303 PO Box 20486 Code 1000, Addis Ababa Tel: +251913013983/+251925917753	<i>Council Member</i>	Dachverband für Technologen/-innen und Analytiker/-innen in der Medizin Deutschland e.V. Spaldingstrasse 110 B, D-20097 Hamburg, Tel: 0049 40 2351170 Fax: 0049 40 233373 Email: info@dvta.de Website: www.dvta.de Susanne Huber Email: susanne.huber@dvta.de
		<i>Council Member</i>	Ghana Society of Radiographers Box KB 313 Korle Bu Tel: +233 50 495 5427 +233 24 441 7585 Email: info.ghsor@gmail.com or info@ghsor.org Website: www.ghsor.org Mr Steven Boateng, address as society Email: stboateng2000@yahoo.com

Greece

The Panhellenic Society of Radiotechnologists,
85-87 Aristomenous Str, 2nd Floor
Athens 104 46
Tel/Fax: 30 2 105 228081;
Email: agadakos@gmail.com
Website: www.aktinotechnologia.gr
Council Member: Euthimios Agadakos
Miriofitoy 59
Egaleo 12242, Athens, Greece
Mob: 30 6 97657467
Ph (BH): 30 2 107456482
Ph (AH): 30 2 105989797
Email: agadakos@gmail.com

Guyana

Guyana Association of Medical Imaging
Practitioners
The Senior Radiographer's Office
Georgetown Public Hospital Corporation
New Market Street, N/C Burge
Georgetown, Guyana

Hong Kong

Hong Kong Radiological Technicians
Association, PO Box 73549
Kowloon Central Post Office
Kowloon, Hong Kong
Tel: 852 3517 5451
Fax: 852 3517 5199
Email: hkrt1965@yahoo.com
Website: www.hkrt1965.com

Hong Kong

Hong Kong Radiographers Association
Dept. of Radiology, Tuen Mun Hospital,
Tuen Mun, NT
Tel: 852 22911161
Fax: 852 25747557
Email: info@hkra.org.hk
Website: hkra.org.hk

Council Member

Mr Edward Chan
Email: chairman@hkra.org.hk

Hungary

Society of Hungarian Radiographers
National Health Institute
Department of Radiology
1135 Budapest, Szabolcs u. 33 - 35.
Tel: 06 1 350 4764
Fax: 06 1 350 4765
Email: hungarian_radiographers@yahoo.com
Website: www.mrae.hu

Council Member

Ms Katalin Lukovich
Email: klukovich@ogyik.hu

Iceland

Icelandic Society of Radiographers
Felag Geislafræðinga, Borgartúni 6,
105, Reykjavík, Iceland
Tel: +354 595 5186; Fax: +354 595 5101
Email: geislar@bhm.is
Website: www.sigl.is

Council Member

Mrs Katrin Sigurdardottir, address as Society
Email: katrinsig2@simnet.is

India

Indian Association of Radiological Technologists,
Department of Radiodiagnosis & Imaging
PGIMER, Chandigarh 160012, India
Tel: 91 172 27476389
Fax: 91 172 2745768
Email: iartindia@yahoo.co.in
Website: www.iart.org.in
Council Member Dr S.C. Bansal
No. 388, Sector 38A,
Chandigarh 160014, India
Email: scbansal38@gmail.com

Indonesia

Radiografer Indonesia (PARI)
Indonesian Society of Radiographers
Daerah Jawa Tengah
Akta Notaris No. 36 Tanggal 19 Maret 2008
Tel: +62 24 7471258
Email: pari-jateng@hotmail.com
Website: <http://pari-jateng.com>

Ireland

Irish Institute of Radiography and Radiation
Therapy (IIRRT)
28 Millbrook Court, Kilmainham, Dublin 8
Tel (m): +353 87 1313795
Fax: +353 1 6790433
Email: info@iirrt.ie
Website: www.iirrt.ie
Council Member Shane Foley
Email: shane.foley@ucd.ie

Italy

AITRI – Associazione Italiana Tecnici di
Radiologia Interventistica
via della Commenda 28,
20122 Milano, Italia
Tel: +39 340 2773464
Email: info@aitri.it
Certificated mail: aitri@pec.it
Website: www.aitri.it
Council Member Diego Catania, Presidente AITRI
Email: cataniadiago@hotmail.com

Ivory Coast

Association Nationale des Techniciens
d'Imagerie Médicale de Côte d'Ivoire
21 BP 854 Abidjan 21
Email: antim_civ@yahoo.fr
Position vacant

Jamaica

Society of Radiographers (Jamaica)
PO Box 38, Kingston 6
Tel: 809 977 2388
Fax: 809 977 2388
Email: societyofradiographers@yahoo.com
Council Member Ms Carlene Rankine

Japan

Japan Association of Radiological Technologists
31st Floor, World Trade Center Bldg,
2-4-1 Hamamatsu-cho Minato-ku,
Tokyo 105-6131
Tel: 3-5405-3612 Fax: 3-5405-3613
Email: kimura@jart.or.jp
Website: www.jart.jp
Council Member Dr Yasuo Nakazawa, address as Society
Email: y_nakazawa@jart.or.jp

Kenya	Kenya Association of Radiographers Golf Course Commercial Centre Off Mbagath Way, Kenyatta Market Nairobi. 1st Floor Room 1.14 Tel: +254 272 0607, +254 272 0607 M: +254 724 319582 / +254 726 160562 Email: kenyaradiographers@yahoo.com	50586 Kuala Lumpur Tel: 03-2906674 Fax: 03-2989845 Email: ms_radiographer@yahoo.com www.groups.yahoo.com/group/ms_radiographers
<i>Council Member</i>	Mr Charles Omondi PO Box 90231 Mombasa Kenya Tel: +254 725848273/254 314201 Ext. 3219 Email: comok2004@yahoo.com	<i>Council Member</i> Ms Chan Lai Kuan address as society Email: clkmsr2011@yahoo.com
Korea	Korean Radiological Technologist Association, 18, Mabang-ro 4-gil, Seocho-gu Seoul, 06778, Rep. of Korea Tel: 82 70 8797 7914; M: 82 10 3957 3175 Email: krta@krta.or.kr Website: www.krta.or.kr	<i>Council Members</i> Ms Ivana Pace and Ms Daniella Zammit Email: srm.malta@gmail.com
<i>Council Member</i>	Mr Youngmoon Lee address as Society	Mauritius Mauritius Association of Radiographers 131c Murray Avenue, Quatre-Bornes Tel: 464-2790 Email: rboolkah@intnet.mu
Latvia	Latvian Society of Radiographers Institute of Radiology 13 Pilsonu Street, Riga, LV 1002 Latvia Tel: 371 714 4635 Fax: 371 714 4635 Email: nms@parks.lv	<i>Council Member</i> Mr Dooshiant Jhuboolall 41 Rue des Fauvelles, 92400 Courberoe, France
<i>Council Member</i>	Ms Elita Rutka, address as society Email: elitaru@hotmail.com	Mexico Federacion Mexicana de profesionales Tecnicos en Radiologia e Imagen, Asociaion Civil, Juan Badiano No. 21, Colonia Seccion XVI, Delegacion Tlapan, C.P. 14080 Tel: 52 55 73 29 11, Ext.1236 Fax: 52 55 73 09 94 Email: fmptrimex@yahoo.com.mx Website: www.fmptri.org.mx
Lebanon	Lebanon Society of Radiographers The American University of Beirut-Medical Centre, School of Radiography PO Box 11-0236, Beirut 1107-2020 Tel: 01961 1 35000 ext: 5070 Email: moufidaassi@hotmail.com	<i>Council Member</i> Mr Bernardo Santin Meza address as society
<i>Council Member</i>	Mr Moufid Abou Assi Email: moufidaassi@hotmail.com	Myanmar MSMRT Radiology Department Asia Royal Hospital No.14, Baho Street, Sanchaung Township Yangon , Myanmar Email: msmrt2012@gmail.com or khinmgtn.radiationhealth@gmail.com Website: to be built
Macao	Macao Radiological Technologists' Association – MRTA PO Box No. 9013, Macau Email: mrta@mrta.org.mo Website: www.home.macao.ctm.net/~mra	<i>Council Member</i> Khin Maung Tin Email: xray@asiaroyal.com.mm
<i>Council Member</i>	Ms Cora Ng Email: coranks@gmail.com	Nepal Nepal Radiological Society PO Box 5634, Maharajgunj Kathmandu, Nepal Email: Soc: radiologynepal@hotmail.com General Secretary: Neyaj Ahmed Ganesh Bahadur Pokhare Email: g_pokharel@hotmail.com
Macedonia	Macedonian Society of Radiological Technologists c/o Miroslav Kostadinov, Institut za Radiolgija Klinichki Centar Vodnjanska 17, 1000 Skopje, Macedonia Tel: 389 2 115069; Fax: 389 2 1 66974 Email: rentgen@vnet.com.mk Email: mariokostadinov@yahoo.co.uk	<i>Council Member</i>
<i>Council Member</i>	Mr Zdravko Damjanovski, 32 Victor Villas, Great Cambridge Road London N9 9VP, United Kingdom Email: zak@zdravko.freemove.co.uk	The Netherlands Nederlandse Vereniging Medische Beeldvorming en Radiotherapie, Catharijnesingel 73, 3511 GM Utrecht Tel: 31-302318842 Fax: 31-302321362 Email: info@nvmb.nl Website: www.nvmb.nl
Malaysia	Malaysian Society of Radiographers c/o Department of Diagnostic Imaging Hospital Kuala Lumpur,	<i>Council Member</i> Ms Sija Geers, address as Society Email: s.geers@nvmb.nl

New Zealand New Zealand Institute of Medical Radiation Technology
PO Box 16, Oakura,
New Plymouth 4345, New Zealand
Tel: 0646 752 7040, Fax: 0646 752 7040
Email: nzimrt@nzimrt.co.nz
Website: www.nzimrt.co.nz

Council Member Ms Kathy Colgan
Email: kathy.colgan@lakesdnhb.govt.nz
Website: www.nzimrt.vo.nz

Nigeria The Association of Radiographers of Nigeria,
2-4 Taylor Drive, Medical Compound, P.M.B.
1068, Yaba, Lagos
Tel: Sec: Elizabeth Balogun
01 017430682, 08023226160
Email: info@the-arn.com
Website: www.the-arn.com

Council Member Dr Mark Chukudi Okeji
Tel: +2348039472126, +2348084923707
Email: markokeji@yahoo.com

Norway The Norwegian Society of Radiographers
Raadhusgat 4, oppg.A, 0151 Oslo, Norway
Tel: 47 23 10 04 70
Email: nrf@radiograf.no
Website: www.radiograf.no

Council Member Mr Bent Ronny Mikalsen , address as society
Email: bent.r.mikalsen@radiograf.no

Peru Asociación Peruana de Técnicos Radiólogos Av.
Grau 383 Dpto., 603 Lima 1, Lima
Tel: 427-0578

Council Member Mr Magno F. Arias Jiménez
Mz E-1 Lt.3 Ciudad del Pescador - Bellavista,
Callao 2

The Philippines Rm 5&6 Medical Arts Bldg. Martinez Memorial
Hospital, 198 [A.Mabini](#) St., Caloocan City
Tel: (02) 285 13 93
Email: part_inc@yahoo.com
Website: www.part_inc.info/

Council Member Mr Rolando Banares,
Chief Radiologic Technologist
Martinez Memorial Medical Centre
198A Mabini St, Caloocan City, The Philippines
Email: part_inc@yahoo.com

Poland Polskie Stowarzyszenie Techników
Elektrodiagnostyki
Email: pste@pste.pl
Website: www.pste.pl

Council Member Mrs Jolanda Tomczak
e-mail: towarzystwopte@gmail.com

Portugal Associação Portuguesa dos Técnicos de
Radiologia Radioterapia e Medicina Nuclear,
Av Miguel Bombarda,
n.º36 - 9ºH, 1050 - 165, Lisboa
Tel: 351 217 959 539, Fax: 351 217 959 592
Email: geral@atarp.pt
Website: www.atarp.pt

Council Member Dr Graciano Paulo
Email: graciano@estescoimbra.pt

**Republique
Democratique
Du Congo** Conseil national Des Techniciens
Radiologues Republic
Democratique Du Congo
B.P. 12.956, Kinshasa 1
Mr Franck Bisumbula
Email: franckbisumbula@yahoo.fr

**Republic of
Singapore** Singapore Society of Radiographers
Ang Mo Kio Central Post Office
PO Box 765, Singapore 915609
Email: exco@ssr.org.sg
Website: www.ssr.org.sg

Council Member Ms Denise Choong

Senegal Association des Manipulateurs et Techniciens
d'Imagerie du Senegal, BP 3270 Dakar
Mr Amadou Tidjani Ball
Email: amadoutidiane143@hotmail.com

Serbia The Society of Radiological Technicians and
Nuclear Medicine Technicians of Serbia
Pasterova 14 Street,
Institute of Radiology and Oncology of Serbia,
11000 Belgrade Serbia
Tel: 38 135 472347
Email: caca2@scnet.yu
Website: www.radteh.org.yu

Council Member Ms Slavica Pavlovic
Email: cacapavlovic@yahoo.com

Seychelles Seychelles Radiological Association
c/o Radiology Section, Ministry of Health,
P.O. Box 52, Victoria, Mahee
Mrs Sabina Panovska
Email: sabinapanovska@yahoo.com

Slovenia Slovenian Society of Radiological Engineers
Društvo Radilskih Inženirjev Slovenije
Zaloska cesta 7, S1-1000 Ljubljana
Tel: 386 1 5431536; Fax: 386 1 5431 321
Email: ohanuna@onko-i.si
Website: www.dri-drustvo.si

Council Member Mr Dean Pekarovik
Institute of Radiology, Clinical Center
Zaloska cesta 7, S1-1000 Ljubljana
Email: dean.pekarovik@klj.si

South Africa Society of Radiographers of South Africa
Physical Address: Unit B44
Pinelands Business Park, New Mill Road
Pinelands, South Africa 7405
PO Box 505
Howard Place, South Africa 7450
Tel: +27 21 531 1231, Fax: +27 21 531 1233
Email: sorsa.admin@iafrica.com
Website: www.sorsa.org.za

Council Member Hesta Friedrich-Nel
Email: hfried@cut.ac.za

Spain Asociación Española de Técnicos en
Radiología, C/ Reyes Magos 18,
Bajos Dcha, 28009 Madrid
Tel: 00 34 91-552 99 00 - 3105
Fax: 00 34 91-433 55 04

Council Member: Email: aetr.nacional@infonegocio.com
 Website: www.aetr.org
 Ms Marta Soto Garcia, address as Society
 Email: martasoto@inicia.es

Sri Lanka The Society of Radiological Technologists
 – Sri Lanka
 16A Kurunduwatte, Mahabage,
 Ragama, Sri Lanka
 Website: srtsl.weebly.com
 Tel: +94 112957126
Council Member Mr VG Wimalasena
 School of Radiography, National Hospital
 of Sri Lanka, Colombo 10, Sri Lanka
 Email: vgwimalasena@gmail.com

Sweden Swedish Society of Radiographers,
 International Secretariat
 Email: international@swedrad.com
 Website: www.swedrad.se
Council Member Kerstin Hillergård
 Email: kerstin.hillergard@swedrad.com

Taiwan Taiwan Society of
 Radiological Technologists (TWSRT)
 Department of Radiology,
 6F-1, No 35, Sec 2, Chongcing N. Rd,
 Datong District, Taipei 103, Taiwan
 Tel: 886 2 2550 5181 - 2
 Fax: 886 2 2550 8402
 Email: artroc@mail2000.com.tw
service@twprt.org.tw
 Website: www.twprt.org.tw
Council Member: Chiung-Wen Kuo
 Email: kuocw@mail.ypu.edu.tw

Tanzania Tanzania Association of Radiographers (TARA)
 School of Radiography,
 Muhimbili National Hospital,
 PO Box 65005, Dar es Salaam, Tanzania
 Tel: 255-714-273 111
Council Member Mr Stephen Samson Mkoloma
 Ocean Road Cancer Institute (ORCI)
 PO Box 3592, Dar es Salaam, Tanzania
 Email: stephenmkoloma@hotmail.com

Thailand Society of Radiological Technologists of
 Thailand, Dept. of Radiological Technology
 Faculty of Medical Technology
 Siriraj Hospital, Bangkok 10700
 Tel: 622 419 7173
 Website: www.tsrto.or.th
Council Member Mr Sala Ubolchai
 Email: sala1950@hotmail.com

Togo Association Togolaise des Techniciens de
 Radiologie et d'Imagerie Médicale ATTRIM
 S/C Surveillant de radiologie CHU Campus
 (Pavilion Scanner), BP 30284, Lome, Togo
 Tel: 00228 90367440 or 0022822254739 /
 0022822257808
 Email: attrim-togo@hotmail.fr
Council Member AZIAGBA Dogbevi Robert
 Email: robert.aziagba@hotmail.com

Trinidad and Tobago Society of Radiographers-Trinidad &
 Tobago, General Hospital, Radiology
 Department, Port of Spain
 Tel: 868-672-5136
 Fax: 868-658-0225
 Email: soradtt@yahoo.com
Council Member Mr Aleth Bruce
 Email: abruce66@yahoo.ca

Turkey Turkish Society of Medical Radiological
 Technologists,
 Department of Radiology Ankara University
 Sıhhiye-Ankara, Turkey
 Tel: +905333010745 or +905325967282
 Website: www.tmrtdr.org.tr
 Email: tmrtdr@hotmail.com
Council Member: Mrs Nezaket Ögür
 Email: nezaketozgur@yahoo.com

Uganda Society of Radiographers of Uganda (SRU)
 Assessment Centre Mulago Hospital
 PO Box 7051, Kampala
 Tel: +256773 260 091 or +256756 840 790
 Email: sruradiography@gmail.com
Council Member Mr Sam Ali
 Email: alisambecker@gmail.com

Ukraine Ukrainian Society of Radiographers and
 Radiological Technologists,
 Lamousov Str. 33/43, Kiev 03022
 Tel: 38044 213 0763/483-61-26
 Fax: 380 44 258 9726
 Email: babiy@aruk.kiev.ua
Council Member Dyemin Valentin
 Email: uarctmri@ukr.net

United Kingdom Society and College of Radiographers
 207 Providence Square
 Mill Street, London SE1 2EW
 Tel: 44-207 740 7200
 Fax: 44-207 740 7204
 Email: info@sor.org
 Website: www.sor.org
Council Member Pam Black
 Email: PamB@sor.org

USA American Society of Radiologic Technologists
 15000 Central Avenue SE,
 Albuquerque, New Mexico 87123-3917
 Tel: 505-298-4500; Fax: 505-298-5063
 Website: www.asrt.org
Council Member Donna Thaler Long
 Email: dlong2@iuhealth.org

Vietnam Ho Chi Minh City Association of Radiological
 Technologists – HART
 201 Nguyen Chi Thanh, Ward 12, District 5,
 HCMC, Vietnam
 Tel: +84 8 39551352; +84 983 371 798
 Email: Vietnam.art.2014@gmail.com
Council Member Mr Thai Van Loc
 Email: thaivanloc@hotmail.com
 Website: in the building process



www.isrrt.org